

Modified Internal Rate of Return = MIRR

@wikipedia

One of the [Investment Project](#):

$(1) \quad \text{MIRR} = \left(\frac{\sum_t FV[CF_t^+]}{-\sum_t PV[CF_t^-]} \right)^{1/T} - 1 = (1+r) \cdot \left(\frac{\sum_t PV_r[CF_t^+]}{-\sum_t PV_{r_f}[CF_t^-]} \right)^{1/T} - 1$
$(2) \quad PV_{r_f}[CF^-] = \sum_{t=0}^T \frac{CF_t^-}{(1+r_f)^t} \quad (3) \quad FV_r[CF^+] = \sum_{t=0}^T CF_t^+ \cdot (1+r)^{T-t} = (1+r)^T \cdot \sum_{t=0}^T \frac{CF_t^+}{(1+r)^t} = (1+r)^T \cdot PV_r[CF^+] = (1+r)^T \cdot PV_r[CF^+]$

where

T	total investment period	t	annual counter
r	reinvestment rate	r_f	financing rate
CF^+	positive cash flows	CF^-	negative cash flows
$CF_0^+ = 0$		$CF_0^- = I_0$	initial investment
$FV[CF^+]$	future value of the positive cash flows	$PV[CF^-]$	present value of the negative cash flows

The usual practise is to give preferences to the [Investment Projects](#) with higher [MIRR](#) and make a direct comparison of [MIRR](#) against the [Weighted Average Cost of Capital \(WACC\)](#).

[MIRR](#) is similar to [IRR](#) in nature but free from some common [IRR](#) issues.

The corporate investment policy usually dictates that:

- [Investment Projects](#) with [MIRR](#) < [WACC](#) should be rejected
- [Investment Projects](#) with higher [MIRR](#) should have a financing priority over the [Investment Projects](#) with lower [MIRR](#)

See also

[Economics](#) / [Investment](#) / [Financial Investment](#) / [Financial Investment Metrics](#)

[[Financial Investment Project](#)]

[[Weighted Average Cost of Capital \(WACC\)](#)] [[Cash Discount](#)] [[Net Present Value \(NPV\)](#)]

[[Internal Rate of Return \(IRR\)](#)]

