NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE DEPARTMENT OF FINANCE

BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE PART IV $2^{\rm ND}$ SEMESTER FINAL EXAMINATION – AUGUST 2009

INTERNATIONAL FINANCE II [CFI 4202]

TIME ALLOWED: 3 HOURS

INSTRUCTIONS

1. Answer <u>Section A</u> and <u>3 Questions</u> from Section B

SECTION A

Obama corporation, a U.S. based MNC, has a subsidiary in Mexico that produces and sells farm equipment. Obama believes the subsidiary could also develop an equipment repair business. The following projections and relevant data have been compiled for the analysis:

- The anticipated initial investment is 9.6 million pesos, which at the existing exchange rate of \$0.001 converts to \$9.6 million.
- The business will generate an estimated five billion pesos per year for 4 years
- The business will be sold in 4 years and the host government will acquire the business with no compensation to Obama, however the government imposes no taxes on income earned by the business. It does impose a withholding tax of 20% on any funds remitted to the U.S. parent.
- The exchange rate of the Mexican peso is forecast as follows;

End of year	Value of Peso		
1	\$0.0008		
2	\$0.0006		
3	\$0.0004		
4.	\$0.0003		

- The U.S. government will tax any dollar earnings received by the parent from its subsidiary at a 20% rate.
- The required rate of return on the project is 18 %.

Required:

Based on this information, do a capital budgeting analysis, to determine whether the project should be undertaken [15]

QUESTION 2

Privately owned Superior Machine Oil Company is considering investing in the Czech Republic so as to have a refinery source closer to its European customers. The original investment in Czech korunas would amount to K250 million, or \$10 million at the current spot rate of K25/\$, all in fixed assets, which will be depreciated over 10 years by the straight-line method.

For capital budgeting purposes, Superior assumes sale of the refinery as a going concern at the end of the 3 rd year at a price, after all taxes, equal to the net book value of fixed assets. All free cash flow will be repatriated to the U.S. as soon as possible.

In evaluating the venture, Superior forecasts the demand of 1 million units in the 1st year, growing at 20% per annum, at a price of €10 per unit. Here is some more information used in the valuation:

Assumed market rates for the next 3 years

. Koruna spot rate : 25K/\$
. Euro spot rate : 1.30\$/€

Question: Is this assumption for spot rates appropriate? How could you improve? [10]

QUESTION 3

A portfolio Manager is considering the benefits of increasing his diversification by investing overseas. He can purchase shares in individual country funds with the following characteristics:

	<u>US</u>	UK		<u>Spain</u>
Expected return	15%	12%	5%	_
Standard deviation	10	9		4
Correlation with US	1.0	0.33		0.06

- (a) What is the expected return and standard deviation of return of a portfolio with 25% invested in the UK and 75% in the US? [3]
- (b) What is the expected return and standard deviation of return of a portfolio with 25% invested in Spain and 75% invested in the US? [3]
- (c) What is the expected return and standard deviation of return of a portfolio with 50% invested in the US and 50% invested in the UK? [3]
- (d) What is the expected return and standard deviation of return of a portfolio with 25% invested in the US and 75% invested in Spain? [3]
- (e) How can you achieve an even better risk-return combination? [3]

SECTION B

QUESTION 4

Despite significant and obvious gains from international portfolio diversification, investors demonstrate a "home bias" and allocate a disproportionate share of funds to domestic securities. Why?

QUESTION 5

- (a) Explain the difference in the risk to the exporter between Accounts Receivable and Factoring.
- b) What is the difference between factoring and forfeiting? Specify the type of traded goods for which forfeiting is applied. [10]

QUESTION 6

Differentiate Direct Portfolio Investment (DFI) from Foreign Portfolio Investment (FPI). In what ways are their motives similar and different? [20]

QUESTION 7

Why might two investors in different countries come to different conclusions about the value of an MNC for which they have information of equal quality (cashflow etc.)? [20]