

CASE STUDY PORTFOLIO MANAGEMENT: Individual Investor

Portfolio Management
for Financial Advisors

Jakub Karnowski, CFA

The background is a composite image. On the left, a semi-transparent globe shows the continents of North and South America. To the right, there are several overlapping financial charts and a newspaper clipping. One clipping is titled "Daily" and "INDEX REVIEW". Another chart shows a line graph with a peak and a subsequent decline, with a label "up 21.15". A third chart shows a line graph with a sharp decline, with a label "-15%".

Table of contents

- 1. Description**
- 2. Questions**
- 3. Answers**



Description

John Mesa, CFA, is a portfolio manager in the Trust Department of BigBanc. Mesa has been asked to review the investment portfolios of Robert and Mary Smith, a retired couple and potential clients. Previously, the Smiths had been working with another financial advisor, WealthMax Financial Consultants (WFC). To assist Mesa, the Smiths have provided the following background information:

FAMILY

We live alone. Our only daughter and granddaughter are financially secure and independent.

HEALTH

We are both 65 years of age and in good health. Our medical costs are covered by insurance.



Description

HOUSING

Our house is in need of major renovation. The work will be completed within the next six months at an estimated cost of \$200,000.

EXPENSES

Our annual after-tax living costs are expected to be \$150,000 for this year and are rising with inflation (expected to be 3% annually).

INCOME

In addition to income from the Gift Fund and the Family Portfolio, we receive a fixed, annual pension payment of \$65,000 (after taxes), which continues for both of our lifetimes.



Description

FINANCIAL GOALS

Our primary objective is to maintain our financial security and support our current lifestyle. A second objective is to leave \$1mln to our grandchild and \$1 mln to our local college. We recently completed the \$1 mln gift to the college by creating a „Gift Fund”. Preserving the remaining assets for our granddaughter is important to us.

TAXES

Our investment income, including bond interest and stock dividends, is taxed at 30%. Our investment returns from price appreciation (capital gains) are taxed at 15%, at the time of sale. There are no other tax considerations.



Description

GENERAL COMMENTS

We need someone like WFC to develop a comprehensive plan for us to follow. We can follow such a plan once it is prepared for us. We invest only in companies with which we are familiar. We will not sell a security for less than we paid for it. Given our need for income, we invest only in dividend-paying stocks.



Description

INVESTMENTS

We benefit from two investment accounts:

1. The Gift Fund (\$1mln) represents our gift to the college. During our lifetimes, we will receive fixed annual payments of \$40,000 (tax free) from the Gift Fund. Except for the annual payments to su, the Gift Fund is managed solely for the benefit of the college and we may not make any other withdrawals of either income or principal. Upon our deaths, all assets remaining in the Gift Fund will be transfered into the college's endowment.
2. The Family Portfolio (\$1.2mln) represents the remainder of our lifetime savings. The portfolio is invested entirely in very safe securities, consistent with the IPS prepared for us by WFC, as shown below.



Description

WFC IPS for Smith Family Portfolio

The Smith Family Portfolio's primary focus is the production of current income, with long-term capital appreciation as a secondary consideration. The need for a dependable income stream precludes investment vehicles with even a modest likelihood of losses. Liquidity needs reinforce the need to emphasize minimum-risk investment. Extensive use of short-term investment-grade investments is entirely justified by the expectation that a low-inflation environment will exist indefinitely into the future. For these reasons, investments will emphasize U.S. Treasury bills and notes, intermediate-term investment-grade corporate debt, and select 'blue chip' stocks, whose dividend distributions are assured and whose price fluctuations are minimal.

Description

BigBanc Model Portfolios

			PORTFOLIOS			
Asset Class	Total Return	Yield	A	B	C	D
U.S. stocks (large)	13.0%	3.0%	0%	35%	45%	0%
U.S. stocks (small)	15.0	1.0	0	5	15	0
Non-U.S. stocks	14.0	1.5	0	10	15	10
U.S. corporate bonds (AA)	6.5	6.5	80	20	0	30
U.S. Treasury notes	6.0	6.0	0	10	5	20
Non-U.S. gov bonds	6.5	6.5	0	5	5	0
Municipal bonds (AA)*	4.0	4.0	0	10	0	10
Venture capital	20.0	0.0	0	0	10	25
U.S. Treasury Bills	4.0	4.0	20	5	5	5
Total			100%	100%	100%	100%
After-tax expected return			4.2%	7.5%	13.0%	6.4%
Sharpe Ratio			0.35	0.5	0.45	0.45
After-tax yield			4.2%	2.9%	1.9%	3.3%
Expected Inflation: 3.0%						

* Tax exempt

Table of contents

1. Description
2. Questions
3. Answers



Questions

- A. Prepare and justify an alternative IPS for Smiths' Family Portfolio. Do not provide a specific asset allocation in your response to this question
- B. Describe how your IPS addresses three specific deficiencies in the WFC IPS
- C. Recommend a portfolio from Table 1 for the Family Portfolio. Justify your recommendation with specific references to:
 - 1) Three portfolio characteristics in Table other than expected return or yield. No calculations are required.
 - 2) The Smiths' return objectives. Show your calculations.



Questions

The Smiths now raise a new concern: „How can we judge whether our IPS is appropriate for us and whether it will continue to be appropriate in the future?” Several questions about the appropriateness of an investment policy include:

- 1) Is the policy written clearly and explicitly?
- 2) Can the client sustain his/her commitment to the policy?
- 3) Can the manager maintain fidelity to the policy?

D. Respond to the Smiths' question as follows:

- Describe how each of the three policy questions is or is not relevant to the Smiths.
- Describe why the WFC investment policy is or is not appropriate in light of each of the three policy questions.
- Recommend to the Smiths who should have the responsibility for their investment policy and for changes in that policy.

The background of the slide is a composite image. On the left, there is a semi-transparent globe showing the continents. On the right, there is a newspaper clipping with the word "Daily" at the top right. Below it, the text "INDEX REVIEW" is visible, followed by a line graph showing an upward trend. The graph has a y-axis with values 1,400, 1,450, 1,500, and 1,550, and an x-axis with labels "Oct" and "Nov". Another graph below it shows a downward trend with a label "Jan." and a value "-15%".

Table of contents

1. Description
2. Questions
3. Answers

Answers

A

That answer does not have to include every specific fact that has been underlined, particularly if given fact only further supports what you have included in your answer.

SAMPLE ANSWER:

Likely scoring:

2 objectives @ 3 points each
5 constraints @ 2 points each

Time horizon: Long because the Smiths are in good health and at age 65 could live 20 to 30 years

Taxes: Ordinary income taxed at 30% and capital gains at 15%. Focus on maximising after-tax return



Answers

A

Liquidity: \$200,000 needed in the next 6M for work on house

Legal: No special requirements beyond normal duty

Unique circumstances: The Smiths indicate a bias toward „safe companies” they are familiar with and that pay a dividend. They have other income sources of \$40,000 from a gift portfolio and \$65,000 from a pension. Both these figures are after taxes. They have long-term goals to leave \$1,000,000 to a grandchild

Answers

A

Risk: The Smiths can tolerate average to somewhat above-average risk given their ample resources, good health, and long time horizon as long as distributions are sufficient to meet their lifestyle. They do need inflation protection.

Return: Mr. And Mrs. Smiths should focus on long-term, after-tax growth at least equal to inflation and income distributions to fund their lifestyle. This is consistent with a family in the spending phase of their life cycle. The initial income target is:

\$150,000	After-tax income needs
- 40,000	Income from gift portfolio
- 65,000	Income from pension
<hr/>	
\$ 45,000	Income needs from portfolio

Answers

A

The initial required return is 7.5%, which is combination of the annual income need of 4.5% ($\$45,000 / \$1,000,000$) and expected inflation of 3.0%.

! NOTE !

The portfolio value of \$1,000,000 is what remains in the Family Portfolio after the expected withdrawal of \$200,000 for the house renovation.

! NOTE !

The answer is shown in „revers” order; Constraints, then Risk, then Return. This is the logical process for actually creating the answer.



Answers

B

More than three are listed in the sample answer below to show a variety of possible responses:

- 1) The emphasis on current income fails to address the return objective of maintaining the Smiths' lifestyle and the need to keep pace with inflation
- 2) „Minimum-risk investments” are an objective ignores the Smiths' long life expectancy and desire to maintain their lifestyle over time
- 3) Taxes are not addressed
- 4) Time Horizon is not addressed
- 5) Liquidity needs are not quantified
- 6) Legal and Regulatory issues are not addressed



Answers

C

One key to selecting an asset mix is to remember that the asset allocation between growth (equity) and income (bond) investments is the most crucial asset allocation decision. The Smiths' objective of moderate or slightly above-average risk supports a 60/40 (Equity/Bond) mix.

Sample answer:

Given the risk-return objectives, 60/40/0 (growth/income/cash equivalents) is a reasonable mix after allowing for the \$200,000 withdrawal.

The first half of Part C asks for three justifications for the selected portfolio other than return or yield. Possible answers:

- Portfolio B is attractive because asset classes broadly diversify it
- Portfolio B has the highest Sharpe ratio
- Portfolio B excludes venture capital investment that might conflict with the Smiths' bias for recognised companies and avoiding losses

Answers

C

- Portfolio B has a 50/50 balance of growth (equity) investments and fixed-income investments for current yield. The relative weight of the equity portion will increase after the \$200,000 disbursement for renovations. This is consistent with their risk-return objective.

The second half of Part C asks for calculations to support the preceding answer. These calculations should address both the need for current income and long-term return.

Family Portfolio:

\$1,200,000	Current market value
- 200,000	Expected distribution for renovations
<hr/>	
\$1,000,000	Ongoing portfolio value

Answers

C

Income needs after pension and gift portfolio	\$45,000
Required annual distribution percentage ($45,000/1,000,000$)	4.5%
Plus long-term expected inflation rate	3.0%
<hr/>	
Required total annual return on portfolio	7.5%

Portfolio B meets the long-term, after-tax total return goal of 7.5% and generates most of annual income need of 4.5% with income of 2.9%. The distribution shortfall of 1.6% ($4.5 - 2.9$) can be made up by distributing realized gains from the expected total return because the total return is sufficient to meet both income and appreciation goals.



Answers

D

Sample answer:

D1: The three policy questions that are relevant to the Smiths are:

- It is clearly written using the Smiths' own statements about their goals and constraints, while specifically addressing their quantified needs
- The manager must regularly review (at least annually) the statement with the Smiths to determine its relevance and their commitment to follow it
- The manager must also formally recommit at least annually to the IPS.



Answers

D

D2: WFC's statement fails to address the questions:

- It is written, but vague in addressing the specific items to be included in an IPS
- The client should not sustain a commitment to the statement because the emphasis on minimum risk and current income will impinge on their lifestyle 5, 10, or 20 years from now as living costs rise
- Again, the WFC policy will be a disaster over the long term if followed, failing far short of the Smiths' objectives. They will undoubtedly blame the manager for the inevitable failure to the plan

D3: It is the Smiths' money and they have total discretion to select, retain, or dismiss the manager. Ultimately, the Smiths are responsible. However, the manager can draft the statement and must discuss it with the Smiths to ensure that they understand how it will affect them



THANK YOU!