UNIVERSITÉ TOULOUSE 1 CAPITOLE

Année Universitaire 2012-2013
SEMESTRE 2
SESSION 2

MASTER 1 in ECONOMICS
MASTER 1 ECONOMIE ET STATISTIQUE
MASTER 1 ECONOMIE ET DROIT

Corporate finance / code : M1S26

Lundi 1er juillet 2013

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J. HONG

↪ durée conseillée pour traiter **ce** sujet : 1 heure
↪ **ATTENTION** : le nom de la matière et son code doivent être **IMPERATIVEMENT** recopiés sur la copie d'examen

Exercise 1: evaluating risky projects

In 1989, General Motors evaluated the acquisition of Hughes Aircraft corporation. GM assumed that Hughes had the same risk as Lockheed or Northrop, which had low-risk defense contracts similar to Hughes. GM's cost of capital was thus not appropriate to value this acquisition.

Assume the following :

Comparison	β_E	D/E
GM	1.2	0.4
Lockheed	0.9	0.9
Northrop	0.85	0.7

Target D/E for Hughes acquisition: 1
Hughes's expected real asset cash-flows next year: 300 million €
Growth rate of Hughes's cash-flows: 5% per year
Discount rate on debt: 8% (riskless rate)
Expected return of the market portfolio: 14%
Assume there are no taxes.

1) compute Hughes's asset β, by taking the average of the asset betas of Lockheed and Northrop
2) compute the appropriate cost of capital for Hughes's acquisition
3) determine the value of this acquisition with the cost of capital computed in 2)
4) determine the value of Hughes of GM uses its own cost of capital.

Exercise 2 : Purchasing stocks before or after dividend payment

XT Corporation will pay a 1$ dividend, and tomorrow is the ex dividend date : if you buy a share tomorrow, you will not obtain the dividend. XT shares sell at 20$ today, and are expected to sell at 19.2$ tomorrow. If your personal tax rate is 25%, will you prefer to buy the stock today or tomorrow ? if it is 30 % ? 10% ?