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The New Dividend Puzzle

WILLIAM W. BRATTON*

INTRODUCTION

The Jobs and Growth Tax Relief Reconciliation Act of 2003 (the “JGTRRA”)\(^1\) aligns tax rates on shareholder capital gains and dividend income at a maximum fifteen percent,\(^2\) departing from the classical rate preference for capital gains and ameliorating the tax system’s longstanding bias against dividends.\(^3\) According to the JGTRRA’s proponents, this adjustment will help jumpstart a staggering economy, jolt stock prices upward, and release a cascade of corporate cash into the pockets of upscale consumers.\(^4\) Several high profile dividend increases since the JGTRRA’s enactment\(^5\) and an increase in the overall amount paid out create an appearance of immediate success. Cooler heads point out that these

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\(^3\) For a review of the history, see Steven A. Bank, Is Double Taxation a Scapegoat for Declining Dividends? Evidence from History, 56 TAX L. REV. 463 (2003). Prior to the First World War, corporations paid out their profits as dividends and financed projects with capital from outside. This was partly due to the weakness of financial disclosure practice and partly due to illiquidity (trading markets were thin or nonexistent). Id. at 471–74. Under early federal income tax regimes, dividends were taxed at the corporate level only. Id. at 474–79. Payout practice changed with the advent of the thick equity market and the separation of ownership and control—retained earnings increased at the expense of dividend payments. Id. at 481–85. The regime of double tax emerged during the Depression with management’s support: the bias toward earnings retention suited management’s desire for a wide zone of discretion respecting finance and investment decisions. Id. at 516.


The largest recent increase is the massive special dividend declared by Microsoft Corp. on July 21, 2004. Microsoft had a cash pile of $60 billion and had come under criticism for failure to invest or pay out. Significantly, Microsoft is splitting the payout between a $32 billion dividend paid in December 2004 and a $30 billion, four-year open-market repurchase program. See Marcia Vickers, The Payout: Any Dividend from the Microsoft Dividend?, BUS. WK., Aug. 2, 2004, at 47; BILL'S BILLIONS, MICROSOFT'S DIVIDEND, ECONOMIST (U.S. ed.), July 24, 2004, at 14.
increases fail to impress when viewed in historical context. This Article joins the cooler heads to predict that no fundamental shift in payout practice should be expected in the wake of the JGTRRA. But it simultaneously enters a governance objection: Corporate boards should take the occasion of the JGTRRA to reconsider prevailing assumptions about payouts, in particular the relative advantages of dividends and stock repurchases.

During the two decades preceding the JGTRRA, corporate boards steadily moved away from the dividend—the traditional vehicle for distributing profits to shareholders—diverting about half of the cash they distribute to shareholders to open-market repurchases of their firms' own common stock ("OMRs"). The shift seemed desirable for four reasons. First, OMRs offered the lower capital gains rate to the selling shareholders, along with a tax deferral and the same lower rate for nonselling shareholders. Second, OMRs increased earnings per share by reducing the number of shares outstanding. Third, OMRs signaled good news and supported the firm's stock price in the market. Fourth, because OMRs suited management's preferences, they facilitated payout and reduced the risk of suboptimal earnings retention. Old-fashioned dividends, in contrast, carried a tax disadvantage for most shareholders, did nothing for earnings per share, did less than OMRs to support the stock price, and overly constrained cash flow management. Rate parity under the JGTRRA substantially removes the first of the four justifications, inviting reconsideration of the emphasis accorded the second, third, and fourth.

This Article moots the proposition that, given tax-rate parity under the JGTRRA, dividends could rise to relative superiority over repurchases for shareholders of many firms. Prior to rate parity, straightforward reasoning supported a preference for repurchases over dividends. Rate parity brings the

6. David Henry, Dividends Just Aren't Dazzling Enough, Bus. Wk., Sept. 15, 2003, at 48 (pointing out that the number of S&P 500 firms paying dividends in mid-2003, at 365, is still smaller than the 372 payers in 2000 and 438 payers in 1990, and that just 20% of the S&P firms have raised their dividends as much as 10% in 2003 even as earnings have increased 17%); see also Weber et al., supra note 5, at 96 (noting that the amount of dividends declared by S&P 500 firms increased 8.8% in 2003, and the number of S&P 500 firms declaring dividends increased by nineteen to 370, but primarily attributing the increase to the firms' earnings increase of 28%). The big winners in the recent bull market have been firms that pay no dividends at all. See Henry, supra, at 48 (pointing out that S&P nonpayers' stocks were up 44% in 2003, while payers' stocks were up 18%); Weber et al., supra, at 97 (noting that in 2003 the stock prices of dividend payers in the S&P 500 rose 23%, while those of nonpayers rose 54%).

7. This Article seconds the suggestion of Bank, supra note 3, at 516–32.

8. This was the twentieth century's second structural shift away from dividends. The first occurred prior to 1929. See Bank, supra note 3, at 481–85; see also Malcolm Baker & Jeffrey Wurgler, Appearing and Disappearing Dividends: The Link to Catering Dividends 12–16 (Nat'l Bureau Econ. Research, Working Paper No. 9995, 2003) (using data on market-to-book-value ratios to show a decrease in shareholder demand for dividends after 1978). In Baker and Wurgler's view, demand for dividend decreases as investor demand for growth stocks increases. Id.

9. See I.R.C. §§ 1(h)(1)(C), 1(h)(11), 55(b)(3)(C) (West 2004). It should be noted that tax parity, instituted by one Congress, cannot safely be assumed to be a permanent condition. Indeed, the JGTRRA's regime of 15% parity is not permanent. It carries a sunset date of January 1, 2009. Id.
relative advantages of dividends and OMRs into much closer balance, turning the choice into a puzzle. In addition to tax-rate parity, four factors favor dividends. First, dividends are transparent, but OMRs can fly under the radar of the disclosure system. Second, dividends treat all shareholders equally, but OMRs can divide shareholders into groups of winners and losers. Third, dividends discipline managers, but OMRs augment management discretion respecting the marginal dollar’s payout. Fourth, repurchases help managers line their own pockets by supporting the value of their stock options even as they obscure the options’ cost.

Corporate boards should confront the puzzle, reviewing payout policy de novo and actively monitoring it on an ongoing basis. Unfortunately, in the corporate governance system’s present posture, boards are unlikely to confront the puzzle, much less to attempt to solve it from the shareholder’s point of view. Managers retain a bias in favor of OMRs, stemming in part from their interest in their own stock option compensation and from their dislike of the disciplinary effect of dividends. Corporate and securities law inadvertently support this bias. This Article asserts that the corporate governance system should follow the JGTRRA in ameliorating the bias against dividends. To this end, it suggests that payout policy be added to the growing list of subjects remitted to independent director control.10

The Article has five parts. Part I describes payout practice in the era of shareholder capitalism, detailing the rise of repurchases from obscurity to dollar-for-dollar parity with dividends in the late 1990s.

Part II evaluates two leading explanations for the shift to repurchases: tax planning and signaling. Each of these explanations assumes benevolent managers who seek to maximize shareholder returns. But both explanations fail fully to explain real-world practice and therefore fall short as justifications. The first explanation, tax planning, should in theory determine the matter in a world of differential rates. Arguably, it should continue to do so, for repurchases still hold out a cognizable—albeit much reduced—tax benefit under the JGTRRA in the form of a deferral of taxation of gains for long-term, nonselling shareholders. But, in practice, tax considerations influence payouts only marginally. Managers making payout choices do not try to minimize shareholder income taxes. Shareholders neither demand payouts keyed to their tax profiles nor sort themselves into clearly delineated tax clienteles. Somewhat mysteriously, shareholders have always registered an unshakeable demand for dividends, despite the tax disadvantages. Part II continues by addressing the second explanation, that repurchases add value as an informational signal. This idea follows from a powerful body of financial theory, but it also fails as a primary explanation. Stock prices increase so modestly in the wake of announcements of dividend increases and OMR programs as to make it implausible that signaling by itself

10. For the stronger suggestion that repurchases should be prohibited, see Victor Brudney, A Note on “Going Private,” 61 Va. L. Rev. 1019, 1046–49 (1975).
motivates real-world managers. Both signals are so weak that neither supports further inferences about hidden positive information. Signaling value accordingly does not justify the shift to repurchases.

Part III considers an agency justification for the shift to repurchases, relaxing the assumption that managers are benevolent. Under this view, repurchases facilitate distribution of spare cash that otherwise might go to suboptimal projects. Dividends are sticky; once a level of dividend payout is set, shareholders expect it to be maintained and treat dividend cuts as a signal of poor performance. As a result, it is thought that firms with sporadic spare cash need the flexibility of the repurchase alternative, with repurchases emerging as superior to dividends as a matter of institutional practice in a world rife with agency costs. Three countervailing considerations, however, undermine this explanation. First, the shift to repurchases diminishes the disciplinary benefits of dividends, complicating any justification based on agency theory. Second, the shift to repurchases proceeded in tandem with the 1990s shift to stock option compensation. Firms repurchased their stock to offset the negative and dilutive effect of stock option exercises on their earnings per share. An OMR program’s value to long-term holders accordingly depends on the option plan’s success as incentive compensation. Third, sporadic free cash flows can be distributed as dividends without triggering unjustified market expectations. Dividends do not have to be sticky. Management need only draw on the practice of a half century ago and declare a “special,” as opposed to a “regular,” dividend when it has nonrecurring cash to distribute. The market will understand the distinction, and, in sharp contrast to present practice, the resulting payout pattern will be transparent.

Part IV takes up the claim that repurchases enhance the value of the firm because managers systematically beat the market by executing repurchases at bargain prices. Restating the claim in formal terms, an OMR program announcement gives the firm an option to buy undervalued stock, and the option has a value. The discussion highlights two shortcomings in the story. First, the bargain repurchase possibility depends on the framework of market regulation. Securities laws allow firms to time repurchases in secret, letting them take advantage of market volatility. In a regime of imposed transparency, any bargains for the most part would disappear. Second, management can be wrong in viewing its stock as undervalued. To the extent that an OMR program sweeps up overvalued stock, it benefits selling shareholders to the detriment of long-term holders, who suffer dilution. This possibility mattered little under the classical tax regime, because the tax benefit tended to make up for the dilution risk. With rate parity, adverse selection becomes a more active possibility respecting OMR programs. For a long-term holder, management’s information advantage imports no circumstantial guarantee against dilution due to overpriced repurchases.

Part V sorts out the pluses and minuses. It asserts that the shift to repurchases should not be read as a governance success story. Since repurchases offered tax
benefits to most shareholders prior to the JGTRRA, there was no reason for outside monitors to ask hard questions about flexibility and adverse selection or to inquire further about the motivational effects of stock option valuation and earnings management. With rate parity, the governance system needs to start the questioning process. The bargain repurchase possibility must be weighed against the adverse selection possibility, with the balance depending on the state of the market. Taxation remains a consideration: repurchases and capital gains still hold out deferral value for long-term, taxpaying shareholders. Finally, special dividends present advantages of transparency with the possible spillover of improved executive compensation policy. More generally, the JGTRRA poses a cost-benefit puzzle to be solved firm by firm, case by case. Unfortunately, the corporate governance system still rubber-stamps management payout decisions, and will probably fail to confront the questions. Governance reform is needed to assure that the payout decision is uncoupled from perverse incentives stemming from stock option compensation and reformulated in light of tax parity. It follows that payout should join management compensation in the emerging regime of governance by independent-director committee.

I. THE SHIFT TO REPURCHASES

An OMR program takes the firm into the market as a buyer of its own stock. The framework is flexible. Under the prevailing practice, the firm announces an intention to repurchase its shares in the market, usually (1) stating a time period over which it intends to act as a buyer, (2) stating an approximate number of shares that it expects to repurchase, and (3) qualifying the foregoing statements by stating that the number of shares actually repurchased will depend on market conditions. Time periods for OMR programs tend to be long, ranging from several months to several years. The average percentage of shares outstanding targeted for buy-back is 6.6%. With no commitment to buy, the actual number of shares repurchased can fall far short of the target figure. Estimated program completion rates range between 53% and 72% of announced levels. (The wide range of uncertainty reflects the fact that, prior to 2004, firms were not required to report separately the results of their OMR programs; statisticians trying to ascertain completion rates have to rely on inferences from the lines in financial statements impacted by repurchase activity.)

Alternatively, a firm desiring to buy back stock can make a repurchase tender offer (RTO). In this mode, the firm publicly offers to its shareholders to

13. See infra note 87.
14. Most RTOs are structured as "Dutch auctions." Under this procedure, the corporation, instead of announcing one price, announces a series of prices at which it is willing to repurchase shares.
repurchase a set number of shares at a premium over the market price. The shareholders decide whether or not to tender into the offer. The amount of shares repurchased in RTOs averages about 15% of the number outstanding. In practice, however, OMRs dominate RTOs by a wide margin: OMRs covered 92% of the stock specified by all announced repurchase programs between 1980 and 1999. Most of the RTOs were conducted during the restructuring era of the late 1980s. OMRs, with their lower transaction costs and reduced commitment, better serve the purpose of ongoing cash distribution and now dominate. This Article accordingly addresses OMRs.

Prior to the mid-1980s, corporations only sporadically exercised their right to repurchase their own shares. Payout practice has changed dramatically since then. Shareholders interested in selling then submit offers stating the number of shares they desire to sell at each of the stated prices. The corporation, having collected the offers, calculates the lowest single price that yields the number of shares it desires to repurchase and accepts at that price the offers made at that price and all lower prices. See Richard A. Brealey & Stewart C. Myers, Principles of Corporate Finance 417–18, 441 n.4 (6th ed. 2000). The Dutch auction mode has emerged as the dominant RTO practice because it tends to yield a lower overall purchase price. Jesse Fried, Insider Signaling and Insider Trading with Repurchase Tender Offers, 67 U. Chi. L. Rev. 421, 431–32 (2000), illustrates why:

ABC Corp. offers to repurchase 100 of its 200 shares for any price between $9 and $10. Fifty shares are tendered at $9, 50 shares are tendered at $9.50, and 50 shares are tendered at $10. ABC purchases 100 shares for $9.50. In a fixed price RTO at $10, ABC would attract 150 shares, and repurchase 100 for $10 each. Thus ABC Corp. would spend $50 (100 × $0.50) more repurchasing the shares through the fixed price RTO.

An additional variation should be mentioned: the transferable put-rights distribution. Under this arrangement, the firm distributes to the shareholders a right with a fixed term to sell shares back at a specified price. Shareholders who do not exercise the option can trade their rights on a secondary market. See Ronald C. Lease et al., Dividend Policy: Its Impact on Firm Value 159–60 (2000).

15. The time period is short; under the rules under section 13(e) of the Securities Exchange Act of 1934 (the 1934 Act), the offer must be held open for at least twenty business days. See 15 U.S.C. § 78m(e) (2000).


There is a third alternative. The corporation can negotiate in private to repurchase all or part of the shares held by one or more shareholders. As a practical matter, the selling shareholders will hold large blocks of stock, and the negotiated price will be at a premium over the market price. One subset of this type of repurchase is “greenmail,” where the seller accumulates the block in the open market and threatens a takeover; the issuer then repurchases the block at a premium in order to defuse the takeover threat. A tax penalty enacted in 1987 put an end to the practice. See I.R.C. § 5881 (2000).

17. Gustavo Grullon & David L. Ikenberry, What Do We Know About Stock Repurchases?, 13 J. Applied Corp. Fin. 31, 33–34 (2000); see also David L. Ikenberry & Theo Vermaelen, The Option to Repurchase Stock, 25 Fin. Mgmt. 9, 10 (1996). The percentage of repurchases completed through OMRs is smaller than the percentage of announced purchases cited here but is impossible to calculate exactly.

18. They tended to be highly leveraged and served a defensive function against takeovers. Jagannathan et al., supra note 12, at 362.

19. American corporate law has long permitted corporations to repurchase their own shares. Dewing, writing more than half a century ago, noted that legal capital rules permitted repurchases by firms not in distress, and he described open-market repurchase programs conducted by cash-rich firms taking advantage of low market prices during the Depression. See 1 Arthur Stone Dewing, The Financial Policy of Corporations 664–65 (5th ed. 1953).

Until recently, the United States was almost alone in the world in allowing repurchases. Id. at 665–66
then. OMR activity became a constant feature of the corporate landscape in the mid-1980s, taking a steadily growing share of dollars paid out. Today, OMRs and dividends emerge as coequal modes of payout. This Part recounts the shift in the payout pattern.

During the past three decades, the annual aggregate amount paid out to shareholders by listed companies has held steady at 26% to 28% of annual earnings. But the portion paid out through repurchases has grown steadily. In the period 1985 to 1996, the number of firms making OMR program announcements increased over 650% from 115 per year to 755. The announced value of the programs increased nearly 750% from $15.4 billion to $113 billion. During the same period, annual dividends increased by a factor of two, going from $67.6 billion to $141.7 billion. In 1972, repurchases amounted to 2.8% of annual earnings; by 2000, repurchases had increased to 12.4% of earnings. In contrast, annual dividends decreased from 21.4% of earnings in 1972 to 11.4% in 2000. In 1980, thirteen cents were paid out annually for repurchases for every dollar paid as dividend; by 2000, $1.13 went out for repurchases for every dollar of dividends. In sum, repurchases achieved equal status with dividends as a means of returning cash to equity investors; in hot stock markets, repurchases even surpassed dividends.

The dividend's relative decline occurred in tandem with a decline in the proportion of publicly traded firms making any payout at all, whether through dividends or repurchases. Consider these statistics: In 1978, 66.5% of nonfinancial, nonutility listed companies paid dividends; in 1999 only 20.8% of these firms paid dividends. The shift to repurchases did not cause the dividend decline, however. The decline instead stemmed from an absolute rise in the number of firms making no payout; by definition, these firms made no contribu-

n.d.d (noting that in Britain repurchases were deemed a constructive fraud against creditors, while in Canada repurchases were treated as illegal reductions of capital).

Repurchases by now are everyday events in Britain and Canada. David L. Ikenberry et al., Stock Repurchases in Canada: Performance and Strategic Trading, 55 J. Fin. 2373 (2000); P. Raghavendra Rau & Theo Vermaelen, Regulation, Taxes, and Share Repurchases in the United Kingdom, 75 J. Bus. 245 (2002). Elsewhere, in jurisdictions like Hong Kong, Japan, France, and Germany, legal barriers have fallen in recent years. Ikenberry et al., supra, at 2373–74; Rau & Vermaelen, supra, at 246.

22. Grullon & Michaely, supra note 20, at 1656. Compare the results reported in Eugene Fama & Kenneth R. French, Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?, 60 J. Fin. Econ. 3 (2001). In the period 1973–1977, aggregate repurchases were 3.37% of aggregate earnings. This figure increased to 5.12% from 1978 to 1982. During the period 1983–1998, repurchases constituted 31.42% of earnings. Id. at 35.
23. Grullon & Michaely, supra note 20, at 1649. From 1980 to 2000, amounts paid to repurchase stock grew at an annual rate of 26.1%; amounts paid as dividends grew at 6.8% during the period. Id.
tion to the rise in spending on repurchases. Restating this point, the growth in repurchase activity came for the most part from within the shrinking class of dividend-paying firms. From 1980 to 2000, 87.9% of total expenditures on repurchases came from firms that also paid dividends. Even as these firms maintained their overall payout rate at historic levels, they steadily adjusted the relative proportions of dividends and repurchases in the latter’s favor. This class of paying firms includes larger, more profitable firms that tend to have lower variability of return on assets. The nonpayers tend to be smaller, younger, and less profitable companies that invest more capital relative to the amount of earnings. These firms also have high ratios of market value to book value, along with higher earnings volatility.

A small residual class, making up 12.1% of repurchasing firms, repurchases without paying dividends. These firms tend to be larger and less volatile, like the larger class of firms that both pay dividends and repurchase. As today’s nonpaying firms mature, this class of repurchase-only, nonpaying firms could grow. A recent survey asked chief financial officers of nonpaying firms whether, should their firms cross the line and join the ranks of payers, they would make dividends, repurchases, or both. Two-thirds projected that they would opt to repurchase, 27% projected that they would pay dividends, and 7% projected that they would combine repurchases and dividends.

II. Benevolent Managers and Rational Shareholders: Taxation and Signaling

It is axiomatic financial economic theory that, in a frictionless world with investment policy held constant, payout policy has no consequences for shareholder wealth. Under this “irrelevance proposition,” shareholders are indifferent as between dividends and OMRs.

25. Grullon & Michaely, supra note 20, at 1659. Firms that repurchase and pay no dividends accounted for only 12.1% of repurchase activity during the period.

26. The rise in repurchases does not explain the fall-off in the overall proportion of dividend-paying firms. Fama & French, supra note 22, at 6.

27. Fama & French, supra note 22, at 19. Fama and French find that even though the profiles of dividend-paying firms and non-dividend-paying firms have remained constant across the period 1978–1999, there is now a lower propensity to pay dividends regardless of firm characteristics. Controlling for characteristics, firms that had never paid dividends initiated dividends at lower rates after 1978, and former dividend payers have been less likely to resume. Id. at 8; see also Xiang Cai, Stock Repurchase and Cash Acquisition—A Payout Policy Perspective (Jan. 27, 2005) (unpublished working paper draft), at http://ssrn.com/abstract=448000 (comparing the characteristics of repurchasing firms with those of firms making acquisitions and finding that firms that repurchase and do not acquire have a lower market-to-book-value ratio, a lower debt burden, higher return on assets, and higher cash flow).


To see how theoretical irrelevance works, hypothesize a Firm X with N shares outstanding. X spends Y dollars to repurchase its own shares at the market price P, dollars that X otherwise would have devoted to a dividend payment. The dividend is not cut completely; it is merely smaller than it otherwise would have been. X’s repurchases reduce its shares outstanding by a percentage \( p = \frac{Y}{(N \times P)} \). Since X would have paid out Y in its dividend but for the repurchase, the repurchase implies a \( p \) percent cut in X’s current dividend yield, which falls on a percentage basis from \( d + P \) to merely \( d \). The shareholders make this back because the shift of payout \( p \) from dividend to repurchase causes X’s stock price to rise \( p \) percent.\(^{31}\) The stock price goes up because the number of shares outstanding declines, offsetting the effect of the dividend cut and leaving the total value accruing to X’s continuing shareholders unaffected.\(^{32}\) Thus the choice between dividend and repurchase is irrelevant in theory.

Filling in some numbers, assume that at the starting point, X is worth $1 million and has $20,000 in cash to distribute above that $1 million. X has 10,000 shares outstanding, which are trading for $100. If the $20,000 is paid as a dividend, the shareholders receive $2 per share. If X repurchases 100 shares for $100 each with $10,000 and pays the remaining $10,000 out as a dividend, \( p = \frac{10,000}{(10,000 \times 100)} = 1\% \). The stock price will rise 1\% after the repurchase: $1,000,000/9900 shares outstanding = $101. The shareholders are in the same position, holding a total of $102, whether the $20,000 is paid out by dividend or repurchase.

The irrelevance proposition holds only in theory and does not describe real-world practice. Nonetheless, it strongly influences explanations and justifications of observed financial techniques and institutions.\(^ {33}\) Such explanations use the irrelevance proposition as a starting point, then identify a real-world friction and show how the friction causes a financial practice that is irrelevant in theory to enhance value to the benefit of real-world actors. This Part inspects two explanations of repurchases: tax planning and signaling. To the extent that either explanation persuasively shows that repurchases place value on the table, the shift to repurchases is not only explained, but justified. We will see that neither explanation, however, proves adequate; both fail to justify the full extent of the payout shift.

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32. Id.

Return to Firm X and assume, for simplicity, that the tax system treats dividends as ordinary income at a 50% marginal rate and taxes long-term capital gains at a 25% rate. Further assume that all of X’s shareholders pay income taxes and hold for more than a year before selling their shares. X’s decision to pay out $10,000 by repurchase results in a net tax savings to its shareholders.\(^\text{34}\) A $20,000 dividend implies $10,000 of income tax to the shareholders in the year of payout. The shift to $10,000 of dividend and $10,000 for repurchase triggers less than $7500 of taxes in the year of payout: $5000 with respect to the dividend, along with capital gains tax with respect to the selling shareholders in amounts determined by their bases and not exceeding $2500 (the aggregate tax payable in the unlikely event that all the selling shareholders have bases of zero). The continuing shareholders, meanwhile, see the stock rise $1 per share without a current taxable event; they benefit from a deferral of tax on the gain until they sell X stock and from any later capital-gains-rate shift respecting the sales. Assume the discount rate is 10%, and all continuing shareholders hold for five years. The $9900 of present gain in X’s market capitalization triggers $2475 of capital gains tax in five years. The negative present value of that tax is $1534.50; accordingly, the present value of the deferral is $940.50.

The JGTRRA changes the tax ramifications of X’s choice between dividends and repurchases without completely denuding repurchases of their tax benefit. With a $20,000 dividend, the shareholders pay $3000 in tax. A fifty-fifty split between dividend and repurchase means $1500 in present income tax and a maximum of $1500 in capital gains tax. Rate parity does not imply equal tax payments for all: To the extent the shareholders selling into the repurchase have bases higher than zero, they pay less than $1500 in capital gains tax with respect to their sales.\(^\text{35}\) In addition, the nonselling shareholders still benefit from a deferral on the $1-per-share rise in the value of the stock. Once again assuming a 10% discount rate and a five-year holding period, the $9900 present gain triggers $1485 in future tax. The negative present value of that outflow is $920.70 and the value of the deferral is $564.30. The value of the deferral

\(^{34}\) This treatment results when the corporation uses OMRs. The distribution is treated as a sale or exchange only if the reduction in the selling shareholder’s ownership in the firm is significant. Under a safe harbor, dividend treatment is avoided if the shareholder completely terminates participation or if the repurchase is substantially disproportionate among the shareholders. See I.R.C. § 302(b) (2000); Treas. Reg. § 1.302-2(b) (as amended in 1997). An OMR is disproportionate because only random selling shareholders take the payout; a pro-rata redemption of a percentage of an issue of common stock would be treated as a dividend.

\(^{35}\) In addition, to the extent the selling shareholders can balance capital gains on X stock with other capital losses during the same period, the repurchase benefits them by offering a source of gains for matching purposes. Of course, these shareholders can sell X so as to generate gains for matching purposes whether or not X repurchases—they may avoid paying taxes on the dividend at ordinary income rates by selling before the ex-dividend date and thereby picking up a part of the value of the dividend in capital gains form.
declines with the tax rate ($940.50 at 25% versus $564.30 at 15%), but remains
cognizable regardless.

These profiles suggest unchanging tax advice respecting payout practice,
whether as of 1960, 1980, 1990, or 2005: Rational managers and shareholders
should agree to channel payouts to repurchases, avoiding dividends to the
maximum amount tolerated by the tax system. Cognizable, albeit much re-
duced, tax benefits continue to follow from repurchase under the JGTRRA.

This dollars-and-cents tax advice falls short as an historical explanation for
the shift to repurchases, however. The discussion that follows shows that, in
practice, shareholder tax effects do not loom large as subjective motivations in
corporate boardrooms. Nor, viewed objectively, does the overall payout pattern
appear to be tax-driven. If tax concerns did not drive payout practice prior to the
JGTRRA, they are unlikely to motivate firms and shareholders under rate parity.

1. Substitution Theory

The 1990s shift to repurchases moved the tax profile of corporate payouts in
the correct, lower-tax direction. One school of thought, called “substitution
theory,” uses this point to explain the repurchase boom as a rational response to
the tax system:36 because, under the irrelevance hypothesis, dividends and
repurchases are perfect substitutes for one another, a real-world decision to
repurchase implies a benevolent manager seeking to maximize the shareholders’
after-tax returns. To review the last three decades of payout policy, then, is to
see managers riding up a learning curve, shaking off irrational traditions to
“substitute” repurchases for dividends and move the practice in an optimal
direction.

Taxes unquestionably impact payout policy at some level.37 Many empirical
studies show evidence of this sensitivity.38 Moreover, firms have “substituted”

36. See, e.g., Laurie S. Bagwell & John B. Shoven, Cash Distributions to Shareholders, 3 J. Econ.
PERSP. 129, 130, 137 (1989); Grullon & Michaely, supra note 20.
37. A very clear case occurred in the United Kingdom in 1997. From 1973 to 1997, the UK tax
system required issuers to pay tax in advance on dividends and issued a tax credit to shareholders with
respect to dividends. In the case of tax-exempt investors, the useless tax credit could be exchanged for a
full cash refund. As a result, tax-exempt institutions and funds had a strong preference for dividends
over earnings retention. The refund was withdrawn in 1997. This had the effect of reducing the value of
dividends to tax-exempt shareholders by 20%. Price studies show a consequent reduction in the market
value of dividend income (based on the stock price’s downward movement on the ex-dividend date),
especially for high yield companies. See Leonie Bell & Tim Jenkinson, New Evidence of the Impact of
38. The principal literature looks to stock price movement on the ex-dividend date. In theory, the
stock will drop on the record date for a declared dividend in an amount equal to the dividend, because
purchasers after the date will not receive the payment. In practice, the stock drops in an amount less
than the dividend. The empirical tests seek to show that the price decline is net of the dividend’s tax
cost. Unfortunately for substitution theory, the results are inconclusive. See H. Kent Baker et al.,
Revisiting the Dividend Puzzle: Do All of the Pieces Now Fit?, 11 REV. FIN. ECON. 241, 243–44, 255
(2002).

Grullon and Michaely, supra note 20, produce three sets of statistical results that show the influence
of tax and substitution: (1) They compare sets of firms making OMR announcements before and after
repurchases for dividends in a practical sense. Dividend payers and repurchasers are the same firms for the most part, and these firms’ aggregate payout rates have remained constant for three decades even as repurchases have made up a steadily increasing percentage.\textsuperscript{39}

The question, however, is whether substitution theory provides a complete or even a primary explanation for the observed payout pattern. A number of factors limit its explanatory reach. First, if the market capitalizes the value of investments net of the tax consequences of payouts (and a cognizable body of opinion in financial economics asserts that it does), it follows that managers need not worry much about shareholder tax consequences when making payout decisions.\textsuperscript{40} Second, the timing is off. Why did tax considerations not motivate management differently decades ago?\textsuperscript{41} And why did the move to repurchase start to pick up steam in the mid-1980s, just when Congress enacted the Tax Reform Act of 1986?\textsuperscript{42} The 1986 Act eliminated the capital gains rate preference for a brief period, lessening the shareholder tax preference for repurchases over dividends.\textsuperscript{43} From a tax point of view, this was an odd time for management to take the first steps toward repurchase. Substitution works well only in ahistorical models. In the real world, it seems improbable that it would take management twenty-five years to figure out how to take advantage of the rate

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39. See supra text accompanying note 21.
40. See Rafael La Porta et al., Agency Problems and Dividend Policies Around the World, 50 J. Fin. 1, 19 (2000). It is noted that this view still holds out the possibility that management could enhance the rate of return on its equity by taking advantage of a tax benefit. Meenakshi Sinha et al., Payout Policy and the Cost of Capital 2, 4–6 (Oct. 2004) (unpublished first draft), at http://ssrn.com/abstract=620382, reports that dividend-paying firms have a lower cost of equity capital, falsifying a long-mooted view that such firms’ cost of equity capital would rise to make up for the payout.
41. Grullon & Michaely, supra note 20, at 1652.
42. Jagannathan et al., supra note 12, at 367. Erik Lie & Heidi J. Lie, The Role of Personal Taxes in Corporate Decisions: An Empirical Analysis of Share Repurchases and Dividends, 34 J. Fin. & Quantitative Analysis 533, 539 (1999), show a residual element of tax sensitivity. It seems that after 1986, within the group of companies that restructured by making large cash payments to their shareholders, there was a shift away from RTOs, which held out capital gains treatment, to large special dividends, resulting in ordinary income treatment.
shift and deferral held out by the tax system. Third, the payout record since 1990 does not indicate that managers substitute, in the direct sense of transforming a dollar of dividends into a dollar for repurchase, for the purpose of delivering a tax advantage to shareholders. If that were the case, managers would freeze, reduce, or eliminate their firms' dividends so as to enhance the tax advantage even more. Instead, they let their dividends rise, protecting an antecedent level of payment and using repurchases to pay out increments of cash above the set level. 44

Shareholder tax returns do not loom large as subjective motivators when corporate actors make payout decisions. Although surveys show that managers are well aware of the tax implications of payouts and recognize tax advantage as a factor in favor of repurchases, in a 2002 survey, only 21.4% of CFOs of dividend-paying firms cited tax as an important factor, along with only 28.6% of the CFOs of repurchasing firms. A majority of the same group represented that tax does not influence decisions regarding levels of dividends or the choice between dividends and repurchases. When the CFOs of dividend-paying firms were asked where the money would go if the firm cut its dividend, the most popular answer was debt repayment. Share repurchase came in second. 45

The same survey asked a group of CFOs of dividend-paying firms whether the JGTRRA would cause a shift in their policies. Two-thirds said elimination of the tax burden on dividends would definitely or probably not affect their decisions; one-quarter said it might lead to a dividend increase; only 6% said it definitely would lead to an increase. Among a group of CFOs of firms that use neither dividends nor repurchases, only 1% said their firm would definitely start paying dividends in response to the JGTRRA; 16% said their firm probably would start paying dividends in response, while 82% said they either definitely or probably would not. 46

It remains to be seen whether these representations prove predictive of post-JGTRRA payout practice. 47 Substitution theory, while not a primary explanation of past practice, still could come into play. 48 But, given the reduction in

44. Ikenberry & Vermaelen, supra note 17, at 10.

Survey evidence carries more weight with respect to payout policy than it does elsewhere in financial economics. For example, the touchstone paper in the entire literature, John Lintner, Distributions of Incomes of Corporations Among Dividends, Retained Earnings and Taxes, AM. ECON. REV., May 1956, at 97, presents the results of a survey. The Lintner picture remains generally accepted.
46. Brav et al., supra note 29, at 9.
47. Early returns show an increase in the number of firms raising or initiating a dividend in 2003. See Ken Brown, As Taxes Fall, Dividends Rise—And Executives Reap Big Gains, WALL ST. J., Aug. 11, 2003, at A1; sources cited supra note 5.
48. James Poterba, Taxation and Corporate Payout Policy, 94 AM. ECON. REV. 171 (2004), presents a time-series model that relates a measure of average investor tax preferences to the rate of dividend
the tax penalty on dividends, the substitution could very well work the other way.

2. Clientele Theory

Substitution theory posits that management caters to shareholder tax preferences—unconvincingly. A competing “clientele theory” posits that shareholders do not wait around for dispensations of corporate grace and instead take care of their own problems. Under this view, shareholders sort themselves among different firms in accordance with their different tax postures and the firms’ policies. Firms in turn will attract different groups of shareholders depending on their payout practices. Tax-exempt holders will gravitate to high dividend firms, while taxpaying holders will gravitate to firms that make no payouts or favor repurchases. A negative implication for substitution theory follows: To the extent shareholders sort themselves into clienteles, managers should not try to do them a tax favor by adjusting payout policy. Any sudden shifts in the pattern could disturb existing shareholders’ expectations, adversely affecting the stock price. And it appears that managers do worry about consistent payout patterns and shareholder expectations.\(^49\)

The clientele description makes sense but direct empirical confirmation stops there. We emerge with tax clienteles that amount to less of a defining geography of shareholding than a vague behavioral tendency.\(^50\) The best evidence of the tendency comes from studies that focus on retail shareholder portfolios and trading records.\(^51\) It appears that older and poorer retail investors tend toward high dividend yield stocks; as income tax liability is marginally less important to holders with these profiles, the finding confirms a clientele effect.\(^52\) Most clientele studies are indirect, however. They test the proposition that, given clienteles, a dividend increase will be greeted more positively at a firm with a low-tax clientele than it will at firm with a high-tax clientele. The studies confirm the prediction, but only inferentially. Firms do not possess shareholder lists breaking out tax profiles. The tester accordingly assumes that a dividend increase will be more favorably received at a firm with a track record for high dividend payouts, on the assumption that the shareholders already will have


52. \textit{Id.} at 5–18.
sorted themselves into a clientele, which is of course the point to be proved.\textsuperscript{53} Contrasting stock price studies find that changes in dividend payout rates do not cause changes in clienteles.\textsuperscript{54}

Clientele theorists also focus on the presence of institutional investors.\textsuperscript{55} These theorists can detect institutions among a firm’s stockholders, and institutions have common characteristics admitting of a clientele characterization. The problem is that there is no agreement on the critical question whether institutions prefer dividends to repurchases or vice versa. DeAngelo, DeAngelo, and Skinner, in a leading paper, cite rising institutional ownership as the primary cause for the decades-long shift from dividends to repurchases. Repurchases, they assert, came along just as institutional owners gained majority status among shareholders; since institutional holders are smarter than retail holders, their presence encouraged a shift to payout policy that favors better informed investors.\textsuperscript{56} Other studies show a statistical correlation between institutional holders and repurchasing firms and suggest that institutions prefer firms that repurchase.\textsuperscript{57} But there is noise on this clientele screen. Still other studies show that firms that increase payouts, whether by dividend or repurchase, have higher institutional ownership than firms that do not pay out, and that within the group of payout-increasing firms, firms that pay no dividends and only make repurchases have the lowest level of institutional ownership, while dividend-increasing firms have the highest level of institutional ownership.\textsuperscript{58} It also

\textsuperscript{53} Lie & Lie, \textit{supra} note 42, at 535, 543. That is, the tests assume that the differing tax rates of the different clienteles are reflected in the stock price on the date of the dividend event. For a study in this mode, see Mukesh Bajaj & Anand M. Vihj, \textit{Dividend Clienteles and the Information Content of Dividend Changes}, 26 J. Fin. Econ. 193 (1990) (finding that high-yield stocks have stronger price reactions to dividend changes); see also Harry DeAngelo et al., \textit{Special Dividends and the Evolution of Dividend Signaling}, 57 J. Fin. Econ. 309 (2000) (supporting the finding of a positive relationship).


\textsuperscript{55} Poterba, \textit{supra} note 48, at 171, reports that taxable household ownership accounted for 80% of outstanding stock in the late 1960s, declined to 60% by the late 1980s, and to 57% by 2003.

\textsuperscript{56} Harry DeAngelo et al., \textit{supra} note 53, at 352–53.

\textsuperscript{57} Eli Bartov et al., \textit{Evidence on How Companies Choose Between Dividends and Open-Market Stock Repurchases}, 11 J. Applied Corp. Fin. 89 (1998) (studying 280 firms, half paying dividends and half doing OMRs); see also Franklin Allen et al., \textit{A Theory of Dividends Based on Tax Clienteles}, 60 J. Fin. 2499 (2000) (presenting a theoretical model tying an institutional-repurchase clientele to governance discipline).

\textsuperscript{58} Jagannathan et al., \textit{supra} note 12, at 375, 377.
seems that institutions prefer dividend-payers to non-dividend-payers and that institutional ownership significantly increases when firms initiate dividends. Management survey data tracks these confusing results. CFOs tend to assume that dividend payout rates matter for both retail stock and institutional stock selections, but that repurchase activity matters only for institutions.

The conflicting signals respecting institutions may stem from the institutions’ differing tax postures. Pension funds are tax-exempt. Dividends paid to mutual funds flow through to their holders’ tax returns; according to some observers, the funds are insensitive to the shareholder tax effects of their portfolio management decisions. Different institutions, moreover, will have different investment objectives. A growth fund will be less attracted to dividends than a value fund. Finally, some institutions are subject to regulatory constraints that steer them to dividend-paying stocks.

3. Summary: The Dividend Puzzle

Taxation is the logical place to start the search for explanations and justifications for corporate payout policy, for, as we have seen, it bears significantly on financial yields to shareholders. The results of empirical studies support its relevance, but they do not sustain a place for taxation as a primary explanation. This stands to reason. If tax were the driving factor here, taxpaying shareholders would have clamored for substitution of dividends by repurchases decades ago. Alternatively, shareholder sorting among firms in accordance with their tax postures would have produced clear-cut clienteles.

The fact that neither tax-driven result has been demonstrated, even as shareholders have paid incremental taxes on dividends with apparent equanimity, creates a puzzle much discussed in financial economics: the original dividend puzzle. It seems that some shareholders are so attached to their dividends that...
they forego tax advantages. It also seems that they prefer managers to maintain present levels of dividends even if so doing causes the firm to pass up promising opportunities, defined as investments holding out a rate of return $r$ greater than the firm’s percentage cost of equity capital $k$. This shareholder preference for dividends appears irrational. There results a daunting explanatory task for economists, dedicated as they are to rational expectations explanations of financial phenomena.

Meanwhile, two propositions emerge. First, something other than shareholder taxation shapes the management preferences that determine payouts. Second, although tax-driven shareholder sorting does occur, significant numbers of shareholders like their dividends despite the tax penalty. Under the new regime of rate parity, these shareholders could prefer a shift back to dividends and away from repurchases.

B. SIGNALING

Recall that, under the irrelevance hypothesis, it makes no difference to shareholders whether a firm makes a payout by dividend or repurchase, at least in a frictionless world in which managers only invest in projects holding out a rate of return $r$ higher than the firm’s cost of capital $k$. Now hypothesize a firm seeking to fund such an $r > k$ investment. The firm has a choice: It can either cut the dividend to release the necessary cash or raise the cash from outside sources. Under the irrelevance hypothesis, the choice makes no difference and the shareholders are indifferent. If management cuts the dividend, a shareholder desiring current income can make her own dividend, selling a portion of her stockholding, which will have risen in price to reflect the value added by the new investment. If management does not cut the dividend, the firm still can:

66. For further explanation of these behavior patterns, see infra text accompanying notes 100–03, 107–10.


68. A simple tax analysis predicts that shares paying high dividends should pay a premium, since the returns that matter are after tax. The empirical studies do not bear out the prediction, showing no distinction between high- and low-dividend shares. See Lease et al., supra note 14, at 66, 69.

69. See Miller & Modigliani, supra note 30. The relaxation of the assumption of a taxless world causes the prediction to change, however. As we have seen, the Internal Revenue Code, prior to the JGTRRA, included a bias against dividends, taxing them at ordinary income rates in a regime under which retained earnings effectively resulted in tax deferral and a downward shift to capital gains rates. Assuming $r > k$ investments (that is, investments with a rate of return greater than the cost of equity capital), a dividend injures a taxpaying shareholder. The prescription changes slightly for firms with free cash flow—that is, internally generated cash in excess of the set of $r > k$ investments. These monies should be paid out of the firm, but the taxpaying shareholder with a long-term holding perspective will prefer an OMR program. Add all of this up, and there emerges a rule of thumb respecting sources of capital for new $r > k$ investments. The first choice is retained earnings, since they carry the lowest transaction costs, and retention avoids the taxable event of a dividend payment. The second choice is debt, since interest payments can be deducted as a business expense. New equity
finance the investment by selling more stock.\textsuperscript{70} The dilution effect of the new equity financing will be offset by the increase in value stemming from the new investment, leaving the shareholders in the same place the dividend cut left them. Given this theoretical irrelevance, both the dividend itself and the fact that real-world managers never cut dividends in order to fund good investments need explaining.\textsuperscript{71}

Economists look to real-world frictions to explain the shareholders’ attachment to sustained dividends. One prominent school of thought looks to the information asymmetry between managers and outside shareholders and posits that payout decisions signal hidden information about the firm’s prospects, information that could not credibly be communicated by any other means.\textsuperscript{72}

Dividend cuts can signal either good or bad news: either earnings will be declining in the future and the firm is husbanding cash, or the firm has excellent new investments and needs cash to fund them.\textsuperscript{73} Shareholders assume the worst; managers therefore avoid dividend cuts.\textsuperscript{74} In contrast, payout increases can signal hidden favorable information about the firm’s prospects. Whether the payout is by dividend or repurchase, the underlying good news could be any of the following: (1) earnings will improve in the future, (2) the stock is undervalued on the market, (3) management will reduce agency costs, or (4) the payout will increase the firm’s ratio of debt to equity so as to reduce the amount paid...
out in corporate income taxes.\textsuperscript{75} A payout by repurchase creates two additional informational possibilities, either that (1) management wants the shareholders to benefit from a decrease in dividend taxation, or (2) management’s presence as a buyer in the market will enhance the liquidity of the stock.

Whatever the more particular informational content, if payout increases convey positive signals not otherwise communicable, they enhance shareholder value. The stock price moves in the correct direction more quickly than would have been the case without the signal. The reduction in the cost of information reduces the firm’s cost of equity capital, also causing the stock price to rise, all other things being equal.\textsuperscript{76} The signaling hypothesis accordingly supplies both an explanation and a justification for payout policy.

Stock price studies show that the market does indeed perceive informational content in payout announcements. The testers look for extraordinary returns in the days surrounding announcements. Their findings reveal a content hierarchy. RTOs take the top spot, triggering abnormal gains ranging from 8% to 12%.\textsuperscript{77} OMRs are in the middle, with an average market price increase of 3.0% to 3.5%, depending on the study.\textsuperscript{78} Dividend increases lie at the bottom, triggering an average 1% price uptick\textsuperscript{79} (with the opposite result for a dividend cut, averaging 6%).\textsuperscript{80}

The RTO signal is strongest because the announcement entails a short-term commitment to repurchase at a premium over the market price—a premium customarily higher than the post-announcement gain.\textsuperscript{81} Since management com-

\begin{itemize}
\item \textsuperscript{76} See Ok-Rial Song, Hidden Social Costs of Open Market Share Repurchases, 27 J. Corp. L. 425, 447 (2002).
\item \textsuperscript{77} See Robert Comment & Gregg A. Jarrell, The Relative Signaling Power of Dutch-Auction and Fixed Price Self-Tender Offers and Open-Market Share Repurchases, 46 J. Fin. 1243, 1246 (1991). More particularly, the result is 11.9% for fixed-price RTOs and 7.7% for Dutch auctions. Id.
\item \textsuperscript{78} David L. Ikenberry et al., Market Underreaction to Open Market Share Repurchases, 39 J. Fin. Econ. 181 (1995), looks at OMRs from 1980 to 1990 and reports 3.42%. Grullon & Michaely, supra note 75, looks at a large sample, from 1980 to 1994, and reports a median of 2.94%. Ikenberry & Vermaelen, supra note 17, at 17–18, using the 1980–1990 sample, add that as the percentage of shares covered by the OMR announcement goes up from 2.5% to 4.5% to 10%, the price reaction rises from 2.63% to 4.40%. All of the OMR studies exclude the fourth quarter of 1987, when issuers, with the encouragement of the SEC, conducted hasty and substantial OMR programs in the wake of the stock market crash.
\item \textsuperscript{79} See, e.g., Joseph Aharony & Itzhak Swary, Quarterly Dividend and Earnings Announcements and Stockholder Returns: An Empirical Analysis, 35 J. Fin. 1 (1980); Paul Asquith & David Mullins, The Impact of Initiating Dividends Payments on Shareholders' Wealth, 56 J. Bus. 77 (1983); DeAngelo et al., supra note 53, at 344; see also Richard Leftwich & Mark Zmijewski, Contemporaneous Announcements of Dividends and Earnings, 9 J. Acct. Auditing & Fin. 725 (1994) (asserting that dividends have informational content when firms reveal good news about earnings and bad news about dividends).
\item \textsuperscript{80} See David Denis et al., The Information Content of Dividend Changes: Cash Flow Signaling, Overinvestment, and Dividend Clienteles, 29 J. Fin. & Quantitative Analysis 567 (1994). For further discussion, see infra note 100–03.
\item \textsuperscript{81} For all RTOs, 1979 to 1989, the median undervaluation prior to the event was 30%, the median premium was 21%, and the median announcement price reaction was 12.1%. See Ranjan D’Mello &
mits a substantial and verifiable amount of cash, an RTO usually implies that management deems the firm’s intrinsic value to be substantially higher than its stock price. Usually, but not always: the positive signal is credible only when the managers do not tender into the offer and are not threatened by a hostile takeover. In these cases the cash payout amounts to a bet on the firm’s future prospects. About three-quarters of RTO firms turn out to be undervalued in the antecedent stock market; the rest are overvalued. Distinguishing the undervalued majority from the overvalued minority does not prove difficult, given disclosure of management trading. In the years preceding the RTO, insiders of undervalued firms are net buyers in the market, and insiders of overvalued firms are net sellers in the market, with the trading trend becoming more pronounced in the six months before the announcement. The OMR signal is more equivocal—so equivocal as to bring signaling into question both as an explanation and as a justification for OMRs. The average 3% abnormal announcement return yielded by the studies does not impress with its magnitude; three percent is not much more than the daily standard deviation for many stocks. While the announcement probably does mean that management considers the stock a good (or potentially good) buy in the short term, its long-term implications are more ambiguous. Management could indeed be projecting increased earnings. But it also could have extra cash due to a dearth of acceptable new investments, heralding a future of contraction. One study backs up this negative reading, showing an 11.95% decline in the return on assets of a large class of OMR firms in the three-year period following announcement.

Part of the signal’s weakness stems from the fact that OMR announcements carry no commitment to buy. Any stock price effects of the program are accordingly difficult to project. The signal’s credibility also suffers from the absence of an evident cost imposed on the firm that signals falsely. Finally, prior to 2004, no mandatory disclosure rule required the purchasing firm to make ongoing disclosures of its OMR activity. Absent a disclosure mandate, the inquirer was remitted to inferences drawn from the balance sheet’s report of shares outstanding and the cash flow statement’s report of financing activity.


82. Comment &Jarrell, *supra* note 77, at 1245. The stronger the signal, the greater the managers' shareholdings, the larger the premium, and the larger the proportion of shares covered by the offer. *Id.*

83. Where the insiders have been selling the announcement, abnormal return is lower. *See* D’Mello &Shroff, *supra* note 81, at 2400–01.

84. Ikenberry et al., *supra* note 78, at 183.


87. In December 2003, The SEC revised its rules to require quarterly disclosure of the number of shares purchased in the previous quarter, the average price paid per share, the number of purchases made as part of an announced OMR program, and the maximum number of shares remaining that may be purchased under the program. *See* Purchases of Certain Equity Securities by the Issuer and Others, Exchange Act Release No. 33-8335, 68 Fed. Reg. 64,952 (Nov. 17, 2003).
Unsurprisingly, repurchasing managers began disclosing their repurchase activity voluntarily, on an after-the-fact basis,\textsuperscript{88} showing the market that they staked money on their judgment of undervaluation and separating themselves from firms making "cheap talk" repurchase announcements.

With dividends, the signal is even weaker—here the average abnormal stock return is only 1%. Controversy over the signal’s value is correspondingly sharper. The drop from the OMR announcement’s 3% uptick to the dividend’s 1% can be partly accounted for by reference to the size of the incremental cash distribution. Dividend increases tend to involve much less money. OMR announcements target an average 6.6% of the firm’s equity,\textsuperscript{89} and the average amount of stock actually repurchased is 75% of the target amount across three years (drawing on the high end of estimates); the average repurchase payout is 2% to 3% of equity value per annum. The average dividend is 0.76% of equity value,\textsuperscript{90} and the average cash increment due to an increase is 0.17% of equity value.\textsuperscript{91} Such a modest cash commitment invites a “cheap talk” characterization, undermining the credibility of the signal.\textsuperscript{92} Finally, after the cash differential is factored out, the dividend signal’s content is diminished by the same ambiguities that obscure the content of OMR announcements.

A separate body of empirical results further weakens the case for dividend increases as signals. These studies look at performance measures in years subsequent to the dividend\textsuperscript{93} to see whether performance does in fact improve. While two reports say “yes” for a period after the announcement,\textsuperscript{94} most say “no.”\textsuperscript{95} In the emerging picture, dividend increases are followers rather than

\textsuperscript{88} Ikenberry & Vermaelen, supra note 17, at 10.
\textsuperscript{89} Jagannathan et al., supra note 12, at 357.
\textsuperscript{90} Id. at 374.
\textsuperscript{91} Grullon & Michaely, supra note 75.
\textsuperscript{92} See DeAngelo et al., supra note 53, at 342–43.
\textsuperscript{93} For first-generation studies not anticipating the future, see Joseph Aharony & Itzhak Swary, Quarterly Dividend and Earnings Announcements and Stockholder Returns: An Empirical Analysis, 35 J. Fin. 1 (1980); Paul Asquith & David Mullins, The Impact of Initiating Dividend Payments on Shareholders’ Wealth, 56 J. Bus. 77 (1983).
\textsuperscript{94} See Roni Michaely et al., Price Reactions to Dividend Initiations and Omissions: Overreaction or Drift?, 50 J. Fin. 573 (1995) (documenting a positive price drift for firms that initiate or resume dividends, 1964–1988); Doron Nissim & Amir Ziv, Dividend Changes and Future Profitability, 61 J. Fin. 2111 (2001) (showing that dividend changes are positively related to earnings changes for a two-year period ex post).
\textsuperscript{95} For a summary, see La Porta et al., supra note 40, at 2. The most devastating study is DeAngelo et al., supra note 53, at 342–43, which isolates a group of firms with five years of consecutive earnings increases followed by five consecutive years of declining earnings. The authors isolate the dividend in the middle year in the sequence and find that 68.3% of the firms increase the dividend in that year, and two-thirds of those firms increasing the dividend do so in an amount greater than or equal to the earnings increase in the peak year. The inference is that managers are overoptimistic. See also Shlomo Benartzi et al., Do Changes in Dividends Signal the Future or the Past?, 52 J. Fin. 1007 (1997) (finding a strong delayed and contemporary correlation between dividend changes and earnings but finding no evidence of a positive relationship between dividend changes and future earnings increases); Rodney D. Boehme & Sorin M. Sorescu, The Long-Run Performance Following Dividend Initiations and Resumptions: Underreaction or Product of Chance?, 62 J. Fin. 871 (2002) (attacking Michaely et al., supra
leaders. Management increases the dividend because earnings and cash flows have increased in immediate past periods. Even as managers who raise dividends remain optimistic—perhaps overly optimistic—about future results, their visions of a more successful future do not generate the dividend decision. Cash flow security and continuity are what count, and they are matters verifiable in existing numbers.

To sum up, both dividend and OMR announcements send weak signals. Both imply management confidence. An OMR also implies management’s view that the stock is undervalued. But one should not infer much more. The OMR framework’s flexibility robs it of much of its signaling value. OMR firms eschew firm commitments. If OMR firms wished to import more credibility to their signals, they easily could commit to buy. Signaling accordingly fails as a primary explanation for the 1990s shift to payout by OMR. It also makes for only a lightweight justification. The corporate governance system holds out plenty of ways to signal confidence about future performance. For example, a hard-wired set of rules assuring unbending and inveterate independence in the firm’s outside directors and auditors would speak volumes about management’s self-confidence. But we have seen few such signals.

III. AGENCY: STABLE DIVIDENDS, SPECIAL DIVIDENDS, AND STOCK OPTIONS

Some explain payout practice by referring to tensions in the shareholder-management relationship. This school of thought abandons the assumption—common to both substitution and signaling theory—that management acts to maximize benefits to the shareholders. It instead makes reference to agency theory and agency cost reduction. When first articulated two decades ago, this agency explanation focused on the stable dividend payouts seen in practice, hypothesizing that the steadiness palliates management’s tendency to reinvest cash flows in projects where the rate of return $r$ is less than the cost of capital.

note 94, by showing that post-announcement, abnormal return results do not include all subsamples and become insignificant when portfolios are value-weighted by market capitalization); Stephen H. Penman, The Predictive Content of Earnings Forecasts and Dividends, 38 J. Fin. 1181 (1983) (finding, after controlling for management’s future earnings forecast, that dividends have little informational content).

The cases where dividends more clearly have information content are (1) when the earnings go up but the dividend goes down, see Richard Leftwich & Mark Zmijewski, Contemporaneous Announcements of Dividends Earnings, 9 J. Acct. Auditing & Fin. 725 (1994), and (2) when earnings go down and the dividend goes up, see Harry DeAngelo et al., Dividends and Losses, 47 J. Fin. 1837 (1992).

96. The survey evidence is in accord. See Brav et al., supra note 29 (concluding that while management sees payouts as having information content, management neither intends academic signaling nor believes any signal adds to publicly disclosed information); H. Kent Baker & Gary E. Powell, How Corporate Managers View Dividend Policy, 38 Q.J. Bus. & Econ. 17 (1999) (showing that managers believe dividends to be a positive signal); H. Kent Baker et al., A Survey of Management Views on Dividend Policy, 22 Fin. Mgmt. 78 (1985) (same).

k.\textsuperscript{98} That point resonates at a structural level, but is less suited to explain the subjective motivations of managers who increase dividends. Section A of this Part shows that an agency approach nonetheless helps us understand the 1990s shift to repurchases: Managers needed a way to distribute extra cash without making a commitment to maintain the level of payment. OMRs gave them the flexibility to pay out, avoiding \( r < k \) reinvestment of earnings. Section B darkens the picture, showing that the 1990s expansion of stock option compensation for both top managers and employees figures prominently in the shift. Section C challenges the attribution of greater flexibility to OMRs, asserting that the device of the special dividend holds out equal flexibility.

A. STABLE DIVIDENDS AND OPTIMAL INVESTMENTS

1. The Stable Dividend

Large American corporations shape their dividend policy to accord with conventional wisdom. This holds that the payout level should be set as a fixed amount—for example, $2.00 per year, per share, to be paid even though earnings fall—rather than as a fixed percentage of earnings yielding a fluctuating amount. A firm increases the fixed amount to a higher fixed amount only if the new, higher payout level clearly can be sustained against negative shocks to corporate cash flow.\textsuperscript{99} It follows that dividend increases lag earnings increases across time, and that the dividend will not be cut to fund a good investment. Managers take the position that any departure from this conservative practice traverses shareholder preferences with destabilizing results. In bad times, managers feel constrained to avoid dividend cuts even when they have very good alternate uses for the cash.\textsuperscript{100} The firm will attempt to borrow to maintain the dividend until relief comes in the form of a cyclical recovery. If forced to cut the dividend, managers look for air cover in the form of dividend reductions by their competitors.\textsuperscript{101} It follows that managers resolve doubts against dividend increases, because once made, they stick. They stick because managers fear


\textsuperscript{99.} \textit{Brav et al., supra} note 29, at 13, report that 87% of the managers they surveyed agreed that the reference point for setting dividends is the previous period's payment. \textit{See also} Baker et al., \textit{supra} note 96. Formal empirical confirmation of the pattern is set out in the famous study by Lintner, \textit{supra} note 45. For a recent reconfirmation of the value of Lintner's model in understanding stock price behavior, see Hyun Mo Sung & Jorge L. Urritia, \textit{Long-Term and Short-Term Causal Relations Between Dividends and Stock Prices: A Test of Lintner's Dividend Model and the Present Value Model of Stock Prices}, 18 \textit{J. Fin. Res.} 171 (1995).

\textsuperscript{100.} \textit{Brav et al., supra} note 29, at 13, report that 97% of the dividend-paying firms in their survey agree that the dividend is cut only as a last resort; \textit{see also} Harry DeAngelo & Linda DeAngelo, \textit{Dividend Policy and Financial Distress: An Empirical Investigation of Troubled NYSE Firms}, 45 \textit{J. Fin. 1415} (1990); Albert Eddy & Bruce Seifert, \textit{Dividend Changes of Financially Weak Firms}, 21 \textit{Fin. Rev. 419} (1986) (showing that distressed firms tend to cut rather than eliminate their dividends).

\textsuperscript{101.} \textit{See Brav et al., supra} note 29, at 14.
dividend cuts. And they have their reasons: As discussed above, on average, a dividend increase yields a 1% announcement-period increase in the stock price, but a cut produces a 6% price drop. 102

Given all of this, it comes as no surprise that firms that pay dividends are larger than firms that do not pay, that their operating income is higher, and that their earnings records have a lower standard deviation. 103 A governance implication also follows for dividend-paying firms: Dividend increases are a second-order decision. The existing dividend’s maintenance is a given. Management considers increasing the dividend only after completing all investment decision-making and assuring itself of liquidity for the coming period’s operations. The board of directors is only minimally involved. 104

2. The Agency Explanation

An agency cost explanation of payout practice first appeared in the 1980s. In those days, payout policy was a cutting-edge issue in corporate politics, and today’s shareholder-value-maximization norm was in gestation. Management’s critics charged that managers behaved in overly risk-averse ways, reinvesting earnings to make the company bigger and safer whether or not the practice enhanced shareholder value. The managers invested in suboptimal \( r < k \) projects, seeking to make their empires grow. 105 Internally generated cash flows presented an easy source of financing for such projects. They were the cheapest funds available and suited risk-averse managers wary of a stepped-up debt-to-equity ratio. The critics charged that these reinvested monies, termed “free cash flows,” should have been paid out, whether as dividends or repurchases. From this perspective, the era’s hostile takeovers and leveraged restructurings, with their huge, single-shot payouts to shareholders, amounted to compensation for years of misinvested free cash flows. With this harsh payout medicine, actors in the capital markets imposed the shareholder-value norm on unwilling managers.

102. See Denis et al., supra note 80, at 572. Cuts also are bigger than increases. Where increases average 0.76% of equity value, cuts average 4.3%. Cutting firms average a dividend-to-earnings payout ratio of 43.53%, which means they really are hurting. Jagannathan et al., supra note 12, at 373–74.

One contrarian study should be mentioned. Paul M. Healy & Krishna G. Palepu, Earnings Information Conveyed by Dividend Initiations and Omissions, 21 J. Fin. Econ. 149 (1988), looks at 172 firms that omit dividends with results that contradict signaling theory. The study finds that earnings decline in the year of the omission but improve significantly in the next several years.

103. See Denis et al., supra note 80, at 572.

104. See BRAV ET AL., supra note 29, at 8; see also S.W. Pruitt & Lawrence J. Gitman, The Interaction Between the Investment, Financing and Dividend Decisions of Major US Firms, 26 Fin. Rev. 409 (1991) (surveying 114 CFOs and concluding that dividend decisions are made independently of investment and financing decisions); cf. Eugene Fama, The Empirical Relationship Between the Dividend and Investment Decisions of Firms, 64 Am. Econ. Rev. 304 (1974) (finding that managers’ dividend and investment decisions are independent); LEASE ET AL., supra note 14, at 130 (concluding that, despite the importance of dividend policy, there is no evidence that the market rewards careful payout management with a higher stock price).

The stable dividend, long a puzzle, made more sense in this context. The steady payout convention checks the tendency toward suboptimal investment of internally generated capital. For every dollar pumped out as a dividend, the investing manager has to go to outside capital markets for a new dollar. The stable dividend thus forces ongoing resort to outside financing, bonding the managers to act in the shareholders' interest. According to Rozeff, this explanation's originator, the resort to outside funding forces management to reduce agency costs and reveal information to actors in the capital markets. Easterbrook, reiterating the theory, stressed the latter point—dividends “start up” monitoring by capital market actors who, unlike shareholders, are unshackled by collective action problems.

The agency explanation offers a plausible answer to the question why, despite a tax disadvantage, a shareholder rationally might prefer $1 to be paid out as a dividend rather than reinvested in an \( r > k \) project. Empirical studies set out evidence backing this view. Evidence in other studies negates it, however.

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107. Id. at 250–51. Rozeff, strictly following the early agency paradigm, also suggests that dividend policy and insider ownership are substitute tools to reduce agency costs, with firms with high percentages of insider ownership paying small dividends. Id. at 250–52. Subsequent empirical work negates this picture. Diane K. Schooley & L. Dwayne Barney, Jr., Using Dividend Policy and Managerial Ownership To Reduce Agency Costs, 17 J. Fin. Res. 363 (1994), shows that the relation between the dividend payout ratio and management ownership is nonmonotonic. Beyond a certain point, greater management ownership causes the dividend payment to rise.

108. Frank H. Easterbrook, Two Agency-Cost Explanations of Dividends, 74 Am. Econ. Rev. 650, 653, 655 (1984). Easterbrook adds a point about management risk-aversion: to replace internal flows, managers may use leverage they might otherwise avoid, thereby benefiting shareholders. Id. at 653–54.

109. Sinha et al., supra note 40, at 4–6, is the most recent. The Sinha paper looks at a broad selection of traded stocks for the period 1981 to 2001 and finds that firms that pay out (whether by dividend or OMR) have a significantly lower cost of capital. They also find that dividend payers have a slightly lower cost of capital than OMR firms, implying a disciplinary advantage for dividends. See also Mahmoud A. Moh'd et al., An Investigation of the Dynamic Relationship Between Agency Theory and Dividend Policy, 30 Fin. Rev. 367 (1995), which performs a time-series, cross-sectional analysis of 341 firms for the period 1972–1989. According to the authors, id. at 379–80: (1) firms experiencing or about to experience high rates of revenue growth tend to establish lower dividend payouts; (2) dividend payout increases as a function of firm size (supporting the view that larger firms have higher agency costs and smaller firms have higher financing transaction costs); (3) dividend payout is inversely related to intrinsic business risk; (4) firms establish a lower dividend payout as their operating and financial leverage mix increases; (5) higher dividend payouts are observed when management holds a low percentage of shares and as outside ownership becomes more dispersed; and (6) firms tend to establish higher payouts as institutional ownership increases. See also La Porta et al., supra note 40 (studying 4000 firms in thirty-three countries and showing that higher dividend payouts occur in common-law countries, where investor protection is better).

110. The agency explanation also has been shown to work well with the RTOs of the 1980s. See Erik Lie, Excess Funds and Agency Problems: An Empirical Study of Incremental Cash Disbursements, 13 Rev. Fin. Stud. 219 (2000) (showing a positive relationship between the market reaction to an RTO announcement and the amount of excess cash held by the RTO firm); Tom Noheil & Vefa Tarham, Share
Absent definitive proof or negation—which we may never receive—the agency explanation resonates best in the long-term, rational-expectations framework where it originated. It seems less plausible as an explanation for day-to-day practice. Managers who raise the dividend may see themselves in a signaling mode but stoutly deny that governance discipline bears on the decision. And, while agency theory does shed light on the shareholders’ puzzling attachment to steady payouts, this preference may be better addressed with behavioral theories.

3. Agency, Shareholder Value, and the Shift to OMRs

An agency explanation still can play a leading role in the overall account, provided we situate it in history and include the 1990s shift to OMRs. In the 1980s, shareholder-value maximization was a rallying cry for shareholder capital as it assaulted management fortresses. Things changed in the 1990s. Managers internalized the norm, building résumés as shareholder-value maximizers. A governance success story accompanied the shift. Corporate America, now pointed in the right normative direction, had solved the problem of separated ownership and control. Stock options better aligned managers’ incentives with those of their shareholders. Managers emerged in the risk-neutral posture counseled by financial economics. They unbundled conglomerates and concentrated on core competencies. They laid off excess workers. They took on the challenge of global markets.

High leverage, thought by observers in the 1980s to be the key that unlocked

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110. See Denis et al., supra note 80, at 569. This article takes a sample of 6777 large dividend increases, 1962–1988, and finds no relationship between the magnitude of the change in payout and Tobin’s Q. (Tobin’s Q is a widely used measure of productivity: the market value of the firm’s equity divided by the replacement cost of its assets.) If the agency explanation were cogent, firms with a Tobin’s Q of less than one would have been paying out higher dividends. The study finds that contrary to the agency prediction, low-Tobin’s-Q firms actually increase their capital expenditures after dividend increases.

111. See supra note 75 and accompanying text.

112. See Brav et al., supra note 29, at 22 (noting that 88% of the managers surveyed make this denial).

value, turned out to be unnecessary.\textsuperscript{114} Its disappearance seemed to remove a threat that pursuit of shareholder value could have perverse effects. Many observers in the 1980s warned that high leverage meant underinvestment in long-term projects. In the 1990s, with the leverage strategy abandoned, value-maximizing managers invested aggressively. The only apparent costs of value maximization fell on employees let go due to cost cutting.

The shift to OMRs fits neatly in this picture. Management, having internalized the shareholder-value-maximization norm, was less prone to put free cash flow into suboptimal projects. But it internalized the norm only in part. Managers still were not ready to sign on to the long-term payout commitment implied by the stable dividend, not to mention the associated disciplinary effects. OMR programs filled the gap, permitting cash to be paid out without commitment. This OMR advantage was first discovered in the wake of the stock market crash of 1987. The crash brought an unprecedented increase in OMR programs: 507 OMR announcements were made between October 19 and October 31, 1987, compared with a total of 115 announcements in all of 1985. The number of announcements dropped immediately thereafter but remained at historic highs until the recession of the early 1990s. OMR announcements fell to 211 in 1991, with the pattern of increase of the 1990s beginning after 1993.\textsuperscript{115}

Studies of OMR behavior confirm this point. Managers use OMRs to pay out temporary inflows of cash.\textsuperscript{116} Aggregate repurchases are volatile, varying with the business cycle.\textsuperscript{117} The market accepts this pattern, reading no negative signal from the cessation of OMR outflows.\textsuperscript{118} There is even a tie to 1980s agency theory—the market reacts with particular favor when a firm with a declining base of new investments announces an OMR program.\textsuperscript{119} In addition, OMR firms’ returns on assets tend to decline in the years post-announcement, implying a deteriorating opportunity set.\textsuperscript{120}

This economic profile determines the governance practice. OMRs, like dividend increases, are highly sensitive to, and negatively correlated with, investment activity.\textsuperscript{121} In contrast, the steady dividend is determined independently

\textsuperscript{114} Leverage increases were a significant motivation for 1980s RTOs. See Baker et al., supra note 38, at 251.
\textsuperscript{115} See Jagannathan et al., supra note 12, at 362.
\textsuperscript{117} See Jagannathan et al., supra note 12, at 357–58.
\textsuperscript{118} Or so most managers believe. See Brav et al., supra note 29, at 16 (noting that only 22.5% of the managers surveyed believe that reducing repurchases carries negative consequences).
\textsuperscript{119} See Guillon & Michaeley, supra note 75.
\textsuperscript{120} Id. at 22–26. The return on assets for a large sample of announcements, from 1980 to 1994, was 14.4% three years before the announcement and 11.95% three years after the announcement.
\textsuperscript{121} See id. (noting that 80% of the managers surveyed confirmed this point).
from investments. In both cases, decisions respecting investments come first. As with dividends, there is little board involvement with OMRs. 122

There arises an inference of governance success. Management uses OMRs to pay out monies for which it has no productive use, monies that it otherwise might reinvest suboptimally. This practice suits diverse shareholder interests, even apart from the tax advantage. Those who wish to liquidate their investments can do so in the market; those who do not wish to share in the payout can hold.

But a caveat must be entered. Recall that OMR payouts reached parity with dividend payouts at the end of the 1990s even as the overall corporate payout rate remained at historic levels. 123 This implies that OMRs provide management a handy vehicle for payouts without commitments—a retreat from the disciplinary model of dividend. So minimal is the OMR commitment that 10% of firms making announcements buy back less than 5% of the shares covered. 124 This negative-agency-cost implication grows in magnitude if the correlation between repurchase activity and a change in compensation policy is recognized. The compensation change—also ushered in by the 1990s shift to shareholder capitalism—was the expansion of stock option compensation for both top managers and employees.

B. STOCK OPTIONS AND OPPORTUNISM

Firms with large stock option plans are more likely to announce share repurchase plans. 125 Actual amounts repurchased in OMR programs relate positively to the total numbers of options exercisable. 126 Some studies report that firms repurchase gradually over the lives of options to reduce the options’ dilutive effect. 127 But there is also evidence that firms time repurchase announcements around the times stock options are being exercised. 128 Whatever the timing, the numbers are large. One survey finds that firms repurchase roughly

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122. Where a dividend decision culminates in a board resolution, OMRs follow from a board delegation. The board approves a maximum amount annually or semiannually (although a ceiling might be raised to take advantage of a market price break). Id.
123. See supra notes 21–24 and accompanying text.
124. There appear to be two types of OMR firms: those that buy back substantially all shares projected and those that buy almost none. On an aggregate basis, OMR firms eventually buy back around three-quarters of the shares targeted. Stephens & Weisbach, supra note 116, at 314; see also Jagannathan et al., supra note 12, at 357 (showing an aggregate repurchase range of 53 to 72%).
38% of the shares underlying their option grants prior to exercise. The more stock options outstanding, the more stock the firms repurchase. Managers admit this. Three-fifths of the executives reporting in one survey acknowledged that they instituted an OMR program to prepare for stock option exercise.

What inferences should be drawn? On the one hand, this could be shareholder capitalism at its best. If stock options better align the interests of managers and shareholders, the correlation may be unimportant. Whatever the motivation, the effect is still to increase payouts of free cash flows, reducing misinvestment. On the other hand, if stock options are a badly designed compensation device that overpays managers in rising markets and in extreme cases imports perverse incentives, then OMRs may be part of an agency problem rather than an agency solution.

At a minimum, the causal tie between stock options and repurchases suggests that repurchases should be viewed as a potential cost, in addition to being viewed as a means to avoid suboptimal investments. In the simple case, the firm uses one dollar to repurchase as an alternate means of releasing free cash flow, replacing one dollar of dividend. The repurchase transfers wealth from the firm to selling shareholders; it enhances value for the holding shareholders due to the reduction in the number of outstanding equity claims (provided that the repurchased stock is not overvalued). Compare with the case where a firm uses one dollar to repurchase for the purpose of warehousing shares to use as consideration in a later merger. Here the one dollar invested enhances value for the holding shareholders only to the extent the later merger succeeds. More particularly, the one dollar benefits the shareholders only if (1) the repurchased stock is not overvalued and (2) the value increment per share under the merger is greater than the dilution cost per share of the merger consideration. Arguably, stock option warehousing works similarly. The one dollar enhances value only if the option’s positive incentive effect exceeds its dilution cost, whether stemming from overpriced stock at the time of repurchase or later stock option exercise.

Repurchase activity also has tended to obscure the dilution cost of option exercises. Under Financial Accounting Standard (“FAS”) No. 123, as stated prior to 2004, firms were not required to deduct the value of the option from their net income as expenses, as they would with cash compensation. But the cost eventually showed up in the form of dilution of each share’s pro rata claim

129. See Weisbenner, supra note 127, at 23.
130. Id. at 8 (citing a 1999 survey of 1600 CFOs); see also Brav et al., supra note 29, at 29 (noting that two-thirds of the respondents in their survey acknowledged that offsetting stock option dilution was a motivation for repurchases).
131. See Lucian Arye Bebchuk & Jesse M. Fried, Executive Compensation as an Agency Problem, 17 J. Econ. Persp. 71, 82.
to the firm’s equity. Under FAS No. 128, the firm must separately report its earnings per share as if each outstanding in-the-money option had been exercised.\textsuperscript{133} When calculating earnings per share, the “treasury stock method” is employed. This assumes that the exercise price of the option, received by the firm, is used to repurchase a share of stock at the current market price. When total earnings are divided by the total number of shares, each presently outstanding share counts as one in the denominator, and each share under an option counts as less than one, according to the formula $P - X / P$, where $P$ is the current stock price and $X$ is the lower exercise price. To the extent the firm buys back stock before having to make this calculation, it reduces the number of shares in the denominator, eliminating the dilutive effect of the options.\textsuperscript{134} With payout by dividend, the impact on earnings per share would be more apparent.

Given warehousing through OMRs, the cost of the exercised option to the shareholders is the difference between the market price of the share repurchased and the option’s exercise price. If we assume that options are exercised in an amount equal to $Y$ percent of the firm’s outstanding shares, the cash wealth transfer from the shareholders to exercising executives and employees equals $Y(1 - X / P)$ percent of the value of the firm.\textsuperscript{135} This cost was cognizable in the rising stock market of the 1990s. Liang and Sharpe’s study of 144 large firms from 1994 to 1998 shows that the difference between the exercise price of options exercised and the market value of shares repurchased amounted to 0.25% of the value of the firm in 1994 to 0.74% in 1998.\textsuperscript{136} Corporate reports do not break out these figures. Repurchases, then, have been obscuring the cost of stock options, thereby making it easier for boards of directors to be generous as to the number of options granted and the programs’ pricing and structuring.

Repurchases simultaneously serve the purpose of earnings management.\textsuperscript{137} Earnings per share, the firm’s key quarterly result, falls in the wake of option exercises and rises due to repurchase activity. It follows that stepped-up repurchases can protect reported results. In a market where missing the analysts’ quarterly earnings per share projection by a cent or two causes a magnified negative shock to the stock price, the power to time OMR activity imports a useful public relations tool—or at least it did in the 1990s, when such manipula-

\textsuperscript{133} EARNINGS PER SHARE, Statement of Financial Accounting Standards No. 128 (Financial Accounting Standards Bd. 1997).

\textsuperscript{134} WEISBENNER, supra note 127, at 5–6. If the firm waits until the option is exercised before buying back a share of stock to cover it, it loses this pre-exercise cosmetic effect.

\textsuperscript{135} LIANG & SHARPE, supra note 31. If the dividend is not cut to make up for the repurchase payouts, the firm’s asset base shrinks.

\textsuperscript{136} Id. at 9. Liang and Sharpe also show an average 1% annual reduction in shares outstanding due to stock option exercise and cash-out flows from repurchases rising from 1.19% of market value in 1994 to 1.98% in 1997. Meanwhile, the net annual payout for repurchases, taken as a percentage of the firms’ income, rose from 17% in 1994 to 41% in 1998. Id.

\textsuperscript{137} WEISBENNER, supra note 127, at 8.
tions were dismissed as benign income-smoothing. Now, after a spate of accounting scandals and a change of prevailing opinion on income-smoothing, the tie to the shareholder interest looks more attenuated. An additional questionable incentive arises when the firm bases annual bonuses and long-term performance incentives on earnings per share. Here, earnings management directly impacts the top managers' annual pay packets.

These agency problems become even more acute when we consider the dividend versus repurchase decision from an option-holder's point of view. Dividends are paid to shareholders but not to option-holders. One dollar paid out as a dividend does an option-holder no good unless the option is dividend-protected, that is, unless the option contract provides for a diminution of the exercise price to make up for the dividend. But only 1% of executives have dividend-protected stock options. It follows that the value of a manager's stock options is negatively related to the firm's expected dividend payout. Assume a manager with a ten-year option. Further assume that the firm's stock price has a volatility of 30%, and the risk-free rate of return is 5%. Under the Black-Scholes option-pricing model, a cut in the dividend yield from 2% to 1% increases the option's value by 18%. Cutting the dividend entirely raises option value by 39%.

Stock options raise the financial stakes of the choice between dividends and repurchases, giving managers a strong incentive to prefer repurchases. Unsurprisingly, empirical studies show a strong correlation between stock options and payout choices. The probability of stock repurchase is positively related to the presence of stock options. Dividends are strongly negatively correlated with options. A study of the largest S&P 500 firms from 1994 to 1997 shows that even as the repurchase payout rose from 17% to 41% as a percentage of income, the dividend yield dropped steadily from 2.76% to 1.41%.

It follows that self-interest figured powerfully in the 1990s shift from divi-

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139. About 25% of firms do so, according to a 1993 Hay Group study. See Weisbenner, supra note 127, at 6.
140. Kevin J. Murphy, Executive Compensation, (Univ. of S. Cal., Working Paper, 1998), reported in Weisbenner, supra note 127, at 9 n.10.
141. Black-Scholes employs stochastic calculus to model option value as a function of the interrelation of five factors: stock price, exercise price, duration, volatility, and the risk-free rate of return. Bratton, supra note 73, at 135–36.
142. Weisbenner, supra note 127, at 9.
144. See George W. Fenn & Nellie Liang, Corporate Payout Policy and Managerial Stock Incentives, 60 J. FIN. ECON. 45, 47–48 (2001) (using the Lambert model to show that a one-percent standard deviation change in the stock option variable reduces dividends by 38 basis points).
145. Liang & Sharpe, supra note 31, at 17.
dends to repurchases. But questions still arise as to the role to be accorded in the overall account to management pocket-lining. Agency improvement stories have been offered to counter the implication of perverse incentives. For example, it has been shown that stock option compensation tends to be associated with firms whose profiles signal agency problems—low management stock ownership, limited investment opportunities, and high free cash flow. Given high management stock ownership, abundant investment opportunities, and limited free cash flow, the statistical connection between repurchases and stock options diminishes. Repurchase activity also increases with high market-to-book ratios and volatile operating income. These observations tend to support the flexibility explanation for repurchases, ameliorating the negative implications of earnings management and option exercise.

The negative implications are not dispelled, however. But the causal ties that link option compensation and payout policy remain more an academic concern than an active topic in real-world governance discussions, even as stock option practice has risen to the top of governance reform agendas in the post-Enron era. One suspects that shareholders continue to base expectations on the governance framework of twenty years ago. Fearful of suboptimal earnings reinvestment and so grateful when management does distribute cash, shareholders ask no further questions as to the mode of payout. The next section shows that shareholders can indeed ask questions about the wisdom of OMR policy without fear of excessive earnings retention. Part IV goes on to show that shareholder passivity holds out potential costs: To the extent that management’s interest in its own option compensation drives payout decisions, firms can be expected to repurchase overvalued stock, injuring their long-term shareholders.

C. DIVIDENDS AND FLEXIBILITY

The opportunism suggested by the tie to option compensation does not by itself displace the OMR from its position as the preferred mode of distributing irregular free cash flows. If dividends are sticky and cannot be cut as a practical matter, then firms arguably have no choice but to buy back stock when they experience positive cash flow shocks.

But the flexibility justification does not withstand inspection. Firms can

146. It should be noted that in firms with high management stock ownership, the move to dividend tax-rate parity can be expected to trigger a shift to dividends. This already has been seen at firms like Citibank (Sanford Weill) and Viacom (Sumner Redstone). See Brown, supra note 47.

147. Fenn & Liang, supra note 144, at 47; see also Cai, supra note 27, at 16 (comparing firms that repurchase to firms that make acquisitions and showing a higher level of CEO stock ownership in firms that repurchase).

148. Fenn & Liang, supra note 144, at 48.

149. Id. There also is evidence associating repurchase activity more with dilution due to employee stock ownership plans than with dilution due to stock exercises by top managers, indicating that earnings management may loom larger than raw self-interest as a motivation. See Weisbenner, supra note 127 (showing that while the overall size of the stock option program is an indicator of repurchase activity, there is no correlation between repurchases and the option holdings of the top five executives).
disgorge temporary cash flows by dividend without committing to a permanent increase. All they need to do is separate their declarations, distinguishing regular from special dividends. The “special” designation tells the shareholders that repetition should not be expected. Since the designation is defensive, there is no reason to expect the market to disbelieve or misunderstand it. Nor is this suggestion merely hypothetical. Prior to the 1970s, firms routinely used special dividends to disgorge temporary cash flows.

From 1927 to 1949, special dividends averaged 9.8% of the total dividend payout, and from 1927 to the 1950s, 26.2% of dividend-paying firms paid specials. Specials were used flexibly. They came and went without stickiness. DeAngelo, DeAngelo and Skinner (“DDS”) report that from 1926 to 1995, cuts of specials outnumbered cuts of regulars by four to one. The median increase for a regular dividend was 25%, whereas the median increase for a special was 60%. While the stock market reacted favorably to announcements of specials—a 1% abnormal return on average—the reaction was more muted than the reaction to increases of regulars. And cuts of specials triggered no negative market response, at least when the special was an isolated event.

But then specials did die out. Compared to the 1940s when 61.7% of NYSE companies paid at least one special, only 4.9% paid one in the early 1990s. Indeed, specials, as vehicles for paying occasional cash, had more or less disappeared by the 1970s. DDS conclude that specials died out because, over time, they failed to serve the occasional cash payment function. Firms that paid specials did so with regularity—27.9% of firms paying specials did so 90% of the time; 56.8% of firms paying specials did so more frequently than every other year. Reductions in specials tended to be accompanied by increases in the regular dividend, so that the firms’ overall payouts remained unaffected. Dividend practice, then, evolved toward homogeneity by the 1970s. Furthermore, there was no connection in time between the disappearance of specials and the appearance of OMR programs in the late 1980s, blocking any suggestion that repurchases substituted for specials. DDS conclude that the decline of specials should be correlated with the rise of institutional stockholding: In the

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151. DeAngelo et al., supra note 53, at 315.
152. Id. at 312, 331–32.
153. Id. at 310.
154. Id. at 315. Through the 1950s, 26.2% of all dividend paying firms paid specials, but the average fell to 11.2% in the 1960s, 5.4% in the 1970s, and 2.2% in the 1980s. Id. Specials in the late 1980s and early 1990s bore no resemblance to their forebears. These latter-day specials were large payouts made pursuant to the era’s leveraged-restructuring movement. Id. at 319. In the late 1980s and early 1990s there were thirty-nine specials exceeding 10% of equity value. Id.
155. Id. at 311, 322.
156. Id. at 326.
157. Id. at 312, 344–45. Nor is there a time connection between the disappearance of specials and the finding of Baker & Wurgler, supra note 8, at 6–16, of the disappearance of premium pricing by dividend-paying firms around 1978.
1960s and 1970s, these new, sophisticated shareholders saw that specials merely substituted for regulars and held out no benefits.  

Additional explanations can be suggested for the decline of specials, however. The 1960s and 1970s were the high water period of managerialism. Specials could not have made sense to managers inclined to retain cash flows in order to build empires. Better to homogenize payouts in a regular framework and increase dividends at a rate lower than the rate of earnings increase. Nor, given that shareholders in that era uncritically accepted the story that earnings retention meant beneficial growth, would the disappearance of specials have occasioned criticism in the investment community, whether institutional or retail. When questions finally came up about payout policy in the 1980s, they did so in a changed environment. Regulatory innovations made OMRs easier to do.  A generation of financial economists had sensitized observers to the tax disadvantage of dividends. Stock option compensation and earnings management had became everyday governance tools. There was no reason to expect managers to return to specials or to expect shareholders to demand them.

Now things have changed again. The tax disadvantage of dividends has disappeared in substantial measure. Shareholders are asking questions about the incentive benefits of stock options. They also question earnings management, preferring—for now—an unvarnished picture of quarterly results. If a firm with irregular free cash flows announces a special dividend, explains that no recurrence should be expected, and reports the special’s cost effects (which are much more transparent than the cost effects of option exercises), then the market should react favorably. That specials lost their informational advantage as a device for distributing occasional cash in the practice decades ago does not denude them of this capability in the present environment, with its keener focus on payout practice. Managers are figuring this out: So far in 2004, fifty-eight companies, mostly outside of the S&P 500, have declared special dividends.

D. SUMMARY

OMRs can create value for long-term shareholders because they suit management preferences as a means of cash distribution. They could beat dividends as an agency cost-control device because, due to their flexibility, they facilitate disgorgement of free cash flows, playing the same disciplinary role identified for dividends in the original 1980s agency story. But the agency story has become more complicated. OMR activity in the 1990s strongly and positively correlated with the proliferation of stock option compensation. Repurchases suited managers because they counteracted the dilutive effect of their own stock

158. Id. at 312, 337–38.
159. See infra text accompanying notes 184–89.
160. Baker & Wurgler, supra note 8, at 6–16 (documenting statistical evidence of a shift of shareholder preferences away from dividends beginning in 1978).
161. See Weber et al., supra note 5, at 97.
option exercises. The note of self-dealing alters the agency account: But for this convenient antidilutive effect, it is unclear how widespread OMRs would have become. Meanwhile, the flexibility justification rings hollow. OMR proponents stress the need to avoid the stickiness of dividends. But OMRs are not the only mechanism available for distribution of occasional free cash flows. If management designates an irregular distribution as a special dividend, the market will adjust its expectations. Meanwhile, a shift to special dividends would make the costs of executive compensation more transparent and enhance the quality of the earnings per share report.

The special dividend alternative, taken together with the clear negative inference arising from stock option practice, sends a strong governance signal in favor of payout by dividend. But the signal does not conclude the matter. As we have seen, a tax argument for repurchases remains on the table. In addition, a final bundle of value variables needs to be confronted. These concern the interplay among payout policy, market prices, and shareholder returns in a world of asymmetric information. The signaling literature, described above, only tells part of this story. We still need to confront management’s claim that it can use its informational advantage to effect bargain repurchases, arguably for the benefit of the firm’s long-term shareholders. That claim in turn confronts a counterclaim grounded in an adverse selection possibility: Repurchased stock can be overpriced as well as underpriced.

IV. SHAREHOLDER VALUE AND UNEQUAL TREATMENT: BARGAIN AND OVERPRICED REPURCHASES

Some argue that OMRs provide an advantage to nonselling shareholders because management’s informational advantage gives it a trading advantage. This bargain repurchase claim has intuitive appeal. If it is true, repurchases enhance value for the benefit of long-term holders. Direct evidentiary support is weak, however. Regulatory questions also come up—studies of foreign trading markets show that any trading advantage diminishes substantially given ongoing disclosure of OMR activity, disclosure not required under the federal securities laws. To the extent that the trading advantage is trivial, nonexistent, or a perverse effect of regulation, an adverse selection possibility also must be recognized: OMR firms can overpay. The likelihood of overpayment increases to the extent separate agendas like stock option dilution and earnings management motivate OMR program activity. To the extent purchasing firms overpay, they transfer value from the pockets of their long-term holders to those of the selling shareholders. The bargain repurchase and overpayment possibilities, taken together, highlight the unequal outcomes held out by OMRs. So long as stock price and intrinsic value are not in identity, OMRs divide selling and holding shareholders into groups of winners and losers.

Section IV.A examines the bargain repurchase claim, showing that it sounds good in theory but has not yet been backed by solid proof. Section IV.B goes on to suggest that to the extent the claim is correct, a weakness in SEC disclosure
mandates might be responsible. If the SEC imposed market-informational equality by requiring contemporaneous disclosure of OMR activity, the bargain repurchase possibility would disappear. Section IV.C turns to the other side of the information asymmetry problem, the repurchase of overvalued stock and its negative impact on long-term shareholders. Prior to the JGTRRA, this problem was more theoretical than real for most shareholders due to the repurchase tax advantage. The diminution of the tax advantage changes the calculation.

A. MARKET TIMING AND OPTION THEORY

Managers believe they can time their OMR purchases to beat the market. OMR firms report that they keep track of their traders’ success or failure in so doing, rewarding those who succeed as they execute their program repurchases.162 The literature of external confirmation is thin, however. Data are lacking due to the federal securities laws’ failure to require OMR firms to break out the results of their trades in a separate disclosure. OMR proponents point to two indirect confirmations: (1) OMR programs tend to be announced after periods of relatively poor stock performance,163 and (2) they tend to be executed when the stock trades at the low end of its long-term price range.164 The one direct study tests data provided voluntarily by sixty-eight firms (out of 478 firms solicited).165 The study tests the firms’ repurchases against a benchmark of highs and lows of their stock prices. Results are mixed. Some firms, particularly NYSE firms, show timing skill, outperforming their benchmarks; other firms, particularly NASDAQ firms, underperform.166

Another indirect empirical confirmation should be mentioned: the average 3.0%-3.5% uptick in the stock price triggered by the OMR program announcement. As we have seen, some attribute this effect to the amelioration of information asymmetries: The program signals that management thinks the stock is undervalued.167 The post-announcement uptick is more problematic for

162. See Brav et al., supra note 29, at 9 (noting that many firms claim to beat the market by one or two percent per year, typically by employing a mechanical trading strategy with a judgment component).
163. See Comment & Jarrell, supra note 77, at 1254 (showing that the stock price reaction to the announcement is inversely related to the stock’s performance in the prior period).
164. See Stephens & Weisbach, supra note 116, at 314 (showing a negative correlation between repurchase activity and the previous quarter’s stock price); see also Barth & Kasznik, supra note 125, at 212–13 (showing higher post-announcement returns for firms with intangible assets, consistent with the presence of information asymmetries).
166. Id. at 17–18.
167. See, e.g., Eli Bartov et al., Evidence on How Companies Choose Between Dividends and Open-Market Stock Repurchases, 11 J. APPLIED CORP. FIN. 89 (1998) (noting that undervaluation is a leading motive for OMRs); George P. Tsetsekos et al., A Survey of Stock Repurchase Motivations and Practices of Major US Corporations, 7 J. APPLIED BUS. RES. 15 (1991) (showing results of a survey of 210 managers and confirming that the most important circumstance triggering repurchases is a low stock price).
those advancing the bargain repurchase hypothesis. They face a question: If the market price rises due to the OMR program announcement and the market thereafter perceives management’s buy-side presence, will not the market price adjust upward so as to deprive the OMR firm of its bargain price? Call this the “OMR value puzzle.”

David Ikenberry and Theo Vermaelen address the OMR value puzzle with a formal theory of value enhancement through bargain OMRs. In their view, OMRs bring together the firm’s resources and management’s inside valuation advantage to enhance value for long-term holders. The announcement of the program, which involves no commitment to purchase, creates an option to buy.

168. Gary E. Porter et al., The Value of Open Market Repurchases of Closed-End Fund Shares, 72 J. Bus. 257 (1999), a study of OMR programs conducted by closed-end investment companies, casts additional light on the OMR value puzzle.

Porter, Roenfeldt, and Sicherman (“PRS”) take a set of OMRs conducted by closed-end funds and find an abnormal post-announcement return of one percent. Id. at 258–59. (This is reduced from 1.56% after controlling for pre-announcement excess return, exchange option value, trading volume, and fund size.) Since the fund’s assets are publicly traded securities, their net asset values are transparent. On a signaling or other information-advantage theory of OMR-announcement price reactions, there should be no price uptick. Nor, assuming an absence of free-cash-flow abuses, should a modest buyback hold out significant changes in the fund’s agency cost profile. Closed-end funds tend to trade at a discount to their net asset values. Agency costs are among the factors that contribute to the discount. But the discount tends to be greater than the sum of agency and other costs of operation and so itself presents a puzzle for orthodox financial economics. See Reinier Kraakman, Taking Discounts Seriously: The Implications of “Discounted” Share Prices as an Acquisition Motive, 88 Colum. L. Rev. 891, 902–05 (1988).

PRS look to the discount between the funds’ market capitalizations and Net Asset Values (“NAV”) to explain the announcement-period price increase. They hypothesize a closed-end fund with a NAV of $100,000 and 10,000 shares outstanding, selling at a 10% discount from NAV for a market price of $9 per share. When the fund announces an OMR covering 10% of its shares, its stock price rises to $9.091 in response. The fund goes ahead and repurchases 1,000 shares at $9.091, for a total cost of $9,091. The fund creates value for its shareholders despite the uptick. NAV decreases to $90,909 due to the cash outflow. Given a constant 10% discount, this implies a market capitalization of $81,800. But NAV per share nevertheless is larger than before the OMR because the number of shares outstanding has decreased: NAV per share now is $10.101, and the market price per share is $9.091. The per-share price increase is $0.91. The nonselling shareholders capture the dollar discount on the assets represented by the repurchased shares; the fund pays $9,091 to retire claims on $10,000 of assets and has $90,909 of assets left. Id. at 260–61.

PRS thus assert that the OMR creates value intrinsically. The $0.91 price increase is permanent and results from the repurchase of equity claims on NAV at a discounted price. No reference is made to management’s informational advantage and ability to time market activity. PRS assert that the OMRs of industrial firms should exhibit the same relationship between the expected increase in the stock price, the discount, and the percentage of shares to be repurchased, and thus the same capture of the discount. Id. at 259. This assertion should be deemed controversial. Discount theory is not orthodox financial economics—nor even financial economics as modified by behavioral psychology. Outside of the pricing of closed-end funds, it appears prominently only in explanations of the large premiums acquiring firms pay in the market for corporate control. Kraakman, supra, at 920–25. When a purchaser buys up an entire firm it must make up the discount from intrinsic value in order to persuade the shareholders to sell. The question for OMRs outside of the world of closed-end funds is whether the discount implies value added on a buyback of 3% to 10% of the stock, with no change of control. One suspects that most would object to PRS’s claim. But it nonetheless should remain on the table as a piece of the larger explanatory picture.

169. Ikenberry & Vermaelen, supra note 17.
The option’s value transfers wealth to long-term holders from liquidity traders (who are likely to be short-term holders). The post-announcement stock price increase reflects the option’s value. Because the OMR program creates an opportunity to buy undervalued stock in the future, the program announcement causes an uptick in the stock price whether or not the stock is undervalued on the announcement date. The option’s value (like that of all options) derives in part from the stock’s volatility and the number of shares covered. The potential for future mispricing also figures in. Ikenberry and Vennaelen back up their description by showing that the post-announcement stock price increase is higher for high-volatility firms than for low-volatility firms.

But how can management make money for long-term holders by creating and exercising the option if the stock price immediately rises to account for its creation? The proponents answer that the market takes a skeptical position respecting the program’s actual future execution, there being no credible commitment. The price corrects upward over time to the extent that management in fact executes the program. For proof, Ikenberry and Vennaelen compare a portfolio of OMR stocks in the post-announcement period with a series of control portfolios. The OMR portfolio, put together from data for the period 1980 to 1990, has an average buy-and-hold return of 12% above the controls.

Ikenberry and Vennaelen’s empirical result does not close the discussion, however. To sort 1980s portfolios in accordance with the constituent firms’ payout practice is to create a high risk of selection bias. Cash payouts were a big issue in those days. Firms that got ahead of the curve and stepped up their payouts (increasing their debt-equity ratios and perhaps avoiding hostile restructuring) were likely to have been rewarded by the market. No inference of trading expertise necessarily arises.

But additional questions do arise. If traders in the market assume that the OMR firm will exploit its informational advantage, bid-ask spreads for OMR stocks should increase whenever traders sense that the firm is in the market on the buy side. Microstructure models of stock markets assert that this happens whenever informed traders enter the market. Such an effect could negate management’s ability to repurchase at an attractive price. In addition, the firm’s cost of equity capital could rise to reflect uninformed investors’ expected loss (in addition to the rest of the risk carried by the business). Such an increase in the capitalization rate could lower the value of the firm, once again negating the informational advantage. A price survey for the period 1970 to 1978 shows

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170. Id. at 10–11.
171. Id. at 11.
172. Id. at 11–12. Ikenberry and Vennaelen studied 892 OMRs between 1980 and 1990 and discovered a 7.13% uptick for high-volatility stocks and 2.28% uptick for low-volatility stocks.
173. See Ikenberry et al., supra note 78, at 183–84.
the predicted increase in bid-ask spreads. But studies for the late 1980s and 1990s either show no increase\textsuperscript{176} or a slight decrease,\textsuperscript{177} the latter result being consistent with the proposition that issuer repurchase activity can import liquidity to a down market. The differing results could reflect the introduction in 1982 of Rule 10b-18, with its system of trading restrictions. The rule’s trading restrictions\textsuperscript{178} handicap the OMR firm in ways the market microstructure models do not contemplate and so could account for the stability of the bid-ask spreads in more recent periods.\textsuperscript{179}

B. REGULATION

If the Rule 10b-18 trading restrictions so constrain the OMR firm’s trading activities as to counteract the usual market response to informed trading, then might they not also prevent the firm from beating the market systematically? The consistent price uptick of 3\% during an OMR announcement period suggests otherwise, provided we ascribe it to option value and reject the signaling explanation. But a second question arises immediately: Might we see different announcement period results under a stricter regulatory regime? Prior to 2004, neither the federal securities laws nor the stock exchange rules required ongoing disclosure of purchases under OMR programs. OMR firms took advantage of this blackout and moved by stealth. In a sample of fifty-four firms, these firms waited an average of seventeen days after an OMR announcement before buying any stock, minimizing the cost of the post-announcement uptick,\textsuperscript{180} and they only executed trades on about one-third of the available trading days during the life of the program.\textsuperscript{181} Beginning in 2004, the SEC required firms to report their repurchases on a quantity basis.\textsuperscript{182} The periodic and ex-post character of this disclosure requirement leaves open considerable room for stealth.

OMR regulation under the federal securities laws otherwise focuses on the risk that issuer repurchases could distort the demand side and artificially raise the stock price. Section 9(a)(2) of the 1934 Act prohibits activity “creating actual or apparent active trading” in a security “or raising or depressing the price . . . for the purpose of inducing the purchase or sale . . . by others.”\textsuperscript{183} This vaguely phrased directive is widely understood to open a zone-of-compliance

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\begin{itemize}
  \item \textsuperscript{176} See Ikenberry & Vermaelen, supra note 17, at 13.
  \item \textsuperscript{177} Cook et al., supra note 165, at 4–6, 22–23.
  \item \textsuperscript{178} See infra text accompanying notes 186–89.
  \item \textsuperscript{179} See Ikenberry & Vermaelen, supra note 17, at 13.
  \item \textsuperscript{181} Id.
  \item \textsuperscript{182} See supra note 87.
  \item \textsuperscript{183} 15 U.S.C. § 78i(a)(2) (2000). SEC v. Georgia-Pacific Corp., [1964–66 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,692 (S.D.N.Y. May 24, 1966), appears to be the single enforcement action. The SEC charged that Georgia-Pacific used OMRs to manipulate its price upwards so as to reduce the number of its shares distributed in connection with upcoming acquisitions. The company was enjoined from repurchasing stock while the terms of acquisitions were under determination.
\end{itemize}
risk for repurchasing firms even as it has not been read to erect a flat prohibition. Unfortunately, no case law has arisen to fill in a set of clear instructions. OMR firms deal with the problem in practice by making formal program announcements, which are thought to minimize the likelihood of a violation of the section. The SEC’s Rule 10b-18 holds out more comfort still, providing an optional safe harbor for OMR firms that adhere to the rule’s trading restrictions.\textsuperscript{184} The rule constrains repurchase executions on a day-to-day basis: Only one broker may be used per day;\textsuperscript{185} the issuer may not make the opening transaction, and purchases must cease ten to thirty minutes before the close, depending on the depth of the market in the stock;\textsuperscript{186} no purchase price may exceed the greater of the highest independent published bid and the last independent sale price;\textsuperscript{187} and purchases may not exceed 25\% of daily trading volume.\textsuperscript{188}

Evidence respecting OMR practice under the safe harbor is scant because day-to-day disclosure of results is not required. This regulatory gap followed from wisdom in circulation at the time of the safe harbor’s adoption. The idea was that limits on volume, price, and timing would so reduce the materiality of OMR activity as to obviate the need for ex-post disclosure of purchases.\textsuperscript{189} Since 2004, issuers have been required to make quarterly reports; prior to 2004 many issuers voluntarily reported annual repurchase totals on their form 10-Ks.\textsuperscript{190} Even so, economists conducting pricing studies have been forced to rely on overinclusive reporting sources like the cash flow statement and the treasury stock account.\textsuperscript{191}


\textsuperscript{186} Rule 10b-18(b)(2), 17 C.F.R. § 240.10b-18(b)(2) (2004).


\textsuperscript{188} There is an exception allowing one block purchase per week, provided the issuer makes no other purchases on the day of the block trade. Rule 10b-18(b)(4)(i), 17 C.F.R. § 240.10b-18(b)(4)(i) (2004).


\textsuperscript{190} See supra note 87; Jagannathan et al., supra note 12, at 359 n.6, reports that in 1995, 75\% of issuers made these reports, while in 1992 almost no issuers made these reports.

\textsuperscript{191} See Stephens & Weisbach, supra note 116, at 318, for a list of sources. The statement of cash flows has set out the value of repurchases since 1984, but the figure includes all redemptions and retirements of equity securities in addition to OMR transaction outflows. Jagannathan, supra note 12, at 359–60.
The enforcement process has not yielded a more particular picture of OMR practice either. If we put Rule 10b-5 to one side, there have been no enforcement proceedings to enforce the federal securities laws against OMR issuers since Rule 10b-18’s promulgation. But a study of day-to-day trading activity, drawn from evidence supplied by a class of volunteer respondent firms, provides a picture to fill in the gap. This shows that OMR activity decreases around firm-specific information announcements, implying that the prospect of insider trading liability operates as an independent constraint. It also shows that the 10b-18 safe harbor is widely but not slavishly utilized. Forty-one percent of the firms surveyed exceeded the volume limits on at least one occasion. The trades in the sample exceeded the pricing and timing limits around 25% of the time. Issuers apparently do this in pursuit of bargains. On trading days in compliance, negative abnormal returns for the stock are minus 10 basis points; on days not in compliance, they are minus 22 basis points. Since the rule cautions that noncomplying trades should not be presumed to violate either Rule 10b-5 or Section 9(a)(2), the report of noncomplying trades need not signal a cognizable compliance problem.

The question is whether we would be better off with a stricter rule. The London Stock Exchange’s listing rules impose additional restrictions. These broaden the time reference of the trading constraint, blocking repurchases at a price greater than 5% above the average market value of the stock during the antecedent ten business days. They also impose long blackout periods: two months before annual earnings reports and one month before quarterly reports. Finally, trading results have to be disclosed almost immediately. This makes it difficult to take advantage of an undervalued stock price. Post-announcement

192. See Barbara Black, Corporate Dividends and Stock Repurchases § 6:103 (2003) (indicating that courts have been disinclined to enforce federal securities laws against OMR issuers due to a recognition that corporations will to some degree always have greater insider knowledge than shareholders); see also Brody v. Transitional Hosps. Corp., 280 F.3d 997, 1006 (9th Cir. 2002) (finding that a company’s press release concerning its open-market repurchase program does not violate Rule 10b-5 by failing to disclose certain relevant information unless it also contains misleading statements); Jesse M. Fried, Open Market Repurchases: Signaling or Managerial Opportunism?, 2 THEORETICAL INQUIRIES L. 865, 883 (2001) (arguing that in many cases enforcement proceedings against OMR issuers cannot be pursued due to understaffing within the SEC and the stringent requirements that must be met to prove a violation of Rule 10b-5).
193. Cook et al., supra note 165; Cook et al., supra note 180.
194. Cook et al., supra note 165, at 22–23.
195. Cook et al., supra note 180, at 298.
196. Id. at 304.
197. Id. at 307.
excess returns for firms conducting OMRs on the London Stock Exchange are only 1.14%—one-third of the U.S. amount.\textsuperscript{200}

The U.K.-U.S. comparison suggests that federal securities law figures importantly in the bargain repurchase story. Even as the insider trading prohibition contains bargain repurchases, nonviolative bargain repurchases may still occur. Their incidence would have been much reduced had the SEC taken the occasion of the enactment of 1934 Act Section 13(e) to require daily trading reports. Such reports tip the traders to the issuer's presence in the market and thereby trigger upward adjustments in the stock price in response to OMR executions. The policy question is whether the leveling effect of transparency enhances the quality of the marketplace. The argument favoring stricter regulation takes the equal-information policy behind Rule 10b-5 and Regulation FD\textsuperscript{201} and carries it out an additional step. But two points of distinction should be noted. First, assuming that OMR issuers respect Rule 10b-5,\textsuperscript{202} we are talking only about market information and nickels and dimes. Second, the beneficiaries in this case are neither insiders nor favored market intermediaries. They are instead the OMR firm's nonselling shareholders—the long-term investors so often held out as the regulatory system's ultimate clients. A movement toward reform seems unlikely, given the beneficiaries of the status quo. At the same time, a note of contradiction enters into the case for OMRs. Some of the advantage over dividends derives from the fact that OMR executions proceed by stealth. It follows that some of the advantage would disappear if market regulations brought transparency to issuer trades. Jesse Fried makes a forceful case for just such a reform in a current article, suggesting that firms be required to disclose their purchase orders before execution by their brokers.\textsuperscript{203} I second Professor Fried's recommendation.

C. ADVERSE SELECTION—THE OVERPRICED REPURCHASE

Even as OMR proponents cite bargain repurchases and show some evidence, nothing guarantees that OMR firms always make bargain repurchases. Adverse selection is a constant possibility in a skewed stock market. When an OMR firm buys overpriced stock, it benefits the selling shareholders to the detriment of

\textsuperscript{200} See Rau & Vermaelen, supra note 19, at 273–74. London Stock Exchange OMR firms show no significant gains in their stock prices during the year after the announcement. \textit{Id.} at 277.

\textsuperscript{201} Regulation FD, 17 C.F.R. § 243 (2004).

\textsuperscript{202} The assumption is not entirely safe. See Jesse M. Fried, \textit{Share Repurchase and Managerial Opportunism}, 93 Cal. L. Rev. (forthcoming 2005), available at http://ssrn.com/abstract=564682 (showing that inside/outside information asymmetries make for insider trading opportunities that the securities laws overlook); see also Fried, supra note 14 (arguing that an OMR is less likely to be used for insider trading purposes than is an RTO, as evidenced by the higher insider ownership in companies instituting RTOs relative to those instituting OMRs); Song, supra note 76, at 469–71 (conceding the possibility of the relative unattractiveness of OMRs as compared to RTOs for insider trading purposes but positing that because insider trading is so difficult to detect in OMRs it may occur more frequently than is commonly thought).

long-term holders. It follows that a firm’s choice between dividends and repurchases can impact shareholders differently depending, first, on their holding periods, and second, on whether they are well informed or uninformed.

1. Benefiting the Short-Termer at the Expense of the Long-Termer

Looking forward from the time the firm makes the choice, consider first the class of shareholders who plan to sell in the period covered by possible OMR repurchases. The choice of the OMR unequivocally benefits these holders. They want the highest price possible as soon as possible and benefit from the price increase triggered by the OMR announcement. A dividend increase serves them less well. The immediate price uptick is smaller, the cash amount is smaller, and those who sell soonest may miss the record date and the distribution.

Next consider a hypothetical shareholder who, during the OMR period, plans to sell a portion of her holding equal to the proportion of shares to be repurchased in an OMR program. This pro rata posture shields the holder from either benefit or injury due to the post-announcement price increase. Given a tax differential favoring capital gains, this holder strictly prefers a higher proportion of repurchases: The greater the proportion, the greater the tax savings. Given tax-rate parity, this holder is indifferent to the choice between dividend and repurchase (assuming the holder does not look to a repurchase program to generate gains to net against unrelated capital losses).

Finally, consider a third class of shareholder, the long-term holder. This holder does not plan to sell during the period covered by an OMR. Assume for the moment that the market price is allocatively efficient, that is, that the market price of the stock equals its intrinsic value. The long-term holder emerges in the same position as the pro rata seller. If the tax system offers a lower rate for capital gains, this holder will disfavor dividends. The OMR program, meanwhile, holds out an added benefit due to the pro rata increase in the holder’s share of the firm’s value. If we introduce rate parity between capital gains and dividends, this holder still benefits from the tax deferral held out by the repurchase, but he or she is otherwise indifferent between dividends and repurchases under allocatively efficient pricing.

Results change when we drop the assumption of allocatively efficient market prices. Assume instead that the uptick in the market price in the wake of an OMR announcement causes the stock price to rise above the firm’s intrinsic value. Now the OMR purchases are dilutive—the value of the nonselling holder’s increased proportionate ownership is less than the pro rata cost of the

205. Id.
206. Id.
207. See supra text accompanying note 35.
outflow to the selling shareholders. Given tax rates favoring capital gains, the long-term holder’s preference will follow from a cost-benefit calculation: If the tax saving from the foregone dividend is greater than the cost of dilution, the holder is benefited; if the dilution exceeds the tax benefit, the holder is injured. This cost-benefit reckoning changes under rate parity: If the cost of dilution exceeds the tax benefit of the deferral, the repurchase of overpriced stock clearly injures the holder. The chance of injury increases accordingly.

The move to rate parity therefore complicates the posture of the long-term holder, the holder whose interest arguably should determine management’s choice between dividends and repurchases. All other things being equal, this holder is benefited by repurchases of underpriced stock; repurchases of overpriced stock hold out a potential for injury. Under the tax regime favoring capital gains, assuming a 50-50 chance of over- or underpriced repurchases, the long-term holder’s interest clearly lies with repurchases, due to the tax advantage. Under rate parity, assuming the same 50-50 posture and putting the value of deferral to one side, we arguably get the opposite result. We have a classic even-odds coin flip on which the risk-averse actor declines to stake significant sums absent compensation. The dividend, which carries no risk of injury, now trumps the repurchase. But the picture regains its complication when we put the value of tax deferral back on the table. Now the holder’s choice depends on whether the deferral’s value compensates for the downside risk of repurchase of overvalued stock.

It plausibly can be argued that the real-world odds are stacked in favor of repurchases. Given management’s informational advantage, the stock is likely to be undervalued. If we put the informational advantage together with the tax deferral, the balance presumptively still falls in favor of repurchases. But to stop here, at the level of presumption, is to miss the governance implications of rate parity. Before 2003, the rate differential meant that adverse selection was a theoretical problem without real-world implications. The long-term holder would be hurt only if the OMR brought in significant amounts of overvalued stock. Given that OMR programs tended to cover significantly less than 10% of the stock outstanding and that there is no evidence of significant insider selling activity at OMR firms, there was no cognizable governance problem. Serious discussion of adverse selection problems accordingly has been limited to the RTOs of the late 1980s, which involved large blocks of stock, clear-cut premiums over the market price, and, in many cases, significant insider selling activity.208

With rate parity, adverse selection becomes a more active possibility respecting OMR programs. The presumptive informational advantage does not negate the possibility of dilution due to overpriced repurchases. Managers make only a modest claim when they say they beat the market as they conduct OMRs.209

209. See supra note 162 and accompanying text.
This is because a portion of the value of the information advantage is transferred directly into the pockets of the selling shareholders by the post-announcement price uptick. The advantage remaining is that of a trader in a single stock playing into short-term price volatility. The long-term holder certainly will be glad to benefit from the nickels and dimes the trading generates. But this holder also cares whether management is astute enough to buy only when intrinsic value is greater than market price, viewed from a long-term perspective. Some managers may have that acuity some of the time. But many managers who conducted OMRs in the hot stock market of the later 1990s presumably did not. It bears noting that the financial economic study most supportive of the presumption that management can beat the market—Ikenberry, Lakonishok, and Vermaelen’s finding of a three-year performance advantage of OMR firms over the market as a whole—covers the period 1980–1990.210 Those were the days when OMRs implied restructuring, and firms that restructured successfully saw substantial intermediate-term increases in equity value. Things will look different in other periods. The next generation of empirical studies—studies covering the long-term value implications of OMRs after 1996—are likely to put things in a different posture, due to historically high repurchase prices.

2. Benefiting the Informed Holder at the Expense of Uninformed Holders

Let us return to the question of how the dividend/repurchase decision impacts different groups of shareholders and change assumptions. This time we have three groups—one group has a long-term holding horizon, the second group plans to sell presently, and a third group lacks a fixed time horizon. The OMR announcement is material information for holders in the third group. If the firm will be buying in an overvalued market, the signal is to sell. If the firm will be buying in an undervalued market, the signal is to hold. The announcement poses a choice. The holders either incur the cost of informing themselves as to the stock’s price/value posture or they run the risk of partial expropriation through the trading activity of better-informed investors. If we assume a fixed cost of information acquisition, then the OMR program benefits larger investors. Because they hold larger blocks of stock, the per-share cost of becoming informed is lower.211 One suspects a perception of this structural advantage informs management’s assumption that institutional holders prefer repurchases to dividends.212 Dividends, meanwhile, create no relative advantages within the group of shareholders.213

The point that large shareholders have structural advantages respecting trading decisions is not news. What is new is that under the prior tax regime the

210. See supra note 172 and accompanying text.
211. Brennan & Thakor, supra note 208, at 995.
212. See supra text accompanying note 61.
213. See Baker et al., supra note 38, at 253–54
advantage made no difference for OMR programs because repurchases benefited most shareholders, whether or not well informed, almost all of the time. That assumption no longer is safe. Now that the OMR tax advantage is modest, there arises a cognizable risk of injury to long-term shareholders due to repurchases of overvalued stock. Payout decisions that formerly implicated no tradeoffs now implicate complex risk assessments, at least in theory. Whether they will be treated as such in practice is an open question.

D. SUMMARY

To the extent management can use its informational advantage or trading acuity to beat the market on a day-to-day basis, the case for repurchase over dividend for long-term shareholders is enhanced. The advantage operates only in the short-term context of day-to-day volatility, for at some point the market perceives the repurchase activity and bids up the price. The moment of perception would be sooner and the trading advantage smaller if the securities laws imposed daily reporting duties on OMR firms. Even absent such regulation, the trading advantage holds out no free lunch to the long-term holder, because it does nothing to assure against repurchases in overvalued markets, the possibility of which increases as stock options loom larger in the motivational picture.

V. GOVERNANCE

Economic theory posits irrelevance for payout decisions. In an ideal world in which managers never self-serve and all shareholders are fully informed, the choice between dividends and repurchases implicates neither gain nor loss. But, in the second-best world we inhabit, the decision as to the mode of payout implies cost-benefit tradeoffs.

A number of these cost-benefit factors figured into the historical shift from dividends to repurchases. Tax certainly must be mentioned, but not because managers altruistically shape payout policy to minimize shareholder tax liabilities. Rather, the tax bias favoring repurchases caused actors in the investment community to favor the change, effectively expanding the zone of management discretion. The normative drift to shareholder-value maximization had a similar effect.214 The shareholder-oriented mindset of the 1990s was shaped during the investor revolt of the 1980s against suboptimal reinvestment of marginal dollars by managers. The restructuring battles of the 1980s succeeded in disrupting management’s habit of reflexive investment in poor projects. But shareholders, still wary of a management bias toward reinvestment, welcomed any transfer of cash out of the firm. With payout assured and suboptimal investment avoided, shareholders asked no further questions about the mode of payout chosen. The

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214. Baker & Wurgler, supra note 67, at 1132–47, show statistical evidence of a shift of shareholder preferences away from dividends beginning in 1978. In their explanation, the operative shareholder preference is for value-enhancing reinvestment rather than payout. The discussion here assumes this preference.
door was open for managers to shift a portion of the total payout to repurchases in lockstep with their desire to obscure the costs of their stock option exercises. Regulatory developments also figured into the change. The SEC opened its door to repurchases in 1982 by promulgating the Rule 10b-18 safe harbor for OMRs. Like shareholders, it then stopped asking questions.

How do the costs and benefits of different payout methods compare today? If we put taxation to one side for the moment, the case in favor of repurchases rests on two points. First, the flexibility of OMR programs facilitates the disgorgement of free cash flows that otherwise might be retained suboptimally. Second, firms can beat the market in their own shares and purchase undervalued stock. But the stock option overlay triggers questions about both claimed advantages. Although OMRs are flexible, it must be questioned whether, absent side benefits to management, their availability alone assures payout of free cash flows. If we answer the question in the negative, we get the counterfactual suggestion that the overall payout rate in recent years would have been lower absent stock options.

Similar questions arise for the bargain repurchase assertion. Managers holding stock options have every reason to execute repurchases at advantageous prices. But to the extent that earnings management determines the amount of cash devoted to repurchases from quarter to quarter, there is less reason to assume purchase price acuity. If the quarterly earnings per share calculation signals for repurchases, the OMR program presumably proceeds even in a market that is at a cyclical high point. Stock option economics compound the problem: The dilutive effect of an exercise of stock options increases with the market price. Increased dilution signals more repurchases to protect earnings per share, whether or not the market is overpriced. To be sure, officers executing an OMR program in such a market will still endeavor to trade at times when the price falls to the low end of the current range. But on average, repurchases under such conditions will not both provide an advantage to long-term shareholders and improve the earnings per share.

One point emerges, regardless of how payout policy might have developed in the 1990s absent the stock option bonanza: The shift to repurchases should not be read as a governance success story. Because repurchases held out tax benefits to most shareholders, there was no reason for outside monitors to ask hard questions about flexibility and adverse selection nor to inquire about the motivational effects of stock option valuation on earnings management. With tax-rate parity, the governance system needs to start the questioning process.

Once shareholders and outside commentators have asked these questions, the special dividend emerges as a viable answer. The shareholders of a firm that

215. See Weisbenner, supra note 127, at 16 (showing that a 5% increase in stock options outstanding means a 0.4% increase in the fraction of shares repurchased and that the link is strongest with a rising stock price).

216. Cf. Lease et al., supra note 14, at 2–4, 179–91 (confirming the importance of dividend policy decisions).
diverts its surplus profits into special dividends instead of repurchases get three benefits. First, the shareholders no longer bear an adverse-selection risk with respect to the prices paid for repurchased shares. Second, they get the benefit of transparency with respect to the dilution cost of managers’ stock options. And third, they receive more meaningful reports of earnings per share. But they also incur two costs. First, they lose the benefit of management’s short-term market trading advantage. Second, the tax system returns to the picture, and taxpaying shareholders lose the ability to defer taxes on sums paid out. If the adverse-selection and trading-advantage possibilities cancel each other out, then the matter comes down to a trade-off between transparency and tax deferral. The outcome of this trade-off is unclear, but the point to note is that transparency has a value. Wider appreciation of the costs of equity compensation schemes could beneficially affect boardroom judgments respecting compensation, holding out the possible dollars-and-cents benefit of a decrease in management compensation.

Thus, we return to the corporate governance system with a cost-benefit question on the table. The trade-offs have to be considered case by case. A series of qualitative assessments comes to bear on each firm’s managers, investment opportunities, incentive pay structure, and stock price. Is the governance system constituted so that the issue will be joined?

At present, the answer is probably no: the system will likely let the matter pass. The payout decision lies in the ultimate redoubt of management discretion, at least as a question of corporate law. And, as we have seen, corporations tend in practice to back into their dividend and repurchase decisions. Spare cash for distribution comes to the table by a process of deduction. The business plan, new investments, and liquidity take first priority. The dividend payout comes next, with aversion to present or future dividend cuts constraining the zone of discretion. Cash for OMRs is released at the final step. The deductive sequence leaves the board of directors in the traditional rubber-stamp position. Management has no incentive to institute a review of the basic assumptions, especially because of the convenient linkage between OMRs and stock option value. Nor should we look to outside directors to make disruptive suggestions. Despite the linkage to stock options, not one decision in the sequence falls into the emerging category of subjects reserved for separate examination by independent directors: auditor approval, board nominations, and executive compensation. As to the last, shareholder approval is emerging as the norm for all

218. See supra notes 103–04 and accompanying text.
220. See NYSE Corporate Governance Rule Proposals § 4(a) (Aug. 1, 2002).
221. Id. § 5(a).
equity compensation schemes. Yet the SEC has traditionally blocked shareholder input on dividend and repurchase decisions.

The federal securities laws aid and abet the system by enveloping payout policy in black boxes. OMR program execution implicates ongoing reporting only on an ex-post, quarterly basis. Indeed, prior to 2004, firms were not even required to break out totals, even on an annual basis. Dividends declared and paid have always been public information, of course. But nondisclosure otherwise still tends to be the rule for decisions respecting payout and reinvestment. Warren Buffett comments as follows on management communications respecting dividend and reinvestment decisions:

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\text{Dividend policy is often reported to shareholders, but seldom explained. A company will say something like, "Our goal is to pay out 40\% to 50\% of earnings and to increase dividends at a rate at least equal to the rise in the CPI." And that's it—no analysis will be supplied as to why that particular policy is best for the owners of the business. Yet allocation of capital is crucial to business and investment management.} \]

Buffett's comment is descriptive of practice under the mandatory disclosure system, which has never mandated meaningful disclosure of dividend and reinvestment decisions. A disclosure regime more skeptical of the incentives

\[\text{\textsuperscript{222}} \text{Id. \textsuperscript{223} Id. \textsuperscript{224} See supra note 87. \textsuperscript{225} See id. \textsuperscript{226} Warren E. Buffett, The Essays of Warren Buffett: Lessons for Corporate America, 19 Cardozo L. Rev. 5, 123 (1997). \textsuperscript{227} SEC disclosure requirements pertaining to the payment and declaration of dividends are very general. Regulation S-X requires the registrant to disclose the amount of the dividends for each class of share, 17 C.F.R. \textsuperscript{228} See generally Regulation S-X, 17 C.F.R. \textsuperscript{229} Regulation S-K requires the registrant to disclose cash dividends declared per common share in its selected financial data and permits the disclosure of any other additional items that the registrant believes would enhance an understanding of other trends in its financial condition. 17 C.F.R. }\]
driving payout and reinvestment decisions would require firms to identify the different investment projects adopted and funded in a given period and state the amount invested.\textsuperscript{228} Unfortunately, such a rule would entail a systemic overhaul.

A lesser level of transparency keyed to the mode of payout could be achieved without root-and-branch reform. Here we put investment policy to one side and concentrate on enhanced transparency and responsiveness respecting choice between OMRs and dividends. OMRs, like stock options, can be reviewed by independent directors and sent to the shareholders for annual ratification.\textsuperscript{229} The accompanying proxy statements can set out the record of past repurchases and their correlation with stock option exercises. These added disclosures could move payout policy to a higher place on the board’s agenda, triggering confrontation with attendant cost-benefit questions.

At a minimum, boards should look carefully at the market before their firms buy back stock and should monitor the market while programs are being executed. They also should pay attention to the trading behavior of the officers they monitor. If the officers are selling the firm’s stock, then the firm should not be buying it. And if some officer sales should be put down to benign purposes—for example, sales for the purpose of diversifying an officer’s personal portfolio—then the benign number of sales per period can and should be stated in advance.

\textbf{CONCLUSION}

The traditional dividend puzzle is a theoretical search for a rational explanation for shareholders’ anomalous preference for dividends. It has never been

\begin{footnotesize}
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\item \textsuperscript{228} See Aaron S. Edlin & Joseph E. Stiglitz, \textit{Discouraging Rivals: Managerial Rent-Seeking and Economic Inefficiencies}, 85 Am. Econ. Rev. 1301 (1995).
\item \textsuperscript{229} This is the practice in Hong Kong. See \textit{supra} note 199.
\end{enumerate}
\end{footnotesize}
solved to the satisfaction of the financial economics community. With tax parity under the JGTRRA, we get a new, real-world dividend puzzle posed in the boardrooms of firms with free cash flow. Up to now, boards have avoided confrontation with the cost-benefit questions now posed by the choice between dividends and repurchases, leaving the matter in the black box of management discretion. Passivity seemed plausible, given the tax advantages of repurchases. Now that the JGTRRA has evened the tax balance, this lax governance posture is no longer defensible. Independent directors now must intervene in payout decisions, informing themselves about the costs as well as the benefits of repurchases. Each of the market and timing management incentives should be monitored on an ongoing basis. Transparent financial reports should be insisted on.