Agenda

- Minimum Attractive Rate of Return (MARR)
- Present Worth Method
- Annual Worth Method
- Internal Rate of Return
- Benefit / Cost Method
- Payback / Break-even

Agenda

- MARR
- Present Worth Method

Present Worth

- \[ PW(i\%) = \text{sum of } F_k (1+i)^{-k} \]

Bond Value

- Present worth of future receipts.
Bond Value

- $Z =$ face value
- $C =$ redemption
- $r =$ bond rate (nominal interest) per interest period
- $N =$ number of periods before redemption

Bond Value (continued)

- $i =$ bond yield rate per period
- $VN =$ value (price) on the bond $N$ periods prior to redemption

**Bond Value (continued)**

$VN =$ value (price) on the bond $N$ periods prior to redemption

$VN = C \cdot (P/F, i\%, N) + r \cdot Z \cdot (P/A, i\%, N)$

**Agenda**

- MARR
- Present Worth Method
- Annual Worth Method
- Internal Rate of Return
- Benefit / Cost Method