

BENCHMARKS AND BUSINESS PERFORMANCE

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QUICK TAKE

- › Benchmarking is a familiar tool for measuring business and farm performance, and a range of different benchmarks can be used.
- › Focussing on one benchmark in particular may have a negative impact on overall business performance.
- › Use business benchmarks to assist with measuring business performance and testing the merits of business and enterprise expansion or other expenditure.



Agriculture is a capital-intensive and long-haul industry with a lumpy cash flow pattern. Cash management problems are exacerbated by seasonal and market fluctuations.

Benchmarks are commonly used to measure performance. To be of value, benchmarks for farming businesses must be able to accommodate the challenges in agriculture of capital and cash management.

There are different types of benchmarks relevant to agriculture:

- **technical benchmarks** to measure crop input efficiency, such as kilograms of grain per unit of nitrogen fertiliser
- **enterprise benchmarks** such as gross margin (\$/ML)
- **business benchmarks** to assess the overall business performance such as return on capital.

Technical & enterprise benchmarks

Technical benchmarks can be useful tools in assessing crop production and/or input efficiency, but they need to be considered in the context of overall business performance.

Enterprise benchmarks such as gross margins can be useful but have limitations. Gross margin (such as \$/ML) is only relevant when comparing two crops which can be grown in the same system with no capital expenditure required. For example, comparing the gross margin of rice with cotton can be misleading for a rice farmer who is considering growing cotton, as gross margins do not address the cost of converting irrigation layout from rice to cotton and changes in farm equipment required.

System gross margins are an extension of the enterprise gross margin concept and are more relevant than individual crop gross margins as they take into account the synergies between crops, such as growing a winter crop on the residual moisture of a rice crop. The gross margin (\$/ML) for an enterprise could be compared with the temporary water market to make decisions about buying or selling water.

All gross margins have limitations as they do not recognise risk, cash flow, operating funds, overheads, build costs and capital expenditure requirements. In addition, a continual focus on technical and enterprise benchmarks can lead to a loss of business direction and a reduction in overall business performance. The key reason is that the inevitable decline in the terms of trade (cost/price squeeze) will undermine the capacity of the business to grow if the usually unavoidable inefficiencies associated with growth are not addressed and understood.

The best way to assess the merits of different crop regimes is to look at whole farm profit, using a budget. Budgets can be time consuming to prepare and are very sensitive to the assumptions of yield, price and costs used within. But budgets are business, people and situation specific, and are the best means of comparing different options for that business. For example, for a rice grower, the whole farm profitability of producing rice should be compared with the whole farm profitability of producing cotton, including the cost and timing issues of converting irrigation layout and purchasing cotton specific equipment. Prepare budgets thoroughly as the merits of one system versus another will be

highly dependent on the assumptions made about yield, price and costs used within the budgets.

Business benchmarks

Business benchmarks arising from whole farm budgets and performance reviews are the best way to assess your business. The most common business benchmark is **earnings before interest and tax (EBIT)**, which can then be used to measure **EBIT yield**.

Also referred to as **return on capital**, EBIT yield is a measure of the debt-free profit of a business divided by the total business value. EBIT yield is not agriculture specific and is used across all industries from mining to retail. The risk-free return (interest rates on fixed deposits) is currently between 3.5% and 4% (zero risk). With inflation ranging between 2% and 3% the real return on deposits is actually closer to 1%.

Any agricultural business must, in order to justify the risks involved, earn significantly more than the risk free rate on a long term basis to provide a fair return to the business owners. The target EBIT yield should be more than the risk free rate, aim for 1.5 to 2 times as a minimum.

Some other business benchmarks used are described as follows.

Interest cover — which is EBIT (debt-free profit) divided by annual interest commitments. At a ratio of 1:1 this would indicate the business has the ability to service interest only and no buffer. The preference is for a ratio of 2 or greater.

Peak debt to income — simply, peak liabilities divided by annual revenue. Ideally this would be 1:1 but it is not uncommon to see businesses which have continued to perform solidly at ratios of 2:1 and even 3:1.

Equity — ABARES farm surveys indicate average equity for all farms is 80% or higher, but there is a significant variation from < 50% to > 90%. Businesses with low equity lack the strength in their balance sheet to buffer against challenging circumstances or take on new opportunities when they arise. Tight equity positions for many arise from their business going through a rapid growth phase. Whilst these circumstances are often unavoidable and well planned, and in cases advisable in order to improve long-term business performance, all debt including equipment finance should be approached with caution as high debt reduces business resilience.

Loan to security — most banks consider their clients' positions in terms of peak debt to securable assets (land and water). There is a range of 'loan to security' upper limits between the banks ranging from 50% to 70%. Loan to security ratios provide a guide as to a business' ability to security additional borrowings, but not the business' ability to service additional borrowings.

Gross margin divided by revenue — this ratio should be > 40%. In other words, total direct enterprise profit should be more than 40% of total revenue, and if not, it suggests that business operating costs are out of sync with the enterprise's performance potential.

Overheads divided by revenue — ideally this should be 5% (or less) and provides a guide as to the efficiency of fixed business costs.

These ratios are objective measures of the business' structure and performance and provide guidance as to whether the business is performing at an acceptable level for the business owners. If not, the business benchmarks assist in quantifying the areas which are constraining the business.

Examples of benchmark conflicts

The risk of making strategic business decisions using technical or (more likely) enterprise benchmarks is a potential undermining of the business. For example, due to the high cost of production, cotton needs to be grown on scale to provide worthy returns. The gross margins for well-run MIA cotton and rice enterprises are:

- cotton: \$2,645/ha and \$240/ML
- rice: \$2,277/ha and \$163/ML.

Cotton has the higher gross margin per area and water used, but gross margins for an enterprise do not take into account the whole farm system such as the winter crops grown with the benefits of residual soil moisture, which will be different after rice than after cotton.

The whole farm system gross margin for a 170 ha cotton and rice enterprises grown in rotation with winter crops in the Murrumbidgee Valley are:

- cotton: \$979/ha and \$272/ML
- rice: \$697/ha and \$237/ML.

Cotton has the highest system gross margins at this assumed scale. Cotton uses 25% less water to grow the same area. Hence a business growing 170 ha of rice could grow, say 210 ha of cotton with the same water assets.

Cotton requires row crop layouts and more specialised machinery than rice, so when whole farm profit is compared for 210 ha cotton and 170 ha rice enterprises in the Murrumbidgee Valley grown in rotation with winter crops, the debt-free profit is:

- cotton: \$222,000
- rice \$262,000.

Hence at this scale rice provides a higher profit. When taking into account the capital associated with extra irrigation development and equipment cotton requires, the return on capital for 210 ha cotton and 170 ha rice enterprises in the Murrumbidgee Valley grown in rotation with winter crops is:

- cotton: 3.0%
- rice: 4.1%.

These examples are provided to show the limitations of gross margins as benchmarks to make strategic business decisions.

Use business benchmarks to assist in measuring your own business performance and testing the merits of business and enterprise expansion or other expenditure.

Further information

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