

CHAPTER 2

SOUTH AFRICAN CASE STUDY

ANSWER GUIDANCE

MOBILE

TELECOMMUNICATIONS

IN SOUTH AFRICA



(TOPICS: OPPORTUNITY
COST, INVESTMENT
APPRAISAL AND RISK)

- 1 Considering the range of investment appraisal techniques, what problems might telecommunications companies such as MTN South Africa face in using these to make investment decisions?

Definitions – a quick reminder

- Opportunity cost is the minimum rate of return the business requires, usually equated to the rate it would receive if it didn't invest in the project.
- Return on investment is the return received on capital invested in a business.
- Discounted cash flow is a way of calculating a present value for money received in the future. The 'discounting' takes account of the fact that the money would have earned interest if received now and can take account of inflation.
- Time value of money is the concept that money received now is worth more than the same amount of money received in the future.
- Net present value is the present/current value of all future cash income and outgoings for a project. Where the net present value is positive, this means the rate of return is greater than the minimum required rate of return.
- Internal Rate of Return (sometimes called the discounted rate of return) is the discount rate that brings the net present value of a project to zero. It reflects the true cost of capital for a project. It can be compared with the minimum required rate of return to check whether a project is worthwhile.
- Accounting Rate of Return (or return on investment/return on capital employed) calculates the average net profit as a percentage of the capital invested – to show the percentage return per year.
- Payback – the payback period of a project is the time that is required for the cash proceeds from a project to pay back the original capital investment.

Problems

Businesses need to be aware of the issues with investment appraisal. A project with a short payback time may have a negative Net Present Value (NPV), for example, so which method should be used?

Businesses also need to consider the rate of change of technology, which might mean that a simpler payback period method of investment appraisal might be more suitable. It is important to ensure that the investment is paid back before the technology is out of date.

Financial investment techniques used alone don't look at qualitative issues of the investment but simply at the financial view. In a fast-moving, competitive market, businesses may have no choice but to invest in new technology to remain in the market.

Future cash flows from new technologies may be uncertain – there is no equivalent project or past experience on which to base predictions. The adoption of new technologies by consumers is uncertain.

Capital investment can be high and may be irreversible – once a provider has chosen a particular technology it may be difficult to change and if there are a number of different technologies to achieve the same result (e.g. HD and Blu-ray video technology) it may not be known which will become dominant in the marketplace at the point of investment.

Dependence on other parts of the sector for some equipment, technology, applications mean that costs of investment and returns can be affected by competition amongst providers for access to different suppliers.

In addition, there are the general problems/limitations with the different methods:

Limitations of payback:

- May oversimplify the investment
- Does not consider that future returns are worth less in today's terms
- Ignores qualitative aspects of the decision
- Focuses just on the payback period and ignores cash flows outside the payback period
- No comparison of net revenues (profits) with initial investment to calculate return
- Ignores inflation and interest rates

Limitations of accounting rate of return:

- Ignores the time value of money
- Ignores qualitative aspects of the decision
- Ignores time to recover initial investment
- Ignores costs of finance that may be needed

Limitations of discounted cash flows/net present values/IRR:

- Ignores qualitative aspects of the decision
- Internal rate of return is difficult for non-conventional cash flows, e.g. those where there are further negative cash flows after the initial investment – there will be more than one IRR.

2 How might MTN take account of risk in their investment decision making?

They may use risk-adjusted discount rates to assess the potential returns on riskier projects.

Weighted average cost of capital can be used to assess projects with risk equivalent to the firm's existing level of risk.

Sensitivity analysis can be used to see how sensitive the net present value is in relation to the elements used to calculate it, e.g. if the interest rate goes up or down or cash flows change.