

The Evans Group LLC



Are You on Track to Break Even?

The principles behind The Evans Group LLC's approach to breakeven analysis are almost as old as accounting itself. What's new is the way TEG has used its formula as a tool for education, communication, and marketing. The secret lies in the formula's simplicity.

To calculate your breakeven point for a given period of time, you need to have just two numbers, your overhead expenses and your gross margin.

Start with your total sales for the period. Then calculate your cost of goods sold (COGS – or, in service businesses, your cost of sales) – by adding up all of your direct costs, that is, the costs directly involved in obtaining or producing what you've sold. You get your gross profit by subtracting COGS from sales. Express that number as a percentage of sales and you've got your gross margin.

You can calculate your overhead by adding up all of the other expenses, the indirect or fixed ones (rent, utilities, insurance, administrative salaries and benefits, and the like).

Here's an example using projected numbers from a company's construction division in 2010:

Annual Sales	\$750,000	100%
Total Cost of Goods Sold (COGS)	\$453,459	60%
Gross Profit	\$296,541	
Gross Margin		40%
Total Fixed Costs (Overhead)	\$247,115	33%
Net Income From Operations	\$ 49,246	7%
(BEFORE TAXES)		

By definition, breakeven is the point at which total revenue equals total costs. Put another way, your gross profit will equal your overhead at the breakeven point: Breakeven Gross Profit = Overhead

To figure out the amount of sales you need to break even, divide your overhead for a given period of time by the gross margin. Breakeven Sales = Overhead / Gross Margin

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That's the basic breakeven formula, and there are a lot of things you can do with it.

Let's say you want to buy a truck that will cost you monthly finance charges of \$500, plus \$250 per month for the fuel and insurance (let's assume those are the only new expenses). In a year, you'll make payments of \$6,000, and you'll have fuel and insurance costs of \$3,000, for a total of \$9,000 a year in new overhead expenses. How much do you need in additional sales to cover those expenses? You divide \$9,000 by your gross margin, say, 40%, and you find that you'll break even on the investment with a sales increase of \$22,500 per year.

You can then ask yourself, "Will this truck allow me to get the \$22,500 more in annual sales that I would need to justify spending the money to buy it?" It's often easier to answer the question if you take the analysis a step further. Say your average sale is \$6,000 – about the price of a pond. In that case, you'll need the equivalent of 3.75 ponds ($\$22,500 / \$6,000 = 3.75$) in additional sales to break even. So you can ask, "Will this truck make it possible for me to build 3.75 more ponds this year?"

You can also use the formula to figure out how long it will take you to break even in a given period.

Suppose your annual overhead is \$240,000 and your gross margin is 40%. You'll break even when you hit \$600,000 in sales ($\$240,000 / 0.4 = \$600,000$). Now suppose that, on average, you do \$20,000 a week in sales. At that rate, you'll hit \$600,000 in 30 weeks. When you get there, you will have covered all of your overhead expenses for the year. In the remaining 22 weeks of the year, you'll earn an operating profit of 40 cents on every \$1 of sales.

But what if you could increase your weekly sales to \$25,000? Your breakeven point would go down to 24 weeks from 30 weeks, and you'd be earning 40 cents on the dollar six weeks longer.

Or what if you could increase your gross margin to 44%? Then you'd need only \$545,455 (rather than \$600,000) in sales to break even.

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¹ Inc. Magazine article utilized within document