Adam

DEPARTMENT OF MANAGEMENT
UNIVERSITY OF TORONTO MISSISSAUGA

MGT339H5S LEC6001 - Business Finance II
Summer 2012

Instructor: ADAM KADAR

QUIZ II – August 14, 2012

Duration: 20 minutes

Aid Allowed: Non-programmable calculator

Instructions:

a) Answer all questions.
b) Please show your work, where applicable, in the spaces provided.

LAST NAME: _____ FIRST NAME: _____

STUDENT NUMBER: _____

SOLUTIONS

Question	Score
1 (7 marks)	
2 (3 marks)	
3 (9 marks)	
4 (6 mark)	
Total (out of 25):	

Question 1: [7 marks]

a) Define and describe what is meant by cash conversion cycle. [3 marks]

CCC = Inventory conversion period + Receivables conversion period − Payables deferral period

- average number of days of sales that a firm must finance outside the use of trade credit
- time between cash disbursement and cash collection

b) How can a firm be highly profitable in an accounting sense, but be on the verge of bankruptcy? [4 marks]

- Rapid growth in production and sales can cause a firm to use up all of its cash pursuing growth, leaving it with illiquid assets such as inventory, A/R, and PPE.
- Exhaustion of liquid resources can leave the firm unable to pay its maturing obligations as they come due.

Question 2: [3 marks]

State 3 differences between forwards and futures:

settlement 1. Marked to market daily – futures
on maturity date – forward.

default risk 2. important/real concern – forward.
mitigated by clearinghouse – futures.

Trading 3. OTC/dealer – forward.
exchange – futures.

Contracts 4. standardized – futures
customized – forwards

initial deposit 5. Not required – forward
Initial + maintenance margin – futures.

Question 3: **[9 marks]**

Suppose AAA is a AAA rated firm that can borrow fixed at 9% and floating at Libor – 0.5%, while BBB is a BBB rated firm that can borrow fixed at 11% and floating at Libor + 0.8%. AAA wants to borrow at a floating rate while BBB wants to borrow at a fixed rate.

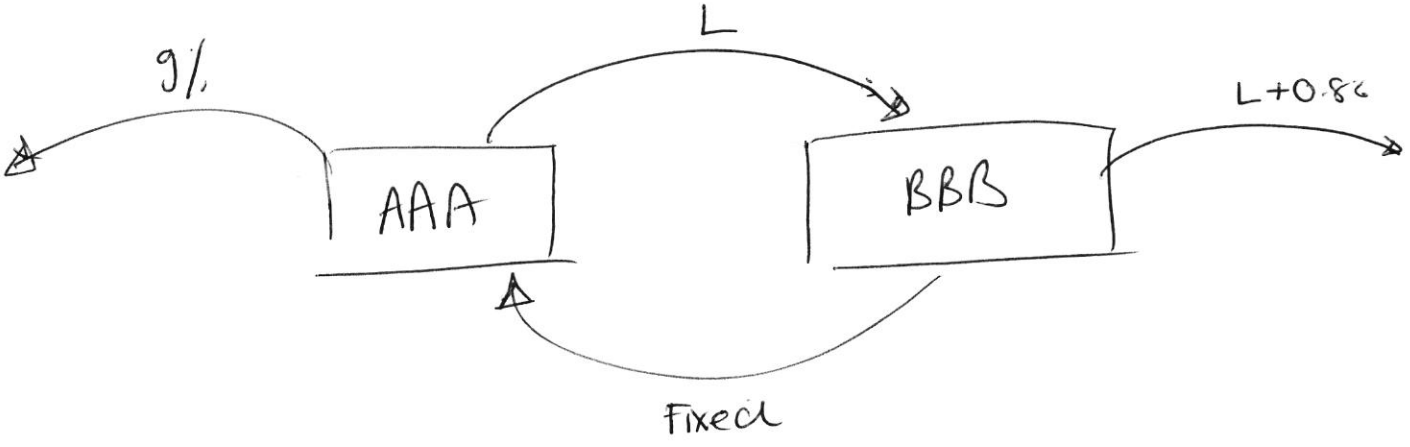
a) Calculate the total benefit to be shared between the two parties. [2 marks]

	Fixed	Float
AAA	9%	L − 0.5%
BBB	11%	L + 0.8%
	2%	1.3%

$\Delta = 0.7\%$

b) Suppose they split the gain evenly; explain in detail (and show graphically) how AAA and BBB can enter into a SWAP agreement. [7 marks]

∴ each gain 0.35%



AAA: $-9\% + \text{Fixed} - L = -(L - 0.5)$ gain 0.35 $\therefore -(L - 0.85)$

$-9\% + \text{Fixed} - L = -L + 0.85$

$\text{Fixed} = 9.85$

Check

BBB: $-(L + 0.8) - 9.85 + L = -(11 - 0.35)$

$-L - 0.8 - 9.85 + L = -10.65$ (=)

AAA: borrows @ 9% from bank
pays BBB Libor
receives 9.85 from BBB

BBB: borrow @ L+0.8% from bank
pays AAA 9.85%
receives L from AAA

Question 4: [6 marks]

Fill out the table below indicating with a + / - what the impact of each factor is on Call/Put Prices

Factor	Call Prices	Put Prices
Higher current asset price (S_0)	+	−
Lower exercise price (X)	+	−
Shorter expiration	−	−
Increased volatility	+	+
Lower interest rates	−	+
Higher dividends	−	+