Farm business health indicators - the key drivers of profit and wealth creation

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Overview:

Benchmarking financial performance is an important way to improve a farm business. The FAST project has benchmarked over several years about 240 farms in total. They have come up with 11 indicators that can be used to assess performance. The indicators deal with business health or financial performance, income drivers and resource use.

Tim Hutchings delivered a similar paper at the CWFS Seminar in 1998. This article is to be published in the 1998 Grassland Society's Conference Proceedings. Reproduction here is gratefully acknowledged.

Summary

Farm Business Health can be measured using the FAST top 11 indicators dealing with Business Health, Income Drivers and Resource Use. The measurements are best taken from tax returns over a five-year period and assistance from an accountant or financial adviser is recommended.

Use of these indicators identifies the strengths and weaknesses within an individual business.

There are strong relationships between indicators so no one indicator should be considered in isolation. However, after identifying business components for further attention, then individual indicators can be explored further to fine-tune opportunities for business enhancement.

When using the indicators to assess Farm Business Health, we should be mindful of the influence of personal goals. Family profit and growth is the driving force to longer term viability, however individual businesses set different targets to achieve their financial security.

When average Disposable Income per Family is above $60,000 then longer term viability enables flexibility of investment and lifestyle. However when average Disposable Income per Family is less than $30,000 a farm business has difficulty maintaining its capital base and may therefore jeopardise future viability, unless changes can be made to improve their Farm Business Health.

An exciting breakthrough is that the family business need not be strong in all 11 indicators. It is the balance that counts. For example, the business may be carrying high levels of debt. High debt is acceptable if it is balanced with good performance in other indicators.

Findings: the Top 11 Business Indicators.

Individuals can rank their own business to identify their strengths and weaknesses using the ranges in Table 1. The indicators are grouped into three areas: financial performance, profit drivers and resource use.

To support the research, seven years of financial and physical resource data was provided by 240 farming families in New South Wales, Victoria, South Australia and Western Australia.

The complex nature of farming ensures that there are strong relationships between indicators so that all 11 indicators should be checked when assessing farm business health.

The 11 *FAST Business Health Indicators* provide an overview of the farming business. The individual indicators should be explored in detail to provide specific analysis of family profit, income drivers and resource use. A more detailed explanation follows.

Table 1. Top 11 Business Health Indicators

	Units	Weak	**Medium**	**Strong**
FINANCIAL PERFORMANCE				
Disposable Income per Family	$'000	<30	30-60	>60
Net Worth	$'000	<500	500-1,000	> 1,000
INCOME DRIVERS				
Production System	$/ha/mm rainfall			
Cropping Property (>65%)	<$60	$60 - $70	>$70	
Mixed Mainly Cropping (50-65%)		<$50	$50 - $60	>$60
Mixed Mainly Livestock (35-50%)		<$40	$40 - $50	>$50
Livestock Property (<35%)		<$30	$30 - $40	>$40
2. Farm Input Costs.	Operating Costs / Farm Income %	>60	50-60	<50
3. Farm Size	Land Value / Family $'000	400	400 - 800	>800
4. Debt Servicing	Financing Costs / Total Income %	> 15	7- 15	<7
5. Machinery Depreciation	Market Value / Farm Income ratio	> 1.2	0.8- 1.2	<0.8
6. Non-Farm Income	Net Non-Farm Income / Family $'000	<5	5- 15	> 15
RESOURCE USE				
Land Productivity	Operating Surplus / Land Value %	<8	8- 15	> 15
Labour	Income / Labour Unit $'000	< 100	100- 150	> 150
Return on Capital	Return on Farm Capital %	<2	2-7	>7

Financial Performance

Every family has different goals and aspirations but most seek to maximise yearly profit to fund business growth and lifestyle choices. Farmers in the FAST study have adopted Disposable Income per Family as being the most important financial performance indicator. It is about their needs - more money in their pocket at the end of the year.

1. Disposable Income per Family

Disposable Income per Family is the total amount of money a family has each year after:

Farm operating costs have been met.

- Machinery has been maintained (depreciation).

Interest and lease commitments have been met.

In other words, it is the annual pre tax profit made from the farm and non-farm activities. This profit is what a family has to meet living expenses, invest on and off-farm, pay off debt and pay tax.

FAST selected Disposable Income per Family as their primary business health indicator because it is what people relate to best. A strong performance (>$60,000) provides a wider range of life choices whether it be wealth creation for inter-generational change, a secure retirement, or a better education for the children. The study also recognised that every family has different goals and aspirations. Some people prefer to sacrifice growth for a better lifestyle, which is quite acceptable.

2. Net Worth Per Family

Net Worth is the second indicator of business health. It is a reflection of a family's ability to invest Disposable Income in farm and non-farm assets and increase their wealth over time.

The Net Worth of a Family is an indicator that is strongly influenced by the stage of lifecycle of the family and age of the manager. For example, a family with young children will have much less time to accumulate assets compared to an older couple whose children have left the farm.

FAST National has identified that farming families seem to be having difficulty in converting Disposable Income into wealth. Wealth creation is essential for successful inter-generational change and a secure retirement. The goal is to have a net worth >$ 1 million per family.

Profit Drivers - Farm Profit

To help farmers come to grips with the process of understanding the real drivers of on-farm profitability, five of these 11 need to be analysed in detail. They are:

Production System

Farn Input Costs

Farm Size

Debt Servicing

Machinery Depreciation

Practical use of these indicators by farming families is pointing to one and two as being the most important. We are going through a period of extremely tight terms of trade which necessitates working hard to achieve a healthy farm profit performance. Non-farn income is not a key driver of farm profitability but feeds directly into disposable income.

/. *Production System*

Production Systems vary between farms due to differences in soil types and rainfall, which influence land use (e.g. cropping, grazing) and enterprise (e.g. crop types, livestock types/breeds).

Therefore, an indicator was developed to enable comparison of Production Systems regardless of the factors above. The indicator is $ Water Use Efficiency ($WUE), which represents the gross value of production, based on water use.

$WUE is calculated by dividing the Gross Farn Income by Total Effective Land Area. This figure is then divided by the Annual Rainfall (mm) over 100.

Table 1 illustrates that it has been possible to define $WUE targets for a range of four broadacre industries. $WUE is emerging as a powerful production benchmark linking commodity prices, farming systems and water use efficiency.

2. Farm Input Costs

Farn Input Costs includes all overhead and variable costs associated with farm production, but excludes depreciation, financing costs and owner's salaries.

When farmers talk about cost control, they automatically think of ways to cut costs. But the FAST project team believes that farmers should think instead of cost control and measure as a ratio of operating costs to farm income. The challenge is to control costs by matching inputs to production targets.

The target is to get farm operating costs down to 50% of income or better. There is a very close relationship between Operating Costs to Income and Disposable Income per Family. In fact cost efficiency is by far the greatest challenge facing farmers today. This is not about cost cutting, it is about ‘getting the best bang for your buck’. It is about being risk averse and getting two or more dollars for every one invested.

3. Farm Size

The FAST National study developed a standard measure for farm size to make comparisons more realistic. Farm size is measured by the value of effective hectares operated per family. This does not include farm buildings, only the area of land used for production.

The findings from the FAST National study demonstrated that the relationship between Farm Size and Disposable Income per Family was not consistent. Farms with low Disposable Income per Family were not necessarily small, although farms with high Disposable Income per Family generally had scale. But having scale did not always equate to high Disposable Income per Family, indicating that Farm Size alone does not ensure big profits.

4. Debt Servicing

Debt Servicing Costs include Interest, Bank Fees and Land and Machinery Hire Purchase or Lease.

Servicing a high amount of debt often means having low profits and in most cases this is true. However, the FAST project has shown that by having strong performance in other areas of the business, a farm can still achieve a high disposable income per family.

5. Machinery Depreciation

The productive value of machinery is to earn income, not to enhance lifestyle or impress the neighbours. The Clearing Sale Value of farm related vehicles and machinery is adequate to maximise productivity when machinery value is less than average annual income.

Some businesses may be above for 2-3 years after a major machinery purchase. The machinery depreciation to income ratio for high performing businesses was generally around the 0.7 or lower mark.

6. Non-Farm Income

Non-Farm Income is the sixth key driver. Although not related directly to the farm, it does feed directly into Disposable Income. It can make a major difference to Disposable Income per Family when the farm is struggling to make a profit, particularly with the declining terms of trade for many enterprises.

Using skills in off-farm jobs is a common way to generate Non-Farm Income. Also, a farm generating sufficient income allows for investment of farm profit in off-farm areas to spread risk. Current trends in superannuation and retirement planning have also been a catalyst to increase investment off the farm.

Resource Use

1. Land Productivity

Land Productivity is measured as the Farm Operating Surplus (Farm Income less Operating Costs) divided by Total Land Value (owned, leased and your portion of sharefarmed). This provides a measure of how well the land is used, and can be applied across locations, soil types and enterprise assuming the land is valued at realistic agricultural values. Land Productivity is a good 'gross margin' type indicator for the whole farm, which enables decisions to be made regarding land values and sharefarming or leasing.

There is a strong link between Disposable Income/Family and Operating Surplus/Land Value (productivity). Typically, those with less than average productivity have lower Disposable Income/Family regardless of how they rate with other indicators.

2. Labour

farmers are all different in their ability to run farms and one way of thinking about the effectiveness of farmers is to measure labour efficiency. Labour efficiency is measured by dividing Gross Farm Income by the number of Labour Units.

One labour unit is equivalent to 2,000 hours per year. Labour includes paid and unpaid contributors. Most owner/operator farmers work longer hours so are equivalent to more than one labour unit.

Farms with high Disposable Income per Family usually have high Labour Efficiency. Farms with weak Labour Efficiency did not generally have a high Disposable Income per Family.

This figure is easy to calculate. A performance of less than $100,000 per labour unit may indicate there are opportunities to get off farm part time work or contracting.

3. Return on Capital

Return on Capital is an indicator of the financial return achieved relative to the value of all the farm's resources, such as land, improvements, machinery and livestock, and the cost of owning resources.

A direct relationship between Return on Capital and Disposable Income per Family exists, with strong Disposable Income per Family farms having a better Return on Capital than weak Disposable Income per Family farms.

Return on Capital is calculated as: Farm Income less Operating Costs less Machinery Depreciation less [Manager Allowance of $30,000 multiplied by the number of families] divided by the Farm Asset Value.

Return on capital gives a good indication of production performance but at a business level. It is a valuable indicator for comparing one non-related business with another.

Further Discussion

Agricultural research and extension has focused almost exclusively on yield for too long. Once upon a time a small increase in yield transferred to healthy increase in profit. When terms of trade were better generating profit was relatively easy. Today margins are so slim that the risks associated with price decline, adverse climate or rising input costs can cause the family business to fail. It is no longer acceptable to promote high inputs and yield achievement without a sound analysis of its impact on the profit of the family business. It is the 'bottom line' that counts.

Many skilled managers are still getting it right whilst others are failing. Successful farming families are skilled in combining the five key drivers of profit, wealth creation and lifestyle choices. The drivers are water use efficiency, cost efficiency, scale, financing costs and investment in machinery.

farming families now have the option to check their business health and recognise their strengths and weaknesses through the Grains Research and Development Corporation (GRDC) funded FAST National benchmarking project. It is helping them and their advisers, turn their businesses around.

FAST National (Farming And Sustainable Technology) is so successful because it has created 'real' benchmarks from information provided by farming families. Participating families see where they sit relative to their peer group. This provides the necessary inspiration to move from thinking exclusively about yield achievement to increasing profit, wealth and the chance of a better lifestyle.

FAST National has now completed seven years of research into farming systems linked to profitability as measured by Disposable Income per Family. 240 farming families in the GRDC Southern and Western Regions have made a generous contribution towards this research. The publications of the results from the FAST Systems Economic Analysis are already helping farming families understand the business health of their enterprise. Of greater importance is the development of indicators and benchmarks. They are helping an increasing number of families develop viable and sustainable farming systems for the future.

FAST National has now settled for 11 business health indicators for grains and mixed farming enterprises in the Temperate Zone of Australia. The project has examined the financial performance linked to farming systems over a seven-year period. farming is a complex business and these 11 key indicators are the minimum required to gain better understanding of performance as measured by Disposable Income per Family.

An exciting breakthrough is that the family business need not be strong in all 11 indicators. It is the balance that counts. For example, the business may be carrying high levels of debt. High debt is acceptable if it is balanced with good performance in other indicators.

The 11 key indicators deal with family profit, farm productivity and the efficient use of resources. They provide farming families with the starting point to understand the complex nature of their business. When used as a diagnostic tool, individuals can benchmark their business against industry standards.