Long-Term Bias, Incentives and Agency Costs

Kobi Kastiel

# Introduction

The problem of managerial short-termism has long preoccupied policymakers, financial economists, governance scholars and practitioners.[[1]](#footnote-2) Alleged concerns regarding managers’ tendency to pursue short-term goals at the expense of future, long-term ones, have been reinforced with the rise of hedge fund activism.[[2]](#footnote-3) Such concerns have led to an heated, ongoing public debate on the mere existence of such short-term bias, its financial consequences, and the need to enact legal reforms to mitigate it.[[3]](#footnote-4)[[4]](#footnote-5)

Much less attention, however, has been given to the opposite problem of long-term bias. Barzuza and Talley, in their pioneering article, “*Long-Term Bias*”, fill this gap. Relying on behavioral finance and psychology literature, the authors provide a novel analysis of the managerial long-term bias. They show that alongside the commonly spoken short-term bias, executives could also suffer from a long-term bias, and that this focus on the long term may be just as detrimental as the more widely condemned short-term bias.[[5]](#footnote-6) Thus, the heated debate about managerial short-termism is incomplete without recognizing the opposite long-termism bias, and the interactions between them.[[6]](#footnote-7)

They supplement their analysis by closely examining three high-profile case studies, which show the negative implications of managerial over-confidence and optimism, and how hedge fund activism could provide "a symbiotic counter-ballast" against it.[[7]](#footnote-8) Their analysis also has important policy implications on ongoing proposals to reform doctrines, laws and regulations aimed to protect management from short-term demands. It is an original, thought-provoking and well-written article, a highly recommended reading.

Managers could certainly be subject to systemic biases, such overconfidence and optimism, but the interesting question in my view is what happens to their confidence accuracy when we interact incentives (such monetary compensation and the willingness to remain in office) and behavioral biases. In particular, should proper incentives elicit less biased and more sensitive and accurate judgments? Would the problem of managerial long-term bias remain prevalent among corporate CEOs in the presence of motivating incentives?

Part II addresses these important questions. I show that managers who have a *systematic* tendency to follow lose-lose investments with delayed realization and inferior returns could suffer significant economic losses in the form of low compensation, high risk of being terminated early, a decline in the share price of the company they manage and other reputational sanctions. These managers, as Barzuza and Talley show, could also become attractive targets for activist hedge funds.

The high costs of long-term biases, in turn, could provide managers with incentives to be less optimistic, more realistic and avoid such inferior long-term investments. In competitive markets, managers of companies without a controlling shareholder,[[8]](#footnote-9) who exhibit constant long-term bias are less likely to persist, and the corrective mechanisms discussed in Part II should be expected to elicit more sensitive and accurate judgments. To be clear, my analysis does not suggest that managers will never suffer from long-term bias. All it predicts is that in the presence of motivating incentives, such as executive compensation, protest vote in unsolicited elections, market signals and activist shareholders, only a *minority* of executives would continue to exhibit a persistent long-term bias.

Consider the example of executive compensation. Barzuza and Talley argue that in the case of overconfident managers, executive compensation incentives are unlikely to play a meaningful disciplinary function, because such executives who genuinely (but mistakenly) believe in the quality of their long-term investments will be encouraged to make more long-term investment if their compensation is tied to firm value. If most executives are motivated by long-term bias, we would expect that most of them will also hold on to their options until late in the option's life. Such assumption, however, does not fit with the evidence, which shows that only a *minority* of the CEOs tend to hold their options beyond the required minimal holding period. Evidence also shows that most CEO stock ownership policies are ineffectual in practice, as CEOs tend to sell their vested stock right when they can. In most cases, when clear financial interests are on the line behavioral biases could be mitigated.

I also show that when the market express a clear dissatisfaction from a contemplated transaction, most managers would not ignore such a signal very quickly. Similarly, if CEOs with long-term bias consistently pursue strategies that harm shareholders, such bias will impede their ability to be re-elected. Like politicians, CEOs do not have incentives to act against the will of their votes. Since Barzuza and Talley do not argue that shareholders suffer from long-term bias, executives who will try to promote inferior long-term projects could be "punished" **by their voters, either directly or indirectly.**

The recent decline in average CEO tenure combined with the move to annual election and the increase in investor engagement further suggest that the risk of early termination is real. Under those circumstances, managers have limited incentives to invest in projects with a long time horizon and unadvisable benefits, which will last well after the anticipated length of their career, and won't enable them to reap the fruits of their investments.

Part II also challenges the distinction between long-term bias and traditional agency theories of empire building and pet projects. In both cases, corporate leaders choose to ignore shareholder interests and waste free cash flow on inferior business acquisitions that provide them with psychic private benefits. Using the three case studies of Bazuza and Talley, I show how they could also be viewed as examples of private benefits consumption. However, even if one views long-term bias as a separate "disease", then such distinction have limited practical effects. This is because the cure to both long-term bias and agency costs are similar: to reduce the board insulation from shareholder disciplinary force, so that shareholders could hold management accountable when they underperform.

In Part III, I turn to discuss the policy implications that stem from the analysis of Barzuza and Talley. By and large, I agree with most of their recommendations which call for mitigating long-term bias by reducing managerial insulation, opposing limitations on stock buyback and increasing managerial accountability by upholding quarterly reporting and enabling hedge funds to engage with targets. As long as legal rules provide shareholders with the adequate tools to discipline underperforming CEOs and incentivize these CEOs to take shareholder interests into account, the underlying reason as to why managers underperform, whether it is due to long-term bias, managerial slack or self-interest, should not matter.

Thus, unlike Stephen Bainbridge who also commented on Barzuza and Talley's article, I strongly support most of the normative conclusions of the authors, with one important exception: their enabling approach to the use of dual-class stock because "dual-class founders will internalize the loss." This idea seems to be in tension with the authors' general analytical framework. If corporate leaders can internalize the costs of choosing dual-class shares, then why would not they be able to internalize all other costs caused by their inferior long-term investment decisions midstream?

Moreover, founders with big ego and tendency not to listen to others are especially prone to over-confidence and optimism, which could lead to long-term biases. With perpetual lock on control, limited equity stake and no risk of removal, there will be no "institutional brake" on all forms of long-termist overinvestment by these founders. If anything, I believe that the analysis of Barzuza and Talley provides a strong justification for not insulating founders perpetually from shareholder intervention through the use of dual-class stock.

# Long-Term Bias, Financial Incentives and Agency Costs

## Biases v. Incentives

The stating point of Barzuza and Talley relies on a large literature in psychology and behavioral economics that documents a widespread tendency in all humans to be overly optimistic or confident regarding their abilities and their future, and such biases cause them to behave irrationality.[[9]](#footnote-10)

Corporate managers are not different. If anything, according to Barzuza and Talley, such executives appear to be particularly prone to display overconfidence or to be highly optimistic in general. As they explain, managerial decisions makers tend to suffer from the "illusion of control."[[10]](#footnote-11) Mangers also tend "to discount feedback and relevant data" and "tend receive such feedback more sporadically for long-term endeavors." Consequently, they hold: "mangers’ long-term projects are particularly prone to *persistent overestimation*."

Long-term biases, however, do not come without costs. Barzuza and Talley define "long term bias" as a "preference for a long-term investment over a superior short-term investment/return", and "short term bias" as a preference for a short-term investment/gain over a superior long-term investment/return." This suggests that there is a crucial difference between these two biases. Short-term bias presents a clear trade-off: investors enjoy liquidity and early realization of their investments in exchange for inferior returns. Long-term bias, however, is a lose-lose proposition. Investors suffer from a delayed realization of their investments *and* inferior returns. Why would managers make such value-deceasing investment decisions that investors have no reason to favor?

One could think of two potential explanations. The first one is that managers derive some private benefits from this strategy to the detriment of other investors. I will turn to it in the next section. The other explanation is the one provided by Barzuza and Talley, that managers genuinely (but mistakenly) believe in the quality of their long-term investment decisions.

But, these genuine mistakes could turn to be costly not just for investors, but for corporate managers as well. Managers who have a *systematic* tendency to follow long-term endeavors with inferior returns could suffer significant economic losses in the form of low compensation, high risks of being terminated early, a decline the share price of the company they manage and other reputational sanctions. They can also be subject to interventions by activist hedge funds as Barzuza and Talley illustrate persuasively in their article.

My point here is that all of these future costs provide managers with incentives to avoid inferior long-term investments. And as financial economists and corporate governance scholars have long taught us: incentives matter. When financial rewards are high, the average CEO who desires not to lose the job or suffer financial losses in the form of lower compensation has strong incentives to become attentive to negative signals.

The interesting question is, therefore, not whether managers could be subject to systemic biases that affect negatable their long term decision making (they probably do), but rather what happens to of human confidence accuracy when we interact financial incentives and behavioral biases. How would monetary incentives influence confidence? Should proper incentives elicit less biased and more sensitive and accurate judgments? Would the magnitude or valence of the incentive (that is the prospect of losses/gains) matter? And what fraction of the population will still remain indifferent or even increase their overconfidence at the presence of large monetary incentives?

Empirical studies in behavioral psychology methodically investigated the interactions between incentive motivation and confidence in an attempt to explain features of human confidence accuracy. Some of these studies find that incentives increase the precision of the estimation. For example, a well-known study by Kritzan and Windschit discusses possible mitigation factors of over-optimism.[[11]](#footnote-12) They provide an example of a person who will receive $1,000 if Company A wins a contract. That person, they show, will become more sensitive to negative information about Company A, compare to a control condition in which no money is at stake.[[12]](#footnote-13)

Another study examined the way incentives can mitigate students' overconfidence when they foresee their grades. Students earned extra credit toward their course grade by accurately forecasting the number of multiple-choice questions they would answer correctly on an upcoming exam, assuming that incentives might motivate students to be more realistic on their self-assessments. The study found that "generally, the incentive scheme results in fewer extreme forecast errors for most groups of students."[[13]](#footnote-14) Along those lines, a third study finds that real monetary incentives (rather than extra credit) also "mitigate overestimation of potential achievements and eliminate overestimation of actual achievements."[[14]](#footnote-15) Taken together, these studies show that people tend to be less optimistic and more realistic when financial or other rewards are at stake.

## Mitigating Factors

In this Section, I will shed light on several factors that could mitigate managerial long-term bias. Such factors include executive compensation, corporate elections, market signals and activists shareholders.[[15]](#footnote-16) I will touch upon the last factor very briefly because it already received significant attention from Barzuza and Talley. In competitive markets, managers of wildly held companies, who exhibit persistent long-term bias will bear substantial costs. These corrective mechanisms, thus, should be expected to elicit more sensitive and accurate judgments.

Before proceeding, an important clarification is in order. The analysis put forward in this section does not suggest that managers will never suffer from long-term bias. Despite the mitigating impact of financial incentives, Barzuza and Talley are correct that some managers could still exhibit a bias towards inferior long-term projects. This view is also supported by empirical evidence showing that overconfident managers who tend to delay option exercise, are also more likely to make lower-quality acquisitions and consequentially suffer personal losses. However, my point is that in the presence of the motivating incentives presented below, only a minority of managers would continue to exhibit such irrational behavior.

### Executive Compensation

In recent years, there has a push toward aligning executive compensation with firm long-term value and performance. Investors, regulators and corporate governance scholars have long emphasized the need to ensure that the compensation of public company executives is tied to long-term results in order to prevent executives from attaching excessive weight to short-term prices or to avoid incentives for excessive risk taking.[[16]](#footnote-17) The mechanism of executive compensation, when operate well, serves as an important disciplinary function as it provides managers with strong incentives not to make investments with inferior long-term returns. Otherwise, such managers will bear significant losses in the form of low compensation due to the decline in the value of their equity-based compensation.

Another important assumption related to executive compensation it that a rational, risk-averse CEO has incentives to reduce his exposure to company-specific risk by exercising his stock options early if they are sufficiently deep in the money.[[17]](#footnote-18) Doing so will reduce the risk of suffering significant losses in case of a failure of a risky venture.

Barzuza and Talley argue that executive compensation incentives are unlikely to play a meaningful disciplinary function in the case of overconfident managers. This is because "overconfident managers—who genuinely (but mistakenly) believe in the quality of their long-term investments—will be encouraged to invest more if their compensation is tied to firm value". Thus, tying compensation to long-term results in the case of overconfident managers would just aggravate their biases as it would provide them with additional incentives to invest more in long-term projects. For the same reason, we would expect that a CEO who suffers from a long-term bias will hold on to an option until late in the option's life—despite the fact that the option is already deep in the money. Doing so is considered evidence for optimistic beliefs about the company's prospects.

The question whether the design of executive compensation package and the link to long-term benchmark mitigate or aggravate long-term bias turns to be an empirical one. If most executives are motivated by long-term bias, we would imagine that most of them will hold on to an option until late in the option's life or would adopt strict stock ownership policies. Such assumption, however, does not fit with the evidence. The data clearly shows that most managers behave in a rational manner to executive compensation incentives in order to reduce their potential losses.

For example, the well-known study by Malmendier and Tate shows that only 10-13% of the CEOs in their sample tend to hold their options beyond the required minimal holding period.[[18]](#footnote-19) This finding is also consistent with additional evidence, which demonstrates that CEOs are unwilling to bear the risk associated with long-term investments. Nitzan Shilon, for example, has shown that CEO stock ownership policies, which are widely adopted by leading firms with the purpose to align managers’ interests with those of their long-term shareholders,[[19]](#footnote-20) are ineffectual in practice, as CEOs tend to sell their vested stock right when they can.[[20]](#footnote-21) He also shows the average vesting period for S&P CEOs is only between 3-5 years.[[21]](#footnote-22)

This evidence shows that financial incentives tend to overcome long-term biases. Indeed, some overconfident managers would still be willing to risk their financial interests, but they are not numerous. The vast majority of the CEOs respond to financial incentives and behave exactly as we will expect them to do. They prefer not to tie the executive compensation to long-term performance, exercise the options when they can, and reduce their firm specific risk. When clear financial interests are on the line behavioral biases could be mitigated.

### Market Signals

Barzuza and Talley further explain that "[w]hile short-term bias originates primarily from external sources such as capital market investors, long-term bias emerges internally, from managers’ assessments about their own long-term projects." This important distinction suggests that "managers are inclined to be highly optimistic in general" because they lack the outside, unbiased perspective. It also suggests that investors do not suffer from such long-term bias (thought they could suffer from short-term bias or be unbiased).

Managers get signals from investors or the stock market all the time. One could assume that mangers with long-term biases are prone to ignore such external signals, whereas rational managers will respond to market signals, otherwise they will face the risk of early termination. Here again, the question to what extent managers can ignore market signals, and bear the price associated with being inattentive to the market, turn to be an empirical one.

Existing evidence supports the view that managers, on average, do respond to market signals. For example, a study by Kau, Linck and Rubin examined whether a negative market response to an announced investment affects the probability of the same investment to be executed. They find that "managers are more likely to cancel investments when the market reacts unfavorably to the investment's announcement" and "[d]eals that the market predicts to have higher returns are more likely to be completed than deals with lower market returns." They also demonstrate "that managers are more likely to listen to markets when their pay is more sensitive to performance."[[22]](#footnote-23)

Similar results were presented in another study from 2005, suggesting that executives learn from stock market reaction to M&A announcements, and thus those reactions can predict the M&A continuation probability. More specifically, using a large sample of domestic M&A transactions, the study found that “the combined bidder and target abnormal return around the announcement predicts whether the companies will later consummate the deal."[[23]](#footnote-24)

Finally, a third study suggests that managers suffer from two types of losses when a value-decreasing acquisition is announced. One type is their tangible capital, through their shares in the company. The second type is their human capital; that is the damage to their reputation. By examining 636 proposed M&A transactions, which were all followed by a negative reaction from the stock market, it was found that the "level of media attention and the tone of media coverage play an important role in managers' decisions to abandon value-reducing acquisition attempts."[[24]](#footnote-25)

The evidence, taken in its entirety, suggests that when the market clearly disfavors a transaction, most managers would not ignore such a signal very quickly.

### Protest Votes

A fundamental function of our corporate law system is that shareholders have the power to elect directors.[[25]](#footnote-26) One could thus argue that even if CEOs suffer from a long-term bias, they have strong incentives to be reelected, which mitigate their long-term bias. If CEOs with long-term bias consistently pursue strategies that harm shareholders and ignore market signals, the argument goes, such bias will affect their reputation and impede their ability to be re-elected. Since many CEOs also serve as chairmen of their boards, shareholders can terminate these CEOs. Even if the CEO does not sit on the board, shareholders can exercise pressure on the board to remove underperforming CEOs.

To understand the impact of election on long-term bias, it is useful to draw an analogy to the political arena. Politicians, like CEOs and directors, are also prone to suffer from overoptimism and over confidence. These biases could be even more severe in their case because politicians are not elected on an annual basis (as many directors do), but rather every four or five years. There is also no outside players, such as activists investors or hostile bidders, who could terminate politicians in the middle of their tenure. Additionally, their actions are less observable than those of corporate leaders of public companies that are required to disclose detailed information to their investors.

Despite the forging, voluminous literature in political science shows that politicians generally have incentives to invest in short-term public goods, even when it would be optimal for the society that they invest in long-term public goods. This phenomenon is known as "political short-termism",[[26]](#footnote-27)[[27]](#footnote-28) and is motivated by politicians' desire to be reelected and voters' tendency to discount the future and give a higher weight to the present.[[28]](#footnote-29)

Like politicians, CEOs do not have incentives to act against the will of their voters. Since shareholders do not suffer from long-term bias, executives who will try to promote inferior long-term projects could be "punished" by shareholders, either directly or indirectly. Moreover, a large percentage of public companies now hold corporate election on an annual basis, and thus underperforming CEOs who also sit on the board face constant risk of removal. Such risk has been on the rise in recent years due to increase shareholder engagement.

Underperforming CEOs, or the directors who nominated them, are now exposed to the threat of negative vote in uncontested elections. In fact, the number of directors failing to receive significant support from their shareholders has risen, meaning that shareholders have used their votes to meaningfully express dissatisfaction with directors with increasing frequency. In 2019 alone, the number of directors failing to receive majority support from their shareholders rose to 478, and the number of directors failing to receive at least 70% support rose to 1726.[[29]](#footnote-30) Data also shows that there are a non-trivial number of companies in which management fails to receive significant support on say-on-pay votes.[[30]](#footnote-31) Often the lack of significant shareholder support in these votes is tied to overall shareholder dissatisfaction with management.[[31]](#footnote-32)

Protest vote serves as an important vehicle for shareholders to communicate their preferences to the board. A large body of empirical research suggests that corporate directors pay attention to voting outcomes and, in many cases, incorporate the results of the vote in future decisions. For example, a recent study finds that protest votes in uncontested director elections have a substantial negative impact on directors’ careers, increasing the likelihood that a director will leave the board and decreasing that director’s future opportunities in the director labor market.[[32]](#footnote-33) More importantly, such protest votes are also associated with higher management turnover and increased corporate activity (such as major asset sale or acquisition) in the year following the vote.[[33]](#footnote-34)

Lastly, evidence also shows that average CEO tenure has decline to 5-7 years in the United States.[[34]](#footnote-35) This decline in managers' average tenure suggests that the risk of early termination is real. Lower tenure also reduces the likelihood of long-term investments. This is because managers have limited incentives to invest in projects with a long time horizon and unadvisable benefits, which will last well after the anticipated length of their career, and won't enable them to reap the fruits of their investments.

Piecing the empirical evidence together, the picture becomes clearer: shareholder voting is no longer inconsequential and long-lasting tenure is no longer promised. Thus, if managers invest in inferior projects that shareholders clearly disfavor, they could face a significant consequences.

### Activist Investors

In the past two decades, activist hedge funds have become critical players in the corporate governance arena.[[35]](#footnote-36) These funds often accumulate large, but noncontrolling, stakes in allegedly underperforming target companies to bring about change in the target companies’ strategic, operational, or financial activity. They might propose, for example, divesting assets, changing investment or payout levels, altering the capital structure, or replacing the CEO, often while threatening to nominate their representatives to the board if target companies are inattentive to their demands.[[36]](#footnote-37)

Activist hedge funds undoubtedly do not suffer from a long-term bias. Their presence in a company whose managers suffer from a long-term bias can mitigate such bias.[[37]](#footnote-38) Indeed, Barzuza and Talley devote a significant part of their article to explain how activist hedge funds "may place an institutional brake" and "symbiotic counter-ballast" against long-termist overinvestment. They also offer three fascinating examples from three well-known companies (Yahoo, AOL and Navistar) "where long-term investment decisions were arguably biased by overconfidence, and their most deleterious effects were ultimately interrupted by hedge fund activism."

Since Barzuza and Talley's already provides a detailed and well-established account of the role activist hedge funds play in mitigating managerial long-termism, I won't repeat it here. Instead, I will just highlight an additional point that merits attention: Activists help curbing managerial long-termism not just be interrupting those value-decreasing investments ex-post. They also provide *ex ante* incentives to managers to be more attentive to shareholder demands and perform well by avoiding value-decreasing investments. As I explained elsewhere, if management is concerned about the likelihood of becoming an activist target, management will try *ex ante* to avoid such a campaign altogether by proactively taking steps to increase shareholder value, such as increasing leverage or decreasing capital expenditures, even in the absence of actual activist engagement.[[38]](#footnote-39) Companies with a healthy respect for shareholder communication with the board will signal success. At the other extreme, failure to engage with shareholders can be detrimental to management in firms who later face an activist challenge.[[39]](#footnote-40)

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So far, I have discussed four major factors that could curb managerial long-termism, at least in the majority of the cases: executive compensation, market signals, corporate election and hedge fund activism. To be clear, the presence of such mitigating incentives does not suggest that management would always make decisions that are aligned with shareholder interests. As agency theories taught us managers could have incentives to deviate from optimal decision in order to advance their self-interest, at the expense of maximizing shareholder value. For instance, managers could pursue pet projects, engage in empire building, refuse to sale the company at a premium, or entrench in their managerial office even when they are no longer the best fit for the company. In some of these situations, what Barzuza and Talley may categorized as a long term bias could be just another form of non-pecuniary private benefits. I will elaborate on this point in the upcoming Section.

In addition, some scholars, including Stephen Bainbridge who also commented on Barzuza and Talley's article, views the board of the directors as another mitigating force and argues that the task of policing managerial time horizon biases should be left to the board. I am skeptical of such approach. Directors could curb managerial long-term bias only to the extent they could exert significant influence over overconfident CEO.

However, as Yaron Nili and I have shown elsewhere, "independent" board members are often *too dependent* on the information management chooses to provide or conceal, as well as on the manner management presents it to the board. We classify it as the "informational capture" of the board.[[40]](#footnote-41) Such directors also lack time and adequate resources to properly digest and analyze the information they receive, and they often lack the knowledge regarding the particular industry or specific characteristics of the firm on whose board they sit. Studies have also shown that CEOs might exercise strong influence over directors' nominations, which could affect the latter’s decision making process. [[41]](#footnote-42) Therefore, the power dynamic in a company and directors informational capture will project on the possibility that directors can mitigate long-term bias. As Babrzuza and Talley correctly shows, increasing board insulation from shareholder activism and hedge fund intervention is likely to exacerbate, rather than mitigate managerial long-term bias and will reduce their accountability to public investors. I will return on this point in the next Part.

## Long-term Bias as a Private Benefit?

A well-known agency problem concerns the interests of corporate leaders in excessive expansion of the business ("empire building"), beyond the optimal size, when expansion would be expected to increase their private benefits.[[42]](#footnote-43) This expansion comes at the expense of taking other actions that may be in the interests of the company's shareholders, such as the distribution of dividends. Empire building may benefit managers in two major ways. First, the increase of resources under managers' control is likely to provide management with pecuniary benefits, such as higher compensation[[43]](#footnote-44) or an increase in their labor market value.[[44]](#footnote-45) Second, mangers may derive nonpecuniary or psychic benefits as a result of empire building, like appreciation, increased media coverage, prestige, etc.[[45]](#footnote-46)

Another related form of psychic private benefit could be derived from “pet projects”. That is the pursue of a value-reducing business strategy that would provide corporate leaders with a private benefit because it would either enhance their legacy or reputation or would move the world in a direction that they favor.[[46]](#footnote-47)

The concept of long-term bias due to over confidence is so closely related to the agency problem of empire building and pet projects, so that they are almost indistinguishable ex-post, and could be viewed as part of the same old problem. In both cases, corporate leaders choose to ignore shareholder interests or market signals. And in both case, corporate leaders waste free cash flow on inferior business acquisitions that provide them with some psychic private benefits.

The behavioral economics literature tries to draw a line between overoptimism and traditional agency theory by focusing on the intentional behavior of the decision makers. Unlike traditional empire-builders, who consciously disregard shareholders’ interests, overconfident CEOs believe that they are maximizing value and are acting in the interest of shareholders. For this reason, traditional empire-builders should minimize their personal investment in the company by exercising in-the-money options at the earliest opportunity, whereas overconfident CEOs are likely to personally over-invest in their companies through late option exercise.[[47]](#footnote-48)

But, from the perspective of public shareholders, should the lack of intention make such a difference? Are managers who systemically deviate from shareholder interests and mistakenly follow grandiose acquisitions due to over-estimation of their success likelihood are that different from those who intentionally ignore shareholder interests by engaging in empire building or pet projects? At the end of the day, both types of behaviors *systematically* harm shareholders, and in both cases courts are unlikely to intervene in these strategic decisions and instead subject them to the deferential business judgment rule. Moreover, since the vast majority of CEOs tend to exercising their options at the earliest opportunity, in reality it could be complicated, almost impossible, to distinguish between overconfidence and traditional agency costs ex-post.

Consider the three case studies presented by the Barzuza and Talley. While one could view them as examples of long-term bias, an equally possible interpretation would be to view them as consumption of psychic private benefits of control. In retro-perspective, either interpretation is possible. For example, while Barzuza and Talley view the investment in AOL’s Patch local news as a demonstration of the vulnerability of long-term projects to overconfidence,[[48]](#footnote-49) it could also be viewed as the pet project of the company previous CEO and chairman. As CNBC mentioned, “[m]any observers, including AOL shareholders, felt Armstrong clung to Patch with a kind of blind paternal love…”.[[49]](#footnote-50) Similar to that, one of the top shareholders in Navistar "would often refer to… Ustian as a "crazy uncle" working on a failed multi-billion dollar pet project in his garage."[[50]](#footnote-51)

Marissa Mayer was also blamed for having a pet project during her time in Yahoo. It was argued that “Yahoo in February folded seven digital magazines, including titles covering food and travel, which had been a Mayer pet project. She wanted to launch dozens of vertically oriented magazines, dictating that they use Tumblr-based designs, hoping to better monetize Yahoo’s monthly audience.”[[51]](#footnote-52)

To further complicate the analysis, it should be noted that there is a third possible interpretation to these three examples; This is that they all represent incompetent managers who chose a wrong busines strategy in the course of fulfilling their vision.[[52]](#footnote-53) Here again, in theory one could draw a line between long-term bias and bad strategic decisions by focusing on ex-ante likelihood of success. Long-term bias, according to Barzuza and Talley would always lead to inferior investment decisions (and thus have no likelihood of success ex ante), whereas ordinary business failures have some likelihood of success ex ante. In reality, however, it could be almost impossible to distinguish between the two options.

Moreover, over-confidence and optimism, by itself, is not necessarily value decreasing. Empirical evidence shows that such biases can increase firm value by counteracting risk aversion, inducing entrepreneurship, or attracting similarly-minded employees.[[53]](#footnote-54) Suppose that Mayer had been successful in the strategy she tried to implement, would one still consider her as suffering from long-term bias?

The good news is that the theoretical distinctions between these three alternative accounts – agency costs, long-term bias due to overconfidence or mere incompetence - has limited practical effects. This is because the cure to all of these diseases is similar: as long as legal rules reduce the insulation of managers from shareholder disciplinary force, then shareholders could hold management accountable and cause them to internalize the costs their actions generate. Managers who underperform and ignore shareholder message of dissatisfaction will face the possible threat of removal, regardless of whether the cause for such failure is long-term bias, their being underqualified or the consumption of excessive private benefits of control. Conversely, overoptimism managers are likely to stay in office and receive shareholder support as long as they perform well.

# Implications

Most of the policy recommendations of Barzuza and Talley are not different from the recommendations to mitigate managerial agency costs. They call for mitigating long-term bias by reducing managerial insulation. They also oppose limitations on stock buyback or dividend distribution that could exacerbate management free cash-flow problem and suggest increasing managerial accountability and enabling hedge funds to engage with targets. Therefore, they oppose the reforms proposed by the Brokaw Act as well as additional reforms to curb quarterly reporting.

This makes a lot of sense. The cure for managers who suffers from long-term bias is not different from the cure to problem of self-serving managers. As long as legal system provides shareholders with the adequate tools to discipline underperforming CEOs and incentivize them to take shareholder interests into account, the underlying reason as to why managers underperform, whether it is due to long-term bias, managerial slack or self-interest, should not matter. In that sense, one of the most important contributions of the authors is that they provide an additional important justification to the normative prescriptions generally advocated by those who call to reduce managerial insulation.

I strongly support most of the authors' normative conclusions with one major exception that is related to their approach to dual-class IPOs. As they explain:

We are reluctant to advocate for a blanket prohibition on dual class stock (as others have championed). It is difficult indeed for outsiders to unpack the motivations of a founder who embraces a dual class structure: it may be due to overconfidence (and thus value-eroding), but it could just as easily be due to a founder’s genuine desire to protect a project that is inherently difficult for outsiders to assess. Moreover, the founder might simply place idiosyncratic value on maintaining control, and is willing to incur the costs of doing so in the form of the price discount that outside investors will no doubt impose on the sale (particularly if they are short-term oriented). Whatever their motivation, dual-class founders will internalize the loss."

The idea that founders could internalize the losses from a dual-class structure that was adopted due to overconfidence seems to be in tension with the authors' general analytical framework. If corporate leaders can internalize the costs of choosing dual-class shares at the IPO, then why would not they be able to internalize all other costs caused by their inferior long-term investment decisions later on down the road? As the analysis of Barzuza and Talley is based on the assumption that corporate leaders are unable to internalize the costs of their long-term investment decisions (otherwise they would avoid such lose-lose investments), there is no reason to believe that they will behave differently at the IPO.

Moreover, even if one believes that founders could internalize the costs at the IPO stage, but not midstream, the use of dual-class stock would enable corporate founders to become fully insulated from the engagements of activist hedges that according to Barzuza and Talley "may place an institutional brake" on managerial long-termism. So those who support legal rules that enable the activity of activist hedge funds, should oppose the use of perpetual dual-class stock.[[54]](#footnote-55)

Corporate founders could be especially prone to over confidence and optimism, which could lead to long-term biases. While these founders could have a unique vision,[[55]](#footnote-56) they could also have big ego and be less likely to listen to others.[[56]](#footnote-57) With a lock on control due to the company dual-class structure and no risk of removal, such founders will have full insulation from market for corporate control and from hedge fund activism. They could remain in office even if they pursue inferior long-term projects over and over, without learning from past experience. There will be no institutional brake on all forms of long-termist overinvestment by these founders, and distortions of incentives is likely to be significantly more severe than in the context of widely held companies.

In an article co-authored with Lucian Bebchuk, we analyze the major costs and risks arising from an extremely long lock on control.[[57]](#footnote-58) Changes in the controlled company, its circumstances and its business environment, might well change the type of leader that would be most appropriate for the company. Tech companies often operate in a dynamic business environment with disruptive innovations and significant changes over time. In such an environment, even highly talented and successful founders can lose their “golden touch” after many years of leading their companies, but not necessarily their over-confidence and optimism. Therefore, we argue that even those who support the use of dual-class stock, should recognize the existence of a major risk, which likely would grow over time, that down the road the company founders would remain in power even though they would value-reducing leaders. We also show that controllers have strong incentives to retain a dual-class structure even when that structure becomes inefficient over time.

In a companion article, we identify and analyze the severe governance issues that are expected to arise in companies with a controller that owns only a small-minority stake.[[58]](#footnote-59) On the one hand, because the controller is fully insulated from the disciplinary force of the control market, this force cannot address problems of underperformance and opportunism. On the other hand, when a controller holds a minority equity stake, the controller does not have the strong ownership incentives that come from owning a majority equity stake. We also demonstrate that as the controller’s equity stake declines, the expected governance costs go up at an increasing rate.

To illustrate, suppose that a controller could make a series of inferior long-term acquisitions that would substantially increase the size of the controlled company while reducing the wealth of the company’s pre-acquisition shareholders. In such scenario, the costs of the acquisition would be divided among shareholders pro-rata. However, by increasing the company’s size and importance, the acquisitions would increase controller’s influence, power, and stature, thereby providing the controller with a significant private benefit. As a result, there is a wide range of acquisitions that the controller would have private incentives to pursue even though such value-reducing, long-term acquisitions would make all other shareholders substantially better off.

If anything, I believe that the analysis of Barzuza and Talley provides a strong justification for not insulating minority controllers perpetually from shareholder intervention through the use of dual-class stock.

# Going Forward

In a thought-provoking and important piece, Barzuza and Talley make an important contribution to the line of research that explores the interaction of corporate law and behavioral psychology. They show how corporate managers often fall prey to excessive optimism about their own long-term projects, and illustrate such long-term bias using case studies from three prominent companies. It's a must reading, which provides an additional important justification for policymakers and legal scholars not to embrace reforms that increase managerial insulation and focus mostly on short-term bias.

The theory presented by Barzuza and Talley gives rise to a few interesting avenues for future research in this field. The first avenue is related to the magnitude of the problem of long-term bias: How prevalent is long-term bias among CEOs? To what extent could various incentives, such as executive compensation or corporate elections could mitigate it?

A second avenue of research could explore what type of managers are most likely to be subject to long-term bias. For this purpose, it would be interesting to compare founders with hired professional CEOs and to explore other factors that could affect CEO's time biases, such the number of years the CEO serves at the company and the equity stake of the CEO. It would also be interesting to explore whether long-term bias is more severe in the case of companies that are nearing the end of their life-cycle. One would assume that managers of these companies, such as the CEOs of Yahoo or AOL, would be unwilling to admit that they fail to turn the company over and suffer the reputational effect associated with such business failure. Exploring the factors that would help the board to determine in advance what CEOs are more likely to be prone to long-term bias would also enable directors to adapt the compensation arrangement of the CEO accordingly in order to mitigate such bias.

The article of Barzuza and Talley is an additional, important step toward a richer discussion on how behavioral biases such as over confidence and optimism influences managerial decision maker. I hope that subsequent legal and empirical studies will shed more light on this important and interesting topic.

1. [↑](#footnote-ref-2)
2. [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, 1885.](https://www.yalelawjournal.org/pdf/i.1870.Strine.1970_cfq35f6x.pdf) [↑](#footnote-ref-3)
3. Such as eliminating quarterly reporting requirements: [Martin Lipton, *The New Paradigm for Corporate Governance*, Harv. L. School. F. On Corp. Governance (Feb. 3, 2016)](https://corpgov.law.harvard.edu/2016/02/03/the-new-paradigm-for-corporate-governance). [↑](#footnote-ref-4)
4. For earlier discussion, see Robert H. Hayes and William J. Abernathy, *Managing Our Way to Economic Decline*, 58:4 Harv. Bus. Rev. (1979); And more recent criticism: [Stein, J. C., *Efficient capital markets, inefficient firms: A model of myopic corporate behavior*, 104(4) Quarterly Journal of Economics 104(4), 655, 664.668 (1989)](https://scholar.harvard.edu/files/stein/files/qje-1989.pdf). [Lucian A. Bebchuk, Alon Brav, Wei Jiang, The Long-Term Effects of Hedge Fund Activism, 115 Colum. L. Rev. 1085, 1093-1096 (2015).](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2291577&download=yes) (explaining what they refer to as “myopic-activist claim”); [Aspen Inst., Overcoming Short-Termism: A Call for a More Responsible Approach to Investment and Business Management 2–3, 5-6 (2009).](https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/overcome_short_state0909_0.pdf) (calling for.a collective response and approach towards short-termism); [Charles Nathan and Kal Goldberg, Finsbury LLC, *The Short-Termism Thesis: Dogma vs. Reality*, Harv. L. School. F. On Corp. Governance(March 18, 2019)](https://corpgov.law.harvard.edu/2019/03/18/the-short-termism-thesis-dogma-vs-reality/). (Questioning the evidentiary basis of the existence of short-termism). [↑](#footnote-ref-5)
5. [Michal Barzuza & Eric L. Talley, Long-Term Bias, forthcoming in the Columbia Business Law Review, 1, 1 (February 20, 2019).](https://ssrn.com/abstract=3338631) [↑](#footnote-ref-6)
6. *Id.* at 45. (“…the interaction of long- and short-term biases probably does not always result in perfectly optimal outcomes; but by plausibly interacting in this way, short-term bias and long-term bias will tend to mitigate one another’s greatest shortcomings.”). [↑](#footnote-ref-7)
7. *Id.* at 25-28. [↑](#footnote-ref-8)
8. When companies have a controlling shareholders corporate election are meaningless, and the likelihood of activist intervention is substantially lower than in the case of widely held companies. See, Kobi Kastiel, Against All Odds: Hedge Fund Activism in Controlled Companies, Vol. 2016, No. 1, Colum. L. Rev. 60, 70-74. [↑](#footnote-ref-9)
9. As Taylor and Brown (1988, p. 197) summarize: “A great deal of research in social, personality, clinical, and developmental psychology documents that normal individuals possess unrealistically positive views of themselves, an exaggerated belief in their ability to control the environment, and a view of the future that maintains that their future will be far better than the average person's.” Evidence that such biases extend to management students, entrepreneurs, and corporate presidents is provided, for example, by Camerer and Lovallo (1999), Cooper, Woo, and Dunkelberg (1988), and Larwood and Whittaker (1977) [↑](#footnote-ref-10)
10. A CEO who hand-picks an investment project is likely to believe he can control its outcome and to underestimate the likelihood of failure (March and Shapira (1987); Langer (1975)). [↑](#footnote-ref-11)
11. [Ziatan Krizan & Paul D. Windschitl, The Influence of Outcome Desirability on Optimism, 133 Psychol. Bull. 95, 108 (2007).](https://www.researchgate.net/publication/6598647_The_Influence_of_Outcome_Desirability_on_Optimism) [↑](#footnote-ref-12)
12. *Id.* [↑](#footnote-ref-13)
13. [Dennis Caplan, Kristian G. Mortenson & Marisa Lester, *Can incentives mitigate student overconfidence at grade forecasts?,* Vol. 27 No.1 Account. Educ. 27, 27-28 (2018).](https://www.tandfonline.com/doi/pdf/10.1080/09639284.2017.1361850?needAccess=true)  [↑](#footnote-ref-14)
14. [Monetary incentives and overconfidence in academic performance: An experimental study](http://www.doctreballeco.uji.es/wpficheros/Herranz_and_Sabater_14_2020.pdf). See also "Two sides of the same coin: Monetary incentives concurrently improve and bias confidence judgments." In line with theories of rational decision-making, the study finds that "incentivizing confidence judgments improves metacognitive sensitivity" and that "high (or low) confidence is more closely associated with correct (or incorrect) decisions when confidence reports are incentivized." The study also finds that the prospect of losses decreases confidence, but that prospect of gains increases confidence. [↑](#footnote-ref-15)
15. The last factor have also been analyzed in length by Barzuza and Talley and I their analysis). [↑](#footnote-ref-16)
16. See, e.g., Bebchuk and Fried, 2009. [↑](#footnote-ref-17)
17. See, e.g., Hall and Murphy, 2002; Huddart and Lang, 1996. [↑](#footnote-ref-18)
18. [↑](#footnote-ref-19)
19. [Nitzan Shilon, *CEO Stock Ownership Policies—Rhetoric and Reality*, 90 IND. L.J. 353, 361 (2015)](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2351343&download=yes) (demonstrating the need to tie executives’ interests to shareholders’ ones through compensation structures in order to minimize agency costs). [↑](#footnote-ref-20)
20. *Id*. at 394. [↑](#footnote-ref-21)
21. [Equity Vesting Schedules for S&P 1500 CEOs (April 26, 2013)](https://www.equilar.com/reports/3-equity-vesting-schedules.html); [Radhakrishnan Gopalan, Todd Milbourn, Fenghua Song & Anjan V. Thakor, *Duration of Executive Compensation*, Vol. 69 No. 6 J. Finance, 2777, 2789 (2014)](https://onlinelibrary.wiley.com/doi/pdf/10.1111/jofi.12085) ; [Brian D. Cadman, Tjomme O. Rusticus & Jayanthi Sunder, *Stock Option Grant Vesting Terms: Economic and Financial Reporting Determinants*, 18 REV. ACCT. STUD., 1160, 1160-1163 (2012).](https://link.springer.com/content/pdf/10.1007/s11142-012-9215-6.pdf) [↑](#footnote-ref-22)
22. [James B. Kau, James S. Linck & Paul H. Rubin, *Do managers listen to the market?*, 14 J. Corp. Finance 347, 348, 361 (2008).](https://reader.elsevier.com/reader/sd/pii/S0929119908000205?token=5A16D0B9EB2482C8EC7C1C685FF9BA4603281CC5D15447CA94BDE773375DF2A6EF17EDD339FB6A4393E7237F661BFEB7) [↑](#footnote-ref-23)
23. [Yuanzhi Luo, *Do Insiders Learn from Outsiders? Evidence from Mergers and Acquisitions*, Vol. 60 NO. 4 J Finance, 1951, 1951-1954, 1977-1978 (2005).](https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1540-6261.2005.00784.x) [↑](#footnote-ref-24)
24. [Baixiao Liu & John J. McConnell, *The role of the media in corporate governance: Do the media influence managers' capital allocation decisions*](https://krannert.purdue.edu/faculty/mcconnell/publications/The%20Role%20of%20the%20Media...JFE%202013%20V110%201-17.pdf), 110 J. financ. econ. 1, 1-2 (2013). [↑](#footnote-ref-25)
25. See example, Bebchuk and Tallarita, 2020. [↑](#footnote-ref-26)
26. [Iconio Garri, *Political Short-Termism: A Possible Explanation*, 145 Public Choice, 197, 198-199 (2010).](https://link.springer.com/article/10.1007/s11127-009-9561-5#citeas) [↑](#footnote-ref-27)
27. *Id.* at 205. [↑](#footnote-ref-28)
28. [Michael K. MacKenzie, Institutional Design and Sources of Short-Termism, 25-27 (2016).](https://www.ies.be/files/Sustainability.pdf)  [↑](#footnote-ref-29)
29. [Competing for votes, 319-320.](https://corpgov.law.harvard.edu/2018/02/12/ceo-tenure-rates/) [↑](#footnote-ref-30)
30. [Id., 314-315.](https://corpgov.law.harvard.edu/2018/02/12/ceo-tenure-rates/) [↑](#footnote-ref-31)
31. [Jill E. Fisch, Darius Palia & Steven Davidoff Solomon, Is Say on Pay All About Pay? The Impact of Firm Performance, 8 HARV. BUS. L. REV. 101 (2018).](https://corpgov.law.harvard.edu/2018/02/12/ceo-tenure-rates/) [↑](#footnote-ref-32)
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33. William C. Johnson, Jonathan M. Karpoff & Michael D. Wittry, The Consequences to Directors of Deploying Poison Pills (Fisher C. of Bus., Working Paper No. 2019-03-023, 2019), https://ssrn.com/abstract=3460201. [↑](#footnote-ref-34)
34. [Dan *Marcec*, Equilar, Inc, CEO Tenure Rates, Harv. L. School. F. On Corp. Governance (Feb. 12, 2018).](https://corpgov.law.harvard.edu/2018/02/12/ceo-tenure-rates/) [↑](#footnote-ref-35)
35. Between 2013 to 2017 alone, 1,151 directors nominated by activist hedge funds gained board seats across corporate America. See Review and Analysis of 2017 U.S. Shareholder Activism, SULLIVAN & CROMWELL LLP 7 (Mar. 23, 2018), https://www.sullcrom.com/siteFiles/Publications/SC\_Publication\_Review\_and\_Analysis\_of\_2017\_US\_S hareholder\_Activism.pdf; Lucian A. Bebchuk, Alon Brav, Wei Jiang & Thomas Keuschd, Dancing with Activists, 1, 6-14, 20-28 (Harvard Law and Econ. Discussion Paper No. 906, 2017) (providing data on activists’ settlements, their determinants and subsequent changes to board composition). [↑](#footnote-ref-36)
36. [Alon Brav, Wei Jiang, Randall S. Thomas & Frank Partnoy, *Hedge Fund Activism, Corporate Governance, and Firm Performance*, Vol. 63, No. 4, J. Finance, 1729, 1730-1731 (2008).](https://law.duke.edu/sites/default/files/centers/gfmc/session_3/2_brav_et_al-hedge_fund_activism-2008.pdf) ; [John C. Coffee & Darius Palia, *The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance*, Vol. 41:3 J. Corp. L., 545, 582-583 (2015).](https://sites.rutgers.edu/darius-palia/wp-content/uploads/sites/218/2019/07/JCL_2016.pdf) [↑](#footnote-ref-37)
37. Barzuza & Talley, supra note 4, at 9. [↑](#footnote-ref-38)
38. Copmeting for votes, 302; Hamdani & Hannes, supra note 27, at 983–992. [↑](#footnote-ref-39)
39. See a similar discussion in [Lucian A. Bebchuk, *The Myth that Insulating Boards Serves Long-Term Value,* Vol. 113, No. 6 Colum. L. Rev, 1637, 1654-1656 (2013).](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2248111&download=yes) [↑](#footnote-ref-40)
40. Reference to capture board [↑](#footnote-ref-41)
41. Lucian A. Bebchuk & Jesse M. Fried, Executives Compensation as an Agency Problem, Vol. 17, No. 3 J. Econ. Perspect, 71, 73-74, 77-78 (2003) (even independent directors’ effectiveness can be questioned due to power dynamics in controlled companies); Lucian A. Bebchuk & Assaf Hamdani, *Independent directors and controlling shareholder*, 165 U. Pa. L. Rev. 1271, 1285–1286 (2017) (discussing the actual ability of independent directors to effectively perform their oversight role); Anil Shivdasani & David Yermack, *CEO Involvement in the Selection of New Board Members: An Empirical Analysis*, 54 J. Fin. 1829, 1851 (1999) (providing evidence on the involvement of CEOs in the nomination of directors). [↑](#footnote-ref-42)
42. For well-known studies that analyze empire building and management’s tendency to avoid distributing cash or assets to shareholders, see Lucian Arye Bebchuk, The Case for Increasing Shareholder Power, 118 HARV. L. REV. 833, 903–04 (2005), Sanford J. Grossman & Oliver D. Hart, Corporate Financial Structure and Managerial Incentives, in THE ECONOMICS OF INFORMATION AND UNCERTAINTY 107 (John J. McCall ed., 1982), and Michael C. Jensen, Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, 76 AM. ECON. REV. 323, 323 (1986). [↑](#footnote-ref-43)
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46. See Ronald J. Gilson, Controlling Shareholders and Corporate Governance: Complicating the Comparative Taxonomy, 119 HARV. L. REV. 1641, 1667–68 (2006) (discussing how controlling shareholders’ decisions to acquire a media or entertainment company may be motivated by the desire to increase their consumption of nonpecuniary private benefits rather than to maximize company value). [↑](#footnote-ref-47)
47. Mallmadier&Tate [↑](#footnote-ref-48)
48. [Michal Barzuza & Eric L. Talley, Long-Term Bias, forthcoming in the Columbia Business Law Review, 1, 38-40 (2019).](https://ssrn.com/abstract=3338631) [↑](#footnote-ref-49)
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51. [Todd Spangler "Yahoo’s False Prophet: How Marissa Mayer Failed to Turn the Company Around", Variety (24.05.2016).](https://variety.com/2016/digital/features/marissa-mayer-yahoo-ceo-1201781310/) [↑](#footnote-ref-52)
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53. E.g., Benabou and Tirole, 2002; Compte and Postlewaite, 2004; Van den Steen, 2004; Hackbarth, 2008; Gervais et al., 2011). [↑](#footnote-ref-54)
54. Against all odds [↑](#footnote-ref-55)
55. Goshen and hamdani [↑](#footnote-ref-56)
56. [refer to studies on entrepreneurs' overoptimism bias] [↑](#footnote-ref-57)
57. The untenable case for perpetual dual-class stock [↑](#footnote-ref-58)
58. The perils of small minority controllers [↑](#footnote-ref-59)