**FIN333 Global Finance**

Homework Assignment 5

Please submit your homework on CourseSite in a single file in .pdf format with file name as ‘your last name FIN333HW5.pdf’. The deadline is Nov. 23 (Tuesday), 11:59 pm.

*\*You need to show your work to get credit.*

1. (40 points) Use the following information of an England company, Stansfield Bicycles, to answer question (a)-(d)  
     
    Table

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2. What is the domestic country beta of Stansfield Bicycles ?
3. Domestic beta=(0.9\*20)/18=1
4. World beta=(0.6\*20)/15=0.8
5. re=rf+beta\*MRP=5%+1\*(14%-5%)=14%
6. re=rf+beta\*MRP=5%+0.8\*(12%-5%)=10.6%
7. What is the world beta of Stansfield Bicycles ?
8. Suppose that the British stock market is segmented from the rest of the world. Using the CAPM and a risk-free rate of 5%, estimate the cost of equity for Stansfield.
9. Suppose that the British stock market is integrated with the rest of the world and Stansfield Company has made its shares tradable internationally via cross-listing on the NYSE. Using the CAPM and a risk-free rate of 5%, estimate the cost of equity for Stansfield.
10. (30 points) Consider the following international investment opportunity. It involves a gold mine that can be opened at a cost, then produces a positive cash flow, but then requires environmental clean-up:  
      
     Timeline

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    The current exchange rate is $1.60 = €1.00. The inflation rate in the U.S. is 6 percent and in the euro zone 2 percent. The appropriate cost of capital to a U.S.-based firm for a domestic project of this risk is 8 percent. Find the dollar-denominated NPV of this project.

CF0= -€64\*$1.6/€= -$102.40

CF1=€160\*\*$1.6/€\*[(1+6%)/(1+2%)]=$266.04

CF2=-€100\*\*$1.6/€\*[(1+6%)/(1+2%)]^2=-$172.80

I=8%

NPV=-$4,211.32

1. (15points) Your firm has just issued five-year floating-rate notes indexed to six-month U.S. dollar LIBOR plus 1/4 percent. What is the amount of the first coupon payment your firm will pay per U.S. $1,000 of face value, if six-month LIBOR is currently 7.2 percent?

As the bond is indexed to six month LIBOR plus ¼ percent, it will pay coupon every six month $1000\*(7.2%+.25%)/2=37.25

1. (15points) In the Frankfurt market, Aldi stock closed at €5 per share. On the same day, the euro U.S. dollar spot exchange rate was €.625/$1.00. Aldi trades as an ADR in the OTC market in the United States. Five underlying Aldi shares are packaged into one ADR. What is the no-arbitrage U.S. price of one ADR ?

5\*€5/(€.625/$1.00)=$40