Pay Now or Pay Later: An Experiential Learning Exercise in Determining a Firm's Dividend Payout

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To Pay or Not to Pay: An Experiential Learning Exercise in Determining a Firm's Dividend Payout

Abstract

We develop a classroom exercise simulating the cash dividend payout decision. The benefits to business students include (*i*) a thorough investigation of the complex payout issues managers must consider when determining dividend policy, and (*ii*) the opportunity to address the long-term trend of declining dividend payouts. The exercise provides business instructors with several options for incorporating the dividend payout decision-making process into their classroom styles; among these are (*i*) experiential learning through peer group interaction and role-playing, and (*ii*) the opportunity to conduct a financial analysis of a firm that has recently initiated a regular dividend payout.

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I. Introduction

In this paper, we offer a learning exercise to address two timely issues. The first issue concerns the firm's choice of dividend payout (cash dividends ÷ operating earnings). The relevance of this issue stems from low dividend payouts that many agree should be addressed by managers. Bernstein (2005) is among those who question the correctness of today's low cash dividend payouts especially in light of the fact that dividends are now taxed at the same 15 percent rate as capital gains. He notes that the 50 percent average dividend yield on the S&P 500 Index from 1950 to 1989 is well above the 30 percent average that has prevailed since the bull market of the 1990s. He concludes that the ". . . demand for dividends is approximately nil. This phenomenon makes little sense."

The second issue concerns student engagement through active and collaborative learning. An engaged student is one who combines knowledge with the ability to apply this knowledge within an organizational and team setting so that unquantifiable decision-making processes can be better experienced. The importance of our second issue can be seen from the recent calls for increased student engagement in business school curricula. Burbridge (2005) notes that the National Survey of Student Engagement, a joint venture of the Carnegie Foundation and the Pew Charitable Trust, identifies "active and collaborative learning" as a practice that enhances student engagement in business education. Burbridge writes:

> "Active and collaborative learning results in students who can apply the knowledge they have acquired. Collaborative learning results in students with greater teamwork skills."

The need to engage students can be seen from the fact that applications to *BusinessWeek's* top 30 MBA programs dropped by almost 30% in 2005. Merritt (2005) writes that several of these elite programs have seen declines as high as 50%. Bennis and O'Toole (2005) note that such declines are due to business schools ". . . graduating students who are ill-equipped to wrangle with complex, unquantifiable issues — in other words, the stuff of management."

To address the above two issues, we design a class exercise on dividend payout policy to engage students in a manner where unquantifiable issues can be experienced. The exercise is based on the recognized pedagogical principle that students learn 90 percent when they "say and do" compared to 10 percent of what they "read" and 20 percent of what they "hear." Our dividend payout exercise challenges students to participate in the collaborative and cooperative aspects of team learning (D. Johnson and R. Johnson, 1975; Keaton, 1976; Bouton and Garth, 1983;

Michaelsen, 1994; McKeachie, 1994) through an experiential simulation of the payout decision-making process. Students are given the opportunity to debate the many relevant factors used when making dividend policy choices. By involvement in the payout decision-making process through role-playing (as a member of a consulting team or of a Board of directors), students can begin to experience how the payout choice is made in practice. This will lead to an increased appreciation of the complex factors faced by managers who are responsible for determining their firm's dividend policy.

The remainder of our paper is organized as follows. In Section II we provide a deeper background on the payout literature, focusing on the important relationship between dividend payout and firm value. We also discuss the decline in dividend payouts in the U.S. and frame this issue as an appropriate topic for consideration by the next generation of managers in MBA and other business school programs. In Section III, we present our class exercise on the payout decision-making process (including an alternative approach for those wanting a more rigorous payout exercise). The appendices supply resources on the dividend payout exercise including the actual tasks and supplementary materials with questions and solutions. In Section IV, we offer concluding comments.

II. Literature Review

While a firm's cash dividend payout can be defined as the percentage of available cash flows paid to shareholders as dividends, in a more general sense a firm's payout can take other forms such as cash spent on repurchasing shares or on mergers and acquisitions. The latter two forms of payout can at times be the favored method of payout. For example, by the mid 1990s, repurchases had become the preferred method of payout among firms initiating cash distributions to their equityholders. Allen and Michaely (2002) note that in 1999 corporations spent over $400 billion in liquidating dividends on mergers and acquisitions. This was more than the $350 billion in cash spent on dividends and repurchases together. The above specifics suggest firms have become less inclined to dispense cash through dividends compared to other means.

A. Different Views on the Impact of Payouts

The theoretical understanding of payout is often traced to Modigliani and Miller (MM 1961), who developed a payout model for a world without imperfections or frictions (such as taxes, asymmetric information, incomplete contracts, institutional constraints, and transaction costs). While their model can encompass both dividends and repurchases, MM focus on dividend payout. Given their frictionless world, MM show that a firm's cash dividend payout is irrelevant in determining firm value. Over the last 45 years, many theorists have voiced disagreement with the MM conclusion that payout does not matter. The disagreement surrounding the importance of the payout cause two major questions to surface. First, what relevant factors should managers consider when deciding their firm's payout? Second, to what extent (if any) can managers influence firm value through their choice of payout?

Answers to the above two questions concerning payout policy are discussed in most financial management textbooks (e.g., Emery and Finnerty, 2003; Ross, Westerfield, and Jordan, 2003). In regards to the first question, factors offered as influencing the payout by a firm include not only those factors associated with imperfections (such as taxes and transaction costs), but also other factors such as investment opportunities, liquidity and profitability, stability of earnings, access to external equity markets, and corporate control. In regards to the second question, we can identify two views that argue the payout choice can affect firm value. These views are the "pro-dividend" view and the "con-dividend" view. These two perspectives, along with a third (the "neutralist" view), are described below.

First, "pro-dividend" proponents stress that higher payouts increase firm value. They argue that risk-averse investors perceive a larger cash distribution from earnings is safer compared to potential future capital gains. There is evidence that higher payouts can increase firm value by reducing firm risk (e.g., Bajaj and Vijh, 1990, Dyl and Weigand, 1998, and Grullon, Michaely and Swaminathan, 2002). Besides the risk argument, other pro-dividend arguments relate the desire for larger payouts with consumption needs (DeAngelo, 1991), institutional tax preferences (Han, Lee, and Suk, 1999) or even psychological factors (Shefrin and Statman, 1984). One of the most popular arguments in favor of dividends is based in asymmetric information where management insiders have superior knowledge compared to outsiders. This argument holds that dividend increases (including initial dividend announcements) signal positive news by managers about future earnings and cash flows. This signaling view has empirical support (Healy and Palepu, 1988; Nissim and Ziv, 2001). Healy and Palepu found that earnings increased, on average, about 164 percent for the four years following dividend increases. Furthermore, the mean abnormal stock return was approximately four percent at the time of the announcement.

Second, "con-dividend" advocates hold views opposite those of "pro-dividend" proponents as they contend that lower payouts increase firm value. One compelling argument put forth by the "con-dividend" camp is that individuals are taxed on dividends but are not taxed on capital gains unless shares are sold (this tax disparity can be ameliorated for retirement accounts and mutual fund investing). Another argument favoring a low payout is premised on the belief that if more cash is paid out then more funds would have to be raised externally. This is costly, as it is more expensive to raise equity from the external capital markets than from internally-generated equity (Myers, 1984). This latter notion is supported as firms in need of funds for capital budgeting purposes typically have low payouts (Deshmukh, 2003). Finally, "con-dividend" proponents hold that cash payouts induce brokerage costs for shareholders who choose to reinvest their payments. This will have a further negative impact on firm value.

Third, "neutralists" (Black and Scholes, 1974; Miller and Scholes, 1978) agree with the MM general conclusion about the irrelevance of payout but without assuming frictions. Even if frictions exist, the payout policy can be irrelevant because investors have a wide range of preferences and whatever payout policy is chosen will attract and satisfy some clientele. If clienteles are equally satisfied (for whatever reasons), then it is possible that firm value will not be changed when the payout is changed. Michaely (1991) and Han and Khaksari (1996) are among those who offer empirical evidence supporting the neutralist viewpoint. They conclude investors are indifferent as to how the firm distributes its income. This evidence suggests a change in the amount of dividends and/or a change in payout policy will have no influence on firm value.

B. Payouts in Practice

In practice, firms usually "smooth" their dividend payout, thus immunizing shareholders from the volatility of underlying earnings and providing a steady source of income. A mathematical model developed by Lintner (1956) posits that a smooth dividend payout is a function of both the firm's current earnings and the previous year's cash paid (which in turn depends on prior earnings). Lintner's model suggests that dividend changes provide markets with signals regarding the sustainability of past and current earnings, and possibly future earnings as well.

Under a smooth policy, a firm tries to maintain a long-run target payout ratio with increases in dividends only following a positive shift in a firm's long-run earnings. The firm must be confident that the increase in earnings is sustainable before bumping up the level of dividends to maintain the target payout ratio. For example, consider a firm paying $1 dividend per share when sustained earnings are $2 per share; this leaves $1 per share as retained earnings useable for other financial strategy purposes. To maintain a payout ratio of 0.5 when sustained earnings increase to $3 per share, the company would have to bump up dividends to $1.5 per share. If the firm believes it still only needs $1 per share for other purposes, then it could increase its DPS to $2, resulting in an increase in the payout ratio from 0.5 to about 0.67 ($2 / $3 $\approx$0.67). In the latter case, the firm not only chooses to increase its dividend but also increase its payout ratio.

A second familiar payout policy (rooted in the pecking order theory) is the passive residual policy. This theory posits that payout policy need not focus on establishing a constant payout. Advocates of this theory argue that payout is a passive or inactive variable such that firms only distribute cash after all projects with positive NPVs are financed. The cash distributed each year can vary based on the firm's needs. A passive policy can be incorporated within a smooth policy because a smooth payout can be set based on expected long-term leftover funds (not needed for positive NPV projects but still constant).

A passive residual policy displays the following characteristics. First, this policy considers capital budgeting needs before determining any cash payment (or change in payment). Second, it prefers internal financing for projects because of the costliness of external financing. Third, if additional funds are needed after using all available internal funds, a passive residual policy recommends issuing debt (followed by preferred stock) before common stock. Finally, in lieu of paying out excess cash flows, it considers using the cash to either buy back stock or pay off debt with the latter helping to establish financial slack.

Besides choosing either a smooth or passive policy (or a combination of both), there are two other forms of dividends that can be considered for special situations. First, firms can pay out "extra" dividends after an unusually good year or after an extraordinary gain from selling off assets or from an unusual buildup of cash. Second, for firms in bankruptcy or reorganization, liquidating dividends may be paid out if excess cash remains after creditors are paid.

In practice, managers avoid decreasing or omitting the firm's regular dividend at all costs, as markets interpret such actions as severely negative news about the firm's prospects. After controlling for the change in yield, Michaely, Thaler, and Womack (1995) discovered the announcement of an omission had a larger impact on prices than the announcement of an initiation. Using a sample of dividend changes of at least 10%, Grullon, Michaely, and Swaminathan (2002) found that the average abnormal return to dividend increases was 1.34% (median of 0.95%) while the average abnormal return to dividend decreases was −3.71% (median of −2.05%).

C. The Decline in Dividends

For today's adult investor in the U.S., the bull market of the 1990s conjures up images of a golden era where outsized stock returns were earned by anyone with an internet connection and an online brokerage account. When this era of large capital gains ended in 2000, the issue of low dividends came to the forefront for both portfolio managers and corporate executives. This is because low dividends in themselves could not compensate investors who now had little (or negative) capital gains. Not only did dividends decline in terms of dividend payout and yield, but Fama and French (2001) note that the proportion of publicly-traded firms paying dividends had fallen to 20.8% by the year 2000 (in contrast to 66.5% about twenty years previously). Below we discuss the dividend decline while also documenting that dividends have been waning for as long as two centuries.

Siegel (2002a) points out that the dividend yield (annual dividend ÷ current price) on U.S. stocks averaged 6.4% from 1802-1870 with dividends accounting for 90% of the total returns earned by investors during this period. From 1871-1925, the average dividend yield of 5.2% represented over 70% of investors' total returns, and from 1926-2001, the average yield of 4.1% contributed to 40% of the returns. If we analyze the recent subperiod 1982-2001, we find that the average yield dipped to 2.9%, which comprised just 20% of investors' total returns. The Federal Reserve Bank of New York reported that the April 2005 dividend yield on the S&P 500 index stood at about 2%, almost double its all-time low of 1.2% from the summer of 2000, but still far below its long-term historical average. The trends in dividend yields and total returns are summarized in the figure below, where we see that market participants have gradually traded off more certain dividend payments for the chance of greater total returns from large capital gains.

Figure One

Years	Dividend Yield	Capital Gains	Total Returns
1802-1870	6.4%	0.7%	7.1%
1871-1925	5.2%	2.2%	7.4%
1926-2001	4.1%	6.2%	10.3%
1982-2001	2.9%	11.6%	14.5%

The decline in dividend yields seen in Figure One came to a head in the 1990s as stock prices skyrocketed and managers put less and less emphasis on regular cash dividend payouts. Although the reasons for this emphasis may be complicated by many factors including the propensity to pay out cash through repurchases and mergers, it appears that many corporate executives and portfolio managers came to characterize dividends as a quaint practice more appropriate for the slow steady growth and tangible assets associated with a U.S. economy based in manufacturing and heavy industry. For a knowledge-based economy, grounded in intangible assets and intellectual capital and propelled by the large productivity gains made possible by technological innovation, decision-makers could argue that paying out dividends squandered valuable cash needed to fuel the double-digit growth possible in the "New Economy" of the 1990s. Without investors and portfolio managers demanding cash payouts such an argument held sway, and executives of firms already paying dividends allocated less of their operating cash flows towards dividend payments to shareholders. Moreover, firms like Microsoft, Intel, Cisco and Oracle eschewed any dividend payments altogether, fearful of losing their luster as New Economy leaders. Two of these firms, Microsoft and Intel, demonstrated that they were capable of changing — by summer 2005 these former high-flying tech vanguards sported dividend yields of around 1.25%. These yields are identical to other blue-chip firms such as IBM, Home Depot, Hewlett Packard and Wal-Mart.

The bursting of the stock market bubble in 2000 served as a warning to investors to become more aware of the safety cushion provided by high dividend payouts. Without this cushion, the poor capital gains component of investor portfolio returns during the early years of the 21st century contrasted even more starkly with the strong capital gains of the 1990s. It can be argued that the widespread problem of accounting malfeasance during the 1990s–2000s was made possible by the lack of the dividend cushion. This is because regular cash payouts to shareholders would have made it harder for firms to fictionalize earnings not backed up by tangible cash flows (e.g., Easterbrook, 1984, Jensen, 1986, and Siegel, 2002b).

Even without the bursting of the stock market bubble that exposed the risk of stocks that pay low dividends, one can argue that dividends should be even more important today. This is because creating shareholder value has become an increasingly popular management theme in the U.S., bolstered both by the focus given to this topic in business schools as well as the plethora of consulting firms eager to take firms through what is essentially a value "makeover" (e.g., Stern Stewart's Economic Value Added approach to corporate financial management). A valuation model based on discounted dividends suggests one sure way of creating shareholder value is to increase dividends.

Ultimately, a firm committed to creating shareholder value should explicitly consider the achievable returns it plans to deliver to shareholders, and the breakdown of these returns between dividends and capital gains. As firms incorporate this perspective into their strategic plans, it is appropriate to consider the impact of dividends on shareholder returns and the effect of dividends on the credibility of reported earnings.

III. The Class Exercise

Our dividend exercise can be tailored to fit into the typical class time slots of either 50 minutes or 75 minutes. We have found that it works nicely with class sizes of 15 to 25 students. For larger class sizes, the exercise can be repeated twice or the three teams (described below) can designate the students who will represent their team in the actual exercise. Prior to actually participating in our class exercise on dividend policy decision-making, we suggest that instructors do the following:

- have students study assigned textbook readings and any supplied materials accompanying lecture materials;

- hand out the assigned task given in the first three appendices while providing needed instructions (see ground rules given below);

- arrange team meetings using class time if necessary (and encouraging chat room meetings if applicable);

- present the supplementary materials (Appendices 4-8, which provide the opportunity to conduct a financial analysis on Microsoft before and after their dividend initiation) if a more rigorous application is desired; and

- consider handing out the literature review portion of this exercise to provide additional in-depth background for students.

A. Three Teams and Three Tasks

The case discussion can be assigned one of two ways. Instructors who prefer a shorter and more direct method can focus on the material in Appendices 1–3. Instructors who prefer that students conduct a financial analysis of a specific firm can explore the materials in Appendices 4–8, which provides financial data for Microsoft Corporation for several years preceding and following their dividend initiation.

In our exercise, students are assigned to one of three teams. One team defends the "pro-dividend" side of the issue (see Appendix 1 for their task), while another team advocates the "con-dividend" viewpoint (see Appendix 2 for their task). Members assigned to the first two tasks are consultants. Consultants are assumed to have academic and/or practical experience in terms of financial management decision-making. The third and final team makes up the Board of Directors (see Appendix 3 for their task). Students forming the Board of Directors will render a final decision as to whether there will be a change in the firm's dividend policy. To challenge the competitive spirit of those arguing the "pro" and "con" sides, we instruct Board members to consider the quality of the arguments presented by the "pro" and "con" sides when making their decision.

By working in teams where students are assigned specific roles, we utilize an experiential method that stresses cooperative and collaborative learning through peer group interaction and role-playing (Coleman, 1948; Collier, 1983; Meyers and Jones, 1993; Michaelsen, Watson and Black, 1989; McKeachie, 1994). To achieve outcomes related to the exercise's goal of student engagement, we encourage adherence to the practices, principles, and techniques related to group activities (Bouton and Gartch, 1983; Fiechtner and Davis, 1985; Abelson and Babcock, 1986; Katzenback and Smith, 1993; Robbins and Finley, 1995). For example, Katzenback and Smith suggest that instructors adhere to the following:

- require all members to contribute equivalent amounts of work so that a sense of mutual accountability is achieved;
- exploit the power of positive feedback, recognition, and reward; and,

- keep teams small enough so the members can communicate openly with others and understand their roles and the skills required to fulfill these roles.

In regards to the last suggestion, we have found the team sizes of about six work the best.

Using the shortened form of our exercise (which includes only the first three appendices) has yielded satisfactory results and positive feedback over the years. This form provides some advantages including the fact the exercise can be accomplished in a shorter period of time for instructors constrained by time. With the firm's industry remaining unspecified for the shortened form, there is no inherent advantage given to either team through looking at industry norms that could dictate what payout might be optimal. While lack of such particulars has some advantages, it does not provide students with an opportunity to study an actual firm with real data.

For instructors who want a more rigorous exercise, we supply real data in the lengthened form of our exercise by looking at a firm (Microsoft Corporation) that has recently initiated regular dividend payments. The longer case option involves assigning the materials found in Appendices 4-8. These appendices supply students with a variety of possible activities and contain a sample of assignments and solutions that include the basic value creation metrics such as NOPAT, EVA, free cash flow, and return on invested capital (ROIC) and a flow chart of an expanded DuPont analysis (Ockree and Hull, 2005). Subtle points from the value creation analysis include noticing that Microsoft's buildup of cash counts as an increase in operating capital, which causes their free cash flow and ROIC to decline over time, even though their annual NOPAT and EVA are consistent from 2001-2004. The flow chart (found in Appendix 8) depicts how return on equity, ROE, is influenced by margin management, asset management, and debt management. As seen in the flow chart, Microsoft's ROE (and thus earnings available for cash dividend distribution) has been influenced negatively over time by margin management through increased costs.

B. Suggested Ground Rules when Conducting the Exercise

In general, we have found that students do a good job of conducting the exercise on their own and do not necessarily need a lot of input from the instructor. However, a little structure is advisable, so we offer six ground rules that we have found useful when conducting the exercise.

First, no one person is allowed to monopolize the exercise as the team's major spokesperson. We encourage teams to delegate tasks to individuals with tasks based on points of interest identified in the team meeting. For example, one member may be in charge of presenting an argument for increasing the payout that involves materials displayed on an overhead or computer projector.

Second, on the day of the actual exercise, students are seated at the front of the class where chairs are pre-arranged. The Board members are seated in the middle and are flanked on the two sides by the "pro" and "con" team participants. If the class size is large (more than six members in a group), members who are not initially involved can remain in their seats and enter the activity later. Since teams meet prior to the actual debate, participants know beforehand whether or not they are to initially represent their team. If the classroom is small, the "pro" and "con" teams can remain in class seats, but we require that they be seated on opposite sides of the room facing the board members, who alone are seated in the front of the classroom.

Third, we allow one five minute "time-out" per team with the instructor moderating the time-outs. From our experience in conducting the exercise, we find that the average exercise has at least one time-out. Time-outs can be used during the exercise for various reasons. For example, we have discovered that a good reason for a time-out, for either the "pro" or "con" team, occurs when one team feels it is having difficulty responding to the other team. For the Board team, a good spot for a time-out is when a Board member feels there is a need to consult among themselves to survey what questions still need to be asked. For larger class sizes with more than six members on a team, we have found that a time-out is an ideal time for substitutes to either enter the class exercise or to relay messages to the team members currently involved in the debate. If the instructor so chooses, (s)he can be used as an advisor to any team desiring advice during the time-out. We have also found that this allows the instructor to become involved as a "coach" to encourage a team that may be struggling.

Fourth, formal rules of a debate are not required. For example, if the Board gives one side the "floor", there is not necessarily any pre-assigned time limits that are imposed although the instructor should remain mindful of the total time assigned for the exercise, and encourage teams to make their points briefly and concisely. Also, participants may ask questions in the course of the debate. The Chair of the Board is charged with making sure that the "pro" and "con" sides each get a fair chance to present their arguments. We recommend that a student, elected by the team members, serve as Chair. However, an outside person with executive experience (or a business faculty member) can be brought in to be Chair. Although we give freedom to the Chair in conducting the meeting, all Board members are expected to take an active role in asking questions.

Fifth, when the debate is over, the Chair asks members of the "pro" and "con" sides to leave the classroom. While the Board meets in private to deliberate, we have noticed that the debate continues outside the classroom. We have also observed considerable student concern about what the final Board decision will be. This reflects the competitiveness that students have experienced from their participation in the exercise. Because students representing the "pro" and "con" sides are waiting outside the classroom, we recommend limiting the Board's deliberation to about five minutes (as sometimes we have found Board members will go much longer). The deliberation should include expressing opinions by members as to which side presented more convincing arguments. If a definitive consensus cannot be reached in the discussion, then we instruct the Board to reach a decision through voting. If a formal vote is needed, we suggest that each Board member's vote counts equally with a simple majority prevailing. To prevent a deadlock, it is best to have an uneven number of Board members or to have the Chair determine the outcome if there is a tie. After the decision (about whether or not a change in payout will occur) is reached, the "pro" and "con" participants are asked to return to the classroom to hear the decision. When the "pro" and "con" sides return to the classroom, the Board announces its decision. The instructor asks the Board to justify its decision briefly pointing out the role each side played in its decision process.

Sixth, as indicated by reading the first three appendices, we require each participant to turn in a one page summary of the salient points describing their fundamental role in the exercise. We do this for several reasons. First, the written summary can help the instructor assess the student's performance in the exercise. Second, it serves (along with any other notes students may bring to class on the day of the exercise) as an aid for students when presenting their arguments. Third, it serves as a written document that can be used by students when studying for an exam as we include an essay question on the exam about the class exercise.

After presenting the general instructions including the ground rules, the instructor meets separately with each team to answer individual questions about the assigned task and give further team-specific counsel. These separate meetings can take place during class time with the instructor making the rounds to visit with each team as they are going over their task and making individual assignments. The instructor can also arrange to meet outside class time with teams or representatives of teams.

C. Student Research Possibilities

Instructors can require advanced students (taking upper level finance or MBA courses) to perform research supplementing textbook and lecture materials on the payout debate. Appendices 4–8 can also be used for this purpose. Additionally, scholarly journal articles and the literature review contained in this exercise can be assigned by instructors who want to challenge more advanced students. Finance journals are rich in articles related to the theoretical arguments and empirical evidence about payout issues (Gordon, 1959; Bhattacharya, 1979; Litzenberger and Ramaswamy, 1982; Miller, 1986; Brennan and Thakor, 1990; Smith and Watts, 1992; Jensen and Johnson, 1995; Dyl and Weigand, 1998; Allen and Michaely, 2002; Stulz, H. DeAngelo, and L. DeAngelo, 2005) with textbooks having their own list of references on dividend policy. To further enhance student preparation for participation in the exercise, instructors can encourage the use of spreadsheet and/or program versions of the various payout models.

IV. Concluding Comments

In designing our dividend payout exercise presented in this paper, we were motivated by the desire to help bridge the gap between dividend theory, as traditionally taught in finance courses, and the experiential knowledge that is needed to make sound dividend decisions. In the eight years that we have conducted this exercise, we have experienced success as students in both undergraduate and graduate level courses have indicated that class materials (on payout policy) come to life when experienced as part a team exercise.

To assess student satisfaction (especially when first conducting the exercise), we suggest that formal student feedback be gathered so that the exercise can be enriched and tailored to meet the needs of a particular type of student. To help improve the peer learning process, students should be asked to comment on other team members. For example, we think information on the following attributes (on a scale of one to five) can be important in any evaluative instrument an instructor might choose to use: attendance and participation at team meetings; completion of delegated team tasks; respect for others' opinions; interest and commitment; and, contribution in terms of competencies and creativity. Alternately, students can also be asked to anonymously assess their peers by simply stating who participated effectively and who did not participate effectively. They can also be required to evaluate their own performance as effective or ineffective. Finally, students can be asked to write a paragraph or two on what they have learned as team members, and to specify what problems they have encountered in participating as a team member.

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Appendix 1. Class Exercise Hand-Out to Be Given to Team One

Task One for Taskpro Consultants

INSTRUCTIONS: There are three "tasks": Task One, Task Two, and Task Three. You have been assigned Task One. You are to discuss your task with classmates who have also been assigned Task One. Details concerning your task are given below.

You are a consultant for Taskpro, Inc., which is a company that provides specialists to help firms make financial management decisions. Taskpro has just been hired by Divitable, Inc. to help Divitable determine if it should increase its payout. As an expert in the area of dividend policy, you will be on the team of consultants formed by Taskpro to advise Divitable about its payout policy. You are aware that another firm, Taskcon, Inc., has also been hired by Divitable to argue against Divitable increasing its payout.

Divitable produces a unique array of products making it difficult to identify its specific industry or any major competitors. Divitable has total assets of $20 billion and its stock is traded on NASDAQ. Members of the Conaby family are major shareholders of Divitable and control 20 percent of the voting shares of the company. The elderly Conaby is founder of the firm and Chair of the Board. The Conaby family collectively exercises a considerable influence on decision-making.

Divitable has recently been paying out about twenty percent of its earnings mostly as cash dividends. The current position held by some key executives of Divitable is that the firm can increase its value by increasing dividends. It is expected that you will give management a series of arguments for why increasing its cash dividend payout is the correct path to follow. As an expert, you should be prepared to report on the theoretical and practical findings of prior research supporting an increase in payout. As a precaution (in case you are asked), you feel that you should come up with a plan of action that specifies a dividend payout ratio that can be optimally issued under the assumption that the Divitable expects no major setbacks in earnings. The plan you submit can only be based on general assumptions because you (at least at this point) have not been given insider details about Divitable's expected future earning prospects. Any plan should take into account that Divitable does not desire to pay out cash through any means other than dividends (eliminating cash payouts related to buybacks or merger or extra dividends). Divitable also does not aspire to use stock dividends nor are they expected to undergo a stock split in the near future.

You have been informed that you will present your professional opinions and conclusions to the Board of Directors at the upcoming Board meeting. You can expect to be asked questions by other participants at the Board meeting. When you appear before the Board, you are to have a one page summary of your arguments and findings that support an increase in dividends. To supplement your one page summary, you are allowed to bring other notes with you to the Board meeting.

As a consultant, all correspondence and opinions are confidential. You are not to discuss your findings with anyone other than the consultants in your firm, Taskpro. Finally, prior to the meeting, you will meet with your fellow consultants to share your opinions, assign individual duties, and formulate a general plan of action.

<u>Appendix 2.</u> Class Exercise Hand-Out to Be Given to Team Two

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Task Two for Taskcon Consultants

INSTRUCTIONS: There are three "tasks": Task One, Task Two, and Task Three. You have been assigned Task Two. You are to discuss your task with classmates who also have been assigned Task Two. Details of your task are given below.

You are employed as a consultant for Taskcon, Inc., which is a company that provides consultants to advise firms on financial management decision-making. Taskcon has recently been hired by Divitable Inc., to supply arguments against increasing Divitable's dividend payout. Because of your past experience in dividend policy, you have been assigned to the team that will advise Divitable against the pitfalls of paying out too much dividends. Although you are not privy to inside information on Divitable, you do know that it produces a unique array of products making it hard to identify its specific industry or any major competitors. You also know that the Conaby family controls 20 percent of the voting shares of Divitable, which is a large-sized company by NASDAQ standards having $20 billion in total assets. You rightfully suspect that the Conaby family exercises a substantial influence when Divitable makes policy decisions.

For recent years, Divitable has been paying out about twenty percent of its earnings mostly as cash dividends. The elderly Conaby, who is the Board's Chair, has informed you that a team of specialists from Taskpro, Inc., will be at the Board meeting and that you will have to rebut their advocacy of increasing the cash dividend payout. You are expected to give inside management viable reasons for why increasing the payout is <u>not</u> the most expedient path to follow. In essence, you are a "devil's advocate" who is to argue against Divitable increasing its payout. This implies that you will be prepared to oppose any plan of action given at the Board meeting to increase the payout. It also means that it would be helpful if you are aware of prior theoretical research and empirical findings that suggest increasing payout can cause a negative market reaction. Because you are not privy to inside information about Divitable's future prospects, your comments and suggestions concerning the disadvantages of paying dividends will only be general in nature. However, you have heard that Divitable does not desire to pay out cash through means other than dividends (eliminating cash payouts related to buybacks or merger or extra dividends). You have also heard that Divitable does not anticipate using stock dividends or undergoing a stock split in the near future.

You will present in person (with other consultants from Taskcon) your arguments to the Board of Directors. When you appear before the Board, you are to have a one page summary that condenses your arguments and viewpoints. To supplement your one page summary when presenting and defending your viewpoints, you are allowed to bring other notes with you to the Board meeting.

Remember, that as a consultant all correspondence and opinions are confidential. You are not to discuss your task and recommendations with anyone other than consultants in your firm. To do otherwise is to jeopardize your firm's integrity and your own livelihood. Prior to the meeting, you will meet with other Taskcon consultants assigned to the case. At this meeting you can assign tasks so your team can present (at the upcoming Board meeting) views that synthesize your team's collective wisdom and insight about the negative consequences of increasing the dividend payout.

Appendix 3. Class Exercise Hand-Out to Be Given to Team Three

Task Three for Board of Directors

INSTRUCTIONS: There are three "tasks": Task One, Task Two, and Task Three. You have been assigned Task Three. You are to discuss your task with classmates who also have also been assigned Task Three. Your task and instructions are described below.

You are a member of the Board of Directors of Divitable, Inc., which is listed on NASDAQ. By NASDAQ standards, Divitable is a large company with $20 million in total assets. It produces a unique array of products making it hard to identify its specific industry or any major competitors. Major shareholders are the Conaby family who control 20 percent of the voting shares of Divitable. Thus, the Conaby family exercises a substantial influence on decision-making. The elderly Conaby is Chair of the Board. For recent years, Divitable has paid out about twenty percent of its after-tax earnings mostly as dividends. For the future, Divitable does not desire to pay out cash through any means other than dividends (eliminating cash payouts for buybacks or merger or extra dividends). It also does not anticipate using stock dividends or undergoing a stock split in the near future.

Two teams of consultants, who are specialists in the area of dividend decision-making, have been hired to appear at the upcoming Board meeting. Team One consists of consultants from Taskpro, Inc. They will argue for increasing the company's cash dividend payout, which means increasing the dividend payout as opposed to other forms of cash payouts such as buying back shares. Team Two includes consultants from Taskcon, Inc. They will argue against increasing the cash dividend payout. Because at this point neither Taskpro nor Taskcon have specific inside information on Divitable, their main job is to simply enlighten Board members on the general arguments for and against an increase in dividend payout. This will prevent Board members from neglecting any argument that could potentially lead to an uninformed payout decision.

At the Board meeting, you will sit in judgment as each consulting team presents its arguments. It will be your task to decide which team of specialists presents the best arguments as this can highly influence your decision. Even though teams of consultants have been hired to come to the meeting to heighten your understanding of the issues, you do not take your position of responsibility lightly; so, prior to the meeting, your team will research the pros and cons of increasing dividends. Your team's research of both theoretical and empirical findings concerning dividend policy (albeit limited relative to the consultants) will help you judge the competency of the arguments that you will hear. Your research should also make you aware of what neutralists advocate—as knowledge of this viewpoint may help you ask questions of those taking a pro or con stance. Because you do not want your competitors to know Divitable's plans, you must not discuss your firm's intentions about increasing its cash payout to all other parties (including consultants).

Board members are expected to hold their own private get-together, prior to the official Board meeting, to assign individual duties and formulate a strategy for the meeting. You are required to bring a one page summary of your own research to the meeting and are permitted to bring notes. As you hear the arguments of each team, you are encouraged to ask questions as needed. After the consultants have presented their arguments, they will be asked to leave the meeting. At that time, you and other Board members will render your decision about whether your company's payout will be increased. Your decision and explanation will be made known to all consultants.

Appendix 4. Class Exercise Hand-Out for Task Extension

Task Extension

INSTRUCTIONS: Besides your assigned task (Task One, Task Two, or Task Three), you have been given additional information, where Divitable is benchmarking its own dividend decision to that of Microsoft Corporation. This information involves the following empirical extensions to the case. As before, *you are to discuss your task only with designated classmates who have been assigned the same task as yourself. Details of your extended task are given below.*

Perform a financial analysis of Microsoft for the years leading up to and following the announcement that Microsoft would begin paying regular cash dividends (Microsoft announced its initial dividend on January 16, 2003). Microsoft's financial statements from 2001-2004 are included on the following pages. The Balance Sheet includes one more year of data (year 2000) than the Income Statement in order to answer some of the metric questions given below. Your task is to critique the financial performance of Microsoft and use your findings to support the argument for or against a dividend payout increase by Divitable, Inc. (depending upon whether you are an employee of Taskpro or Taskcon). Your financial analysis should include the following:

1. Report trends in Microsoft's basic financial ratios and comment on the company's financial health in the following categories:
    a. Liquidity: current and quick ratios
    b. Asset Management: days sales outstanding, fixed assets turnover and total assets turnover
    c. Debt Management: debt ratio, times interest earned
    d. Profitability: return on assets and a DuPont analysis of return on equity (profit margin, total asset turnover and equity multiplier)
2. Discuss Microsoft's ability to build value for its shareholders as evidenced by trends in the following valuation metrics:
    a. NOPAT (net operating profit after tax)
    b. ROIC (return on invested capital)
    c. EVA© (economic value added)*
    d. FCF (free cash flow)
3. Compare Microsoft's stock returns over the period 2001-2004 with the returns to the S&P 500 and NASDAQ indices (MSFT's historical stock prices can be downloaded directly into a spreadsheet from Yahoo!Finance: http://finance.yahoo.com/q/hp?s=MSFT).

* For the EVA calculation, use a weighted average cost of capital of 10% for Microsoft.

Appendix 5. Supplementary Data: Microsoft Balance Sheets

Microsoft (MSFT) Balance Sheets for Fiscal Years Ending June 30 (in billions of dollars)	**2000**	**2001**	**2002**	**2003**	**2004**
Assets					
Current assets:					
Cash and equivalents	$4,846	$3,922	$3,016	$6,438	$15,982
Short-term investments	18,952	27,678	35,636	42,610	44,610
Total cash and short-term investments	23,798	31,600	38,652	49,048	60,592
Accounts receivable	3,250	3,671	5,129	5,196	5,890
Inventories			673	640	421
Deferred income taxes	1,708	1,949	2,112	2,506	2,097
Other	1,552	2,417	2,010	1,583	1,566
Total current assets	30,308	39,637	48,576	58,973	70,566
Property and equipment, net	1,903	2,309	2,268	2,223	2,326
Equity and other investments	17,726	14,141	14,191	13,692	12,210
Goodwill			1,426	3,128	3,115
Intangible assets			243	384	569
Deferred income taxes				2,161	1,829
Other assets	2,213	3,170	942	1,171	1,774
Total assets	$52,150	$59,257	$67,646	$81,732	$92,389
Liabilities and stockholders' equity					
Current liabilities:					
Accounts payable	$1,083	$1,188	$1,208	$1,573	$1,717
Accrued compensation	557	742	1,145	1,416	1,339
Income taxes	585	1,468	2,022	2,044	3,478
Unearned revenue	4,816	5,614	5,920	7,225	6,514
Other	2,714	2,120	2,449	1,716	1,921
Total current liabilities	9,755	11,132	12,744	13,974	14,969
Other income taxes	1,027	836	398		
Long-term unearned revenue			1,823	1,790	1,663
Other long-term liabilities			501	1,056	932
Stockholders' equity:					
Common stock and paid-in capital	23,195	28,390	31,647	49,234	56,396
Retained earnings	18,173	18,899	20,533	15,678	18,429
Total stockholders' equity	41,368	47,289	52,180	64,912	74,825
Total liabilities and stockholders' equity	$52,150	$59,257	$67,646	$81,732	$92,389

Appendix 6. Supplementary Data: Microsoft Income Statements

Microsoft (MSFT) Income Statements for Fiscal Years Ending June 30 (in billions of dollars except EPS)	2001	2002	2003	2004
Revenue	$25,296	$28,365	$32,187	$36,835
Operating Expenses:				
Cost of revenue	3,455	5,191	6,059	6,716
Research and development	4,379	4,307	6,595	7,779
Sales and marketing	4,885	5,407	7,562	8,309
General and administrative	857	1,550	2,426	4,997
Total operating expenses	13,576	16,455	22,642	27,801
Operating Income	11,720	11,910	9,545	9,034
Gains (losses) on equity investees	(159)	(92)	(68)	(25)
Investment income (loss)	(36)	(305)	1,577	3,187
Income before taxes	11,525	11,513	11,054	12,196
Provision for income taxes	3,804	3,684	3,523	4,028
Cumulative effect of accounting change	(375)			
Net income	$7,346	$7,829	$7,531	$8,168
Earnings per share				
Basic	$0.72	$0.72	$0.70	$0.76
Diluted	$0.66	$0.70	$0.69	$0.75

Appendix 7: Supplementary Data: Microsoft Trend Analysis

Microsoft (MSFT) Financial Ratio Trend Analysis

	2000	2001	2002	2003	2004
Liquidity					
Current		3.56	3.81	4.22	4.71
Quick		3.56	3.76	4.17	4.69
Asset Management					
Days Sales Outstanding		52.97	66.00	58.92	58.36
Fixed Assets Turnover		10.96	12.51	14.48	15.84
Total Assets Turnover		0.43	0.42	0.39	0.40
Debt Management					
Debt / Equity Ratio		0.20	0.23	0.21	0.19
Times Interest Earned		(Interest expenses are not reported.)			
Profitability					
Profit Margin		29.04%	27.60%	23.40%	22.17%
Total Assets Turnover		0.43	0.42	0.39	0.40
Return on Assets		12.40%	11.57%	9.21%	8.84%
Equity Multiplier		1.25	1.30	1.26	1.23
Return on Equity		15.53%	15.00%	11.60%	10.92%

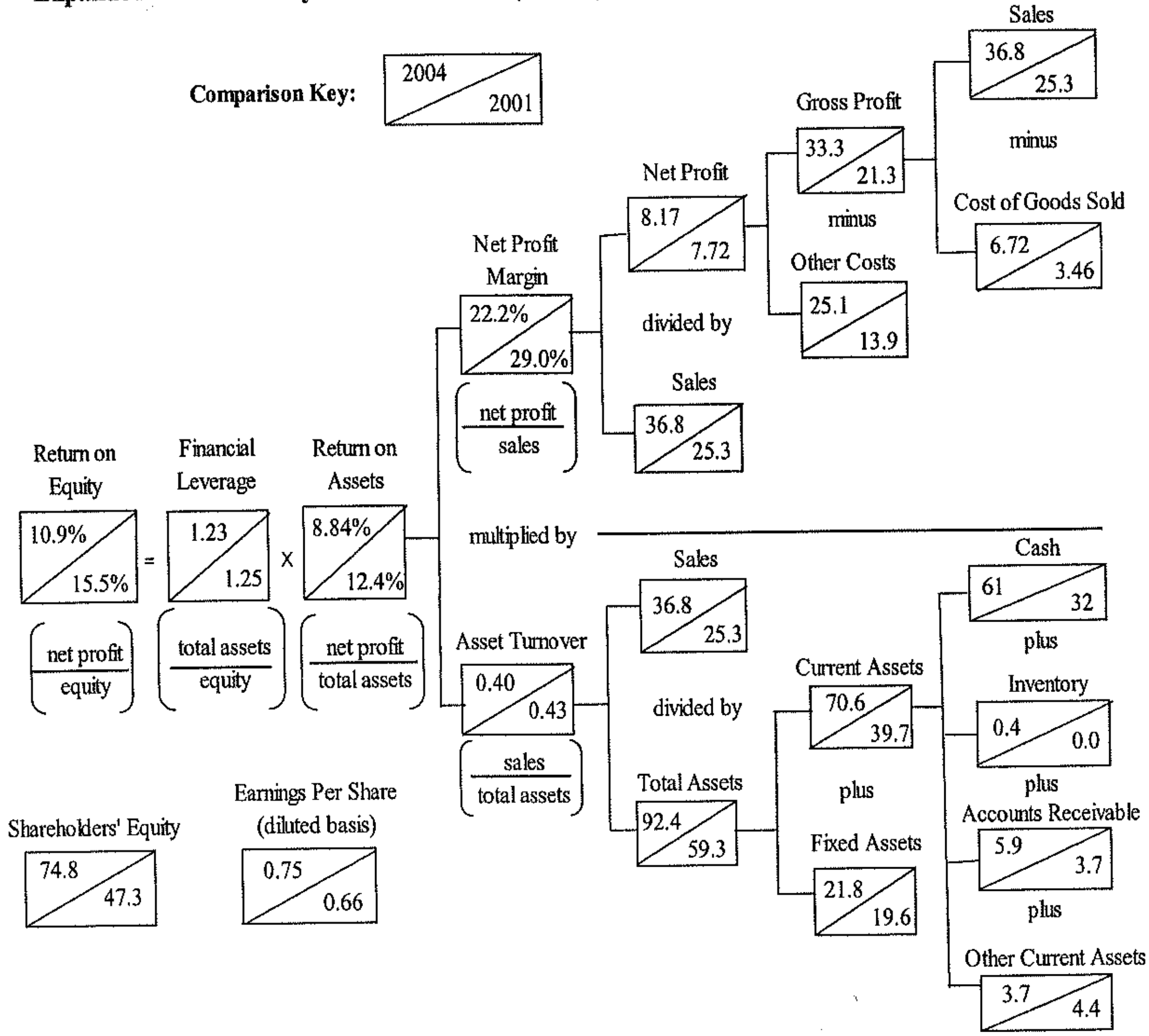
Microsoft (MSFT) Valuation Metrics Trend Analysis (in billions of dollars where applicable)

	2000	2001	2002	2003	2004
NOPAT (net operating profit after tax)		$7,721	$7,829	$7,531	$8,168
ROIC (return on invested capital)		92.37%	98.21%	86.24%	70.98%
EVA (economic value added)		$6,885	$7,032	$6,658	$7,017
FCF (free cash flow)		$8,108	$7,068	$4,756	($1,887)
Weighted Average Cost of Capital		10.00%	10.00%	10.00%	10.00%

	2000	2001	2002	2003	2004
Net Operating Working Capital	$6,456	$5,663	$6,465	$9,285	$19,237
Operating Long Term Assets	$1,903	$2,309	$2,268	$2,223	$2,326
Total Operating Capital	$8,359	$7,972	$8,733	$11,508	$21,563
Cash Dividend	$0	$0	$0	$857	$1,729
Cash Dividend Payout	0	0	0	0.11	0.21

Appendix 8: Supplementary Data: DuPont Analysis for Microsoft

Expanded DuPont Analysis for Microsoft (MSFT) from 2001 to 2004 (in billions of dollars)



CONCLUSION: ROE has only been slightly influenced (in a negative manner) by debt management (financial leverage decreased slightly) and asset management (asset turnover has also decreased only slightly). However, ROE has been significantly influenced (in a negative manner) by margin management where net profit margin has fallen 23 percent. This fall stems from the 83 percent increase in costs compared to only a 45 percent increase in sales. While there appears to be greater net profits to pay greater dividends, the overall return is down.