FARM BUSINESS FACT SHEET



FAMILY AND BUSINESS



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Making good farm-expansion decisions

Farm expansion involves increasing business scale to become larger or more productive. Conventionally, expansion occurs through the purchase or tenancy of additional farming area. However, increasing productivity of existing areas should not be overlooked as an expansion strategy.

Key points

- Farm expansion can occur through the purchase or tenancy (leasing or sharefarming) of additional farming area, or by generating greater levels of production from the existing area
- There is no 'one-size-fits-all' approach to farm expansion as success is dependent on the goals and the existing circumstances of the farm-business operators and owners
- The goals of the expansion must be understood to ensure the best decision is made
- Well-managed expansion can increase profitability, profit and wealth creation.
- The extent to which wealth is created from expansion depends on the level of scale advantage, the value of the expansion opportunity, the financing costs and the ability to meet the financing costs



Conduct a physical inspection and estimate the likely level of production that is probable as well as the likely additional operational and capital costs to generate that level of production.



If there is no ability to fund the capital required for the expansion then there is no appropriate time to expand.

SUMMARY

Where a lack of scale constrains business profitability, expanding the farm area through land purchase is often seen as the only way of increasing farm profitability and wealth. But alternative options such as leasing land, share-farming, contracting, working off-farm, and increasing productivity on the existing area are all potential means of achieving a similar outcome.

Expansion can lead to improvements

in profit and wealth creation but it requires significant capital investment, which can increase business risk, particularly where debt funding is required to finance the purchase or lease of additional land.

There is no 'one-size-fits-all' or prescription solution to assist in farm expansion decisions: each set of business circumstances is unique, as are the motivations of the farm business



operators and owners to expand. Some of the factors that will influence the level of profit and wealth created from an expansion decision include:

- the management ability of the farmbusiness operators;
- the specific productivity of the expansion opportunity;
- the price paid for the farm assets or the lease:
- the extent of the potential scale advantages achieved;
- the extent of any additional operating costs that may be incurred;
- the level of borrowings required to provide the capital required for the expansion;
- the future value of assets that are acquired as part of the expansion; and
- the market and seasonal conditions that occur after the expansion.

A key risk in undertaking farm expansion is the potential for financial loss and for wealth to be eroded. This could occur as a result of:

- a run of poor seasonal and/or market conditions;
- poor management leading to lower than projected returns;
- additional cost of servicing debt exceeding additional profits generated; and
- low rates of capital growth in assets acquired as part of expansion.

A farm expansion analysis should be accompanied by a sensitivity analysis demonstrating the impact of the downside risk. This helps managers to be aware of the extent of the losses that could be incurred and develop an exit strategy before expanding.

WHY EXPAND

Expansion may be considered for many reasons, including to increase operating returns, resource efficiency and wealth. Building a succession pathway is another common reason.

Increased operating returns

Increased operating returns from expansion occur by creating:

- scale advantage relative to the existing business. This means that the marginal overhead costs (for example, per unit, hectare cropped or tonne of grain produced), are less than in the existing business;
- more income from the same or lower direct enterprise costs in the existing

- business. This means that the marginal production or price is higher than the existing business with a similar or lower cost structure;
- the same level of income from a lower enterprise cost structure in the existing business.
- the same level of income and expenses in the existing business from a lower land value.

The most likely of these is the generation of scale advantages relative to the existing business.

METHODS OF FARM EXPANSION

There are three categories of farm expansion and there are several methods for expanding within each category. These include:

- increasing the area under management. This can occur by purchasing or tenancy (leasing or share-farming) of additional land.
- increasing the amount of production from the existing area. This usually occurs by first identifying the optimum level of production and then establishing if current production is below optimum and, finally, assessing the costs and if warranted implementing a strategy to increase production.
- utilising under-utilised farm resources; machinery; and/or labour. This can involve contracting to utilise surplus machinery and labour or if labour only is in surplus then employment off-farm may be an option.

The choice of expansion method, assuming a profit motive is driving the decision, will depend on the limitations and the goals of the business and the returns and risk of the investment. Both categories and all methods of expansion usually have a common goal – to improve profitability. There may also be other goals that are specific to the expansion method and help to weigh a decision in favour of one method over another. Similarly, there may be limitations to pursuing one method of expansion over another.

Increasing area under management

Benchmarking data has been used to assess operating scale against operating return. Mixed and grazing farms with more than eight years of benchmarking data have been used in the analysis. Operating scale is represented by the total value of assets under management,

while operating return is a measure of profit before interest and tax, relative to the total value of assets under management.

It is difficult to draw rigid conclusions about profitability based on the total assets of a business. Some businesses in the data set may have land value influenced by factors that have no relationship to its productive capacity. This usually relates to farms located close to cities where land value is influenced by real estate, rather than productive value.

The results of the analysis (Figure 1) show little difference in probability in relation to scale of the businesses.

The majority of data points fall in a band between 10 per cent and -5 per cent return on assets regardless of the scale or value of assets under management. There is no evidence from a long history of benchmarking results that increasing farm size leads to increased profitability.

Scale advantages are achieved to a point and then decline beyond that point. The point at which scale advantages decline is a function of labour and machinery efficiency. Small farm businesses can achieve high levels of labour and machinery efficiency by matching labour and machinery expenditure to the size of the business.

A small farm should not be expected to sustain a whole labour unit, particularly if it generates less than \$350,000 in gross profit. Within corporate agriculture large-scale businesses do not appear to have any profit advantage over medium-to-large-sized family farms.

Increasing production from existing area

It is possible to increase the scale of farm enterprises by generating more production from the existing farm area. The returns generated from this pathway are dependent on the existing level of productivity and the costs of achieving any increase in production. Often this apprach can lead to high returns on investment, as the costs may be small and the benefits large. For example, changing sowing date or early application of additional nitrogen to a deficient crop might result in little-to-no additional cost but potentially large marginal production benefits.



UTILISING SURPLUS MACHINERY AND LABOUR

An important farm business performance indicator is labour efficiency. Labour efficiency can be improved through expansion by spreading the cost of labour over a larger production area and tonnes of grain production. This is important as labour and labour-related expenses account for a significant proportion of the total overhead costs of a business. However, improving labour efficiency can also be achieved by farming the existing area and using 'surplus' labour capacity, by working offfarm or using machinery for contracting elsewhere

Where labour efficiency is already at optimum levels (i.e. labour units are fully utilised), then additional labour will be required to manage any additional area. Managers in this position will not achieve the same levels of scale advantage as will those who have a pre-existing labour inefficiency.

Machinery efficiency is another area where farm expansion can lead to lower costs per productive unit. In specialist cropping businesses, where significant machinery inventories are owned, machinery ownership costs, including depreciation, can be a major overhead expense for the business. Utilising the machinery over the maximum number of crop area keeps the cost of machinery low on a per hectare basis. The capacity of crop machinery (maximum number of hectares that can be serviced) is dictated by the operating width of machinery, the speed of travel and the field efficiency, while allowing for timely completion of crop operations.

FINANCIAL COMPARISON

Projecting the annual returns, both capital and operating, is a useful means of comparing the expansion options. It is then up to the farm business operator and owners to consider the non-financial differences between options and the difference in risk posed by each.

Consider a comparison of the same business in two scenarios:

1. Purchasing 150 hectares; or

2. Leasing 300 hectares

The features of the business under its existing structure are as follows.

- Historical return on assets managed is 4 per cent.
- Land value is \$5000 per hectare.

- Land represents 80 per cent of the total farm asset
- Current equity position is 80 per cent (% total assets value).
- Interest rate is six per cent.
- Capital growth in land value: average six per cent per annum.
- Enterprise costs are \$400 per hectare.
- Land lease cost is \$150 per hectare per year (that is, 3% of land value)

THE OUTCOME

Table 1 shows leasing 300 hectares increases annual profit by 20 per cent (or \$25,326) when compared to purchasing half (150ha) that area. However, the increased profit from leasing is offset by the capital gain in land (assuming six per cent) so that purchase of half the area of land has achieved the better growth in net worth. **Note:** this case study is for illustration purposes only. Each business will

purposes only. Each business will have different circumstances hence should assess its own situation when considering farm-scale expansion.

CAPITAL GROWTH IN FARM ASSETS – WEALTH CREATION

The safest component of the total return in agriculture where land is owned is the capital growth of land. Provided the investment period has a reasonable horizon (greater than 10 years) then history suggests that rates of capital growth of 6 per cent are achievable. Expansion through land purchase provides the opportunity to create additional wealth via capital growth in the land value.

Rates of capital growth for agricultural land can be volatile with increases of more than 50 per cent in a single year

being recorded in the past decade. Such spikes are often followed by long periods of low rates of growth bringing things back to the average. Despite the benefits, agricultural land purchase requires a high level of capital, which can be a factor preventing investment, particularly if the operational returns are inadequate to cover a completely debtfunded land purchase.

Farm business owners considering this approach to expansion must have additional funds in reserve to service the debt associated with the expansion in the event that the expansion does not generate sufficient operating returns. Leasing and share-farming do not provide the capital growth opportunities delivered by purchasing as the land is not owned under such arrangements.

SUCCESSION PLANNING

Expansion through land purchase is often seen as the preferred option when additional family members are looking

FIGURE 1 Bigger farms are not necessarily more profitable.

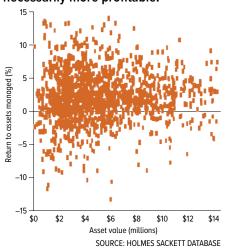


TABLE 1 Comparison of two farm expansion options: purchase 150 hectares and lease 300 hectares

		Current	Purchase 150ha	Lease 300ha
Land area farmed	Hectares (ha)	1000	1150	1300
Land value	\$	5,000,000	5,750,000	5,000,000
Non-land business assets	\$	880,000	930,000	980,000
Total asset owned (business)	\$	5,880,000	6,680,000	5,980,000
Less liabilities	\$	1,176,000	2,001,000	1,341,000
Equity	\$	4,704,000	4,679,000	4,639,000
Annual interest and lease	\$	62,310	110,685	107,310
Profit after interest + tax	\$	121,023	117,107	142,433
Value of capital gain	\$	300,000	345,000	300,000
Total wealth created	\$	421,023	462,107	442,433



to enter into agriculture. As a benchmark in this situation, an additional family labour unit looking to earning a living from a farm business should generate an additional \$350,000 or more in gross income. If 40 per cent of this is retained as net profit at a target return of 6 per cent then another \$2.3 million in asset value is required to sustain the labour unit, not to mention the additional operating capital and plant costs.

An expansion of this magnitude clearly requires adequate equity in an existing business of significant scale, to enable the expansion to be funded either internally or with debt. The ability to fund and secure the investment and to repay bank debt are key issues that need addressing.

WHEN TO EXPAND

The optimal timing of farm business expansion depends on the interaction of the following factors:

- motivation for expansion;
- view of the market opportunity;
- proposed expansion method; and
- ability to fund the expansion.

If there is no ability to fund the capital required for the expansion, regardless of the method or motivation, then there is no appropriate time to expand. However, there may be ways of expanding production on the existing area at no cost. For example, improving the timing of management events such as sowing or spraying in a cropping program costs nothing but can lead to significant production and profit gains.

If the proposed method for expansion is land purchase and capital is non-limiting then there is no time imperative for expansion.

If the expansion method is land ownership and the decision to expand is driven primarily by capital growth then the timing will be dependent on perceived value and speculation or the view of future capital growth.

Regardless of which avenue is pursued for expansion, an exit strategy should



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first be developed. The exit strategy has to be sufficiently dynamic that it can be implemented at short notice and under unfavourable market circumstances.

HOW TO EXPAND – THE STRATEGIES AND ANALYSIS

Conduct a physical inspection and estimate the likely level of production that is probable as well as the likely additional operational and capital costs to generate that level of production. Consideration should be given to those areas where cost efficiencies will be achieved. This will require a solid understanding of the management and financial performance of the existing business to assist in projections over the expansion.

Prepare a partial budget to establish the additional income and expenses associated with the farm business expansion. This will establish whether the profits of the expansion are adequate to cover the cost of financing or financing plus lease costs.

Where wealth creation is targeted through the combination of capital growth and operating return then it may be acceptable to accept an operating (cash) loss after financing. This is only the case provided the profits of the pre-expansion operations are adequate to comfortably meet the financing and capital needs of the expansion as well as the personal needs of the farm business owners.

Where the operating returns from the farm expansion is the only source of revenue then the profits after financing and lease costs have to be adequate

to account for the risk of expansion. The level of acceptability of return in this case will be dependent on the risk profile of the business owners.

Valuations for pricing opportunities, assuming the decision is motivated by profit and wealth creation, should occur on an economic valuation basis. This means that the acceptability of the budgeted returns generated will dictate the price that can be offered.

Sensitivity analyses should be conducted to establish the ability of the business to meet financing obligations (financial consequences) where deviations from the probable outcome occur. Develop an exit strategy that can be readily implemented if things do not go according to plan. The implementation of the exit strategy may result in a small financial loss but its aim is to act as an insurance policy to prevent catastrophic loss over the whole business.

Useful resources

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