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What is Stock Market Short-Termism?

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Mark J. Roe
Harvard University and ECGI

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Abstract

What precisely is stock market short-termism? For an issue that pervades corporate governance thinking, rhetoric, and policymaking, one would think that we know well what it is. But much that's called stock market short-termism is not properly categorized as such. This distinction—between true stock-market short-termism and false short-termism—is the focus of this article.

Keywords: Short-termism, quarterly capitalism, hedge funds, shareholder activism, R&D, capex, investment, buybacks

JEL Classifications: D72, E71, G18, G34, G38, G41, K22, L21

Mark J. Roe
David Berg Professor of Law
Harvard University, Harvard Law School
Griswold 502
Cambridge, MA 02318, United States
phone: +1 617 495 8099
e-mail: mroe@law.harvard.edu

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Abstract

What precisely is stock market short-termism? For an issue that pervades corporate governance thinking, rhetoric, and policymaking, one would think that we know well what it is. But much that's called stock market short-termism is not properly categorized as such. This distinction—between true stock-market short-termism and false short-termism—is the focus of this article.

What is stock market short-termism? It's important to know the boundaries between stock market short-termism and other economic ills, because in public discourse many social and economic woes are mistakenly attributed to stock market myopia. But when we mistakenly categorize problems as short-term, when they in fact have little to do with failing to think and plan for the long run, we misunderstand the problem and miss out on the best remedies. Knowing what is, and just as importantly what is not, due to stock market short-termism is vital so that policymakers, analysts, and pundits avoid wrongly prescribing remedies that are fated for failure from the start.

In its most direct sense, stock markets are too short term if they over-emphasize immediate corporate results and discount long-term results too heavily. Critics say this affliction is severe and that distorted time horizons lead too many public firms to stop investing in good projects, to shut down work on viable R&D, and to use up cash by buying back stock even when the firm has productive ways to invest that cash.[1] There's much empirical work estimating the extent of this core short-termism problem, and the empirical results are divided on its importance.[2]

* Professor, Harvard Law School. I address the concept of stock market short-termism and its potential conflation with externality problems in chapter 3 of MARK J. ROE, MISSING THE TARGET: WHY STOCK MARKET SHORT-TERMISM IS NOT THE PROBLEM (2022), from which this article draws.

[1] Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 304–05 (1999) (director mediation needed to cure the conflict between short-termism of shareholders and the interests of employees); Jane Maley, *Sustainability: The Missing Element in Performance Management*, 6 ASIA-PACIFIC J. BUS. ADMIN. 190, 190, 196 (2014) (short-term financial aims ignore the developmental needs of the employees); Katharine V. Jackson, *Towards a Stakeholder-Shareholder Theory of Corporate Governance: A Comparative Analysis*, 7 HASTINGS BUS. L.J. 309, 324, 349–50 (2011).

[2] I analyze the divided empirical work in Part II of MARK J. ROE, MISSING THE TARGET: WHY STOCK MARKET SHORT-TERMISM IS NOT THE PROBLEM 75–122 (2022).

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Some readers will balk at this view of short-termism as being too narrow. "That's Type-A short-termism—it's focused on low investment, declining R&D, and stock buybacks. But that's not the only kind of short-termism. And not even the worst kind. Due to stock market short-term pressure, firms also degrade their workforce, pollute the environment,[3] skirt sound regulation, damage stakeholders,[4] cause financial crises, and risk climate catastrophe." Recent corporate governance efforts in the European Union have had policymakers explicitly linking stock market short-termism to sustainability failures.

This viewpoint linking stock market short-termism and sustainability failure is widely held; respected analysts seek to have large firms controlled by long-term shareholders who better appreciate the environment than short-term shareholders do.[5] We can call this societal degradation "Type B Short-termism." In this view, "ESG is [seen as] fundamentally a time-horizon problem. . . . [C]apital markets are short-term oriented. The market rewards companies that meet quarterly earnings estimates and punishes those that miss them. . . . ESG . . . reduces long-term risk, thereby leading to future profits that are larger and more sustainable."[6]

But properly understood, Type B problems are not primarily time horizon problems. They should be labelled "Type B Social Problems," with the short-term modifier struck. Such corporate misdeeds are to be condemned, but they're generally not due to truncated corporate time horizons. They are due to firms' capacity to externalize costs and internalize profits. Firms that externalized costs in the long run are not to be applauded (for being long-run players) as compared to those that do so in the short run. When a firm pollutes this month instead of next year, its motivation could well have nothing to do with the firm's time horizon but result from the firm's willingness to selfishly impose costs on outsiders when rules and norms

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[3] Johan J. Graafland, *Price Competition, Short-termism and Environmental Performance*, 116 J. CLEANER PRODUCTION 125, 130 (2016) (short-termism from fierce price competition decreases environmental performance).

[4] *See, e.g.*, Lisa M. Fairfax, *Making the Corporation Safe for Shareholder Democracy*, 69 OHIO ST. L.J. 53, 57, 83 (2008); Kent Greenfield, *Reclaiming Corporate Law in a New Gilded Age*, 2 HARV. L. & POL'Y REV. 1, 10, 12 (2008); Caroline Flammer & Pratima Bansal, *Does a Long-Term Orientation Create Value? Evidence from a Regression Discontinuity*, 38 STRATEGIC MGMT. J. 1817, 1829–30 (2017); David Millon, *Shareholder Social Responsibility*, 36 SEATTLE U. L. REV. 911, 911–12, 939 (2013); David Millon, *Enlightened Shareholder Value, Social Responsibility, and the Redefinition of Corporate Purpose Without Law*, *in* CORPORATE GOVERNANCE AFTER THE FINANCIAL CRISIS 68, 68–72 (P.M. Vasudev & Susan Watson eds., 2012).

[5] *See* COLIN MAYER, FIRM COMMITMENT 262 (2013). The Center for American Progress criticized short-termism and praised long-termism because it leads to "the fulfillment of environmental commitments." CTR. FOR AM. PROGRESS, REPORT OF THE COMMISSION ON INCLUSIVE PROSPERITY 16 (Lawrence H. Summers & Ed Balls chairs, 2015), www.americanprogress.org/issues/economy/reports/2015/01/15/104266/report-of-the-commission-on-inclusive-prosperity/ (the report is a collegial undertaking, without primary authors). *Cf.* Senators Tammy Baldwin & Jeff Merkley, the Problem of Short-Termism & Activist Hedge Funds (Mar. 17, 2016), www.baldwin.senate.gov/imo/media/doc/3.7.16%20-%20Brokaw%20Act%201.pdf (criticizing underinvestment in workforce, R&D, and infrastructure, due to short-termism).

[6] David F. Larcker, Brian Tayan & Edward M. Watts, Seven Myths of ESG 1 (Rock Ctr. for Corp. Gov., Stanford, Nov. 5, 2021), who show management lawyers, institutional investors, and progressive media supporting this view.

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impose no counterbalancing costs on the firm. No one would conclude that a firm is sound if it has a long-term strategy of leaking toxins into the aquifer year after year or of treating employees and stakeholders badly decade after decade. The policy may be a long-term strategy but its long-term nature does not save it from reprobation. Long-term misfeasance does not and should not get a pass because it is long-term. It's the actions' harmful nature that's objectionable, not their duration. Their long-term nature makes them more objectionable, not less.

In this article, I show why this distinction is important. If we label more problems as emanating from stock market short-termism than really do spring from the stock market's time horizon, we will think stock market short-termism is a more serious problem than it is. Mislabeling is not "free." By mislabeling the problem—as policymakers, analysts, and pundits do too often—we seek purported solutions that do not address the real problem. For example, if we think that climate change problems are due (in significant measure) to the stock market's short-termism pushing individual companies to think about today's profits and not tomorrow's, then politicians will have another strong reason to adopt policies that are commonly thought to lengthen stock market time horizons. Another example: taxes on trading and lower capital gains taxes for longer-term holdings are commonly discussed as ways to lengthen stock market horizons. Stifling or at least weakening the strongest forms of shareholder pressure on executives and boards is another commonly-sought remedy sought to cure short-termism. These policies may be justified, but only for other reasons, not because it's a shortened time horizon that propels Type B social problems. Lengthening stock market time horizons will have little or no impact on climate change, as I shall show below. In some ways they may further damage the climate, because they turn political attention away from the hard problems that might mitigate the climate crisis—like a carbon tax—to solutions that have little or no impact—like lengthening corporate time horizons.

A. Employees and Stakeholders

Detractors of the large corporation criticize executives and corporations for not respecting employees, communities, the spirit of government regulation, and the environment.[7] These problems come from the stock market inducing a short-term mentality in too many corporate

[7] RALPH NADER, MARK GREEN & JOEL SELIGMAN, CONSTITUTIONALIZING THE CORPORATION: THE CASE FOR THE FEDERAL CHARTERING OF GIANT CORPORATIONS 1–25 (1976); Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733, 745 (2005).

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executives, it's thought.[8] Social values—like environmental protection and loyalty to employees—are long term in this view; the public corporation, in contrast, is short term.

For example, a recent British prime minister, Theresa May, contrasted the goals of "transient shareholders" with the well-being of "[w]orkers [who] have a stake, local communities [which] have a stake, and often the whole country [which] has a stake."[9] And a few years ago then-Chief Justice Strine of the Delaware Supreme Court also moved seamlessly from short-termism to concern for stakeholders when examining the modern corporation's problems.[10] But that move should not be seamless. The officials were conflating time horizons with social concerns, as is common in public discourse, but the two are different. A commonly used term—sustainability—captures this brand of short-termist idea. Sustainable activities are long term and to be encouraged; unsustainable ones are short term and should be discouraged.[11] Critics say that companies once saw "that investing in workers, communities and other stakeholders was key to sustainable profits."[12] But too many corporate players no longer seek such sustainability, it's said.

Global warming in this view is exacerbated by firms unwilling to think and act long term.[13] "[B]usiness tends to fall victim to short-term financial markets, whereas society tends to embody longer-term challenges[.]"[14] Long-term investors will seek firms that adopt sustainable, environmentally friendly, socially stable results.[15] If stock markets and companies were more long-term focused, the environment and employees would be better treated.

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[8] European Union, Directive 2017/828 of the European Parliament and of the Council of 17 May 2017, amending Directive 2017/36/EC as regards the encouragement of long-term shareholder engagement, 2017 O.J. (L 132) 20. *See* Virginia Harper Ho, *"Enlightened Shareholder Value": Corporate Governance Beyond the Shareholder-Stakeholder Divide*, 36 J. CORP. L. 59, 61–62 (2010).

[9] *Unilever Is Safe, but We Need Better Defenses Against Short-term Capitalism*, GUARDIAN (Mar. 19, 2017), www.theguardian.com/business/2017/mar/18/unilever-is-safe-but-we-need-better-defences-against-short-term-capitalism.

[10] Leo E. Strine, Jr., *Who Bleeds When the Wolves Bite? A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System*, 126 YALE L.J. 1870, 1871, 1874 (2017) ("In the back and forth about short-term effects on stock price . . . the flesh-and-blood human beings our corporate governance system is supposed to serve get lost.").

[11] Natalie Slawinski & Pratima Bansal, *Short on Time: Intertemporal Tensions in Business Sustainability*, 26 ORG. SCI. 531 (2015); ALLEN L. WHITE, TRANSFORMING THE CORPORATION 2 (2006), www.corporation2050.org/pdfs/5Corporations.pdf.

[12] Paul Roberts, *Why Have U.S. Companies Become Such Skinflints?* L.A. TIMES, Aug. 27, 2014, www.latimes.com/opinion/op-ed/la-oe-roberts-corporate-responsibility-20140828-story.html.

[13] *E.g.*, Slawinski & Bansal, *supra* note 11, at 531 ("many companies have chosen to focus on immediate profits and to delay investments in . . . emissions reductions").

[14] *Id.* at 532 ("[T]he tension between the short term and long term is connected intimately to the tension between business and society.").

[15] The Inv. Integration Project, Systems-Level Considerations and the Long-Term Investor 3 (2017), www.tiiproject.com/wp-content/uploads/2017/03/Systems_Level_Considerations_Long_Term_Investor.pdf.

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Critics say that a truly long-term corporation would protect the environment and incur short-term costs that benefit the environment in the long run.[16] "The short-term payback periods of financial markets take precedent over the long-term time horizons of ecological and social systems," says one report.[17] Another critic states that a prime reason "why . . . markets [are] not currently . . . promot[ing] a sustainable economy . . . is [financial market] short-termism—for which the capital markets can be fairly criticized[.]"[18]

These environmental, climate, and stakeholder issues are serious and need attention. They can lead the economy to fall well short of providing the greatest good to the greatest number of citizens. But while the stock market may indeed induce the firm to act badly, neither the firm's nor the stock market's time horizon is the core issue; the operative question is for whom the firm works. The operative mechanism is that firms seeking profits can, and will, externalize costs when not barred from doing so. The barriers to their doing so are (1) sound regulation that internalizes the costs—making the firm pay or (2) executives' consciences, which make firms pay in another dimension when enough skilled executives cannot countenance the externalization. When an unenlightened, unregulated company works blindly for shareholders, it neglects societal values like environmental integrity even if the company is fully working for its own long-run value.

These societal problems are collective action debilities and have been labelled "the tragedy of the commons," because individual users of pastures have incentives to over-graze and overuse the common pasture, thereby degrading and ruining it. Those who analyze the tragedy of the commons know it's a societal, and not a corporate time horizon, problem.[19]

* * *

Consider six widely perceived failings of the large U.S. corporation: (1) failing to invest enough, (2) declining R&D, (3) draining cash by buying back stock, (4) damaging the environment and the planet, (5) mistreating stakeholders—employees in particular—and (6) sometimes taking big

[16] *E.g.*, Slawinski & Bansal, *supra* note 11, at 545.

[17] Andrew J. Hoffman & Max H. Bazerman, *Changing Practice on Sustainability: Understanding and Overcoming the Organizational and Psychological Barriers to Action*, *in* ORGANIZATIONS AND THE SUSTAINABILITY MOSAIC: CRAFTING LONG-TERM ECOLOGICAL AND SOCIETAL SOLUTIONS 84, 95–96 (Sanjay Sharma, Mark Starik & Bryan Husted eds., 2007) ("Financial markets often encourage short-term goals . . . and discount the future [so as] not [to] reflect true environmental and social risks and opportunities. . . . These pressures will lead companies to . . . diminish[] the stability of the ecosystem.").

[18] FORUM FOR THE FUTURE: ACTION FOR A SUSTAINABLE WORLD: SUSTAINABLE ECONOMY IN 2040: A ROADMAP FOR CAPITAL MARKETS 4 (2011), www.forumforthefuture.org/sites/default/files/project/downloads/aviva-sustainable-economy-full-report-web.pdf. The report does cite market failure, but as a reason second to financial market short-termism. *Id*. at 4.

[19] Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243–48 (1968).

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financial risks, like the ones that damaged the economy in 2008–2009. The first three malfeasances could be due to stock markets having too short a time horizon. They are instances of "Type A" short-termism. If pernicious, they lead individual firms to underperform in the long run. And if most public firms are afflicted by this kind of short-termism, the economy as a whole will underperform in the long run. Elsewhere, I analyze the data brought forward on whether these problems are serious.[20] If indeed serious in making many firms underperform, then stock market short-termism needs to be addressed in this dimension—Dimension A. But here I am assessing what short-termism is and, more importantly, what it is not. The last three problems—classified as "Type B" problems—are often labelled short term, but they are not primarily time horizon problems. Type B problems are real but come from the corporation offloading risks and costs to the rest of society, in both the long- and the short-run.

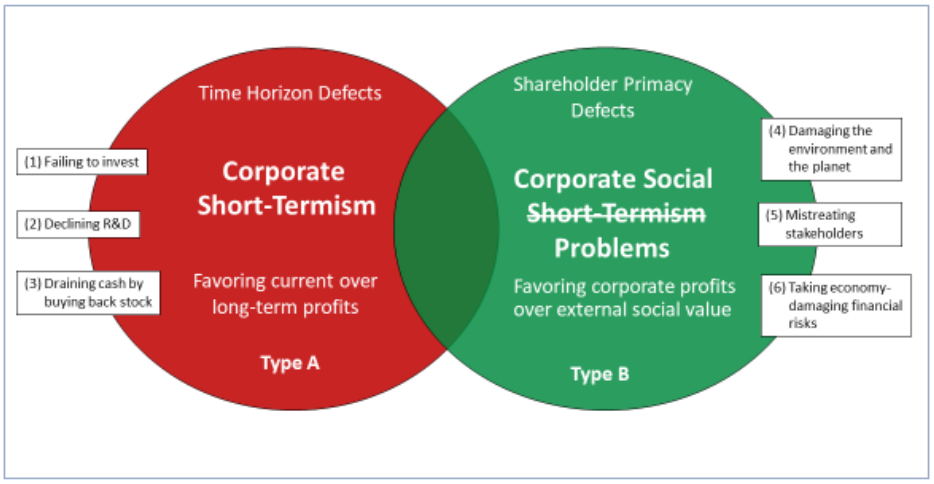


Figure 1. Distinguish Corporate Externalities from Corporate Short-Termism

The difference can be readily illustrated by thinking of corporate excess production and burning of hydrocarbons, and then comparing that overproduction to our personal burning of hydrocarbons—when driving our cars, for example. Corporate hydrocarbon burning (and sales, and use) risks climate catastrophe for the planet decades from now. And personal hydrocarbon burning, such as when I drive my car—and when you drive yours—has us individually contributing to global warming and to the risk of climate catastrophe decades hence.

[20] ROE, MISSING THE TARGET, *supra* note 2, at 75–112.

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But our time horizon is not the principal mechanism that induces us to risk climate catastrophe. The primary mechanism here is that neither the polluting corporation nor the gasoline-burning car driver absorbs the full costs of his or her own pollution. These costs are spread over society. So my driving harms the environment, but (1) my driving harms it only a small amount and (2) with almost no negative environmental impact to me. When too many of us do the same thing, however, (1) we collectively harm the environment and (2) I feel some of that overall impact. And when the corporation, even the large mega-corporation, burns hydrocarbons, or finds them and refines them and sells them, it harms the environment, but the harms are spread over society generally and not borne primarily by the firm's stockholders, its executives, or its employees.

The profits from the pollution are internalized, but not the costs. The convenience of my driving to work today is nice for me, whereas the pollution and the contribution to environmental degradation are not nice but borne by society overall, not by me alone. My time horizon is not what counts here; it's my capacity to externalize the costs that counts.

More on this below. For now, keep in mind that the solutions to climate change problems depend greatly on whether we think these problems are due to stock market short-termism—a time horizon problem—or to externalization. The latter is *not* a time horizon problem; it extends over the long run and is not due just to short-run thinking. If the problem really were one of short-termism, then common solutions would be to accord executives more autonomy from stock markets, to tax stock market trading, and to encourage long-term ownership of stocks. But if environmental degradation and global warming are not due in any strong way to stock market short-termism, then these proffered remedies will fail.

Bottom-line: If we continue to erroneously blame stock market short-termism for the severity of these problems, our remedial efforts will be mistargeted.

B. DuPont, Environmental Toxicity, and the Long Term

Consider a company in a country that does not regulate environmental wrongs. The company destroys its local environment and makes considerable profit by selling its products elsewhere. The company profits but does not pay for its environmental degradation. Others, external to the firm, pay. The social costs are great, but the problem is not primarily caused by the company having a stunted time horizon. Much that is environmentally costly is miscategorized as short-termism, when it really arises from distorted incentives and a lack of corporate conscience.

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A DuPont episode illustrates this result.[21] Long seen by many as "one of the most distinguished of . . . U.S. corporation[s]"[22] and a dedicated long-term organization that was lauded by corporate law judges for its long-term orientation and its respect for corporate constituencies,[23] it was embroiled in one of the major environmental debacles of our time. For six decades—a very long term—DuPont discharged a highly toxic chemical into the environment when it made Teflon. The company knew of both the chemical's danger and the human body's inability to rid itself of the toxin. Yet it refused inexpensive abatement. Executives counted on keeping inculpating information from the public and the government. They did so for decades, as Roy Shapira and Luigi Zingales show and as the movie *Dark Waters*—named for how and where the toxins were hidden—dramatizes.[24] DuPont's long-term horizon did not stop it from polluting dangerously.

True, there's typically a lag between a polluter's act and the polluter getting caught; profits are immediate and the cost of getting caught comes later, as was so for DuPont. But this time horizon consideration should not obscure the fact that the pollution was primarily an externality: DuPont captured the benefits while others—external to DuPont—suffered the costs. A shareholder who held DuPont's stock for the sixty-year long term made money from DuPont's sixty years of Teflon pollution, even though the company was caught.[25] DuPont did not pollute because it was pressured by short-term hedge-fund activists seeking to push a cost deep into the future, nor distracted by traders ignoring the future, nor pressured to report good results in a single financial quarter; it polluted because its internal organizational conscience broke down. Its long-term pollution paid off for both short-term and long-term shareholders.[26]

Rewarding whistleblowing and facilitating liability, even punitive liability in excess of the damage caused, are plausible cures for this

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[21] See Mark J. Roe & Roy Shapira, *The Power of the Narrative in Corporate Lawmaking*, 10 HARV. BUS. L. REV. 421 (2021).

[22] Bill George, *The DuPont Proxy Battle is a Battle for the Soul of American Capitalism*, HUFFINGTON POST (Nov. 5, 2015), http://www.huffingtonpost.com/bill-george/the-dupont-proxy-contest_b_7256490.html.

[23] Delaware's former Chief Justice Strine lauded DuPont's "track record of long-term investment and better-than-typical treatment of constituencies other than stockholders." Leo E. Strine, Jr., *Corporate Power Is Corporate Purpose I: Evidence from My Home Town*, 33 OXFORD REV. ECON. POL'Y 176 (2017). Delaware "nationalism" and pride could account for this.

[24] Roy Shapira & Luigi Zingales, *Is Pollution Value-Maximizing? The DuPont Case* (NBER Working Paper 23866, 2017), www.nber.org/papers/w23866; Nathaniel Rich, *The Lawyer Who Became DuPont's Worst Nightmare*, N.Y. TIMES, Jan. 6, 2016, www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html.

[25] Shapira & Zingales, *supra* note 24. Moreover, the stock market as a whole could neglect catastrophic climate outcomes. If each firm calculates that its contribution to global warming will not make a difference, it continues to contribute to global warming, with the collective effect pernicious. But the market as a whole suffers because each firm (and increasingly each nation) externalizes a large fraction of the climate costs. *See infra* Part H.

[26] *Cf.* Pat Akey & Ian Appel, Environmental Externalities of Activism (Jan. 2020), https://ssrn.com/abstract=3508808 (hedge fund activism has a salutary effect on target firm emissions, via better management and reduced activity from a substandard organization).

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externalization, as is better regulation to make being caught more likely; lengthening corporate time horizons is not.

* * *

My purpose here is not to prove that stock-market-driven short-term proclivities have never exacerbated pollution or fraud, but that they are unlikely to be the biggest contributors to global warming, excess methane, and spoliation of aquifers. These social problems often emanate from a misdirected and selfish shareholder orientation. One does not cure such problems of conscience and externalization of costs with a longer time horizon for the stockholders. One cures them by making the polluter pay, right away or at least eventually. Yet too much of the rhetoric of policymaking here mistakenly aims to lengthen time horizons.

C. Environmental Degradation and Global Warming as Corporate Selfishness

The DuPont example can be generalized: Even firms that think solely about the long term can and will pollute, degrade the environment, and warm the planet as long as they selfishly prioritize their own benefits and do so by externalizing the social costs of their business. (And we citizens who drive our cars and fly planes to visit relatives or to do our jobs are not much different.) Integrated oil companies are among the most long-term-oriented companies on the planet, with planning departments projecting worldwide energy needs and oil field possibilities decades into the future. Making them think more long term is not an important climate cure because, first, they already do, and, second, the problem is not their time horizon but that polluters (including us, driving our cars) do not pay. Longer-term thinking will induce firms to take into account the costs that they themselves pay years hence for their own pollution or from changes in production costs and sales (if they do not already do so). But if the social harm is not so much the self-inflicted portion but the externalized portion—as it seems to be—then making firms think longer instead of shorter will not solve our climate change problem.

Corporate critics should stop reflexively blaming major corporate problems on short-termism, not just because it's conceptually incorrect but because doing so leads us to misidentify the underlying problems and solutions. Even if every corporation operated for its own long-run benefit, bad corporate social behavior could and would persist, as long as corporations can externalize costs. The polluting corporation is a bad citizen but need not have a short-term outlook.

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It is not surprising that those who have thought most about environmental degradation typically identify a carbon tax as the best means of addressing the problem—a tax on the volume of carbon that citizens and companies release into the atmosphere. Carbon taxes address externalities by making people and companies pay for the negative consequences of their actions. The payment normally should induce them to pollute less. This policy effort targets the selfishness problem (and hence might work), not the time horizon issue, which is the wrong target and won't work.

D. The Financial Crisis

A housing bubble grew during the first decade of this century until, by the decade's end, it burst and caused a worldwide financial crisis that threatened to turn into a great depression. The crisis unleashed political forces that still disturb the polity and the economy.

Influential analysts blamed corporate and financial short-termism as a core cause of this crisis. The government's official Financial Crisis Inquiry Commission castigated banks' short-term executive compensation systems as propelling it.[27] SEC Chair William Donaldson likewise saw "one of the root causes" of the crisis to be "[t]he excessive focus by too many corporations on achieving short-term results."[28] Timothy Geithner, who eventually became Secretary of the Treasury, concluded that "[t]his financial crisis had many significant causes, but . . . [i]ncentives for short-term gains [from executive compensation] overwhelmed the checks and balances meant to mitigate the risk of excess leverage."[29] Empirical studies exist on both sides: some show that the duration of executive compensation had no impact on a financial firm's vulnerability,[30] while others detect a correlation between the two.[31]

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[27] FIN. CRISIS INQUIRY COMM'N, FINANCIAL CRISIS INQUIRY REPORT xix (2011). *See also* Florian Möslein & Karsten Engsig Sørensen, *Nudging for Corporate Long-termism and Sustainability?* 24 COLUM. J. EUR. L. 391, 393 (2018) ("the global financial crisis has turned public attention to issues of short-termism in the financial sector").

[28] Nicholas Rummel, *Donaldson: Short-term Earnings Led to Woes*, INV. NEWS (Sept. 18, 2008), www.investmentnews.com/article/20080918/REG/809189995/donaldson-short-term-earnings-led-to-woes.

[29] Statement by Treasury Secretary Tim Geithner on Compensation (June 10, 2019), www.treasury.gov/press-center/press-releases/Pages/tg163.aspx.

[30] Andrea Beltratti & René M. Stulz, *The Credit Crisis Around the Globe: Why Did Some Banks Perform Better?* 105 J. FIN. ECON. 1, 25 (2012).

[31] Adam C. Kolasinski & Nan Yang, *Managerial Myopia and the Mortgage Meltdown*, 128 J. FIN. ECON. 466, 481–82 (2018). *Cf.* Lucian A. Bebchuk, Alma Cohen & Holger Spamann, *The Wages of Failure: Executive Compensation at Bear Stearns and Lehman, 2000–2008*, 27 YALE J. ON REG. 257, 261 (2010) (executives at two financial firms did very well financially before the crisis and came out ahead even after the losses they suffered from their firms' collapse in the financial crisis); Lynne Dallas, *Short-Termism, the Financial Crisis, and Corporate Governance*, 37 J. CORP. L. 265, 319, 357 (2012). *See also* Radhakrishnan Gopalan, Todd Milbourn, Fenghua Song & Anjan V. Thakor, *Duration of Executive Compensation*, 69 J. FIN. 2777, 2712 (2014).

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Few analysts, even those emphasizing short-term executive compensation as a root cause, would, when explaining the financial crisis, leave out weakened financial sector capital requirements, the rise of unregulated but risky banking, and other core causes having little to do with executive compensation. But adding short-termism to the list of major causes is a mistake, because the systemic financial problem being analyzed is not fundamentally one of time horizons but, again, one of externalities. Those who conjure up a powerful short-term driver here see executives taking risks with their bank's solvency that those same executives would shun if the risks were played out within the duration of the executives' compensation packages. If I'm paid based only on how high *this* year's profits are, I'll take excessive risks with *next* year's profits, taking the chance that next year's profits will be obliterated in a financial crisis. This is indeed a time horizon contribution to financial risk-taking. But overly focusing on this channel will lead policymakers to miss the broader externalization channel, which is the main target.

The basic financial problem inducing the crisis was that the costs of a bank's failure were mostly borne by others outside the bank and the executive suite. The losers were not primarily the risk-taking bank, its shareholders, and its executives but were instead the government, the rest of the financial system, and, most importantly, the country's workers and taxpayers—all interests external to the risk-taking banks.

The government lost first by backing up failing banks' deposits through the government's deposit insurance and then by bailing out sinking banks. And the economy then suffered when banks failed and were bailed out. But if the banks' risk-taking paid off, and there had been no failure, the gains would have been garnered almost entirely by the bank's shareholders and stock-compensated executives, all of whom would have won big. Heads the executive wins; tails, the rest of us pick up most of the loss. The executives' time horizon was less important than the distorted payoffs in their stockholders' compensation.

Imagine that the banks' executives were paid over the long run with company stock. If they ran their banks in a risky way that usually pays them a million dollars annually but inflicts a trillion-dollar loss on the economy once in a while, they would still be incentivized to take that bet—good for them most of the time, but very bad for the rest of us when it's a losing bet. The bankers still would have incentives to take the risk because most of the time they would get the million-dollar payoff. The bank and the executives bear only a sliver of the costs.

The key incentive-based cure is to unlink bank executives' compensation from the banks' stock. (Conscience, better regulation, and public-spiritedness can help too.) Financial firms that paid their executives more in debt-like claims that the executives had to hold on to, such as fixed

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pension obligations (which did not rise if the bank did well but fell when the bank did badly), fared better during the crisis.[32] That pay package incentivized bankers to take fewer risks. Conversely, banks with high stock-based executive compensation took more risk than was good for financial stability.[33] This problem is one of incentive alignment, not of stretching the executives' time horizons. The two differ, but, in too much thinking about short-termism, they are often confused and thought to be the same.

E. Long-Term Externalization

A popular perspective in some quarters is that the corporation's discount rate is too high when it evaluates the costs of future harms that it causes. An immediate lawsuit for the corporation's tortious harm is, in this view, valued appropriately. But the firm values too low a potential loss in a lawsuit a decade hence. It discounts the costs of that lawsuit by an interest rate notably higher than the firm would value a benefit coming to it at the same later time. Dig down, however, and the reason for the higher discount for future damage comes from the rising chance that a later harm may be avoided or eliminated. Corporate liability may just disappear over time. The next paragraphs analyze why and how.

Imagine that the corporation releases a deadly toxin. If the damage were done in the short run, the firm would, let's assume, be liable in an amount commensurate with the harm done. But if the harm is done deep into the future, the company's disposition to reap the short-run gains incentivizes it to release the toxin.[34] Only the directors' and executives' consciences stand in the way of short-term gain and long-term harm. But properly understood, the problem is that externalization *increases over time* and *not* that the corporate discount rate is inherently too high.

The long-term reasons why the firm could escape liability are several. First, the corporation may disappear, leaving no entity to pay, even if liability would have been clear; the perpetrators clear a profit and then "skip town." Second, causality and responsibility fade with time. E.g., was the deadly mesothelioma decades later caused by the corporation's original release of

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[32] Sjoerd van Bekkum, *Inside Debt and Bank Risk*, 51 J. FIN. & QUANT. ANAL. 359, 383 (2016); Rosalind L. Bennett, Levent Güntay & Haluk Unal, *Inside Debt, Bank Default Risk, and Performance During the Crisis*, 24 J. FIN. INTERMEDIATION 487 (2015); Frederick Tung & Xue Wang, *Bank CEOs, Inside Debt Compensation, and the Global Financial Crisis* 1–3, 29 (Boston U. Sch. of Law Working Paper No. 11-49, Aug. 2013), www.ssrn.com/abstract=1570161; Frederick Tung, *Pay for Banker Performance: Structuring Executive Compensation for Risk Regulation*, 105 NW. L. REV. 1205 (2011). *Cf.* Bebchuk, Cohen & Spamann, *supra* note 31, at 276–77 (emphasizing excessive risk-taking incentives of some financial executives' compensation).

[33] *See* sources cited at *supra* note 32; Lucian A. Bebchuk & Holger Spamann, *Regulating Bankers' Pay*, 98 GEO. L.J. 247 (2010); René M. Stulz, *Risk-Taking and Risk Management by Banks*, 27 J. APPLIED CORP. FIN. 8 (2015); Bill Francis, Aparna Gupta & Iftekhar Hasan, *Impact of Compensation Structure and Managerial Incentives on Bank Risk Takin*g, 242 EUR. J. OP. RES. 651 (2015).

[34] *Cf., e.g.*, Kent Greenfield & Frank Partnoy, Discounting Externalities (working paper, Mar. 2022).

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asbestos or by the victims' subsequent tobacco smoking? And, third, liability is simply cut off when the statute of limitations runs out and thereby bars otherwise winning lawsuits.

A misanalysis of these scenarios would conclude that the firm's short-term profits lead it to take long-term risks. But properly analyzed, these considerations (corporate disappearance, fading causality, and the statute of limitations) are operating not principally as a *time* factor but as an *externalization* mechanism. Each factor increases the probability that the firm will *not* be held responsible for the harms it caused. It's *not* that the firm is diminishing the value of its own future profits.

Here's how the mechanism works: If disappearance, via shutdown, bankruptcy, or merger, cuts off liability years hence, then that shutdown creates an uncompensated harm. It's that failure to compensate—i.e., that the corporation does not have to pay—that incentivizes the firm to ignore the risk; the long-term and the discount rate are *not* the operative factor diminishing liability and increasing externalization. Rather, it's that over time, liability *disappears*. If causality becomes uncertain with time, then that uncertainty creates an uncompensated harm; again, time and an increasing discount rate are not the operative factors. Increasing externalization is. If the statute of limitations runs out, then the policy reasons for statutes of limitations induce the externalization of harms and not a too-high corporate discount rate. Once again, time is not the operative factor diminishing liability but a legal system that cuts off liability, allowing the firm over time to externalize more harm.

A related conceptualization: Analysts distinguish the social discount rate from the private discount rate. Private projects' discount rates are determined by market forces, it's said,[35] but the proper social discount rate is lower—making future projects with a social dimension more valuable than the market accords them. These contrasting rates militate, I argue, not for making corporations more long term but for the public to act directly by promoting the desired activity or realigning firms' incentives to deter the undesired activity. Inducing corporations to adopt the public rate would make them use the wrong rate for their market-based activities.[36]

Another way to look at the social discount rate follows. The main rationale for a low future discount rate (which makes the future more valuable) is that intergenerational equity demands that future generations be

[35] Such analyses usually ignore the Federal Reserve's (and other public institutions') role in setting the private discount rate. In this sense—the Federal Reserve determines or influences interest rates, both long-term and short-term—there is no pure market-based discount rate.

[36] Kenneth J. Arrow, *Inter-Generational Equity and the Rate of Discount in Long-Term Social Investment*, *in* CONTEMPORARY ECONOMIC ISSUES 89 (M.R. Sertel ed., 1999). The potential disjunction is acute for intergenerational issues as unborn generations do not exhibit a demand for goods, investment, or environmental purity.

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treated with more respect. A future life, in this thinking, is as valuable as a contemporary life—making the proper discount rate *zero*.[37] Similarly, the market's discount rate does not value the benefits that future generations will obtain from a safer planet not afflicted with detrimental climate change. But properly analyzed, this intergenerational disparity is *also* an externality and not a matter of the corporation being too short term in the time horizon sense we've used in this article's inquiry. *Today's* generation externalizes harms onto a *future* generation because that future generation is not represented in today's relevant market transactions.[38] The cure for this externality is appropriate regulatory action that internalizes that externality. Indeed, the social discount literature aims primarily to inform the policymaker—the social planner in this economic lexicon—and does *not* aim to adjust the corporate discount rate.[39]

The public decisionmakers—a well-informed, disciplined government—should act directly by taxing the undesired activity, subsidizing the desired activity, and regulating the market to get to where the social planner thinks we should be. But public decisionmakers are responsible to *today's* public, not to tomorrow's citizenry. The problem is our collective inability to induce a more desirable future by making the undesirable future more costly.[40]

F. When Time Horizon Could Count

All this is not to say that time horizon plays no role at all.

In truly short-term stock-market-based corporate action, the firm imposes the cost on others for a quick corporate benefit, but at a long-term cost to the corporation itself. If the long-term costs to the corporation exceed its own short-term profits (properly discounting to present value), then we indeed have a true time-horizon, short-term issue. If instead the firm and its

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[37] William MacAskill, *The Case for Longtermism*, N.Y. TIME OPINION, Aug. 7, 2022, at 5 ("Future people count."):

> Suppose that I drop a glass bottle while hiking. If I don't clean it up, a child might cut herself on the shards. Does it matter when the child will cut herself—a week, or a decade or a century from now? No. Harm is harm, whenever it occurs.

[38] The future generation that is of course unrepresented directly in political decisionmaking as well. And that underrepresentation helps to explain the weak deference that the future generations are paid.

[39] Kenneth J. Arrow et al., *Should Governments Use a Declining Discount Rate in Project Analysis?* 8 REV. ENVT'L ECON. & POL'Y 145, 160 (2014); Andrew Caplin & John Leahy, *The Social Discount Rate*, 112 J. POL. ECON. 1257 (2004); Moritz A. Drupp et al., *Discounting Disentangled*, 10 AM. ECON. J. ECON. & POL'Y 109 (2018); Mark A. Moore et al., *"Just Give Me a Number!"—Practical Values for the Social Discount Rate*, 23 J. POLICY ANAL. & MGMT. 789 (2004).

[40] Here in the text I am invoking a public-spirited planner who is knowledgeable and not captured by today's interests. Whether such a planner in a real political system can fully represent future generations—which have no current direct political input—is unclear, uncertain, and difficult.

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stockholders benefit in the short and the long run, we have a social problem, but not a time horizon problem.

If pollution or financial risk-taking are undiscoverable for longer than the executive expects to be with the company, the self-interested executive has reason to tolerate the undetected pollution now that will diminish the company's stock price later, when the wrong is discovered and finally fully priced into the stock.[41] But is this problem emanating from *stock market* short-termism? While popular discourse ties this harm to executive stock options that are worth more now, this tie-in is largely incorrect. It's not the stock market's purported short-termism that exacerbates the problem. *Any* compensation structure that rewards the executive for current profitability, despite hidden costs, incentivizes the executive to push costs out into the future. The executive could pollute, pump up profits, and take a *cash* bonus this year, expecting to be gone from the firm when the problem is discovered and the firm finally pays up.

The pay structure is what needs fixing, not the stock market. In fact, stock-based compensation, if done well, is better than a cash bonus for the long- vs. short-term problem. If the payment is in stock that the executive must keep deep into the future, then the executive cannot benefit by pushing costs into that future. The stock's value will suffer when the pollution is discovered—if, but only if, the enforcement machinery to internalize the externality is strong. Hence, the company's shareholders—the stock market—has the incentive to keep the executive "on the hook" longer. Thus, more stockholder power (through a stockholder say on executive pay) can be better for the environment in this delayed discovery scenario.

Consider another apparent time horizon channel: Some executives feel pressured to meet this quarter's numbers, so they put off resolving an environmental problem or postpone awarding employees a well-deserved raise. And, once they begin shortchanging employees and degrading the environment for this quarter, they get caught up in the bad behavior and fail to correct it in the next quarter. What once was a short-term action turns into a long-term problem.

Such a channel fits aspects of the 2001 Enron scandal: the executives scrambled to show good quarterly results and did so fraudulently, hoping that better business in the future would hide their doctoring of the books. But that better business never came, so they found themselves pushed to falsify earnings levels for several years, until they were caught.

But while this sequence could relate to distorted time horizons, it need not. First, what we need to know is whether the short-term-pressured executive acts in a way that is detrimental to the firm's long-term good. Recall the DuPont sequence. DuPont polluted early and then kept polluting.

[41] John Armour, Jeffrey Gordon & Geeyoung Min, *Taking Compliance Seriously*, 37 YALE J. ON REG. 1 (2020).

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The pollution seems to have been profitable for the company in both the short and the long run. If too few firms are reprimanded, prosecuted, or fined for their transgressions, the action that is interpreted as short-term beneficial to the firm but at a long-term cost to the firm *is actually beneficial to the firm* in *both* the short and the long run. Second, in some instances, fraud is a benefit for the executive but is costly to the firm; curing the problem would not come by lengthening the firm's time horizon but by making the wrongdoing executive behave better.

Vivid scandals like Enron make it easier for us to imagine that executives' short-run misdeeds are costly in the long run to the firm. In Enron's case, they were. In DuPont's case they were not. Many such misdeeds are, one suspects, never uncovered and never become public scandals. Such undiscovered misdeeds are, one supposes, profitable to the firm in the short run and not costly in the long run. Lengthening time horizons, if this indeed correctly surmises the lack of long-term costs, would fail to remedy the problem.[42]

This can be seen by imagining 1000 firms taking a short-term action that will gain $1 million for each of those 1000 firms at the expense of outsiders, for a total gain of $1 billion. One of these thousand firms will be caught and, when caught, that firm will have to pay (via a degraded reputation or by fines) $50 million. From the perspective of the firm that gets caught, the action certainly looks to be short term—a $1 million short-term gain that costs the firm $50 million in the long run. But from a portfolio-wide perspective, the firms gain $1 billion overall for a total cost of $50 million. Or from each individual firm's perspective, each gains $1 million in the short run, at a cost of a .001 chance of a $50 million loss—i.e., an expected loss of $.05 million for a gain of $1 million.

These are *not* short-term actions that are, in the aggregate, costly to the firms in the end.

* * *

The underlying problem in such cases is not so much the short-termism but the fraud, the externality, and the misbehavior. Fix the fraud, incentivize the firm and its executives to internalize the externality, and

[42] Even Enron's long-term costs may not have been due to short-term *stock-market*-induced benefits, despite the concession in the text. It's plausible that Enron's management hoped that their misdeeds would postpone a day of reckoning to when new profitable businesses kicked in profits to stabilize the firm from major money-losing investments. Bennett Stewart, *The Real Reasons Enron Failed*, 18 J. APP. CORP. FIN. 116 (2006) ("Enron did not fail because of creative bookkeeping, . . . but was creative in bookkeeping because it was failing."). Those losses were induced by a misguided internal compensation system that overpaid people for closing deals irrespective of their profitability; i.e., Enron's problem in this analysis was due to managerially-induced short-termism or just plain (senior) managerial error. *Id*. at 116–17.

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punish the misbehavior—and then the problem is reduced or eliminated. Altering the firm's time horizons may well do no good.[43]

G. Index Funds as Universal Owners

The explosive growth of index funds, which own some stock in all firms in the market (or at least some of each company in the underlying index), raises some analysts' hopes that (i) these index funds can overcome the externality problem[44] and (ii) that the index funds' long-term nature will facilitate that cure. The index funds' long-term incentives come from their ownership structure: the indexer buys a slice of the entire stock market (or at least of one of the common indices, such as the Standard & Poor's 500). It never sells out a stock position, other than if the stock is removed from the index. Hence, the thinking might run, the index fund's long-term nature will enable it to diminish public firms' short-termism, from polluting, risking climate change, and inducing financial crises. Here, I show that the hoped for overcoming of the externality problem (item (i) in this paragraph's first sentence) does not arise from the funds' long-term incentives.[45]

Since these funds own a slice of the entire stock market, their incentives come closer to those of the nation as a whole than any individual firm's incentives. Here too, however, we need to separate analysis of externalities from analysis of time horizons. The optimistic academic analysts' hopes are not coming from an expectation of changing the index funds' time horizons. Their hopes arise instead from the funds' incentives to internalize the externalities that individual firms generate, which become costs to other firms in the indexers' portfolios. If another firm in the index fully bears the costs of the polluting firm's externality, then the index fund and its investors make no profit. One firm gains, another firm loses. The hope that the indexers can fix the pollution, climate change, and financial risk-

[43] A related possible channel that could pin some negative externalities to the stock market's purportedly short-term horizon. Some companies "don't get away with it" in the long run, it's said, but the stock market does not know that in the short run. Small negatives predict future major negative externalities but barely hurt stock price in the short run even though they led to bigger externalities later that did hurt the stock price. However, according to recent work, the stock market now prices these small failures better (because it has learned that they predict later bigger failures). Because the stock price now adjusts more quickly, quick profits become even harder to acquire. George Serafeim & Aaron Yoon, *Which Corporate ESG News Does the Market React To?* (Harv. Bus. Sch. Working Paper No. 21-115, 2021), www.ssrn.abstract=3832698; Philipp Krueger, Zacharias Sautner, Dragon Yongjun Tang & Rui Zhong, The Effects of Mandatory ESG Disclosure Around the World (May 2021), www.ssrn.com/abstract=3832745.

[44] Madison Condon, *Externalities and the Common Owner*, 95 WASH. L. REV. 1 (2020); Jeffrey N. Gordon, *Systemic Stewardship* (Colum. L. & Econ. Working Paper No. 640, 2021), www.ssrn.com/abstract=3782814. *Cf.* James Hawley & Andrew Williams, *The Emergence of Universal Owners*, 43 CHALLENGE 43, 43 (2000) ("when financial institutions effectively own almost the entire economy . . . [t]heir interests are the same as the public at large"). Others are skeptical. Here, I examine the positive case to see the extent to which its proponents are examining a time horizon aspect or another problem.

[45] The indexers' long-term structure—from their not selling out a stock position simply because they conclude the stock is a poor short-term best—casts some doubt on whether the stock market is too short term in the Type A sense. See ROE, MISSING THE TARGET, *supra* note 2, at 84–86. But that's not the topic of this article.

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taking problems come not from the indexers' long-term incentives but from their incentives to internalize their portfolio firms' externalities.

Here's what I mean: If the indexers fail (or do not try hard enough), is it because they are not long-term enough, or because they cannot successfully internalize the costs that their portfolio firms produce? It's the latter, not the former. I elaborate next.

First off, index funds today own about 20 percent of the stock market. Although that is substantial, it is not a slice of the entire economy; hence, much of the economy is *external* to the index fund's portfolio, which lowers the indexer's incentive to internalize. First, not every firm is in every index—several thousand public firms are not in the Standard & Poor's 500, which is the base for several major index funds. And about half of the economy is in private firms. Internalizing externalities in public firms could benefit those private firms that no longer have to bear those externalities, meaning that the index fund bears a cost while other firms outside the index gain a profit. And those private firms, not subject to the index funds' purported incentive to internalize the public firms' harm-causing externalities, could pick up the profitable harm-causing activities that the index funds induce some public firms to forgo.

Furthermore, *individuals* often bear the costs of corporate externalities, from breathing polluted air or being subjected to excessive risks from corporate products. These costs are *not* borne by the index funds' portfolio companies and, hence, will not readily be internalized by the index fund that thinks only of costs to its other portfolio firms. Financial panics also put *un*indexed firms' viability and individuals' jobs at risk; hence, there's not enough for the index funds to internalize because business activities affect too many other economic actors whom the index funds have no financial incentive to save. And as for climate change, firms adversely affected by global warming are hurt, but individual well-being is hurt even more. The externality problem does not disappear; the problem that indexers face and that the optimists hope they can cure is not primarily a time horizon problem.

Second, the externality problem is even embedded inside the fund managers' operations. A fund manager may sponsor and manage an index fund *and* an exchange-traded energy fund. The index fund's incentives may become "green," but its energy-based fund would pay a high price for that decision.[46]

Third, even if the index funds had perfect incentives to internalize widely, other stockholders do not. Other stockholders could seek to

[46] *See* Marcel Kahan & Edward Rock, Systemic Stewardship with Tradeoffs (NYU Law and Econ. Working Paper No. 22-01, 2021), www.ssrn.com/abstract=3974697. Kahan and Rock analyze the corporate law problems of the effort. Corporate law's single firm focus would impede universal owner's efforts to internalize externalities.

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externalize harms (they will call this profit-seeking and management improvement, not externalization of harms) and have incentives to reduce the index funds' influence.[47] The resulting conflict will use up economic resources. But, once more, it is conflict over externalization, not over time horizons.[48]

H. System-Wide Corporate Short-Termism?

The environmental problem can be confused with long-term vs. short-term issues because the overall system *does* indeed burn up social resources in the short term at the expense of social well-being in the long term. When firms overconsume hydrocarbons for today's profit, at the expense of long-term, civilization-threatening global warming, then society incurs a big cost in the long term. But the operative mechanism is that a firm profits from hydrocarbons, while it bears only a fraction of the resulting costs.[49] The polluter does not pay enough. The corporation (like individuals who drive cars and pollute) is selfish, but it's *society* that is functionally short term, *not* the car driver or the corporation.

Let's consider this problem in extreme terms of catastrophic climate change. All corporate leaders may believe that catastrophe is probable, but each knows that a single firm's actions cannot make a difference. Each thus releases methane and burns hydrocarbons (or sells them to us, and we burn them to heat our houses and run our cars). All of us suffer later. No single firm can make a difference in avoiding catastrophe.

Even the climate-worrying CEO could contribute to the catastrophe—"I alone cannot reduce the chance of catastrophe; I can only cut my modest contribution, which would slash my profits and still not avoid the catastrophe," the CEO calculates. "If I could affect every firm, I could reduce the chance of catastrophic climate collapse thirty years hence. But I cannot affect every firm. Only the government or some other collective action can get this done right."

Some stock-market-wide investors do admonish their portfolio companies to respect the environment and combat climate change.[50]

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[47] Mark R. Desjardines, Emilio Marti & Rodolphe Durand, *Why Activist Hedge Funds Target Socially Responsible Firms*, 64 ACAD. MANAGEMENT J. 851 (2020).

[48] Some critics raise a residual time horizon issue. The social discount rate is lower than financial markets' discount rate. More broadly, some climate activists could reject time horizons in the climate change calculation. That is, as a moral matter, climate degradation, whether it's happening now, or in 2050, must be arrested and reversed. *See supra* Part E.

[49] Slawinski & Bansal, *supra* note 11, at 533.

[50] Larry Fink, Larry Fink's 2022 Letter to CEOs: The Power of Capitalism (Jan. 17, 2022), https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter (last visited July 26, 2022); Larry Fink, Larry Fink's 2021 letter to CEOs, (Jan. 26, 2021), https://www.blackrock.com/corporate/investor-relations/2021-larry-fink-ceo-letter (last visited Mar. 15, 2021).

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(Whether this rhetoric plays out positively on-the-ground is yet to be seen, but the rhetoric and for now the will are there.) But as we saw in Part G, the problem is much bigger than the index funds' capacity to internalize the harms.

The socially distorted incentive of the individual free-rider is why collective organization, usually government-organized or government-mandated or government-incentivized action (such as via a carbon tax), is needed to remedy this so-called "tragedy of the commons." These are problems of individual firms offloading costs outside the corporation, of individuals polluting more than they should, and of countries around the world hoping that other countries will fix the problem.

I. Consequences

Overly attributing problems to stock market short-termism has consequences. First and foremost, we (analysts, policymakers, the public) thereby see more stock market short-termism than there really exists. Stock market short-termism seems then not to be a merely minor defect in the corporation, but a society-threatening, even civilization-endangering, debility.

Second, overly attributing social, economic, and climate problems to stock market short-termism distorts policymaking. That is, one might think the over-attribution problem could be disregarded. After all, externalities are bad and should be corrected. Excessive stock market short-termism is also bad. We would be better off without either. Both should be corrected and a cost-effective way of doing so needs to be implemented. If political leaders use shortcuts and simple phrases to criticize the problem, well, that's acceptable, one might say. They need to speak to the average voter, not to the climate scientist.

But when short-termism seems broader than it is, there's more justification for pouring resources into diminishing it. When we mix externalities with true short-termism, the remedies are mixed and become garbled. Policymakers believe that by lengthening corporate time horizons they can have seriously reduce global warming.

Some of this mistaken thinking may have been at the root of recent European Union initiatives on corporate governance.[51] These initiatives sought to reduce shareholder influence on executives to reduce corporate climate degradation. One can understand why policymakers become

[51] *See* Mark J. Roe, Holger Spamann, Jesse M. Fried & Charles C.Y. Wang, *The European Commission's Sustainable Corporate Governance Report: A Critique*, 38 YALE J. ON REG. BULLETIN 133 (2021); ROE, MISSING THE TARGET, *supra* note 2, 145–68 (Part IV); Ernst & Young, Study on Directors' Duties and Sustainable Corporate Governance: Final Report (2020), https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12548-Sustainable-corporate-governance/F594640 [https://perma.cc/ML8A-NKVG]).

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misguided in this way. These misconceptions allow them to believe that solutions to climate change can be had without any budgetary impact. Policymakers reduce the influence of shareholders, raise the power of directors and executives, and convince themselves and voters that they—the policymakers—have moved a powerful pro-climate, anti-global-warming policy initiative forward. This misguided action provides an illusion of positive movement. It saves the political leader from raising taxes on carbon—gasoline taxes at the pump have never been popular and for a political leader to seek to raise gasoline taxes is a good way to lose votes—and from making hard choices between and among nuclear, wind, and other sources of electrical power.

Conclusion

Society, when dealing with persistent externalities, is overall short-term and foolish, while individual firms are selfish, but not short-term.[52]

Environmental degradation, global warming, shoddy products, financial crises, mistreated employees, and severe inequality are among the most severe problems we face as a society. If we blame stock market short-termism for these societal problems—when they instead emanate primarily from corporate selfishness and a lack of political will to deal with the problems directly—then policymakers will try to cure these serious problems by lengthening the stock market's time horizon or insulating executives from the stock market. But lengthening the stock market's time horizon will not fix these problems because they are for the most part not horizon problems. This mistaken targeting pulls policymakers away from sounder efforts, such as a carbon tax to address climate change or better regulation to keep banks well-capitalized and safe. Mistakenly thinking that one can ameliorate environmental degradation and avoid financial crises by curing stock market short-termism means that we will have more environmental degradation and risk more deeply damaging financial crises before solutions are found.

[52] Hardin, *supra* note 19; MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS (1971); RUSSELL HARDIN, COLLECTIVE ACTION (1982); ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION (1990).

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