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American Institute of Certified Public Accountants. Academic and Career Development Team

AB COMPANY: ACCOUNTING AND AUDITING FOR THE IMPLEMENTATION OF A NEW ACCOUNTING STANDARD

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Part 1

AB Company Background

AB Company is an Ohio corporation organized in 1965. The company went public in 1969 and has stock actively traded on the Nasdaq Stock Exchange. Originally AB produced and sold specialty food products, but through acquisitions they have expanded their business to include automotive products. Strategic acquisitions and strong internal growth have helped to expand sales and product offerings in the specialty foods business to the point that in the last ten years the food products business has been the company's primary growth area.

Management has evaluated its operations in accordance with SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information, and has determined that, for external reporting purposes, the business is properly separated into two distinct operating and reportable product categories: Segment A, the Food Products division comprising sixty-five percent of AB Company's total net sales and Segment B, Automotive Products, which accounts for the other thirty-five percent of total net sales for the company. These two groups operate autonomously, allowing each to focus on their specific customer base and market opportunities.

Segment A: Food Products

Food Products is the largest and fastest growing division of AB Company. This group markets high quality specialty foods brands produced by AB Company in manufacturing facilities throughout the United States. Products are marketed under the company's brand names or sold to an array of private-label customers in both the retail and foodservice markets.

The specialty food products produced and sold by AB Company include salad dressings, vegetable and fruit dips, barbecue and grilling sauces, croutons, egg noodles, and caviar. Frozen food products include breads, rolls, pies, noodles and pastas. For internal reporting purposes, Segment A is divided into three components: Salad Dressings and Sauces; Breads, Rolls, and Croutons; and Other Specialty Foods. Each component has its own general manager responsible for the operating results of the component. The AB Company corporate accounting department prepares, and top management reviews, weekly operating reports for each component. The products of the three components are very different, but the business processes of each are similar in several ways. For example, all of the specialty foods products share a common R&D program and product development processes. Also, packaging and product distribution are similar for each component. The food products are marketed and sold to basically the same customers. Finally, profit margins on the products of each component of Segment A do not differ significantly other than on a temporary basis.

No single customer accounts for more than ten percent of this segment's total net sales. Although AB is a leading producer in several of its product categories, all of the markets in which it sells food products are highly competitive in the areas of price, quality, and customer service.

The trade names under which AB operates are significant to the overall success of this segment. However, the patents and licenses under which it operates are not essential to its overall success.

Segment B: Automotive Products

For internal reporting purposes, Segment B is divided into two components: Aluminum Products and Rubber and Plastic Products. As with Segment A, each component has its own general manager responsible for the operating results of the component and weekly operating reports for each component are prepared and reviewed at the corporate level. For Segment B, the components are different both in the products they sell and in the ways the businesses operate. Aluminum products (running boards, tube steps, toolboxes, and other aluminum light truck accessories) are manufactured in AB's two highly automated factories in the US and are sold almost exclusively to original equipment manufacturers. Rubber and plastic products (floor mats and pickup truck bed liners and bed mats) are sold primarily in the automotive aftermarket and are manufactured in AB Company's only foreign facility, a factory in Mexico. Profit margins on the aluminum products are significantly higher than those of rubber and plastic products.

The automotive aftermarket products are marketed primarily through mass merchandisers and automotive outlets under the company's brand names as well as under private labels. Aggregate sales to two customers account for approximately thirty-five percent of this segment's total net sales. Although AB is a market leader in many of its product lines, all the markets in which it sells automotive products are highly competitive in the areas of design, price, quality, and customer service.

The patents, trademarks and licenses under which it operates are generally not essential to the overall success of this segment.

Assignments for Part 1

Assume you are Controller and Director of Financial Reporting for AB Company. One of your duties is to make sure the company understands and complies with official accounting pronouncements. Another important duty you have is to communicate to CPA Firm, your company's outside auditors, that AB understands their responsibilities relating to official accounting standards and is in compliance. AB has Goodwill balances on their books and the initial implementation of Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets* (SFAS 142), is scheduled for the current fiscal year which ends on December 31, 2002. Initial discussion with company management about the goodwill impairment tests called for in SFAS 142 indicate that, because of time and other resource constraints, AB will not be able to test both segments of the company. Therefore, company plans call for the appraisal of Segment A to be performed by in-house accounting personnel, and the appraisal of Segment B to be performed using an outside appraisal consultant.

You are required to

1. Read SFAS 142 and consider its applicability to the AB Company situation.

2. Demonstrate your understanding of SFAS 142 by taking a quiz over the major concepts contained in the standard.

3. Write AB Company's position statement on the implementation of SFAS 142. The position statement should be between two and four pages (including excerpts from SFAS 142) of clear, concise prose and should both inform AB Company top management of their responsibilities regarding the implementation and communicate to CPA Firm AB's understanding of and plans to comply with the standard. Organize your position statement to include:
   a. an introduction which
      (1) establishes the basic facts
      (2) highlights the issues or questions to be explored
   b. a body which
      (1) defines relevant terms and concepts
      (2) applies the concepts to AB and justifies the application
      (3) uses relevant excerpts from SFAS 142
   c. a conclusion which states AB's plans for complying with SFAS 142.

AB Company - Part 2

Assume you are a staff accountant for CPA Firm assigned to the AB Company audit. One area you are working in is the audit of goodwill and intangible assets. Specifically, you have been asked to monitor AB Company's compliance with SFAS 142 and design appropriate audit procedures. Through the senior accountant on the AB engagement you have received the memo (See Exhibit 4) that an AB accountant wrote outlining their understanding of the requirements of SFAS 142 and their plan for compliance. You have been asked to evaluate AB's understanding of the requirements of SFAS 142 and their implementation plans, prepare a brief summary of the official auditing literature relevant to this situation, and write a planning memo.

Assignments for Part 2

1. Critically read and evaluate the AB Company position statement in light of the requirements of SFAS 142.

2. Tomorrow the AB audit team, lead by the engagement partner, will meet to discuss major aspects of the AB Company audit. To prepare for the meeting you should make sure you are ready to discuss AB's understanding of and plans for complying with SFAS 142. Also, prepare to share a brief summary of the official auditing literature relevant to AB's implementation of SFAS 142.

3. After the audit team meeting, prepare a memo for the audit working papers which includes:
    a. an analysis of our audit purpose
        (1) What do we need to do in auditing the information?
        (2) What are the significant audit issues to be considered in relation to:
            (a) the initial implementation of this (or any) SFAS?
            (b) accounting for goodwill on a go forward basis?
            (c) business implications outside of reporting for goodwill?
    b. an analysis of the information we will need to do the audit and where it will come from
    c. a list of appropriate auditing procedures for testing this area.

CONSOLIDATING INFORMATION TECHNOLOGY OPERATIONS AT FIRST RATE FINANCIAL

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Joe Sebastian sat at his desk and wondered if his strategy for reducing costs while increasing revenue really made sense for his new company, First Rate Financial, where he was starting his third month as president and CEO. Joe had experienced great success in his prior position at a brokerage firm, where centralization of back-office functions had significantly enhanced the company's earnings, and he felt sure that a similar strategy would yield even greater returns at First Rate Financial. However, just three months into his tenure, a number of key management team members at First Rate had left the company despite Joe's best efforts to convince them of the soundness of his plan. Joe was certain that his strategy would work, even though he faced objections from some of the more autonomous parts of the company. He stared out the window and reflected on what else he could do to convince his managers and employees. He decided to ask his management team to conduct an analysis of the strategy, and to identify a common set of issues and opportunities that would encompass their concerns.

CASE BACKGROUND

First Rate Financial, located in Nashua, N.H is an insurance and financial services company licensed to sell life insurance, annuities, and property and casualty insurance (auto, homeowner, and commercial lines) across the US. First Rate offers investment-oriented life insurance, retirement savings, and investment management products and services through Supreme Life Insurance Company; and personal and commercial property and casualty insurance through the

Gold Standard Insurance Company and Protector Insurance Company. An overview of the product and service offerings of First Rate is provided in Figure 1.

The parent company is a Fortune 500 company, generating annual revenue of approximately $2 billion dollars from its life insurance and annuity operations and approximately $1 billion dollars from its property and casualty operations. First Rate is considered a medium sized company within the Insurance Industry and ranks in the top 20 of variable annuity providers and top 30 of property and casualty providers.

First Rate Financial sells and services its property and casualty products through its subsidiary Gold Standard Insurance, which is also located in Nashua. Gold Standard supports its operations through regional offices located around the US. In particular, Gold Standard supports its operations in the mid-west through its own subsidiary called Protector Insurance, located in Green Bay, Wisconsin. The inter-relationship among First Rate, Gold Standard, and Protector insurance companies is illustrated in Figure 2.

Protector is different than other Gold Standard subsidiaries because it once had been an independent company, prior to its acquisition by Gold Standard. Protector was used to running its operations in an almost totally autonomous manner. Their local operations still provided marketing, underwriting, accounting, human resources, customer service, and information technology (IT) support. All of these areas were prime targets for First Rate's centralization efforts.

As with all business entities, managers are constantly scanning their environments to find ways to become more efficient. At First Rate Financial, Sebastian identified several areas in which the company could reduce expenses. One such area involved consolidating duplicate IT operations between First Rate and Protector Insurance; specifically, First Rate would subsume the IT operations from Protector (Gold Standard's IT functions had already been consolidated into First Rate). This would be no easy chore, as the technology employed at both sites was quite complex, the breadth and depth of operational and accounting applications involved were very extensive, and affected employees at Protector were extremely concerned about the contemplated change. Clearly, top management faced a host of business and internal control risks.

PART I: THE INITIAL CONSOLIDATION PROPOSAL

The management of Gold Standard Insurance was allowed a great deal of independence from First Rate Financial with regard to selling and administering its property and casualty insurance business. The Gold Standard management team believed that a 'local' approach was needed to effectively sell and service the business; accordingly, the management actively developed a number of autonomous regional offices which were empowered to make most of the daily decisions related to the business they conducted in their parts of the country. Protector Insurance, as a separate company acquired by Gold Standard, was very successful in the mid-west region of the country and was upheld as a shining example of how well the 'local' approach worked.

The management team at Gold Standard perceived this business strategy to be working effectively, and was shocked when told of impending changes advocated by First Rate Financial's newly hired CEO. Joe Sebastian's principle charges were to find new approaches to generate additional revenue from the 'baby boomer' generation and to streamline company operations with the objective of reducing expenses. Sebastian believed that centralizing certain business functions to gain economies of scale was critical to achieving lower expenditure levels.

The "local" approach advocated by the prior CEO of First Rate Financial and endorsed by Gold Standard management was not embraced by Sebastian. In particular, Gold Standard allowed Protector Insurance to process all business functions (market analyses, policy underwriting, claims processing, financial accounting, human resource processing, customer serving, and regulatory reporting) via its own complex IT infrastructure, which included mainframe, client-server and desktop computers—all connected through a sophisticated internal network. Gold Standard used similar software applications to handle its business information needs; however, all of Gold Standards' software applications and data were located at and processed by the IT operations of First Rate Financial. Gold Standard defended Protector's decentralized, local approach by insisting that customers across the United States did not want to feel as though they were dealing with a monolithic, massive insurance company from New Hampshire; rather, they were much more inclined to purchase their property and casualty insurance needs through a smaller local company. Thus, if First Rate Financial centralized IT operations, customer business was at risk.

Sebastian felt as though a 'local storefront' could and should be maintained; however, consolidating 'back office' information processing functions from Protector to First Rate would be transparent to customers, yet efficient for First Rate Financial. Protector management was not convinced in this regard and, further, they were worried that many IT jobs at Protector would be at risk. They felt that this consolidation effort was only the tip of the iceberg, as they believed that consolidation of other back-office functions could soon follow.

Required:

Assess the pros and cons of the proposed consolidation strategy from the perspectives of the (a) new CEO of First Rate Financial, (b) management team at Gold Standard, and (c) management team at Protector. Frame your arguments by evaluating the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the proposal from the viewpoint of each stakeholder.

PART II: COST-BENEFIT ANALYSIS

Joe Sebastian, the CEO of First Rate Financial presented his SWOT analysis and listened as managers from Gold Standard and Protector also presented their analyses. The president of Protector, Alan Tokar, expressed his concern that IT operations at First Rate would not be able to effectively meet the needs of Protector's employees, agents and customers, and that any expense savings would be more than offset by a reduction in service levels. Managers at First Rate and Gold Standard also expressed concern that if IT operations were consolidated, service levels at First Rate and Gold Standard might also be compromised. Everyone seemed to be getting nervous.

Sebastian decided that he needed more information, particularly a cost-benefit breakdown, before making a final decision. Tokar thought a cost-benefit analysis was an unnecessary waste of time and effort because of the expected reduction in service levels, which is vital in the insurance industry. Sebastian insisted that a study would be undertaken and, based on the findings, a final decision would be made. The CEO asked Richie Hill and Bill Lewis, the Chief Information Officers (CIOs) from First Rate and Protector respectively, to conduct the cost-benefit study and present a recommendation (both CIOs reported directly to their respective presidents).

Alan Tokar quickly communicated the proposed consolidation plan to his managers and then informed the rest of Protector's employees. Initial reaction was negative, as many managers and employees agreed that without a local IT operation, customer service levels would deteriorate, and insurance agents and policy owners would notice a reduction in service, severely harming the reputation of Protector.

Richie Hill and Bill Lewis met and assembled a joint proposal team to begin the study. They also communicated to managers and employees at Protector that maintaining excellent service levels was the paramount consideration, and that the proposed consolidation would not be undertaken if deteriorated service levels were at risk. Richie Hill was named proposal team leader, with key personnel from First Rate, Gold Standard and Protector assigned to the team. Hill recommended that the proposal team immediately visit Protector, meet with all key IT and business managers, and reinforce the message that service levels would not be impacted by any consolidation efforts. The proposal team could also use the visit to gauge the depth of resistance to the consolidation plan and formulate actions to deal with this resistance, should it become necessary.

Required:

1) The cost-benefit proposal team was comprised of the CIOs from First Rate and Protector, along with staff members from First Rate, Gold Standard and Protector, with the First Rate CIO as team leader. Discuss the composition of the proposal team. Do you believe the team would be biased one way or another? How would you have constructed the team and why?

2) Why did Hill recommend that the proposal team visit Protector immediately? What could they accomplish on-site that could not be done from their offices in Nashua?

3) What factors would you consider in the cost-benefit analysis? What business information should the team collect to support each of these factors?

PART III: DEVELOPING THE PROJECT PLAN

Sebastian met with the cost-benefit proposal team and key managers from First Rate, Gold Standard and Protector. His words were measured and targeted:

> "I received the cost-benefit analysis of the proposal, in addition to the earlier SWOT analyses provided by Gold Standard and Protector. I thank you all for your hard work! After much consideration, I am convinced that we can effectively consolidate the First Rate and Protector IT operations, while simultaneously maintaining excellent service levels for employees, agents and customers. I am not saying that this will be an easy or risk-free project; rather, it will be fraught with potential pitfalls. Nevertheless, by putting together a solid project management team and executing the plan to perfection, I believe that we can accomplish the objective. In the end, First Rate will benefit immensely from this consolidation strategy."

The proposal team was readily transformed into the project team. The project manager, who was responsible for detailed oversight of the IT consolidation effort, was Sarah Clearwater, the Data Center Manager (DCM) at First Rate Financial. Sarah reported to First Rate's CIO, Richie Hill. Her first step was to develop a preliminary project plan, with the advice and assistance of key technical and application personnel from First Rate and Protector. Clearwater started with the following outline of key elements to include in the project plan:

1. Assigning Roles and Responsibilities: Identify who will participate on the project, for what period of time, and what are each person's responsibilities.

2. Tracking and Reporting Team Progress: Outlines the method for tracking the progress of the project, how frequently progress updates are to be reported and by whom, and the type and frequency of meetings to discuss progress and make decisions relative to the project.

3. Facilitating Communications Among Stakeholders: Details how communications about the project would be handled. The frequency of communication and the audience to which communications would be directed are determined as part of this plan. Also included are plans on how to communicate with Data Center staff at both sites whose positions were going to be affected by the consolidation.

4. Handling Human Resource Issues: Lists the tasks necessary to deal with proposed staff reductions, development of severance packages, and retention of key staff members during the consolidation. Includes new roles needed in Nashua and new opportunities for staff in Wisconsin including possible transfer of certain Green Bay staff to Nashua.

5. Managing Conflict and Change: Covers the manner in which changes to the plan are to be requested, approved, and communicated.

6. Configuring the Information Technology Architecture: Lists the tasks needed to install computer and telecommunications equipment at the Nashua site.

7. Relocating Business Applications and Data: Identifies which equipment from Wisconsin would be moved to Nashua, which equipment at Wisconsin would be disposed of and the method for disposal. Determines when to uninstall equipment at the Wisconsin site. Describes all tasks needed to install Protector software applications at the Nashua site. Entails the physical relocation of data from Wisconsin to Nashua on the cutover date.

8. Testing the Consolidation Plan: Gives the tasks needed to test and verify that all Protector applications will run successfully at the Nashua site and that required service levels (on-line response time, completion of batch processing, and required system availability) are to be maintained. Details the number and timing of tests during the project.

9. Implementing the IT Consolidation: Determines the tasks needed to physically move all equipment, software, and data from Wisconsin to Nashua, the sequencing of these tasks, and the final testing to insure that all applications work properly.

10. Conducting a Post-Implementation Review: Identify the changes in organization needed at Nashua and Wisconsin to resolve problems and to support the IT needs of Protector employees after the completion of the consolidation.

Clearwater determined that the consolidation project could be completed in sixteen weeks. The project manager completed the first major project element (#1), and all team leaders were responsible for tracking and reporting their progress (element #2) to her on a weekly basis. Each of the remaining project elements (#3 through #10) reflected 8 project teams, each with its own team leader. The overall project plan is illustrated in Figure 3.

Sebastian received monthly reports of the progress of the project from Richie Hill. As the end of the project approached, he worried about the impact on First Rate's financials. He knew the risks were substantial, but he was confident that the expected benefits could be achieved. If the project was successful, he planned to look into consolidating the accounting and human resources staff next.

Required:

1) What are the risks inherent in consolidating IT in Nashua? How does the adoption of this project plan help prevent risk or reduce the potential for business exposure?

2) What are the inherent risks related to each project element, and what controls would you recommend to reduce each identified risk to a tolerable level? For each risk-controls mapping, assess how much residual risk would still remain and explain why?
3) How would the centralization of accounting and human resources staff differ from the IT consolidation project? Describe differences in the consolidation process itself, and the risks

and control issues that would need to be considered. Identify relevant cost and benefit categories and measures.

Figure 1

First Rate Financial: Overview of Services and Products

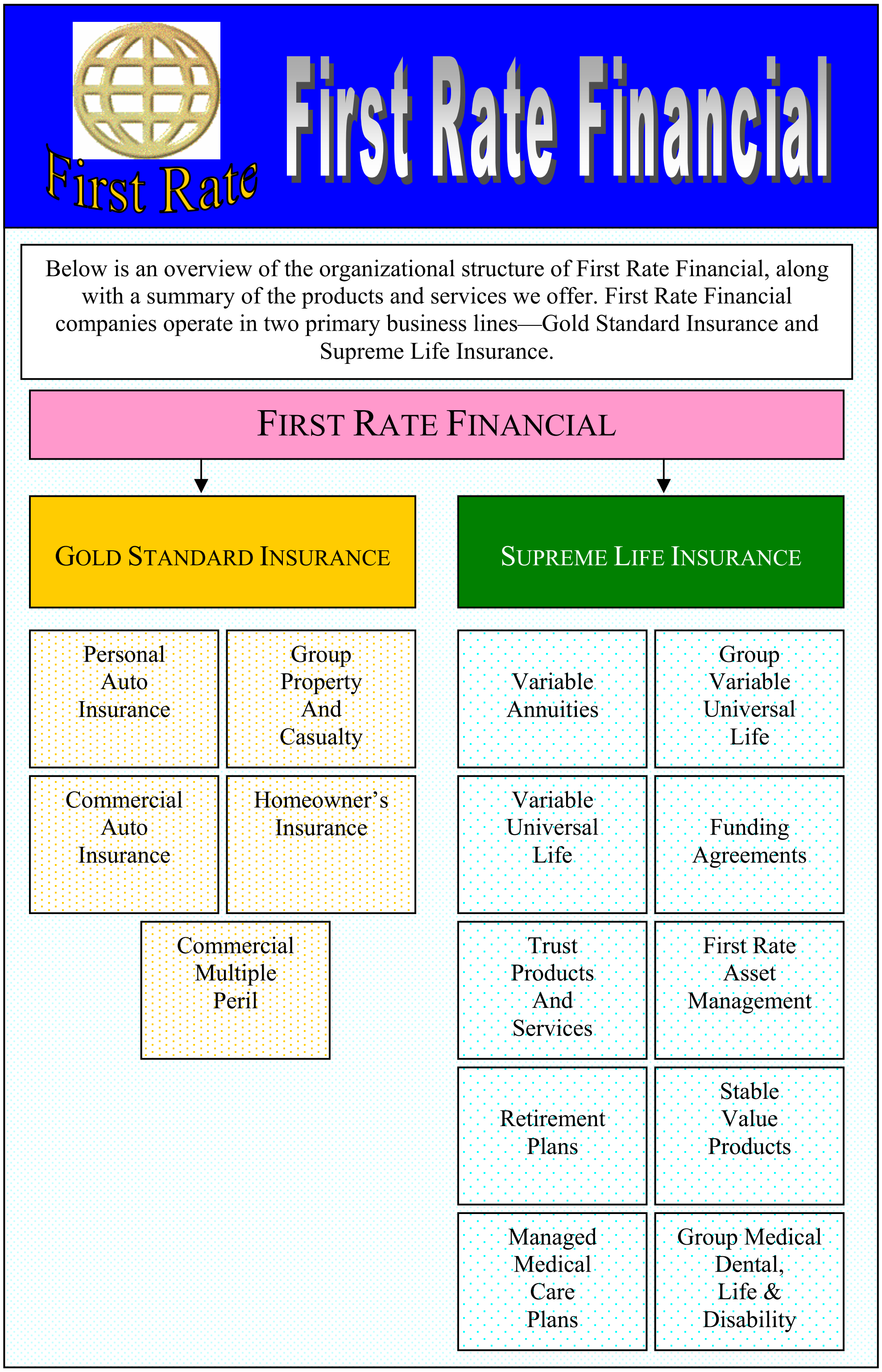


Figure 2

First Rate Financial Subsidiaries

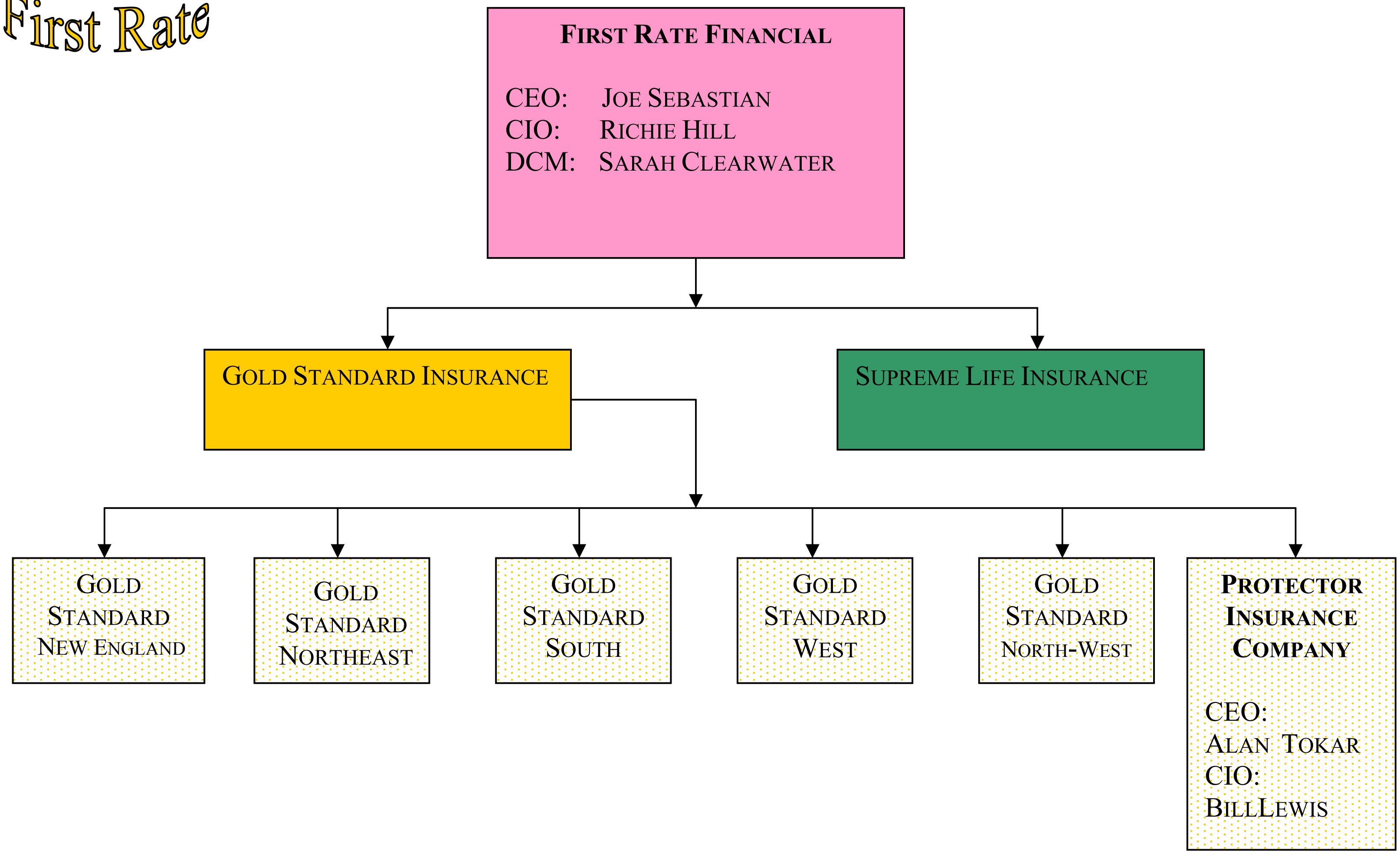
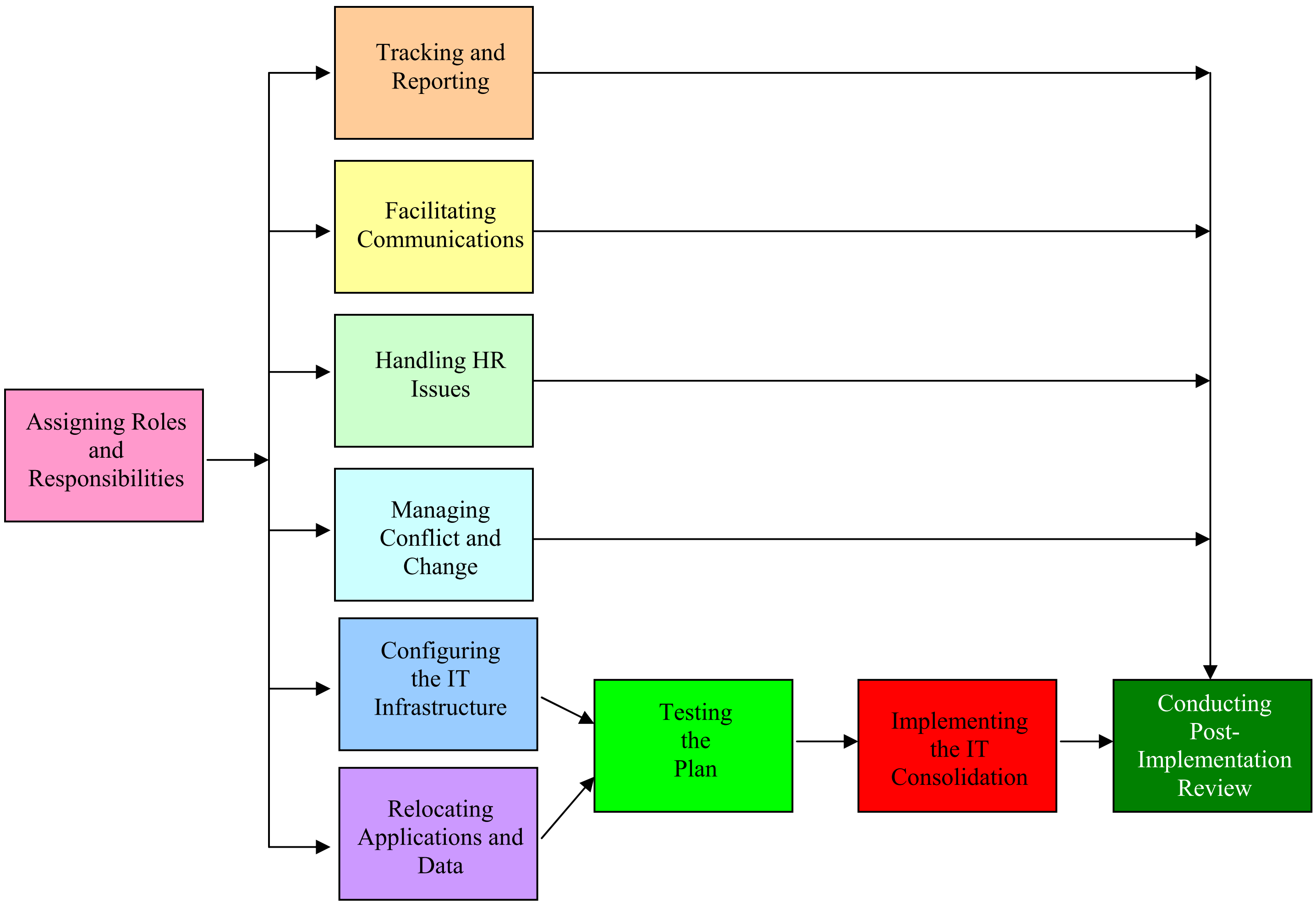


Figure 3

Overall Project Plan



FINANCIAL PLANNING FOR THE PROFESSOR

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CASE BACKGROUND

You are working as an intern at a CPA firm during the summer before your final year of college. The firm provides clients with a full range of services including personal financial planning (PFP). The PFP services are rendered through a separate entity that is a registered investment advisor. PFP services are rendered on a fee-only basis, meaning a fee is charged for services and commissions are not earned or accepted. You are very interested in the financial planning aspect of the practice and you have been selected to work closely with Ed Miller, one of the partners who specializes in tax and PFP. You are going to work on the case described below.

THE CLIENTS

Craig and Mary Smith have been tax clients of the firm for the last fifteen years. They both recently turned age 55. The Smiths are "empty-nesters." Their youngest child recently graduated from college and all three of their children are gainfully employed. The Smiths want to address their retirement planning concerns.

Craig is a management professor. In addition to teaching, he is engaged in numerous other activities such as research and consulting in time management; he also authored two books and several journal articles. Fortunately, to avoid a conflict of interest, Dr. Smith is a professor at a college other than the one you attend. Mrs. Smith is an elementary school teacher. The Smiths are relaxed, calm, cool, and collected people. They have adopted a 'keep-it simple' philosophy to life. Craig has learned through experience that it is difficult to outsmart the stock market. His experience has helped him to grow wise and mellow about investing.

For the last several years, Craig has requested an extension for the filing of their tax returns. He likes to wait until the conclusion of the spring semester before tackling the summarization of the past year's transactions. He also has a laissez-faire attitude about financial matters. During the most recent meeting to review tax return information, Craig and Mary started a discussion about their retirement planning and financial security concerns. They are very confident about Ed Miller's advice and they recognize the value of fee-only financial planning. They consider the firm's advice to be competent, independent, and objective.

The Smith's investments are a vast collection of various retirement accounts and some non-retirement accounts. Almost exclusively, they have used mutual funds. Craig was really disappointed with the performance over the last three years. The dismal performance motivated him to study the family's investing results over the last 20 years. His observation was that their high-cost, actively managed stock mutual funds underperformed the Wilshire Total Market Index by more than 2.5% and their bond mutual funds underperformed the Lehman Bond Index by almost 1%. His conclusion is to consolidate their investments and to use passive index funds. He wants to use one equity fund that will replicate the performance of large company stocks and one bond fund that will replicate the return of intermediate-term government bonds. Craig understands and appreciates the concepts of efficient frontiers and risk tolerance. He points out, "I realize that a portfolio of 100% equity should produce a higher return, but adding bonds can dramatically reduce downside risk." He also commented that they used portfolio optimization techniques several years ago with the assistance of a highly trained technician and the results were unsatisfactory. He plans to use a fixed weighting approach for asset allocation. The allocation of equity and bonds will be dependent upon age. As they get older, he feels that their risk tolerance should decrease and they should decrease their exposure to stocks. Craig's formula to determine the target percentages of equity and bonds is:

Step #1. The % of equity in the portfolio - subtract their age from 120.
Step #2. The % of equity will never drop below 20%.
Step #3. The % of bonds in the portfolio – subtract the % of equity, steps #1 & 2, from 100%.

At the Smith's current age of 55, their mix will be 65% equity and 35% bonds. Craig plans to adjust the target allocation percentages once every five years. They will maintain their current mix until age 59. Then, at age 60, they will adjust the mix to 60% equity and 40% bonds. Should the Smiths reach age 100 their mix will be 20% equity and 80% bonds and this allocation will be maintained until death. He realizes that market factors may cause their investment mix to vary from the target allocations. He plans to annually adjust the accounts to conform to the 5-year target allocation percentages.

Craig and Mary really like the simplicity of the investment plan, but they have many questions. What will their retirement assets be worth when the stop working? And when that day comes, how much will they be able to safely withdraw each year? What is the chance that they may outlive their assets? How much will they leave to their children? They realize that no one can perfectly predict the outcome of their investments. Uncertainty is part of the nature of investing. They want the firm to calculate the odds or the probability of meeting their goals. They want to be able to do some what-if analysis. What if they withdraw more or less each year? What if they retire earlier? What if they retire later? What if they change the investment allocation targeted percentages? Is their investment mix too aggressive? They also want to know, when should they start to collect Social Security?

RESOURCES

As at June 30th the Smiths have $800,000 ($700,000 for Craig and $100,000 for Mary) in various qualified retirement accounts. Craig and Mary have named each other as primary beneficiaries and their children are contingent beneficiaries. Mary is eligible to collect a defined benefit pension of $15,000 per year at age 60. The pension will increase by 4% per year for each year she works after age 60 until age 65. The pension distributions will grow annually at 2/3 the inflation rate during the period of distribution. They both will qualify for Social Security retirement benefits. Their annual Social Security benefits will depend upon the age at which they begin to collect their benefits. Their annual expected benefits, in today's dollars, if they start collecting at:

	Age 62	Age 66
Craig	$15,000	$20,000
Mary	$10,200	$13,600

The Social Security benefits are also expected to grow annually at 2/3 the inflation rate. They have $150,000 in non-retirement accounts; primarily invested in mutual fund money market accounts. They also own their residence and a rental property. Craig and Mary's employers provide life insurance as long as they are employed at 3 times their salary. Their employers also provide disability insurance at 60% of their salaries and full medical coverage. Based upon the number of years that Craig has been with the college, the Smith's have medical coverage for life.

ASSUMPTIONS

The Smith's want their retirement assets to generate $60,000 per year after taxes in today's dollars and they want to leave an inheritance to their children of at least $500,000. They expect that their average tax rate will be 25%. For planning purposes they ask you to ignore the non-retirement assets, Mary's defined benefit pension, the values of their real estate investments, and both Social Security benefits. They expect that inflation will behave similarly to the past. They expect that their investment performance will average the historical mean of the underlying security minus .30% for fund expenses. They would like to be financially prepared to retire at age 60. Craig really enjoys his work at the college and may want to continue working. Craig's annual contribution to his retirement assets including the contribution by the college is $14,400 per year and it is expected to grow at the same rate as inflation. Mary is undecided as to whether she wants to work after age 60. She is not contributing to her pension plan.

Ed Miller instructed you to assume the following data:

	Historical Mean Rate	Standard Deviation
Inflation - CPI	3.0%	4.4%
Equity – Large Company*	10.3%	20.2%
Bonds – Intermediate Government*	5.3%	5.7%

* - rates of return before any fund expenses

DETERMINISTIC VS. STOCHASTIC MODELING

Two types of models available to financial planners are deterministic and stochastic models. A deterministic model assumes nothing is random and gives a single definitive answer. One or more variables are used and the model is run to predict an outcome stated as a definitive number.

EXAMPLE 1: A planner wants to calculate the amount accumulated in a retirement account over a ten-year period from age 55 to 64. The assumptions are: annual contributions - $10,000, contributions made at the end of the year, and the rate of return is 7.5% net of expenses. See illustration – Exhibit 1.

According to the exhibit, we see that the assets should grow to $141,471.

Stochastic models analyze situations involving random phenomena. Instead of using a fixed rate of return, a financial planner simulates returns based upon the likelihood of different events occurring using Monte Carlo simulation methodology. For normal distributions the mean and standard deviations are the parameters; other distributions may require other parameters.

EXAMPLE 2: A planner wants to determine the probability that a client will accumulate less than $130,000. The assumptions are similar to Example 1 with three modifications: the returns are normally distributed, the mean of the returns is 7.5% net of expenses, and standard deviation of the returns is 5.0%. See illustration – Exhibit 2.

As we can see from the percentiles and the graph, there is between a 15% and 20% chance that less than $130,000 will be accumulated.

TAX INFORMATION

Craig and Mary's tax information for the previous year indicated the following information:

Craig's salary (net of pension contribution)	$70,000
Mary's salary	44,500
Bank interest	450
Dividends from money market	2,400
State income tax refund from previous year	220
Craig's consulting income (net)	30,000
Loss from residential rental property (net)	(5,000)

Withholdings:	Federal	State
Craig	$18,250	$2,800
Mary	8,125	1,350
Estimated payments:		
	$ 4,000	none

Medical expenses (unreimbursed)	1,500
Real estate taxes for residence	4,000
Mortgage interest for residence	4,500
Charity contributions	3,500
Union dues (both)	1,000
Unreimbursed employee expenses (Craig)	700
Educator expenses (Mary)	300
Tax preparation	450

Craig and Mary plan to file a joint return and they will not take any of their children as dependents. Craig's consulting net income in previous years was $15,000 to $20,000. He hopes that last year's level will be continue plus or minus 10% over the next several years. Craig and Mary's itemized deductions are approximately the same as last year. They purchased their residence several years ago. The fair market value of the residence is $350,000, the basis is $135,000, and the remaining mortgage balance is $75,000. The residential rental property was acquired on June 1, fifteen years ago, for $100,000. Land was considered to be $20,000 and the improvement was $80,000. Depreciation taken through the beginning of the current year was $45,211. The fair market value of the rental property is $300,000. They still owe a mortgage balance of $51,000 on the rental property. The net loss from the rental property is expected to continue for the next several years. The Smith's reside in a common-law state. They expect that their non-retirement assets will grow at the same rate as inflation over the next five to ten years.

QUESTIONS

Investment Planning

1. Index funds have become very popular. Identify and discuss the reasons for the popularity of such funds.

2. There is a downside to investing with index funds. Identify and discuss the negative aspects of index funds.

3. Dr. Smith observed that his experience with actively managed funds was that they underperformed the benchmark indexes. Discuss the reasons why actively managed funds may underperform indexes. Explain how you would test Dr. Smith's hypothesis.

4. An alternative to investing in index funds is exchange-traded funds. Discuss the differences between index funds and ETFs. In light of the situation described in this case, which type of investment is recommended?

5. What is the difference between the historic arithmetic average annual return and the historic compound (geometric) average annual return? If you were told that the average return is 8% and the geometric annual return is 7%, which value would you use to predict the accumulated value of a client's retirement account? Why?

Deterministic Modeling

6. Prepare a spreadsheet that presents to the Smiths the year-by-year projection of the nominal value of the retirement assets from age 55 to age 70. Use the data and assumptions supplied in the case. Assume that the return for their portfolio will be the weighted average of the expected returns for equity and bonds minus assumed fund expense percentages. Use the target asset allocation percentages assuming the average values. The spreadsheet should indicate the beginning balance, annual savings indexed for inflation, annual return, and ending balance. Assume also that there are no withdrawals. To simplify the calculations, assume annual contributions are made at the end of the year. All assumptions should be explicitly stated on the schedule.

7. Use the spreadsheet prepared for question 6 as your base. Prepare another spreadsheet that includes the desired annual withdrawals indexed for inflation (fixed at 3.00%) starting at age 60. The spreadsheet should be a year-by-year projection to age 95. As with the previous model, use the data and assumptions supplied in the case and all assumptions should be explicitly stated on the schedule. Use the model to answer the following questions:

    a. Based upon the projected assets available, can the Smiths make their desired annual withdrawals and have $500,000 remaining at age 95?

   b. If the answer to 7a is no, how much can the Smiths withdraw annually and still have $500,000 remaining at age 95? *Hints: The answer to 7a should be no. Use the Goal Seek tool with Excel.*

   c. If the answer to 7a is no, how long should the Smiths postpone retirement in order to withdraw the desired annual amount and still have the $500,000 remaining? Use "What-if analysis" and assume that the Smiths will retire only at the end of a year.

8. The value of an asset can be defined as the present value of the asset's future cash flows. Compute the value of Mary Smith's defined benefit pension plan today assuming she works until age 60. Recalculate the value today, if she plans to retire at age 65. Assume that Mary is age 55 today, the appropriate discount rate is 5.5% and her life expectancy at age 60 is 24 years and at age 65 is 20 years. To simplify calculations, assume the benefits are paid at the end of the year. Present your response with a clear worksheet. Assume inflation is fixed at 3.00%.

9. The case assumptions indicated that Social Security benefits were to be ignored. However, Social Security provides significant cash flow for the Smiths. If the Smiths start collecting at age 62, they will collect reduced amounts. If they start collecting at age 66, they will collect a greater annual benefit, but they are deferring the benefits for 4 years. Assume that during the 4-year deferral period the Smiths will cover the cash flow difference by withdrawing the foregone benefits from their qualified retirement accounts. Prepare a worksheet that will help the Smiths understand the trade-offs of collecting reduced benefits at age 62 or full benefits at age 66. The spreadsheet should compare the year-by-year expected benefits indexed for inflation (fixed at 3.00%). Assume that the Smiths will earn 7% on their retirement assets and ignore the income tax implications. How many years will the Smith's need to collect the higher age 66 benefits to payback for the assumed withdrawals made to make-up for the forgone age 62 benefits? In other words, if the Smith's chose to wait until age 66 to commence collecting Social Security, how many years will they need to live collecting the higher benefits to 'break-even'? Support your answer with a worksheet. How does the investment rate of return affect the 'break-even' period?

Stochastic Modeling

10. Incorporate risk using Monte Carlo techniques into your analysis performed for Question 6. Use the historical mean return and standard deviation data assumed by Ed Miller. Assume that the probability distribution patterns for inflation, large company stocks, and intermediate-term government bonds are all normal. Prepare a table and graph depicting the probability distributions of the retirement assets at ages 60, 65, and 70. Use three different tables and graphs.

11. Incorporate risk using Monte Carlo techniques into your analysis performed for Questions 7a and 7b. Again, use the historical mean return and standard deviation data

assumed by Ed Miller. Assume that the probability distribution patterns for inflation, large company stocks, and intermediate-term government bonds are all normal.

a. Prepare a table and graph depicting the probability distribution of retirement assets at age 95. Based upon this distribution what is the probability of the Smiths having at least $500,000.

b. Using the 'goal seek' withdrawal amount from question 7b, prepare a table and graph depicting the probability of the Smiths not running out of money by age 95.

12. Illustrate how increasing the equity portion of the investment mix and correspondingly decreasing the bond component of the portfolio affects the results of Questions 10 and 11. Adjust the formula used to determine the target percentages by subtracting the age of the Smiths from 130 instead of 120 (Step #1).

13. Discuss how you would explain the results of stochastic analysis (Questions 10 - 12) to a client. What difficulties do you anticipate?

Data Analysis

14. Research the historical data for the rates of inflation, total returns of large company equities, and total returns of intermediate-term government bonds for the period 1925 to the most recent year. Calculate the arithmetic mean, median, geometric mean, standard deviation, minimum, maximum, and coefficient of variation (standard deviation per unit of geometric mean) of each variable. Find the correlations between each pair of variables. Prepare a histogram depicting the pattern of the probability distribution for each variable. Using histograms, describe the pattern of the probability distribution for each variable. What do you think about the assumption that the distributions are all normal? Explain your results.

15. Review the data obtained for Question 14. How many times did large company stocks show negative returns for two or more consecutive years? Dr. Smith indicated, "A portfolio of 100% equity should produce a higher return, but adding bonds can dramatically reduce downside risk." Use the data over Dr. Smith's lifetime as a base. Select a period of negative equity returns for at least two consecutive years other than our most recent bear market, which started in 2000. Prepare a table and a graph illustrating how varying percentages (0%, 25%, 50%, 75%) of bonds in a portfolio affects a portfolio that starts with a beginning balance of $100,000.

Tax and Legal Issues

16. Prepare a worksheet computing the federal income tax liability for the previous year. Use currently legislated tax law and rates. The worksheet should present total income, adjustments, adjusted gross income, itemized deductions, exemption amount, income tax liability, credits (if available), net amount due/overpayment, average tax rate, and marginal rate. Discuss the marginal tax rate for Craig's self-employment income.

17. Craig and Mary are considering selling the residential rental property for $300,000 to obtain the funds to purchase a future retirement residence. How much federal tax would be due if they sell the property? Present data in a clear concise worksheet. Are their any tax planning opportunities with this transaction?

18. Craig currently operates his consulting business as a sole proprietorship. Identify different ways that he can organize his business. Discuss the advantages and disadvantages of each form.

19. Craig has not established a retirement account for his self-employment business. Identify the different types of retirement plans that he can utilize within a self-employed business. Discuss the advantages and disadvantages of each method. Craig has no employees.

20. Craig and Mary have titled their bank accounts, mutual fund accounts, residence, and rental property in joint name. With regard to Federal Estate Taxes, is it wise to title these assets in joint name? Do you have any recommendations pertaining to the titling of the assets? What are the advantages and disadvantages of your recommendations?

EXHIBIT 1

EXAMPLE 1
PROJECTED RETIREMENT ASSETS
DETERMINISTIC MODEL

20-Oct-03

INPUTS / ASSUMPTIONS:

CURRENT AGE	55
CURRENT RETIREMENT ASSETS	$0
ANNUAL RETIREMENT SAVINGS	$10,000
EXPECTED RATE OF RETURN	7.5%

OUTPUT

AGE	BEG. BAL. RETIREM'T ASSETS	RETIREM'T SAVINGS	RETURN	END. BAL. RETIREM'T ASSETS
55	0	10,000	0	10,000
56	10,000	10,000	750	20,750
57	20,750	10,000	1,556	32,306
58	32,306	10,000	2,423	44,729
59	44,729	10,000	3,355	58,084
60	58,084	10,000	4,356	72,440
61	72,440	10,000	5,433	87,873
62	87,873	10,000	6,590	104,464
63	104,464	10,000	7,835	122,298
64	122,298	10,000	9,172	**141,471**

EXHIBIT 2

EXAMPLE 2
PROJECTED RETIREMENT ASSETS
STOCHASTIC MODEL

20-Oct-03

INPUTS / ASSUMPTIONS:

CURRENT AGE	55
CURRENT RETIREMENT ASSETS	$0
ANNUAL RETIREMENT SAVINGS	$10,000
EXPECTED RATE OF RETURN	7.5%
STANDARD DEVIATION OF RETURNS	5.0%

OUTPUT

AGE	BEG. BAL. RETIREM'T ASSETS	RETIREM'T SAVINGS	RETURN	END. BAL. RETIREM'T ASSETS
55	0	10,000	0	10,000
56	10,000	10,000	750	20,750
57	20,750	10,000	1,556	32,306
58	32,306	10,000	2,423	44,729
59	44,729	10,000	3,355	58,084
60	58,084	10,000	4,356	72,440
61	72,440	10,000	5,433	87,873
62	87,873	10,000	6,590	104,464
63	104,464	10,000	7,835	122,298
64	122,298	10,000	9,172	**141,471**

STATISTICS:

Minimum =	106,504
Maximum =	191,904
Mean =	141,482
Std Deviation =	12,392

PERCENTILES	VALUES
5% Perc =	121,930
10% Perc =	125,821
15% Perc =	128,600
20% Perc =	130,781
25% Perc =	132,648
30% Perc =	134,420
35% Perc =	136,163
40% Perc =	137,989
45% Perc =	139,564
50% Perc =	141,139
55% Perc =	142,695
60% Perc =	144,216
65% Perc =	146,019
70% Perc =	147,732
75% Perc =	149,672
80% Perc =	151,769
85% Perc =	154,258
90% Perc =	157,641
95% Perc =	162,895

EXHIBIT 2

EXAMPLE 2
PROJECTED RETIREMENT ASSETS
STOCHASTIC MODEL (CONTINUED)

INPUTS / ASSUMPTIONS:

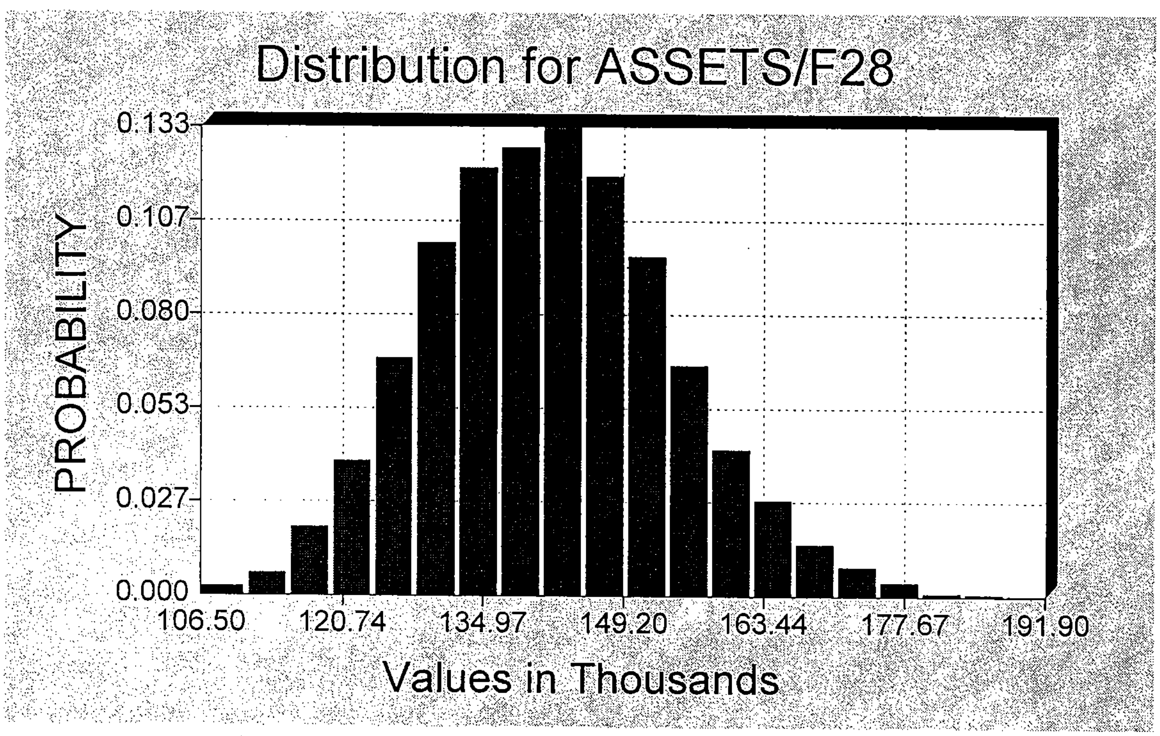
CURRENT AGE	55
CURRENT RETIREMENT ASSETS	$0
ANNUAL RETIREMENT SAVINGS	$10,000
EXPECTED RATE OF RETURN	7.5%
STANDARD DEVIATION OF RETURNS	5.0%

OUTPUT

STATISTICS:

Minimum =	106,504
Maximum =	191,904
Mean =	141,482
Std Deviation =	12,392

GRAPH



POP'S, INCORPORATED
MANAGERIAL ACCOUNTING AS A STRATEGIC DECISION TOOL

Brian Miller
Assistant Professor of Accounting
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Cedarville University, Cedarville, Ohio

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The Procter & Gamble Company, Cincinnati, Ohio

BACKGROUND

Paulo "Pops" Gigliotti emigrated from Italy and settled in Dayton, Ohio. In Italy, Mr. Gigliotti had earned both a bachelors and masters degree in food chemistry and worked for several food processing companies. Pops came to the United States when his cousin, Guiseppe Manganaro, offered him the position of senior food chemist at Manganaro Foods, a growing producer of Italian cuisine for the American market. Although he enjoyed working with family members, he did not feel challenged by his new job and therefore began tinkering with various "experiments" at home.

Mr. Gigliotti was fascinated by the variety of carbonated beverages available in America. He enjoyed the refreshing sensation caused by carbonation, but felt all of the American soda pops were too sweet and none of them provided the depth of flavor to which he had been accustomed with non-carbonated beverages in Italy. After much experimentation, Mr. Gigliotti developed a formula for a semi-sweet, multiple-fruit-flavored carbonated beverage. After sampling his creation, friends and family alike responded in an overwhelmingly positive manner. Many of them encouraged him to bottle the beverage and sell it locally. Indeed, Mr. Manganaro was so excited about the beverage that he offered to provide the necessary production equipment, facilities, and capital.

After much discussion, Mr. Gigliotti and Mr. Manganaro decided to call the beverage Pop's Punch and began marketing it in the Dayton area. Consumer response was very strong. Within five years Pop's Punch was selling well throughout the Midwest region. To keep up with demand, and to develop a more focused marketing strategy, the cousins detached the beverage operations from Manganaro Foods and established Pop's, Incorporated. To compete more directly in the non-cola carbonated soft drink market; Mr. Gigliotti developed several individual fruit-flavored sodas, which were marketed under the Pop's (Orange / Grape / Strawberry / Cherry) Soda brand name. This strategy proved to be highly successful and after five years, Pop's, Inc. began selling its beverages on a nation-wide basis.

Over the next 20 years, Pop's, Inc. failed to introduce any new products, but experienced steady growth in both sales and profits from the base line-up. During this time period, the company achieved a respectable 4.7% share of the non-cola market and subsequently made its first public offering. After nearly 35 years in business Mr. Gigliotti and Mr. Manganaro both retired and sold all of their holdings. For the next eight years Mr. Gigliotti's son, Paulo, Jr., served as chief executive officer, but was recently forced to resign after failing to achieve unit and dollar sales growth. Michael Newberg, formerly the firm's chief financial officer, has been appointed CEO and charged with growing the company.

CURRENT SITUATION

Upon assuming his new responsibilities, Mr. Newberg and his management team performed a thorough S.W.O.T. analysis. The corporate history and culture had long emphasized slow gradual change. They concluded the company possessed neither the core competencies nor the capacity to change that would be necessary to diversify into an entirely new industry. Accordingly, Pop's, Inc. would need to devise a new strategy by which to achieve growth within the soft drink industry.

The team carefully considered several alternative ways of revamping its strategy within the non-cola market, but none of them seemed to have the potential for the magnitude of growth the team desired. The team then began to consider the "unthinkable" – the possibility of entering the cola market. Although the risks were high, so were the possible rewards with each market share percentage point in the domestic soda market worth approximately $500 Million in annual retail sales. Under Mr. Newberg's leadership, Pop's, Inc. began the process of developing a strategy with which to compete directly with the giants of the Cola industry.

The research and development team created a formula for Pop's Cola that performed very well against Pepsi® and Coke® in national blind taste tests. Ecstatic about these results, Mr. Newberg recently met with a group of venture capitalists in an effort to gain financing necessary to launch the new brand. The venture capitalists were intrigued by the idea, were impressed with the preliminary marketing research results, and believed Pop's, Inc. possessed several requisite strengths. However, they highlighted the fact that entering the "cola war" was a very different battle-field than the non-cola market in terms of the (a) strength of the competition, (b) ferocity of the battles fought, and (c) resources required for successful marketing. In particular, the venture capitalist had several concerns regarding formula costs, economies of scale, and price points. In order to provide the necessary information in these areas, Mr. Newberg has assigned you to the project described below.

COST ESTIMATION PROJECT

Mr. Newberg has requested that you analyze the cost of making Pop's Cola and then compare that cost to the current price points offered by Coke® and Pepsi® on both the 12 Pack of 355ml Cans and the 2 Liter Bottle. Your predecessor recently left the company, but has already pulled together the raw cost data you will need to complete the project.

Sales Projections

Over the past 12 months the corporation has been evaluating the product under the brand name Pop's Cola in a Denver test market. Lacking any specific pricing expertise the company matched the on-shelf pricing of Coke® and Pepsi®, and determined the following sales estimates.

	Sales / Year
Pop's 12 pack (355ml/12 Cans)	100,000,000 Cases
Pop's 2 Liter	200,000,000 Bottles

Raw Material Costs

POP'S TOP - SECRET FORMULA

Ingredient	% in Formula	Cost Per Liter of Ingredient*
Carbonated Water	73.0%	$0.08
High Fructose Corn Syrup	11.2%	$0.49
Sugar	6.3%	$0.37
Carmel Color	3.0%	$1.40
Phosphoric Acid	2.7%	$0.10
Caffeine	2.1%	$0.12
Citric Acid	1.1%	$0.15
Cola Flavor	0.6%	$4.11

*Costs are delivered prices to the Plant

Based on a conversation with the engineering staff the 355-ml cans need to be filled at 357 ml to avoid under-pack, while 2 Liter bottles need to be filled at 2.008 Liters per bottle. In addition to overfill, the manufacturing engineers expect to incur a 3% loss of raw materials during the making phase of production.

Packing Material Costs

355 ml Can	$ 25 / 1000 Cans
355 ml Lid/with opener	$ 7 / 1000 Lids
12 Pack Carton	$ 170 / 1000 Cartons
2 Liter Bottle	$ 120 / 1000 Bottles
2 Liter Injected Molded Lid	$ 25 / 1000 Lids

Manufacturing Engineers estimate that approximately 2% of all packing materials will be damaged/lost through production and warehousing.

In addition to these costs, Pop's will additionally need to purchase several new molds for 2-Liter Bottles and Lids at a total cost of $2,000,000. (Amortized Straight line over 3 Years.) The Company considers these expenses a part of Packing Materials and charges all bottle mold amortization to only the 2-Liter Bottles.

Manufacturing Expense

Pop's fruit-flavored soda volume has maximized the capacity in the current production facilities. Pop's, Inc. has decided to avoid the hassle associated with building a new plant and utilize a contract manufacturer to produce Pop's Cola. After investigating several contract manufacturers, the purchasing department selected Shull Enterprises based on their ability to meet rigorous quality measures at a competitive price.

Shull Enterprises will require a $1.5 Million Supplier Advance for new equipment – (Pop's, Inc. expects the equipment to last three years and recommends using straight-line amortization for all Supplier Advances.) In addition to these costs Shull will charge the following fees. Note that both products will be charged a fee for the making and packing process.

Making Fee
$ .035 / Liter Processing *(Making Fee is applicable for both Can & 2 Liter Processing)*

Packing Fee
$ .015 / Can Bottling
$ .040 / 2 Liter Bottling

Distribution

Pop's, Inc. has decided not to invest in the extensive sales/distribution system of its competitors. Instead Pop's, Inc. will deliver its products in full truckloads directly to its customer's distribution warehouses. Distribution costs should be allocated based on space utilization. The warehouse supervisor has pulled together the following assumptions:

80 of the 12 Pack Containers fit on a single Pallet
250 of the 2 Liter Bottles fit on a single Pallet
48 Pallets of either size fit on a normal truck

The Distribution Coordinator estimates that the average cost for a trucking company to deliver a full truckload is $1,000/Truckload. Additionally, a one-time cost of $10 / Pallet will be charged for Storage and Handling at the warehouse.

Other Fixed Costs

Several departments will require additional resources on a long-term basis to appropriately staff the additional requirements of the new brand. Incremental Wages and benefits for incremental Purchasing/Planning Personnel amount to $300,000/Year.

Additional non-manufacturing costs are expected to increase as follows:

Research and Development	$ ½ Million / Year
General Administrative	$ 1 Million / Year
Advertising and Promotional Spending	$ 6 Million / Year

Allocation Basis

Unless otherwise indicated Pop's, Incorporated allocates all fixed costs based on sales projections (in Liters)

REQUIREMENTS

1. Calculate the Full Product Unit Cost of both the 12 pack and 2-Liter products. Make certain to round to four decimal places and include a detailed analysis by component (Raw Materials, Packing Materials, etc.)

2. At what price would Pop's, Inc. need to sell the 12 pack and 2-Liter products to "the trade" in order to provide a 25% profit mark-up for Pop's, Inc. shareholders (Pre-Tax & Interest Expense)?

3. At what Price would the trade sell the 2 Liter and 12-pack on-shelf to the final consumer assuming that on average "the trade" requires a 30% mark-up?

4. (Optional) Visit at least three different channels (i.e. Grocery, Mass/Club Stores, Convenient Stores) that distribute Coke® and Pepsi® products. For each channel researched list the Store Name, Location, Date, and the promotional pricing currently offered for both the 2-Liter and 12 pack products.

5. Based on a comparison between your cost analysis and competitive benchmarking would you recommend that Pop's, Inc. enter the "Cola Market" and compete directly with Coke® and Pepsi®? Provide a strong justification for your conclusion and discuss what factors influence the difference in on-shelf pricing between Coke® & Pepsi® and Pop's Cola.

6. Prepare an alternative strategy for gaining market share in the beverage industry. Determine whether Pop's, Inc. should compete using a "Low Cost" or a "Differentiation" strategy, and provide specific examples of how you would implement your strategy.

FIRST COMMUNITY CHURCH
A NONPROFIT ACCOUNTING CASE

Penny Clayton, Associate Professor
Drury University, Springfield, Missouri

Robyn Devore, Senior Manager
BKD, LLP, Springfield, Missouri[1]

In mid-January, 20X1, Dr. Randy Willis, Chairman of the Economics department of the local University, felt very proud as he sipped his first cup of coffee. Looking at the students scurrying to their Monday morning classes from the window in his office in the Business School, Randy reflected on the church board meeting that he had attended the previous evening. After only five years, the First Community Church began fundraising for a church building. The congregation had come a long way from the five people who held the first service in the back room of, at that time, the rural post office that served the area.

Randy, though, realized he faced a series of new challenges in assisting First Community Church with the effort to build a new church building. With a congregation of 100 people and a fundraising effort that would secure $400,000 for the new church building, Dr. Willis recognized that the financial reporting of the church would need to be strengthened. A simple bookkeeping system was all that was needed when the congregation numbered less than 10, but as the church had grown, it was apparent to all members that a financial accounting system was necessary. But with a new system came additional costs, as none of the current members possessed the expertise to develop a financial accounting system thus requiring the congregation to hire a consultant if a new financial and accounting system was to be developed and implemented.

[1] The authors would like to gratefully acknowledge the contributions of James S. Dunlop for his assistance with the creative development of the case dialogue.

With these thoughts racing through his mind, Randy decided it was the appropriate time to approach Dr. Joan Simpson, Chairman of the Accounting department, about the church's current financial needs. When the church was in its infancy, Joan had given Randy a brief overview of the bookkeeping needs for a church. As a result, the First Community Church maintained a checking account, a receipts ledger and a disbursements ledger.

Randy continued by summarizing for Joan the church's needs, "As you may remember, I was a member of the founding congregation of First Community Church. We were very appreciative of your advice for handling money when the church started and I'm here for more advice. The congregation has grown to almost 100 members. In addition, we have completed fundraising for the new building and have received all pledge cards reflecting fundraising efforts. I'm afraid we're too large for a simple bookkeeping system and the cost of an outside consultant may be beyond our means. Do you by any chance have any suggestions?"

After a morning staff meeting, Randy was able to update Joan on the progress of the church in the last five years. "The church treasurer, a charter member and church elder, is responsible for all bookkeeping duties. She opens the daily mail and when necessary, records receipt and disbursement entries. She also writes all checks necessary to pay church bills. Outgoing checks are reviewed and signed by the minister. Cash deposits are made on a weekly basis. At the end of each month, the treasurer reviews the monthly bank statement and records any interest earned or service charges. Formal bank reconciliations are not prepared. The minister and treasurer maintain a purchase card and all purchases are made at the discretion of these two individuals."

"Randy, I may have a solution to your problem. I received a call from Sandra Moore, a former student of mine that has started her own accounting firm. She's had several years of experience in public accounting and I'm sure she could use additional clients and I'm certain she would be less expensive than a larger firm. Would you like to call her?" Joan answered.

"I would love to talk to Sandra. Thank you very much," Randy replied.

After several phone calls to coordinate schedules, Randy and Sandra agreed to meet in her new office. He arrived promptly at 10:00 am and was ushered into the small, spartanly furnished office of Sandra Moore. Sandra listened as Randy related the story of the beginning of First Community Church. He discussed the growth in membership, the various locations where services had been held in the past, and the need for a new church. He then related the plans for the church building project.

"First Community Church has reviewed various building options and in conjunction with a church member that owns a construction firm decided upon a $400,000 building project. The initial plans call for ground breaking to occur in three years with construction to be completed six to nine months after we begin, depending upon the weather. To support the building project, the church board developed a fundraising project called "A Thousand Reasons to Build a Church." As you can tell we also have an advertising executive as a board member, but the basic concept is that each member of the congregation would give $4000 over four years for the building. We certainly did not expect every member to pledge $4000; yet, the goal of the fundraising effort was to achieve $4000 as the average pledge per member. Remarkably, we were able to achieve our goal and all pledges were received by January 1 of the current year. Now our main concern is how to handle the accounting for the pledges for the new building. We currently use a checking account, a receipts ledger, and a disbursements ledger. We don't know how to handle pledges. Can you help?" Randy asked.

After asking about the church's new building project and the financial systems currently utilized, Sandra learned that the criteria for recording pledges had been met. Members submitted pledge cards to signify the level of giving for the building fund and each pledge card identified not only the year of giving but also the donation schedule, i.e. monthly, quarterly, semiannually or annually. Sandra also learned that a member who is a retired teacher pledged $50,000 to build a library if a new building is constructed.

Several weeks later, Sandra received a phone call from Randy. "Hi Sandra this is Randy Willis," the Economics Chairman stated as he sat among the myriad of papers strewn across his desk.

"Dr. Willis, how are you doing and how is the church construction progressing?" Sandra Moore replied.

"Well, I have good news and bad news. The good news is that plans are on schedule and we have received even more donations than expected. The bad news is that I don't know how to account for the investments related to these contributions."

"That's bad news only to an economist." Sandra laughed. "Let's set a time to meet and I can show you that an accountant would view these contributions as good news and goods news!"

*****

Randy spent the next few months influencing young economic minds at the university, and in his spare time, working with church members in finalizing building plans. In mid-December, he realized that he and Sandra had never met to discuss the church contributions and he rushed to call Sandra for help. Although busy with the holidays, Sandra met Randy to discuss the donations received by First Community Church since the two had last discussed the church's accounting structure. Although excited about the generosity shown by the congregation, Randy was extremely nervous about properly accounting for these funds.

"First and by far the largest donation is $100,000 from my brother Roger. And what is truly unique about this gift is that Roger has designated the money to be invested with the yearly earnings to be used for building maintenance and repair. Rogers believes that there is no sense in constructing a new building if you aren't able to take care of it and this is his way to provide the funds to allow the new building to be maintained."

"Great," Sandra answered. "For your information, this gift is considered to be invested in perpetuity because only the earnings will be used by the church. How are the funds invested?

"We received the donation on October 1, 20X1 and immediately placed 25% of the funds in a 5 year CD paying 6%. Fifty percent are in a AAA bond mutual fund and 25% are in a blue chip stock mutual fund."

Then, Randy continued by providing Sandra with additional information about donations received by the church. "On April 15, 20X1, Barbara Compton, a founding member of the church, established a $10,000 endowment fund with the earnings from the fund to be used to purchase library books and hymnals as needed. We invested $5,000 in a three-year CD paying 5%, $2,500 in a two-year CD paying 4.75%, and $2,500 in a one-year CD paying 4.5%."

"On December 1, 20X1, the church received $30,000 from the family of James E. Duncan to be used to award a college scholarship to a deserving student in our congregation. The family requested that the $30,000 be invested in perpetuity and at least $1,500 of earnings be awarded each year with the first scholarship to be awarded in the spring of 20X3. We purchased a 30-year treasury bond purchased at 98.753 and the interest rate is 5.375%."

"On September 15, 20X1, Charles Benson, who has been very active in our church school, donated 1000 shares of Wal-Mart stock to use as needed. Mr. Benson actually had the stock certificates in his possession and assigned the shares to the church. Also, the shares were selling at $50 when he made the assignment."

"Roberta Johnson, a church member and owner of a local toy store company, verbally committed to $1,500 for playground equipment when we complete the building. This year we also received $54,000 in the yearly church offering and had a special offering totaling $2,100 the last Sunday before Christmas on behalf of Habitat for Humanity. A special service honored a group of college students that built a home in August and the offering received was on behalf of Habitat to Humanity. I doubt we'll actually send the money until the office staff returns to work after New Years."

"And, the collection for our building fund totaled $100,000 in the first year of our campaign. We have placed the monies in a money market earning 2.5 percent interest since we need the funds available for upcoming architecture and construction costs."

Randy completed his narrative and with this, Sandra commented, "If this is all the donations you have, then let me get to work and consider the proper accounting for these investments."

*****

Randy Willis was content. Plans for the church project were moving along and, with the assistance of Sandra Moore, a proper accounting of all finances of the church was complete. Only the ringing of his office phone could bring him out of his reverie.

"Dr. Willis, this is Sandra Moore," Randy heard as he cradled the receiver to his ear.

"Sandra, I was just thinking about all my projects and how well they are progressing. Not bad for an old economics professor," he joked.

"Not bad for any professor. But at the risk of bursting your bubble, you have never asked about financial statements for the church. Will someone on your board be able to complete the year-end financial statements to reflect the new accounts that have been developed?"

"To be honest, I haven't thought about it, nor has the board. The board has been so caught up in the project itself and you have been handling the accounting changes that we've not thought of statements. But, I know we will need year-end statements. Sounds to me like we still need your assistance."

"Actually, to prepare the financial statements will not take long as I have already been involved with the church finances and I expected that I would need to generate the statements. My main reason for calling, though, was to find out when you typically present the year-end financial statements to your board."

"Well," he hesitated, "we should have the statements available at the first board meeting of the year."

"From your voice, I detect that the board meeting is to be held fairly soon." Sandra laughed.

"Is next week considered soon?" Randy chuckled.

"For you, Dr. Willis, I can complete the financial statements by next week, and for good measure, I will throw in suggestions for improving internal controls." Sandra said with a smile.

"Thank you. I appreciate all of your efforts."

RESOURCES

AICPA Audit and Accounting Guide, *Not-for-Profit Organizations,* May 1, 2001.

Gross, M. J., Larkin, R. J., and McCarthy, John H., *Financial and Accounting Guide for Not-for-Profit Organizations,* 6th Edition, John Wiley & Sons, New York, NY, April 2000.

Larkin, R. F. and DiTommaso, M., *Wiley Not-for-Profit Accounting Field Guide 2002,* John Wiley & Sons, New York, NY, 2002.

Larkin, R. F. and DiTommaso, M. *Wiley Not-for-Profit GAAP 2002: Interpretation and Application of Generally Accepted Accounting Principles,* John Wiley & Sons, New York, NY, 2002.

Statements of Financial Accounting Standards No. 116, "*Accounting for Contributions Received and Contributions Made," 1993.*

Statements of Financial Accounting Standards No. 117, *"Financial Statements of Not-for-Profit Organizations," 1993.*

CASE QUESTIONS

1. According to SFAS 117, "Financial Statements of Not-For-Profit Organizations," what content should be included on the statement of financial position, statement of activities, and statement of cash flows? Provide a general discussion.

2. Consistent with SFAS 117, donor-imposed restrictions must be reflected in the financial statements under temporarily restricted, and permanently restricted net assets while unrestricted net assets should have separate disclosure. Provide the appropriate definition for the term "donor-imposed restriction" and for each of the three types of net assets.

3. Identify the case transactions related to all donor activities and classify each as either unrestricted, temporarily restricted, or permanently restricted net assets.

4. (a) Provide the journal entry at 12/31/X1 to record the unconditional promise to give to the church building. Assume a discount rate of 5 percent.

   (b) Since it is probable that not all pledges will be collected, provide the appropriate adjusting entry to recognize an allowance for uncollectible pledges. Assume that prior experience indicates that 10 percent of pledges will never be collected.

5. Provide the appropriate accompanying footnotes to the financial statements covering the following:
   - Note X: Summary of Significant Accounting Policies (relating only to pledges)
   - Note Y: Promises to Give (i.e. for the building campaign)
   - Note Z: Conditional Promise to Give (i.e. library and playground equipment)

6. Given the case information and the additional information provided below, summarize the total earnings on investments for the following donations and cash collections:

   - $100,000 invested from Roger Willis donation
   - $10,000 invested from Barbara Compton
   - $30,000 T-Bond investment
   - $100,000 building campaign collection earning an average of 2.5%

Additional Information:

- Interest earned on the AAA bond mutual fund totaled $700
- The year-end market value of the AAA bond mutual fund totaled $52,300
- Dividends earned on the stock mutual fund totaled $335
- The year-end market value of the stock mutual fund totaled $23,398
- The year-end market rate of the treasury bond is 100.2
- Using the *Wall Street Journal* or a similar publication, determine the market value of the Wal-Mart stock as of the end of the previous year.
- $26,000 of the $54,000 church offering received has not been spent. Also assume that the church does not earn interest on the cash account.
- All pledge contributions are received evenly throughout the year.
- Certificate of deposit earnings are paid in cash and not rolled into the face value of the investment.
- Cash equivalents have an original maturity of three months or less.

7. Both SFAS 116, "Accounting for Contributions Received and Contributions Made," and SFAS 117, "Financial Statements of Not-For-Profit Organizations," requires specific disclosures for non-profit entities. Among those are disclosures relating to permanent and temporary restrictions including a list of the organization's major programs. Given these guidelines, provide the appropriate footnote disclosures for the following:

   - Note A: Temporarily restricted net assets
   - Note B: Permanently restricted net assets

8. Given the case information and the additional information provided below, prepare the First Community Church Statement of Financial Position for year ended December 31, 20X1.

   Additional information:

   - The church has a piano, computer, copier, miscellaneous furniture, and hymnals with a total book value of $11,000. Ignore depreciation.
   - Prepaid rent and prepaid liability insurance total $3,000

9. In addition to the annual financial statements, Sandra indicated that she would provide Randy with a few suggestions for improving internal controls. Given the brief description of the church's accounting processes, provide recommendations for strengthening internal controls.

SAN ANTONIO ENERGY: PUTTING A VALUE ON THE FUTURE

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The last few months have been busy for Tim Lurner. About a year and a half ago, Tim took a job at San Antonio Energy (SAE) as a senior accountant for the Controller. Prior to this job, Tim spent five years in public accounting with extensive experience with energy company clients. He was anxious to join SAE because his new boss, Sandra Kyle, was nationally recognized. Her reputation had earned her a position as one of the industry members of the Emerging Issues Task Force.

Little did Tim know when he accepted this job that his move would coincide with the most tumultuous period accounting has ever seen, and that the energy industry would be at the center of the storm. The bankruptcy of energy giant Enron sent tremors through a high-flying stock market. The subsequent failures of WorldCom, Global Crossing and the accounting firm Arthur Andersen, resulted in a dramatic decline in the public's confidence in the credibility of financial reporting. As a result, companies, accounting firms, stock exchanges, law makers, and regulators all have been working overtime to restore public trust in financial markets and in financial reporting.

Roughly five months ago, Tim accompanied Sandra to a meeting of the Emerging Issues Task Force (EITF). The most contentious topic at that meeting involved the accounting for energy contracts. Energy contracts are agreements to deliver or receive energy in the future – sometimes in the distant future. Energy contracts have been around for a long time. What changed in recent years was that Enron and companies like it had started to trade energy contracts in a speculative fashion. That is, they bought and sold contracts, betting on the direction of energy prices, with no intention of ever actually taking delivery of the energy.

Before energy contracts became widely traded, their accounting treatment varied from company to company, and from contract to contract. They might be accounted for at cost, lower-of-cost-or-market, or they might be marked to their fair value. As energy contracts became more prevalent, accounting regulators became concerned that the lack of consistent accounting treatment was reducing the usefulness of financial statements. In 1998, the Emerging Issues Task Force reached a consensus (EITF 98-10) requiring that energy contracts be adjusted to their fair value at the end of each period, and that the resulting unrealized gains and losses be recorded in income. The reason given for requiring the contracts to be accounted for at fair value was that the contracts were actively traded. Consequently, like other trading securities in a company's portfolio, they should be recorded at their fair value. Application of the 98-10 ruling appeared to be running smoothly until the Enron bankruptcy. That bankruptcy (at the time the largest in history) brought attention to the way Enron and other energy companies were applying 98-10.

In applying fair value accounting, accounting standards require that a "fair value hierarchy" be followed. The thrust of the hierarchy is that quoted market prices in active markets are the most reliable source of information concerning fair value. The hierarchy also indicates the fair value measure that should be used if market prices are not available. The fair value hierarchy is described in paragraph 540 of FAS 133 as:

> **Fair value**
>
> The amount at which an asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets are the best evidence of fair value and should be used as the basis for the measurement, if available. If a quoted market price is available, the fair value is the product of the number of trading units times that market price. If a quoted market price is not available, the estimate of fair value should be based on the best information available in the circumstances. The estimate of fair value should consider prices for similar assets or similar liabilities and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated expected future cash flows using discount rates commensurate with the risks involved, option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis. Valuation techniques for measuring assets and liabilities should be consistent with the objective of measuring fair value. Those techniques should incorporate assumptions that market participants would use in their estimates of values, future revenues, and future expenses, including assumptions about interest rates, default, prepayment, and volatility. In measuring forward contracts, such as foreign currency forward contracts, at fair value by discounting estimated future cash flows, an entity

> should base the estimate of future cash flows on the changes in the forward rate (rather than the spot rate). In measuring financial liabilities and nonfinancial derivatives that are liabilities at fair value by discounting estimated future cash flows (or equivalent outflows of other assets), an objective is to use discount rates at which those liabilities could be settled in an arm's-length transaction.

At the top of the fair value hierarchy are market prices. Many of the energy contracts traded by Enron and others were not traded on exchanges and did not have other sources for readily obtainable market prices. Since market prices were not available from external sources, Enron employed valuation models to estimate the value of its contracts at the end of each period. After its collapse, it became clear that Enron's estimates of the value of its contracts were often extremely optimistic, and consequently grossly overstated its profitability. This abuse led some to conclude that 98-10 was too easily manipulated and therefore should be rescinded. Others, however, suggested that the rule was conceptually sound, and that safeguards could be put in place to avoid future abuse.

This was the backdrop to the EITF's June 2002 meeting. Prior to the meeting, the FASB staff prepared a position paper arguing that 98-10 be rescinded. At the meeting, positions for and against rescinding 98-10 were presented. After a lengthy discussion of the pros and cons of reporting these contracts at fair value, a vote was taken. The EITF members decided to continue to account for the contracts at fair value, that is, 98-10 was not rescinded. However, it was also decided that the issue would be investigated further by the FASB staff, and that after further study, the matter would be voted on again at a later EITF meeting. Sandra voted against rescinding 98-10 because she felt that fair value accounting was the most relevant measure. She also felt that, with proper safeguards, it could be applied in a way that produced reliable fair value measures.

Subsequently, an article in the financial press reported the events of that meeting. The article noted that the members of the EITF are not employed by the FASB. Instead they serve the EITF as volunteers, and work full-time as employees of major companies and accounting firms. The article questioned whether it was appropriate for some of the members of the EITF to have voted on the decision whether to rescind 98-10. The article noted that some EITF members are employed by companies that have contracts that would be directly affected by the ruling, or are public accountants with clients that would be affected by the ruling. That is, the decision could have direct and significant implications for their employers' financial results, or the financial results of their clients.

At its next meeting, the EITF is scheduled to revisit the decision whether to rescind 98-10. Tim will be attending the meeting again with Sandra. She has asked him to meet with her in advance of the meeting to discuss the issues.

References

Jonathan Weil. 2002. Heard on the Street: Should J.P. Morgan Set Rules for J.P. Morgan? *The Wall Street Journal* (October 8, 2002).

Rebecca Smith. 2002. Energy Traders to Issue New Rules on Disclosure. *The Wall Street Journal* (November 19, 2002).

Exhibit 1

SAN ANTONIO ENERGY

RESULTS OF OPERATIONS

Our results of operations by segment for each of the two years ended December 31 were as follows:

	2001	2000
OPERATING INCOME BY SEGMENT		
Pipelines	$1,038	$1,323
Merchant Energy	897	929
Production	920	609
Field Services	195	214
OPERATING INCOME	$3,050	$3,075

SEGMENT RESULTS

Our four segments: Pipelines, Merchant Energy, Production and Field Services are strategic business units that offer a variety of different energy products and services, each requiring different technology and marketing strategies.

Merchant Energy

Merchant Energy's customer origination, marketing and trading activities provide energy supply and risk management solutions for its customers and affiliates involving natural gas, power, crude oil, refined products, chemicals and coal. Merchant Energy assists its customers with energy supply aggregation, storage and transportation management and provides them with an array of risk management products. Merchant Energy also conducts a substantial energy trading business that executes proprietary trading strategies and manages the segment's risk across multiple commodities and over seasonally fluctuating energy demands using consistent methodologies. During 2001 and 2000, U.S. energy supply and demand resulted in substantial volatility in the energy markets that significantly impacted Merchant Energy's earnings.

Merchant Energy's customer origination, marketing and trading groups account for their activities using mark-to-market accounting. Under this accounting method, financial instruments, physical commodity positions and contractual energy-related transactions are recorded on the balance sheet and the income statement at their fair value at the time they are entered into. Subsequent to their inception, the transactions continue to be adjusted in the balance sheet and income statement for changes in their fair value until they are settled. Determining the fair value of these positions at inception and until settlement principally involves the use of actively quoted prices and, to a lesser degree, other valuation methods, including models that rely on actively quoted prices. Approximately 9% of the value of our mark-to-market portfolio is based on model valuations (i.e., not on active market quotes). Examples of contracts that are generally valued using models include natural gas pipeline capacity, natural gas storage contracts and to a lesser extent power plant tolling agreements.

The price data underlying these models is based, in part, on market data and our estimates of future prices for periods which market data is limited. We believe these calculations to be reliable predictors of value over time. In addition, Merchant Energy maintains a risk controls group that verifies all market price data for accuracy, independently of the marketing and trading groups and this group conducts these activities on both actively quoted and model-derived information. Further, to the extent there is uncertainty of the amounts we will ultimately realize from these transactions, we adjust the amounts we recognize as income until these uncertainties are resolved. These estimates are adjusted as assumptions change or as transactions move closer to settlement and better estimates become available.

As of December 31, 2001, the fair value of our trading-related price risk management activities was $1,295 million, and total margins generated from these activities during 2001 were $690 million.

SAN ANTONIO ENERGY
(In Millions, Except Share Amounts)

	December 31, 2001	December 31, 2000
ASSETS		
Total current assets	$12,659	$15,124
Total property, plant and equipment, net	24,591	22,262
Other assets	10,921	8,934
Total assets	$48,171	$46,320
LIABILITIES AND STOCKHOLDERS' EQUITY		
Total current liabilities	$13,565	$15,675
Long-term debt and other financing obligations	13,184	11,946
Other debt	8,053	6,873
Commitments and contingencies	4,013	3,707
Total liabilities	38,815	38,201
Total stockholders' equity	9,356	8,119
Total liabilities and stockholders' equity	$48,171	$46,320

Basic Requirements

1 Excerpts from the financial statements of San Antonio Energy are provided in Exhibit 1. Answer the following questions:
   (a) How does the company account for its trading activities? How are fair values determined?
   (b) What types of controls does the company maintain to ensure the accuracy of the fair values used to account for its trading activities?

2 Compute the return-on-assets ratio (use operating income) and debt-to-assets ratio for the company for 2001.

3 San Antonio Energy trades many different types of energy contracts. One year ago, it signed a forward contract to buy power. The contract requires that it receive 1 million megawatt hours of power for 20 years at a fixed price of $20 per megawatt hour. At the signing of the contract, the fair value of the contract was zero. SAE and other energy companies would enter into such a contract because it would allow them to "lock in" the cost of providing energy in faster growing markets.

EITF 98-10 requires that this contract be marked to fair value. Today (one year after issuance of the contract), the price of power jumped to $30 per megawatt hour. It is not known how long this new price will last. Four different scenarios, which are based on different assumptions about future prices are shown below. Assume the cash flows occur at the end of the year.

Scenario	Value of Contract (millions)	Years 2-5	Years 6-10	Years 11- 15	Years 16-20
1	$34.7	$30	$20	$20	$20
2		$30	$30	$20	$20
3		$30	$30	$30	$20
4		$30	$30	$30	$30

SAE uses a 6% discount rate to discount the expected future cash flows of this contract. The estimated fair value today (the end of year 1) for Scenario 1 is provided.

Required:
   a. Calculate the value of the contract under each of the other scenarios.
   b. What factors should be considered in determining the fair value of the contract?
   c. Which value would you use if you were SAE? Justify your answer.

4 The company's disclosures in Exhibit 1 indicate that 9% of the company's mark-to-market portfolio is valued based on models rather than active market quotes. Suppose that of the total $690 million dollar unrealized gain reported in 2001, 50% of it was the result of gains from contracts whose fair value was derived from valuation models. Perhaps San Antonio has been too optimistic in valuing its energy contracts, and as a consequence its net income is too high. Recalculate the return on assets ratio (using

operating income) and debt to assets ratio for 2001, assuming that 50% of the 2001 unrealized gains of $690 million should not be included in income. (Ignore income tax effects.) Comment on the results in comparison to the base analysis.

5 What is the significance of the terms "relevance" and "reliability" to financial reporting? In what ways does the debate over 98-10 represent a choice between relevance and reliability?

6 Do you think that contracts or other financial instruments that do not have readily available market prices should be accounted for at fair value? Provide a thorough justification for your response.

Advanced Requirements

7 Go to the FASB website (www.fasb.org) and identify the roles and key characteristics of the (i) FASB and (ii) EITF. Compare and contrast the composition of each group, the procedures of each, and the relationship between the two.

8 The October 8, 2002 issue of *The Wall Street Journal* contains an article by Jonathan Weil entitled, "Heard on the Street: Should J.P. Morgan Set Rules for J.P. Morgan?" Read that article and then discuss the pros and cons of having people such as the employee from J.P. Morgan serving on the EITF.

9 During the 1990s, the FASB worked diligently toward a goal of reporting all financial instruments and other similar assets and liabilities at their fair market value. To what extent might the decision to rescind EITF 98-10 be perceived as a retreat from this goal?

10 The November 19, 2002 issue of *The Wall Street Journal* contains an article by Rebecca Smith entitled, "Energy Traders to Issue New Rules on Disclosure." Read that article and answer the following questions.

a. What reason did companies give previously for keeping so much of their trading data secret?
b. What effect has this lack of clarity had on these companies since the collapse of Enron?

PRINCIPLES VERSUS RULES-BASED ACCOUNTING STANDARDS AND THE APPLICATION TO THE DETERMINATION OF CONTROL FOR CONSOLIDATION

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Part 1: Principles versus Rules-Based Accounting Standards

Enron and other high profile corporate scandals have intensified scrutiny of the accounting standards-setting process and the regulatory mechanisms intended to prevent such problems. In response to these concerns, the Sarbanes-Oxley Act (section 108(d)) required that the Securities and Exchange Commission (SEC) conduct a study and report to Congress by July 2003 on the feasibility of principles-based standards. The SEC in turn has requested that the Financial Accounting Standards Board (FASB) solicit input from its constituencies on the merits of a principles-based system for accounting standards.

A growing number of stakeholders endorse the adoption of principles-based standards to replace the current rules-based approach.[1] "Moving from a rules-based accounting system to principles-based standards could have a significant impact on eliminating some of the accounting abuses …" (PricewaterhouseCoopers 2003).

Read: Financial Accounting Standards Board. (October 21, 2002). *Principles-Based Approach to U.S. Standards Setting (proposal no. 1125-001)*. FASB.

Quinn, Lawrence Richter. (January 2003). *The rules explosion: Is it time to move toward principles?* in Strategic Finance (vol. 84, no. 7). Institute of Management Accountants

[1] The American Institute of Certified Public Accountants (2003), The Financial Accounting Standards Committee of the American Accounting Association (2003), and PricewaterhouseCoopers (2003).

Kivi, Smith and Wagner (May 2004). *Principles-Based Accounting Standards and the Determination of Control for Consolidation* in The CPA Journal. (Included as an attachment to this case – 3 pages – Copyright permission granted to AICPA).

Other articles and publications based on your research.

Discuss: Present the pros and cons of a rules versus principles-based accounting standard setting system. Discuss how you believe a "principles-based approach" would help alleviate the issues that have been impeding the completion of the consolidations project and how it would move toward convergence of international accounting standards.

Your discussion should be more than just listing the pros and cons of principles versus rules-based accounting. Fully discuss the merits of each side of the issue and provide insight as to the implementation issues that may occur. Finally, present your recommendations to the FASB on how you believe the principles versus rules issue could be resolved.

Part 2: Evolution of the Definition of Control

This case requires research on how control has been defined for purposes of consolidation. Follow the definition of control as defined in ARB 51, SFAS 94, the FASB's Exposure drafts and FIN 46R.

Read: ARB 51 - *Consolidated Financial Statements,* August 1959.

FASB 94 - *Consolidation of all Majority-Owned Subsidiaries,* October 1987.

Exposure Draft – *Consolidated Financial Statements: Purpose and Policy*, Feb 1999.

Optional

Exposure Draft – *Consolidated Financial Statements: Policy and Procedures*, October 1995. (Included as an attachment to this case – 112 pages – Copyright permission granted to AICPA).

FASB Interpretation No. 46R – *Consolidation of Variable Interest Entities*, Dec 2003.

IAS 27 - *Consolidated Financial Statements and Accounting for Investments in Subsidiaries.*

Discuss: At a minimum, your research should thoroughly describe and discuss the following.

- Why the definition started as a 50% rule.
- What are the limitations to such a rule?
- What is implied in such a definition?
- Was there unanimous support for this definition at its initiation?
- Why have we not moved away from a rules-based definition of control even though there was one proposed by the FASB in 1995 and 1999?

Keep in mind that the primary purpose of consolidation is to present a group of related entities as if it were one single entity. The FASB requires consolidation whenever one entity controls another entity. Consolidated statements are more informative to the financial statement user because the economic unit as a whole is presented. **(Economic entity concept!)** The difficulty is determining control in those instances where there is no voting stock to measure control.

By implementing a principles-based approach, control could be defined more broadly (many say that the definition in the 1999 Exposure Draft is fairly broad) and thus determining control consolidation may finally move past the definitional dilemma. However, a principles-based definition will also have limitations. Describe those limitations.

Part 3: Determining Control: A Case Scenario

OBJECTIVE

The objective of this case is to role-play various positions using a case study on the use of variable interest entities (VIEs). This case study is a real scenario. The company's name is Pamark and the bank is Smogan Bank. Pamark and Smogan each hold interest in two VIEs - VIE 433 and VIE 633. You are expected to fulfill the assigned task in your assigned role. The roles will reveal different perspectives and it will be up to you and your team to figure out how to approach and solve your assigned task. Positive and active role-playing will improve your ability to think about the alternative positions, analyze the merits of those positions and effectively communicate your position. This case is intended to be creative, engaging, challenging and fun.

The case will first show why a company is motivated to formulate a VIE and then show how difficult it is to determine who actually controls the VIE. The scenario presented represents real circumstances that when reported in compliance with the current "rules", the result may not be fairly representing the consolidated entity. The case will also show that a slight change in circumstances could cause a change in who controls the VIE.

PRESENTATIONS

PowerPoint presentations are required. A copy of the presentation must be turned in on the day of your presentation. The team presentation grade will be based on a variety of factors, including (but not limited to); appropriate use of the authoritative literature to support your position, clarity of presentation, identification of issues, creativity, suggested alternatives, ability to field questions and respond to challenges.

The role assignments will be *the company management, the auditor, the SEC, and the company's investors*. Each role requires the team to research the accounting and reporting issues related to the transaction and present the accounting treatment you advocate. In order to make a compelling argument, each team should have a thorough understanding of the position that may be advocated by the other roles in order to adequately respond to counterarguments. As you research the accounting for this scenario, keep in mind the motives and objectives of each party and try to represent that perspective as best you can.

CONSULTATIONS

Each team is <u>required</u> to set up a "consultation" to receive guidance and feedback. A sign up sheet for the consultation times will be distributed during class. The objective of the consultation is to place much of the responsibility on you to have fully researched the issue and to come to the meeting prepared with questions for guidance. Part of your team points will be assigned to the consultation and will be based on the level of preparedness for the consultation appointment. The consultations are intended to mimic scenarios where you consult with a partner, controller, vice president, outside expert or some one in a position of authority and expertise. Therefore, you need to be prepared, organized and focused on the information you need to obtain from this person.

This consultation is similar to situations you will encounter in the real world where the time of upper management or outside consultants is limited and valuable. All team members must attend the consultation; any absences will be detrimental to the grade of the absent individual.

TEAM ROLES

The *management team* will represent Pamark and be responsible for explaining the details of the transaction to the rest of the class and present their preferred accounting treatment supported by the appropriate authoritative literature. This team will explain management's reporting objectives and why the accounting treatment is critical to obtaining those objectives.

The *auditing team* will represent an accounting firm that was just sanctioned by the SEC in the audit of another client that had off balance sheet entities that were not fully disclosed. This team will explain how the role of the auditor has changed in the current environment and how that change has affected the firm's stance on this issue. The auditors will present their preferred accounting treatment supported by the appropriate literature.

The *SEC enforcement division* has been closely scrutinizing the clients of the auditing firm ever since the sanction was levied. This team will consult GAAP and the SEC literature as guidance to support their position of the accounting treatment that is acceptable by the SEC.

The *company's investors* are mainly institutional and therefore very savvy financial analysts. The investors are aware of the off balance sheet arrangement and are diligent in their quest for more information on the arrangement and details of the transaction.

CLASS DISCUSSION

After the role-playing, we will hold an open discussion of the issues presented by the teams. Be prepared to discuss the following:

- the issue of determining control as raised during the presentations,
- the merits of principles versus rules-based accounting,
- conflict resolution in today's environment,
- ethical issues encountered as you tried to support your position,
- the lifelong learning skills needed to complete a research assignment.

PEER EVALUATION

The team will develop and turn in a contract that outlines the responsibilities, deadlines and deliverables of each member. The contract must be agreed upon and signed by all members of the team and turned in. The contract can be modified because of unforeseen circumstances if everyone is in agreement. Each team member will submit his or her evaluation of the other team members' performance based upon the contract. The evaluation is due on the next class day after the case presentation. Evaluation of another's performance is a serious and significant activity. If the evaluation is viewed to be cursory, the evaluator's grade will be penalized.

POINT ALLOCATION

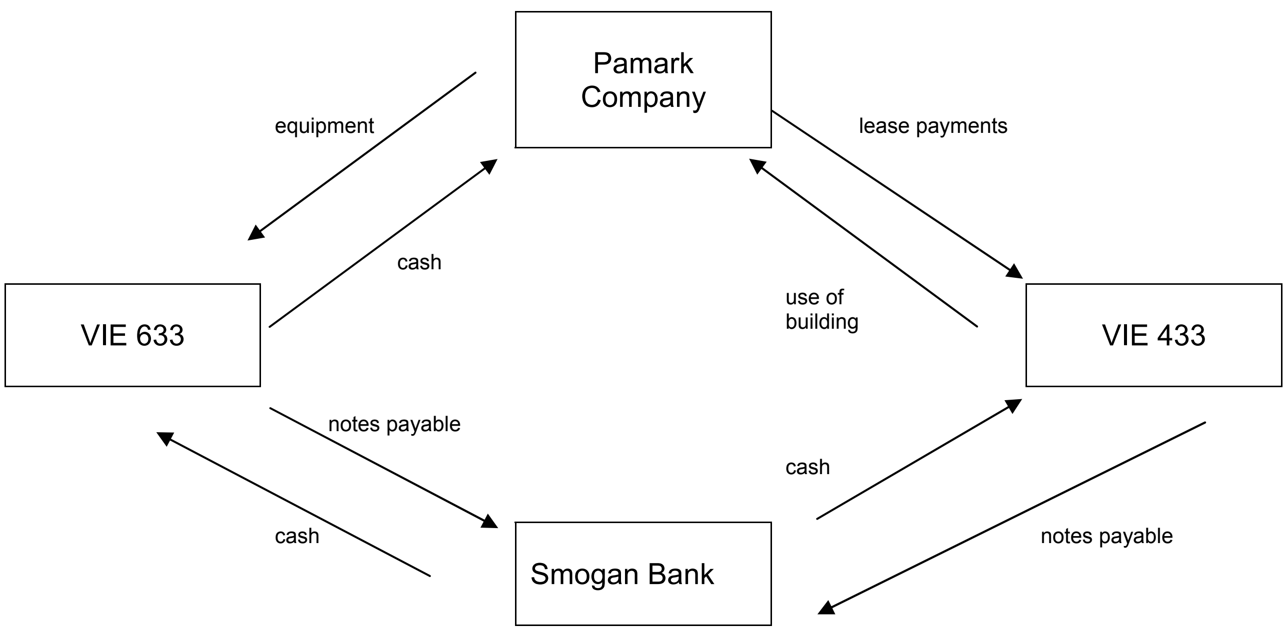
Tentative point allocation is outlined below:	Points
Team presentation	75
Consultation	15
Peer evaluation[1]	10
	100

[1] This is an INDIVIDUAL score.

All items are graded on a straight curve (90% - A; 80% - B; 70% - C; etc).

CASE SCENARIO

Pamark Company assembles computers and is striving to be a competitor of Dell and Gateway. Pamark has two variable interests entities with which it conducts business. VIE # 1 is called 633 and VIE # 2 is called 433. The diagram below depicts the relationship between Pamark and the VIEs.



Both 633 and 433 are VIEs because it is assumed that the residual equity holders lack decision-making ability and all transactions with 633 and 433 are predetermined.

VIE 633 - Equipment Leasing

VIE 633 leases Pamark's equipment to corporate clients. When a corporate client wants to purchase Pamark's equipment on a long-term lease, Pamark sells the equipment to VIE 633 and in turn VIE 633 serves as the leasing agent to the customer. Financing for VIE 633 is funded from Smogan Bank. Pamark and Smogan share gains and losses of 633 proportionate to their equity interests. Pamark guarantees 633's debt to Smogan. Pamark obtains the benefit of recognizing a sale and removing the equipment from its balance sheet. VIE 633 holds the equipment and lease receivable as an asset. The cash flows from the lease are used to service the debt to Smogan.

Note: This arrangement is analogous to the Dell – CIT – DFS arrangement described in the Wall Street Journal article *Dell-CIT Venture May Remain an Orphan Despite New Rules,* March 27, 2003.

The balance sheet of VIE 633 is as follows:

Lease receivables	$ 300,000	Debt to Smogan	$ 300,000
Equipment	700,000	Equity of Pamark	350,000
		Equity of Smogan	350,000
Assets	$1,000,000		$1,000,000

VIE 433 - Construction and Leasing of Building

VIE 433 was established to construct and lease the office building that houses Pamark's headquarters. Pamark then leases the building from VIE 433. VIE 433 obtains long-term financing from Smogan Bank using the building as collateral. Pamark and Smogan share gains and losses of VIE 433 60% and 40%, respectively. Pamark enjoys the use of the building without carrying the asset or debt. VIE 433 carries the building as an asset and uses the lease payments collected from Pamark to pay the debt to Smogan.

The balance sheet of VIE 433 is as follows:

Building	$1,000,000	Debt to Smogan	900,000
		Equity of Pamark	60,000
		Equity of Smogan	40,000
Assets	$1,000,000		$1,000,000

Additional Information

The following pages present the income/loss and cash flows to each party under a worst-case scenario and a best-case scenario. The worst-case scenario assumes the assets were sold for $200,000, a loss of $800,000 and the best-case scenario assumes the assets were sold for $4,700,000, a gain of $3,700,000.

Smogan holds a conversion instrument that would permit Smogan to convert $250,000 of debt to equity for VIE 633. After the conversion the equity of 633 would be $350,000 Pamark and $600,000 Smogan.

Required

Determine who should consolidate VIE 633 and 433, Pamark or Smogan. Support your conclusion with the reasoned logic and accounting concepts literature. Provide supporting calculations.

NET INCOME/NET LOSS AND CASH FLOWS FOR VIES ASSUMING ASSETS SOLD FOR $200

(all numbers in thousands)

	VIE 633		VIE 433
	Without Conversion	**With Conversion**	
Net income/loss:			
Smogan's interest income on debt:			
No interest realized on $300[2]	$ 0		
Interest = .10 x $50,000		$ 5	
No interest realized on $900			$ 0
Smogan's income/(loss) on investment:			
Profit/Loss percentages - 50%-63%-40%			
Equity investment	$(350)	$(600)	$ (40)
Less return of capital (see cash flows)		91	
Net loss on equity investment	(350)	(509)	(40)
Loss on debt =$900 - $200	0	0	(700)
Smogan's total loss	$(350)	$(504)	$(740)
Pamark's income/(loss) on investment:			
Profit/Loss percentages - 50%-37%-60%			
Equity investment[3]	$(450)	$(350)	$ (60)
Less return of capital (see cash flows)	0	54	0
Pamark's total loss	$(450)	$(296)	$ (60)
Total net income/net loss	$(800)	$(800)	$(800)
Cash flows:			
Smogan's debt cash flows:			
$200 cash flows from sale + $100	$300		
$50 debt principle + $5 interest		$ 55	
$200 cash flows from sale			$200
Smogan's equity cash flows			
Residual cash flows ($200-50-5) x .63	0	91	0
Smogan's cash flows	$300	$146	$200
Pamark's cash flows:			
Residual cash flows ($200-50-5) x .37	$ 0	$54	$ 0
$100 guarantee to creditor	(100)		
Pamark's cash flows	$(100)	$54	$0
Total cash flows	$ 200	$ 200	$ 200

[2] Accrued interest would be written off because the $300 cash flow ($200 cash from sale + $100 from Pamark) would first be applied to the principle

NET INCOME/NET LOSS AND CASH FLOWS FOR VIES ASSUMING ASSETS SOLD FOR $4,700

(all numbers in thousands)

	VIE 633		VIE 433
	Without Conversion	**With Conversion**	
Net income/loss:			
Smogan's interest income on debt:			
Interest = .10 x $300 debt	$ 30		
Interest = .10 x $50 debt		$ 5	
Interest = .10 x $900 debt			$ 90
Smogan's share of VIE income			
.50 x ($3,700 asset gain - $30 interest)	1,835		
.63 x ($3,700 asset gain - $5 interest)		2,328	
.40 x ($3,700 asset gain - $90 interest)			1,444
Smogan's total income	$1,865	$2,333	$1,534
Pamark's share of VIE income:			
.50 x ($3,700 asset gain - $30 interest)	$1,835		
.37 x ($3,700 asset gain - $5 interest)		$1,367	
.60 x ($3,700 asset gain - $90 interest)			$2,166
Pamark's total income	$1,835	$1,367	$2,166
Total net income	$3,700	$ 3,700	$3,700
Cash flows:			
Smogan's cash flows on debt:			
$30 interest + $300 principle	$ 330		
$5 interest + $50 principle		$ 55	
$90 interest + $900 principle			$ 990
Smogan's cash flows on equity:			
$350 investment + $1,835 income	2,185		
$600 investment + $2,328 income		2,928	
$40 investment + $1,444 income			1,484
Smogan's total cash flows	$2,515	$2,983	$2,474
Pamark's cash flows:			
$350 investment + $1,835 income	$2,185		
$350 investment + $1,367 income		$1,717	
$60 investment + $2,166 income			$2,226
Pamark's total cash flows	$2,185	$1,717	$2,226
Total cash flows	$4,700	$4,700	$4,700

[3] Amount of investment $350 + Debt Guarantee $100 = $450

Peer Evaluation of Team Members
Instructions

The team will develop and turn in a contract that outlines the responsibilities, deadlines and deliverables of each team member. The contract must be agreed upon and signed by all members of the team and turned in. The contract can be modified because of unforeseen circumstances if everyone is in agreement. Each team member will submit his or her evaluation of the other team members' performance based upon the contract. The evaluation is due on the next class day after the project due date. Evaluation of another's performance is a serious and significant activity. If the evaluation is viewed to be cursory, the evaluator's grade will be penalized.

The three major areas that are most important to the success of any team environment are: attendance, attitude and contributions.

Attitude:

First, a team member should have a ***positive outlook*** and commitment to the project. This includes their overall disposition toward the project.

Second, a team member should have a ***willingness to assume responsibilities***. This involves the individual's effort to take on responsibilities voluntarily and to help in areas he/she may not have be initially designated as responsible.

Finally, a team member should have an ***ability to work with others***. This includes the individual's willingness to work with all members of the group including willingness to listen and consider the ideas of others. It also involves the resolution of any conflicts in a mature and productive manner without interfering with the productivity of the overall work at hand.

A recommended point allocation is as follows:

Positive outlook	.5 points
Willingness to assume responsibilities	1.0 points
Ability to work with others	1.0 points
	2.5 points

Attendance:

The first is ***attendance to planned team meetings and scheduled events***. This includes being on time for and present during the entire meetings. Including meetings for the purpose of discussing and working on the project and attendance to graded events like the presentation.

Other attendance is ***responsiveness to emails and phone calls*** in a timely fashion. Often work will be partitioned off to sub groups. It is imperative that the individuals are available and responsive to communication with each other.

A recommended point allocation is as follows:

Attendance to planned meetings	1.0 points
Responsiveness to communications	.5 points
	1.5 points

Contributions:

First, are the contributions ***during the team meetings*** including involvement in the discussion and decisions during these meetings.

Second, is the preparation for the meetings including the ***individual's effort to understand the material and prepared ahead of time*** to help the team progress to the completion of the project.

Finally, is the ***completion of the task assigned*** to the individual and evidence that effort was undertaken to complete their assigned task in a quality manner and in a timely fashion.

A recommended point allocation is as follows:

Involvement during team meetings	2.0 points
Preparation for team meetings	2.0 points
Completion of assigned tasks	2.0 points
	6.0 points
Total points for peer evaluation	10.0 points

Peer Evaluation of Team Members
Example Form

Area **(Points possible)**	**Team Member A**	**Team Member B**	**Team Member C**	**Myself**
Attitude: Positive outlook (.5)				
Willingness to assume responsibilities (1.0)				
Ability to work with others (1.0)				
Attendance: To planned meetings (1.0)				
To communications (.5)				
Contributions: Involvement during meetings (2.0)				
Preparation for meetings (2.0)				
Completion of assigned tasks (2.0)				
Total points (10.0 possible)				