Ministry for Primary Industries
Manatū Ahu Matua

CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF

Key results from the Ministry for Primary Industries 2012 sheep and beef monitoring programme

KEY POINTS

- The 2011/12 season provided the best pasture growth and returns for sheep and beef farmers in this region for many years. Some dryland farmers believe it was the best year in their memory.
- Lambing increased nine percentage points to a record 125 percent.
- Better prices and increased production for lamb, other sheep, wool and beef from the good season lifted net cash income by $97 900 (23 percent) to $532 000 in 2011/12.
- Farm working expenses rose $48 900 (19 percent), with increases in the cost of labour and fertiliser prices, and catch-up spending on fertiliser, weed and pest control and regrassing.
- Farmers plan to keep expenses tightly controlled for the 2012/13 year. Some expenses are expected to increase while spending on discretionary items will be reduced to ensure a break-even cash budget.
- Farm profit before tax jumped to $186 300 in 2011/12 but is budgeted to drop to $137 100 in 2012/13, which is still $28 700 ahead of 2010/11. The extra profit has been used for debt reduction, capital purchases and farm development.

Table 1: Key parameters, financial results and budget for the Canterbury/Marlborough hill country sheep and beef model

Year ended 30 June	2008/09	2009/10[1]	2010/11	2011/12 actual	2012/13 budget
Effective area (ha)	1 397	1 397	1 397	1 397	1 397
Breeding ewes (head)	2 614	2 600	2 600	2 600	2 780
Replacement ewe hoggets (head)	664	650	650	680	700
Other sheep (head)	0	389	240	240	241
Breeding cows (head)	0	192	190	193	193
Rising one-year cattle (head)	143	140	130	135	135
Other cattle (head)	30	73	66	74	74
Opening sheep stock units (ssu)	3 318	3 380	3 266	3 569	3 805
Opening cattle stock units	2 048	2 022	1 942	2 095	2 095
Opening total stock units (su)	5 482	5 487	5 268	5 724	5 960
Stocking rate (stock unit/ha)	3.9	3.9	3.8	4.1	4.3
Ewe lambing (%)	111	118	116	125	124
Average lamb price ($/head)	70.51	70.02	87.41	100.88	88.43
Average store lamb price ($/head)	58.00	61.50	82.50	96.00	80.00
Average prime lamb price ($/head)	79.00	74.00	97.00	103.00	93.00
Average wool price ($/kg)	3.10	3.28	4.10	4.52	3.67
Total wool produced (kg)	15560	15730	14105	16170	16915
Wool production (kg/ssu)	4.7	4.7	4.3	4.5	4.4
Average rising two-year steer ($/head)	1025	700	890	883	930
Average cull cow ($/head)	562	643	750	997	607
Net cash income ($)	362 009	375 894	434 238	532 090	511 087
Farm working expenses ($)	222 964	230 784	258 032	306 893	302 361
Farm profit before tax ($)	46 854	49 441	108 346	186 303	137 089
Farm surplus for reinvestment ($)[2]	35 519	20 500	39 263	79 083	38 328

Notes

1 The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

2 Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as farm profit after tax plus depreciation plus stock adjustments less drawings.

Table 2: Canterbury Marlborough hill country sheep and beef model budget

	2011/12			2012/13 budget		
	Whole farm ($)	Per hectare ($)	Per stock unit[1] ($)	Whole farm ($)	Per hectare ($)	Per stock unit[1] ($)
Revenue						
Sheep	304 882	218	85.42	301 922	216	79.35
Wool	73 102	52	20.48	62 049	44	16.31
Cattle	125 870	90	60.08	110 206	79	52.60
Grazing income (including hay and silage sales)	26 660	19	4.66	31 810	23	5.34
Other farm income	19 000	14	3.32	22 000	16	3.69
Less:						
Sheep purchases	8 250	6	2.31	7 500	5	1.97
Cattle purchases	9 174	7	4.38	9 400	7	4.49
Net cash income	**532 090**	**381**	**92.95**	**511 087**	**366**	**85.75**
Farm working expenses	**306 893**	**220**	**53.61**	**302 361**	**216**	**50.73**
Cash operating surplus	**225 197**	**161**	**39.34**	**208 727**	**149**	**35.02**
Interest	53 047	38	9.27	50 050	36	8.40
Rent and/or leases	5 250	4	0.92	5 500	4	0.92
Stock value adjustment	33 315	24	5.82	0	0	0.00
Minus depreciation	13 913	10	2.43	16 088	12	2.70
Farm profit before tax	**186 303**	**133**	**32.55**	**137 089**	**98**	**23.0**
Income equalisation	0	0	0.00	0	0	0.00
Taxation	24 818	18	4.34	53 848	39	9.04
Farm profit after tax	**161 485**	**116**	**28.21**	**83 241**	**60**	**13.97**
Allocation of funds						
Add back depreciation	13 913	10	2.43	16 088	12	2.70
Reverse stock value adjustment	- 33 315	- 24	-5.82	0	0	0.00
Drawings	63 000	45	11.01	61 000	44	10.24
Farm surplus for reinvestment[2]	**79 083**	**57**	**13.82**	**38 328**	**27**	**6.43**
Reinvestment						
Net capital purchases	27 000	19	4.72	19 500	14	3.27
Development	12 770	9	2.23	7 100	5	1.19
Principal repayments	45 938	33	8.03	9 492	7	1.59
Farm cash surplus/deficit	**- 6 625**	**- 5**	**-1.16**	**2 236**	**2**	**0.38**
Other cash sources						
Off-farm income	13 000	9	2.27	13 000	9	2.18
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	**6 375**	**5**	**1.11**	**15 236**	**11**	**2.56**
Assets and liabilities						
Farm, forest and building (opening)	4 700 000	3 364	821.06	4 750 000	3 400	796.99
Plant and machinery (opening)	83 000	59	14.50	97 550	70	16.37
Stock valuation (opening)	914 402	655	159.74	947 717	678	159.02
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	**5 697 402**	**4 078**	**995.30**	**5 795 267**	**4 148**	**972.37**
Total assets (opening)	**5 937 402**	**4 250**	**1037.22**	**6 035 267**	**4 320**	**1012.64**
Total liabilities (opening)	851 000	609	148.66	775 062	555	130.05
Total equity (farm assets - liabilities)	**4 846 402**	**3 469**	**846.63**	**5 020 205**	**3 594**	**842.33**

Notes

1 Sheep stock units are used in the per stock calculation for sheep and wool income and sheep purchases. Cattle stock units are used for cattle income and purchases. The remainder of the time total stock units are used.

2 Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as farm profit after tax plus depreciation plus stock adjustments less drawings.

Table 3: Canterbury Marlborough hill country sheep and beef model expenditure

	2011/12			2012/13 budget		
	Whole farm ($)	Per hectare ($)	Per stock unit ($)	Whole farm ($)	Per hectare ($)	Per stock unit ($)
Farm working expenses						
Permanent wages	34 000	24	5.94	35 958	26	6.03
Casual wages	6 000	4	1.05	6 095	4	1.02
ACC	2 109	2	0.37	1 994	1	0.33
Total labour expenses	**42 109**	**30**	**7.36**	**44 046**	**32**	**7.39**
Animal health	19 920	14	3.48	21 757	16	3.65
Breeding	1 145	1	0.20	1 311	1	0.22
Electricity	9 779	7	1.71	11 600	8	1.95
Feed (hay and silage)	14 948	11	2.61	10 970	8	1.84
Feed (feed crops)	5 859	4	1.02	6 095	4	1.02
Feed (grazing)	1 758	1	0.31	1 036	1	0.17
Feed (other)	3 515	3	0.61	4 388	3	0.74
Fertiliser	53 907	39	9.42	50 103	36	8.41
Lime	4 800	3	0.84	4 000	3	0.67
Cash crop expenses[1]	1 000	1	0.17	1 000	1	0.17
Freight (not elsewhere deducted)	4 900	4	0.86	5 200	4	0.87
Regrassing costs	10 100	7	1.76	10 300	7	1.73
Shearing expenses[2]	20 552	15	5.76	20 947	15	5.51
Weed and pest control	17 577	13	3.07	15 000	11	2.52
Fuel	15 367	11	2.68	16 066	12	2.70
Vehicle costs (excluding fuel)	11 176	8	1.95	11 875	9	1.99
Repairs and maintenance	26 700	19	4.66	21 700	16	3.64
Total other working expenses	**223 003**	**160**	**38.96**	**213 347**	**153**	**35.80**
Communication costs (phone and mail)	2 500	2	0.44	2 600	2	0.44
Accountancy	4 300	3	0.75	4 400	3	0.74
Legal and consultancy	2 700	2	0.47	2 800	2	0.47
Other administration	3 850	3	0.67	3 850	3	0.65
Water charges (irrigation)	300	0	0.05	350	0	0.06
Rates	12 600	9	2.20	14 000	10	2.35
Insurance	7 600	5	1.33	9 500	7	1.59
ACC employer	4 631	3	0.81	4 467	3	0.75
Other expenditure	3 300	2	0.58	3 000	2	0.50
Total overhead expenses	**41 781**	**30**	**7.30**	**44 967**	**32**	**7.54**
Total farm working expenses	**306 893**	**220**	**53.61**	**302 361**	**216**	**50.73**
Calculated ratios						
Economic farm surplus (EFS[3])	169 600	121	29.63	117 639	84	19.74
Farm working expenses/NCI[4]	58%			59%		
EFS/total farm assets	3.0%			2.0%		
EFS less interest and lease/equity	2.3%			1.2%		
Interest+rent+lease/NCI	11.0%			10.9%		
EFS/NCI	31.9%			23.0%		
Wages of management	75 000	54	13.10	75 000	54	12.58

Notes

1 Includes forestry expenses.

2 Shearing expenses per stock unit based on sheep stock units.

3 EFS is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: $31 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of $75 000.

4 Net cash income.

FINANCIAL PERFORMANCE OF THE CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF FARM MODEL IN 2011/12

Higher returns in 2011/12 for lambs, sheep, wool and beef increased the cash operating surplus for the Canterbury/Marlborough hill country sheep and beef farm model by $49 000 (28 percent) to $225 200. Farm working expenses increased by $48 900, but the rise in revenue was more than twice this amount at $97 900.

Best season for many years

The 2011/12 season was the best for many years. Pasture growth was strong in spring and early summer. It continued well through February providing feed at a time when pasture growth rates normally drop under moisture stress. Lambing was generally good, with favourable lambing conditions. However, some properties with late lambing were affected by storms in mid-September and October. There was regular summer rainfall, with no significant dry spells. This resulted in high pasture covers that lost their quality in late summer.

SHEEP RETURNS INCREASE

Sheep sales less purchases increased 17 percent from the previous year, with a lift in prices for all classes of stock and increased lamb numbers following a record lambing. Strong demand from meat processors and for breeding lifted the prices for all classes of stock except for during autumn, when prices for store lambs fell. Lamb prices averaged $101 per head, up 15 percent on last year. Cull ewe prices were exceptionally high, averaging $104 per head. Ewe hogget prices increased $46 from the previous year to $138 per head. Increased lamb survival, with only isolated spring storms combined with good mating weights in autumn 2011, gave a record 125 percent lambing. This rate was well up on the previous three years, which ranged from 111 percent to 118 percent. Average lamb carcass weight was up slightly, although lamb growth was not as good as expected given the exceptional pasture production, due in part to lower feed quality.

The farms monitored sell approximately 60 percent of lambs prime and 40 percent on the store market in most years. However, in 2011/12, the good pasture growth enabled farmers to sell around 76 percent of lambs prime and only 24 percent as stores. Store lamb prices were strong early in the season, with typical sales at $3.50 to $3.60 per kilogram liveweight ($80 to $100 per lamb) in Canterbury during November, with higher prices paid in Marlborough. Store lamb prices dropped from February onwards as the prime lamb schedule dropped and a late harvest on cropping farms reduced demand. By May, typical store lamb prices were $2.80 to $2.90 per kilogram, or $55 to $65 per head.

The prime lamb schedule followed the usual trend of declining over summer and autumn, falling from a peak of $8.00 per kilogram carcass weight in December to $5.60 per kilogram in May. This reduced income for some farmers as they would have received more for a store lamb earlier in the season than they did finishing the lambs in late autumn.

Wool weights up and priced peaked

The average wool weight lifted 0.2 kilograms per sheep stock unit, due to higher feeding levels and extra lambs shorn. Prices for New Zealand strong wool peaked early in the season at over $6.50 per kilogram clean, before dropping again. The price in May 2012 was 35 percent lower than the same time the previous year. The average wool price was $4.52 per kilogram for the farms monitored, 38 percent higher than the $3.28 average in 2009/10. This wool price includes some mid-micron wool (raising the average price) but is predominantly for crossbred wool.

Stock numbers have increased

Sheep stock units have increased 9 percent in 2011/12. Extra hoggets were retained then mated and older ewes were held over following two good seasons and good feed reserves. There is a general focus on more lambs on the ground for the 2012/13 season. These hill country farmers do not want triplets and the associated lower survival rates if there are spring storms. They prefer twins so would rather put more animals on to reduce potential lambing percentages. The extra ewes and hoggets are regarded as trading stock that can be sold at any time if feed is short.

Grazing, cattle and forestry all contributed to improved revenue

Grazing of stock is now an important source of income for the monitored farmers. Grazing income may include sheep or beef, not just dairy carry-over cows and dairy replacement heifers. Several farmers sold high-value store lambs early in the season then finished additional lambs on grazing contracts at a price per kilogram of liveweight gain.

Cattle sales net of purchases increased $18 300 (19 percent), following the increase in stock on hand on 1 July 2011 and the early sale of calves in autumn 2012 that took advantage of the high calf prices. When prices are lower, farmers tend to retain and finish calves rather than sell them.

Several monitored farmers have taken advantage of forestry opportunities and have sold either logs or carbon credits.

SIGNIFICANT RISE IN EXPENDITURE

Farmers planned to keep expenses tightly under control in 2011/12; however, farm working expenses increased $48 900 (19 percent). There were significant increases in wages and insurance and catch-up spending on fertiliser, weed and pest control and regrassing. Increases in operating costs included electricity, freight, fuel, vehicle and rates. There has been a 30 percent increase in insurance following the Canterbury earthquakes.

Permanent wages and shearing wages have increased. Farmers commented this was due to competition for staff with the dairy industry and labouring jobs as part of the Christchurch rebuild. Animal health costs increased $1300, or 7 percent, with more animals to drench as stock were held for longer, and more expensive drench families used to slow down drench resistance. The cost of National Animal Identification and Tracing tags has been included as animal health.

Feed costs increased 7 percent as more pasture was conserved in the good growing season and larger areas of forage crops were grown. These increases were offset by reduced grazing costs. Strong summer pasture growth resulted in more silage and baleage being made than usual and some pasture surplus being harvested for hay. Farmers have been able to rebuild feed reserves of baleage, straw and hay. Some farmers have put away extra silage reserves for the longer term. There are concerns as to how long some of the conserved feed will last, especially some of the poorer quality baleage.

Improved returns have allowed catch up on maintenance

Improved prices and production allowed farmers to significantly lift fertiliser expenditure in 2011/12 (38 percent). Some lime and sulphur pellets have been used. This is the second year there has been catch-up expenditure for repairs and maintenance, particularly of buildings, fences and tracks. Farmers are aware that Environment Canterbury is proposing that streams and rivers be fenced off to exclude stock on the more intensive areas. At this stage, many hill country farmers are unsure how this will affect their properties, but they are starting to repair existing fences and, in some cases, put in new fences, as part of their development spending.

The amount spent on regrassing has almost doubled (92 percent increase) as farmers see the benefits of higher production levels. The high pasture growth season has also allowed a lot of natural pasture reseeding. It is vital this natural reseeding occurs at least every five years to maintain pasture production on the hill country. Expenditure on weeds and pests has lifted over time. Factors in this are the spraying of scrub and woody weeds and the higher inputs used on feed crops, such as kale, to ensure high yields for sale as grazing.

Table 4: Canterbury Marlborough hill country sheep and beef model cash farm

Year ended 30 June	2008/09 ($)	2009/10 ($)	2010/11 ($)	2011/12 ($)	2012/13 budget ($)
Sheep sales less purchases	183 066	202 729	253 378	296 632	294 422
Cattle sales less purchases	106 507	105 831	98 430	116 696	100 806
Wool	48 236	51 594	57 831	73 102	62 049
Grazing income (including hay and silage sales)	10 500	5 040	5 600	26 660	31 810
Other income	13 700	10 700	19 000	19 000	22 000
Net cash income	362 009	375 894	434 238	532 090	511 087

Note
The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

Interest rates continue to fall

Interest costs fell $5300 (9 percent) as fixed-term mortgages finished and moved onto floating or short-term fixed rates of less than 6.5 percent. Debt servicing for the farm model, including rent and lease, dropped to 11 percent of the net cash income, from 15 percent in 2010/11, as a result of increased income and reduced interest costs. Equity levels on these farms are high, at 84 percent.

IMPROVED NET RESULT REINVESTED ON-FARM AND IN REDUCING DEBT

Farm profit before tax jumped to $186 300 in 2011/12, an increase of $78 000, the highest level for many years. This has enabled reinvestment in the farm including $27 000 of capital spending, often on vehicles, plant and machinery, $12 800 on development, and principal repayments of $45 900 including some voluntary repayments of flat mortgages. The increased farm profit has allowed farmers to increase drawings by 13 percent to $63 000.

Tax increased to $24 800 for 2011/12, and many farmers will have a large terminal tax payment due in 2013.

Return on assets was only 3 percent in a season that has provided the best returns in many years. The demand for dairy land is continuing to push up the price for sheep and beef properties, suppressing returns on capital despite the high income.

BUDGET FINANCIAL PERFORMANCE OF THE CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2012/13

Cash operating surplus for the Canterbury/ Marlborough hill country sheep and beef farm model is budgeted at $209 000, a drop of 7 percent compared with the exceptional 2011/12 year. Forecast net cash income and the cash operating surplus are both still better than the 2010/11 year.

FARM REVENUE IS FORECAST TO DROP 7 PERCENT

Lamb, sheep, wool and cattle revenue is budgeted to be lower for 2012/13, with net cash income falling $21 000 (4 percent), compared with 2011/12. Increased grazing revenue of $5200 is expected to partly offset drops in these other items.

Farmers are budgeting on a $12 decrease in the average lamb price in 2012/13, expecting $93 for prime lambs and $80 for store lambs. They anticipate a return to the usual policy of selling approximately 60 percent of lambs prime and the remaining 40 percent store. Sheep revenue is expected to fall 1 percent from 2011/12.

Farms are well set up for 2012/13

Farmers are expecting a compact lambing and another high lambing of 124 percent in spring 2012. Ewes were in good condition going into winter. In some areas, flushing may have been limited by poor-quality pasture, preventing a rising plane of nutrition. A compact lambing will increase the risk of loss from storms during lambing so the actual lambing percentage may be lower. Hogget mating is up due to a favourable season, with extra ewe hoggets and more of them reaching the minimum live weight for mating. Increased lambing and stable numbers mean an extra 300 lambs are expected to be sold in 2012/13.

Cattle are 20 to 30 kilograms heavier so are expected to reach higher carcass weights resulting in increased cattle returns per head. However, there are fewer cattle for sale as more calves were sold in autumn 2012, so cattle revenue is expected to fall 12 percent.

Farmers are budgeting for high wool prices to continue but may be being optimistic. Industry commentators are anticipating wool prices to drop nearly 20 percent reflecting the lower prices at the end of the 2011/12 season. Wool price in the model budget is expected to be $3.67 per kilogram, down from $4.52 per kilogram in 2011/12. Wool weights should remain above average due to the good feed levels in summer and autumn 2012.

FARM EXPENDITURE WILL BE RESTRAINED

Farmers are budgeting on farm working expenses to remain at similar levels, at $216 per hectare, in 2012/13. Further increases are expected in wages, animal health, electricity, freight, fuel, rates and insurance. To offset these cost increases, farmers are planning to reduce the quantity of fertiliser and lime applied and reduce spending on repairs and maintenance and weed control.

The fertiliser budget includes the cost of freight and spreading. Farmers anticipate these costs will go up so plan to decrease the volume of fertiliser applied. The planned application of 100 tonnes of fertiliser is nearly 20 percent above maintenance for the farm model, further improving soil fertility. If the revenue is lower than budgeted, fertiliser expenditure will decrease. The amount spent on feed will depend on whether farmers need to use their current reserves through winter and early spring or are able to carry these forward. The total feed budget is expected to fall 14 percent, reflecting a more usual season requiring less expenditure on conserving surplus pasture.

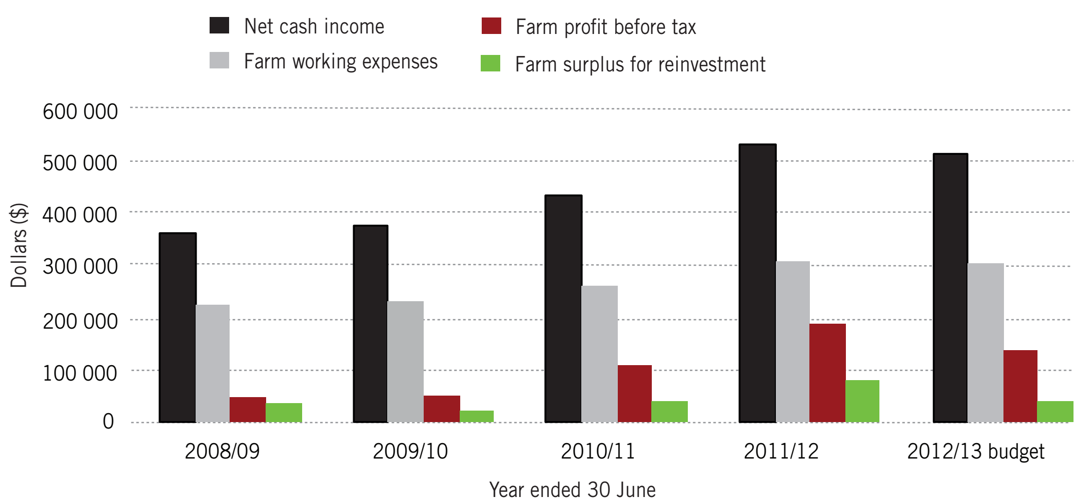
Tax planning is important

Following the high farm profit before tax in 2011/12, farmers will face a tax bill of $53 800 in 2012/13, more than doubling 2011/12 payments. Budgeted tax includes increased terminal and provisional tax, and unless farmers revise their provisional tax they could pay more than necessary. Farm accountants commented that tax planning will be important to their farming clients this year. Most farmers no longer have tax losses or write-offs carried forward from previous years to reduce their tax liability.

NET RESULT DETERIORATES

The farm surplus for reinvestment is predicted to fall to $38 000, 52 percent lower than in 2011/12, but still well above results for most of the previous 10 years. Farmers are still planning for capital purchases, development spending and principal repayments but, in total, these are expected to be at less than half 2011/12 levels.

Figure 1: Canterbury/Marlborough hill country sheep and beef model profitability trends



INFORMATION ABOUT THE MODEL

This model represents 425 hill country farms in Canterbury and Marlborough. Farms have a proportion of land that is in tussock or too steep to be cultivated by two-wheeled tractors. They run mid-micron or crossbred sheep according to the class of country and farmer preference. They run breeding flocks and herds and produce a proportion of store stock.

Please note that the sample of farms has changed between 2008/09 and 2009/10. Caution should be taken if comparing data between these two years.

Farm monitoring models calculate sheep stock units based on lambing performance. One standard sheep stock unit is based on a ewe lambing greater than 111 and less than 120 percent. Based on the lambing percentage for this model breeding ewe numbers were multiplied by 1.1 stock units in both years. Any per stock unit calculations or indices should take this into account when comparing to other sources of financial information.

For further information on the model contact **Gillian.Mangin@mpi.govt.nz**

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