

# Net Present Value.

Cash flow is money in (+) and (-) of a company.

Expect negative cash flow in first year(s) so we need investors.

Hope for positive returns later.

Convert all cash flows into present values to get net present value NPV

NPV = present value of outflow - inflows.

If  $NPV > 0 \Rightarrow$  invest

$NPV \leq 0 \Rightarrow$  do not invest.

Note Use a discount rate same as AER really.

Year	0	1	2	3
Cash flow	-15000	-3000	10000	10000

If discount rate is 3% should I invest compounded annually?

$$P = \frac{F}{(1+i)^k}$$

Year		Present
0	-15000	-15000
1	$\frac{-3000}{1.03}$	-2912.62
2	$\frac{10000}{(1.03)^2}$	9425.96
3	$\frac{10000}{(1.03)^3}$	$\frac{9151.42}{\text{---}}$
		€ 664.76 > 0

⇒ invest.