

AN ECONOMIC SURVEY
OF NEW ZEALAND WHEATGROWERS:

FINANCIAL ANALYSIS

1979-80

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PREFACE

This Report is the third in an annual series of economic surveys which concentrate on financial aspects of New Zealand wheatgrowing farms. These surveys have been undertaken by the Agricultural Economics Research Unit at Lincoln College on behalf of Wheat Growers Sub-Section of Federated Farmers of New Zealand Inc.

The principal objective of this survey is to establish, from farm accounts and personal interviews, financial data pertaining to wheatgrowing farms in the 1979-80 financial year. Such data will allow a more comprehensive picture of wheatgrowing in New Zealand, in line with that available for other major New Zealand farming industries.

The accounts analysis was carried out by Roger Lough, computer programming and analysis by Patrick McCartin, and the report compiled by Roger Lough and Michael Rich.

P.D. Chudleigh
Director.

SUMMARY

1. Total assets per farm were \$424,506, 93 percent of which were invested in farm capital, 2 percent in crop on hand and 5 percent in off farm assets.
2. Total liabilities per farm were \$99,967, equivalent to 23.5 percent of total assets. Current liabilities were 18 percent of total liabilities. This proportion increased on the more intensive cropping farms.
3. Average gross farm income for all surveyed farms of \$85,074 came principally from livestock (66 percent), wheat (14 percent) and other crops including barley, peas and small seeds (17 percent).
4. Expenditure per farm of \$55,875 was made up of farm working expenses (44 percent), tractor and vehicle expenses (14 percent) and debt servicing (17 percent).
5. Average net farm income was \$18,456 or nearly 25 percent of gross farm profit. Net farm income per hectare was the highest on farms where 25 to 49 percent of gross farm income came from crop production (\$104 per hectare).
6. Available cash per farm of \$34,181 came from direct farm trading (60 percent), increase in term liabilities (19 percent), sale of assets (11 percent) and non farm income (10 percent).

7. Average cash disposition for all surveyed farms of \$33,552 was made up of capital expenditure (41 percent), personal expenditure (46 percent) and loan repayments (13 percent).
8. The average cash surplus per farm of \$629 resulted in an increase in sundry debtors of \$846 and an increase in current accounts at the stock firm and bank of \$1,176. Offsetting this was an increase in sundry creditors of \$1,383 and withdrawals from the Income Equalization Scheme of \$11.
9. The average adjusted cash surplus per farm, that is the cash surplus with allowances for inventory changes, was \$4,699. The principal inventory change was an increase in the value of livestock.
10. The cash surplus of farms with less than 5 percent of gross farm income from crop was \$1,326 which, after adjusting for changes of produce on hand, increased to \$4,542. Those properties with 25 to 49 percent of gross farm income from crop had a similar cash surplus (\$1,239) but greater inventory change resulted in an adjusted surplus of \$7,793. Properties with 6 to 24 percent and over 50 percent of gross farm income from crop showed similar adjusted surpluses of \$3,466 and \$3,644 respectively but a cash surplus of \$417 for the less intensive cropping property and a cash deficit of \$12 for the more

intensive cropping property.

11. The return on capital for the average New Zealand survey farm was 4.0 percent. Farms with 5-24 percent and 25-29 percent of gross farm income from crop had a return on capital of 4.7 percent and 4.6 percent respectively; those farms with less than 5.0 percent of Gross Farm Income from crop returned 3.4 percent while those with crop incomes 50 percent and over showed a 2.7 percent return on capital.

CHAPTER 1

INTRODUCTION

1.1 Background

The purpose of this analysis was to provide financial data relating to those New Zealand wheatgrowing farms that participated in the 1979-80 wheat enterprise survey¹. The analysis was based upon the annual financial statements prepared for wheatgrowers by their accountants.

1.2 Survey Description

Farm accounts for the 1979-80 financial year were collected following the farm visit in 1981. Those available for analysis were grouped, as shown in Table 1, according to the degree of cropping intensity which was determined by expressing crop income as a percentage of gross farm income. Crop income included income from wheat, barley, small seeds and other crops.

Of the 175 farms in the 1979-80 New Zealand wheat enterprise survey, 56 percent provided financial statements suitable for analysis, 10 percent provided financial statements unsuitable for analysis because of insufficient information, while 34 percent either were unable or refused to provide financial statements for various reasons. All

¹ The wheat enterprise survey is an annual survey undertaken by the Agricultural Economics Research Unit on behalf of the Wheatgrowing Sub-Section of Federated Farmers of New Zealand Inc. Results for the 1979-80 year are contained in Research Report No. 113 published by the Unit.

2.

farms suitable for analysis were "owner-operator" properties.

TABLE 1
Farm Groups

=====			
Group	Range	Average Crop Intensity	Number of Farms

	Crop Income as % Gross Farm Income	Crop Income as % Gross Farm Income	Number
1	Below 5	2.0	12
2	5-24	15.0	39
3	25-49	36.2	24
4	50 and above	64.6	23
All Farms		30.8	98
=====			

1.3 Physical Characteristics

The physical characteristics of the four farming groups are summarised in Table 2. The table shows the emphasis on livestock production in group 1 and an increased area devoted to cropping in groups 2, 3 and 4.

TABLE 2

Physical Farm Characteristics

Group	1	2	3	4	All Farms
Total Area (ha)	386.2	210.0	212.0	169.0	222.9
Stock Units (no)	2,829	2,441	1,710	613	2,000
Wheat Area (ha)	2.9	12.8	28.4	37.0	19.5
Barley Area (ha)	1.2	4.7	12.0	12.2	7.3
Pea Area (ha)	-	0.8	8.7	24.5	6.7
Small Seeds Area (ha)	-	3.9	9.0	26.8	8.9
Other Crop Area (ha)	2.0	2.3	10.2	5.4	4.8
Crop Area (% of Total Area)	1.6	11.7	32.2	62.7	21.2

CHAPTER 2

CAPITAL STRUCTURE

The capital structure of wheatgrowing farms in New Zealand is detailed in Table 3. Valuations of land and buildings apply as at the start of the 1979-80 financial year while valuations of livestock, plant and machinery apply as at the end of the financial year.²

2.1 Assets

Total assets on the average New Zealand survey farm were valued at \$424,506; 73 percent was invested in land and buildings, 20 percent in livestock and plant, 2 percent in crop on hand and 5 percent in off farm assets.

Total assets per farm in groups 3 and 4 averaged \$458,409 and were at least 18 percent higher than either group 1 or group 2. This was largely due to the value of land and buildings in groups 3 and 4 being at least 19 percent higher than either group 1 or group 2.

2.2 Liabilities and Net Worth

Total liabilities on the average New Zealand survey farm were valued at \$99,967, a 14.4 percent increase from the preceding year. Fixed liabilities represented 82.0 percent of total liabilities while current liabilities represent 18.0 percent. The two main sources of fixed

² Plant and machinery were valued at book value while market values were used for livestock.

TABLE 3

Capital Structure

Group	1	2	3	4	All Farms
<u>Farm Capital</u>	\$	\$	\$	\$	\$
Land and Buildings	271,752	280,064	337,280	351,097	309,729
Tractor, Truck, Header	13,823	13,181	22,295	26,311	18,573
Other Plant	6,809	8,348	11,846	11,804	9,827
Sheep	63,917	56,203	49,859	22,315	47,641
Cattle	17,752	10,361	1,861	2,343	7,303
Other	0	0	3,054	337	827
Total:	374,054	368,156	426,195	414,208	393,900
<u>Crop on Hand</u>					
Wheat	0	2,367	6,690	4,990	3,751
Barley	0	682	1,066	1,040	777
Peas	0	0	207	4,113	1,016
Small Seeds	0	627	771	6,327	1,923
Other	0	0	729	2,938	868
Total:	0	3,676	9,463	19,409	8,335
<u>Off-Farm Assets</u>					
Cash	5,617	6,753	7,188	2,605	5,747
Sundry Debtors	3,004	2,536	2,726	6,286	3,520
Income Equalisation		290	908	145	372
Other Assets (incl. car)	3,468	5,051	4,141	4,040	4,397
Sundry Investments	2,674	8,169	8,961	10,492	8,236
Total:	14,764	22,799	23,925	23,568	22,272
Total Assets:	388,817	394,631	459,583	457,185	424,506

(Table 3 Cont...)

TABLE 3 (Cont.)
Capital Structure

Group	1	2	3	4	All Farms
<u>Fixed Liabilities</u>	\$	\$	\$	\$	\$
Rural Bank/Marginal Lands Board	25,197	23,489	12,977	16,746	19,541
Commercial Bank	2,789	1,384	6,694	3,059	3,249
Insurance Company	151	6,265	8,582	8,532	6,616
Stock Firm	2,333	2,051		1,391	1,429
Private	33,416	50,275	40,229	53,544	46,518
County Council		1,232	118	1,513	874
Hire Purchase	630	442	2,917	1,894	1,412
Other	769	2,912	226	2,913	1,992
Total:	65,285	88,050	71,743	89,592	81,631
<u>Current Liabilities</u>					
Commercial Banks	6,282	3,780	3,190	6,278	4,528
Stock Firms	2,363	5,038	11,022	9,866	7,309
Sundry Creditors	5,698	6,530	4,419	8,562	6,388
Other	521			199	111
Total:	14,864	15,348	18,631	24,905	18,336
Total Liabilities	80,148	103,399	90,374	114,497	99,967
Net Worth - (\$)	308,669	291,232	369,208	342,688	324,539
- (% of total assets)	79.4	73.8	80.3	75.0	76.5
=====					

8.

liabilities in order of importance were Private (46.5 percent of total liabilities) and Rural Bank/Marginal Lands Board (20 percent of total liabilities). Stock Farm current account levels remained constant with the previous year while Commercial Banks declined by 36 percent and sundry creditors increased by 23 percent.

Group 4 farms had the highest level of total liabilities at \$114,497, this being 43 percent higher than group 1. For all four groups, fixed liabilities were 78 to 85 percent of total liabilities. Among groups, current liabilities increased with greater cropping intensity.

Net worth, defined as total assets less liabilities, reflects the level of a farmer's equity. On the average New Zealand survey farm, net worth was \$324,539 or 76.5 percent of total assets.

2.3 Capital Structure Per Hectare

A summary of capital structure per hectare is given in Table 4. The table shows that increased cropping intensity was associated with an increased total farm capital, value of crop on hand and net worth despite an increase in total liabilities.

TABLE 4
Capital Structure Per Hectare

=====					
Group	1	2	3	4	All Farms

	\$	\$	\$	\$	\$
Total Farm Capital	969	1,753	2,010	2,450	1,767
Crop on Hand	0	18	45	115	37
Off Farm Assets	38	109	113	139	100
Total Assets	1,007	1,880	2,168	2,704	1,904
Total Liabilities	208	492	426	678	448
Net Worth	799	1387	1,742	2,026	1,456
=====					

CHAPTER 3

INCOME AND EXPENDITURE

Gross farm income and expenditure details along with the disposition of net farm income are given in Table 5.

3.1 Gross Farm Income

Table 5 shows gross farm income for the average New Zealand survey farm was \$85,074, 66 percent of which came from livestock production. The other main sources were wheat (14 percent) and other crops including barley, peas and small seeds (17 percent). Gross farm profit (gross farm income less livestock purchases) between groups was highest in group 3 (\$83,786) and lowest in group 1 (\$68,729).

Table 6 shows gross farm income details on a per hectare and per stock unit basis. It is seen that:

1. Total gross farm income per hectare increased with increased cropping intensity.
2. Livestock income per stock unit in groups 1 and 2 was similar, but lower than in groups 3 and 4.
3. Increased cropping intensity was associated with increased wheat income per total farm hectare. However, when this income was expressed on a per hectare of wheat grown basis, a decrease occurred because yields dropped as cropping became very intensive.

TABLE 5

Income and Expenditure

Group	1	2	3	4	All Farms
	\$	\$	\$	\$	\$
<u>Gross Farm Income</u>					
Wool	31,045	25,895	21,650	9,382	21,610
Sheep	32,269	33,464	35,106	17,766	30,035
Cattle	8,766	5,846	1,749	3,213	4,582
Wheat	845	7,744	17,825	16,972	11,534
Barley	465	1,863	5,273	5,554	3,393
Peas		493	2,507	12,148	3,661
Small Seeds		946	2,674	16,159	4,824
Other Crops	140	354	4,937	5,915	2,755
Rebates & Subsidies	1,347	540	938	429	711
Produce, Milk, Pigs	64	1,262	1,899	807	1,165
Sundry, Hay, Grazing	3,308	329	608	504	803
Total:	78,250	78,737	95,166	88,848	85,074
Less Livestock Purchases					
Sheep	6,685	7,588	9,719	9,730	8,502
Cattle	2,835	2,226	730	2,473	1,992
Other			931	76	246
Total Purchases	9,521	9,814	11,380	12,280	10,740
Gross Farm Profit	68,729	68,923	83,786	76,568	74,334

(Table 5 Cont...)

TABLE 5 (Cont.)

Income and Expenditure

Group	1	2	3	4	All Farms
	\$	\$	\$	\$	\$
<u>Farm Expenditure</u>					
Farm Working Expenses					
Wages	7,345	5,573	8,658	6,248	6,704
Animal Health	2,104	1,538	1,473	949	1,453
Seed and Fertiliser	3,799	4,813	6,639	6,848	5,614
Freight	1,370	1,383	1,414	1,742	1,473
Other	7,074	8,310	9,480	11,445	9,181
Repairs & Maintenance	7,701	3,471	3,530	3,510	4,013
Tractor & Vehicle Expenses					
Repairs & Maintenance	3,789	3,753	4,749	5,236	4,349
Fuel & Oil	3,156	2,626	4,212	4,463	3,510
Admin., Rates, Insurance	3,426	3,799	4,380	4,346	4,024
Debt Servicing	5,521	8,960	9,770	11,297	9,286
Depreciation					
Buildings	834	624	713	1,047	771
Motorised Plant	3,223	3,124	5,224	6,314	4,399
Non Motorised Plant	730	980	1,293	1,298	1,101
Total	50,074	48,952	61,535	64,743	55,878
<u>Net Farm Income</u>					
- \$	18,655	19,971	22,251	11,825	18,456
- % Gross Farm Profit	27.1	29.0	26.6	15.4	24.8
<u>Used as Follows</u>					
Personal Drawings	8,456	9,854	10,371	8,750	9,551
Taxation	3,849	4,460	5,379	3,999	4,502
Savings	6,349	5,657	6,501	-923	4,404

14.

4. Other crop income per hectare of other crops grown increased with increasing cropping intensity. In group 1, this income was similar to livestock income per hectare but less than wheat income per hectare of wheat grown. In groups 2 and 3, this income was higher than livestock income per hectare but less than wheat income per hectare of wheat grown. In group 4, this income was higher than both livestock and wheat income per hectare.

TABLE 6
Gross Farm Income

Group	1	2	3	4	All Farms
Livestock (\$/ha)	187	311	276	180	252
Wheat (\$/ha)	2	37	84	100	52
Other Crops (\$/ha)	2	17	73	235	66
Sundry (\$/ha)	12	10	16	10	12
Total (\$/ha)	203	375	449	525	382
Livestock (\$/stock unit) ^a	22.10	22.69	27.56	29.50	22.74
Livestock (\$/livestock ha) ^a	164	197	318	236	209
Wheat (\$/ha wheat grown)	291	605	628	458	591
Other crops (\$/ha other crops grown)	189	312	498	577	528

^a Net of livestock purchases.

3.2 Farm Expenditure

Table 5 shows farm expenditure for the average New Zealand survey farm to be \$55,878; the main components were farm working expenses (44 percent), tractor and vehicle expenses (14 percent) and debt servicing (17 percent).

Table 7 gives a summary of farm expenditure on a per hectare basis. Total farm expenditure per hectare increased with increasing cropping intensity. In group 4 farm working expenses were nearly three times higher than group 1, while tractor and vehicle expenses were three and a half times greater.

TABLE 7

Farm Expenditure Per Hectare

Group	1	2	3	4	All Farms
	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Farm Working Expenses:					
Wages	19	27	41	37	30
Animal Health	5	7	7	6	7
Seed & Fertiliser	10	23	31	41	25
Freight	4	7	7	10	7
Other	18	40	45	68	41
Repairs & Maintenance	20	17	17	21	18
Tractor & Vehicle Expenses:					
Repairs & Maintenance	10	18	22	31	20
Fuel & Oil	8	13	20	26	16
Admin., Rates, Insurance	9	18	21	26	18
Debt Servicing	14	43	46	69	42
Depreciation	12	23	34	51	28
Total:	129	236	291	386	252

3.3 Farm Income Disposition

Table 5 shows net farm income (gross farm income minus livestock purchases and farm expenditure) on the average New Zealand survey farm to be \$18,456 or nearly 25 percent of gross farm income. This net farm income was used on personal drawings (52 percent), taxation (24 percent) and "savings" (24 percent).

Table 8 gives a summary of the disposal of gross farm income on a per hectare basis. Farms in groups 1, 2 and 3 all generated between \$1.30 to \$1.34 of gross farm income per dollar spent on farm inputs (livestock purchases and farm expenditure) compared with \$1.14 in group 4 farms. Therefore, despite a high gross farm income per hectare, net farm income per hectare declined when crop income exceeded 50 per cent of gross farm income. The level of "savings" per hectare available for re-investment increased sharply between groups 1, 2 and 3; however, low net farm income and high personal drawings per hectare in group 4 resulted in negative savings for this farm group.

3.4 Economic Indicators

Table 9 shows the average New Zealand survey farm to have a rate of return on total farm capital of 4.0 percent, and a return on equity capital of 2.5 percent.

Group 2 and 3 farms showed the same return on total farm capital of 4.6 to 4.7 percent and a return on equity capital of 3.2 to 3.4 percent, while group 4 farms had a return on total farm capital of 2.7 percent and a return on

equity capital of 0.2 percent.

TABLE 8

Farm Income Disposition Per Hectare

Group	1	2	3	4	All Farms
	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Gross Farm Income	203	375	449	525	382
Less:					
Livestock Purchases	25	47	54	73	48
Farm Expenditure	130	236	291	386	252
	---	---	---	---	---
Net Farm Income	48	92	104	66	82
Used as Follows:					
Personal Drawings	22	47	49	52	43
Taxation	10	21	25	24	20
"Savings"	16	24	30	-10	19

TABLE 9

Economic Indicators

Group	1	2	3	4	All Farms
	\$	\$	\$	\$	\$
A. <u>Return on Capital</u>					
Cash Farm Expenditure	45,286	44,226	54,305	56,084	49,607
Less:					
Debt servicing	5,521	8,960	9,770	11,297	9,286
Administration and Rates	3,426	3,799	4,380	4,346	4,024
Wages of Management	10,711	10,682	11,262	11,142	10,935
1. Total Adjusted Working Expenses	47,049	42,147	51,417	51,582	47,233
Working Capital Allowance (0.5 x 1)	23,524	21,073	25,708	25,791	23,616
Farm Capital	374,054	368,156	426,195	414,208	393,900
2. Total Farm Capital	397,578	389,229	451,903	439,999	417,516
Net Farm Income	18,655	19,971	22,251	11,825	18,456
Debt Servicing	5,521	8,960	9,770	11,297	9,286
Less: Wages of Management	10,711	10,682	11,262	11,142	10,935
3. Economic Farm Surplus	13,465	18,249	20,759	11,980	16,807
Return on Capital % (3/2)	3.4	4.7	4.6	2.7	4.0

(Table 9 Cont...)

TABLE 9 (Cont.)

Economic Indicators

Group	1	2	3	4	All Farms
	\$	\$	\$	\$	\$
B. <u>Return on Equity</u>					
Farm Capital	374,054	368,156	426,195	414,208	393,900
Cash Deposits & Sundry Debtors	8,621	9,289	9,914	9,036	9,301
Less: Fixed Liabilities	65,285	88,051	71,743	89,591	89,631
Less: Current Liabilities	14,864	15,348	18,631	24,906	18,336
4. Total Farm Equity Capital	302,527	274,048	345,735	308,747	295,234
Net Farm Income	18,655	19,971	22,251	11,825	18,456
Less: Wages of Management	10,711	10,682	11,262	11,142	10,935
5. Equity Surplus	7,944	9,289	10,989	683	7,521
Return on Equity Capital % (5/4)	2.6	3.4	3.2	0.2	2.5

CHAPTER 4

CASH FLOW STATEMENT

The cash flow position of wheat growing farms in New Zealand is given in Table 10.

4.1 Source and Disposition of Cash

Table 10 shows that the available cash on the average New Zealand survey farm was \$34,181, 60 percent of which came from direct farm trading. The other main sources were an increase in term liabilities (19 percent), sale of assets (11 percent) and non farm income (9 percent). Total cash disposition on the average New Zealand survey farm was \$33,552. The components of this expenditure were capital expenditure (41 percent), personal expenditure (46 percent) and loan repayments (12 percent). A cash surplus of \$629 was achieved despite an increase in inventory of \$4,070. Livestock on hand increased by \$4,319 while crop on hand declined by \$249.

In group 1 the cash surplus from farming covered personal expenditure, existing loan repayments and 45 percent of capital expenditure. The balance of the capital expenditure amounting to \$6,789 was financed by an increase in liabilities (\$5,636), sales of assets (\$853) and non farm income (\$1,628), leaving a cash surplus of \$1,326. The increase in fixed liabilities (\$5,636) was greater than loan repayments (\$2,247), therefore an increase in future debt servicing is expected.

TABLE 10
Cash Flow Statement

Group	1		2		3		4		All Farms	
	\$	%	\$	%	\$	%	\$	%	\$	%
Cash Sales										
Wool	31,045		25,312		21,650		9,382		21,378	
Sheep	29,417		29,284		31,027		14,828		26,334	
Cattle	7,876		5,803		1,335		4,002		4,540	
Wheat	970		9,011		16,490		17,746		11,908	
Barley	865		1,789		5,531		6,611		3,724	
Small Seeds			1,178		2,909		15,518		4,823	
Peas			826		2,383		11,278		3,560	
Other Crops	140		354		5,117		4,220		2,402	
Rebate Subsidies	1,347		540		939		429		711	
Sundry - Produce	64		1,262		624		674		821	
- Hay, Grazing	3,308		329		608		504		803	
1 Total Cash Farm Income	75,034		75,688		88,613		85,192		81,004	
Stock Purchases	9,521		9,814		11,380		12,280		10,740	
Cash Farm Expenditure	45,286		44,226		54,305		56,084		49,607	
2 Total Cash Expenditure	54,807		54,039		65,685		68,364		60,347	
Cash Surplus from Farming (1-2)	20,226	71.4	21,649	69.6	22,927	57.0	16,828	46.6	20,657	60.4
Non Farm Income:										
Contracting	622		367		2,257		3,610		1,622	
Interest, Fees etc.	268		1,204		1,311		922		1,050	
Insurance Claims etc.	480		256		1,228		1,010		498	
Tax Refunds	258	5.7	1	5.9	129	11.9	182	15.3	106	9.6
Increase in Term Liabilities:										
Fixed Liabilities	5,067		4,233		5,407		8,157		5,544	
Hire Purchase	569	19.9	548	15.4	2,205	18.9	880	25.0	1,034	19.2
Sale of Assets:										
Mechanised Plant	763		1,208		3,219		2,168		1,871	
Non Mechanised Plant	48		421		148		735		382	
Car			333		535		372		351	
Investments	42	3.0	889	9.1	840	12.2	1,286	13.1	866	10.8
3 Total Available Cash	28,343	100.0	31,109	100.0	40,206	100.0	36,150	100.0	34,181	100.0

(Table 10 Cont...)

TABLE 10 (Cont.)

Cash Flow Statement

Group	1		2		3		4		All Farms	
	\$	%	\$	%	\$	%	\$	%	\$	%
Capital Expenditure:										
Land										
Buildings	4,519		1,182		4,736		2,052		2,665	
Mechanised Plant	5,686		6,054		7,625		7,152		6,651	
Other Plant	2,100		2,807		3,193		4,130		3,126	
Car		45.6	1,549	37.7	1,717	44.3	1,482	41.0	1,385	41.2
Loan Repayments:										
Rural Bank	942		671		497		561		636	
Private	211		1,809		198		2,431		1,365	
Other	835		578		1,243		1,023		877	
Hire Purchase	259	8.3	233	10.8	3,132	13.0	1,927	16.4	1,344	12.6
Personal Expenditure:										
Personal Drawings	8,456		9,835		10,371		8,750		9,543	
Taxation	3,849		4,460		5,379		3,999		4,502	
Sundry Investments	158	46.1	1,515	51.5	876	42.7	2,655	42.6	1,460	46.2
4 Total Cash Disposition	27,016	100.0	30,692	100.0	38,967	100.0	36,162	100.0	33,552	100.0
5 Cash Surplus/Deficit (3-4)	1,326		417		1,239		-12		629	
Change in Inventory:										
Livestock: Sheep	2,851		4,180		4,080		2,938		3,701	
Cattle	890		43		414		-789		42	
Other					1,275		133		344	
Wool			583						232	
Crop: Wheat	-125		-1,267		1,335		-274		-374	
Barley	-400		74		-258		-1,058		-331	
Peas			-333		124		870		102	
Small Seeds			-231		-235		641		1	
Other					-179		1,695		354	
6 Total Inventory Change	3,216		3,049		6,554		3,656		4,070	
7 Adjusted Cash Surplus/Deficit (5+6)	4,542		3,466		7,793		3,644		4,699	

In group 2 the cash surplus from farming covered personal expenditure, loan repayments and 22 percent of the capital expenditure. The balance of the capital expenditure amounting to \$9,044 was financed by an increase in liabilities of \$4,781, sale of assets of \$2,851 and non farm income of \$1,828, resulting in a cash surplus of \$417. This cash surplus was achieved despite an increase in the value of livestock and crop on hand estimated to be \$3,049. The increase in fixed liabilities exceeded loan repayments by \$942.

In group 3 the cash surplus from farming covered personal expenditure, loan repayments and 7 percent of the capital expenditure. The balance of the capital expenditure amounting to \$16,040, was financed by an increase in liabilities (\$7,612), non farm income (\$4,925) and the sale of assets (\$4,742) resulting in a cash surplus of \$1,239. This cash surplus would have been greater if inventory levels had not been increased by \$6,554.

In group 4 the cash surplus from farming covered personal expenditure and 24 percent of the existing loan repayment. The balance of the loan repayments plus capital expenditure amounting in total to \$19,334, was financed by an increase in term liabilities (\$9,037), sale of assets (\$4,561) and non farm income (\$5,724).

4.2 Financing the Cash Deficit

Table 11 shows that the increase in working capital on the average New Zealand survey farm resulted in a \$1,250 increase in cash resources held in the Bank and Stock Firm current accounts, a decrease of \$11 in Income Equalisation deposits, an increase of \$772 in sundry debtors and other short term loans and a decrease of \$1,383 in sundry creditors.

TABLE 11

Financing the Change in Working Capital

Group	1	2	3	4	All Farms
	\$	\$	\$	\$	\$
Change of Funds in Current Account:					
Bank	460	2,676	1,421	-3,605	623
Stock Firm	2,082	-196	-1,480	3,462	627
Other	-521			-42	-74
Sundry Debtors	2,121	-49	960	1,580	846
Income Equalisa- tion Deposits	0	-248	221	145	-11
Sundry Creditors	-2,816	-1,765	117	-1,552	-1,383
Cash Surplus/ Deficit	1,326	417	1,239	-12	629

CHAPTER 5

TRENDS IN FINANCIAL PERFORMANCE

This chapter compares the financial returns of the average New Zealand wheatgrowing farm as determined from wheatgrowers financial statements for the period 1979-80 with the previous year 1978-79.

5.1 Capital Structure

Table 12 shows that total assets increased 14.3 percent to \$1,904 per hectare while total liabilities decreased by 10.1 percent to \$448 per hectare. This resulted in net worth increasing from \$1,419 to \$1,456 per hectare. The major factors affecting the increase in total assets were a 3.9 percent increase in the value of land and buildings and a 19.1 percent increase in the value of plant and machinery. Fixed liabilities increased by 17.0 percent while current liabilities declined by 12.5 percent.

TABLE 12
Capital Structure Comparisons

	1977-78	1978-79	1979-80	Change 1978-78 to 1979-80
	\$/ha	\$/ha	\$/ha	%
Land and Buildings	1,120	1,337	1,390	3.9
Plant and Machinery	101	107	127	19.1
Livestock	156	232	250	7.9
Total Farm Capital	1,337	1,676	1,767	5.4
Plus Crop on Hand	40	42	37	-11.0
Plus Off Farm Assets	108	108	100	-8.0
Total Assets	1,525	1,826	1,904	14.3
Fixed Liabilities	296	313	366	17.0
Current Liabilities	93	94	82	-12.5
Total Liabilities	389	407	448	10.1
Net Worth	1,136	1,419	1,456	2.6

5.2 Farm Income and Expenditure

Table 13 shows that a 31.6 percent increase in gross profit from livestock plus a 15.8 percent increase in the gross profit from other crops offset a constant wheat income and declining sundry income. Total gross farm profit increased by 20.6 percent to \$334 per hectare. Total farm expenditure increased by 14.6 percent to \$252 per hectare. These movements caused net farm income to increase 43.9 percent to \$82 per hectare.

TABLE 13

Farm Income and Expenditure Comparisons

	1977-78	1978-79	1979-80	Change 1978-79 to 1979-80
	\$/ha	\$/ha	\$/ha	%
Gross Farm Profit:				
Livestock	140	155	204	31.6
Wheat	60	52	52	0.0
Other Crops	61	57	66	15.8
Sundry	9	13	12	-7.7
Total	270	277	334	20.6
Farm Expenditure:				
Farm Working Expenses	88	94	110	17.0
Repairs & Maintenance	13	16	18	12.5
Tractor & Vehicle				
Expenses	29	30	36	20.0
Administration & Rates	15	17	18	5.9
Debt Servicing	37	39	42	7.7
Depreciation	23	24	28	16.7
Total	205	220	252	14.6
Net Farm Income:	65	57	82	43.9
Used as Follows:				
Personal Drawings	37	38	43	13.2
Taxation	23	18	20	11.1
Savings	6	1	19	0.0

5.3 Cash Flow Statement

Table 14 shows that a 15.3 percent increase in cash farm income to \$362 per hectare was offset by a 12.9 percent increase in cash farm expenditure. The cash surplus from farming increased by 24.3 percent to \$92 per hectare. Non Farm Income remained constant, term liabilities fell by 11.8 percent and the sale of assets fell by 27.3 percent. These movements resulted in a 5.5 percent increase in total available cash to \$153 per hectare.

The total disposition of cash resources declined by nearly 2.0 percent to \$151 per hectare. The major factors contributing to this situation were a 4.6 percent reduction in capital expenditure, a 17.4 percent reduction in loan repayments offset by a 6.1 percent increase in personal expenditure. The 1978-79 cash deficit of \$9 per hectare was reduced to a cash surplus of \$2 per hectare in 1979-80. In addition the value of crop and livestock on hand at the end of the year increased by \$18 per hectare resulting in an adjusted surplus of \$20 per hectare.

TABLE 14
Cash Flow Statement Comparisons

	1977-78	1978-79	1979-80	Change 1978-79 to 1979-80
	\$/ha	\$/ha	\$/ha	%
Total Cash Farm Income	291	314	362	15.3
Total Cash Farm Expenses	210	240	271	12.9
Cash Surplus from Farming	81	74	92	24.3
Non Farm Income	18	15	15	0.0
Increase in Term Liabilities	34	34	30	-11.8
Sale of Assets	20	22	16	-27.3
Total Available Cash	153	145	153	5.5
Capital Expenditure	74	65	62	-4.6
Loan Repayments	20	23	19	-17.4
Personal Expenditure	69	66	70	6.1
Total Cash Disposition	163	154	151	-2.0
Cash Surplus/Deficit	-10	-9	2	122.2
Inventory Change	7	7	18	157.1
Adjusted Surplus/Deficit	-3	-2	20	

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APPENDIX A

SURVEY DEFINITIONS AND DATA TREATMENT

Capital Structure

1. Value of land and buildings was taken from the latest Government valuation figures and updated using their "Farmland Sales Price Index". Valuations are taken as being at 1 July 1979.
2. Plant and machinery valuations were taken from the depreciation schedule of the 1979-80 financial statement. They exclude cars, boats and caravans as these items were included under Other Assets.
3. The following per head figures have been used to assess the value of livestock on hand at the end of the 1979-80 financial year:

Sheep:	Ewes	\$25
	Hoggets	\$18
Cows		\$275
2 yr Cattle		\$300
Yearlings		\$200
Calves		\$100
Bulls		\$300
4. Values of crop on hand were obtained from the crop accounts for the 1979-80 year.
5. Off-farm assets were valued as at the end of the 1979-80 financial year.
6. Both fixed and current liabilities were as recorded in the balance sheet at the end of the 1979-80 year.

Gross Farm Income

1. Gross income for wool, sheep, cattle, wheat, barley small seeds, other crops, produce and sundry income, were assessed as follows:

Gross Income = Cash Sales
 + Stock on hand at end of year
 - Purchases
 - Stock on hand at start of year

2. Rebates, subsidies and contracting are as presented in the financial statements for 1979-80.

Gross Farm Expenditure

1. Gross farm expenditure is as presented in the financial statement for 1979-80 with the following adjustments if applicable:

- (i) Appropriation of private car expenses.
- (ii) Deletion of managerial salaries.
- (iii) Deletion of special depreciation allowances.

2. Breakdown of farm expenditure items can be summarised as follows:

- (i) Repairs and maintenance includes that done to buildings, fences, tracks, culverts etc. plus any development expenditure.
- (ii) Tractor and vehicle expenses includes all expenses associated with both mechanised and non-mechanised plant and machinery.

(iii) Administration, rates, insurance includes all administrative, power, telephone and overhead expenses.

(iv) Debt Servicing includes all interest and rent charges.

3. Savings is the residual after personal drawings and taxation have been deducted from net farm income.

Economic Indicators

Wages of management are assessed as \$7,000 plus 1 percent of total farm capital.

Cash Flow Statement

In assessing the cash flow statement, an attempt was made to delete from the financial statement:

- (i) All non-cash transactions.
- (ii) All current assets subject to valuation, that is, livestock and crop on hand.

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