

Pastures under adverse conditions - Too expensive?

Lending for pasture establishment and improvement

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National Australia Bank has been in business for over 140 years. The National is the largest lender to farmers and rural industries, with advances currently standing at \$5.7 billion. The Bank's aim is to strengthen and improve its leadership position with people on the land by undertaking changes to the Bank's services in country districts which are now coming into effect.

To focus more closely on farming customers, the Bank has established several new positions, including senior managers, in each State to oversee the provision of all our financial services to the rural community.

In addition to serving customers' interests, the Bank is also setting up more and larger Business Banking Centres. Each of these will be headed by a Regional Business Manager. These managers in turn, amongst their other duties, oversee strategically located Rural Finance Teams. Managers of these teams, unlike many of the Bank's competitors, have the power to approve loan and leasing arrangements for clients without the delay of referring deals to superiors elsewhere. The Rural Finance Teams consist of an experienced Rural Manager and a Rural Graduate Trainee with a degree in Agricultural Economics or similar qualifications.

The service provided by the Rural Finance Teams is personal and carried out on farm where all production and financial records are held. The teams are equipped with up-to-date tools: laptop computers, portable printers, computer software etc to enable a professional service to be delivered.

When the first Rural Finance Teams were established on a trial basis at Wagga Wagga and Dubbo in 1988 it was unknown territory. Their success is evident, with 36 teams located in all States.

With all that in place, how do Managers at NAB go about the process of "Lending for Pasture Establishment and Improvement"?

Data used for lending decisions

All lending decisions are determined by two factors:

- Safety; and,
- Profitability.

No matter how large or small the loan, the Manager will assess the borrower on five major criteria - commonly called the "5C's" these are:

- *Character* - Shown by the reputation you have developed with the Bank for financial management and planning.
- *Capital* - Shown by the assets and liabilities in the application.
- *Capacity* - Demonstrated by the cashflow.
- *Conditions* - Supported by evidence of your industry and your physical performance.
- *Collateral* - Supported by security and other business the farmer does with the bank to aid the application

Lending for pasture development or improvement is assessed on the same basis as any lending whether it is for an agricultural enterprise or any commercial oriented business. Planning is the key. There is a relatively new saying "Farmers don't plan to fail - they fail to plan". The thing about **not planning** is that failure comes as a complete surprise and is not preceded by periods of worry and depression.

Armed with a forward cash flow budget for the ensuing 12 months the farmer approaches his bank manager and says "I want to borrow \$XXX to improve the place". A broad approach, however a lot more information is certainly needed.

The cash flow is an important start. As the proposal states it is for "pasture improvement". One year's cash flow will be insufficient to judge the impact on the borrowing due to the delayed impact of bringing the new pasture development into the

production cycle. Therefore the Bank would need to look at 3 years. Not only is the Bank looking for dollars and cents on the cash flow, it needs to look at the assumptions behind the construction of the cash flow budget. A terminology currently used in the Bank is "How much of what by when" to gauge the impact, *ie.* current stocking rates, cover crop yield, area to be improved, potential stocking rate, increased weight gains, changes to micron levels, changes to marketing of produce, timing *etc.*

Also needed will be the latest financial statements for the farmer's enterprise. Hopefully they will be no more than 3 to 6 months old. In addition, the financial statements should be accompanied by a trial balance or cash book details for the period from the end of the latest financial year to the date of the lending application.

Armed with all this information the Manager should now be in a position to commence his assessment of the proposal.

The Bank over the past decade has developed tools that enable managers to assess the financial performance of the farm and the risk profile of their customers. National Australia Bank has developed its own programme called "Rural Credit Assessment" which encompasses the following elements :

- Cash Flow Budget.
- Statement of Assets and Liabilities.
- Farm Analysis.
- Livestock Schedule.

The first three elements are all interactive and provide the data for the farm analysis report.

The information provided to the Bank to analyse past performance is identical to that provided to the Taxation Department and provided by the farmer's accountant in the form of annual financial statements, comprising profit and loss statement, livestock schedules, enterprise income and expenses and balance sheets. We rely on at least the past three year's data and as time goes by we are able to build a history and comparison of the farm over a number of years.

The Farm Analysis appears in the format shown in Table 1. An ability to measure farm performance is important to a farmer's banker as it allows the banker to obtain a true indication of the profitability of the farm, management performance and risk. Analysis of these factors determines the risk profile of the customer and consequently the margin the farm will pay on any borrowings.

There are a number of financial and physical indicators (*eg.* wool cut/hd, yields, growth rates) which can be used to analyse the performance and viability of a farm business. Lenders tend to develop their own preferences for particular ratios, many of

Table 1. Farm analysis format.

Parameter	Unit
Farm operating surplus per hectare (FOS/ha)	\$/ha
Farm operating costs per hectare (FOC/ha)	\$/ha
Farm operating costs as a % of farm income	%
Return on operating costs	%
Return on farm income	%
Return on farm assets (ROA)	%
Return on farm equity (ROE)	%
Total farm liabilities: farm income	ratio
Total farm liabilities: FOS	ratio
Interest as a percentage of farm income	%
Interest cover	times

which express the same data differently. Indicators calculated over time are useful in identifying *trends* in farm performance.

Definitions of four key indicators used by the National are as follows:

Farm operating surplus per ha (FOS/ha)

Represents the difference between farm income generated and farm operating costs (total costs less depreciation, interest, and drawings/living expenses) on a per hectare basis.

$$\text{FOS/ha} = \frac{\text{Farm income} - \text{Farm Operating Costs}}{\text{Total Farm Area (ha)}}$$

FOS/ha is a comparative performance statistic within a particular district. The district may be identified by soil types, rainfall, topography and vegetation. FOS/ha can be compared from farm to farm in a particular district as it is not influenced by the level of debt or living expenses. FOS/ha indicates the return a farmer is achieving per land area. A high FOS/ha suggests a farm manager who is a better business manager and/or technically superior.

Trends in FOS/ha

What factors could contribute to a fall in FOS/ha over time?

- declining productivity.
- a fall in prices received for commodities.
- farm operating costs are increasing.
- declining production levels/yields.
- occurrence of a natural disaster *eg.* drought, flood, disease, weed or insect infestation.
- purchase of a neighbouring property which is less productive than that already owned

While an increasing FOS/ha over time is a favourable trend, you should be alert to any problems hidden by a rising FOS/ha.

- unsustainable farming practices, *eg.* overstock-

ing and cropping for short term gains

- FOS/ha may increase because less productive land is sold off. This decision may be a positive move to reduce debt however you will need to be satisfied that the property remains viable.
- deferring expenses such as maintenance and fertilisers.

Limitations to the use of FOS/ha

In some extensive pastoral areas where land area is not the limiting factor (eg. some pastoral areas of the Northern Territory) and in some intensive industries, FOS measured per hectare is *not* the most meaningful measure.

In these cases in addition to the preparation of a farm analysis report, FOS can be expressed in terms of other units viz:

- Sheep - FOS per DSE (dry sheep equivalent);
- Cattle - FOS per cattle unit;
- Grape production - FOS per vine;
- Piglets - FOS per sow;
- Broilers - FOS per 100 chicks arriving.

Farm operating costs as a percentage of total farm income (FOC)

Farm operating costs as a percentage of total farm income (FOC) gives an indication of how efficiently the business is producing its income. For example, if FOC equals 50 per cent, the cost structure of the farm business is such that for every 50 cents spent on operating costs a dollar of income is generated.

$$\text{FOC as \% total farm income} = \frac{\text{Farm operating costs} \times 100}{\text{Total farm income}}$$

Trends in FOC as a percentage of total farm income

A declining FOC may be interpreted as a favourable trend. A low FOC may be misleading as a farmer may reduce costs without a great impact on income in the short term, perhaps by reducing fertiliser inputs in one season, which may well have an adverse effect on future productivity.

Return on Farm Assets (ROA)

This figure provides an indication of how efficiently the farmer is using the farm's total asset base. A farm with consistently low or negative ROA indicates the farm is inefficient or assets are underutilised (for example, machinery is too big for the needs of the farm or alternatively the assets are overvalued).

$$\text{ROA (\%)} = \frac{(\text{FOS} - \text{Farm management charge}) \times 100}{\text{Total assets}}$$

Return on farm equity (ROE)

This is the return being generated on the farmer's equity in the business. This figure may be compared with the rate of return for alternative investments - for example, bank deposits or from other sectors of the economy.

$$\text{ROE (\%)} = (\text{FOS} - \text{FMC} - \text{IE}) \times 100$$

Equity (net worth)

where: FMC = Farm management charge

IE = Interest expenditure

A consistently low or negative ROE may indicate that the farmer has a preference for the rural lifestyle or the farm business exhibits asset fixity, the inability to divest funds off-farm without selling land and the principal place of residence. Eventually such a farm business is unlikely to be viable without off-farm income.

Two other indicators that have a major relevance are the ratio of total farm liabilities to farm income and interest cover or interest paid as a percentage of farm income. These ratios should be self explanatory. If debt levels are too high and interest is taking a high percentage of gross farm income there is not much chance of survival in a low interest rate climate let alone being able to survive should another 1988-90 period come around. Quantifying both ratios - debt to farm income levels should not exceed 3:1 and interest cover should be less than 25%.

The underlying factor in any lending decision is the continued viability for all customers who generate income from on-farm sources. Some farm businesses will not meet this criteria, but will still present sound lending opportunities, given secure sources of off-farm income.

The National defines a viable farm business as one which generates sufficient income to:

- Service borrowings.
- Provide the family with an adequate standard of living.
- Allow investment on farm to maintain the farm's productive assets.
- Provide funds for investment which increases long term productivity.

To quantify the definition, \$50,000 cash operating surplus is required per family before:

- ⇒ family drawings/wages/dividends
- ⇒ depreciation/replacement cost
- ⇒ capital expenditure
- ⇒ debt repayment
- ⇒ income tax

NOTE

- ⇒ The \$50,000 cash income viability base is likely to grow over time
- ⇒ Add \$30,000 per additional family.

In summary a lending manager will use the following to assess farm performance and the lending decision :

- Financial statements - past 3 to 5 years.
- Statement of assets and liabilities.
- Management ability.
- Direction - goals, holistic planning.
- Industry performance and outlook - forecasts (ABARE, rural advisors, government policy).
- Individual's position within industry - diversification, location, benchmarks.

Assessment process

We are able to assess an individual farmer's financial performance using the farm performance indicators. How do they perform amongst their peers and is there any method to gauge this performance? The simple answer is yes. *Benchmarking*. Benchmarks and or key indicators have been around for a number of years and in different guises. A number of accountants with large agricultural client bases, ABARE, Farm Management 500 are a few of the organisations already providing a measure of comparison for the rural community. Over the past five years National Australia Bank has developed a set of benchmarks using our rural customer base in the New England and North West district of the State. It is restrictive in so much that we have only used information supplied by our borrowing customers. We have been able to provide our customers with reliable data for comparison as our sample size is in excess of 1100 producers. The accuracy of the information provided is very high given that much of the data is extracted directly from tax returns and from the farmers. Over a number of years we will be able to build a profile of our customers and be able to chart their progress and performance using the farm financial ratios and key performance data.

Interest margins

The final decision approving a loan is to assess the interest rate the bank is to apply to the facilities.

Each applicant is assessed on an individual basis. The method of determining risk margins is the same for rural and commercial borrowers despite the regular comment that farmers are treated differently. In fact if a rural borrower is in receipt of an interest rate subsidy from the Rural Assistance Authority the risk rate margin cannot be amended during the term of the subsidy. Also the bank is not able to apply a risk margin in excess of 2% of the base lending rate. Margins are an indication of the level of risk the bank takes in lending depositors funds. The more accurate the information given to the lending manager the better the assessment of the level of risk the farm or farmer represents and also reinforces the importance of the relationship with the bank.

Factors affecting margins include:

- Overall industry rating
 - ⇒ performance and exposure to specific industries
- Cash Flow
 - ⇒ forecast v actual cashflow -
 - ⇒ is it positive/negative?
 - ⇒ sensitivity to production levels and prices
- Security position
 - ⇒ market value
 - ⇒ saleability
 - ⇒ convertibility
 - ⇒ environmental - chemical contamination, State laws SEPP46, endangered species, native vegetation
 - ⇒ Mortgagee sale is last ditch option
- Management
 - ⇒ past history
 - ⇒ depth - management succession
 - ⇒ skills inventory
- Profitability
 - ⇒ sustainable
 - ⇒ consistent
 - ⇒ artificial - maintainable (sale of assets)
 - ⇒ off-farm income
 - ⇒ diversification
- Equity position and trends
 - ⇒ level of assets and liabilities
 - ⇒ impact on farm performance
 - ⇒ level of debt serviced by the farm

- ⇒ improving or declining
- Bank relationship and perceived integrity
- ⇒ advise banker of changes - positive and or negative
- ⇒ communication
- ⇒ account conduct

may find useful in future dealings with your bankers:

"Financing Your Farm" produced by the Australian Bankers Association in conjunction with Marcus Oldham Farm Management College Consulting Company.

"Farm Business Planning" which comes in two parts "A" and "B" - National Australia Bank

"Code of Practice for Farmers" - Australian Bankers Association

"Understanding the Cost of Farm Finance" - Australian Bankers Association

"Managing Agricultural Price Risk" produced in conjunction with Monash University.

Further reading

The following lists some publications that you

Appendices

Appendix 1 - The following disclaimer accompanies all farm analysis reports and would be attached to Appendices 2 and 3.

Farm Management Charge: \$30,000

National Australia Bank Limited
A.C.N. 004044937

Farm Analysis Report

Customer Name
Customer Number

Date: 30/04/1997

IMPORTANT INFORMATION

The Farm Analysis Report represents an estimate of Trading Results, Performance Ratios and Capital Structure for your farm/business. The Farm Analysis Report estimates are based on information, contained in the Cash Flow and Statement of Position Reports, which have been supplied to National Australia Bank Limited ("the Bank") by you or your authorised representatives.

The Farm Analysis Report estimates are based upon the assumptions contained within the Cash Flow and Statement of Position Reports. In view of the many assumptions used variations from projections may occur. In addition the report includes an assumed farm management fee which amount has been shown.

The Farm Analysis report estimates will be affected by the accuracy of information provided and its relevance in light of changes in general economic conditions and other factors.

It is important that the Farm Analysis Report estimates are revised each time the Cash Flow and/or Statement of Position projections are amended.

So far as the law allows, the Bank disclaims any warranty or representation as to the accuracy or reliability of the information and statements in this document.

The Bank advises that the Farm Analysis Report is produced to assist the Bank in making its own credit assessments and it should not be relied upon by any other person as constituting any statement of information or opinion by the Bank. The Bank will not be liable in any way whatsoever (whether in negligence or otherwise) for any loss or damage which may be suffered by any person relying upon such information or otherwise arising in connection with the contents of or any omission from this document except where a liability is made non-excludable by legislation.

Appendix 2 - Farm analysis report mixed farming/grazing Liverpool Plains.

National Australia Bank Limited
A.C.N. 004044937

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Farm Analysis Report

Customer Name :
Customer Number:

Date: 30/04/1997

	30.6.91 FARM RATIOS	30.6.92 FARM RATIOS	30.6.93 FARM RATIOS	30.6.94 FARM RATIOS	30.6.95 FARM RATIOS	30.6.96 FARM RATIOS
TRADING RESULTS						
Farm Income	498,935	653,929	854,993	927,698	885,569	1,048,578
less Farm Operating Costs (FOC)	366,335	475,208	692,399	673,895	566,536	788,130
Gross Farm Operating Surplus (POS)	132,600	178,721	162,594	253,803	319,033	260,448
less Interest	46,450	106,241	53,016	120,455	72,031	50,272
Surplus after Interest	86,150	72,480	109,578	133,348	247,002	210,176
less Capital Expenditure	0	0	0	0	0	
less Drawings	0	0	0	0	0	
Net Cash Income Before Tax	86,150	72,480	109,578	133,348	247,002	210,176
PERFORMANCE RATIOS						
Farm Operating Surplus per Hectare (POS/Ha) (\$/Ha)	47.26	63.69	57.95	90.45	113.70	92.82
Farm Operating Costs per Hectare (FOC/Ha) (\$/Ha)	130.55	169.35	246.76	240.16	201.90	280.87
Farm Operating Costs as a (%) of Farm Income	73.42	72.67	80.98	72.64	63.97	75.16
Return on Operating Costs (%)	28.01	31.30	19.15	33.21	51.02	29.24
Return on Farm Income (%)	20.56	22.74	15.51	24.12	32.64	21.98
Return on Farm Assets (ROA) (%)	2.39	3.36	3.09	4.16	6.14	4.73
Return on Farm Equity (ROE) (%)	1.47	1.40	2.75	2.55	5.32	4.11
Total Farm Liabilities:Farm Income	0.91	2.14	1.63	1.42	0.71	0.46
Total Farm Liabilities:POS	3.44	7.81	8.59	5.21	1.97	1.86
Interest as a (%) of Farm Income	9.31	16.25	6.20	12.98	8.13	4.79
Interest Cover (times)	2.85	1.68	3.07	2.11	4.43	5.18
CAPITAL STRUCTURE						
Total Farm Area (Ha)	3,117	3,117	3,117	3,117	3,117	3,117
Total Farm Liabilities (\$)	456,200	1,396,200	1,396,200	1,321,801	629,526	485,000
Total Farm Assets (\$)	4,288,500	4,421,079	4,288,500	5,374,610	4,709,200	4,872,791
Total Farm Equity (\$)	3,832,300	3,024,879	2,892,300	4,052,809	4,079,674	4,387,791
Total Farm Equity (%)	89.36	68.42	67.44	75.41	86.63	90.05
NON-FARM FACTORS						
Non-Farm Income (\$)	0	0	0	0	867	0
Non-Farm Income as a (%) of Total Gross Income	0.00	0.00	0.00	0.00	0.10	0.00

Seasonal Conditions :

Appendix 3 - Fram analysis report for grazing sheep/cattle New England Tablelands.

National Australia Bank Limited
A.C.N. 004044937

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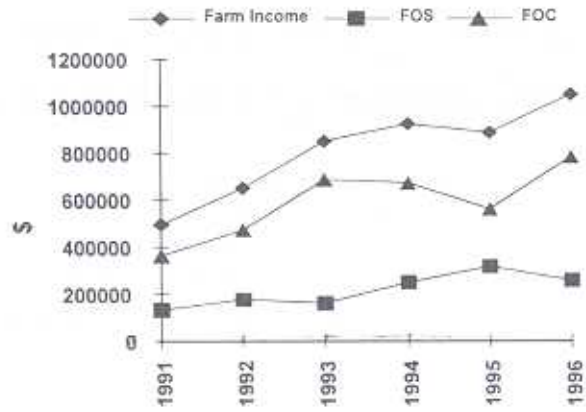
Farm Analysis Report

Customer Name :
Customer Number:

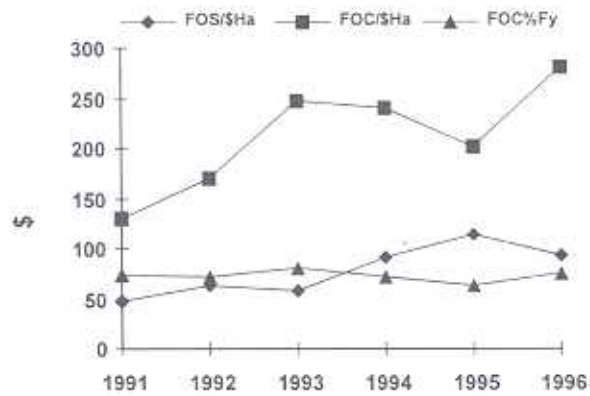
Date: 30/04/1997

	30.6.91 FARM RATIOS	30.6.92 FARM RATIOS	30.6.93 FARM RATIOS	30.6.94 FARM RATIOS	30.6.95 FARM RATIOS
TRADING RESULTS					
Farm Income	1,255,070	892,354	618,721	738,433	1,093,079
less Farm Operating Costs (FOC)	771,996	716,682	350,839	411,022	810,074
Gross Farm Operating Surplus (FOS)	483,074	175,672	267,882	327,411	283,005
less Interest	241	610	103	61	732
Surplus after Interest	482,833	175,062	267,779	327,350	282,273
less Capital Expenditure	0	0	0	0	0
less Drawings	0	133,687	52,650	42,000	150
Net Cash Income Before Tax	482,833	41,375	215,129	285,350	282,123
PERFORMANCE RATIOS					
Farm Operating Surplus per Hectare (FOS/Ha) (\$/Ha)	154.78	56.29	85.83	104.91	90.68
Farm Operating Costs per Hectare (FOC/Ha) (\$/Ha)	247.36	229.63	112.41	131.70	259.56
Farm Operating Costs as a (%) of Farm Income	61.51	80.31	56.70	55.66	74.11
Return on Operating Costs (%)	58.69	20.33	67.80	72.36	31.23
Return on Farm Income (%)	36.10	16.32	38.45	40.28	23.15
Return on Farm Assets (ROA) (%)	6.89	2.21	3.94	4.45	3.76
Return on Farm Equity (ROE) (%)	7.59	2.40	4.26	4.75	3.96
Total Farm Liabilities: Farm Income	0.48	0.60	0.74	0.56	0.33
Total Farm Liabilities: FOS	1.26	3.06	1.72	1.26	1.27
Interest as a (%) of Farm Income	0.02	0.07	0.02	0.01	0.07
Interest Cover (times)	2004.46	287.99	2600.80	5367.39	386.62
CAPITAL STRUCTURE					
Total Farm Area (Ha)	3,285	3,285	3,285	3,285	3,285
Total Farm Liabilities (\$)	608,220	537,439	460,000	413,287	360,000
Total Farm Assets (\$)	6,577,853	6,577,853	6,040,120	6,676,940	6,730,090
Total Farm Equity (\$)	5,969,633	6,040,414	5,580,120	6,263,653	6,370,090
Total Farm Equity (%)	90.75	91.83	92.38	93.81	94.65
NON-FARM FACTORS					
Non-Farm Income (\$)	0	0	0	8,320	0
Non-Farm Income as a (%) of Total Gross Income	0.00	0.00	0.00	1.11	0.00

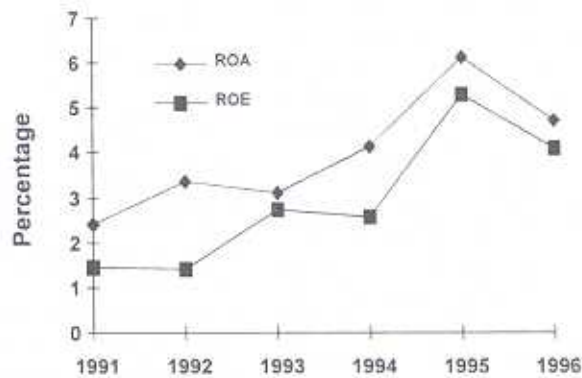
Seasonal Conditions :



Appendix 4 - Chart for farm income, farm operating surplus and farm operating costs mixed farming/grazing Liverpool Plains.



Appendix 5 - Farm operating surplus and farm operating costs expressed as dollars per hectare and farm operating costs expressed as a percentage of farm income mixed farming/grazing Liverpool Plains.



Appendix 6 - Return on assets and return on equity mixed farming/grazing Liverpool Plains