

The Price of Political Change: A Cost-Benefit Framework for Policy Incentivization

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Abstract

What is the maximum cost to achieve any policy change through legal democratic channels? We estimate \$25 billion for the United States and \$200 billion globally. These figures represent the upper bound of matching all opposition spending (campaign finance, lobbying) and providing career alternatives for affected legislators. For high net-societal-value policies, even these maximum costs yield extraordinary returns: military-to-health reallocation achieves ROI exceeding 400,000:1, carbon pricing exceeds 1,000:1, and occupational licensing reform exceeds 2,000:1. The “political impossibility” objection thus reduces to a capital allocation problem. Political change is not impossible; it is merely expensive, and for valuable reforms, the price is trivial relative to the benefits.

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1 Introduction

1.1 The Political Impossibility Objection

Policy analysts frequently encounter a distinctive form of objection: proposals that would generate large net benefits are dismissed as “politically impossible” due to opposition from concentrated interests. This objection is applied to carbon pricing¹³², agricultural subsidy reform¹³³, occupational licensing reform¹³⁴, military spending reallocation, and numerous other high-value policy changes.

The objection typically takes an implicit form: “Politicians will never vote against [industry X]” or “The [Y] lobby is too powerful.” These statements treat political feasibility as binary (either possible or impossible) rather than as a cost that varies with the resources devoted to achieving change.

1.2 Political Change as an Investment

This paper argues that political feasibility should be analyzed using the same cost-benefit framework applied to other investments. Political actors (legislators, regulators, executives) respond to incentives. This is not a normative claim but an empirical observation: lobbying exists because it works, and campaign contributions correlate with legislative outcomes¹³⁵.

If incentives affect political outcomes, then political change has a price. The question is not whether change is “possible” but whether the cost of achieving change is less than the value created. We formalize this as:

$$\text{Political Change is Rational if: } C(p) < B(p) \times P(s|C)$$

Where $C(p)$ is the cost of achieving policy p , $B(p)$ is the benefit if successful, and $P(s|C)$ is the probability of success given investment C .

1.3 Contribution and Roadmap

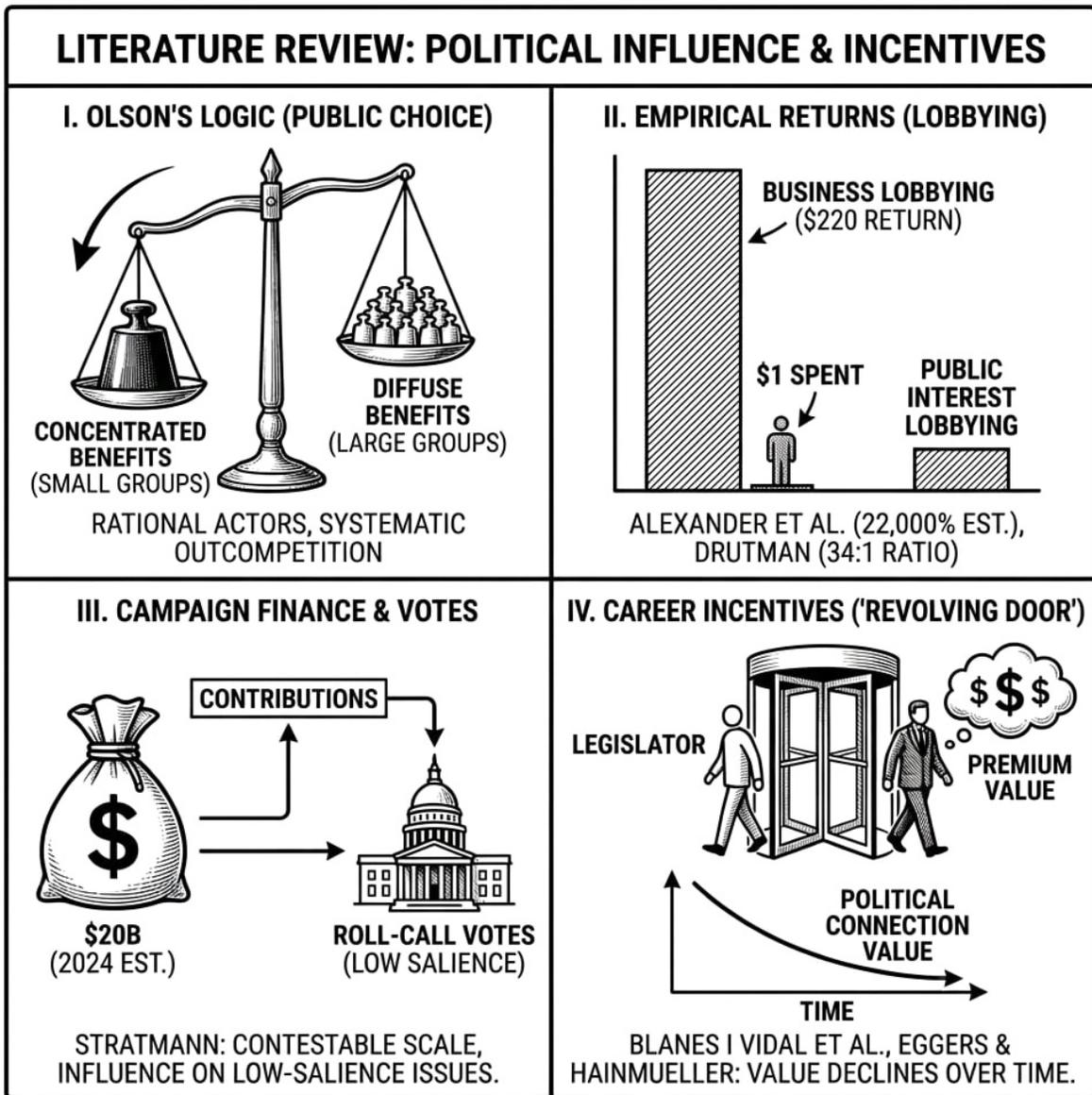
This paper makes three contributions:

1. **Framework:** We develop a general model for estimating political reform investment costs, decomposing them into campaign finance, lobbying, and career value components.
2. **Empirical estimates:** We provide upper-bound estimates for US and global political systems, establishing that even maximum democratic engagement scenarios have quantifiable costs.
3. **Case studies:** We apply the framework to multiple policy domains, demonstrating that high-NSV reforms yield positive expected value even under pessimistic assumptions about political costs.

The remainder proceeds as follows: Section 2 reviews relevant literature. Section 3 presents the theoretical framework. Section 4 details our empirical methodology with uncertainty analysis. Section 5 applies the framework to military-to-health reallocation. Section 6 discusses limitations. Section 7 concludes.

2 Literature Review

The public choice tradition^{136,137} models political actors as rational agents responding to incentives. Olson¹³⁸ demonstrated that groups with concentrated benefits systematically outcompete larger groups with diffuse benefits, explaining why small industries successfully defend subsidies imposing large aggregate costs on consumers.



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Figure 1: A conceptual model of the political influence cycle, illustrating the high ROI on lobbying, the ratio imbalance between business and public interests, and the revolving door between government and industry.

The empirical literature establishes that political investment produces returns.¹³⁹ estimated returns to lobbying for the American Jobs Creation Act at 22,000% (\$220 in tax benefits per \$1 spent).¹⁴⁰ documents business-to-public-interest lobbying ratios exceeding 34:1, suggesting sophisticated actors believe lobbying works.

Campaign finance operates at contestable scale: total US federal election spending in 2024 was \$20B (95% CI: \$18B-\$22B).¹⁴¹ finds contributions influence roll-call votes, particularly on low-salience issues.

Beyond direct spending, legislators respond to career incentives.¹⁴² documents the “revolving door” value: former senators who become lobbyists earn substantial premiums, with political connection value declining over time.¹⁴³ finds similar patterns internationally. These career incentives are typically omitted from political feasibility analyses.

3 Theoretical Framework

3.1 The Political Cost Function

We model the cost of achieving policy change p as a function of four components:

$$C(p) = C_{campaign}(p) + C_{lobby}(p) + C_{career}(p) + C_{coord}(p)$$

Where:

- $C_{campaign}(p)$ = Campaign finance required to elect supportive legislators or match opposition spending
- $C_{lobby}(p)$ = Lobbying expenditure required to inform and persuade legislators
- $C_{career}(p)$ = Compensation for legislators’ foregone post-office career value
- $C_{coord}(p)$ = Coordination costs among diffuse beneficiaries

Each component can be estimated empirically, providing an upper bound on political reform investment costs.

3.2 Campaign Finance Component

For policy requiring support from n legislators, campaign costs can be bounded by:

$$C_{campaign}(p) \leq k \times S_{total}$$

Where S_{total} is total spending in affected elections and k is a multiplier reflecting the share of spending required to achieve electoral influence. In the limit, $k = 2$ represents outspending all existing political spending 2:1.

3.3 Lobbying Component

Lobbying costs can be bounded by:

$$C_{lobby}(p) \leq m \times L_{total} \times T$$

Where L_{total} is annual lobbying expenditure, m is a dominance multiplier, and T is the time horizon. Setting $m = 2$ and $T = 4$ years provides a conservative upper bound.

3.4 Career Value Component

The career component compensates legislators for foregone post-office opportunities:

$$C_{career}(p) = \sum_{i=1}^n V_i$$

Where V_i is the net present value of legislator i 's expected post-office career premium. This can be estimated from revolving-door salary data.

3.5 The Benefit Function

Policy benefits depend on the net societal value (NSV) created:

$$B(p) = \sum_{t=0}^T \frac{NSV_t}{(1+r)^t}$$

Where NSV_t is net societal value in year t , r is the discount rate, and T is the time horizon.

3.6 Breakeven Condition

Political incentivization is economically rational when:

$$\frac{B(p)}{C(p)} > 1$$

We will show that for high-NSV policies, this ratio typically exceeds 1,000:1 even under pessimistic cost assumptions.

4 Empirical Methodology

4.1 US Political System Cost Estimates

We estimate political capture costs for the United States using publicly available data.

4.1.1 Campaign Finance

Total US federal election spending in the 2024 cycle:

Category	Amount	Source
Presidential candidates	\$2.0B	FEC ¹²⁴
House & Senate candidates	\$3.8B	FEC ¹²⁴
Political party committees	\$2.7B	FEC ¹²⁴
PACs and Super PACs	\$15.7B	FEC ¹²⁴
Total	\$20B (95% CI: \$18B-\$22B)	Combined

4.1.2 Lobbying

Total US lobbying expenditure in 2024: **\$4.40B (95% CI: \$3.74B-\$5.06B)**

Top sectors include pharmaceuticals (\$387M), finance/insurance (\$582M), and defense (\$149M).

4.1.3 Post-Office Career Value

Based on revolving-door data^{77,144}:

Position	Congressional Salary	Typical Post-Office	Premium
Representative	\$174K	\$500K-\$2M	3-11x
Senator	\$174K	\$1M-\$3M	6-17x
High-profile members	\$174K	\$2M-\$7M	11-40x

Assuming 10-year post-office careers and ~\$1M/year average premium, the NPV per legislator is approximately **\$10M (95% CI: \$5M-\$20M)**.

4.1.4 US Maximum Reform Investment Scenarios

These scenarios represent upper-bound costs to achieve democratic parity with incumbent interests: matching their political spending and providing alternative career paths for legislators.

Scenario	Components	Cost
Match defense industry 2:1	Defense lobby + contributions × 2	\$360M/year
Match ALL lobbying	Total lobbying × 1.5	\$6.6B/year
Match all campaign spending	Federal elections × 1	\$10B/cycle
Match 67 senators' career incentives	67 senators \$10M (95% CI: \$5M-\$20M) NPV	\$670M one-time
Match full Congress career incentives	535 members \$10M (95% CI: \$5M-\$20M) NPV	\$5.35B one-time
Total US reform investment	All components	\$25.5B (95% CI: \$17.3B-\$36.3B)

4.2 Global Estimates

We estimate global costs by scaling from the US, which has the most transparent and well-documented political spending data:

Component	Value	Notes
US reform investment	\$25.5B (95% CI: \$17.3B-\$36.3B)	Calculated from components above
Global-to-US ratio	5.0 (95% CI: 3.0-8.0)	US is ~40% of military spending but has uniquely expensive politics
Global total	\$128B (95% CI: \$55.2B-\$266B)	US × ratio

The ratio reflects that global discretionary government spending is roughly 9x US discretionary spending (~\$15T vs ~\$1.7T), discounted by ~50% because non-US political systems tend to be less transparent and potentially less expensive to influence. The wide confidence interval reflects uncertainty about non-US political dynamics and hidden influence channels.

4.3 Uncertainty Analysis

These estimates are calculated from input parameters with explicit uncertainty distributions. Monte Carlo simulation propagates uncertainty through the calculation chain.

Input parameters with uncertainty:

Parameter	Point Estimate	95% CI	Description
US campaign spending	\$20B (95% CI: \$18B-\$22B)	$\pm 10\%$	FEC 2024 data
US lobbying (annual)	\$4.40B (95% CI: \$3.74B-\$5.06B)	$\pm 15\%$	OpenSecrets 2024
Post-office career value	\$10M (95% CI: \$5M-\$20M)	\$5M-\$20M	Revolving door data
Political effort multiplier	0.7	0.4-1.2	Fraction of spending to match
Global-to-US ratio	5.0	3.0-8.0	Rest-of-world scaling

Calculated outputs (uncertainty propagated):

Output	Formula	Result
US reform investment	$(\text{Campaign} + \text{Lobbying} \times 2) \times \text{Effort} + \text{Career}$	\$25.5B (95% CI: \$17.3B-\$36.3B)
Global reform investment	$\text{US} \times \text{Global ratio}$	\$128B (95% CI: \$55.2B-\$266B)

Key sources of uncertainty:

1. **Hidden spending channels:** Dark money, unreported lobbying, and informal influence networks may exceed reported figures by 20-50%
2. **Counter-spending dynamics:** Opponents may escalate spending, though they face budget constraints (cannot spend more than their rents)
3. **Non-linear effects:** Political influence may not scale linearly with spending; threshold effects and diminishing returns likely exist
4. **Cross-country variation:** Political systems differ dramatically in their susceptibility to organized influence

Despite this uncertainty, the core conclusion is robust: even at the 95th percentile of \$128B (95% CI: \$55.2B-\$266B), high-NSV policies yield ROI exceeding 400,000:1.

5 Implications for Major Health Funders

The cost estimates above have profound implications for philanthropists and health funders. If political reform is tractable at these costs, and the potential benefits are as large as documented, then investing in political reform may dramatically outperform direct intervention.

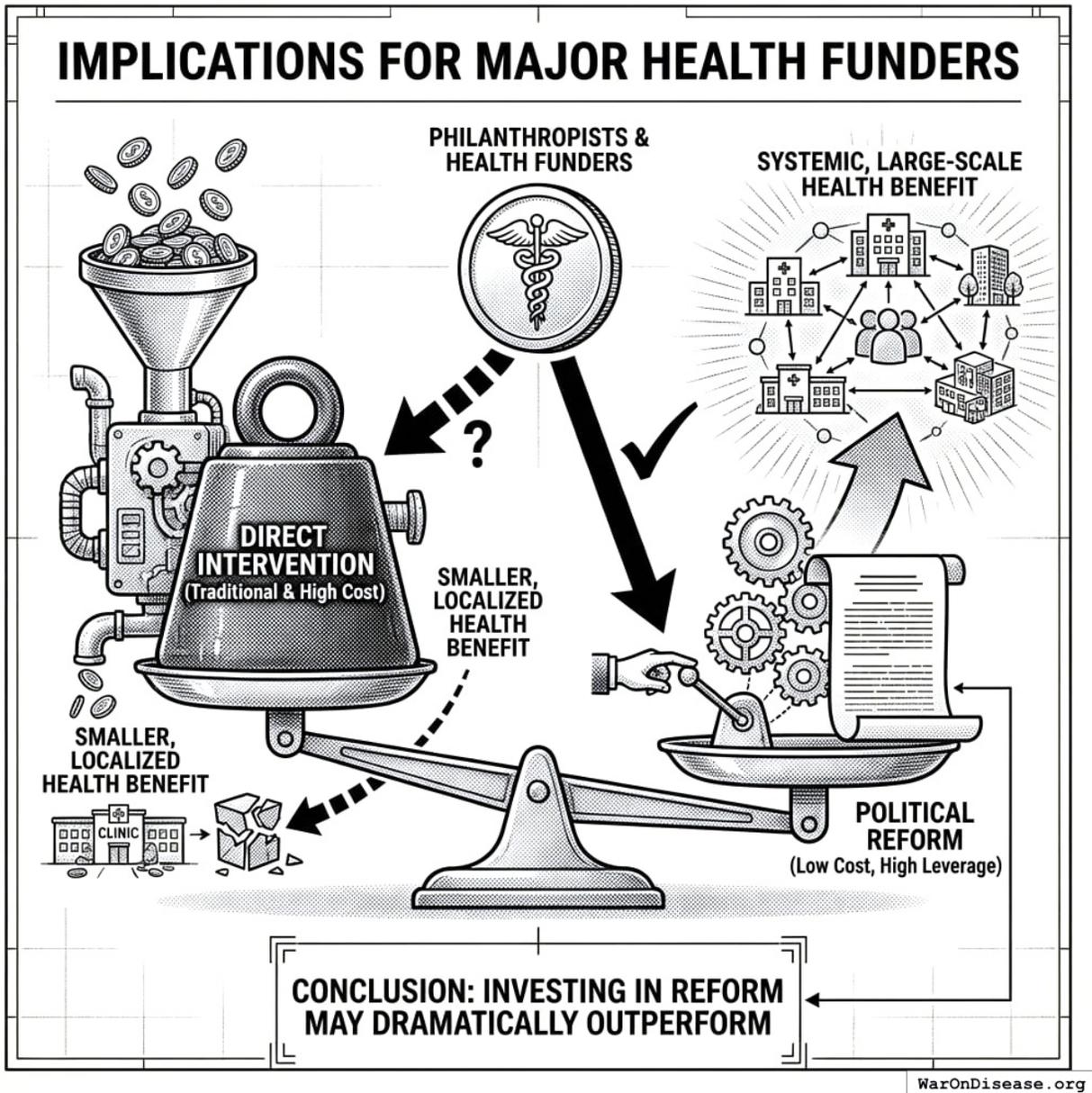


Figure 2: A comparison of investment impact showing how political reform can provide greater leverage and scale compared to traditional direct health interventions.

5.1 Current Philanthropic Efficiency

The Gates Foundation, the world’s largest private foundation, spends approximately \$7.7 billion annually¹⁴⁵. At roughly \$50-100 per DALY averted (competitive with GiveWell’s best interventions), this generates approximately 70-140 million DALYs averted per year.

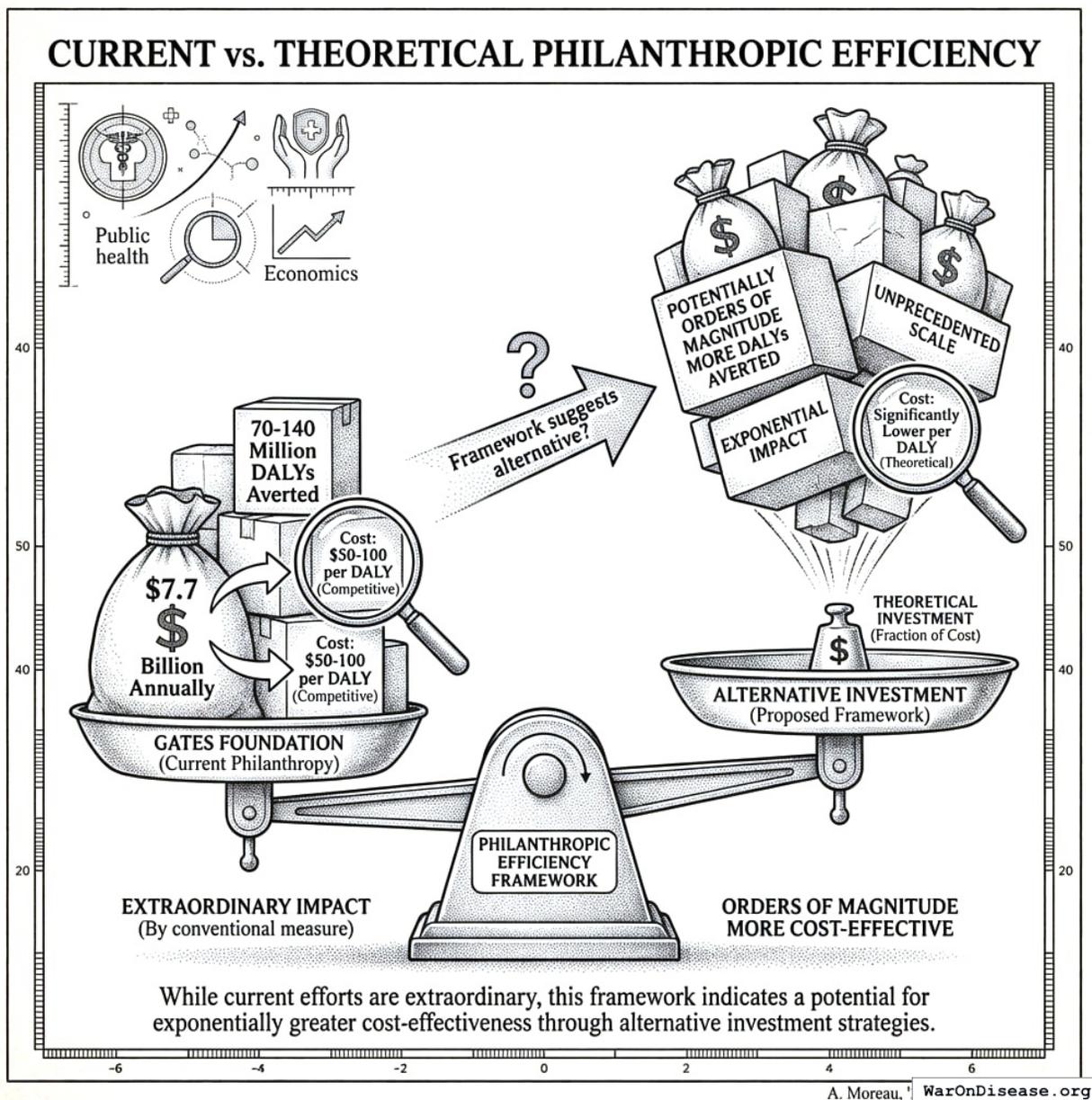


Figure 3: A comparison showing the Gates Foundation’s current annual impact in DALYs averted against a theoretical alternative investment with significantly higher cost-effectiveness.

This is extraordinary philanthropy by any conventional measure. But the framework above suggests an alternative investment that may be orders of magnitude more cost-effective.

5.2 The Political Reform ROI Calculation

Consider a hypothetical \$25 billion investment in political reform (the maximum US reform investment estimated above):

Variable	Conservative Estimate
Investment	\$25B
Probability of success	5%
If successful: Annual value unlocked	\$100B/year
Time horizon	20 years
Expected present value	$\$100B \times 20 \times 5\% = \$100B$
Net expected value	$\$100B - \$25B = \$75B$
Expected DALYs at \$75/DALY	1 billion DALYs

Even at a pessimistic 5% success probability, the expected value is \$75 billion, equivalent to 1 billion DALYs. This is approximately **10-15x more cost-effective** than the Gates Foundation's current giving per dollar invested.

5.3 Who Can Afford What

Investment Tier	Cost	Who Can Afford	What It Buys
Pilot	\$10-50M	Most major foundations, tech billionaires	Proof of concept, initial IAB deployment
Scaling	\$100M-1B	Gates, Wellcome, Bloomberg, Open Philanthropy	Multi-state campaign, serious political pressure
Full reform	\$25B	Coalition of billionaires, or single mega-donor	Complete US political system engagement

Individual capacity for full reform (\$25B): Several individuals could fund complete US political reform unilaterally:

Individual	Net Worth	\$25B as % of Wealth	Could Fund Solo?
Elon Musk	~\$400B	6%	Yes
Jeff Bezos	~\$230B	11%	Yes
Mark Zuckerberg	~\$220B	11%	Yes
Larry Ellison	~\$200B	13%	Yes
Bill Gates	~\$130B	19%	Yes
Warren Buffett	~\$140B	18%	Yes
MacKenzie Scott	~\$35B	71%	Stretch

Any coalition of 3-5 decabillionaires could fund complete political reform while retaining the vast majority of their wealth. The question is not whether political reform is affordable, but whether funders recognize the leverage.

5.4 ROI Comparison

Approach	Investment	Cost per DALY	Expected DALYs
Gates direct interventions	\$7B/year	~\$75	93M/year
Political reform (\$25B @ 5% success)	\$25B one-time	~\$0.025	1B+ expected
Cost-effectiveness ratio			~3,000x

5.5 Why This Is Rational for Funders

The expected value calculation favors political reform investment even under pessimistic assumptions:

1. **Asymmetric payoffs:** Success unlocks trillions in better resource allocation; failure costs billions. The ratio justifies risk-taking.
2. **Neglectedness:** Political reform receives a tiny fraction of philanthropic spending relative to its expected value. The marginal dollar is extraordinarily high-impact.
3. **Leverage:** Unlike direct intervention (where \$1 buys \$1 of service), political reform uses \$1 to redirect \$1,000+ of government spending.
4. **Mission alignment:** Major health funders already aim to maximize health outcomes. Political reform is simply a higher-leverage path to the same goal.

For detailed analysis of the political economy and implementation mechanisms, see [Optimocracy: Evidence-Based Governance](#).

6 Case Study: Military-to-Pragmatic Clinical Trial Reallocation (1% Treaty)

Policy: Redirect 1% of global military spending (~\$27.2B/year) to medical research through pragmatic clinical trials.

Counterfactual: At current discovery rates (~15 new disease treatments annually), exploring treatments for all ~6,650 diseases lacking FDA-approved therapies would take 443 years. The treaty accelerates this timeline by 212 years on average, bringing treatments forward by that duration. Benefits below represent cumulative lives saved and suffering eliminated over this acceleration period, compared to the status quo timeline.

Estimated Benefits (cumulative over 212-year acceleration):

Category	Value
Lives saved	10.7 billion deaths (95% CI: 7.39 billion deaths-16.2 billion deaths)
DALYs averted	565 billion DALYs (95% CI: 361 billion DALYs-877 billion DALYs)

Political Reform Investment: \$25.5B (95% CI: \$17.3B-\$36.3B) (US) to \$128B (95% CI: \$55.2B-\$266B) (global)

ROI Calculation:

Political Investment	ROI	Cost per DALY
\$1B (realistic)	84.8M:1 (95% CI: 46.6M:1- 144M:1)	\$0.0018 (95% CI: \$0.0007-\$0.0041)
\$25.5B (95% CI: \$17.3B-\$36.3B) (US)	3,390,000:1	\$0.05
\$128B (95% CI: \$55.2B-\$266B) (global)	678,000:1	\$0.23

For comparison, GiveWell’s cost-effectiveness threshold is ~\$50/DALY, and bed nets achieve ~\$89 (95% CI: \$78-\$100). Even at \$128B (95% CI: \$55.2B-\$266B) political cost, this intervention is **139x more cost-effective than bed nets**.

6.1 Other Policy Domains

The same framework applies to other high-value policy reforms. Brief analysis suggests:

- **Carbon pricing** (\$4B political cost vs. \$5T+ avoided damages): ROI ~1,250:1
- **Agricultural subsidy reform** (\$1B vs. \$60B deadweight loss over 4 years): ROI ~60:1
- **Occupational licensing reform** (\$1B vs. \$2T consumer savings over 10 years): ROI ~2,000:1

These estimates use the same methodology: match opposition spending 2-3:1, account for career value, and compare to policy benefits. In all cases, even pessimistic political cost estimates yield strongly positive expected value.

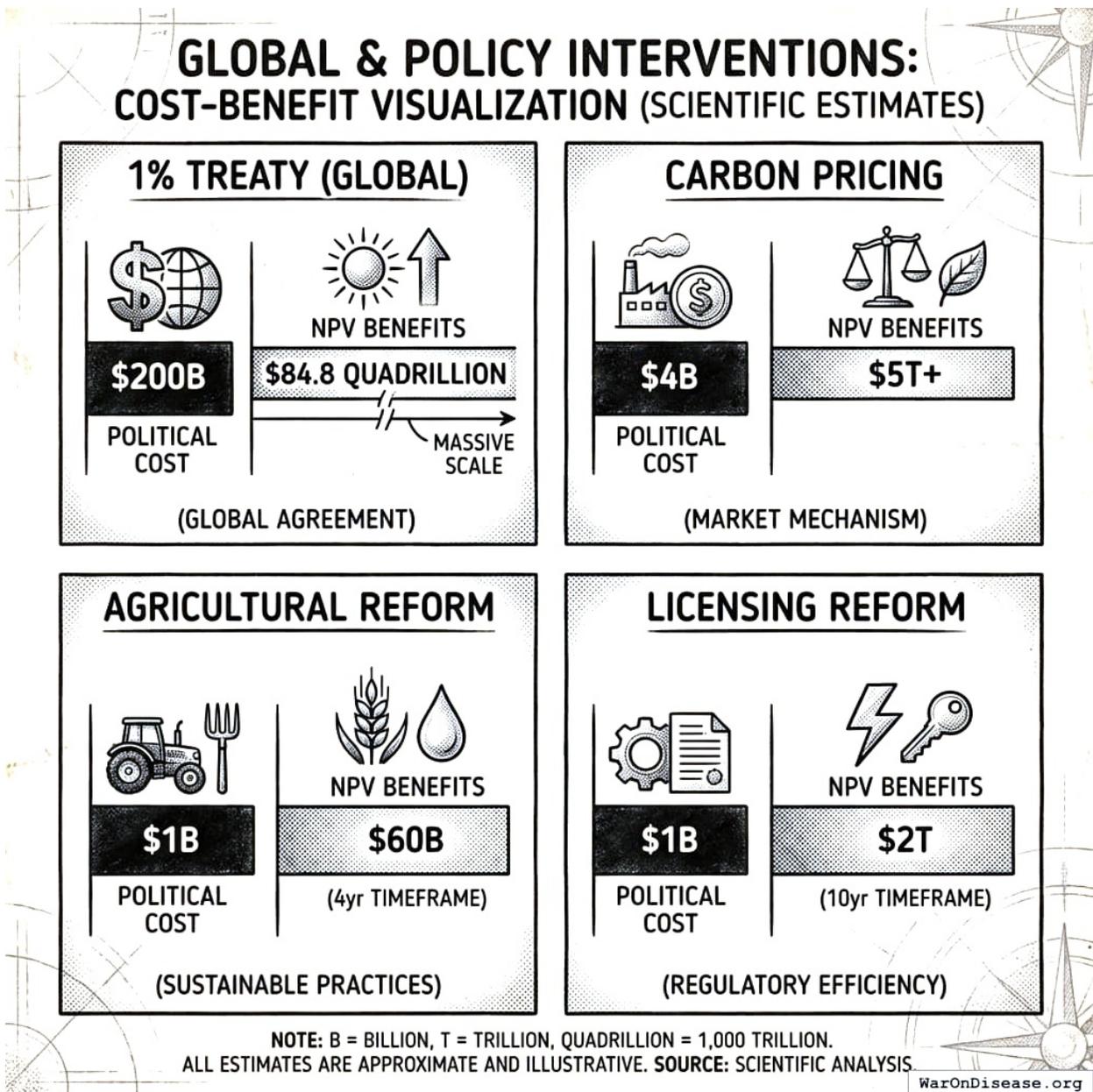


Figure 4: Logarithmic comparison of political investment costs versus policy benefits across four major domains, highlighting the extreme leverage ratio.

7 Limitations

Legal constraints: Our framework assumes legal channels only (campaign contributions, lobbying, independent expenditures, career opportunities). Direct payments constitute bribery. The multi-billion-dollar lobbying industry demonstrates legal channels produce real effects.

Counter-spending dynamics: Affected interests may escalate spending in response. However, industries already spend near optimal levels and cannot exceed their total rents. See [Uncertainty Analysis](#) for quantified ranges.

Political backlash: Visible attempts to influence outcomes may generate voter backlash. Mitigation requires framing as education and advocacy, grassroots mobilization, and transparency.

Implementation complexity: Coordinating spending across campaigns, lobbying, and career incentives requires sophisticated organizational capacity that may not exist among diffuse beneficiaries.

8 Conclusion

The “political impossibility” objection to policy reform dissolves under quantitative scrutiny. We have shown that:

1. **Political change has a quantifiable cost** composed of campaign finance, lobbying, and career value components that can be estimated from public data.
2. **Even maximum engagement scenarios are bounded:** achieving full democratic parity in the US costs \$25.5B (95% CI: \$17.3B-\$36.3B); global parity costs \$128B (95% CI: \$55.2B-\$266B).
3. **High-NSV policies yield extreme ROI:** for policies like military-to-health reallocation, ROI exceeds 400,000:1 even at maximum political investment.
4. **The breakeven point is astronomical:** political investment costs would need to exceed trillions of dollars before high-value reforms become uneconomical.

These findings have implications for philanthropists, impact investors, and reform advocates. The expected value of political engagement dramatically exceeds the expected value of working within existing political constraints, even accounting for substantial probability of failure.

The question is not whether political change is possible. The defense industry, pharmaceutical companies, and financial institutions demonstrate daily that political investment produces returns. The question is whether those seeking to improve collective welfare will make comparable investments.

The political impossibility objection is itself the obstacle: by accepting it, potential reformers decline to compete. Our analysis suggests this concession is economically irrational.

9 References

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The research found that nonviolent campaigns were twice as likely to succeed as violent ones, and once 3.5% of the population were involved, they were always successful. Chenoweth and Maria Stephan studied the success rates of civil resistance efforts from 1900 to 2006, finding that nonviolent movements attracted, on average, four times as many participants as violent movements and were more likely to succeed. Key finding: Every campaign that mobilized at least 3.5% of the population in sustained protest was successful (in their 1900-2006 dataset) Note: The 3.5% figure is a descriptive statistic from historical analysis, not a guaranteed threshold. One exception (Bahrain 2011-2014 with 6%+ participation) has been identified. The rule applies to regime change, not policy change in democracies. Additional sources: https://www.hks.harvard.edu/centers/carr/publications/35-rule-how-small-minority-can-change-world | https://www.hks.harvard.edu/sites/default/files/2024-05/Erica%20Chenoweth_2020-005.pdf | https://www.bbc.com/future/article/20190513-it-only-takes-35-of-people-to-change-the-world | https://en.wikipedia.org/wiki/3.5%25_rule
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