

A graduate student is learning about endowment funds. Some of the material covered in the class addresses characteristics of endowment funds, the endowment model of investing, rebalancing endowment portfolios, and ways of reducing illiquidity and tail risks associated with endowment funds. The student's teacher gives the following quiz in class.

QUESTION A • Learning Objective C25-L2-1.2.2

- i. Describe the concept of maintaining intergenerational equity, and its relationship to an endowment's spending rate. **(1.5pts)**
- ii. State the target return for endowment funds. **(0.5pts)**
- iii. State how endowments and foundations in the U.S. differ in terms of their spending rates. **(1pt)**

GUIDELINE RESPONSE

- i. **0.5pts:** Maintaining intergenerational equity refers to preserving equity through generations of beneficiaries (50% chance of maintaining the real value of an endowment in perpetuity).
1pt: If there is little chance of an endowment maintaining assets and surviving in perpetuity, then the endowment's spending rate is high, which benefits its current beneficiaries. Conversely, if there is a good chance of an endowment surviving in perpetuity, then the endowment's spending rate is relatively low, which benefits its future beneficiaries.
- ii. The target return needs to exceed the rate of inflation by at least the fund's spending rate.
- iii. U.S. endowments have flexible spending rates, while U.S. foundations are required to spend at least 5%/year on operating expenses and charitable activities.

QUESTION B • Learning Objective C25-L2-1.2.4

Other than accepting liquidity risk and having access to a network of talented professionals, state two factors that contributed to the outperformance of large endowments.

GUIDELINE RESPONSE

State two - (except #s 4 & 5)

1. Aggressive asset allocation
2. Effective investment manager selection
3. First-mover advantage
4. Access to network of talented alumni
5. Acceptance of liquidity risk
6. Sophisticated investment staff and board oversight

QUESTION C • Learning Objective C25-L2-1.2.3

- i. Briefly describe the endowment model of investing.
- ii. Explain why David Swensen does not include investment-grade bonds in the Yale endowment fund portfolio.

GUIDELINE RESPONSE

- i. **1pt:** The endowment model investment approach invests heavily in alternative assets and has limited holdings in liquid traditional assets.
- ii. **0.5pt:** Due to the principal-agent problem of corporate managers working for and making decisions to benefit shareholders, sometimes to the detriment of bondholders.

QUESTION D • Learning Objective C25-L2-1.2.6

Briefly describe the process of rebalancing an endowment portfolio and state a challenge associated with rebalancing an endowment portfolio.

GUIDELINE RESPONSE

1pt: Rebalancing involves restoring portfolio weights back to their long-term strategic asset allocation weights, which involves selling outperforming assets and buying underperforming assets.

0.5pt: A challenge is rebalancing with illiquid alternative assets due to factors such as (*state one*) lockups, redemption windows, and having to hold private equity funds until distribution of assets.

QUESTION E • Learning Objective C25-L2-1.2.5

Describe the tiered approach to reducing illiquidity risk associated with endowment funds, and give an example of a Tier 2 asset.

GUIDELINE RESPONSE

0.5pts for this statement if you do not describe the strategy below: This is a liquidity-driven investing strategy that matches the liquidity of investments to investors' time horizons.

1.5pts: This involves the endowment estimating its spending needs expected for the next 10 years and using liquid assets (i.e., tier 1 and tier 2 assets) to cover those costs. Then tier 3 assets are used to match more long-term liabilities.

0.5pts: Tier 2 assets invest in stocks.

QUESTION F • Learning Objective C25-L2-1.2.7

The endowment fund manager is assessing ways to reduce the fund's tail risk. He does not want to allocate more to cash and risk-free debt due to the drag that will have on the fund's performance. Also, his fund already has allocations within the asset classes that reduce tail risk exposure. State one other approach the manager can adopt to reduce the fund's tail risk.

GUIDELINE RESPONSE

Ways to reduce tail risk in endowment funds - *state #2; #s 1 and 3 are given in the question.*

1. Increase allocations to cash and risk-free debt.
 2. Use equity option hedges (e.g., buy equity put options).
 3. Structure allocations within each asset class to reduce extreme event risk exposure (e.g., invest in high-quality bonds expected to rise in value during crises).
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