

The Margin of Safety in Dollars



The margin of safety in dollars is the excess of budgeted (or actual) sales over the break-even volume of sales.

Margin of safety in dollars = Total sales - Break-even sales

Let's look at Racing Bicycle Company and determine the margin of safety.

how much sales \$ / unit ↓ before making "no profit / break-even / losing \$"

- lose \$
- below bre
- margin of safety
- like - negative runway / loss EPS, PE
- ① must - must be making \$

- ② if ① apply - ↓ before bre in % ↓ ✓ if ↓ 40% bre losing \$ in \$ (unit × 40% of what?)

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If we assume that RBC has actual sales of \$250,000, given that we have already determined the break-even sales to be \$200,000, the **margin of safety** is \$50,000 as shown.

	Break-even sales 400 units	Actual sales 500 units
Sales	\$ 200,000	\$ 250,000
Less: variable expenses	120,000	150,000
Contribution margin	80,000	100,000
Less: fixed expenses	80,000	80,000
Net operating income	\$ -	\$ 20,000

return
P₀ \$100
P₁ \$150

$$r = \frac{150 - 100}{100} = 50\%$$

$$\frac{500 - 400}{500} \quad \frac{250 - 200}{250}$$

100 unit ↓
\$ 50,000 ↓ in sales
% ↓
units 500 → 400
↓ 20%
\$ 250 → 200
↓ 20%