

# Managing financial principles and techniques assignment



## Managing Financial Principles and Techniques Assignment 2 Part 1: Financial Appraisal techniques Part 2: Forecasting Part 1-Financial Appraisal

Techniques Task 1. NET PRESENT VALUE (NPV) Year PROJECT X ? 000Project

Y ? 000Discount FactorXY 0-200-200-200-200 1352180. 90931. 815198. 162

280100. 82666. 088. 26 390100. 75167. 597. 51 47540. 68351. 2252. 732

52030. 62112. 421. 863 229219 1)NET PRESENT VALUE (NPV) X= 229-200=

29 Y= 219-200= 19 PAYBACK PERIOD: Cumulative Cash Flow Year PROJECT X

? 000Project Y ? 000XY -200-200-200-200 135218-165-18 28010-8528

39010538 47548042 520310045 10045 TASK 2: Net Present value The

present value of an investments future net cash flows minus the initial

investment. If positive, the investment should be considered (unless an even

better investment exists), otherwise it should not. It is a calculation based on

the idea that ? 1 received in ten years time is not worth as much as ? 1

received now because the ? 1 received now could be invested for those ten

years and compound into a higher value.

The NPV calculation establishes what the value of future earnings is in

today's money. To do the calculation you apply a discount % rate to the

future earnings. NPV is said to be short for net present value, it is the

present value of net cash flows. It is commonly used for appraisals on

projects. The advantage of using NPV is that it tells you if a project will add

or deduct value from the business and hence decisions are taken of whether

to accept it or reject it. Advantages: It will also give accurate position for

commonly special projects. -It gives an absolute value. -NPV allow for the

time value for the cash flows considers both magnitude and timing of cash

flows •Consistent with shareholder wealth maximization: Added net present

values generated by investments are represented in higher stock prices.

- Indicates whether a proposed project will yield the investor's required rate of return

Disadvantages:

- It is very difficult to identify the correct discount rate. Many people find it difficult to work with a dollar return rather than a percentage return because it is hard to directly compare projects unlike say a percentage return as calculated using IRR
- It needs to be interpreted carefully because the overall NPV reflects the scale of the project as well as the rate of return. IRR Like the NPV method used for capital budgeting, the IRR method also uses cash flows and recognizes the time value of money.

NPV and IRR may give conflicting decisions where projects differ in their scale of investment.

Advantages IRR allows you to compare projects easily because it is a percentage

- Also it can direct attention to situations where it might be better to do multiple versions of the same project with a high IRR
- In calculating IRR it can give an indication of how sensitive the Net Present Value is to changes in discount rate
- Considers both the magnitude and the timing of cash flows

Disadvantage

- Multiple internal rates of return with unconventional cash flows
- Any change in sign (+,-) in period cash flows produces as many IRR's as there are changes in the cash flow directions of the investment, lending or borrowing. Assumes cash flow is reinvested at the IRR rate and this may not be a realistic assumption

NPV and IRR compared

NPV assumes that project cash flows are reinvested at the company's required rate of return; the IRR assumes that they are reinvested at the IRR. Since IRR is higher than the required rate of return, in order for the IRR to be accurate, the company would have to keep finding projects that would reinvest the cash flow at this higher rate. It would be difficult for a company to keep this up forever, thus NPV is more accurate.

<https://assignbuster.com/managing-financial-principles-and-techniques-assignment/>

NPV method assumes that CFs are reinvested at the cost of capital  $K$  IRR method assumes that CFs are reinvested at IRR Can lead to conflicts in ranking of mutually exclusive projects Crossover NPV is superior to IRR when choosing among mutually exclusive investments Payback

- Ignores the time value of money. This weakness is eliminated with the discounted payback method.
- Advantages
- It is very simple
- Helps prevent cash flow problems
- Useful where technology changes rapidly or there are other sources of risk as it asks the question how quickly do we get the money back? Measure of risk and liquidity
- Useful for evaluating small projects
- Disadvantages
- Ignores the time value of money
- Ignores cash flows after the payback period
- Objective not consistent with shareholder wealth maximization rather it focuses on risk minimization

ARR Advantages

- It clearly shows profitability of a project
- It allows easy comparison between projects
- The opportunity cost of investment can be taken into account
- It can be easily compared to the target return on long term capital employed which is calculated in the same way

Disadvantages

- More complex than pay back

It does not take into account the effects of inflation on the value of money over a time period.

ARR Advantages

- It clearly shows profitability of a project
- It allows easy comparison between projects
- The opportunity cost of investment can be taken into account

Disadvantages

- More complex than pay back
- It does not take into account the effects of inflation on the value of money over a time period.

TASK 3 PUBLIC SECTOR PROJECTS: Cash In Flows TOIN8% Inflation Adjustment Inflation Adjustment Value T1250001. 0827000 T2250001. 1729250 T3250001. 2631500 T340001. 265040

Cash Out Flow OUT10% Inflation Adjustment Inflation Adjustment Value  
 T01000010000 T11000018000 T1180001. 1020900 T2190001. 2122990 Net  
 Inflation adjusted cash flows NPV INOUTNet Cash FlowNet Present Discount  
 FactorDiscounted Cash Flow T0-1000010000110000 T12700010000170000.  
 8514450 T1-18000180000. 8515300 T2292502090083500. 726012  
 T3315002299085100. 615191. 1 T35040-50400. 613074. 4 PART 2-  
 FORECASTING DIXON COMPANY Solution:

NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE  
 Sales/Budgeted Sales Units (Given) 1000 1200 1400 1600 1800 2000 2200 2600  
 Sales budgeted/ sales ? working note 1) 50, 000 60, 000 70, 000 80, 000 90,  
 000 100, 000 110, 000 130, 000 Budgeted Production  
 (Given) 1200 1400 1600 2000 2400 2600 2400 2200 Cost Budgeted  
 Manufacturing Cost ? Material (working note 2) 31, 200 36, 400 41, 600 52,  
 000 62, 400 67, 600 62, 400 57, 200 Labour (working note 3) 9, 600 11, 200 12,  
 800 16, 000 19, 200 20, 800 19, 200 17, 600 Variable overheads (working note  
 4) 2, 400 2, 800 3, 200 4, 000 4, 800 5, 200 4, 800 4, 400 Fixed Overheads  
 (Given) 5, 500 5, 500 5, 500 5, 500 5, 500 5, 500 5, 500 5, 500 Total Production  
 Cost (working note 5) 48, 700 55, 900 63, 100 77, 500 91, 900 99, 100 91,  
 900 84, 700 working note 1

Sales budgeted/ sales ? = Sales/Budgeted Sales Units x 50 working note 2  
 Material = Budgeted Production x 26 working note 3 Labour = Budgeted  
 Production x 8 working note 4 Variable overheads = Budgeted Production x 2  
 working note 5 Total Production Cost = Material + Labour + Variable  
 Overheads + Fixed Overheads Work Out Cash Flow Forecast

Novemeber December January February March April May June Opening

<https://assignbuster.com/managing-financial-principles-and-techniques-assignment/>

Balance 35,500 Sales 70,000  
 80,000 90,000 100,000 110,000 130,000  
 Less: Material 41,600 52,000 62,400 67,600 62,400 57,200  
 Labour 12,800 16,000 19,200 19,200 17,600

Variable Overheads (50%) 6,400 8,000 9,600 10,400 9,600 8,800

Variable Overheads (50%) 6,400 8,000 9,600 10,400 9,600 8,800  
 Fixed Overheads 5,500 5,500 5,500 5,500 5,500 5,500  
 Machinery 1200 3400

Closing Balance Task 2 Solution:

NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE

Sales/Budgeted Sales Units (Given) 1000 1200 1400 1600 1800 2000 2200 2600

Sales budgeted/ sales ? (working note 1) 75,000 90,000 105,000 120,000 135,000 150,000 165,000 195,000

Budgeted Production (Given) 1200 1400 1600 2000 2400 2600 2400 2200

Cost Budgeted Manufacturing Cost ?

Material (working note 2) 31,200 36,400 41,600 52,000 62,400 67,600 62,400 57,200  
 Labour (working note 3) 9,600 11,200 12,800 16,000 19,200 20,800 19,200 17,600  
 Variable overheads (working note 4) 2,400 2,800 3,200 4,000 4,800 5,200 4,800 4,400  
 Fixed Overheads (Given) 5,500 5,500 5,500 5,500 5,500 5,500 5,500 5,500  
 Total Production Cost (working note 5) 48,700 55,900 63,100 77,500 91,900 99,100 91,900 84,700

working note 1 Sales budgeted/ sales ? = Sales/Budgeted Sales Units x 75

working note 2 Material = Budgeted Production x 26

working note 3 Labour = Budgeted Production x 8

working note 4 Variable overheads = Budgeted Production x 2

working note 5 Total Production Cost = Material + Labour + Variable Overheads + Fixed

Overheads Work Out Cash Flow Forecast

	Novemeber	December	January	February	March	April	May	June	Opening
Balance	35,500								
Sales	70,000	80,000	90,000	100,000	110,000	130,000			
Less:									
Material	41,600	52,000	62,400	67,600	62,400	57,200			
Labour	12,800	16,000	19,200	20,800	19,200	17,600			
Variable Overheads (50%)	6,400	8,000	9,600	10,400	9,600	8,800			
Fixed Overheads	5,500	5,500	5,500	5,500	5,500	5,500			
Machinery	1200	3400							
Closing Balance									