

Investments

The following investment selection methods are described in the literature:

- a) Payback method
- b) ROI or GBR method
- c) Net Present Value or IRR method

Method a:

To be used for pre-selection purposes; in building a time horizon. As long as all the invested money has not yet returned, financiers keep a close eye on us. However, final selection is irresponsible because the time value of money is not taken into account.

Method b:

It is only about an average profit as well as average capital and it does not take into account the time value of money.

Method c:

The operational cash flows depend on the one or another applied fiscal depreciation method and the balance of the cash flows does include the C_0 (basis: historical cost price; normal depreciation is provided), but – this does not take into account the possibility of a depreciation catch-up (depreciation based on a higher replacement value).

Conclusion

Final decision making is not possible with any of these methods except in a few simple cases. Investments result in depreciation and cannot really be considered properly apart from that depreciation. The last word cannot be said about the ranking of two or more investment projects with the aid of the current investment selection methods. Think about this, after an investment it does not stop, then it actually begins.

The balance of the present values of the various cash flows associated with a particular investment project is the so-called Net Present Value (NPV). The NPV can be determined for each value of the interest. NPV is a function of the interest. The value(s) of the interest for which $NPV = 0$ is called the Internal Rate of Return, IRR.

NPV and IRR are both derived from the same function.

There are authors who present NPV and IRR as two separate methods like Blommaert and Blommaert do. With contrived assumptions thereby then being made as in the case IRR, the idea "that released money may be reinvested at the internal rate of return (Blommaert and Blommaert, 1997, p. 228)."

Neither the IRR method nor that project is liable for what does or does not happen to cash flows that have returned from the project.

Yet many textbooks contain this challenged premise and authors such as Van Halem and Van der Pol even speak of "a weak point of the method (Van Halem and Van der Pol, 1989, p. 234)." These authors then bring up an adjusted profitability figure and mention further so-called weaknesses of the IRR method. This bit of applied mathematics is apparently not understood by several economists. The term "scale size" is not only at the beginning but throughout the maturities of investment's projects. However, this is separate from the function mentioned; that function says nothing about that! Know what that function can and cannot do. "Unfortunately some of those who have advocated use of this procedure have done so for the wrong reasons or have made claims for it that cannot be fulfilled. All of us recognize that the

simple screwdriver is a useful tool when properly used. There is no need to revise that opinion because an inexperienced do-it-yourself enthusiast reports disastrous consequences from his attempt to use a screwdriver in a situation where a chisel was required (Bierman and Smidt, 1971, pp. 62/63)."

Investment selection involves two consecutive questions:

1. Is the present project ACCEPTABLE?

YES, at least temporarily, on the basis of a positive NPV at the related cut-off rate, or the observation that the IRR rises above the cut-off rate.
NO, then get rid of the present project.

2. What is the RANK ORDER of a number of acceptable projects?

Usually neither NPV nor IRR helps with this. Except in very simple situations, NPV/IRR says nothing at all about this. And that function cannot be blamed for that. As mentioned, know what that function can and cannot do. That function cannot do much more. But it is curious to attribute various things to that function. The NPV formula (the IRR directly follows from this formula) does not really change. It was, is and remains $y = f(x)$, a polynomial, no more, no less.