

Both parents of 12-year-old Andrew Campbell recently died in an accident. The parents have been supporting Andrew and his grandmother, Lisa Bavier, aged 77. The parent's accumulated assets prior to their death were \$640,000 in a diversified common stock (both domestic and international) portfolio and \$360,000 in the common stock of Petrie Enterprises, a publicly traded company founded by Bavier's husband. The parents' assets will now be held in a single U.S.- based trust- the Bavier-Campbell Trust (the Trust)- to benefit both Bavier and Campbell. In addition to these assets, the Trust received life insurance proceeds of \$2,000,000

Petrie Enterprises will continue to provide medical coverage for Bavier until her death. Campbell has government-provided healthcare until he reaches age 22. Campbell will attend university for 4 years beginning at age 18. In addition to normal living expenses, initial annual university costs are projected to be \$38,000, rising 8% annually.

According to the provision of the Trust documents:

- The Trust should provide for Bavier's and Campbell's annual living expenses, currently estimated to total \$78,000 per year (after tax). The Trust portfolio should earn a return sufficient to cover living expenses of Bavier and Campbell, taking taxes into consideration and allowing for both inflation (expected to be 2% annually) and modest growth (1% annually). Income and capital gains are taxed at 30% and this tax treatment is not expected to change
- The Trust may, at the trustee's discretion, distribute a portion of the Trust assets to meet Bavier's and Campbell's health, education or other essential needs.
- The Trust should limit shortfall risk (defined as expected total return minus 2 standard deviations) to no lower than a -10% return in any one year.
- Campbell is entitled to receive distributions from the Trust until he reaches age 22. At that point, the Trust will continue making distributions for Bavier's living expenses,
- Upon Bavier's death, the Trust's assets will go to Campbell, provided he is at least 32 years old. If Campbell is not yet aged 32 when Bavier dies, the Trust will then distribute income and principal to Campbell until he reaches age 32, at which point the Trust will terminate and the assets will be distributed to Campbell
- The Petrie Enterprises common stock cannot be sold without Bavier's approval. Bavier has stated her strong desire to retain stock indefinitely, to fulfill a promise she made to her husband.
- The Trust must hold in cash equivalents an amount equal to nine months of living expenses (on a pre-tax basis) for Bavier and Campbell
- In the unlikely event that Campbell dies before Bavier, distributions will continue for Bavier's benefit until she dies, at which point any remaining Trust assets will be distributed to several charities.

As a result of poor financial advice, Bavier lost all of her inheritance from her husband's estate. Because her assets are nearly depleted, she wants to minimize any further losses in the Trust portfolio: in fact she has expressed serious concern about the Trust's ability to meet Campbell's and her needs during her lifetime

A. Prepare the objectives section of an appropriate IPS for the Bavier-Campbell trust. Show any appropriate calculations. (Note: Each objective in your response should address specific circumstances of the Trust and include appropriate supporting justification) (7 minutes)

B. Prepare the constraints section of an appropriate IPS for the Bavier-Campbell trust. Show any appropriate calculations. (15 minutes)

## SOLUTIONS

### PART A: Solution

#### 1. Risk Tolerance

**Ability.** The Trust has average ability to assume risk, largely because the total return requirement as a relatively modest 6,71% (see calculation below). Compared to portfolio assets, before-tax expenses plus inflation equal  $3,71\% + 2\% = 5,71\%$ , which is an achievable level given the size of the portfolio. The Petrie Enterprises stock, however, represents 12% of the portfolio. If the value of the portfolio were to drop significantly, it would be more difficult for the portfolio to meet its return requirements. Because the portfolio is the only source of support for Bavier, the Trust's ability to assume risk is lower than it might otherwise be.

**Willingness.** The Trust has below average willingness to assume risk. The Trust document requires that the account be invested so that shortfall risk is limited to -10% return in any year. This limitation implies that the Trust will be unwilling to tolerate any substantial volatility in portfolio returns. Bavier has a below average willingness to assume risk, given her unfortunate prior experience of receiving poor financial advice and seeing her inherited assets shrink. In addition, Bavier is relying on steady returns to meet her current and future living expenses.

**Overall risk tolerance.** The Trust has below average risk tolerance and will continue to have it for many years, especially while Bavier is alive.

#### 2. Return Requirement

The return requirement reflects 2 major factors: the need to cover the living expenses and the need to protect the portfolio from the adverse effects of inflation. Specially, the Trust must generate a total before-tax return of at least 6,71% on an annual basis to meet the return requirements.

The living expenses are estimated at \$78,000 per year. However, because income and capital gains are taxed at 30%, the Trust will need to generate \$111,429 before tax to meet the living expenses of Bavier and Campbell, which equals a 3,71% return on \$3,000,000 portfolio.

Adding inflation and growth results in the total return at 6,71%:

$$((\$78,000/(1-.3))/\$3,000,000) + 2\% \text{ inflation} + 1\% \text{ (minimum) for growth} = (\$111,429/\$3,000,000) + 2\% + 1\% = 6,71\%$$

### PART B: Solution

- Liquidity requirements:** The Trust has minimal liquidity needs, at least until Campbell begins his university education, but should maintain liquidity, in case of emergencies. Of \$83,571, which is equal to 9 months if the first's year estimated living expenses on a pre-tax basis (as mandated by the Trust) or  $\{(\$78,000/0,70) \cdot (9/12)\}$
- Time Horizon.** Based on the assumption that Campbell lives longer than Bavier, the Trust faces a time horizon comprising 3 stages: The 1. Stage is years 1 through 6, when the living expenses of Bavier and Campbell are expected to increase consistent with inflation; the 2. Stage would be years 7 through 10, when Bavier's expenses continue and Campbell's expenses increase with cost of his university education; the 3. stage would extend from year 11 onward to Bavier's death or year 20, whichever is later. As long as Bavier is alive, her expenses will continue. If Bavier dies, the 3. stage would last until year 20, when Campbell turns 32. During this period between Bavier's death and year 20, Campbell would receive distributions from the Trust sufficient to cover essential expenses in excess of his after-tax income.
- Tax considerations.** The Trust will be subject to taxes; therefore after-tax returns of individual securities and of the portfolio will be critical. Income and capital gains are taxed at the 30% rate. The Trust should evaluate assets and portfolio returns on after-tax basis and consider the possible attractiveness of tax-advantaged securities.
- Regulatory/legal considerations.** The Trustee will need to follow the Prudent Investor statutes. The Trust also has the usual fiduciary responsibilities.
- Unique circumstances.** The restriction on selling Petrie Enterprises common stock