PFL Academy

Teacher Guide: Chapter 62 — Investment Portfolio Strategies

OVERVIEW

TIME	MATERIALS	PREREQUISITES
45-50 Minutes	Student Activity Packet	L-47: Introduction to Investment Types

LESSON FLOW

5 min — **THE CHALLENGE**

- Read Emma's rebalancing story aloud. Emphasize the $180,000 lifetime impact.
- Discussion: "Why did Emma sell stocks that were doing well?"
- Preview: Rebalancing seems counterintuitive but enforces buy-low-sell-high discipline.

10 min — **CORE CONCEPTS**

- Review the 5 key terms. Emphasize "asset allocation" as the primary performance driver.
- Walk through "110 minus age" guideline with examples.
- Quick check: If you're 30, what percent stocks? (80%) If you're 55? (55%)

25-30 min — **APPLY IT**

- **Part A (10 min):** Life-stage allocations. Discuss why allocations differ by age.
- **Part B (10 min):** Rebalancing math. Ensure students understand Year 3 crash impact.
- **Part C (5-10 min):** Tax-efficient location. Explain why bonds belong in tax-advantaged accounts.

10 min — **CHECK YOUR UNDERSTANDING**

- Complete in class or assign as homework.
- Review Q3 (compound effect of small improvements) and Q5 (personal reflection).

DIFFERENTIATION

Support

- Pre-teach "110 minus age" rule with multiple age examples.
- Provide completed Part B table for reference.
- Pair students for rebalancing calculations.
- Focus on Part A allocation decisions before moving to B.

Extension

- Calculate 40-year impact of 0.5% vs. 1.0% annual improvement.
- Research actual expense ratios of index funds vs. active funds.
- Create a personal Investment Policy Statement with specific funds.

ANSWER KEY

Part A: Life-Stage Asset Allocation

Profile 1 (Age 25): 85-90% stocks, 10-15% bonds. Long 40-year horizon allows weathering volatility. Can recover from crashes. Maximize growth potential.

Profile 2 (Age 45): 65-75% stocks, 25-35% bonds. Shorter 20-year horizon but still need growth. Significant wealth to protect. Balance growth and stability.

Profile 3 (Age 60): 45-55% stocks, 45-55% bonds. Near-term stability critical (retiring in 5 years). Still need growth for 25-year retirement. Can't afford major loss before retirement.

Part B: Rebalancing Impact Analysis

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Year 3 Crash Impact (on $100,000):

Non-Rebalanced (85% stocks / 15% bonds):
• Stocks: $85,000 × -18% = -$15,300
• Bonds: $15,000 × +5% = +$750
• Net Loss: -$14,550 (14.55%)

Rebalanced (80% stocks / 20% bonds):
• Stocks: $80,000 × -18% = -$14,400
• Bonds: $20,000 × +5% = +$1,000
• Net Loss: -$13,400 (13.40%)

Rebalancing saved: $1,150 in this single year
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5. When stocks rise, rebalancing forces selling them (high) and buying bonds (relatively low). When stocks fall, rebalancing forces selling bonds (high) and buying stocks (cheap). This systematic discipline enforces the opposite of emotional reactions.

Part C: Tax-Efficient Asset Location

6. Option B is better. Bonds generate taxable interest annually. In taxable account, this is taxed every year at ordinary income rates. In IRA, interest grows tax-deferred. Stocks in taxable account get favorable long-term capital gains rates and you control timing of gains.

Check Your Understanding

1. C (Asset allocation)

2. A 25-year-old has 40+ years to recover from crashes. Over any 20-year period historically, stocks have positive returns. A 60-year-old retiring soon can't wait years to recover—a 40% drop could derail retirement plans.

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3. At 8%: $500/mo × 30 years = ~$680,000
At 8.5%: $500/mo × 30 years = ~$745,000
Additional wealth: ~$65,000 from 0.5% improvement
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4. Gradual shift reduces risk progressively as time horizon shortens. Staying 90% stocks at 60 risks devastating losses near retirement. Sudden switches miss growth opportunities and may crystallize gains at wrong time.

5. *Accept responses that show understanding of personal time horizon, realistic risk assessment, and logical allocation reasoning.*

COMMON MISCONCEPTIONS

Misconception	Clarification

"Rebalancing means selling winners—that's bad."	Rebalancing is selling high and buying low systematically. It enforces discipline that improves risk-adjusted returns and prevents unintended risk from allocation drift.
"I should time the market to maximize returns."	Research shows timing attempts hurt returns. Missing just the 10 best days over 20 years can cut returns in half. Consistent investing beats timing.
"Tax efficiency doesn't matter much."	1% annual tax drag over 30 years reduces wealth by 26%. Strategic asset location and minimizing turnover can add hundreds of thousands over a lifetime.