



**CFA
LEVEL III**

EXPLANATIONS – SAMPLE – CFA LEVEL III

Explanations - Sample - CFA Level III

Answer 1:

Part 1) Correct answer is B

Statement 2 is incorrect because a free float-adjusted index does not remove the float, it considers only the float. Statement 4 is incorrect because an equal-weighted index must be periodically rebalanced. Price weighted indexes are adjusted by adjusting the divisor. Statements 1 and 3 are correct.

Part 2) Correct answer is B

Hageman is incorrect with respect to both statements. Active return is the excess return of a manager relative to the benchmark, and tracking risk is the standard deviation of active return. The information ratio is active return divided by tracking risk, so a decrease in tracking risk would tend to raise, not lower, the information ratio.

Part 3) Correct answer is C

The primary advantage of a price-weighted index is that it is computationally simple. The fact that it implicitly assumes that each investor holds one share of each stock in the index is generally considered a disadvantage because that approach to investing is rarely adopted in practice. The best representation of aggregate investor wealth is a market capitalization weighted index. The float-adjusted index is generally viewed as easiest to track.

Part 4) Correct answer is B

Vargas is incorrect with regard to the information ratio because, historically, the information ratio has been highest for semiactive management and lowest for passive management, with active management falling in the middle. Vargas is correct that passive management is more likely to appeal to a taxable investor because of the reduction in capital gains taxes associated with lower portfolio turnover.

Part 5) Correct answer is B

The description of the Value Line index is incorrect because it is based in the US, not the UK. The description of the Nikkei is incorrect because it is price-weighted, not value-weighted. The others are correct.

Part 6) Correct answer is C

Vargas is correct that active managers do not, on average, outperform passive strategies after consideration of expenses. Hageman is incorrect that a US based investor should use active strategies abroad since foreign investors may lack information that local investors have and thus active investing would be futile and the manager should follow a passive strategy.

Answer 2:

Part 1) Correct answer is B

If LIBOR increases as she expects, the cost of Rensselaer's floating rate loan will increase. In this case the firm will want to pay a fixed rate and receive a floating rate in a swap. The payer's swaption will allow them to pay a predetermined fixed rate in a swap. The maturity of the swaption should coincide with the initiation of the loan.

Part 2) Correct answer is A

If interest rates increase and the fixed rate on swaps in six months (projected at 7.2%) exceeds the swaption fixed rate, the firm will exercise the swaption and pay 7.0%. They receive LIBOR from the swap in the swaption and pay in total $7.0\% + 2.0\% = 9\%$ in the swap and the loan. The firm's first quarterly payment in net will be $9\% \times \$30,000,000 \times 90/360 = \$675,000$.

Note that if swap fixed rates are less than 7.0% in six months, the firm would not exercise the swaption. The firm could either a) enter a swap at that time and pay the lower fixed rate or b) not enter a swap and just pay the floating rate in the loan.

Part 3) Correct answer is B

A floating-rate cash flow will have a very low duration which means that its market value is largely resistant to changing interest rates. If Rensselaer hedges its floating rate loan so that it becomes a synthetic fixed rate loan, they have increased its duration and increased its sensitivity to changes in interest rates. So the loan's market value risk increases.

However, they will have decreased the sensitivity of the cash flows in the loan to changes in interest rates, so cash flow risk declines.

Part 4) Correct answer is A

In order to calculate how much Rensselaer will receive in dollars as a result of the swap, first calculate the implied notional principal (NP) from the quarterly cash flows of EUR 10,000,000, using the quarterly euro interest rate:

$$NP \left(\frac{0.058}{4} \right) = 10,000,000$$
$$NP = 689,655,172.41$$

Next, calculate the dollar implied principal at the current exchange rate:

$$\text{EUR } 689,655,172.41 / 0.72 = \$957,854,406.13.$$

Lastly, calculate a dollar cash flow using the quarterly dollar interest rate:

$$\$957,854,406.13 \times 0.034/4 = \$8,141,762.$$

Part 5) Correct answer is B

Hiatt is concerned that global interest rates will increase. In the currency swap, Rensselaer will pay euros and receive dollars. They will therefore want to fix the euro interest rate and receive dollars at a floating interest rate, which is expected to be higher in the future.

Part 6) Correct answer is B

Rensselaer has credit risk because if the swap counterparty defaults on the contract, Rensselaer will not have hedged its dollar cash flows. Rensselaer is also exposed to the type of currency risk referred to as economic risk to the extent that local asset and currency movements are correlated. Economic risk refers to longer term noncontractual exchange rate risk and the amount to hedge is not readily determined. Hoskins states that she does not feel comfortable projecting cash flows from the German factory beyond the next two years. She therefore is uncertain how much to hedge in the future and Rensselaer has economic risk.



CFA Institute does not endorse, promote, or warrant the accuracy or quality of the products or services offered by Finstructor. CFA Institute, CFA® and Chartered Financial Analyst® are trademarks owned by the CFA Institute.

GARP does not endorse, promote, review or warrant the accuracy of the products or services offered by Finstructor of FRM® related information, nor does it endorse any pass rates claimed by the provider. Further, GARP is not responsible for any fees or costs paid by the user to Finstructor nor is GARP responsible for any fees or costs of any person or entity providing any services to Finstructor. Financial FRM®, GARP® and Global Association of Risk Professionals™ are trademarks owned by the Global Association of Risk Professionals, Inc.

CAIAA does not endorse, promote, review or warrant the accuracy of the products or services offered by Finstructor nor does it endorse any pass rates claimed by the provider. CAIAA is not responsible for any fees or costs paid by the user to Finstructor nor is CAIAA responsible for any fees or costs of any person or entity providing any services Finstructor. CAIA®, CAIA Association®, Chartered Alternative Investment Analyst, and Chartered Alternative Investment Analyst Association®, are service marks and trademarks owned by CHARTERED ALTERNATIVE INVESTMENT ANALYST ASSOCIATION, INC., of Amherst, Massachusetts, and are used by permission.

info@finstructor.in | Ph: +91 - 99202 22792 | www.finstructor.in

©2010 Finstructor. All Rights Reserved