

# FINANCIAL MANAGEMENT FORMULA SHEET (DEC 2013)

## Future Values

### **Lump Sum**

$$FV = PV (1 + r)^{NM}$$

### **Ordinary Annuity**

$$FVA = I [(1 + r)^N - 1] / r$$

### **Annuity Due**

$$FVA = \{I [(1 + r)^{N+1} - 1] / r\} - I$$

## Present Values

### **Lump Sum**

$$PV = FV / (1 + r)^N$$

### **Ordinary Annuity**

$$PVA = I [(1 - (1 + r)^{-N})] / r$$

### **Annuity Due**

$$FVA = \{I [1 - (1 + r)^{-N+1}] / r\} + I$$

### **Perpetuities**

$$PV = \text{Cash flow} / r$$

### **Operating Leverage**

$$\text{Contribution} / \text{EBIT}$$

### **Financial Leverage**

$$\text{EBIT} / (\text{EBIT} - I)$$

### **Combined Leverage**

$$\text{Contribution} / (\text{EBIT} - I)$$

### **Spread of cash limits**

$$\frac{3}{4}(cy^2/i)$$

### **Value of a Right**

$$\text{Current Market Price} - \text{Expected Market Price}$$

### **Earnings Per Share**

$$\text{EAIT} / \text{Number of Ord Shares}$$

### **Interest Cover**

$$\text{EBIT} / \text{Interest}$$

### **Gearing Ratio**

$$\text{Debt} / \text{Equity}$$

### **Cost of Debt**

$$R (1 - T) / P_0$$

### **Cost of Debt**

$$[R(1 - T) + 1/M (\text{FCV} - P_0)] / [\frac{1}{2} (\text{FCV} + P_0)]$$

### **Cost of Preference Shares**

$$D / P_0$$

### **Cost of Equity**

$$(D_1 / P_0) + g$$

### **Cost of Equity**

$$R^f + (R^M - R^f)\beta$$

### **Current Ratio**

$$\text{Current Assets} / \text{Current Liabilities}$$

## **Quick Ratio**

$$(\text{Current Assets} - \text{Stock}) / \text{Current Liabilities}$$

### **Stock Holding Period**

$$(\text{Average Stock} / \text{Cost of Sales}) \times 365 \text{ days}$$

### **Debtors Collection Period**

$$(\text{Average Debtors} / \text{Credit Sales}) \times 365 \text{ days}$$

### **Operating Cycle**

$$\text{Stock Holding Period} + \text{Debtors Collection Period}$$

### **Creditors Payment Period**

$$(\text{Average Creditors} / \text{Credit Purchases}) \times 365 \text{ days}$$

### **Cash Conversion Cycle**

$$\text{Operating Cycle} - \text{Creditors Payment Period}$$

### **Economic Order Quantity**

$$\sqrt{(2RC / h)}$$

### **Co - Variance**

$$SD/ER$$

***Coefficient of Variation***

$SD_{ur} / SD_u \times SD_r$

***Accounting Rate of Return***

Avg Profit/ Avg  
Investment

***Accounting Rate of Return***

Avg Profit/ Initial  
Investment