5.5 Break-even analysis

The big picture

Almost all new businesses will start out as loss-making enterprises. This is because they need to spend money on resources – physical and human – in order to develop and launch their products. New businesses can usually sustain losses for a while, particularly if they have secured large amounts of equity finance from venture capital companies or business angels, or through debt finance from banks or other sources.

At some point, however, businesses must reach the break-even point. Break-even refers to a situation where the total revenue equals the total costs of production. A business is earning zero profit at the break-even point. But the assumption is that if it continues to increase the quantity of the product produced, it will start to earn profits. Total revenues will exceed total costs.

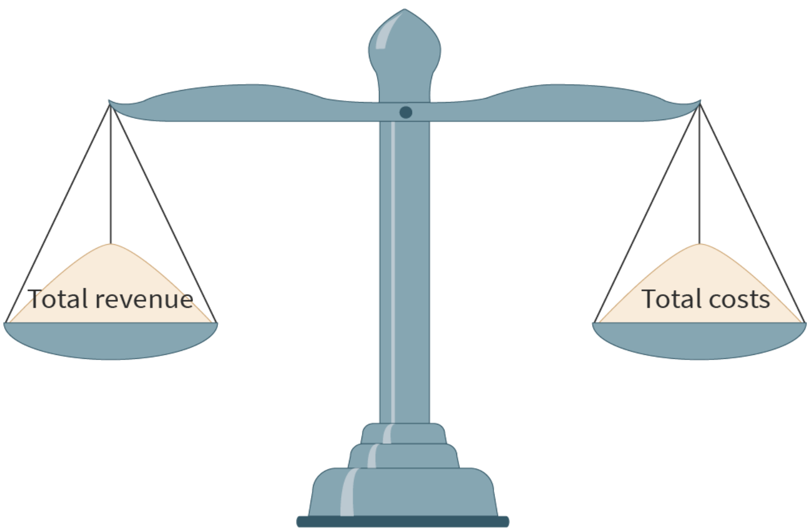

Figure 1. The break-even point is where total revenues equal total costs.

Break-even analysis is one of the most important financial calculations that a business can make. By carrying out a break-even analysis, a business can anticipate the best price to charge for its product and consider how to change fixed and variable costs so that the business earns a profit earlier. Generally, the sooner the business can move into profit, the more likely it is to be economically sustainable. However, moving to the break-even point too quickly, by considering only short-term objectives, can also cause long-term problems for the business. Poor strategy can also mean a business never achieves profitability and therefore fails. A break-even analysis is often part of a business plan (Section 1.1.6 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/tool-business-plan-id-36505)).

An interesting example of this is Paytm, an Indian digital payments company that competes with Google Pay, Apple Pay, and PayPal, among other online payment companies. Paytm secured hundreds of millions of US dollars of financing from large equity investors, such as Berkshire Hathaway and other institutions. Paytm went public, through its parent company One97 Communications Ltd, on the Indian stock market in November 2021, when it was still a loss-making business. It was the largest IPO ever in India. Over the next few months, Paytm's stock price declined as some investors sold stock to realise investment profits, and other investors began to question its long-term growth prospects.

Figure 2. Digital payments company Paytm started out making losses but expects to reach break-even.

Credit: boonchai wedmakawand, Getty Images

In early 2022, Paytm announced that it expected to reach break-even within two years, which was sooner than some analyses expected, but perhaps not soon enough for some investors. It is not uncommon for businesses to take years to reach break-even. This is especially true of businesses, like Paytm, which need to grow very large to reach the economies of scale needed to reduce costs of production. According to Paytm, the company had to deal with some unexpected regulatory and privacy issues, which would raise costs. And increases in costs would make the break-even point harder to reach. By the time you read this, the financial situation and ability of Paytm to reach break-even will be clearer.

In this subtopic, you will learn how businesses calculate their break-even point, to draw a break-even chart and how cost and revenue changes alter the break-even analysis. Break-even analysis will also be evaluated as a tool for business decision-making.

Concept

Sustainability (economic)

Businesses/entrepreneurs are risk-takers and strive to make a profit that sustains the business activity. Sustaining business activity is important when businesses are providing for human needs, supporting the wellbeing of diverse stakeholders in the community and providing tax revenue to support public services and infrastructure.

Calculating the break-even point is essential for businesses to understand the role of the price of their produce, total revenues and total costs. Loss-making businesses use break-even analysis to determine when they can expect to achieve profits. This is vital information to determine whether the business has the financial resources to continue running during the initial period of losses that most businesses experience.