## FORECASTING, REPORTING, AND COPING WITH SYSTEMATIC RISK

Gail E. Farrelly, Accounting Department, Rutgers University
Marion G. Sobol, Accounting Department, Southern Methodist University

#### Abstract

A sample of 123 corporate executives, from the Fortune 500 IndustrialCorporations list, evaluate nine common systematic risk factors such asrate of inflation, long-term interest rates, level of money supply, priceof crude oil, etc. Executives indicate their views on the significance of these risk factors as well as their ability to cope with, and report on, these factors. Future interest rate changes and inflation rate changes are considered to be the most significant risks. There is a high negative correlation between the significance of particular risks and the ability to cope with these risks.

### Introduction

Future risk is rarely given much attention in financial reports; if men-tioned at all, it is usually in the vaguest of terms. For the most part, in-vestors are left to their own devices in assessing risk, and this is unfortu--The void is "filled" by investor reliance on past-oriented data whichmay not be that helpful in assessing future risk. Such reliance may not belogical. If it is the case that managers learn from past mistakes and developstrategies for successfully coping in the future with circumstances handledpoorly in the past, then such heavy reliance on projecting past results intothe future doesn't make sense. It seems somewhat stifling for investors but also for the managers of firms who must function within the confines of the risk assessments made in financial markets.

Investors need information on expectation (that is, on what a firm may achieve in the <u>future</u>) as well as on realization (that is, on what a firm has achieved in the <u>past</u>). Thus there are two time dimensions (past and future) in financial reporting; and, within each time dimension, information

may be communicated on <u>return</u> and <u>risk</u>. This results in four different considerations of financial reporting as illustrated below:

# CONSIDERATIONS OF FINANCIAL REPORTING

### FACTORS

			Α.	Return	В.	Risk
TTMF.	1.	Past		1A		<b>1</b> B
11111	2.	Future		2A		2B

The research present concentrates on Consideration 2B (risk in the future), the only one of the four considerations that has received littleattention accounting in The study does not build on an economy-wide, mathematical model, as do most accounting studies on risk; instead itbuilds on the views of a representative group of financial executives who. ona daily basis, develop strategies for coping with various elements of risk in the business environment.

An attempt is made to formulate a comprehensive picture of a set of risk-sfaced by major corporations and a scheme for categorizing these risks, since respondents to the questionnaire survey were asked to indicate their views on:

- 1. Significance (in the past as well as in the future) of various risk factors
- 2. Ability to handle or cope with the risk factors.
- 3. Evaluation of the "reportability" of such risk factors. That is, do they possess qualities such as reliability and relevance, and is it reasonable to expect that firms will discuss such factors in financial reports prepared for investor use?

In this initial attempt to deal with the issue of possible reporting ofrisk, we limit our attention to the elements of systematic (economy-wide, non-versifiable) risk only. This is in keeping with the latest theoretical developments in modern finance. It is also logical from the viewpoint that if reporting on risk were to be formally required, such requirements might verywell begin with the risk elements that are quite common to most firms in theeconomy. These are the elements of systematic, rather than non-systematic, risk.

The paper is organized as follows. The next section looks at the conceptof systematic risk and the role of accounting in disclosing risk in a manner-consistent with modern theory on risk assessment in investment decision-making. This is followed by the research design and results of the questionnaire survey. Then some considerations regarding future research are provided, along with some concluding notes.

### Systematic Risk and Financial Reporting

Irving Fisher (1930) observed many years ago that there are two means bywhich risk may be reduced: increased diversification and increased knowledge. Modern finance, in theory

and in practice, emphasizes increased diversifica-tion. Thus, the firm's total risk can be separated into a systematic (economy-wide, non-diversifiable) ment as well as an unsystematic (diversifiable, firm-specific) one. It is assumed that, in a well-constructed portfolio, firm-specific risk can be eliminathrough diversification, leaving onlysystematic risk to be of concern to investors and to be priced in the mar-The problem is that the reduction of risk through diversification requires the use of a viable measure of systematic economy-wide, non-diversifiable risk, a measure which is difficult to Thus far, beta has achieved the find. widest degree of acceptance as a measure of systematic risk. Beta measures the extent to which a stock moves with the market. But the problem is, beta is a past-oriented concept and it is unstable over time. Thus, the search for a better measure of systematic risk persists. Lorie (1966, p. 108) comments:

. . . we will ultimately find an objective measure of sensitivity to decline which avoids the inherent absurdity of calling a stock risky because in the past it has gone up much faster than the market in some years and only as fast in others, whereas we call a security which never varies in price not risky at all.

And, according to Blume and Friend (1973), it just may be the case '. . the beta coefficient only measures part of what investors mean by risk." Since the future is often unlike the past (this, of course, is thereason for the very existence of risk), a quantitative measure, such as beta, based on past results may not be totally reliable for predicting the future. Malkiel (1982) has remarked that in judging risk, "beta cannot be a substitute for brains." But if there is little or no material available upon which brains can operate (that is, material related to "knowledge" of risk), thencontinued reliance on betas is understandable, although perhaps not totally

rational.

Now that there has been some disenchantment with beta, attention has been focussed in some different directions. The arbitrage pricing model of Ross (1976) has generated considerable interest. This model recognizes that a uni-dimensional measure such as beta does not provide enough information on risk. According to Sharpe (1981, p. 184), arbitrage pricing theory breaks market risk into its components:

...it should be possible to measure sensitivities to important common factors that account for much of the risk of the market portfolio. The arbitrage pricing theory provides a basis for believing that such an approach should be fruitful for investment management..

Thus it is clear that application of this theory involves: (1) identifying the important common factors, (2) measuring sensitivity to the common factors, and (3) making predictions about the state of the common factors in the future and the return of the security in light of these common factors. Thus, assuming that interest rates, level of industrial production, and unanticipated changes in inflation were common factors, one would predict the level of each over the investment horizon as well as how the firm's performance might be affected by these common factors.

The present research builds, in a very practical way, on the work of Ross, in that it deals with some common risk factors. It is a very preliminary exploration of the topic of explicitly disclosing future-oriented risk, a topic which we think needs much more attention in the accounting litera-As previously discussed, the four major considerations of financial reporting (past and future return as well as past and future risk) have received unequal shares of attention in accounting theory and practice. It would seem thataccounting has traditionally dealt with these considerations as follows:

<u>Consideration 1A</u> (return in the past) dominates financial reporting.

Consideration 1B (risk in the past) is dealt with implicitly in mostfinancial reports, at least in the sense that it is possible to derive histor-ical information on risk by computing the variability over time of items suchas dividends or earnings or the variability of such items for a given firmfrom overall national, regional, or industry trends.

Consideration 2A (return in the future) has received some attention re-cently in that the benefits, costs, and implications of forecasting have beendebated practitioners and theoreticians. Thus, there is some concern withredicting an uncertain future but little concern with disclosing the riskwhich inevitably accompanies this predicting process. Generally forecastshave been of the time series variety which assume that trends, seasonal and cyclical effects that have occurred in the past will continue in the future.

Consideration 2B (risk in the future) is the only one of the four con-siderations which has received little serious attention. (FASB Statement No. 5 deals with specific contingencies but not "general or unspecific businessrisks.") This lack of attention is unfortunate, because as Ronen (1977) indicates:

...the entire burden of assessing uncertain prospects falls on the user. But companies and management are the very ones -- sometimes the only ones -- who can make proper assessments of uncertainties relevant to their own future prospects.

In the financial reporting process, most first appear to assume that ignoring risk (rather than openly disclosing it) is a good tactic for buildingup investor confidence. But this assumption is open to question. It may be the case that investors, lacking explicit information on risk, become anxiousand uncertain -- perhaps to a greater de-

gree than is warranted by the realityof the situation which has never been communicated to them. After all, information has value in that it may reduce uncertainty. Investors might perceive less risk, and have more confidence, in firms which openly disclose risk as well as strategies for coping with it.

In any case, it seems advisable to consider how financial executives viewa variety of risk factors as well as what they think about expanding financial reporting to include discussion of certain of these risk factors.

### Research Design

In August of 1982, a questionnaire on forecasting, reporting, and coping with systematic risk was sent to 500 financial executives, typically vice-pres-The sample was randomly selected from the well-known Fortune Directory of the largest U.S. Industrial Corporations. This Directory is used by many researchers because it is universally recognized as providing an excellent sample of major industrial Every other firm in the first '500'as well as the second '500' was included in the sample for a total of 500firms. One hundred and twenty-three executives (that is, 25% of the sample)responded to the survey. response rate is within the modal range of the 20-40 percent response rate expected for mailed questionnaires (Kerlinger, 1973).

Nine "common factors" of systematic risk were included in the questionnaire: level of GNP, rate of inflation or disinflation, long-term interest rates, level of the money supply, level of national income, price of crude oil, safety and environmental regulations of the federal government, corporate tax legislation, rate of unemployment. Respondents were asked to:

1. Rank the nine factors in terms of how significantly they might impact the

firm in the next five years.

- 2. List the three risk factors (from the nine) which posed the most risk to the firm over the past five years.
- 3. Indicate their level of confidence in the firm's ability to successfully cope with each risk factor: extremely confident, fairly confident, or not confident.
- 4. Categorize each risk factor in terms of the firm's ability to report on it. Thus the respondents were asked to consider whether the firm was definitely able, probably able, or definitely unable to provide meaningful information (such as an assumption regarding the risk factor and/or a contingency plan for coping) on the risk factor.
- Consider the desirability of expanding financial reporting to include future-oriented considerations of risk. This question mentioned that the FASB has stated that accounting information should be understandable, useful for decision making, relevant, and reliable. Respondents were asked to keep this in mind in their determination of whether each risk factor should be, should possibly be, or should not be reportable. This question differed from the previous one (No. 4 above) in that it dealt with the desirability of reporting and not just the ability of the firm to do This distinction is important, because although a firm may consider itself able to report on a particular risk factor, it may also consider that it is undesirable to do so (because of competitive disadvantage, undue reliance of investors, or a variety of other reasons).

A profile question asking for information on level of sales and assets as well as level of beta was also included.

### **Results and Discussion**

A. Past Vs. Future Risk

The responding firms showed variability in risk as assessed by their estimate of their past beta (over the previous five years). Of the one hundredand five who gave information on their past beta, 21.9% were in the least riskcategory (beta <.9), 38.1% were in the medium risk category (beta .9 to 1.1), and 40% were in the greatest risk group (beta >1.1). When we examined these executives' predictions for beta for the next five years, the respondents gave similar answers, 16.7% said least risk, 46.1% said medium risk and 37.3% said greatest risk. The differences between past and future risk estimates were not statistically significant at the .05 level. Thus most of the first studied fell between the medium to high risk groups.

Respondents ranked risk factors from 1 (high) to 9 (low) in terms of future significance for them. In Table 1 we show weighted scores for this ranking. Long term interest rates and rate of inflation are by far the two most crucial factors related to risk. Level of GNP comes next. Crude oil prices, level of money supply, corporate tax legislation and level of national income are approximately tied for the intermediate positions. Unemployment and federal regulation are considered least significant. From the same list of future sources of systematic risk, respondents were asked to pick which factors had posed the most risk in the past five years. Inflation and interest rates were chosen by 70% of the respondents to be the top two most important risk sources. This is very similar to their choices for future risk. Oil prices and GNP were the next two most important choices, followed by corporate taxlegislation and federal regulations. Money supply, unemployment, and national income were ranked last.

In summary, the two main sources of risk chosen for the past five years were the same as those chosen for the future five years. Oil prices and GNP were chosen next for both the past and the future. In the past, however, government intervention (federal regulation, tax legislation) seemed to have been more important than it was expected to be in the future. It is possible that the election of a Republican administration in 1980 had led these financial executives to believe that there would be less negative government intervention with business. Thus expectations with regard to systematic risk could well be related to the political climate of the country.

# B. Coping With, and Reporting On, Systematic Risk

In a business community where one is continually striving for more perfect information, reporting on risk could be of primary import. Therefore, we were interested in determining to what extent significant risk factors may be reportable; and, if they were not reportable, to speculate on why this may be the case. Hence, as previously explained, in addition to collecting data on the significance of nine systematic risk factors, we also asked respondents to provide information on ability to cope, ability to report, and desirability of reporting on these risk factors. Table 2, in which each risk factor is considered individually, provides a sum-Table 3 provides mary of this data. anoverall view of the interrelationships among the various schemes (significance, ability to report, desirability of reporting and ability to cope) for categorizing the risk factors.

Table 2 shows that, in general, the executives are not in favor of reporting on future-oriented considerations of systematic risk. Regarding desirability of reporting the risk factors, the percentage of respondents answering should be reportable ranges from only 2% to 27%, with an average of only 13%. On a comparative basis, the two most significant risk factors-(interest rates with 22% and inflation with 24% of the respondents in favor of

reporting) hold up well. Tax legislation (27%) is the only risk factor the respondents think is more reportable than interest rates and inflation. The results regarding the two most significant risk factors are interesting, especially in light of the fact that, as Table 3 shows, the correlation between significance and the desirability of reporting is fairly low (r=.317), as is the overall correlation between significance and the ability to report (r=.346). Both correlation coefficients are significant, however, at the .05 level.

In view of the fact that relevance is one of the qualities sought in financial reporting, the lack of an even higher correlation than .317 between significance and the desirability of reporting is somewhat disconcerting. These results are somewhat tempered. however, by some other relationships revealed by Table 3. Financial reporting must be reliable as well as relevant;a tradeoff between the two characteristics must be achieved. It would appear that, for the most part, where executives feel able to report, they think it is desirable to do so; this is indicated by the high positive correlation (r=.921) between these two charac-This suggests that the lack ofspecific information on risk in financial reporting may be due, at least in part, to an inability to report. Unwillingness to report may also be impor-

tant, although this study does not provide data to support this. If executives were more eager to report on the factors they were confident of coping with and less eager to report on what could not be coped with, we might argue that unwillingness (and not necessarily inability) is a major explanatory factor for the lack of reporting. But this is not the case in this study. Ability to cope is not significantly related to either the ability to report or the desirability of reporting. It is, however, highly negatively correlated (r=-. 783) with the significance of risk factors. This is logical, in that aperceived inability to cope would appear to be central to the basic notion of risk. It is understandable, then, that the two risk factors perceived as most significant are also the two risk factors that the firms are least confident they can cope with.

## C. Risk Factors and Firm Characteristics

# 1. Size of Firm and Size of Sales Differences

We have studied some overall results concerning systematic risk for these Fortune "1000" industrial firms. One would expect that larger firms in terms of sales and assets might report different results than smaller firms. Therefore, the sample was divided into two groups: those with assets below the median and those with assets above the median. Rankings of factors, ability to report, desirability of reporting and ability to cope were compared for the below and above median assets gro-A similar analysis was done for above and below median sales groups.

An analysis of ratings of risk factors for high vs. low sales firms indicates that interest rates, inflation and GNP were about equally significant for small and large firms. When the firms are divided by assets the level of agreement between the large and small asset firms is similar to that between large and small sales firms. Oil prices are still slightly more important to large asset firms while money supply is more important to low asset firms. Generally the rankings of high and low assets first and high and low sales firms are highly correlated (Table 4).

This leads us to the types of activity taken with respect to risk. Regarding the ability to report on risk, desirability of reporting on risk, and ability to cope with risk, there is a very high correlation between the rankings of the different types of risk for large vs. small sales groups and largevs. small asset groups (Table 5). One

should remember that ail of these first represent major industrial companies in the U.S. Thus the giants worry about the same risk factors as the large firms and they generally agree on the factors on which they think have the ability to report, the desirability of reporting and the ability to cope.

### 2. Beta Differences

Next the group of respondents was divided according to reported betas. Three groups were established: (1) betas less than .9 (low beta -- relatively low risk); (2) betas between .9 and 1.1 (medium beta -- medium risk); (3) betas greater than 1.1 (high beta -- high risk). Table 6 indicates that there is much similarity in how the three groups (each representing a different level of risk) categorize the risk factors.

When ability to report on particular risk factors is studied, generally the risk groups which are the most similar are most likely to rank factors similarly. The widest disparities are found between the high and low beta For example, low-risk groups groups. are most able to report on interest rates and inflation, whereas high-risk groups are most able to report on federal regulations and oil prices. When desirability of reporting is studied, the high, low and medium risk groups are all in relative agreement as to the ranking of factors. As far as ability to cope is concerned, the closest groups show the highest correlation (see Table 10). Low-beta firms are confident they can cope with changes in level of money supply while high betas are very dubious about their abilities in this respect. High-beta firms feel they can cope with corporate tax while low-beta firms feel unable to cope with this factor. Both high-risk and low-risk firms feel that they will have trouble coping with long-term interest rates, whereas low-beta firms are somewhat more likely to feel that they will have trouble coping with

inflation than high beta firms.

#### **Future Research on Risk**

The findings of this preliminary study on risk provide some interesting topics for future research. For example, the study shows a high negative correlation between the significance of risk factors and the ability of firms to successfully cope. This perception of inability to cope with significant risk factors might be further explored. Are the respondents chiefly worrying because they cannot estimate future interest rate and inflation rate changes or because they cannot estimate the effect of say a 1 or 2% or a large percent change in these items for their businesses or because even if they knew the effects they would have a hard time counteracting them? Further, would the size of these changes lead to different qualitative effects on the Thus 1-5% changes in businesses? interest rates and inflation rates might lead to different types of changes than 6-10% changes.

In addition, future research might be extended to include elements of unsystematic (that is, firm-specific and industry-specific) risk. It would be interesting to compare managerial perceptions of external risks, the risks over which management has no control, vs. perceptions of internal risks, the risks over which management does have control. Once data were collected on managerial perceptions, data might be collected on investor perceptions; the two sets of data might then be compared.

The disclosure of future-oriented considerations of risk in financial reporting is a complicated topic but one worth investigating. Presumably there is risk information (obtained from various economywide and industrywide sources as well as through circulated rumors) currently reflected in stock prices, but such information does not usually come directly from management

and thus is accompanied by much 'noise,' and possible bias, in the market-place. It is reasonable to suppose that managers, whose job it is planning the future and controlling future risks, have relevant information on risk to convey to the market.\* Providing a channel through which such information can be conveyed directly and thus fairly 'noiselessly' to the market would appear to be advisable in a financial system in which capital allocation is accomplished by having good information available to market participants. Future research may lead to the development of such a channel for communicating risk information to the market.

### Conclusion

This research provides a very preliminary exploration of the topic of explicitly disclosing systematic risk; it explores executive perceptions regarding the significance and reportability of some major components of systematic risk and also investigates how successfully executives perceive these risk components can be coped with.

In general, the respondents are opposed to disclosing future-oriented considerations of systematic risk. may be mainly because they are unable (rather than unwilling) to disclose, since the study shows a high correlation between the ability to report and the desirability of doing so. though the executives are opposed to the explicit disclosure of risk, it is interesting to note that their opposition to disclosing future-oriented considerations of inflation and interest rates (the two most significant risk factors) is not as strong as their opposition to disclosing most of the other risk factors.

When executives were asked to compare the future with the past, their perceptions of risk were quite similar. Thus, on an overall basis, the respondents seemed to anticipate that the

major sources of past risk would also be the major sources of future risk. Size of the firm was not a significant factor in explaining variation in responses to the questionnaire. Regarding the characteristic of level of risk as indicated by beta, the responses of adjacent groups (that is, low-risk vs. medium-risk firms and medium-risk vs. high-risk first) were more similar than the responses of high-risk vs. low-risk firms; overall, however, there was much agreement across all three level-of-risk groups. Thus it appears that it may be somewhat reasonable to envision a reporting system in which firms are required to disclose information on some basic systematic risks (pertinent to the future of just about all firms.)

As financial reporting makes the transition from dealing only with the past to dealing with the future as well, hopefully it will increasingly become concerned with risk as well as return. Reporting on risk may:

--force managers to think through and develop more carefully their strategies regarding the various elements of systematic risk, over which they have no control, but with which they must cope.

--enable investors to make better risk assessments, especially for those firms for which the future is expected to be most different from the past. This is advantageous, because it would seem that one has the greatest need of a risk measure where the level of uncertainty is the highest (that is, the future is likely to be most different from the past).

--provide better information for legislators and regulators making decisions which help to control the state of the economy and thus partially mold the variables which affect the systematic risk of the future.

--add a more "realistic" note to financial reporting, making it less cosmetic and more informative.

Table 1
Weighted Scores and Ranking of Factors Most
Closely Related to Future Risk
Fortune 500 Executives, August 1982

Ranking	Factor	Weighted Score*
1.	Long term interest rates	333
2.	Rate of inflation or disinflation	351
3.	Level of Gross National Product	532
4.	Price of crude oil	639
5.	Level of money supply	652
6.	Corporate Tax Legislation	657
7.	Level of National Income	678
8.	Rate of Unemployment	789
9.	Federal regulation	829

<sup>\*</sup>The weighted scores were computed by assigning a one if the respondent considered the factor as most significant; a 0 if the factor was least significant. Thus with 125 responses, if everyone considers the first factor (long term interest rates) as most important, it would have a score of 125. Conversely if everyone considered federal regulation as least significant it would have a score of  $9 \times 125 = 1125$ .

<sup>\*</sup>It might be argued that risk information from management would be too biased to be useful. The tendency for managers to be biased (and thus, for example, to dismiss the future with totally unwarranted optimism) may be tempered by the following:

<sup>--</sup>the need for managers to retain the credibility and support of investors on a continuing basis. That is, eventually, biased forecasts would be discounted by the marketplace.

<sup>--</sup>management incentive systems designed to reward realistic, rather than biased, expectations.

Table 2

Categorization of Risk Factors\*

by Significance, Ability to Report, Desirability of Reporting, Ability to Cope

Risk Factor	Significance Rank (1 = Most Signifi- cant in the Future)	Is Firm Able to Report Meaningful Future- Oriented Information?	ų	Is it Desirable for the Firm to Report Future-Oriented Considerations?	for the sture- rations?	How Confidently Can the Firm Cope?	
Long-term interest rates	-	Definitely Able 26% Probably Able 33% Definitely Unable 41%	<i>K</i>	Yes Possibly No	22% 24% · 54%	Extremely Confident Fairly Confident Not Confident	21% 51% 28%
Rate of inflation or disinflation	n 2	Definitely Able 24% Probably Able 38% Definitely Unable 38%	<b>1</b> 12 <b>1</b> 12 <b>1</b> 12	Yes Possibly No	24% 21% 55%	Extremely Confident Fairly Confident Not Confident	24 <b>%</b> 53% 23%
Level of GNP	E	Definitely Able 14% Probably Able 32% Definitely Unable 54%	કર કર કર	Yes Possibly No	7% 13% 80%	Extremely Confident Fairly Confident Not Confident	36% 43% 21%
Price of crude 011	7	Definitely Able 22% Probably Able 30% Definitely Unable 48%	K K K	Yes Possibly No	12% 24% 64%	Extremely Confident Fairly Confident Not Confident	44% 39% 17%
Level of the money supply	٧.	Definitely Able 8% Probably Able 27% Definitely Unable 65%	8% .7% .5%	Yes Possibly No	2% 10% 88%	Extremely Confident Fairly Confident Not Confident	32% 50% 18%
Corporate tax legislation	9	Definitely Able 27% Probably Able 36% Definitely Unable 37%	14 54 54	Yes Possibly No	27% 25% 48%	Extremely Confident Fairly Confident Not Confident	47% 44% 9%
Level of National income		Definitely Able 9% Probably Able 29% Definitely Unable 62%	7 × 7	Yes Possibly No	3% 14% 83%	Extremely Confident Fairly Confident Not Confident	37% 47% 16%
Rate of employment		Definitely Able 7% Probably Able 25% Definitely Unable 68%	7% 5% 8%	Yes Possibly No	67 127 827	Extremely Confident Fairly Confident Not Confident	40% 47% 13%
Regulations of the Federal Government	he nt 9	Definitely Able 24% Probably Able 38% Definitely Unable 38%	<b>9</b> 6 <b>9</b> 6 <b>9</b> 6	Yes Possibly No	15% 34% 51%	Extremely Confident Fairly Confident Not Confident	52% 35% 13%

Source: Survey of Sample of Fortune Directory of large U.S. Industrial Corporations, August 1982 (123 respondents).

Table 3

Rank Order Correlation Coefficients for Nine Risk Factors in Terms of Action Alternatives

	Significance	Ability to Report	Desirability of Reporting	Ability to Cope
Significance	1	.346*	.317*	<b></b> 783*
Ability to Report	em eq	1	.921*	.079
Desirability of Reporting			1	.100
Ability to Cope				1

<sup>\*</sup>Significant at the .05 level.

Table 4

Rank Order Correlation on Ratings of Past Risk Factors for Large and Small Sales, Large and Small Asset Firms

Comparison	Rank Order Correlation Coefficient
Above and below median assets	•900*
Above and below median sales	.751*

Rank Order Correlations on Ratings of Future Risk Factors for Small and Large Sales, Small and Large Assets

Above	vs.	below	median	income	.833*
Above	vs.	below	median	assets	<b>.</b> 783*

<sup>\*</sup>Significant at the .05 level.

Table 5

Comparison of Rankings of Large Sales vs Small sales, Firms of Risk Factors on Which They Are Most Able to Report on Risk Factors Most Desirable to Report, and Low Risk Factors Most Able to Cope With

	Above vs. Below Median Sales
Classification of factors	Rank order
by ability to report	correlation coefficient
Definitely able to report	
on factors	•771 <b>*</b>
Probably able to report	•233 <del>*</del>
Unable to report	.838*
Classification of factors by	
desirability of reporting	
Should report	•908 <del>*</del>
Should possibly report	•738 <b>*</b>
Should not report	.833*
Classification of factors by	
ability to cope	
Confident can cope	•850 <u>*</u>
Fairly confident can cope	•533*
Not confident	.804*

Comparison of Rankings of Above Median Assets vs. Below Median Assets Firms of Risk Factors That They Can Report on, Should Report on, and Can Cope With

Above vs Below Median Asset Levels Classification of Factors by Rank Order correlation Ability to Report Coefficient Definitely able .796\* .267\* Probably able .842\* Unable By Desirability of Reporting Should do it .863\* .750\* Should possibly do it .833\* Should not do it By Ability to Cope .788\* Confident .533\* Fairly confident Not confident .508\*

<sup>\*</sup>Significant at the .05 level.

Table 6

Rank Order Correlation Coefficient Relating
Rankings of Risk Factors

### Ability to Report on Risk Factors by Beta Groups

Classification of Factors by:	Low vs. Med. Beta	Med. vs High Beta	Low vs. High Beta
Definitely able to Report	.813*	•629 <b>*</b>	.379*
Probably Able to Report	.125	• 242 <b>*</b>	.188*
Unable to Report	.608*	•908*	.429*

## Desirability of Reporting on Risk Factors by Beta Groups

Classification of Factors by:	Low vs. Med. Beta	Med. vs High Beta	Low vs. High Beta
Should Be	.796*	.750*	.758*
Should Possibly	.725 <b>*</b>	.633*	.791*
Should Not	•975 <b>*</b>	•925*	.871*

### Coping with Risk Factors By Beta Groups

Classification of Factors by:	Low vs. Med. Beta	Med. vs High Beta	Low vs. High Beta
Extremely Confident They Can Cope	.808*	.892 <b>*</b>	•646 <b>*</b>
Fairly Confident They Can Cope	<b>.</b> 354 <b>*</b>	.450 <b>*</b>	.217*
Not Confident They Can Cope	•321*	.567*	.117

<sup>\*</sup>Significant at the .05 level.

### **REFERENCES**

Baker, H. Kent, and Haslem, John A. "Information Needs of Individual Investors." *Journal of Accountancy* (November 1973), pp. 64-69.

Beaver, William H. "Current Trends in Corporate Disclosure." *Journal of Accountancy* (January 1978), pp. 44-52.

Beaver, W.,; Kettler, T. P.; and Scholes, M. "The Association Between Market Determined and Accounting Determined Risk Measures." *Accounting Review* (October 1970), pp. 654-682.

Blume, M. W. "On the Assessment of Risk." *Journal of Finance* (March 1971), pp. 1-10.

Blume, Marshall E., and Friend, Irwin. "A New Look at the Capital Asset Pricing Model." *Journal of Finance* (March 1973), pp. 19-33.

Blustein, Paul. "Money Managers' Bedrock Theory of Investing Comes Under Attack." Wall Street Journal, 8 September 1980, p. 33.

Bowmen, R. G. "The Theoretical Relationship Between Systematic Risk and Financial (Accounting) Variables." *Journal of Finance* (June 1979), pp. 617-630.

Dhaliwal, Dan S.; Spicer, Barry H.; and Vickrey, D. "The Quality of Disclosure and the Cost of Capital." *Journal of Business Finance and Accounting* (Summer 1979), pp. 245-266.

Dyckman, Thomas R. "On the Investment Decision." *Accounting Review* (April 1964), pp. 285-295.

Elgers, Pieter T. "Accounting-Based Risk Predictions: A Re-examination." *Accounting Review* (July 1980), pp. 389-408.

Erdos, Paul L. *Professional Mail Surveys*. New York: McGraw-Hill Book Company, 1970.

Financial Accounting Standards Board. FASB Statement of Financial Accounting Concepts No. 1: Objectives of Financial Reporting by Business Enterprises. Stamford: Financial Accounting Standards Board, 1978.

Financial Accounting Standards Board. FASB Statement of Financial Accounting Concepts No. 2: Qualitative Characteristics of Accounting Information. Stamford: Financial Accounting Standards Board, 1980.

Financial Accounting Standards Board. FASB Statement No. 5: Accounting for Contingencies. Stamford: Financial Accounting Standards Board, 1975.

Fisher, Irving. The Theory of Interest. London: Macmillan, 1930.

Gooding, Arthur E. "Quantification of Investors' Perceptions of Common Stock: Risk and Return Dimensions." *Journal of Finance* (December 1975), pp. 1301-1316.

Knight, Frank H. *Risk Uncertainty and Profit*. Chicago: University of Chicago Press, 1971; originally published by Houghton Mifflin Company, 1921.

Kripke, Homer. The SEC and Corporate Disclosure: Regulation in Search of a Purpose. New York: Law & Business, Inc., Harcourt Brace Jovanovich, Publishers, 1979.

Lansing, John B., and Morgan, James W. *Economic Survey Methods*. Ann Arbor: University of Michigan Survey Research Center Institute for Social Research, 1971.

Lori, James H. "Some Comsents on Recent Quantitative and Formal Research on the Stock Market," *Journal of Business* (January 1966, No. !, Part II), pp. 107-110.

Malkiel, Burton G. "Risk and Return: A New Look." from *The Changing Role of Debt and Equity in Financing U.S. Capital Formation*, ed. Benjamin M. Friedman, University of Chicago Press, 1982, pp. 27-45.

McDonald, John G., and Stehle, Richard E. "How Do Institutional Investors Perceive Risk?" *Journal of Portfolio Management* (Fall 1975), pp. 11-16.

Richards, Jon C. "A Need for Communicating Uncertainties." *Management Accounting* (February 1976), pp. 24-26.

Roll, R., "A Critique of the Asset Pricing Theory's Tests," *Journal of Financial Economics* (March 1977), pp. 129-176.

Ronen, Joshua. "Who Should Audit the Auditors?" *New York Times*, 8 May 1977, sec. 3, p. 14, c. 3.

Ross, Stephen A., "The Arbitrage Theory of Capital Asset Pricing," *Journal of Economic Theory*. (December 1976), pp. 341-360.

Sharpe, William F. *Investments*, 2d ed. Englewood Cliffs, New Jersey: Prentice-Hall, 1981.