BUS130 Exam Notes

Topic 1

Financial Decisions

A financial decision is a choice between alternatives in a business situation.

The one chosen:

- Produces highest value
- Maximises the value of the firm
- Increases shareholder wealth

Valuation

- FV of cash flows increase when the PV of cash flows increase
- The value is greater when the cash flow is received sooner
- Value is greater when the risk is lower

Basis for financial management:

1. Risk-return trade-off: investors demand return for delaying consumption and additional return for taking on added risk.
2. Time value of money: a dollar received today is worth more than a dollar received in the future.
3. Cash (not profits) is king.
4. Incremental cash flows – it's only what changes that counts.
5. Curse of competitive investment markets and why it's hard to find exceptionally valuable projects.
6. Efficient capital markets – the markets are quick and the prices are right.
7. Agency problem: conflict of interest in firm/shareholders.
8. Taxes affect both business and personal finance decisions.
9. All risk is not equal – some risk can be diversified and some cannot.
10. Ethical behaviour is doing the right thing and ethical dilemmas are everywhere in finance.

Topic 2

Cash flows in different time periods cannot be compared unless they are adjusted to the same point in time (usually present time)

Simple Interest

Paid only on the original amount borrowed or invested

- PV, the principal, is the amount borrowed or invested
- r, rate of interest, is the percentage of principal charged for its use for one time period
- t is the time period in years
- FV is the future value at the end of the period (principal + interest)
- FV = PV (1 + rt)

Simple interest is used in short term commercial notes and fixed interest-bearing deposits in banks

Compound Interest

Interest is reinvested at end of each period.

- P/Y is the payment periods per year
- C/Y is the compounding periods per year
- N is the number of periods
- I/Y is the annual nominal interest rate
- PV can be either negative (you invest) or positive (bank loans to you)

Use skeleton for working out.

Nominal and effective interest rates

Nominal: expressed as a rate per annum

Effective: used for comparison, takes into account the impact of compounding interest more often than annually (use calculator)

Topic 3

Annuity: multiple cash flows of the same amount e.g. loan repayments

Perpetuity: infinite steam of equal cash flows

A perpetuity is basically an annuity which goes on forever.

Ordinary annuity: first payment occurs after first period

PV is the sum of PV's of cash flows

FV is the sum of FV's of cash flows

Interest rate changes: use a timeline and complete calculation in stages

Annuity due: first payment occurs immediately

- Set calculator to BGN
- Write BGN above skeleton

Deferred annuity: starts after a number of periods

- Work it out in stages
- Draw normal line to make it look like an ordinary annuity

Uneven income stream: cash flows aren't equal

- Use cashflow function on calculator
- Use a timeline
- 0 recorded if there is no cashflow present

General annuity: payment have different frequency than compounding period

- P/Y and C/Y are different

Principle and interest loans

- Loans are paid back in regular equal payments
- Payments cover both principal and interest
- Successive payments repay increasing amounts of principle and decreasing amounts of interest

Topic 4A

Valuation of bonds is important because they are a major source of debt finance for big companies/governments.

Intrinsic value: PV of expected future cash flows

- Compare with market value to determine whether to buy or sell