

# [Managing financial principles and techniques assignment](https://assignbuster.com/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 todays 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.

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 AdjustmentInflation Adjustment Value T1250001. 0827000 T2250001. 1729250 T3250001. 2631500 T340001. 265040

Cash Out Flow OUT10% Inflation AdjustmentInflation 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: NOVEMBERDECEMBERJANUARYFEBRUARYMARCHAPRILMAYJUNE Sales/Budgeted Sales Units (Given)10001200140016001800200022002600 Sales budgeted/ sales ? working note 1)50, 00060, 00070, 00080, 00090, 000100, 000110, 000130, 000 Budgeted Production (Given)12001400160020002400260024002200 Cost Budgeted Manufacturing Cost ? Material (working note 2)31, 20036, 40041, 60052, 00062, 40067, 60062, 40057, 200 Labour(working note 3)9, 60011, 20012, 80016, 00019, 20020, 80019, 20017, 600 Variable overheads (working note 4)2, 4002, 8003, 2004, 0004, 8005, 2004, 8004, 400 Fixed Overheads (Given)5, 5005, 5005, 5005, 5005, 5005, 5005, 5005, 500 Total Production Cost (working note 5)48, 70055, 90063, 10077, 50091, 90099, 10091, 90084, 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 NovemeberDecemberJanuaryFebruaryMarchAprilMayJune Opening Balance35, 500 Sales70, 00080, 00090, 000100, 000110, 000130, 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 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 Machinery120034000 Closing Balance Task 2 Solution: NOVEMBERDECEMBERJANUARYFEBRUARYMARCHAPRILMAYJUNE Sales/Budgeted Sales Units (Given)10001200140016001800200022002600 Sales budgeted/ sales ? (working note 1)75, 00090, 000105, 000120, 000135, 000150, 000165, 000195, 000 Budgeted Production (Given)12001400160020002400260024002200 Cost Budgeted Manufacturing Cost ?

Material (working note 2)31, 20036, 40041, 60052, 00062, 40067, 60062, 40057, 200 Labour(working note 3)9, 60011, 20012, 80016, 00019, 20020, 80019, 20017, 600 Variable overheads (working note 4)2, 4002, 8003, 2004, 0004, 8005, 2004, 8004, 400 Fixed Overheads (Given)5, 5005, 5005, 5005, 5005, 5005, 5005, 5005, 500 Total Production Cost (working note 5)48, 70055, 90063, 10077, 50091, 90099, 10091, 90084, 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 NovemeberDecemberJanuaryFebruaryMarchAprilMayJune Opening Balance35, 500 Sales70, 00080, 00090, 000100, 000110, 000130, 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 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 Machinery120034000 Closing Balance