1. (15%) It has been suggested that one disadvantage of common stock financing is that share prices tend to decline in recessions, thereby increasing the cost of capital and deterring investment. Discuss this view. Is it an argument for greater use of debt financing?

2. (15%) Discuss this statement: The cost of retained earnings is less than the cost of new outside equity capital. Consequently, it is totally irrational for a firm to sell a new issue of stock and to pay dividends during the same year.

3. (15%) Two large, publicly owned firms are contemplating a merger. No operating synergy is expected. However, since returns on the two firms are not perfectly positively correlated, the standard deviation of earnings would be reduced for the combined corporation. One group of consultants argues that this risk reduction is sufficient grounds for the merger. Another group thinks this type of risk reduction is irrelevant because stockholders could themselves hold the stock of both companies and thus gain the risk reduction benefits without all the hassles and expenses of the merger. Whose position is correct? (15%)

4. (15%) Ron Redwine, financial manager of Blum Industries, is developing the firm’s optimal capital budget for the coming year. He has identified the five potential projects shown below. Projects B and B* are mutually exclusive, while the remainder are independent. Neither B nor B* are essential to the firm’s operations, so replication is not mandatory.

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost (in $100,000)</th>
<th>CF (in $100,000)</th>
<th>Life (Y)</th>
<th>IRR (%)</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>200,000</td>
<td>119,626</td>
<td>5</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>200,000</td>
<td>56,863</td>
<td>5</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>B*</td>
<td>200,000</td>
<td>35,397</td>
<td>10</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>100,000</td>
<td>27,057</td>
<td>5</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>300,000</td>
<td>79,139</td>
<td>5</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

The following information was developed for purposes of determining Blum’s weighted average cost of capital (WACC):

- Interest rate on new debt: 8.0%
- Tax rate: 40.0%
- Debt ratio: 60.0%
- Current stock price, $P_0$: $20.00
- Last dividend, $D_0$: $2.00
- Expected growth rate, $g$: 6.0%
- Flotation cost on common, $F$: 19.0%
- Expected addition to retained earnings: $200,000

The firm adjusts for differential project risk by adding or subtracting 2.0 percentage points to the firm’s marginal cost of capital.

a. Calculate the WACC, and then plot the company’s IOS and MCC schedules. What is the firm’s marginal cost of capital for capital budgeting purposes?

b. Assume initially that all five projects are of average risk. What is Blum’s optimal capital budget? Explain your answer fully.

c. In reality, companies like Blum have hundreds of projects to evaluate each year, hence it is generally not practical to draw the IOS and MCC schedules which include every potential project. Now suppose this situation exists for Blum. Suppose also that the company has 3 divisions, L, A, and H, with low, average, and high risk, respectively, and that the projects within each division can also be grouped into three risk categories. Describe how Blum might go about structuring its capital budgeting decision process and choosing its optimal set of projects. For this purpose, assume that Blum’s overall WACC is estimated to be 11.0 percent. As part of your answer, find appropriate divisional and sub-hostile return on project differential risk levels.
Article 1

BALANCE YOUR PORTFOLIO WITH BOND FUNDS

Bond funds aren’t quite as tough as they sound on the surface, but neither are they a panacea. The red-hot equity market has made these normally staid investment vehicles look downright controversial, and no doubt you may still be skeptical of the benefits they offer in 1994.

Yet there are some good reasons to consider bond funds. The first is diversification. If your investment portfolio is still in its growth phase, and you’re looking for a way to diversify your holdings, bond funds can be a valuable addition. Second, if you have a specific investment goal in mind, such as a down payment on a house or funding college tuition for your children, bond funds can be a good choice. Third, if you’re a money market investor who’s disappointed with 1995’s nearly invisible returns, a bond fund can still provide a good return, even in times of low interest rates. And, don’t make the mistake of thinking that all bond funds are created equal. Just as equity funds invest involves an equity investment, and the fund’s performance will reflect its exposure to the stock market. Bond funds, on the other hand, invest primarily in fixed-income securities such as bonds and notes, and their performance will reflect the interest rate environment and the credit quality of the securities they hold. In general, bond funds are considered less volatile than equity funds, but they also tend to provide a more consistent stream of income. To minimize volatility, stick to a bond fund that invests in lower-interest-rate bonds, or one that invests in bonds that are rated higher than average. If you’re looking for a longer-term investment, consider a bond fund that invests in corporate bonds, which tend to offer higher yields than government bonds but also come with more risk. Overall, bond funds can be a valuable addition to your investment portfolio, but it’s important to carefully consider your investment goals and the specific risks and rewards associated with each type of fund before making a decision.
Article II.

IS THE STOCK MARKET TOO PRICEY?

There's nothing like a scary stock market drop to get investors wondering whether the market is too high. Consider: The Dow went from 3834 at the start of 1983 to a record 8642 before sliding 771 points on March 8 because of worries about inflation. Yet another reason has been a flood of cash from individuals. In January alone, small investors poured $23 billion of household assets into stock mutual funds, which is about 57% more than the previous one-month record of $18.4 billion. February's inflows look as if they'll also be off the charts.

All that money out by the millions of dollars pouring into the market are a few faint voices warning that the good times can't last. Says Robert Farrell, Merrill Lynch's senior investment adviser and a student of stock market cycles for nearly 40 years: "I'm worried that people have gotten too optimistic about stock prices. Every market tends to be met with skepticism most of the way up, but there comes a point when the fear of risk is overtaken by the fear of missing out. That's when price can be driven up, and the money starts pouring in. The billion-dollar question, then, is: Will the euphoria be extinguished by a nasty, back-to-reality crash? And if so, when? The frightening market swings in early March suggest that stocks are vulnerable. But more reliable indicators are to be found in the classic barometers—price-to-book-value ratios and dividend yields—that Wall Street uses to gauge whether stock valuations have gone off the deep end.

Those indicators all point to the same alarming trend. Prices do seem to be getting out of hand. The price-to-book-value ratio on the S&P 500, now about 3.5, is above its historical average of 1.8 and the highest it's been for at least 30 years. Dividend yields, which have averaged about 4.3% over the past 70 years, now languish at a paltry 2.2%. That's partly because the economic level is below even the scary depths dividend yields reached before the 1929, 1972, and 1989 market drops. In fact, it is the lowest it has been since 1926. Other valuation measures, like price-to-sales or the ratio of stock market value to GDP, also appear overvalued.

So what does it all mean? Warren Buffett explains that markets often stay overvalued for long stretches of time before they come crumpling back to justifiable price levels, but eventually they always do. "Regression to the mean is what markets are all about," says Buffett.

Bullish analysts have jumped to explain why the market dynamics are different this time. For one thing, they argue, the classic measures of value have become outdated. The calculation of book value, for example, has deteriorated because of changes in how companies account for write-downs and acquisitions. Also, the growing number of successful companies in the market index with
Article II (continued)

Small book values but valuable intangible assets—information and technology companies, for instance—reduce the relevance of this measure. Similarly, some analysts contend that dividend yields no longer matter as much because by repurchasing their own shares, corporations are actually paying out more of their earnings than is apparent. Share buybacks boost the value of the stock remaining in shareholders' hands.

But Laszlo Birinyi, president of Birinyi Associates, a financial consulting firm, disagrees, saying buybacks have less impact than is widely believed. "The net shrinkage has been overstated by considering all announced buybacks as effective reductions in the number of outstanding shares," says Birinyi. In fact, he says, only about 40% of announced repurchases are actually acted on, and less than half of those shares are taken out of circulation; most are simply fed into employee benefit programs. This underscores the argument that dividend yields are at dangerous lows.

The one issue every analyst and money manager agrees to worry about is the earnings momentum of American companies. The past few years have been a bonus to the bottom line, as net profit margins at S&P 500 companies approach their highest levels in 40 years, and returns on equity have shot up further. But these gains will not be sustainable if the economy slows—and despite a recent dip in unemployment, a slowdown is still the big concern. At 18.8, the trailing P/E ratio on the S&P remains in reasonable territory, based on historical levels and the current low level of interest rates (the market P/E has averaged about 14 per the past 60 years and was 2/1 just before the 1987 crash). But according to Salomon Brothers chief equities analyst David Shulman, the P/E ratio is the only valuation measure that makes the startling rise in the market seem reasonable. Says Shulman: "If the economy slows more and suddenly we find that the 'E' isn't there, then we've got big problems."

Also fretting about the "E" is Jack Bogle, chairman of the $133 billion Vanguard Family of mutual funds. According to him, "Corporations have dug deep to slim down and increase shareholder value, but as the economy slows that can't go on much longer."

Through restructuring, heavy layoffs, and ample use of leverage, corporate profits have been growing two to four times faster than the underlying economy since 1991. At the end of 1995, consensus estimates by Wall Street analysts showed a forecasted 15% earnings jump for this year. But already it has become clear that earnings for the first quarter will fall short of those lofty expectations, reflecting a slowing economy and back-lashed consumer spending.

Security analysts are growing more conservative about estimates as the year wears on. But recently, for the first time in two years, analysts have reduced their estimates by more than the historical norm. "I'm very concerned that earnings estimates are coming down faster than people are expecting," says John Rogers, who manages $1.3 billion for Capital Management. Because of increasingly disappointing earnings, he expects at minimum a 20% decline in the major blue-chip indexes over the next 12 months. For smaller-cap growth stocks, which typically suffer more in a market decline, he is forecasting a milder drop of 30% to 35%. Ultimately, says Rogers, "you're buying a share in a business, and if the business is not earning as much, that share should be worth less."

As for the little guy, the one who continues putting money into stock funds in hopes of replicating last year's 34% return, it's a good time to ask yourself: Do you really want to be heavily exposed to stocks when the deluge of money stops? With the stock allocation in your portfolio now much bigger because of the market's winning streak, it's a pretty good moment to take some money off the table.

Article II

II-3. (20%) What are the bearish and bullish arguments regarding the US equity market in this article? Do you agree with them? (Maximum 10 lines)