Selected Paper No. 57

Do Dividends Really Matter?

Merton H. Miller

Graduate School of Business
The University of Chicago



Merton H. Miller, Leon Carroll Marshall Distinguished Service Professor of Finance in the University of Chicago Graduate School of Business, has been active in the application of economic analysis to a wide variety of management problems in finance. Before joining the Graduate School of Business faculty. Professor Miller had been an economist with the U.S. Treasury Department and with the Board of Governors of the Federal Reserve System, a lecturer at the London School of Economics, and a faculty member of Carnegie Institute of Technology's Graduate School of Industrial Administration. He received the A.B. degree magna cum laude from Harvard and the Ph.D. from Johns Hopkins. He is a former president of the American Finance Association and is a fellow of the Econometric Society. He serves as coeditor of the Journal of Business. Professor Miller has presented these views on dividends recently as part of a seminar on current management issues in Stockholm. Sweden.

I. The Question

There are few aspects of corporate financial policy where the gap between the academics and the practitioners is larger than that of dividend policy. The academic consensus is that dividends really don't matter very much. The market does not, and should not be expected to, pay premium prices for firms adopting what are sometimes called "generous" dividend policies. If anything, generous dividends may actually cause the shares to sell at a discount because of the tax penalties on dividends as opposed to capital gains.

Most practitioners on the other hand, both among corporate officials and investment bankers, still continue to insist that a firm's dividend policy matters a great deal. And they'll cite example after example of companies whose price collapsed after passing a regular dividend; or whose price jumped after announcing a resumption of regular dividends.

My role will be that of a peacemaker trying to reconcile these conflicting views. In particular, I want to try to explain to the practitioners, why, in the face of all this evidence of price gyrations in response to dividend announcements, otherwise sensible academics believe that a firm's dividend policy really doesn't make much difference.

I'll argue that the seeming evidence that dividends do matter-evidence I hope at least some of you believe, so that I'm not just preaching to the choir-is not to be trusted. It's an optical illusion.

An example I often use with my students is a stick in the water. If you use your eyes and look at the stick, it appears bent. But if you feel it with your fingers or if you pull it out of the water-that is, if you think about your observation more deeply-you will realize that the stick is not really bent. It just

looks bent. And similarly with dividends. They don't really affect the value of the shares, but they may seem to if you do not think about your observations more deeply.

II. The Explanation

My explanation of the illusion-why dividends look like they affect value even though, in a deeper sense, they do not-will have two strands, which can be traced back ultimately to two academic journal articles that appeared almost exactly twenty years ago.

One article is devoted explicitly to the subject of dividends and tries to explain why, as a matter of economic theory, no relation between dividends and value should be expected. That is, it explains why the stick does not really bend.

The other deals with what seems to be an entirely unrelated problem, but turns out to hold the essential clue to the other side of the puzzle: why the stick *looks* bent, that is, why dividends look like they matter even though they do not.

The M-M Article

The first article entitled "Dividends, Growth and the Valuation of Shares," is one I wrote jointly with Professor Franco Modigliani (now of the Massachusetts Institute of Technology) for the *Journal of Business* of the University of Chicago. We argued in our article that part of the feeling that there ought to be a dividend effect was caused by an imprecise use of words.

To speak only of a firm's dividend policy is incomplete. It's like the sound of one hand clapping, or a one-sided coin. The money to pay the dividend must come from somewhere. Uses of funds must equal sources of funds. Debits must equal credits. If a firm pays out a dividend (which is a use of funds)

something else has to change in the sources and uses statement.

We argued in our paper that if you hold constant the use represented by the firm's capital budget, that is, its investment spending, then paying out more dividends just means you will have to raise more funds from bank loans or outside flotations of bonds or stocks. A firm's choice of dividend policy, given its investment policy is thus really a choice of financing strategy. Does the firm choose to finance its growth by relying more heavily on external sources of funds (and paying back some of those funds in higher dividends) or by cutting its dividends and relying more heavily on internal funds?

Put this way, it is by no means obvious that the generous dividend/heavy outside financing strategy is always the best one, or vice versa. In fact, when we academics say that dividend policy doesn't matter much, we are really saying only that, given the firm's investment policy (which is what really drives its engine), the choice of dividend/financing policy will have little or no effect on its value. Any value that the stockholders derive from the higher dividends is more or less offset, because they must give outsiders a bigger share of the pie.

If you find yourself resisting this notion, it may be because you skipped over the crucial qualifying phrase, "given the firm's investment policy." You may think of cases in which a firm doing poorly replaced its management, and the new managers promptly announced an increase in the dividend (to do something for the long-suffering stockholders) with the market presumably showing its appreciation by a big jump in the price. But was the price increase caused by the increased dividend? Or was it caused by the presumed change in the investment policies

of the former management-the policies that were acting as a drag on the firm's price? What would have happened to the price if the *old* management had announced the increase in the dividends but also the continuation of its former investment policies, along with a proposal to finance those policies no longer with retained earningsthose earnings now going to the shareholders in bigger dividends-but with the proceeds of new issues of common stock or new bank borrowing?

You may think even in this case shareholders would still prefer the high dividend/high financing strategy. At least they would have cash in their pockets. But remember that if cash is what your shareholders want, they can get it even when you follow the low dividend/low outside financing strategy. They simply sell off part of their holdings. It works in the opposite direction, too. If you adopt the high payout strategy, any investors who want to build up their equity in your firm can do so by reinvesting the unwanted cash in the additional shares you will have to issue. In fact, that presumably is what dividend reinvestment plans are all about.

Personal portfolio adjustments of this kind are not costless, of course, particularly once we allow for taxes. That is why it may pay your firm to adopt and announce a dividend policy, even though in a deeper sense, dividends do not matter. If your firm announces a high payout/high outside financing policy, you may attract a clientele of people or financial institutions preferring that policy, and vice versa if you opt for the low dividend route. To say that dividends do not matter under these conditions is simply to say that one clientele is as good as the other.

In sum, much of the belief that dividends are terribly important is basically a confusion

of the firm's dividend policy with its investment policy. Given the firm's investment policy-and again, I cannot overemphasize how important it is to make that qualification before beginning to appraise the role of dividend policy-the dividend decision can be seen as essentially a decision about financing strategy. You can always pay your stockholders higher dividends while maintaining capital spending, if you are prepared to sell off more of their firm to outsiders.

A neat, almost literal, illustration is provided by a story that appeared in the *Wall* Street *Journal* (March 4, 1982, p. 20) after RCA cut its dividend for the first time since it began payouts in 1937. The *Journal* reporter wrote:

According to John Reidy, analyst at Drexel Burham Lambert, the cut was a sound management decision. He noted that the alternative would have been to consider liquidating some of RCA's assets.

RCA, the *Journal* goes on, "recently put its Hertz Rental car unit up for sale. Analysts said a cut could have been prevented if a buyer had been found."

1 sometimes wonder why RCA didn't just pay out the Hertz shares as a dividend. Perhaps that would have made it all too obvious that for stockholders, a dividend payment is merely putting money in one of your pockets by taking it out of another.

If you still resist the notion that the financing drag or divestiture drag will cancel out the dividend boost, it may be because the phrase "dividend boost" brings to mind another scenario that seems to have nothing to do with the firm's investment or financing policy. In that scenario, a firm suddenly, by luck or skill, generates big increases in earnings and cash flow-so big in fact that it

can afford a substantially more generous dividend payment to the shareholders without any change in its investment budget or any resort to outside financing.

Under those conditions most real world observers would expect the firm's share price to rise, and I would agree. But what is responsible for the higher value? Is it the use of the funds for more generous dividend? Or is it the source of the funds, to wit, the assumed big increase in the current cash flow? Do you really believe the price would always be lower if instead of paying out its windfall as dividends, the firm announced its intention to use the cash for retiring outstanding bank loans'or for buying shares in other companies (or, for that matter, for buying back its own shares)?

But you may say that you know cases where there was no significant increase in current cash flow (or at least none that the market had been told about), and yet the price still jumped up when a dividend boost was announced.

I will agree with you. Prices often change when dividends are announced even when not accompanied by an earnings announcement or forecast. There are even cases where the price followed the dividends despite an earnings move in the opposite direction. The firm announced a decrease in its accounting earnings, but an increase in its dividend, and its share price still rose.

These are the cases, par excellence, of what I called earlier the "dividend optical illusion"-dividends can look as if they matter even when they do not. To understand the source of the illusion we must turn to the second of the two fundamental papers I referred to earlier.

The article in question was entitled "Rational Expectations and the Theory of Price Movements" and was written by John F. Muth, now at Indiana University, and published in *Econometrica*.

Muth's "Rational Expectations" paper has come to be recognized as one of the most important and influential papers written in economics in the twentieth century. In the last ten years, the central notion of the paper, as developed by my colleague Robert Lucas at Chicago, among others, has virtually destroyed the intellectual underpinnings of traditional macroeconomic theory and policy, both of the Keynesian and of the more naive monetarist varieties.

Like many other important ideas in economics, the central notion is basically a simple one, though its development and elaboration can become complicated and subtle. Reduced to its essentials-and I hope economists will pardon me for taking such liberties with the doctrine-the rational expectations approach says that what matters in economics, and especially in policy making in economics, is often not so much what actually happens as the *difference* between what actually happens and what was expected to happen.

Politicians in America relearn the cruel truth of this point again and again during our prolonged presidential election campaigns. Our presidential primary system involves a sequence of trial elections within each political party, leading ultimately to the selection of the party's candidate during its convention.

Had you been a foreigner visiting the United States in March 1980, during the week of the Massachusetts primary, you might have read in the morning paper that George Bush received 60 percent of the votes and Ronald Reagan only 40 percent. As a visitor you could be pardoned for believing that Bush had won and Reagan had lost. But as we know Bush actually lost be-

cause he was expected to get 75 percent of the vote. The fact that he won a plurality of 60 percent is of no consequence; the point is that he did worse than expected, and so he lost.

It is bad enough when a candidate is running for office, but the nightmare gets worse after the election and the hard policy decisions must be made. Then, says the doctrine of rational expectations, only the surprises in the policies will have the effects the policy maker is trying to achieve.

Suppose, for example, that an administration takes office at a time of substantial unemployment in the economy. The administration's economic advisers will tell the policy makers about the so-called Phillips curve-the trade off between inflation and unemployment. The monetarists among the advisers will warn that the trade off can work only in the short run. The Keynesians among them will argue that the trade off will apply longer than the monetarists suspect; but, in any event, in the long run the administration will be dead or out of office if no immediate action is taken.

In the face of this advice an administration may well conclude: We really have no choice but to open the monetary and fiscal spigots a bit and trade some inflation for the benefits of getting the economy going again. But the public knows the kind of advice the administration will be getting, so they anticipate that the spigots will be opened and that prices will rise. That means that when the planned price rise does come, it is no longer a surprise. And if the inflation is not a surprise, the doctrine of rational expectations implies there will be no improvement in employment. In fact, if the administration is not careful, or not lucky, opening the monetary spigots may produce less inflation than the public is expecting. Then the policy produces the worst of both worlds: inflation and

rising unemployment at the same time. Sound familiar?

Similar rational expectations nightmare scenarios can arise in the area that concerns us here-the effects of management's dividend decisions on the value of the firm. As the date for announcing the regular quarterly dividend approaches, the market decides what dividend to expect, based on its estimates of the firm's earnings, investment opportunities, and financing plans, which are in turn based on information the market has about the state of the economy, the industry, the firm's past dividend decisions, the recent decisions of other similar firms, changes in the tax trade offs, and so on.

If the actual announced dividend is just what the market expected, there may be no price movement at all, even if the announced dividend is larger than the previous one. It was expected to be larger and was fully discounted long ago. But if the announced dividend is higher than the market expected, the market will start rethinking its appraisal.

They tell a story about the great diplomat, Prince Metternich, during the prolonged negotiations at the Congress of Vienna which redrew the map of Europe after the Napoleonic Wars. After one particularly difficult session Metternich was notified that the Russian ambassador had just died. And Metternich is reported to have replied, "Ah, what could have been his purpose?"

Now the real world financial markets may not be quite as suspicious as Prince Metternich, but when they see an unexpected increase in the dividend they, too, begin to wonder: What does management mean by that? They answer their question by saying: We can't be sure yet what the firm's earnings really are, but given what we know of the firm's investment opportunities, management is certainly behaving the way we would expect them to behave if they had turned in

better earnings than we had been thinking they would. And, since it is the earnings as sources of funds and not the dividend as one particular use of funds that concern the market, we should expect upward price revisions even though no earnings figure was actually announced-just a dividend payment that was higher than expected.

And similarly in the other direction. We all know cases where a firm cut or passed a dividend unexpectedly, thereby setting off a crash in its price. Protestations by management that all was really well for the long pull and that this was just a way of redeploying cash to more profitable uses were of no avail. The market reasoned thus: They may say the picture is rosy, but talk is cheap; and they are acting as if they had just experienced a drop in their earning power that was far worse than had been expected or that they are letting on.

The following comments in the *Wall Street Journal* (February 18, 1982, p. 36) on the decision by AT&T to hold its payout to \$1.35 per share neatly illustrate this interaction between the market's expectations of earnings and the firm's dividend decisions that give rise to the dividend illusion.

Many analysts had expected an increase of 10 cents or more in the quarterly rate. . . .

Apparently investors were disappointed that the dividend wasn't raised. AT&T was the most active stock . . . yesterday, down \$1.125.

Analyst Steven Chrust of Sanford C. Bernstein and Company said continuing the current dividend rate lends credence to the recent cuts in earnings projections for AT&T.

In sum, unexpected dividend actions in a world of rational expectations provide the better earnings than we had been thinking they would. And, since it is the earnings as sources of funds and not the dividend as one particular use of funds that concern the market, we should expect upward price revisions even though no earnings figure was actually announced-just a dividend payment that was higher than expected.

And similarly in the other direction. We all know cases where a firm cut or passed a dividend unexpectedly, thereby setting off a crash in its price. Protestations by management that all was really well for the long pull and that this was just a way of redeploying cash to more profitable uses were of no avail. The market reasoned thus: They may say the picture is rosy, but talk is cheap; and they are acting as if they had just experienced a drop in their earning power that was far worse than had been expected or that they are letting on.

The following comments in the Wall Street *Journal* (February 18, 1982, p. 36) on the decision by AT&T to hold its payout to \$1.35 per share neatly illustrate this interaction between the market's expectations of earnings and the firm's dividend decisions that give rise to the dividend illusion.

Many analysts had expected an increase of 10 cents or more in the quarterly rate. . . .

Apparently investors were disappointed that the dividend wasn't raised. AT&T was the most active stock . . . yesterday, down \$1.125.

Analyst Steven Chrust of Sanford C. Bernstein and Company said continuing the current dividend rate lends credence to the recent cuts in earnings projections for AT&T.

In sum, unexpected dividend actions in a world of rational expectations provide the

market with clues about *unexpected* changes in earnings. These in turn trigger the price movements that look like-but only *look* like-responses to the dividends themselves.

I wish I could safely conclude on this note of harmony in which the academic view that dividends do not matter, and the practitioners' view that they matter very much, are nicely reconciled. Both views are correct in their own ways. The academic is thinking of the *expected* dividend; the practitioner, of the *unexpected*.

But I am afraid I have one more piece of bad news to deliver to the practitioners: the unexpected can become expected. Some of you may be wondering: If the market is going to read an estimate of my earnings into my dividend announcements, why not just pay out more than is expected, even if it means cutting back on profitable investments? That will run the price up in the short run and benefit those shareholders who are selling out in this period. It will also get me off the hook with all those pension fund managers who keep threatening dump the shares if the price is low at the end of the quarter when their performance is evaluated. True, passing up investment opportunities to prop dividends and prices will hurt those not selling out, but the immediate benefits of the price rise or prevented fall may well be larger than the loss to the stayers over the long run.

Unfortunately (or perhaps fortunately), this tactic cannot be counted on to work in a world of rational expectations. The market will say: We know how managements think. They'll figure that we think they are tying the dividend to earnings in the same old way; and they'll raise the dividend above what we expect to create the impression of an unexpectedly large increase in earnings. But we know they'll be tempted to do that, and for that reason we'll expect an even larger divi-

dend than before at any given level of earnings.

And now you're really in trouble, just like the policy maker in the inflation case. You dare not raise the dividend even further in hopes of generating a surprise; the cost in terms of foregone future earnings would be too great. And you dare not cut back to a more sensible dividend because the market is already assuming that you'll pay a bigger dividend than you can really afford in the hopes of getting the price up, and so will interpret the disappointingly low dividend as a sign of bad news.

So you're stuck. You've lost your ability to conduct an independent dividend policy. You have to deliver the dividend that the market expects you to deliver. If you don't deliver, you'll have to pay for it either in price falls (if you deliver too little as did AT&T) or lost opportunities and unnecessary financing expense (if you pump out too much).

III. Conclusion

I hate to end on such a negative note, particularly these days when there's so little anywhere to be cheerful about. So I will recall the positive side for practitioners in the academic view of the dividend problem.

Dividend policy may not be an effective management tool and may not even be completely under your control in a world of rational expectations, but there *are* things that do matter and over which you *do* have more control. I refer, of course, to the firm's investment decisions and to the engineering, production, personnel, marketing, and research decisions that underlie them. These decisions are in what economists call the "real" side of the business, and they generate the firm's current and future cash flows.

And that, you'll find, is what really matters.