The Mason Family (A)

Paul Water, CFA, is a managing partner of SPW, Inc., an investment counseling firm specializing in domestic stocks and bonds. Water takes pride in his ability to establish and carry out investment policies that are tailored to the specific circumstances and needs of individuals and families. Currently, he is reviewing his notes on the Mason family account.

The Masons

Dr. Perrie Mason is an electrical engineer, inventor, and long-time professor at the Essex Institute. After 30 years of teaching, she learned that the rights to one of her patented inventions, the "inverse return valve," were acquired by a new electronics company, ACS, Inc. In anticipation of such an event, Dr. Mason had established a private corporation, wholly owned by the Mason family, to hold the valve patent. ACS is acquiring this corporation from the Masons for $1 million in cash, payable at the closing in 30 days. ACS has also agreed to pay continuing royalties to Dr. Mason or her heirs, based on its sales of systems that use the valve.

Because ACS has no operating record as yet, neither the company nor Dr. Mason has a historical basis for forecasting future sales and royalties. Although all parties are optimistic about prospects for success, they also are aware of the risks associated with any new firm, especially one exposed to the technological obsolescence that is characteristic of the electronics industry. ACS management has informed Dr. Mason that she might expect royalties up to $100,000 in the first year of production and maximum royalties up to $500,000 annually thereafter for an indefinite period.

Investment Considerations

Water is particularly interested in the Masons' income requirements. Dr. Mason, who is 60 years old, earns $50,000 annually at the Essex Institute. Mr. Mason, who is 70 years old, retired from his own career 12 years ago to help Dr. Mason with her research efforts. A small income from irregular speaking engagements supplements his annual retirement income of $25,000. Their combined annual income averages $80,000. Aside from a modest equity in their home, the Masons have no financial assets; their savings have been invested in Dr. Mason's inventions. Dr. Mason plans to retire from Essex at the end of the year to devote her time to travel, charity, and special research projects. All of the Masons' three children are married and have families of their own.

The Masons desire to help with the education of their grandchildren and have included specific provisions to this effect in their wills. In addition, Mr. Mason

wants to establish a scholarship fund at Essex in his wife's name. He has not decided whether to make annual contributions or to leave a bequest in his will to fund this scholarship.

The Task

The Masons are eager to know how their money will be invested, given their priorities. Water reviewed his notes one more time to make sure that he had all of the facts. He identified two specific tasks to be completed prior to his upcoming meeting with the Masons:

- Develop an investment policy for the Masons' $1 million portfolio; and
- Determine an asset allocation that reflects the investment objectives, constraints, and preferences detailed in the investment policy.

Water also reviewed his firm's economic forecast (see Exhibit 1), current capital market conditions (Exhibit 2), and the firm's capital market outlook for the next 12 months (Exhibit 3). SPW is forecasting a high probability of either stagflation or disinflation. Water also noted that the firm is forecasting long-run annual returns on common stocks of 8 percent and on bonds of 6 percent. He will incorporate these capital market expectations into his asset allocation recommendation.

Exhibit 1
SPW's Economic Forecast

SPW anticipates three possible economic scenarios during the next 12 months: stagflation, disinflation, or accelerating inflation. These scenarios are summarized as follows:

Scenario	*Nominal GNP*	*GNP Deflator*
Stagflation (45% probability)	9.7%	7.5%
Disinflation (35% probability)	6.6	5.0
Inflation (20% probability)	15.4	10.0

These numbers are based on the following conditions:

Stagflation: Continuing budget deficits, a Federal Reserve policy that is accommodative of large government credit demands, higher levels of nominal interest rates, some "crowding out" of private investment spending, and somewhat slower economic growth.

Disinflation/Slow Growth: Slower growth in the money supply, resulting in lower inflation and, eventually, lower nominal interest rates; high federal government deficits and slower rates of economic growth, which reduce private investment spending.

Accelerating Inflation/Rapid Growth: Inflation accelerating to double digits, and real GNP growth at above-average rates; a Federal Reserve policy that accommodates large federal budget deficits; higher levels of spending, which increase employment and national income; rising nominal interest rates and an overheated economy.

Exhibit 2
Current Capital Market Conditions

	Current Yield Levels	*Historical Standard Deviation of Total Returns*
Cash equivalents	9.0%	2.8%
Domestic bonds	12.0	2.6
Domestic stocks	4.0	15.6

Exhibit 3
Twelve-Month Capital Market Outlook

	*Total Expected Annual Return**	*Expected Annual Yield*
Stagflation (45% probability)		
Cash equivalents	9.5%	10.0%
Domestic bonds	3.4	13.0
Domestic stocks	2.2	4.5
Disinflation (35% probability)		
Cash equivalents	8.4%	6.0%
Domestic bonds	34.0	10.0
Domestic stocks	24.9	3.0
Inflation (20% probability)		
Cash equivalents	11.0%	16.0%
Domestic bonds	−10.3	15.0
Domestic stocks	19.4	6.0

* The assumed annual dividend growth rates for common stocks are 10% in stagflation. 7% in disinflation. and 14% in inflation.

The Mason Family (B)

Several years later, Mr. Mason whose own health is deteriorating, telephoned Water to inform him that Dr. Mason had died. Water immediately requested a meeting with Mr. Mason to discuss the investment policy in light of these changes.

In the meeting, Mason indicates that he has decided to use his royalty income to set up a scholarship fund in the name of his wife for the benefit of enterprising young engineers attending the Essex Institute and that he still wants to assist financially in the education of his grandchildren. He plans to leave all of his assets to his children and grandchildren, with a special bequest to the Essex Institute.

Water confirms that after all estate taxes are paid, the value of the Mason portfolio will be $2.5 million. The royalties from Dr. Mason's invention are expected to average $200,000 a year indefinitely.

Water ponders the change in circumstances. He wants to make sure that the revised investment policy statement will adequately consider Mr. Mason's uncertain health and his priorities. Then, Water will reevaluate the asset allocation. The portfolio is currently invested in "blue chip" stocks (70 percent) and high-grade bonds (30 percent).

Water notes that, coincidentally, his firm's current capital market expectations are the same today as they were when he first met the Masons.

The Allen Family (A)

Harvey Bowles, CFA, recently joined Perennial Trust Company, a firm specializing in financial management for wealthy families. Bowles' first assignment is the Allen family, a new client who came to Perennial upon the death of Charles A. Allen. Bowles soon will be meeting with Mr. Allen's widow, Emily Allen, and son, George Allen. To familiarize himself with the Allens' situation, he reads the following memorandum prepared by Perennial's new-business officer:

> Emily Allen is the Allen trust's only income beneficiary. Upon her death, the assets go to her son, George, free of taxes (which were paid at Mr. Allen's death). Emily Allen is 65 years old and is suffering from a physically degenerative disease; although her mind is quite alert, she is not expected to live more than a few more years. Mrs. Allen has good insurance, but it does not cover all of her growing medical bills. Beyond her substantial medical bills, Mrs. Allen has few expenses. She contributes most of her excess income to various charities and occasionally makes gifts to George and members of his family. She feels that George is somewhat irresponsible but is a good son, husband, and father. Mrs. Allen lived through the Depression and is concerned about the present-day financial environment. She has often said, "We saw great companies and great fortunes destroyed. We were terrified, and we suffered great hardship; yet, my husband was able to build our fortune by investing wisely over the years." The Allen trust's only investment restriction is a requirement that George Allen be consulted, as a courtesy, before any investment action is taken.
>
> George Allen, 44, is married and has three sons (two in prep school and one in college). Although Mr. Allen is not employed, he volunteers his services to a variety of civic and charitable organizations. Neither he nor his wife, a homemaker, seems to be financially sophisticated, although Mr. Allen is a strong believer in free investment markets and free enterprise. He believes that "smart investors can double their money every five years." He looks forward to financing businesses for his sons as they graduate from college. The George Allens' living style and family needs require an annual after-tax income of $100,000. This now is derived from investment income and occasional gifts from his mother. He wants to increase the income from his portfolio to eliminate his dependence on gifts from his mother.

The present status of the Allen trust is shown in Exhibit 1, and George Allen's current investment portfolio is shown in Exhibit 2. The real estate investment in that portfolio is a piece of the real estate investment owned in the trust.

Exhibit 1

Investment Assets: Charles A. Allen Trust

	Cost	*Market Value*	*After-Tax Yield*
Cash equivalents	$ 3,000,000	$ 3,000,000	4%
Growth stocks	500,000	1,000,000	1
Cyclical stocks	1,000,000	1,000,000	2
Defensive stocks	3,000,000	4,000,000	2
Tax-exempt bonds	4,000,000	4,500,000	7
Equity real estate*	1,000,000	2,000,000	6
Total	$12,500,000	$15,500,000	

* Exclusive of personal residence.

Exhibit 2

Investment Assets: George Allen

	Cost	*Market Value*	*After-Tax Yield*
Money market account	$ 50,000	$ 50,000	3%
Growth stocks	150,000	300,000	1
Cyclical stocks	200,000	250,000	2
Defensive stocks	300,000	400,000	2
Venture capital fund	100,000	100,000	0
Tax-exempt bonds	300,000	400,000	7
Equity real estate*	200,000	300,000	6
Total	$1,300,000	$1,800,000	

* Exclusive of personal residence.

Before his meeting with the Allens, Bowles reviews Perennial's latest investment return projections. His firm believes that continued prosperity is the most likely outlook for the next three to five years but is mindful of the possibility of two disturbing alternatives: a return to high inflation, or a drift into deflation/depression. Exhibit 3 presents the details of Perennial's projections.

Bowles lists the tasks to be completed prior to his upcoming meeting. The first is to create revised investment policy statements for the Allen trust and for George Allen. The second is to recommend a new asset allocation for each Allen portfolio.

He realizes that he must justify any changes he recommends and explain why they are appropriate.

Exhibit 3

Perennial Trust Company
Three- to Five-Year Expected Annual Investment Returns

	Expected Total Annual Return	*Expected Annual Yield*
Continued prosperity (60% probability)		
Cash equivalents	5%	5%
Domestic stocks	14	4
Domestic bonds	13	13
Tax-exempt bonds	7	7
Equity real estate	9	10
High inflation (20% probability)		
Cash equivalents	9%	9%
Domestic stocks	16	5
Domestic bonds	6	16
Tax-exempt bonds	2	8
Equity real estate	14	10
Deflation/depression (20% probability)		
Cash equivalents	2%	2%
Domestic stocks	–5	2
Domestic bonds	25	9
Tax-exempt bonds	15	5
Equity real estate	–3	5

The Allen Family (B)

Nine months later, Emily Allen requested a meeting with Bowles to discuss her portfolio. After this meeting, Bowles knows that he must review the Allen trust's policy and investment mix. He rereads the memorandum summarizing his meeting with Emily.

> Mrs. Allen announced that her disease has been arrested. The Lifeline Company discovered a new drug that successfully counteracts the virus that had been attacking her. This "miracle drug," as she calls it, has changed her perspective on life. She now looks forward to exploring the world and seeing the sights she had thought she would never be able to see. She also wants to make a substantial donation to medical research in the name of her late husband, Charles. Because she does not control the assets of the trust and is entitled only to its annual income, Mrs. Allen reasons that she would have to make gifts of $250,000 a year for 10 years to meet her goal. Mrs. Allen does not plan to provide any further support to her son; in fact, she would prefer that he get a job. She is willing to help with the education of the grandchildren.

Bowles prepares to revise his previous investment policy statements and asset allocations for each of the Allen portfolios. Although he looks forward to revising the Allen trust portfolio, he is not looking forward to his "consult" meeting with George Allen, who had insisted at their previous meeting that his portfolio be managed to generate annual income of at least $100,000 after taxes.

The Ramez Family (A)

Martina Lindell, CFA, is reviewing the file of the Ramez family, her first non-U.S. client. This client is especially important to her firm, Dexter Associates, because it is beginning to expand its services internationally. Lindell is to provide recommendations on asset allocation for the Ramez portfolio and on whether the firm should engage an outside manager for the international equities to be included.

Dexter Associates

Dexter's management process is "top-down." The firm begins with broadly defined economic scenarios and proceeds in a systematic, disciplined manner to asset allocation and security selection. For many years, the firm has included only domestic stocks and bonds in its portfolios. This year, however, it has decided to broaden the asset classes available for client portfolios by adding equity real estate, international equities, and precious metals. The firm has proceeded cautiously in this and has not yet brought into the firm all the personnel required to manage the three new asset classes.

Dexter Associates prides itself on its economic forecasts. Exhibit 1 contains the current three- to five-year forecast of expected annual total return, yield, and standard deviation under three possible economic scenarios. The firm believes that the most likely scenario is one of low growth and low inflation.

The Ramez Family

Luis and Inez Ramez have recently sold their family business for $10 million and immigrated to the United States from the Philippines. They have been accepted for residence in the United States and intend to become U.S. citizens. After a few years of travel and leisure, Luis intends to return to business. He plans to use a portion of the proceeds from the sale of his business to fund a new business venture. Inez expects to pursue charitable activities benefiting needy Philippine families throughout the world.

The Ramezes have three children. Pedro, 19, is a student in Paris who intends to practice medicine in his native Philippines. Marco, 23, lives with his wife in Singapore, where they have recently begun an international import/export company. Maria, 25, lives in Panama with her husband, a banker, and their two children. She is currently enrolled in a masters program in political science. Although Luis and Inez have carefully raised their children to be self-reliant and self-supporting, they intend to pay for their children's and grandchildren's education and occasionally to provide for special needs the children encounter. The children are not aware of the

The Mason Family (A)

This case illustrates the main considerations involved in setting investment policy and determining asset allocation for individuals. In this instance, the life-cycle approach must be adapted to suit the unique circumstances of the client. The Masons are a couple near retirement who are about to receive a large infusion of capital ($1 million) and expect a substantial royalty income stream in future years. Investment policy should reflect the fact that the family's demand for income from the investments would change if and as the royalty income becomes more certain. Thus, the time horizon has two parts: the first year or two, and then a longer time period representing the life expectancy of the Masons. Assets in this case include only domestic stocks and bonds and cash equivalents.

Investment Policy

Investment policy for the Masons must express their investment objectives and consider all relevant constraints on the achievement of these objectives.

Objectives

Return Requirements: The rate of return on the Mason's assets must provide them with adequate retirement income, on an inflation-adjusted basis. In addition, the return on their assets should be large enough to allow them some financial participation in their grandchildren's education. Income from the portfolio should be sufficient in the first year to replace Dr. Mason's Essex salary and provide additional money for the Masons' other objectives. To the extent that royalty income materializes later, it can provide most or all of the Masons' income requirements; at that time, the portfolio should be shifted to a growth orientation.

Risk Tolerance: The portfolio should accept only a low-to-moderate level of risk to reduce the volatility of the portfolio. The Masons are entering retirement with a $1 million portfolio, plus the equity in their home, as financial assets. One of the objectives of the portfolio is to preserve this capital base. Although the Masons expect substantial royalty income, this might not materialize or might stop suddenly. Thus, the portfolio should retain sufficient liquidity to meet the need for flexibility during the first year.

Constraints

Liquidity: After the first year or so, if royalties develop, liquidity is not a major requirement for the Masons' portfolio.

Time Horizon: A medium-long time horizon is appropriate for this portfolio. Although the Masons are in the latter part of their investment life cycle, which

normally suggests a shorter-than-average time horizon, they have adequate resources available and the expectation of significantly more on an annual basis from the royalty stream. Adopting a longer time horizon will allow them to diversify more effectively and to fund some of their investment objectives that extend beyond their own life expectancies.

Laws and Regulations: No significant regulatory or legal constraints affect the Masons' portfolio other than the need to act with ordinary prudence.

Taxes: The income on this portfolio, combined with expected royalty income in excess of $100,000 a year, will put the Masons into a high tax bracket. Therefore the investment policy should seek to minimize the tax consequences.

Unique Preferences and Circumstances: The Masons expect to receive substantial income from the royalty agreement. The amount and timing is variable although the initial estimates are that the income will amount to more than twice Dr. Mason's university salary. Clearly, the realization of royalty income will have an important effect on the income requirements from the portfolio. Although the portfolio should be prepared to pick up the slack should the royalty income stop, the production of above-average current income is unnecessary.

Asset Allocation

Dr. Mason is planning to retire and use investment income from the portfolio supplemented by income from royalties, to cover living expenses. Because the level of royalty income in the first several years is uncertain, the portfolio initially should be structured to provide for the Masons' entire income requirements. At a minimum, investment income should replace Dr. Mason's salary. After the first several years, assuming that royalties materialize, the portfolio should adopt a growth orientation with sufficient liquidity to provide for emergency needs should the royalty income slacken or stop suddenly. Although the Masons are late in their life cycle, they do not need to rely solely on the income from their portfolio to support their lifestyle. Thus, the portfolio does not need a pronounced income orientation, and it can reflect a fairly long time horizon.

The asset allocation decision should consider the expected returns from the different asset classes, given the firm's economic outlook and capital market forecast. Specifically, the data indicate that the expected return on stocks is 13.6 percent, compared with historical returns of 10.3 percent; the expected return on Treasury bonds is 11.4 percent, compared with historical returns of 6.4 percent; and the expected return on Treasury bills is 9.4 percent, compared with historical returns of 6.3 percent. Stocks are expected to yield 4.3 percent: bonds, 12.4 percent; and Treasury bills, 9.8 percent. Stocks are clearly attractive. but so are bonds and Treasury bills, and income levels on the latter are extremely high relative to historical levels, whereas income yields on stocks are only average. The Masons' high tax bracket and the need to protect capital suggests the inclusion of high-grade, tax-exempt bonds, if the yields are sufficiently attractive.

In the first year or so, the portfolio should have some liquidity until the Masons' royalty flows are known. An appropriate asset mix would be 50 to 70 percent of the portfolio in stocks, 30 to 40 percent in tax-exempt bonds, and up to 10 percent in tax-exempt cash equivalents. Once the level of royalty income is known, the allocation to cash equivalents can be shifted to stocks or bonds, or both. The Masons will have little need for portfolio liquidity once the royalty income stream begins. This transition portfolio is flexible, and it provides sufficient income in the first year to meet the Masons' return requirements. Assuming a 50 percent stock/30 percent bond/20 percent cash equivalent allocation in the first year, the portfolio will generate about $78,000 in income, a large part of which will be tax-exempt.

The long-run asset allocation should range between 50 and 70 percent stocks, with the balance in bonds; the precise allocation will depend on the level of royalty income generated. If the income stream from the royalty is sufficient to meet the Masons' income objectives, then the portfolio should have a growth orientation. If the royalty does not materialize, the portfolio should have an income orientation. Obviously, a wide middle ground is possible, in which the royalty materializes but falls short of supplying all the Masons' income needs; in this case, the portfolio must balance income and growth appropriately. To meet the Masons' risk objective, the portfolio should be well diversified within the asset classes and contain only high-quality securities. Depending on the portfolio's stock/bond mix, the expected return on the long-run portfolio would range from 12.5 percent (50/50 mix) to 12.9 percent (70/30 mix). The expected yield on the portfolio would fall between 8.4 percent (50/50 mix) and 6.7 percent (70/30 mix).

Although the expected return to stocks and bonds varies considerably across the economic scenarios, time mitigates the risk in these assets, making the volatility of the portfolio acceptable for the Masons. Bonds compose almost half of the portfolio because of their acceptable return and risk as compared to stocks. The data in Exhibit 3 show that stocks offer an incremental expected return of 2.2 percent over bonds, but they do so at a higher level of risk (standard deviation of 16 percent as opposed to 11 percent). The low historic correlation of bonds to stocks indicates that inclusion of both assets would diversify and lower total risk.

The Mason Family (B)

Mr. Mason receives $25,000 a year in retirement income and about $135,000 fr[illegible] the portfolio, a good part of which is tax-exempt. He has stated his desire to g[illegible] the $200,000 royalty stream to the Essex Institute. He would appear to have m[illegible] than enough income to live very comfortably, including the payment of any medi[illegible] bills and the funding of his grandchildren's education. Even though he is in the la[illegible] part of his life cycle, current income production is not the predominant ret[illegible] requirement; growth of capital is increasing in importance as he ages.

Revised Investment Policy Statement

Objectives

Return Requirements: Because additional income is of little importance to M[illegible] Mason, the return objectives are to protect the portfolio from inflation and [illegible] provide adequate funds for the education of the grandchildren. The royal[illegible] stream is adequate to fund the scholarship.

Risk Tolerance: Because Mr. Mason has no apparent need for addition[illegible] income, he can afford to increase the volatility of the portfolio so that his famil[illegible] and designated charities will receive a higher expected return.

Constraints

Liquidity: Because income from the portfolio is adequate and his capital need[illegible] are inconsequential, liquidity is not an important consideration for Mr. Mason[illegible] Further, liquidity is not a necessity for his estate.

Time Horizon: Mr. Mason's shorter-than-average personal time horizon is n[illegible] of particular significance, because so much of his wealth will go to charity or t[illegible] his grandchildren, who have much longer time horizons for investment purposes[illegible] This longer horizon is the governing consideration in this case.

Laws and Regulations: No change.

Taxes: Mr. Mason is in a high tax bracket and in all likelihood would continue to seek the tax-advantaged investments that are appropriate to his age and circumstances.

Unique Preferences and Circumstances: All major considerations here have been addressed.

[illegible]sset Allocation Revisions

[illegible]he portfolio is currently 70 percent in stocks and 30 percent in bonds. The facts [illegible] the case provide no reason to change the allocation, although Water may choose [illegible] substitute some international and growth-oriented stocks for the blue-chip stocks [illegible] improve the diversification of the portfolio.

Mr. Mason's eventual income of about $185,000 ($25,000 in retirement income [illegible]nd $160,000 in portfolio income) appears more than adequate to meet his stated [illegible]ncome requirements. In fact, it is about double the level of income the Masons [illegible]njoyed only several years earlier. His willingness to donate the royalty stream to [illegible] Essex Institute supports the fact that he has sufficient income. The risk level of [illegible] portfolio need not be changed either. In fact, Mr. Mason can spend some of his [illegible]rincipal if he needs additional funds. Finally, no significant changes in the [illegible]onstraints merit a change in the allocation of the portfolio.

Because Mr. Mason's income needs are well taken care of, his main priority is [illegible]o increase the total value of his portfolio for the benefit of his children, [illegible]randchildren, and the Essex Institute (should he elect to make an additional bequest [illegible]n his will). The current mix is accomplishing this goal.

The Allen Family (A)

This case illustrates the resolution of income beneficiary/remainder man interests in a multi-interest trust. It also deals with planning the portfolio of an individual in the light of his residual interest in a trust. Emily Allen, a widow, is the sole income beneficiary of the Allen trust. Her life expectancy is only a few years, and upon her death, her son, George, will inherit the assets of the trust. George does not work but receives—and says he needs—an annual after-tax income of $100,000. This is derived from investment income, supplemented by occasional gifts from his mother. Bowles is to create investment policies and suggest new asset allocations for each Allen portfolio.

Investment Policy: The Trust

Investment policy for the Allen trust must express the investment objectives and consider all relevant constraints on the achievement of the portfolio objectives. In this case, the trust has two sets of interests to satisfy: those of Mrs. Allen, who presently receives all of the income, and George Allen, who will inherit the residual assets free and clear at Mrs. Allen's death. The investment of the trust assets must consider the interests of both. Because the trust assets provide more than sufficient income to meet Mrs. Allen's needs, the primary portfolio objective is inflation-adjusted capital preservation and growth over time.

Objectives

Return Requirements: The primary return objective is inflation-adjusted capital preservation, with a growth-oriented mix to reflect the family entity's need for capital growth over time. Mrs. Allen has sufficient current income, so an income orientation is unnecessary. It would also fail to recognize the remainderman's interests.

Risk Tolerance: The trust can afford moderate to above-average volatility to achieve long-term capital appreciation, as long as Mrs. Allen's income needs are fully met.

Constraints

Liquidity: No immediate liquidity constraints affect the portfolio.

Time Horizon: The time horizon is very long. The trust has more than enough assets to meet income objectives; therefore, the longer term investment objectives—those of future generations—dominate.

Laws and Regulations: Investment of personal trust assets must adhere to appropriate legal and regulatory guidelines. The most relevant one here is that the trust assets must be invested to meet Prudent Man standards on an asset-by-asset basis.

Taxes: The trust income is taxable at high-bracket rates. Therefore, the investment policy must seek to minimize the tax consequences for the Allen family.

Unique Preferences and Circumstances: Nothing about the trust itself is unique. The assets do not belong to Emily, of course, although they provide her with a more-than-adequate income. The existence of the assets is extremely important to George Allen, who expects to inherit them in the near future. George also has a vested interest in the current return from the trust in that his mother subsidizes him when necessary. Bowles should keep in mind that Mrs. Allen has voiced concern about another economic depression.

Investment Policy: George Allen

The appropriate investment policy for George Allen is not so clear-cut. Because he expects to inherit the assets of the Allen trust in the near future, his principal stated concern with regard to his own portfolio is to maximize income production now. It might be several years, however, before the trust assets reach him, and inflation could quickly reduce the buying power of his income.

Objectives

Return Requirements: The primary return objective is to provide $100,000 annually in after-tax income and to do so in a capital-preservation context.

Risk Tolerance: George's aggressive talk is not consistent with the need for his portfolio to be below average in volatility. To meet his current return objective, George must be heavily invested in fixed-income securities; these have little long-run appreciation potential, however. To maintain his standard of living, George can ill afford large fluctuations in the income stream, although he can afford some fluctuations in the value of the portfolio. George's personal risk is relatively low—and his risk tolerance relatively high—because the entire estate will come to him eventually. Furthermore, his mother is willing to give him money when he needs it, although he wants to minimize his dependence on these gifts.

Constraints

Liquidity: As long as Mrs. Allen is willing to give George money, he has little need for liquidity in his personal portfolio. Prudence would dictate creating some liquidity for emergencies to avoid a sudden need to sell permanent investments to meet unplanned demands for cash.

Time Horizon: The time horizon may be viewed from two perspectives. Based on George's age, it is probably 30 to 40 years. The current investment policy will change significantly, however, when he inherits the assets of the trust. In that context, the life of the current portfolio is probably very short; investment planning for George could well take place in a series of three-year cycles.

Laws and Regulations: No special legal or regulatory considerations affect the portfolio, except that Bowles must act in a prudent manner.
Taxes: Although George Allen probably generates a fairly large amount of deductions, the size of the income stream means a high tax bracket. The investment policy must seek to minimize the consequences.
Unique Preferences and Circumstances: George Allen's investment perspective is not consistent with his financial muscle or his return objectives, and he should be educated away from his inappropriate approach. To meet his return objective, the portfolio will be heavily invested in fixed-income securities with little appreciation potential. Typically, this allocation would not be prudent for someone of his age. Luckily for George, his mother would probably cover any temporary shortfalls, and he enjoys the prospect of inheriting the trust, probably within a few years.

Capital Market Outlook

Perennial Trust's forecasts and scenario data (Exhibit 3) generate the following expected values:

	Expected Annual Total Return	*Expected Annual Yield*
Cash equivalents	5.2%	5.2%
Common stocks	10.6	3.8
Domestic bonds	14.0	12.8
Tax-exempt bonds	7.6	6.8
Equity real estate	7.6	9.0

Assuming a 40 percent tax rate, the after-tax expected yield on cash equivalents is 3.1 percent, on stocks is 2.3 percent, on real estate is 5.4 percent, on tax-exempt bonds is 6.8 percent, and on domestic bonds is 7.7 percent.

Asset Allocation

To meet the capital preservation objective, the Allen trust's assets should be skewed toward stocks and real estate, although the portfolio should continue to include a meaningful holding of bonds. Income production will continue to be completely adequate, and annual fluctuations in asset value are of no real concern to Mrs. Allen. The projected returns on tax-exempt bonds are competitive, so they should compose the bond allocation. Because the trust requires few reserves, it does not need to include more than a working balance of cash equivalents.

The suggested mix for the Allen trust is 50 to 60 percent in stocks, 10 to 20 percent in real estate, and the balance in tax-exempt bonds. The recommended portfolio is 55 percent in stocks, 30 percent in tax-exempt bonds, and 15 percent in real estate.

This portfolio would yield 4.1 percent after taxes and generate almost $640,000 annually in after-tax income. The high allocation to stocks and bonds provides for inflation adjustment of the assets and income stream. The bonds provide some diversification and risk reduction, that is, they lower the volatility of the portfolio. Because liquidity is unimportant, nothing is allocated to cash equivalents. The fixed-income portion of the portfolio should be tax-free bonds as long as the after-tax yields are competitive with the yields on Treasury bonds.

At some point, Bowles may wish to suggest an even broader diversification in the portfolio, including venture capital and international equity investments for inflation-hedging purposes. The Allen trust's assets are sufficient to support such breadth, and George Allen would probably endorse it.

George Allen

George Allen's income requirement limits the flexibility of the asset allocation for his own portfolio. Assuming the venture capital is relatively illiquid and the real estate cannot be sold because it is owned with the trust, George's portfolio will need to be invested 70 percent in tax-free bonds to meet his stated income goal of $100,000. The following allocation would satisfy his income needs:

	After-Tax Yield	*Allocation $*	*Allocation %*	*After-Tax Annual Income*
Bonds (tax-exempt)	6.8%	$1,250,000	70%	$ 85,000
Real Estate	5.4	300,000	17	16,200
Growth stocks	1.0	150,000	8	1,250
Venture Capital	0.0	100,000	5	0
		$1,800,000	100%	$102,450

This portfolio has little growth potential. The allocation of 8 percent to growth stocks, which yield only 1 percent as compared with 2.3 percent for the S&P 500, is to provide as much inflation protection as possible within the equity allocation. The venture capital investment could have growth potential, but probably not for several years to come; in the interim, it generates no income. The $100,000 of after-tax income should be fairly stable because its basic component is bonds and the yield is not expected to change significantly across the different scenarios. George is subject to substantial purchasing-power risk, call risk, and reinvestment risk, however. Furthermore, the income-oriented portfolio is unlikely to increase his capital. In fact, it is not likely to preserve the real value of the assets.

Bowles must advise George of the risks associated with a heavy allocation to bonds. The allocation to bonds is justified, in part, because George stands to inherit substantial assets in the not-too-distant future and because his mother is willing to give him financial assistance meanwhile. The inheritance will provide adequate assets to support him for the rest of his life, so his current portfolio can be structured to provide only income for the next few years.

The Allen Family (B)

This case provides an opportunity to untangle the conflicting investment objective of George Allen. He can no longer afford to keep his portfolio invested 70 percent in bonds if he wishes to maintain his lifestyle in years to come.

George must be advised of the risks associated with his portfolio. If he insists that he needs $100,000 a year in after-tax income, his portfolio will remain heavily invested in bonds. This leaves him open to inflation risk, call risk, and reinvestment risk. If Mrs. Allen lives 20 years, George's life style will be severely constrained. To invest in assets more oriented toward growth, however, he would have to accept a reduced lifestyle or get a job now, or both.

The Allen Trust

Nothing in this case calls for revision of the investment policy or reallocation of the trust assets. The primary return objective remains to provide for inflation-adjusted capital preservation, to be achieved at moderate to above-average risk. The major difference is that Mrs. Allen is now expected to spend her income on herself, her grandchildren's education, medical research, and charity; she no longer plans to make gifts to her son, George. Mrs. Allen receives in excess of $600,000 in after-tax income from the trust. This should be sufficient to meet her own living expenses and to make the $250,000 annual contribution to charity. If a shortfall threatens, the portfolio allocation could be shifted toward greater income production. The present structure of the portfolio also protects the assets against inflation.

George Allen

The investment policy and asset allocation for George Allen will need revision. In addition, Bowles must advise George that he will have to accept a lower standard of living or go back to work. Mrs. Allen has declared her intention not to support George financially. Therefore, George's portfolio will have to be invested as if he will not receive any additional cash from his mother for the next 10 to 20 years.

A revised investment policy for George Allen is:

Objectives

Return Requirements: The returns should be sufficient to provide George with a realistic level of inflation-adjusted income to meet his basic living expenses.

Risk Tolerance: A higher-than-average level of volatility will be necessary to afford some inflation protection.

Constraints

Liquidity: The portfolio should provide some liquidity because George has no other source of capital.

Time Horizon: The shortest planning time horizon is equal to Mrs. Allen's life expectancy, now 10 to 20 years.

Laws and Regulations: No special legal or regulatory constraints of importance apply here.

Taxes: The income level places George in a high tax bracket. Investment policy should seek to minimize the tax consequences.

Unique Preferences and Circumstances: George must now rely solely on the income from this portfolio, unless he gets a job, because his mother has stated she does not intend to support him. Unfortunately, the portfolio is unlikely to satisfy his desire for a $100,000 after-tax real annual income level over a 10- to 20-year investment horizon. George will need to accept either a steadily declining real income or a more growth-oriented allocation with a lower income level but some prospect of an increase over time.

Based on the revised investment policy statement, a reasonable asset mix for George's portfolio would be a balanced mix of bonds and growth stocks. The choice between taxable and tax-exempt bonds should reflect their relative after-tax returns. In this case, the tax-exempt bonds provide competitive expected yields. Assuming that the real estate investment is still attractive, it should be kept because it is expected to yield more than 5 percent and offers some inflation protection. Furthermore, it is owned in the trust. Thus, the recommended allocation is as follows:

	After-Tax Yield	*Allocation $*	*Allocation %*	*After-Tax Annual Income*
Cash equivalents	3.1%	$ 50,000	3%	$ 1,550
Bonds (tax-exempt)	6.8	725,000	40	49,300
Growth stocks	1.0	725,000	40	7,250
Real estate	5.4	300,000	17	16,200
		$1,800,000	100%	$74,300

This structure will generate an expected annual income of $74,300 and will provide better inflation protection than did the previous allocation. The recommended allocation does not meet George Allen's income objective, but Bowles has an educational role to play, and facts are facts. The choice of income level is George's; once Bowles shows him what is reasonable, prudent, and the best bet for the future, George's choice will dictate what management Bowles will provide. Once the choice is made, a new investment policy statement and asset mix may be required.