

# Investment management essay



**ASSIGN  
BUSTER**

25721 Investment Management 1. Case background: Date| Event| Decision| July 6, 1998| Creative Computers decided to carve-out the Ubid subsidiary| Creative Computers planned to sell 20% of Ubid's equity and keep 80% to shareholders in a tax-free spin-off six months after Ubid's IPO. | December 3, 1998| The Ubid IPO took place| Creative Computers sold 1. 817 million shares at \$15 per share| December 9, 1998| Elena King contemplated her first investment before market close and Creative Computers was trading at \$22. 75 and Ubid was at \$35. 6875| Elena had raised \$20 million for her new fund| 2. Investing in hedge funds

Both hedge funds and mutual funds are “ pooled” instruments, but there are more differences than similarities between them. Three kinds of differences are going to introduce in the following part which are strategy, risk and reward. Strategy: The hedge funds managers have fewer limits to deal with, they can sell short, use derivatives and use leverage, and otherwise, they can also change the strategy significantly if they think it is appropriate. The mutual fund managers cannot be as flexible as hedge fund managers. In case they changes the strategy of the fund, the may be accused of “ style drift”.

Risk: As hedge funds are managed much more aggressive than the mutual fund, they can take speculative positions in derivative securities and have the ability to short sell stocks. This will obviously increase the leverage and the risk of the fund. Mutual funds are the opposite of the hedge funds, taking highly leveraged positions is not allowed and managers should take solid strategy to make the funds safe. Reward: Hedge funds take an aggressive

strategy which has high risks to seek absolute returns (it means they want to produce positive return no matter what the market performance is).

Mutual funds are managed relative to an index benchmark which means their return is steady because they are judged on their variance from that benchmark.

3. Arbitrage opportunity

3. 1 According to the case study, during the IPO of Ubid, there is only 20% equity offer to public, and remaining 80% will distribute to CC's shareholders after 6 months. The arbitrage opportunity is appear because if we own CC's share that we will receive Ubid's share after six months. In that reason, we should form a portfolio which combines long position of CC and short position of Ubid.

In Dec 9, there was 10, 238, 703 CC's share outstanding and 9, 146, 883 Ubid's share outstanding. However the 80% of Ubid's share will distributed to CC's shareholders after 6 month of IPO. In that reason, we can assume that 80% of Ubid's share is subjected to CC's share.  $(10, 238, 703 \times 80\%) / 9, 146, 883 = 0.715$  If we have long position on 1 share of CC, we should take 0.715 short position of Ubid's share.

3. 2 Based on the output in section 3. 1, the arbitrage opportunity has arise when we have 1 long position on CC's share and 0.715 short position on Ubid's share. Therefore we need short sell the Ubid's share and buy CC's share. Assume that we buy 1 share of CC and short sell 0.715 share of Ubid. After 6 months later. In addition, after 6 months, the 80% Ubid's share will distribute to CC's shareholders, therefore, after 6 months we have 1 share of CC will receive 0.715 share of Ubid. Subject to 1 share of CC, we have 0.715 share short position of Ubid. In that reason we will have a portfolio that combine 1 long position of CC and 0.715 short position of Ubid.

The total payoff of portfolio is sum of payoff in both position is: Price of CC after six month – price of CC + 0.715 × price of Ubid. As we mention before, our return is the total payoff of portfolio. According to the equation of payoff of portfolio, even the price of CC is drop to Zero, we also will generate positive return which is price difference between Ubid and CC, and this is our minimum return Price difference of Ubid and CC is  $0.715 \times 35.6875 - 22.75 = 2.767$  and the initial margin is 50% for long and short position, therefore the capital required is  $50\% \times 2.75 + 50\% \times 35.6875 = 29.22$ . The minimum rate of return is 4. Risks in arbitrage The arbitrage means that investors find temporary risk-free profit from misprice at inefficient market. Therefore, arbitrageurs will face risk lower than other investors. However, some of risks can limit arbitrageur to seek risk free profit. Firstly, arbitrageurs need to bear the fundamental risk. Although arbitrageurs can eliminate unsystematic (firm-specific) risk by portfolio diversification, they cannot mitigate systematic risk which arises from market contracture.

This lead to some of bad news or policies can cause negative effects on fundament value and arbitrageurs' profits. Thus, the fundamental risk can limit arbitrageurs to invest in inefficient market. Secondly, noise trader risk will limit arbitrage. High percentages of noise traders who make irrational investment of decision in market will lead price and risk level to be different with expected level for arbitrageurs, and cause misprice to be reduced. Thus the profit of arbitrage will be limit by noise trader risk. Finally, arbitrageurs will also face high implement cost.

Implement cost includes commission, bid-ask spread, price impact, short sell cost and identification cost. High cost will cause arbitrageur loss interest on

seeking misprice in inefficient market. 6. Realized Return 6. 1arbitrage opportunity There is an arbitrage opportunity when an investor employs trading strategy to guarantee a positive financial situation. when the share price of Creative Computers falls down to zero, the Ubid shares are distributed the minimum payoff would be Minimum payoff = Ubid Price now \* 0. 715 - Computer Price now = \$ 34 \* 0. 15 - \$ 32. 625 = - \$ 8. 315 The arbitrage would not survive when minimum return is negative. 6. 2 rate of return Creative Computers = \$ 32. 625 Ubid = \$ 34. 00 Payoff for Long position = (Computer Price in End - Computer Price Beginning) + 0. 715 \*Ubid Price in 6 months = (32. 625 - 22. 75) + 0. 715 \* 34 = \$ 34. 19 Payoff for Short position = (Ubid Price Beginning - Ubid Price End) \* 0. 715 = (35. 6875 - 34) \* 0. 715 = \$ 1. 21 Total Payoff = \$ 34. 19 + \$ 1. 21 = \$ 35. 40 Realized Return = 35. 40/29. 22 \* 100% = 121. 14%