Public Choice **97:** 645–662, 1998.

© 1998 *Kluwer Academic Publishers. Printed in the Netherlands.*

When is buying votes wrong?*

MICHAEL S. KOCHIN[1] & LEVIS A. KOCHIN[2]
[1]*Department of Political Science, University of Toronto, 100 St. George Street, Toronto, Ontario M5S 3G3, Canada;* [2]*Department of Economics, P.O. Box 353330, University of Washington, Seattle, Washington 98195, U.S.A.*

Accepted 15 August 1996

Abstract. In modern liberal democracies, offering individual voters in political elections money for their votes is wrong and illegal; offering groups of voters particular benefits in exchange for their votes is constitutionally protected. Voters do not sell their votes; instead, voters assign their votes to legislative representatives who sell or trade for them.

Examining the role of coalition costs in political and corporate elections, we argue that these rules protect voters from *themselves*, from being compelled to approve proposals that leave them individually worse off. Simultaneously, these rules allow voters to seek particular benefits through collective organization and legislative representation.

1. Some paradoxes of vote buying

The regulations governing vote buying in modern liberal democracies seem paradoxical. It is wrong and illegal to offer individual voters in political elections money for their votes. It is, however, perfectly acceptable (or at least, constitutionally protected) to promise identifiable groups of voters particular benefits in exchange for their votes. To quote Justice Brennan of the United States Supreme Court, in his 1982 majority opinion in *Brown* v. *Hartlage* (456 US 56):[1]

> We have never insisted that the franchise be exercised without taint of individual benefit; indeed, our tradition of political pluralism is partly predicated on the expectation that voters will pursue their individual good through the political process, and that the summation of these individual pursuits will further the collective welfare. So long as the hoped for benefit is to be achieved through the normal processes of government, and

* Research for this paper was partly supported by Michael's National Science Foundation Graduate Fellowship. An earlier version of this paper was presented to the Political Science Colloquium at the University of Washington on February 9, 1996, and we would like to thank Jeffrey Pontiff, Ed Rice and the other colloquium participants for their helpful comments. We also benefitted from the comments of Tyler Cowen and an anonymous referee.

> not through some private arrangement, it has always been, and remains, a reputable basis upon which to cast one's ballot.

To follow the terminology of Pamela Karlan (1994), the Constitution permits candidates to buy votes *wholesale*, from many voters with a single promise of political action, but not *retail*, from a single voter with a promise of a private side-payment.

Besides the wholesale-retail paradox, there is a second, closely related, paradox in the existing attitude toward vote buying. Candidates can offer even individual voters benefits in return for votes or support as long as these promises are conditional on the candidates' reelection. It is far more dubious and frequently illegal for the candidate to offer benefits even to large groups of voters whether or not the candidate is actually elected. Joan, a candidate, can offer a city job to Bill if Joan wins. She cannot promise to build a swimming pool for Bill's community in exchange for its votes whether or not she is victorious. Call this the "conditionality paradox".[2]

Furthermore, legislative representatives are allowed, and even encouraged, to trade their votes with the representatives of other voters in return for votes beneficial to their constituents. Votes are not for sale by *voters*: instead voters assign them to agents who sell them on their behalf. Call this the "principal-agent paradox" of vote buying.

Social scientists and legal scholars have offered arguments from egalitarian principles and arguments from economic efficiency against vote buying in political elections. None, we shall contend, succeed in dissolving these three apparent paradoxes.

Since modern democratic regimes prohibit the unconditional purchase of votes from individual voters in political elections,[3] we examine elections within corporations to find electoral regimes that permit vote buying. Voting is important whenever participants must engage in collective action despite divergent interests.[4]

In private corporations voting thus supplements other guardians of the shareholder interest, such as the fiduciary duty of management, against the expropriation of the shareholders' wealth. Looking at stock and bond voting enables us to determine whether prohibitions on vote buying increase or reduce voters' welfare, without having to define or discover the ends that citizens pursue through political participation. We can thus test propositions of political significance in "private" elections and in the construction of the bylaws or "constitutions" of private organizations.[5]

Private corporations can be viewed without enormous distortion as devices to maximize the value of the investors' claims on the corporation.[6] We therefore analyze corporate rules governing the purchase of the votes assigned to

a given class of securities by examining the instrumental value of these rules in maximizing the return to the security-holders.[7]

From an analysis of transactions costs, we derive the correct normative classification of vote buying proposals. Vote buying is problematic, we argue, only when the costs of making a proposal or of forming a coalition to block a proposal are high. When there is no cost to collective action, we shall show, allowing the sale of votes by individual voters is harmless or even beneficial to the electorate as a whole.

Let us state these conclusions as two formal propositions.

Proposition 1. If both a proposal can be made and a coalition to block a proposed vote trade can form without marginal cost, allowing the trade of votes can only improve the welfare of voters.

A variety of proofs of this proposition have been given in the public choice literature, though the implicit assumption that the costs of organizing a blocking coalition are insignificant has remained hidden.[8] To complete the contrast of our transaction-costs approach with that of previous writers, we supply our own proof of proposition 1 below.[9]

Proposition 2. If making proposals or organizing blocking coalitions is costly, voters may unanimously approve proposals that leave all of them worse off.

We will demonstrate proposition 2 with both abstract and real examples. We will then argue that both the wholesale-retail, conditionality, and principal-agent paradoxes reflect attempts by legislators and judges to prevent those who can make proposals cheaply from exploiting voters who cannot cheaply coalesce to block proposals.

We review the arguments against vote buying that have appeared in the public choice and law and economics literature in Section 2. In Section 3, we show how our transactions-costs solution to the paradoxes of vote buying emerges out of a consideration of vote buying in corporate elections. In Section 4, we explain the permissions that our seemingly paradoxical rules grant by considering abstract cases where the costs of coalition are low. We show that when voters can combine to block collectively undesirable proposals at low cost, rules that license vote buying allow outcomes that better express voters' divergent preferences. We conclude in Section 5 by expounding our resolutions of the three paradoxes of vote buying in their original political context.

2. A review of the literature

Two kinds of arguments against retail vote buying appear in the literature on political elections, arguments from *egalitarianism* and arguments from *efficiency*. The argument from egalitarianism starts with the observation that if votes are traded for money, some individuals must place a higher cash value on additional votes than these votes' original holders. Presumably, they value these votes more because they have more money than the original holders. The buying of votes is likely only if there is an existing inegalitarian distribution of wealth and an egalitarian distribution of votes. To preserve both distributions, democracies must prevent individual voters from trading their votes for personal wealth.[10] As James Tobin writes (1970: 269): "A vote market would concentrate political power in the rich, and especially in those who owe their wealth to government privilege".[11]

This argument from egalitarianism has merit, but it cannot explain the existing prohibition on retail vote buying from principals, but not from their (collective) representatives. Many groups might cast their vote for politicians who promised them higher transfer payments, even if they had to give up much of their influence over other questions of national policy. Non-group members, or their representatives, might gladly pay their share of these transfers in order to secure influence over issues of greater concern to them. For example, politicians promise higher Social Security and Medicare benefits when talking to the elderly, rather than discuss the merits and defects of foreign aid. Some political scientists have alleged that, as log-rolling, vote trading is prevalent in legislative assemblies.[12]

Such incidents of vote buying surely act to disturb the egalitarian allocation of votes, that is to say, of choice opportunities on every issue that is to be put to a vote. Tobin's argument would require a prohibition against all forms of vote buying, even when wholesale, unconditional, and through representatives. It cannot justify the current mixture of licenses and prohibitions.

The argument from egalitarianism seeks to protect the egalitarian distribution of votes from the inegalitarian distribution of wealth; the argument from externalities tries to do the opposite. According to Richard Epstein, vote buyers can use their newly acquired votes to impose costs on third parties by looting the public treasury or by raising taxes to confiscatory levels (1985: 987–988). Moreover, third parties can easily be forced to pay more than the vote buyers receive due to the costs of garnering the transfers and the disincentive effects of high taxation. To prevent such an imposition of external costs on uninvolved parties, it is better to damp down on vote buying as much as possible.

Yet as Epstein remarks, this argument from externalities does not accord with the evolved practice of modern democracies:

> Political candidates can run for public office by making general promises that are akin to the purchase of votes: there are the standard campaign promises of favorable treatment, be it domestic content legislation for automobile manufacturers and workers, subsidies for farmers, retraining grants for displaced workers, or increases in social security. I do not wish to condone any of these devices; indeed, I would support a workable system of constitutional restrictions on the power to dole out subsidies to interest groups. But that system is assuredly not in place today. A simple restriction on selling votes should not be disparaged even if it does not offer a complete answer to the problem of political abuse.

For Epstein the wholesale-retail paradox is not a paradox, but a signpost to a loophole, and the principal-agent paradox similarly.[13]

Epstein's argument assumes that voters can understand the economic logic behind the prohibition of buying votes retail, from themselves as principals rather than from their agents, because they and their representatives endorse prohibitions on it. Yet, according to Epstein, for some reason voters have not seen that it applies equally well to the purchase of votes wholesale or from the voters' representatives. The prohibitions on vote buying, with their paradoxes or loopholes, go back to the common law and the earliest elections. This mixture of prohibitions and licenses is a feature of the law of every American state. As Justice Brennan notes, it defines democratic pluralism. The persistence and success of these seemingly paradoxical regulations point to some logic of their own.[14]

3. Coalition costs and vote buying in corporate elections

As we have seen above, some of the greater minds of law and social science have commented on the ethical and legal prohibitions of vote buying in political elections. Yet they have not yet lighted upon the crucial but simple argument that dissolves the wholesale-retail and the principal-agent paradox of vote buying. Take first the principal-agent paradox of vote buying. Electorates are usually much larger than legislative bodies. In a large electorate each vote is worth little to the individual voter, because it has little chance of changing the outcome.[15] Coalitions become more expensive as the size in number of voters of the coalition required to block a proposal increases. If the percentage of the voters required to pass a proposal is fixed, as the electorate grows larger it becomes more costly to form a coalition to block a proposal, *even if that proposal is counter to the interest of the majority of the voters*. A single individual could thus use his or her personal resources to buy votes for a policy that would benefit that individual at everyone else's expense. Such

Table 1. Individual payoffs when coalition is prohibited

Individual choices of other voters	Take bribe	Refuse bribe
Voter's choice		
Take bribe	b -c	b
Refuse bribe	-c	0

a proposal could pass only if the majority, although harmed by the proposal, would find suffering the harm cheaper than organizing to prevent it.

Examples of this kind are not purely theoretical. In corporate elections, votes can and have been purchased to the detriment of the vote sellers themselves.

Consider an abstract example. Let b be the price offered for each vote, and let c be the cost of the proposal to the general voter, and assume that $b<c$. First assume that the vote buyer offers to pay each voter whether or not his or her proposal wins. Then by offering to buy votes the proposer compels each voter to play the game in Table 1. Whether or not any individual voter expects the proposal to pass, he or she, if prohibited from contacting other voters, will be better off taking the bribe and voting for the proposal.[16] All (or a majority) of the voters will reason similarly, and they will all take the bribe and vote to pass the proposal. Vote buying is bad in a large electorate not because the buyer can impose "external" costs on third parties, but because he or she can impose costs on the vote sellers themselves.

The most familiar kind of corporate election is the common stockholders' meeting. At the meeting stockholders elect corporate directors and vote on proposals that affect their interests. Fortunately for common stockholders, but unfortunately for students of electoral processes, a stockholder can, in general, legally effect the sale of his or her votes only by selling his or her stock (Easterbrook and Fischel, 1983: 400; André, 1990).

A variety of legal methods are available to bypass this restriction; one method explored in the empirical finance literature is the dual-class exchange offer (Ruback, 1988; Jarrell and Poulsen, 1988). In a dual-class exchange offer, management or a separate holding company asks stockholders to exchange their common stock for shares with limited voting rights but higher dividends.[17] Shareholders who refuse to exchange, generally inside shareholders and their allies, concentrate their voting power while diluting their equity holdings. If enough outside shareholders choose to exchange, outside shareholders effectively forfeit their prospective claim to premiums for full voting stock should the corporation ever be subject to takeover. The

expected value of these premiums is generally greater than the dividend bonus offered, so outside stockholders, on the average, lose from dual-class exchange offers.[18]

The *appraisal remedy* in corporate law and managers' *fiduciary duty*, however, restrict management in its use of dual class conversion offers or other legal methods of purchasing votes to exploit stockholders. Under the appraisal remedy shareholders who dissent from a corporate transaction can claim the value of their shares as before the transaction's completion (Fischel, 1983: 875–876). In the case of the restricted offer mentioned above, appraisal rights would require the purchaser to offer at least the market price as before the offer date to the minority shareholders.

Management's fiduciary duty provides a more complex protection for shareholders from exploitative vote buying attempts. The courts demand that management look out for the interests of the shareholders even at the expense of its own. Such duties prevent management from completely looting the corporation. By enforcing fiduciary duties, the courts aim to restrain management from legitimating their looting with purchased consents via dual class offers or other machinations.[19] Because fiduciary duty prevents some transfers from stockholders' wealth, it also increases social wealth by restricting expenditure on theft by would-be corporate thieves.[20]

While the pure purchase of naked votes of common stock is generally prohibited by statute in the United States, the purchase of votes or "consents" from holders of bonds is not so prohibited. Because managers owe a fiduciary duty to stockholders but not to bondholders, they are free to exploit bondholders for stockholders' gain.[21]

Bondholders' claims on the corporation are protected by law and by the bond covenants, that is, by the terms of their loan contract with the corporation. Such covenants frequently require a majority or super-majority vote of the bondholders before the corporation can undertake activities that imperil its ability to repay its bonds, such as mergers. The covenants and the law do not generally restrict management from purchasing the consent of the bondholders; that is to say, from offering bondholders cash for voting as management desires.[22]

Management can exploit their ability to act collectively at the corporation's expense, while bondholders have to pay the costs of organizing themselves to vote down management's bribes out of their own pocket. When bondholders do collude to reject a bad offer, management often responds by improving the terms of the offer so as make it beneficial to the bondholders (Kahan and Tuckman, 1993).

Bondholder consent solicitations, unlike dual class conversion stock offers, are associated with statistically significant abnormal *positive* gains to bond-

holders (Kahan and Tuckman, 1993), a result seemingly inconsistent with the claims of this paper. Generally, however, management solicits consents in order to deny bondholders *prospective* gains of which the bondholders themselves were unaware before the solicitation of consents was announced (Coffee and Klein, 1991). The solicitation of consents itself signals an improvement in the fortunes of the company. Thus even if the consent solicitation offer exploits bondholders, as long as the offer is not *too* exploitative, bondholders will experience a gain associated with the solicitation.

In corporate control cases, where the votes involved are those of voting stock, the costs of coalition play a crucial role. If coalition is free, equity holders can never be exploited by an offer to purchase their votes, because they can organize collectively to buy the votes themselves.

When coalition costs exist, however, management, whose existence reflects the sunk costs of organizing the company, has a substantial advantage over its dispersed stockholders. Any rival to management for control of the company has to come into being. A potential rival must first pay the costs of information to find out that the company is poorly run (from the point of view of the stockholders), and must discover some more profitable plan of business. A rival faces legal costs of organizing, and must pay to distribute information to shareholders, unlike management, who can use the corporate treasury to fund its proxy solicitations.

Because the management is already a force in being, it has power over the agenda for stockholder voters that outsiders and rivals find costly to match. Anyone except management who wishes to make a proposal must pay costs out-of-pocket that management itself pays out of the corporate treasury, that is to say, out of the stockholders' pockets.[23]

If the rival attempts to gain control of the company by purchasing stock, it may have to pay a premium for the stock once the public realizes that the control of the corporation is "in play." By paying the premium the rival helps to move the stock closer to the price it would attain if stockholders could make costless coalitions, but it also reduces the benefit to the rival of gaining control, and thus, *ex ante*, the expected returns of entering the contest. When both management and a rival for control already exist, competitive bidding between the two, whether for shares with votes or for naked votes, will pass more of the company's value to stockholders.[24]

If regulators and courts allow management to purchase votes more freely even when a rival is not present, they will make it easier for management to buy votes to legitimate exploiting the stockholders.[25] The transactions costs perspective thus supports prohibitions on the naked sale of votes.[26]

Table 2. Vote buying with coalition

Collective actions	Individual outcome
Take bribe	b -c
Refuse bribe and join coalition	-m

4. Vote buying with cheap coalitions

As our examination of corporate elections has made clear, a prohibition on the purchase of votes is desirable when the marginal cost of organizing a coalition to block proposals that exploit the voters is high.[27] When the marginal cost of organizing a coalition to block undesirable proposals is low, however, a prohibition on vote-buying is unnecessary and may even, we shall show, be harmful. In a small electorate or legislative body, allowing the purchase of votes cannot prove detrimental to voters. Since with fewer voters the cost of coalition is much lower, the voters can collude to refuse the bribe and vote down any proposal that is contrary to their individual interests. In Table 2, let b be the bribe and c be the cost to each of voter of the vote buyer's policy, and let m be the cost to each of joining in a majority coalition. Assume that the coalition forms instantaneously, so that no one can receive its benefits (the defeat of the proposal) without paying its costs. Then the matrix is reduced, because given the small number of players the choice becomes collective. If the cost of coalition is smaller than the total cost of the proposal, voters will coalesce to vote down a proposal that runs contrary to their individual interests.

Both the outcomes of Table 2 are negative; that is to say, the voters individually are worse off (by the lesser of -m and b -c) simply because the proposal is introduced. Presumably the voters have opted for a mechanism of collective choice because they expect that some proposals will be in the interest of majorities.

When coalition is cheap, vote-buying offers threaten little harm. In addition, some desirable proposals will pass only if the voters who favor them most pass along some of their gains to the other voters. If the cost of coalition to block bad proposals is not too high, vote trading allows voters to capture the gains from trade.[28] Consider the following arithmetically elegant example: Five neighbors live in a single row of houses on identical lots on a dead end street. Each house gets its water from a private pipe that connects to the main street (see Figure 1).

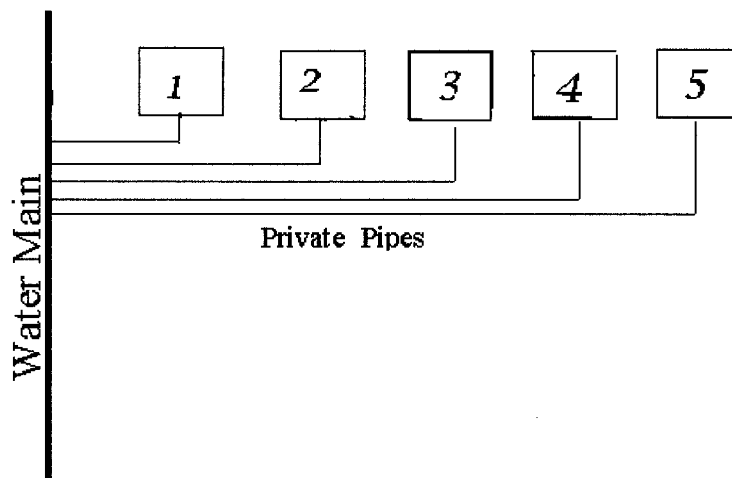

Figure 1. The water-pipe case

Table 3. The water-pipe case

House number	Distance from main	Expected future cost of private pipe
1	1	pc
2	2	4pc
3	3	9pc
4	4	16pc
5	5	25pc

These pipes occasionally break spontaneously. Each time a pipe breaks, it must be replaced for its entire length, and each pipe has a chance of breaking that is proportionate to its length. Let p be the probability that a pipe one unit long will break once, and let c be the cost of replacing a pipe one unit long. Then for each house, the present cost of retaining its private pipe is proportionate to the square of its distance from the main. Assume that the distance of the houses from the main is as in Table 3.

The city offers to replace the private pipes with a water-main running under the dead-end street as far as the last house, the cost of the replacement to be distributed evenly among the households. The city will only put in a main if the households will agree by simple majority vote.

If the cost of the new main exceeds 45pc, and the households are forbidden to make any side payments for a vote, then houses 1, 2 and 3 will vote to

kill the main. Yet if the main costs less than 55pc, it has less total cost than continuing with the private pipes. The proposal to build the main will pass only if houses 4 and 5 can trade some of their cost savings to another house in exchange for a "yes" vote on the main.[29]

Note that if the cost of the main is greater than 55pc, any proposal to build the main is more costly, from the point of view of each household, than some coalition that blocks building the main. Since the electorate has only five voters, there is only a small cost to form a coalition behind a new, superior proposal. We can conclude that, even if each household is free to sell its vote, no such inferior alternative will be approved. No proposal that is contrary to the interests of a majority of the voters could pass, because that majority could easily organize to block the proposal.

5. The paradoxes resolved

When the electorate is small, vote buying cannot lead to an outcome that leaves the majority worse off. Legislatures are smaller electorates that represent the preferences of larger electorates, so voters would want to empower their representatives to trade votes even while forbidding themselves from selling their votes directly. The principal-agent paradox of vote buying has thus been resolved.

We saw that in corporate elections the existence of a rival to management is sometimes sufficient for vote buying to be in the interest of the voters. Political elections usually have organized oppositions, which can outbid the incumbents' promises with promises of their own. In political elections these promises usually take the form of wholesale payment for votes, where each candidate bids with the other for the support of particular groups.

When wholesale vote buyers make promises to benefit an entire class of voters, they each offer to pay each member of the class no matter whether that voter actually voted for the proposal. The benefit (if any) to each voter does not come from a side payment contingent on his or her vote, but from the victory of the proposal.

Suppose that there are two candidates for office, Sarah and Thomas. Sarah offers a payment of s to each voter in some affected class, and Thomas offers t (Table 4). The candidate gains the support of an affected voter only if his or her proposal is most in the voter's interest. If candidates can only buy votes wholesale, the voter cannot be coerced by a bribe and the costs of coalition to vote for a candidate pledged to a policy that leaves him or her worse off than under the policies of the other candidates.

Though the wholesale-retail distinction has a certain transparency, it is not the most salient distinction within the norms regarding vote buying. More

Table 4. Individual payoffs under wholesale vote buying

Other's choice	Sarah	Thomas
Voter's choice		
Sarah	s	t
Thomas	s	t

Table 5. Individual payoffs when conditional opposes unconditional vote buying

Other's choice	Corwin	Ursula
Voter's choice		
Corwin	c	0
Ursula	c+u	u

fundamental is the distinction between conditional and unconditional offers to buy votes. The more familiar conditional offer, or promise, is an offer to buy the tendered vote only if enough votes are offered to make the candidate victorious. Wholesale offers like those of Sarah and Thomas are conditional offers. An unconditional offer promises payment for the vote whether or not the candidate or proposal proves victorious.

Suppose Corwin and Ursula are both running for office in an almost exclusively African-American district. Corwin is a well-known civil rights leader, and Ursula, the incumbent, is a Grand Witch of the ladies auxiliary of the Klu Klux Klan. Corwin promises his prospective African-American constituents that, conditional upon his election, he will work for them to secure liberty and economic opportunity. Corwin's promises, when delivered upon, are worth c to his voters. Ursula offers a cash payment worth u to each African-American voter for voting for her, whether she wins or not. Assume that there are many voters, so that each voter disregards the chance that his or her vote will prove decisive. Then each African-American voter faces the game in Table 5. Even if u is much less than c, each voter proves to be better off voting for Ursula. If all voters follow the logic of each voter, Ursula will be reelected.[30]

We see why unconditional promises, made to many, beat out collectively superior conditional proposals.[31] Yet even conditional promises made to a few, government contracts or special tax-benefits in exchange for votes or support, at least have the merit that they do not shake down support for a candidate from those whose overall interests, even when the bribe is counted, would be benefitted by the success of a different candidate.

Still, we must answer Epstein's argument from externalities. Vote trading with conditional promises does not permit proposals to be passed that harm their supporters. Any kind of vote-trading, however, still can permit proposals to be passed whose costs to the society as a whole outweigh their benefits to their supporters.[32]

Yet without vote trading it is unclear how more intense preferences among the voters can be effectively represented. Vote trading allows particular groups to weigh candidates and candidate proposals according to their promises of special benefit, and, in the case of incumbent legislators, according to their record of fulfilling their promises.[33] Not all of these promises will be inefficient to fulfill. Epstein and the "Virginia School" have suggested constitutional restraints on the fulfillment of promises to interest groups. Yet in a democracy, the majority's hostility to "special interests" puts a majoritarian, rather than constitutional, restraint on the extent of the inefficiency.

Through particular, conditional, promises the attention of each is drawn to the government of all.[34] Good government is a public good, a good that each obtains without regard for the effort he or she expends on political participation. Conditional promises make government policy impinge on the private interest of the promisees, and thus encourage the promisees to maintain the eternal vigilance that is the price of democratic liberty.

Our prohibition on vote buying has a logic of its own. It is not intended to preserve the egalitarian distribution of votes, nor to minimize the external effects of vote buying on third parties. Legislators trade votes to serve the interests of their constituents; they promise trades in seeking election and are held to these promises in seeking reelection. The actual prohibition against vote buying protects voters from *themselves*, from being compelled by the costs of organizing a blocking coalition to approve proposals that leave them individually worse off. The actual license allows voters to seek particular benefits at the expense of other voters through collective organization and legislative representation.

Notes

1. Carl Brown was running for County Commissioner for District B, Jefferson County, Kentucky, against the incumbent, Earl Hartlage (Aranson and Shepsle, 1983: 213). Hartlage had recently led the commissioners in voting themselves a substantial salary increase. Brown and his running mate promised during a press conference that, if elected, they would vote to reduce their salary by $3,000 each per year. Brown defeated Hartlage. Hartlage then sought to have Brown's election overturned on the grounds that Hartlage's promise to reduce his salary (and thereby reduce the County budget and thus the tax burden) constituted a bribe to the voters within the meaning of the Kentucky Corrupt Practices Act. The Kentucky Court of Appeals agreed with Hartlage and voided the election. Brown appealed, and the Supreme Court ruled in his favor.

2. Justice Brennan rightly stresses conditionality in his majority opinion in *Brown* v. *Hartlage*; he writes that Brown's commitment to reduce his salary "was to be honored, 'if elected'; it was conditioned not on any particular vote or votes, but entirely on the *majority's* vote" (456 U.S. 58).
3. We discuss Anderson and Tollison's treatment of political vote buying before the introduction of the secret ballot in n. 14 below.
4. Voting in corporations is unimportant if there is no possibility of management or anyone else diverting the resources of the corporation away from the shareholders in general into private benefits. Such private benefits include direct embezzlement, and employment of the corporation's market power so as to benefit a party other than the owners (see Hart, 1979; DeAngelo, 1981).
5. On voting within condominium associations, another private electoral context, see Barzel and Sass (1990), Sass (1992).
6. An entrepreneur setting up or reorganizing a corporation who does not intend to maintain control for the life of the corporation will have a strong incentive to set up the bylaws of the corporation so as to maximize the value of the claims the entrepreneur plans to sell. When the owners of a private corporation intend to continue to manage the corporation after public sale they sometimes limit the voting rights of public shareholders in order to retain a firmer hold on the perquisites of management at the sacrifice of transferable wealth. Moving from corporations to condominiums, note that builders of condominiums who do not intend to live in or manage the condominium after construction have an interest only in the profit they can get by selling apartments, so they will set the bylaws of the condominium so as to maximize the value of the apartments (Barzel and Sass, 1990).
7. That corporations ought only to maximize the wealth of their stockholders is not a settled maxim of corporate law anywhere, though economists and Law and Economics adherents assert that it ought to be (Easterbrook and Fischel, 1991: 35–39; cf. Von Thadden, 1991). It is, however, a settled maxim of Federal securities regulation in the United States (see O'Neil, 1989; André, 1990).
8. See Buchanan and Tullock, 1962; Hewitt, 1987; Weiss, 1988.
9. See Section 4 below.
10. The need to preserve different principles of just distribution in different spheres of human activity is the fundamental principle of Walzer (1983).
11. Presumably Tobin's rich "who owe their wealth to government privilege" value votes more than those whose wealth was privately gotten because what Caesar gives, Caesar may take.
12. For an empirical estimate see e.g. Gilligan and Matsusaka (1995). For a negative view of the importance of logrolling in actual legislatures see Krehbiel (1991).
13. In the pioneering work of the "public choice school" James Buchanan and Gordon Tullock present an argument against vote buying that is very similar to Epstein's, if less explicit. "With market-imperfections of a certain type," they write, "the individual may choose rationally to prohibit the open buying and selling of political votes" (Buchanan and Tullock, 1962: 272). Yet as examples of "market imperfections" Buchanan and Tullock describe only market power due to imperfect competition, and like Epstein they regard vote trading as perilous due to "external costs on other individuals" than the parties to the trade (280). They make no effort to explain the particular form these prohibitions take in political elections, and do not mention, much less solve, the paradoxes we have described.
14. The argument from externalities has, however, recently been applied to argue in favor of allowing pure purchases of votes in political elections. Gary Anderson and Robert Tollison (1990) argue that retail vote-buying, when the vote-buying agreement is enforced by the open ballot, decreases government transfers and the associated externalities. The poor sell their vote to the rich instead of voting for government redistribution. According to Anderson and Tollison, the adoption of the secret ballot increased the level of transfers because the secret ballot makes vote buying agreements harder to enforce. We argue, however, that vote-buying is not necessarily efficient when voters face substantial costs of

organization, as the poor do (cf. Anderson and Tollison, 1990: 294). From the viewpoint of the majority of the voters, then, the secret ballot, or other obstacles to retail vote buying, would seem desirable. Such obstacles help the majority to avoid being coerced into approving an inferior vote buying proposal by the costs of an alternative coalition.

15. Since Berle and Means (1932) this analysis has been a staple of the literature on corporate voting. In political elections this is, of course, the central principle of the logic of collective action as described by Olson (1965).
16. In the language of game theory, taking the bribe and voting for the proposal *strongly dominates* refusing the bribe and voting against the proposal.
17. Other methods for evading the prohibition on the purchase of naked votes include conversion arbitrage (Blair, Golbe and Gerard, 1989: 442) and the restricted offer (Fischel, 1983: 878; Grossman and Hart, 1988).
18. For a theoretical account, see Ruback (1988). Jarrell and Poulsen (1988) found that dual class stock conversions from 1984–1988 had statistically significant negative effects on the stock price of converting firms.
19. Note well that fiduciary duty, by preventing the most "efficient" form of theft, direct embezzlement from the corporate treasury, may sometimes decrease everyone's wealth. Managers are prevented by their fiduciary duty from taking money directly, but they can instead award themselves perks whose cost to the corporation exceeds their value to them.
20. In public-choice terms, one could say that fiduciary duty discourages rent-seeking expenditures by competing embezzlers.
21. See e.g. Floyd Norris, "Owens's Offer: Take it or Lose it," *New York Times* October 17, 1991, Late-Edition-Final, p. D12 col. 1.
22. On the law in regard to the buying of bondholders' votes see André (1990); *Kass* v. *Eastern Airlines*, No. 8700 (Del. Ch. Nov. 14, 1986) (WESTLAW 1986 WL 13008); *Katz* v. *Oak Indus., Inc*. 508 A.2d 873 (Del. Ch. 1986). In *Kass*, Chancellor Allen's reasoning in allowing the coercive purchase of bondholder consents implicitly followed that of Tobin. Chancellor Allen argued that since votes were proportional to security holdings, there was no ex-ante equality to be disturbed by the purchase of votes. Thus, explicitly denying the analogy from corporate to political elections, Chancellor Allen saw no reason not to allow purchase of naked votes. Note that Chancellor Allen completely neglected the distinction between conditional and unconditional purchase of votes, a distinction correctly made by Justice Brennan in *Brown* v. *Hartlage* (see note 1 above).
23. Kings George II and III had similar electoral power because only they could fund election campaigns out of general revenues. As Burke shows in the "Speech on Economical Reform," the King could also campaign for support within the House of Commons by providing members with high-paying, no-show jobs at the public expense.
24. Blair, Golbe, and Gerard (1989) have shown that if management and rival already exist, and if either party can only offer to purchase votes conditional on being tendered a controlling portion of them, it is irrelevant to the stockholders whether management and rival seek control through purchase of shares with the attached votes, or through purchase of votes alone. In the presence of capital gains taxation, they further argue, some social wealth increasing corporate takeovers will go through only if stockholders can tender their votes while retaining their shares (Blair, Golbe, and Gerard 1989: 432–440). From these results, Blair, Golbe, and Gerard go on to argue that regulatory bodies ought to allow holders of common stock to sell their votes without their shares (422). Their argument depends, however, on the existence of a rival. That is to say, their normative claim for the efficiency of vote trading assumes that marginal transaction costs are zero. Note also that Blair, Golbe and Gerard's claim that permitting the naked sale of votes can be wealth increasing in the presence of capital gains taxation depends on one party to the transaction, the government, having a claim to the profits and assets of the corporation but no say in its affairs. If the government is allowed to negotiate the tax bill, it will surely not seek to prevent any wealth-increasing transaction from taking place, since more wealth means more to tax.

Only if the government cannot exercise (or sell) a vote within the corporation to match its right to tax does Blair, Golbe, and Gerard's result go through.

25. Such exploitation is, in turn, limited by the costs of organizing a rival bid for control. Bondholders can generally organize more cheaply to block management proposals than can stockholders, since bond issues are smaller and are held in fewer hands. Also, proposals frequently require consents of supermajorities in each of several classes of bonds, so a sufficient minority share in a *single* affected issue can defeat the proposal. Since the cost of organizing to block exploitative proposals is lower for bondholders than for stockholders, bondholders have less reason to take ex ante steps to guard against possible exploitation through vote buying offers. This may explain why bondholders are permitted by their covenants to sell their consents, while stockholders are generally prohibited by law from selling their votes.
26. See Easterbrook and Fischel, 1983: 411; Grossman and Hart, 1988.
27. Political and corporate elections also differ in one crucial respect that is highly relevant to the cost of coalition. Political electorates are almost always geographically concentrated. This concentration drastically reduces the cost of coalition within them when compared to geographically dispersed corporate electorates.
28. For other formal demonstrations of the existence of gains from vote trading with a small electorate see Buchanan and Tullock (1962), Buchanan and Lee (1986), Hewitt (1987), Weiss (1988). None of these writers is aware that this result applies only in the absence of costs of coalition, as when the electorate is small.
29. The exact distribution of payments and transfers is formally indeterminate in this case, because any proposed allocation can be defeated by another under majority rule. We can predict, however, that the main will be built if and only if it is cheaper than the sum of the expected costs of the private pipes. To repeat in the language of game theory, the water pipe game with vote trading has no core. Nonetheless, in the absence of collectively irrational strategic bargaining, if building the public main is more efficient, it will be built.
30. Note that Table 4 is the same game, when payoffs are ordinally ranked, as Table 1. In the language of game theory, both are one-shot n-person prisoner's dilemmas. Note also that, under the secret ballot, the African American voters in our example would benefit the most by taking Ursula's bribe and voting for Corwin anyway. The secret ballot thus makes buying votes a riskier prospect for the would-be vote-buyer (Anderson and Tollison, 1990). Though this reasoning is formally sound, votes are bought and delivered even under the secret ballot.
31. Stranger proposals, where a candidate promises higher payments if he or she loses than if he or she wins, would have an even more pronounced effect (Grossman and Hart, 1988). Note that Blair, Golbe, and Gerard's claim (note 24 above) depends crucially on their restriction of takeover proposals to unconditional offers.
32. Here, perhaps, the wholesale-retail distinction gains more force, as what benefits many is more likely to benefit all. Externalities can outweigh benefits in the political process because voters are "rationally ignorant" of the overall effects of these proposals. Yet the larger the number of beneficiaries of any proposal, the easier it is for any one voter to learn the true merits and costs of the proposal and vote accordingly.
33. Both incumbents and challengers have to make promises, but only incumbents can be judged on their actual performance in office. Promises, even promises of special benefit, thus allow voters to compare challengers and incumbents. This argument is well laid out by Aranson and Shepsle (1983, 253–256). They do not recognize, however, the crucial motivating force of promises for private benefit.
34. The geographical concentration of voters also encourages their representatives to make particular promises.

References

Anderson, G.M. and Tollison, R.D. (1990). In M. Crain and R.D. Tollison (Eds.), *Predicting politics: Essays in empirical public choice*, 285–303. Ann Arbor: University of Michigan Press.

André, T.J., Jr. (1990). A preliminary inquiry into the utility of vote buying in the market for corporate control. *Southern California Law Review* 63: 533–636.

Aranson, P.H. and Shepsle, K.R. (1983). The compensation of public officials as a campaign issue: An economic analysis of *Brown* v. *Hartlage*. *Supreme Court Economic Review* 2: 213–276.

Barzel, Y. and Sass, T.R. (1990). The allocation of resources by voting. *Quarterly Journal of Economics* 105: 745–771.

Berle, A.A. and Means, G.C. (1932). *The modern corporation and private property*. New York: Macmillan.

Blair, D.H., Golbe, D. and Gerard, J. (1989). Unbundling the voting rights and profit claims of common shares. *Journal of Political Economy* 97: 420–443.

Buchanan, J.M. and Lee, D. (1986). Vote buying in a stylized setting. *Public Choice* 49: 3–15.

Buchanan, J. and Tullock, G. (1962). *The calculus of consent*. Ann Arbor: University of Michigan Press.

Coffee, J.C., Jr. and Klein, W.A. (1991). Bondholder coercion: The problem of constrained choice in debt tender offers and recapitalizations. *University of Chicago Law Review* 58: 1207–1273.

DeAngelo, H. (1981). Competition and unanimity. *American Economic Review* 71: 18–27.

Easterbrook, F. and Fischel, D.R. (1983). Voting in corporate law. *Journal of Law and Economics* 26: 395–427.

Easterbrook, F. and Fischel, D.R. (1991). *The economic structure of corporate law*. Cambridge: Harvard University Press.

Epstein, R.A. (1985). Why restrain alienation? *Columbia Law Review* 85: 970–990.

Fischel, D.R. (1983). The appraisal remedy in corporate law. *American Bar Foundation Research Journal* 4: 875–902.

Gilligan, T.W. and Matsusaka, J.G. (1995). Deviations from constituent interests: The role of legislative structure and political parties in the states. *Economic Inquiry* 33: 383–401.

Grossman, S.J. and Hart, O.D. (1988). One share/one vote and the market for corporate control. *Journal of Financial Economics* 20: 175–202.

Hart, O.D. (1979). On shareholder unanimity in large stock market economies. Econometrica 47: 1057–1083.

Hewitt, D.P. (1987). Market vote trading and efficient public choice. *Public Finance/Finances Publiques* 42: 85–104.

Jarrell, G.A. and Poulsen, A.B. (1988). Dual-class recapitalizations as antitakeover mechanisms: The recent evidence. *Journal of Financial Economics* 20: 129–152.

Kahan, M. and Tuckman, B. (1993). Do bondholders lose from junk bond covenant changes? *Journal of Business* 66: 499–516.

Karlan, P. (1994). Not by money but by virtue won? Vote trafficking and the voting rights system. *Virginia Law Review* 80: 1455–1475.

Krehbiel, K. (1991). *Information and legislative organization*. Ann Arbor: University of Michigan Press.

Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Cambridge: Harvard University Press.

O'Neil, T.K. (1989). Rule 19c-4: The SEC goes too far in adopting a one share, one vote rule. *Northwestern University Law Review* 83: 1057–1078.

Ruback, R.S. (1988). Coercive dual-class exchange offers. *Journal of Financial Economics* 20: 153–173.

Sass, T.R. (1992). Constitutional choice in representative democracies. *Public Choice* 74: 405–424.

Tobin, J. (1970). On limiting the domain of inequality. *Journal of Law and Economics* 13: 263–277.
Von Thadden, E.L. (1991). On the efficiency of the market for corporate control. *Kyklos* 43: 635–658.
Walzer, M. (1983). *Spheres of justice: A defence of pluralism and equality*. Oxford: Blackwell.
Weiss, J.H. (1988). Is vote-selling desirable? *Public Choice* 59: 177–194.