

2009

Arrow's Theorem and the Exclusive Shareholder Franchise

Grant M. Hayden

Maurice A. Deane School of Law at Hofstra University

Matthew Bodie

Follow this and additional works at: https://scholarlycommons.law.hofstra.edu/faculty_scholarship

Recommended Citation

Grant M. Hayden and Matthew Bodie, *Arrow's Theorem and the Exclusive Shareholder Franchise*, 62 Vand. L. Rev. 1217 (2009)

Available at: https://scholarlycommons.law.hofstra.edu/faculty_scholarship/100

This Article is brought to you for free and open access by Scholarly Commons at Hofstra Law. It has been accepted for inclusion in Hofstra Law Faculty Scholarship by an authorized administrator of Scholarly Commons at Hofstra Law. For more information, please contact lawcls@hofstra.edu.

Arrow's Theorem and the Exclusive Shareholder Franchise

Grant Hayden

Matthew Bodie

62 Vand. L. Rev. 1217 (2009)

In this Essay, we contest one of the main arguments for restricting corporate board voting to shareholders. In justifying the limitation of the franchise to shareholders, scholars have repeatedly turned to social choice theory—specifically, Arrow's theorem—to justify the exclusive shareholder franchise. Citing to the theorem, corporate law commentators have argued that lumping different groups of stakeholders together into the electorate would result in a lack of consensus and, ultimately, the lack of coherence that attends intransitive social choices, perhaps even leading the corporation to self-destruct. We contend that this argument is misguided. First, we argue that scholars have greatly overestimated the relative likelihood of cyclical outcomes with an expanded electorate. Second, even if a nascent intransitivity were to occur, there is almost no chance that it would manifest itself in inconsistent corporate decisions, much less ones that would cause a firm to self-destruct. Moreover, the exclusive shareholder franchise, like any other preference aggregation system, may avoid violating one of the conditions of Arrow's theorem only by violating another—a tradeoff that has never been explicitly acknowledged or defended. Ultimately, we argue that Arrow's theorem fails to support the limitation of corporate voting rights to shareholders.

Arrow's Theorem and the Exclusive Shareholder Franchise

Grant Hayden & Matthew Bodie***

INTRODUCTION	1218
I. THE USE OF ARROW'S THEOREM IN CORPORATE LAW SCHOLARSHIP	1220
A. <i>The Basic Argument</i>	1220
B. <i>The Influence of the Argument from Arrow's Theorem</i>	1223
C. <i>Two Related but Distinct Arguments</i>	1225
1. The Argument from Politics	1225
2. The Argument for Absolute Delegation	1227
II. SHORTCOMINGS IN THE ARGUMENT FROM ARROW'S THEOREM.....	1229
A. <i>Shareholder Heterogeneity</i>	1229
B. <i>Shareholder Preferences over Candidates</i>	1230
C. <i>The Inevitability of Imperfection: Understanding Arrow's Theorem</i>	1232
1. Making Choices Among Arrow's Conditions.....	1232
2. The Likelihood of Intransitive Results	1234
3. The Consequences of Intransitive Results	1239
CONCLUSION.....	1243

* Professor, Hofstra Law School.

** Associate Professor, Saint Louis University School of Law. The authors wish to thank Stephen Ellis for his helpful comments. Thanks also to the participants at the 2008 Law and Society Association Annual Meeting, the Washington University Junior Scholars Regional Workshop, the Hofstra Summer Series Workshop, the 2008 Midwest Law and Economics Association Annual Meeting, and a faculty workshop at Vanderbilt University Law School.

INTRODUCTION

The doctrine of shareholder primacy has received substantial attention from its legions of proponents,¹ its indefatigable opponents,² and even its disinterested observers.³ The notion that a corporation should be run in the interests of its shareholders is the theoretical foundation upon which modern corporate law stands.⁴ Almost all empirical study in corporate law is premised on a notion of shareholder primacy, and these results would lose much of their meaning if the theory were somehow disproved.⁵ Perhaps most importantly, shareholders do in fact have primacy of place within the corporation, as they alone generally have the right to elect the firm's directors.⁶

1. Shareholder primacy is generally viewed as the normative foundation for modern corporate law theory. See Stephen M. Bainbridge, *Director Primacy in Corporate Takeovers: Preliminary Reflections*, 55 STAN. L. REV. 791, 798 & n.35 (2002) ("Today, most corporate law scholars embrace some variant of shareholder primacy."). In some sense, shareholder primacy means nothing more than shareholder control of the corporation through the power to elect directors. See D. Gordon Smith, *The Shareholder Primacy Norm*, 23 J. CORP. L. 277, 277 (1998) ("The structure of corporate law ensures that corporations generally operate in the interests of shareholders. Shareholders exercise control over corporations by electing directors . . ."). However, shareholder primacy is generally seen as meaning something more: namely, that the corporation's directors should strive to run the corporation solely for the financial benefit of the shareholders in order to maximize social utility. See Stephen M. Bainbridge, *In Defense of the Shareholder Wealth Maximization Norm: A Reply to Professor Green*, 50 WASH. & LEE L. REV. 1423, 1423 (1993) [hereinafter Bainbridge, *In Defense*]. For that reason, it is sometimes called the "shareholder wealth maximization" norm. *Id.* at 1423-25.

2. For some prominent examples, see LAWRENCE E. MITCHELL, *CORPORATE IRRESPONSIBILITY: AMERICA'S NEWEST EXPORT* 4-5 (2001) (arguing that shareholder wealth maximization keeps managers and stockholders focused on the short term); Margaret M. Blair, *Directors' Duties in a Post-Enron World: Why Language Matters*, 38 WAKE FOREST L. REV. 885, 891-95 (2003) (criticizing shareholder primacy's focus on the maximization of short-term value); Lynn A. Stout, *Bad and Not-So-Bad Arguments for Shareholder Primacy*, 75 S. CAL. L. REV. 1189, 1208 (2002) (dismissing several key arguments for shareholder primacy and providing tepid support for one).

3. Gordon Smith might be considered one such observer. In an article examining the actual effects of the norm, Smith acknowledged that "[t]he assumption that the shareholder primacy norm is a major factor in the ordinary business decisions of boards of directors of modern, publicly traded corporations is pervasive in modern corporate law scholarship." Smith, *supra* note 1, at 280. However, he argued that "the shareholder primacy norm is nearly irrelevant to the ordinary business decisions of modern corporations" and that the norm may be "one of the most overrated doctrines in corporate law." *Id.* at 279, 323.

4. See, e.g., Bainbridge, *In Defense*, *supra* note 1, at 1423-25, 1446 (describing the shareholder wealth maximization norm as providing the basic logic from which modern corporate law rules have emerged).

5. Jill E. Fisch, *Measuring Efficiency in Corporate Law: The Role of Shareholder Primacy*, 31 J. CORP. L. 637, 639 (2006).

6. See, e.g., DEL. CODE ANN. tit. 8, §§ 211-212 (2002).

Despite the importance of shareholder primacy to the American (and increasingly global) corporation, there is one aspect of shareholder primacy theory that has not received sustained scholarly critique. In justifying the limitation of the franchise to shareholders, scholars have repeatedly turned to social choice theory—specifically, Arrow's theorem—to raise concerns about expanding the corporate electorate.⁷ Arrow's theorem posits that no social choice function, including any voting procedure, can simultaneously fulfill four conditions of democratic fairness and guarantee a transitive outcome.⁸ Citing the theorem, corporate law commentators have argued that combining different stakeholders together into the electorate would result in a lack of consensus and, ultimately, the lack of coherence that attends intransitive social choices.⁹ Plagued by these voting pathologies, a corporation with such an electorate could even be led to "self-destruct."¹⁰

This argument from Arrow's theorem, however, overestimates the concerns raised by the theorem about the aggregation of more diverse preferences. Almost any time that different viewpoints are converted into social choices, disparate preferences must be reconciled. In fact, the only way around this would be to assume that shareholders will never disagree—increasingly a flawed premise. More importantly, the argument misreads the import of the theorem—namely, that any voting system will fail to achieve perfection, and thus we must confront the weaknesses of the particular system at hand.¹¹ Ultimately, the shareholder franchise may avoid violating one of the conditions of Arrow's theorem only by violating another condition. This tradeoff has never been explicitly acknowledged or defended. Indeed, the entire argument has not received the attention it deserves.

This Essay critically examines the use of Arrow's theorem to defend the exclusive shareholder franchise. The first Section explains

7. See *infra* Part I.A.

8. KENNETH J. ARROW, *SOCIAL CHOICE AND INDIVIDUAL VALUES* (2d ed. 1963); see also NORMAN FROHLICH & JOE A. OPPENHEIMER, *MODERN POLITICAL ECONOMY* 19–23 (1978) (summarizing the assumptions, conditions, and conclusions of the theorem); PETER C. ORDESHOOK, *GAME THEORY AND POLITICAL THEORY: AN INTRODUCTION* 62–65 (1986) (providing a concise outline of a proof of the theorem).

9. See *infra* Part I.A (discussing, inter alia, Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 J.L. & ECON. 395 (1983)).

10. Easterbrook & Fischel, *supra* note 9, at 405.

11. See, e.g., FROHLICH & OPPENHEIMER, *supra* note 8, at 30–31 (stating that voting systems, according to the posits of social choice, "by themselves cannot lead to intuitively justifiable decisions," and, consequently, that corollary aspects of the decisionmaking process must be adjusted to achieve better group choices).

the basic contours of the argument, surveys its influence, and distinguishes it from a couple of related arguments. The second Section, comprising the bulk of the Essay, is a sustained critique of the argument, which, we contend, misconstrues the import of Arrow's theorem and ignores recent work in social choice theory. Our goals are limited. We do not question larger issues involving the shareholder electorate or shareholder primacy more generally. There have been several other justifications offered for restrictions on the corporate franchise, some of which we addressed in a recent article.¹² In this Essay we seek only to shed light on a particular justification for the franchise—one that has not received the critical attention it deserves.

I. THE USE OF ARROW'S THEOREM IN CORPORATE LAW SCHOLARSHIP

A. *The Basic Argument*

One of the basic tenets of shareholder primacy is that, with few exceptions, shareholders alone possess the right to vote in corporate board elections.¹³ Several arguments have been advanced to support this proposition. One line of reasoning, for example, is that shareholders are the owners of the corporation and thus, ultimately, should be able to control corporate decisions.¹⁴ Another argument is that shareholders are the sole residual claimants and, as such, are in the best position to exercise control for the good of all corporate constituents.¹⁵ These claims have been advanced, fleshed out, and subjected to extensive critical examination.¹⁶ There is, however, one argument for the exclusive shareholder franchise that has escaped careful scrutiny: the argument from Arrow's theorem.

12. Grant M. Hayden & Matthew T. Bodie, *One Share, One Vote and the False Promise of Shareholder Homogeneity*, 30 CARDOZO L. REV. 445, 445–505 (2008).

13. See Smith, *supra* note 1, at 299 (describing the development of the principle of shareholder primacy as deriving in part from the fact of “the exclusive right of shareholders to vote”).

14. For a version of this argument, see, e.g., Milton Friedman, *The Social Responsibility of Business Is to Increase Its Profits*, N.Y. TIMES MAG., Sept. 13, 1970, at 32–33, 122–26 (arguing that shareholders are “the owners of the business” and, therefore, that the only “social responsibility of business is to increase its profits”).

15. For a version of this argument, see, e.g., FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 67–70, 91 (1996).

16. For a critique of the argument based on shareholder ownership, see Lynn A. Stout, *The Mythical Benefits of Shareholder Control*, 93 VA. L. REV. 789, 804–05 (2007). For an extended critique of the argument based on shareholders as sole residual claimants, see MARGARET M. BLAIR, *OWNERSHIP AND CONTROL: RETHINKING CORPORATE GOVERNANCE FOR THE TWENTY-FIRST CENTURY* 227–34 (1995).

The argument from Arrow's theorem was first made by Frank Easterbrook and Daniel Fischel in their article on corporate voting¹⁷ and later recounted in their book on the economic structure of corporate law.¹⁸ After presenting the residual claim argument, Easterbrook and Fischel provide a second reason why shareholders alone have voting rights. Citing Kenneth Arrow's groundbreaking work, they explain:

The voters, and the directors they elect, must determine both the objectives of the firm and the general methods of achieving them. It is well known, however, that when voters hold dissimilar preferences it is not possible to aggregate their preferences into a consistent system of choices. If a firm makes inconsistent choices, it is likely to self-destruct. Consistency is possible, however, when voters commonly hold the same ranking of choices (or when the rankings are at least single-peaked).¹⁹

Shareholders, as a class, have relatively homogeneous preferences with respect to profit maximization.²⁰ The corporate franchise, therefore, is correctly limited to this particular class of like-minded participants.²¹

So what is Arrow's theorem? The theorem is the centerpiece of a broader enterprise known as social choice theory.²² Social choice theory attempts to rigorously explain how individual desires are aggregated into social choices. More specifically, it focuses upon the mechanisms, known as social choice functions, used to move from individual preference orders to social preference orders. Most democratic institutions use some type of voting procedure to aggregate preferences (as opposed to, say, flipping a coin or asking a dictator).²³ The trustworthiness of all social choice functions, however, was cast into doubt with the publication of Arrow's theorem.²⁴

Arrow's theorem holds that no social choice function can simultaneously satisfy four relatively undemanding conditions of

17. Easterbrook & Fischel, *supra* note 9, at 405.

18. EASTERBROOK & FISCHEL, *supra* note 15, at 70. Because the arguments in the article and book are identical, we will refer to the earlier article. Easterbrook & Fischel, *supra* note 9.

19. Easterbrook & Fischel, *supra* note 9, at 405 (citing ARROW, *supra* note 8; DUNCAN BLACK, *THE THEORY OF COMMITTEES AND ELECTIONS* (1958) [hereinafter BLACK, THEORY]).

20. *Id.*

21. *Id.* This is also, they mention, the reason why the law makes little effort to require firms to pursue goals other than profit maximization. *Id.* at 405–06.

22. Social choice theory and Arrow's theorem have mainly come into legal scholarship under the guise of public choice theory. For summaries of the literature, see DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION* 38–42 (1991); Saul Levmore, *Foreword* to MAXWELL L. STEARNS, *PUBLIC CHOICE AND PUBLIC LAW: READINGS AND COMMENTARY*, at xii–xiv (1997).

23. See FROHLICH & OPPENHEIMER, *supra* note 8, at 16.

24. ARROW, *supra* note 8, at 22–23, 51–60.

democratic fairness and guarantee a transitive outcome.²⁵ The first fairness condition, nondictatorship, demands that no single person's preference order determines the social preference order regardless of what others prefer.²⁶ The second condition, Pareto efficiency, requires that if everyone prefers one alternative to another, then the social choice procedure must reproduce that ordering.²⁷ The third condition, universal domain, demands that the social choice procedure works with any possible set of individual preference orders.²⁸ The final fairness condition, independence from irrelevant alternatives, requires that the introduction of a new "irrelevant" alternative into the preference profile does not affect the relative orderings of the other alternatives.²⁹ The logical condition of transitivity guarantees that the social choice function will produce a complete and transitive social preference order: if A is preferred to B, and B to C, then A must be preferred to C.³⁰ The contrary—an intransitive preference order where A is preferred to B, B to C, and C to A—is referred to as a voting cycle and indicates that the social choice function is unable to declare a winner, at least one that is meaningful.³¹

As applied to corporate voting, then, the argument from Arrow's theorem is as follows. The theorem tells us there is no corporate voting procedure that meets the four fairness conditions and at the same time guarantees a consistent (i.e., acyclical) outcome. Something—either one of the fairness conditions or a guaranteed transitive outcome—must yield. For example, adhering to the

25. See *id.* (laying out the logical foundations and conclusions for the theorem); see also FROHLICH & OPPENHEIMER, *supra* note 8, at 19–23 (summarizing the assumptions, conditions, and conclusions of the theorem); PETER C. ORDESHOOK, *supra* note 8, at 62–65 (1986) (providing a concise outline of a proof of the theorem). This Essay will borrow terminology largely from WILLIAM H. RIKER, *LIBERALISM AGAINST POPULISM: A CONFRONTATION BETWEEN THE THEORY OF DEMOCRACY AND THE THEORY OF SOCIAL CHOICE* 293–98 (1982). For a good, recent summary of the state of social choice theory and Arrow's theorem, see 1 *HANDBOOK OF SOCIAL CHOICE AND WELFARE*, at ix (Kenneth J. Arrow et al. eds., 2002) [hereinafter 1 *HANDBOOK OF SOCIAL CHOICE AND WELFARE*].

26. RIKER, *supra* note 25, at 295.

27. *Id.* at 117–18.

28. *Id.* at 116–17, 297.

29. *Id.* at 118. The term "irrelevant" is not pejorative, but instead refers to an alternative outside the set from which a group must choose that does not alter the desirability of the other alternatives relative to each other. Grant M. Hayden, *The Limits of Social Choice Theory: A Defense of the Voting Rights Act*, 74 *TUL. L. REV.* 87, 101 (1999).

30. See RIKER, *supra* note 25, at 119, 297.

31. See Hayden, *supra* note 29, at 101–02 (describing intransitivity as a voting cycle and explaining the problems with a system displaying this characteristic); Grant M. Hayden, Note, *Some Implications of Arrow's Theorem for Voting Rights*, 47 *STAN. L. REV.* 295, 299 (1995) [hereinafter Hayden, Note] (defining intransitivity and stating that it may in essence lead to dictatorial power being exercised in a social choice function by way of agenda control).

condition of universal domain by allowing those with dissimilar (or, at a minimum, multi-peaked) preferences to vote in corporate elections could result in inconsistent corporate decisionmaking, which, in turn, would cause a corporation, in Easterbrook and Fischel's terms, to "self-destruct."³² Relaxing the condition of universal domain by restricting the vote to a class of participants with similar individual preference profiles would avoid such an outcome.³³ Shareholders, given their homogeneous interest in profit maximization, are just such a class.³⁴

B. The Influence of the Argument from Arrow's Theorem

This argument has been quite influential in the decades since its initial formulation. Henry Hansmann uses it to argue against allowing every group of stakeholders to have representation on a corporate board of directors: "[B]ecause the participants are likely to have radically diverging interests, making everybody an owner threatens to increase the costs of collective decision making enormously."³⁵ Among these costs: the possibility of a voting cycle, which "increases as preferences among the electorate become more heterogeneous."³⁶ Such cycles, Hansmann explains, would lead to repeated alteration of the firm's policies and a grant of "extraordinary power" to those in control of the voting agenda.³⁷

The argument appears to give particularly powerful ammunition to those arguing against codetermination, or employee board representation. Gregory Dow, for example, worries, as per Arrow's theorem, that employee representatives introduce the possibility of "voting . . . pathologies."³⁸ He explains, "[U]nder most proposals for employee representation, the board would need to reconcile a far wider range of conflicting interests" than when the board represents only shareholders.³⁹ Merely expanding the franchise

32. Easterbrook & Fischel, *supra* note 9, at 405.

33. *See id.*

34. *Id.* at 405–06.

35. HENRY HANSMANN, *THE OWNERSHIP OF ENTERPRISE* 44 (1996).

36. *Id.* at 41–42.

37. *Id.* at 42.

38. Gregory K. Dow, *The New Institutional Economics and Employment Regulation*, in *GOVERNMENT REGULATION OF THE EMPLOYMENT RELATIONSHIP* 57, 69 (Bruce E. Kaufman ed., 1997).

39. *Id.* Though he relies on Arrow's theorem as part of a general argument against opening up corporate elections to additional constituencies, Dow seems most worried about cycling at the level of board decisionmaking. *See id.*

to include this one additional class of constituents, then, is enough to trigger the damaging intransitive outcomes.⁴⁰

This argument for exclusive shareholder franchise has even been cited by scholars whose vision of corporate governance does not otherwise demand it. Margaret Blair and Lynn Stout, for example, advocate a "team production model" of corporate law,⁴¹ where the corporate boards "exist not to protect shareholders *per se*, but to protect the enterprise-specific investments of *all* the members of the corporate 'team,' including shareholders, managers, rank and file employees, and possibly other groups, such as creditors."⁴² When it comes to determining the proper board electorate, however, Blair and Stout take a more traditional line, arguing that the franchise should probably be limited to shareholders alone.⁴³ Their first argument for this proposition? "[P]lurality voting by shareholders who have a relatively homogeneous interest in maximizing share value may exhibit fewer pathologies and be less conducive to rent-seeking than a vote taken among many competing constituencies with conflicting interests."⁴⁴ The perceived power of the argument from Arrow's theorem, then, is such that a fairly wide variety of corporate scholars have made use of it.

The argument from Arrow's theorem has been quite influential. The durability of the argument appears to come from the strength of the theorem itself, which, at this point, has withstood scrutiny for over half a century.⁴⁵ Indeed, the strength and power of the theorem may be the reason why this argument for exclusive shareholder voting is frequently raised but rarely examined, as if invocation of the theorem is all that is required. Before turning to the task of critically examining the argument, however, we must distinguish it from two related arguments.

40. See, e.g., *id.*

41. Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247 (1999). In their model, people who hope to profit from team production give up some of their rights to the corporation and, in return, the corporation coordinates the activities of the team members and allocates the resulting production in a way that minimizes shirking and rent-seeking. *Id.* at 250–51.

42. *Id.* at 253.

43. *Id.* at 312–15.

44. *Id.* at 313. This is not, by the way, their only argument for this conclusion. *Id.* at 314–15.

45. See Kotaro Suzumura, *Introduction* to 1 HANDBOOK OF SOCIAL CHOICE AND WELFARE, *supra* note 25, at 1, 18–25 (describing decades of work attacking Arrow's theorem, but reiterating its continued vitality).

C. Two Related but Distinct Arguments

1. The Argument from Politics

First, the argument from Arrow's theorem is different (and more powerful) than the argument for exclusive shareholder franchise based on mere disagreements among constituents or the board members they elect. The latter, which we will call the argument from politics, is that a board representing more diverse constituents will come to agreement on corporate decisions less readily than a board representing a single class of constituents. A board may represent more diverse interests when an election has been opened up to more than one corporate constituency or when certain constituencies are allowed to elect their own board representatives (like the German codetermination model). Either way, the resulting process, the argument goes, would be prone to disagreements, internal bickering, information asymmetries, and the like that would make for less efficient corporate decisionmaking. The argument from politics, then, draws on a range of difficulties (other than lurking Arrowian intransitivities) in collective decisionmaking introduced by voters with more heterogeneous interests.

Many corporate law theorists have advanced the argument from politics. Henry Hansmann and Reinier Kraakman, for example, argue for an exclusive shareholder franchise because stakeholder representation would lead to more cumbersome decision processes.⁴⁶ Stephen Bainbridge makes a similar point largely on the basis of Arrow's models of consensus and authority decisionmaking,⁴⁷ explaining that differing interests and levels of information would bog down corporate decisionmaking.⁴⁸ In a related vein, Blair and Stout ask us to "[i]magine the chaos and politicking likely to attend an election in which a firm's creditors, executives, rank-and-file employees, and other stakeholders with unique and often conflicting interests could vote on their favored candidates."⁴⁹ It is at times difficult to discern which argument for exclusive shareholder franchise

46. See, e.g., Henry Hansmann & Reinier Kraakman, *The Basic Governance Structure*, in *THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH* 33, 64 (Reinier Kraakman et al. eds., 2004); Henry Hansmann & Reinier Kraakman, *The End of History for Corporate Law*, 89 GEO. L.J. 439, 447–49 (2001).

47. The arguments are drawn, somewhat confusingly for our purposes, from Kenneth Arrow's other work on institutional design, *THE LIMITS OF ORGANIZATION* (1974).

48. See Stephen M. Bainbridge, *Participatory Management Within a Theory of the Firm*, 21 J. CORP. L. 657, 725 (1996).

49. Blair & Stout, *supra* note 41, at 313.

is being advanced.⁵⁰ Bainbridge, for example, concentrates on the argument from politics, but at times refers to more generalized worries about collective decisionmaking that may include the possibility of Arrowian intransitivities.⁵¹

We take care to separate the two arguments not only because they are analytically distinct, but also because the argument from politics is far less powerful than the one from Arrow's theorem. The argument from politics postulates that a more diverse board electorate may have difficulty choosing board members, or that a board composed of members representing more diverse constituencies may not reach consensus as easily (or at all) as a board representing those with more homogeneous interests. This may be so, but the difficulties that animate the argument from politics may, at least theoretically, be reduced or eliminated by tinkering with institutional design features. For example, boards traditionally follow internal procedures requiring majority votes, with the chair having tie-breaking authority.⁵² In the end, one can always design a procedure for forcing a vote and reaching a decision on any particular issue—there may be winners and losers, but a decision will be made that is based on voter preferences. (Indeed, board diversity, and the argument and deliberation that go with it, may actually change people's preferences. And the fact that voters do not always agree—and may squabble along the way—is, of course, the reason we have voting procedures to begin with.)

The argument from Arrow's theorem involves a more fundamental objection to heterogeneous board electorates. Unlike the argument from politics, the theorem applies to all social choice procedures. This means that there is no independent mechanism of checking the reliability of an election outcome in any particular case. Any checking mechanism would need to explicitly or implicitly equate voter preferences with social choices and thus would be vulnerable to violations of the same set of the theorem's conditions that it is designed to test.⁵³ This is part of the reason the theorem is so devastating, and it explains why some commentators argue that the

50. This is certainly understandable because both arguments are related to potential breakdowns in collective decisionmaking. This is not to say that the authors are conflating the two arguments, but just that it is difficult to see whether and to what degree they are relying upon the argument from Arrow's theorem when discussing reasons for limiting the franchise to shareholders.

51. See Bainbridge, *supra* note 48, at 667 n.51, 725 n.409.

52. See DEL. CODE ANN. tit. 8, § 141(b) (2002) ("The vote of the majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors unless the certificate of incorporation or the bylaws shall require a vote of a greater number.").

53. See Hayden, Note, *supra* note 31, at 305.

theorem makes the very notion of a popular will meaningless at some level.⁵⁴ The argument from Arrow's theorem cannot be overcome by simply tinkering with the decision procedures.

Further, the consequences of the theorem itself are, if anything, understated by Easterbrook and Fischel. In their version of the argument, expanding the corporate board electorate would result in "inconsistent" firm choices.⁵⁵ But the true impact of the theorem goes beyond choices that are merely inconsistent. One famous corollary of Arrow's theorem—the Gibbard-Satterthwaite theorem—tells us that all nondictatorial voting schemes are subject to strategic manipulation.⁵⁶ In the presence of intransitive social preference orders, the social choice may depend upon the order in which alternatives are presented to the electorate—control of the agenda is tantamount to control of the outcomes. This is, in part, what worries Hansmann about the possibility of intransitive results.⁵⁷ The potential, then, is not only for inconsistent firm decisions, but also for decisions that may be manipulated by whoever sets the agenda (which, in this setting, would most likely be the board itself). The argument from Arrow's theorem, then, is distinct from and more powerful than the argument from politics.

2. The Argument for Absolute Delegation

The argument from Arrow's theorem for exclusive shareholder franchise may also be distinguished from a similar argument for the absolute delegation rule in corporate law. The absolute delegation rule describes the fact that shareholders typically lack the power to directly participate in a firm's business decisionmaking; that power is instead delegated to corporate managers.⁵⁸ One argument advanced for this institutional arrangement is based on Arrow's theorem. Jeffrey Gordon argues that direct shareholder control over day-to-day

54. See ORDESHOOK, *supra* note 8, at 56–57 (discussing the Condorcet paradox and its argument that journalistic shorthand such as "the public interest" or "community goals" has no proper place in any adequate theory of political processes); RIKER, *supra* note 25, at 119.

55. Easterbrook & Fischel, *supra* note 9, at 405. One assumes this means choices that are inconsistent with each other, as opposed to inconsistent with some hypothetically "correct" choice (which, as we now know, would not be possible to discern).

56. Or subject to dictatorial control, a state of affairs that is no better in this context. See Alan Gibbard, *Manipulation of Voting Rules: A General Result*, 41 *ECONOMETRICA* 587, 587 (1973); Mark A. Satterthwaite, *Strategy-Proofness and Arrow's Conditions: Existence and Correspondence Theorems for Voting Procedures and Social Welfare Functions*, 10 *J. ECON. THEORY* 187, 188 (1975).

57. See HANSMANN, *supra* note 35, at 41–42.

58. Jeffrey N. Gordon, *Shareholder Initiative: A Social Choice and Game Theoretic Approach to Corporate Law*, 60 *U. CIN. L. REV.* 347, 351–52 (1991).

business decisionmaking through, say, an initiative process, would greatly increase the risk of cyclical outcomes because the risk of intransitivities grows as the number of voters and alternatives increase.⁵⁹ This, as per Arrow's theorem and its corollaries, would lead either to inconsistent corporate decisions or to the manipulation of the corporate decisions by shareholders interested in private gain.⁶⁰ In either case, shareholder initiative of this sort would lead to a less productive corporation—hence the need to delegate such authority to management.⁶¹

The argument from Arrow's theorem with respect to exclusive shareholder franchise has much in common with this argument for absolute delegation. Both trade on the possibility that Arrowian intransitivities will result in inconsistent or manipulable corporate decisions. There are, however, some differences, the principal one being that the alternatives are candidates for board membership in one case and specific business decisions in the other. The specter of cycling may not loom as large with respect to board elections because there are typically fewer candidates up for any particular seat on the board than there are possible directions to take a business. Board elections may be held much less frequently than a system of direct shareholder initiatives on day-to-day business decisions, further reducing the opportunities for cycling.⁶² And, more generally, the argument for an exclusive shareholder franchise depends upon a more complicated (and tenuously connected) series of events to get from inconsistent board membership choices to inconsistent corporate decisions, a relationship that is more direct in the argument for absolute delegation.

Thus, some of the arguments that follow—for example, those that make use of the distinction between voting on board members and voting on firm decisions—would not apply with any force to this related argument for absolute delegation.⁶³ Other arguments, however, may have some application to both. For example, the arguments below that involve balancing the likelihood of intransitivities in the corporate setting with the costs associated with limiting the franchise may also apply, with some variation, to the argument for absolute delegation. That said, the focus of this Essay is

59. *Id.* at 359–60.

60. *See id.* at 359–63.

61. *See id.* at 363.

62. *Id.* at 373.

63. Indeed, Gordon makes some of these distinctions between the cycling problem with initiatives and the potential cycling problem that may arise in board elections with a more heterogeneous shareholder electorate. *See id.* at 372–73.

on the strength of the argument from Arrow's theorem as it applies to restricting the franchise to shareholders; the degree to which some of our arguments apply to the related arguments for absolute delegation is left for another day.

II. SHORTCOMINGS IN THE ARGUMENT FROM ARROW'S THEOREM

The argument from Arrow's theorem for exclusive shareholder voting is not compelling. This does not stem from a vulnerability in the theorem itself, but instead from its application to the social choice function in question—corporate board voting. That application has been undertheorized by those who make the argument and taken as an article of faith by those who rely upon it. The remainder of this Essay is devoted to a critical appraisal of the argument.

A. Shareholder Heterogeneity

Initially, we note that the premise of the argument—that shareholders have homogeneous preferences with respect to wealth maximization—has come under increasing scrutiny. Shareholders, it turns out, have interests that diverge along a number of dimensions. Shaun Martin and Frank Partnoy recently focused attention upon the problems caused by equity derivatives, which carve up various shareholder rights into discrete financial securities.⁶⁴ But there are many other ways in which shareholders fail to share common interests.⁶⁵ Some shareholders may be in a control group, and others may not.⁶⁶ Employee and pension-holding shareholders have different interests from non-employee shareholders.⁶⁷ And even traditional shareholders may have different time horizons for wealth maximization that cannot be costlessly equalized through existing financial instruments.⁶⁸ Martin and Partnoy conclude, "It is simply not true that the 'preferences of [shareholders] are likely to be similar if not identical.'"⁶⁹

The presence of heterogeneous shareholder preferences undercuts a crucial assumption of the argument from Arrow's

64. Shaun Martin & Frank Partnoy, *Encumbered Shares*, 2005 U. ILL. L. REV. 775, 778–81.

65. See Hayden & Bodie, *supra* note 12, at 477–99 (cataloguing the ways in which shareholder interests diverge).

66. See *id.* at 477–80.

67. See *id.* at 486–88.

68. See *id.* at 492–94.

69. Martin & Partnoy, *supra* note 64, at 778 (quoting Easterbrook & Fischel, *supra* note 9, at 405).

theorem. But even if shareholder preferences are not identical, proponents of the argument may be able to salvage their position by showing that the preferences are sufficiently similar to make the argument work. If, for example, shareholder preferences are *more* homogeneous than the preferences of those of other corporate constituencies or, at a minimum, than the preference profile of a combined corporate electorate, then there may be some support for a weakened version of the argument from Arrow's theorem. As we discuss below, this will, in part, depend upon the exact nature of the asserted homogeneity. But in any case, there may be enough left of the premise of shareholder homogeneity to examine the strength of the argument itself.

B. Shareholder Preferences over Candidates

Even with the assumption of shareholder homogeneity, there are several reasons why Arrow's theorem fails to provide a suitable foundation for restricting corporate voting to shareholders alone. Shareholder agreement on the goal of wealth maximization, even if true, does not indicate agreement on how best to achieve that goal.⁷⁰ Shareholders may, and often do, wildly disagree over the proper course of action for their corporation.

Indeed, it is not at all clear that shareholder preferences with respect to methods are more likely, as Easterbrook and Fischel argue, to be single-peaked or otherwise value restricted. Take, for example, three groups of shareholders (S_1 , S_2 , and S_3), each of which owns a third of the voting shares of Yahoo!. Let us also suppose that Yahoo! has three sets of strategic opportunities in front of it: it could merge with Microsoft, it could set up a strategic alliance with Microsoft, or it could set up a strategic alliance with Google. Different shareholders are likely to have different preferences for each of these options. These preferences could be described as: merge with Microsoft (mm), set up an alliance with Microsoft (am), or set up an alliance with Google (ag). The first two groups, S_1 and S_2 , believe that Yahoo! is floundering and needs to set up a relationship with either Microsoft or Google in order to thrive. The first group, S_1 , thinks a great deal of Microsoft and believes a merger or, to a lesser extent, a contractual relationship with them will generate the most profitable synergies. Thus, S_1 most

70. See Bainbridge, *supra* note 48, at 665 (discussing various explanations, such as investment time and tax bracket, for disagreement over how best to achieve the goal of wealth maximization). If there was complete agreement, there would, of course, be no reason to have board elections in the first place because we could just ask one of the shareholders to report the shared preference ranking.

prefers mm, followed by am, then ag.⁷¹ Group S₂ believes the profit potential is greater with Google, and hence most prefers ag, followed by mm, then am. The third group of shareholders, S₃, slightly prefers Microsoft over Google, but greatly values Yahoo!'s unique corporate culture and believes that the resulting culture clash with either of the potential partners would overwhelm any productive synergies from an alliance or, worse, a merger. This group also believes Google would be more aggressive in a partnership than Microsoft would be. Thus, S₃ most prefers am, followed by ag, then mm. The resulting preference profile is:

S₁: mmPamPag

S₂: agPmmPam

S₃: amPagPmm

This profile is not single-peaked or otherwise value restricted. It is, instead, an instantiation of the Condorcet paradox and yields the voting cycle mmPamPagPmm.

At the level of general methods of achieving corporate wealth-maximization goals, then, there is no reason to believe that shareholders are uniquely situated to have preference profiles that are single-peaked or otherwise domain restricted. In the Yahoo! example, it was quite simple, given a plausible division in shareholder preferences along two dimensions—their relative feelings about the two potential partners and their views on Yahoo!'s corporate culture—to generate a preference profile that returned an intransitive outcome.⁷² This was true despite the fact that all three groups of shareholders wanted to maximize profits. Given the multiple dimensions of most significant business decisions, shareholder preferences are not particularly likely to fall into patterns that ensure transitive outcomes.

71. If the merger was a cash-out merger offering the highest current cash value of the three options, this preference set would correlate with shareholders interested in short-term profit maximization.

72. This is not to say that it would be difficult to put together a scenario in which an expanded corporate electorate (that included constituencies other than shareholders) had a preference profile that led to an intransitive outcome. The point here is that devising such a scenario with shareholders alone is relatively easy, even assuming an identical interest in wealth maximization, and the burden is on those who advance the argument from Arrow's theorem that there is a marked difference in the probability of acyclic outcomes with an expanded electorate.

More specifically, even if shareholders were to agree on the direction for their corporation, they may well have very different ideas about which director candidate(s) would best effectuate it. This additional degree of detachment is less likely to play a role with respect to significant corporate decisions, where slates of board candidates are elected precisely to effectuate a particular decision. But it would add a layer of complexity when translating agreement on more mundane aspects of a corporation's direction into preferences on board candidates. The proponents of the argument from Arrow's theorem never make clear why underlying agreement on profit maximization, or even upon the method for achieving that goal, generally makes it more likely that shareholder preferences are single-peaked with respect to director candidates. Because Arrow's theorem operates on the level of individual preference orders over an array of alternatives (here, director candidates), agreement on the general goals or methods of the corporation does little to ensure that a particular voting system for board membership will be free from Arrowian intransitivities.

C. The Inevitability of Imperfection: Understanding Arrow's Theorem

1. Making Choices Among Arrow's Conditions

Even if shareholder homogeneity with respect to profit maximization reduced the incidence of cycles in corporate director elections, that is not necessarily a powerful argument in favor of allowing only shareholders to vote. Arrow's theorem demonstrates that no social choice function can simultaneously fulfill the four conditions of democratic fairness and one condition of logicity, but it says nothing about which condition should be sacrificed when designing a voting structure. That decision depends on an assessment of the costs associated with sacrificing one of the conditions of democratic fairness and, on the other side, the practical likelihood and costs associated with intransitive outcomes. And those who use Arrow's theorem to argue in favor of restricting voting rights to shareholders have not made the case for their choice of conditions to sacrifice.

Because Arrow's theorem applies to all social choice functions, including all corporate voting systems, we know that a voting system where shareholders alone may cast votes must violate one of the

conditions of democratic fairness or transitivity.⁷³ And, as mentioned above, it does: restricting voting rights to shareholders because of their purported agreement with each other is a straightforward violation of the condition of universal domain. That condition, remember, demands that a voting procedure work with every permutation of voter preferences over a set of alternatives. And, like the other fundamental requirements of democratic fairness, universal domain is relatively uncontroversial. Giving up this condition by restricting individual preference orders runs counter to a fundamental democratic principle: people should not be declared ineligible to vote because of their preferences. It also runs counter to a fundamental principal of standard economics that we take people's preferences as they come.

And, to be clear, this is not one of those situations where people with an interest in an election, to whom we would otherwise extend the right to vote, just naturally happen to have preferences that, collectively, do not produce intransitivities.⁷⁴ In those situations, the condition of universal domain is not sacrificed by denying anyone the right to vote from the outset. Because the voters encounter no prior restraint on their preference orders, the principal justification for universal domain—the immorality of denying the ballot to people with certain preference orders—is not implicated. Sacrificing universal domain in such situations sacrifices very little. Here, however, the argument is that people other than shareholders, even if they have an interest in an election, should be denied the right to vote from the outset *because* they have preference orders that, when combined with those of the shareholders, may produce a voting cycle. The argument thus implicates the full weight of the justification behind the condition of universal domain.

Given the obvious democratic cost of disenfranchising interested voters because of their opinions, the argument that Arrow's theorem inevitably leads us to restrict voting rights to shareholders is not compelling. If one is willing to sacrifice universal domain, why not further restrict voting rights to those who agree on the precise

73. See Hayden, Note, *supra* note 31, at 299–304 (providing examples of how the Condorcet method, the amendment procedure, the Borda count, and cumulative voting systems all fall prey to Arrow's theorem).

74. See, e.g., Hayden, *supra* note 29, at 109–32 (arguing that the level of spectrum agreement required in Voting Rights Act claims, while not complete, is sufficient to reduce the incidence of cycling to near zero); Hayden, Note, *supra* note 31, at 312 (arguing that the racial bloc voting requirements of certain claims under the Voting Rights Act may represent a case of “naturally occurring” spectrum agreement that decreases the incidence of cycling). As will be discussed *infra*, many groups of people associated through a polity or a corporation may have sufficiently common reference points to greatly reduce the incidence of intransitivities.

direction that the corporation should go, or, better yet, on the slate of directors to take it there? After all, that kind of agreement, unlike a shared goal of profit maximization, may actually guarantee a transitive outcome. Or why not sacrifice one of the other conditions of democratic fairness? Restricting the vote to shareholders is certainly not the only social choice procedure that may eliminate the possibility of cyclical results—one could also have a system where the person reading this Essay chooses the directors (which, despite the obvious upside, violates nondictatorship) or a system where the directors are randomly chosen (which violates Pareto efficiency). There is something weird about “solving” the problem of preference aggregation by deciding not to listen to certain people. But, more broadly, the point here is that the case for sacrificing universal domain in this instance has not been made, and we’re really just left with the question we started with: should voting rights be restricted to shareholders?

2. The Likelihood of Intransitive Results

The argument from Arrow’s theorem is all the more surprising given that it does not analyze the likelihood or cost of intransitive results. As it turns out, the likelihood of cyclical outcomes, even when voting is not limited to shareholders, is probably quite small. And the cost of such outcomes, when they do occur, is probably negligible (and certainly not likely to cause corporations to “self-destruct”). This is true for several reasons.

Initially, we note that empirical observations across a broad range of voting mechanisms have failed to discover the large number of intransitivities initially predicted by social choice theory.⁷⁵ This is probably because those early predictions were based on the assumption that all individual preference orders were equally likely to occur in a preference profile—that individual preference orders were somehow randomly distributed.⁷⁶ With such preference profiles, for example, in a large election with as few as six alternatives, almost one-third of the possible preference profiles produce intransitive

75. See Scott L. Feld & Bernard Grofman, *Partial Single-Peakedness: An Extension and Clarification*, 51 PUB. CHOICE 71, 71 (1986) (explaining that “empirical observations of a wide variety of actual collective decisionmaking processes indicate that cyclical majorities are very rare”); Bernard Grofman, *Public Choice, Civic Republicanism, and American Politics: Perspectives of a “Reasonable Choice” Modeler*, 71 TEX. L. REV. 1541, 1553 (1993) (noting that cycles are much harder to find than early social choice models had predicted).

76. See Richard G. Niemi & Herbert F. Weisberg, *A Mathematical Solution for the Probability of the Paradox of Voting*, 13 BEHAV. SCI. 317, 321 (1968).

outcomes.⁷⁷ Without this assumption of an impartial culture, however, the predicted frequency of cycles varies tremendously, and there are several aspects of real-world preference profiles that greatly increase the likelihood of transitive outcomes.

One feature of a preference profile that ensures transitive outcomes is something loosely referred to as spectrum agreement.⁷⁸ Spectrum agreement is a domain restriction that occurs when all voters array their preferences along a common spectrum.⁷⁹ This should not be confused with agreement on the order of those alternatives. To make this point clear, take an extreme example of a case where all the individuals rank candidates for corporation director based on whether the candidates promise to maximize profits (one end of the spectrum) or to minimize profits (the other end of the spectrum). There are three candidates running for office—a profit maximizer (p), a wastrel (w), and some evenhanded chap in between (m). Voters who want to maximize profits will most prefer candidate p and least prefer candidate w, with m somewhere in between. Conversely, voters who want to throw money away will most prefer w, followed by m, with p last. Moderate voters will have preference orders of m-p-w or m-w-p, depending on whether they are closer to the profit or wastrel side of the spectrum. Although these voters rank the candidates in different orders, their preferences can all be aligned along the same spectrum. And no voter would rank the moderate candidate last, as agreement on the spectrum precludes such an ordering.

This type of spectrum agreement is important because it is a sufficient condition of transitivity.⁸⁰ When all voters align the alternatives on a common spectrum, a simple majoritarian voting procedure will produce a transitive social ordering.⁸¹ This is true despite the fact that the voters vehemently disagree on the relative merits of the candidates;⁸² indeed, the example included voters who wanted profits maximized and those who wanted profits minimized. But so long as there is agreement on the spectrum, an acyclic result is guaranteed.

77. See *id.* at 322 & tbl.2.

78. See Hayden, *supra* note 29, at 107–08; Hayden, Note, *supra* note 31, at 306–07. Although the term “spectrum agreement” seems to imply some express understanding between voters, it is enough that voter preferences may be arrayed on a common continuum, regardless of whether the voters agreed ahead of time or, indeed, even knew about the agreement.

79. Hayden, *supra* note 29, at 107.

80. *Id.*

81. See RIKER, *supra* note 25, at 123–28.

82. *Id.* at 126.

Spectrum agreement of this sort may be described in a variety of ways, all of which constitute a sufficient condition for transitive outcomes. For example, a group of individual preference profiles may be "single-peaked" if there is a single horizontal ordering (a spectrum) where every one of the individual orders may be arranged so that each has a most-desired alternative and prefers other alternatives less as they are further from his ideal point.⁸³ The outcome of a simple majority vote is guaranteed to be transitive, and the winner will be the alternative closest to the ideal point of the median voter.⁸⁴ The same sort of outcome is true of profiles that are, analogously, single-caved or polarized.⁸⁵

More broadly, domain restrictions where a preference profile is "value restricted" are a sufficient condition of transitive outcomes.⁸⁶ A triple of alternatives is value restricted if at least one alternative is never first, middle, or last in every individual's preference order.⁸⁷ The example above—with the profit maximizer, wastrel, and moderate—involved a preference profile that was both single-peaked (on the array of profit maximizing or minimizing) and value restricted (candidate m was never ranked last).

One potential drawback to these various indicia of spectrum agreement is that they must be complete in order to guarantee transitive outcomes.⁸⁸ If, for example, even one voter in an otherwise value-restricted preference profile ranks an alternative where she shouldn't (the rank order that made the profile value restricted to begin with), the guarantee of a transitive outcome disappears.⁸⁹ For this reason, one early commentator explained that "the various

83. See BLACK, THEORY, *supra* note 19, at 19–25 (discussing proofs of theorems and examples involving single-peaked preference curves); DUNCAN BLACK & R.A. NEWING, COMMITTEE DECISIONS WITH COMPLEMENTARY VALUATION 19–28 (1951) (discussing group voting on two separate issues and proving there can be at most one majority decision); Duncan Black, *On the Rationale of Group Decision-Making*, 56 J. POL. ECON. 23, 23–24 & fig.1 (1948) (explaining and depicting a single-peaked preference profile for a voter with one most desired alternative).

84. See BLACK, THEORY, *supra* note 19, at 125–29.

85. *Id.*

86. See Amartya K. Sen, *A Possibility Theorem on Majority Decisions*, 34 ECONOMETRICA 491, 492–95 (1966).

87. *Id.* at 492.

88. See Feld & Grofman, *supra* note 75, at 72–73 ("[I]f even one individual has non-single-peaked preferences then there can be a paradox of cyclical majorities."); Richard G. Niemi, *Majority Decision-Making with Partial Unidimensionality*, 63 AM. POL. SCI. REV. 488, 488 (1969) (finding that for "majority voting [to] yield a transitive social ordering . . . the preference ordering of every individual must be single-peaked").

89. See Hayden, *supra* note 29, at 125–26 (providing an example of a preference profile where sixteen of seventeen preference orders are single-peaked yet a majority vote produces an intransitive outcome).

equilibrium conditions for majority rule are incompatible with even a very modest degree of heterogeneity of tastes, and for most purposes are probably not significantly less restrictive than the extreme condition of complete unanimity of individual preferences."⁹⁰ Perhaps, then, we should still be wary of the possibility of cyclical outcomes in our voting procedures.

Fortunately, later work in social choice theory has shown that the likelihood of transitive outcomes does not wholly depend upon the assurance of complete spectrum agreement. Instead, much lesser degrees of voter homogeneity may be sufficient. Richard Niemi, for example, proved that a larger proportion of single-peaked or otherwise value-restricted preference orders increased the probability of an acyclic result.⁹¹ This is especially true, counterintuitively, as the number of voters increases.⁹² His result was confirmed by later studies using other measures of social homogeneity.⁹³ And it was supported by other work that looked at preference profiles as a whole, which concluded that society often acts in a way that is more ideological than the individuals that compose it.⁹⁴ Overall, it turns out that "[t]he [voting] paradox can be very satisfactorily avoided if common frames of reference are widespread but far less than unanimous."⁹⁵

There is a range of political, economic, and sociological reasons why members of societies will exhibit a large degree of spectrum agreement. Most democracies, for example, require a degree of consensus at their formation, and common socialization may further shape individual frames of reference,⁹⁶ which may explain why there are so few observed cycles in the political arena. Those reasons would apply with particular force in corporate ventures, which, after all, involve participation in an organization designed to facilitate certain

90. Gerald H. Kramer, *On a Class of Equilibrium Conditions for Majority Rule*, 41 *ECONOMETRICA* 285, 285 (1973).

91. See Niemi, *supra* note 88, at 488.

92. *Id.* at 493–94; see also Hayden, *supra* note 29, at 127–28 (discussing Niemi's findings). This is counterintuitive because the likelihood of transitive outcomes decreases as you increase the number of individuals in a profile assuming an impartial culture. See Niemi, *supra* note 88, at 493–94.

93. See, e.g., Peter C. Fishburn, *Voter Concordance, Simple Majorities, and Group Decision Methods*, 18 *BEHAV. SCI.* 364, 371–72 (1973); Dean Jamison & Edward Luce, *Social Homogeneity and the Probability of Intransitive Majority Rule*, 5 *J. ECON. THEORY* 79, 84–86 (1972); see also Hayden, *supra* note 29, at 128–30 (discussing these two studies).

94. See Feld & Grofman, *supra* note 75, at 73–79 (extending Niemi's result and finding that a social preference order will be transitive if there is more than a fifty percent probability that a randomly chosen individual would align the alternatives along one existing continuum); see also Hayden, *supra* note 29, at 130–31 (discussing Feld and Grofman's findings).

95. Niemi, *supra* note 88, at 494.

96. See FROHLICH & OPPENHEIMER, *supra* note 8, at 19–20.

kinds of economic activity. The various categories of people interested in the organization may disagree about many aspects of its governance, but they will very likely share the common frames of reference that lead to transitive election results. There is reason to believe, in other words, that the number of intransitivities in corporate director elections, even when the electorate is expanded, is likely to be quite low. In any case, the proponents of this argument have not made the positive case for the proposition that expanding the corporate electorate will, in fact, significantly increase the risk of intransitive outcomes when compared with an election restricted to shareholders alone.

Indeed, it may well be that expanding the corporate electorate to include at least one other group of stakeholders may further reduce the expected number of intransitivities in board elections. Take, for example, a system of codetermination where both shareholders and employees have the right to vote on candidates for board membership in the same election. That electorate may very well view candidates for board membership through the common lens of whether the candidates are friendlier to the interests of capital or labor. There would, in other words, be the sort of spectrum agreement that increases the likelihood of a transitive outcome in any given board election. There would not, of course, be agreement on the candidates themselves, as members of each group would likely favor candidates more friendly to their interests. And there would not be any guarantee that the resultant board would make better decisions (though at least the board would represent a greater number of stakeholders in the enterprise). But if, as here, the entire concern is the destructive possibilities of voting cycles, introducing a second set of voters may polarize voter preferences over the array of candidates in a way that greatly increases the chance of a transitive outcome. Thus, Easterbrook and Fischel are not merely wrong to pronounce it "well known . . . that when voters hold dissimilar preferences it is not possible to aggregate their preferences into a consistent system of choices"⁹⁷—they may have it exactly backwards. Expanding the corporate electorate to include constituencies whose interests are clearly oppositional reduces the chances of a multi-peaked social preference profile. The argument from Arrow's theorem may actually be turned on its head as an argument in favor of expanding the electorate to include at least one other significant group of stakeholders.

97. Easterbrook & Fischel, *supra* note 9, at 405.

The prospect of a corporate board election with multiple voting constituencies brings to light another flaw in the argument from Arrow's theorem—the assumption that the entire expanded electorate would necessarily be voting in a single election. It is much more likely that, in an expanded electorate, each group would be allocated a certain number of board representatives. In other words, there would be a prior decision about how many representatives each group had a right to elect, and then each group would hold its own elections. Roughly speaking, this is how the German codetermination system is set up. And the argument from Arrow's theorem would then come down to showing that other constituencies are more likely than shareholders to have suitably domain-restricted preference profiles (a dubious prospect given recent work on the diversity of shareholder preferences) or to claiming that the argument really is about cycling at the level of board decisionmaking, not candidate elections.

3. The Consequences of Intransitive Results

Finally, the case has not been made that the occasional intransitivity in corporate board elections would do much harm to an organization, and certainly not that it would cause a firm to make “inconsistent choices” that would lead it to “self-destruct.”⁹⁸ Initially, a large proportion of intransitive results are middle or bottom cycles that still allow us to pick clear winners despite producing cycles involving lower-ranked alternatives.⁹⁹ Thus, the estimates of the number of social preference profiles that result in intransitive social preference orders include many that would be inconsequential in a board election.

Once we're past such general observations about the possibility of cycles, though, it is somewhat difficult to assess the nature of the inconsistency that gives rise to Easterbrook and Fischel's worries about expanding the corporate electorate. The inconsistency would ostensibly involve the choice of board candidates, which would need to be incompatible with some other outcome. But it is unclear what that other outcome is thought to be. It cannot be that we are worried about the actual choice of board members being inconsistent with the “correct” choice, because, of course, there is no such choice in this situation. Indeed, the main problem with a preference profile that produces a top cycle is that there is no single best social choice.

98. *Id.*

99. See Grofman, *supra* note 75, at 1552.

Like many aspects of the argument from Arrow's theorem, it is difficult to understand what exactly its proponents are worried about. Because we are talking about preference consistency, it may be useful to divide the discussion into concerns about synchronic and diachronic consistency. Simply put, synchronic consistency involves having a preference ordering that fits together at a particular time, while diachronic consistency has to do with coherence over time. They are related (synchronic inconsistency may result in diachronic inconsistency), and fear of one, the other, or both may be implicated here.

Although worries about Arrowian intransitivities usually involve concerns about synchronic consistency (indeed, cycling is a form of synchronic inconsistency), it is difficult to see how those concerns alone could be behind this argument. The synchronic inconsistency in this situation would be that, at one time, a board electorate has preferences with respect to board candidates that give rise to an intransitive ordering. But a nascent intransitivity does not automatically translate into an unstable outcome, because there are many features to corporate (and political) elections that operate to produce stability. Initially, most corporate board voting procedures are structured to produce a winner regardless of the presence of lurking intransitivities. Board elections generally only require the vote of a plurality to win; as long as a director gets one vote, in some cases, she will win if unopposed.¹⁰⁰ Some boards have staggered seats, in which directors have three-year terms, and only one-third of the directors are elected in any given year.¹⁰¹ In cases where there actually are top cycles, the candidate selected by the voting procedure may, indeed, be the contingent product of that process. But the voting procedures themselves, and the "structure-induced" equilibria they produced,¹⁰² would ensure that the firm would not suffer for lack of directors. And

100. Joshua R. Mourning, Note, *The Majority-Voting Movement: Curtailing Shareholder Disenfranchisement in Corporate Director Elections*, 85 WASH. U. L. REV. 1143, 1144 (2007). Some shareholders have pressed corporations to change their voting rules so that a director must win a majority of the votes cast in order to win the seat. See generally *id.* at 1143–46. However, even under such a "majority-vote" regime, a director who fails to get a majority will stay on until a replacement is chosen or until a majority of shareholders vote to remove the person. See DEL. CODE ANN. tit. 8, § 141(b) (2002) (stating that "[e]ach director shall hold office until such director's successor is elected and qualified or until such director's earlier resignation or removal"). However, some companies have established resignation policies that require directors to resign if they are not elected by the shareholders. Mourning, *supra*, at 1182–85. For criticism of majority voting as an ineffective reform, see Vincent Falcone, Note, *Majority Voting in Director Elections: A Simple, Direct, and Swift Solution?*, 2007 COLUM. BUS. L. REV. 844, 881–82.

101. See, e.g., DEL. CODE ANN. tit. 8, § 141(d) (allowing such a staggered election procedure).

102. For some background on structure-induced equilibria, see, e.g., RIKER, *supra* note 25, at 188–92.

the other director candidates within the cycle have no greater claim to the position than the chosen member.

The more plausible argument here is that a synchronic inconsistency could easily lead to diachronic inconsistency if the choice that resulted from a preference cycle was determined at random. This would mean that, in certain situations, we may have successive board elections with somewhat similar sets of candidates and end up with different board members. These board members would, presumably, have different ideas about the best strategies for the firm, implement them, and thus cause the firm to lurch from one strategy to another. This type of diachronic inconsistency would also fit with the standard inconsistency complaint about firms: they change courses too often.

But, even assuming the presence of a top cycle, this sort of diachronic inconsistency in choice of board members is unlikely to occur. The decision processes themselves may operate to produce stability across time.¹⁰³ Once a decision is made, there are new actors and new interests involved; the same alternatives are rarely confronted twice. Indeed, in corporate elections, it is quite plausible that both voters and candidates would change from election to election. For example, voters for the “losing” candidate in the first election—especially the shareholder voters, given their low exit costs—would probably not be around for the next election. The same can be said for the losing candidates themselves, further reducing the possibility of successive elections that produce intransitive outcomes. And if the first board makes certain decisions, the result is a fait accompli at the next election—even the opposition cannot undo it in a costless way.

The ultimate worry here, though, appears to be that expanding the electorate will result in inconsistent *firm* decisions. But even in the rare case where successive board elections produce “inconsistent” board members, they are not likely to result in inconsistent board decisions, much less ones that would cause a firm to self-destruct. For one, the board member would be only one of, say, eleven directors. In addition, even assuming a complete board turnover, the subsequent board members would presumably know the recent history of the firm’s decisions, its current situation, and whether it is now in the firm’s interest to change course. In other words, the board members would be able to exercise independent judgment as to whether their original plans for the firm still make sense in the current situation. (Indeed, Gordon claims that cycling at the board level is, for this and

103. Grofman, *supra* note 75, at 1561–62.

several other reasons, very unlikely.)¹⁰⁴ Those who make the argument from Arrow's theorem never explain this move from inconsistent board elections to inconsistent corporate decisions, and it seems anything but obvious.

The intransitivity concerns are even more out of place in the typical corporate election. Our discussion thus far has assumed a robust democracy in which many candidates compete for the right to represent the voting populace. In most corporate elections, the board puts forth its proposed slate of candidates (which may be all incumbents), and the shareholders ratify those choices. This separation of ownership and control, in which shareholders "own" and managers "control," has long been a foundation of corporate law—both in theory and practice.¹⁰⁵ Consistency in corporate policy comes not from the uniformity and stability of voter preferences, but rather from a lack of responsiveness and from (economically rational) voter apathy. In fact, efforts to reinvigorate the shareholder franchise have only recently met with limited success. For this reason, a preference for a hypothetical shareholder franchise (as opposed to a more inclusive voting polity) seems out of touch with the modern reality of the impotence of the corporate franchise.

The related worry that intransitivities in board elections would mean the election results could be manipulated is also not that compelling. If we were in one of those relatively rare situations where voter preferences may produce a cyclical outcome, we know that one may strategically manipulate the election process to achieve a desired outcome. But in order to do so, one must have a pretty good read on the set of voter preferences far enough in advance of the election to actually manipulate the process (by tinkering with the election process or the slate of candidates). In corporate board elections, the set of preferences is typically enormous, and the processes and candidates are usually set far enough in advance of the actual election to make such manipulation quite difficult.

More to the point, current board members, who would presumably be in the best position to manipulate the agenda, would manipulate outcomes in a way that *consistently* favored their interests (which should allay the fear of inconsistent firm decisions).¹⁰⁶ Manipulation removes synchronic inconsistency, and consistent

104. See Gordon, *supra* note 58, at 372–73.

105. See generally ADOLF A. BERLE & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* 119–52 (1932).

106. For an empirical examination of the power of incumbent boards to influence elections, see Yair Listokin, *Management Always Wins the Close Ones*, 10 AM. L. & ECON. REV. 159 (2008).

manipulation removes diachronic inconsistency. And to the extent that the fear of manipulation is independent of the fear of inconsistency, it is worth pointing out that a manipulated outcome would just be a fallback tiebreaker between top cycle alternatives—not the kind of thing likely to result in damaging corporate behavior. Of course, all of this should not be of much concern to those who favor some version of board primacy anyway, for this would allow the board to further solidify its own power. Thus, the potential for the manipulation of board member elections, like the possibility of inconsistent members over time, does not seem that worrisome.

Proponents of the argument from Arrow's theorem have not connected the long series of points between a board election cycle and a self-destructive firm. There are many aspects to the voting process itself that produce stability in individual elections and across time. Inconsistent board member elections, if and when they do occur, would not normally be expected to produce inconsistent firm decisions, much less ones that would translate into the "destruction" of the firm. In other words, one has to tell a fantastic story in order to move from a nascent intransitivity in a board election to a firm that makes self-destructive choices, a story so fantastic that it is completely implausible.

CONCLUSION

The argument from Arrow's theorem for the present state of the corporate franchise is flawed at many levels. Shareholders do not have homogeneous interest in profit maximization. Even if they did, it would not directly translate into the kind of agreement on candidates necessary to avoid intransitive results in corporate elections. Further, even if shareholder homogeneity did translate into the requisite agreement on candidates, restricting voting rights to shareholders involves sacrificing a fundamental condition of democracy in a situation where the likelihood and impact of intransitive results is already negligible. This argument for restricting corporate voting rights to shareholders, then, is far from compelling.
