DAIRY INVESTMENT FUND LIMITED

GT & CO

DAIRY INDUSTRY INVESTMENT REVIEW

OCTOBER 2010

Dairy Investment Fund Limited (DIFL) is a specialised long-term private equity investor in the de-regulating New Zealand dairy sector.

The Grate Cheese Company

New Zealand Made KAIMAI fresh milk cheeses

Te Mata Cheese Company

OpenCountry™

DAIRY INVESTMENT FUND LIMITED

Contents

2010-2011 Review

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SECTION ONE

Industry data

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Industry data

Value of the industry

Industry value is broadly correlated to NZ milk price

2008

Value peaked at $73b

Payout at $7.66/kg ms

Industry EBIT at $6b

Farm value per ha at $35,000

2009

Industry EBIT crunched to $2.5b

(with interest costs above $3b)

2010

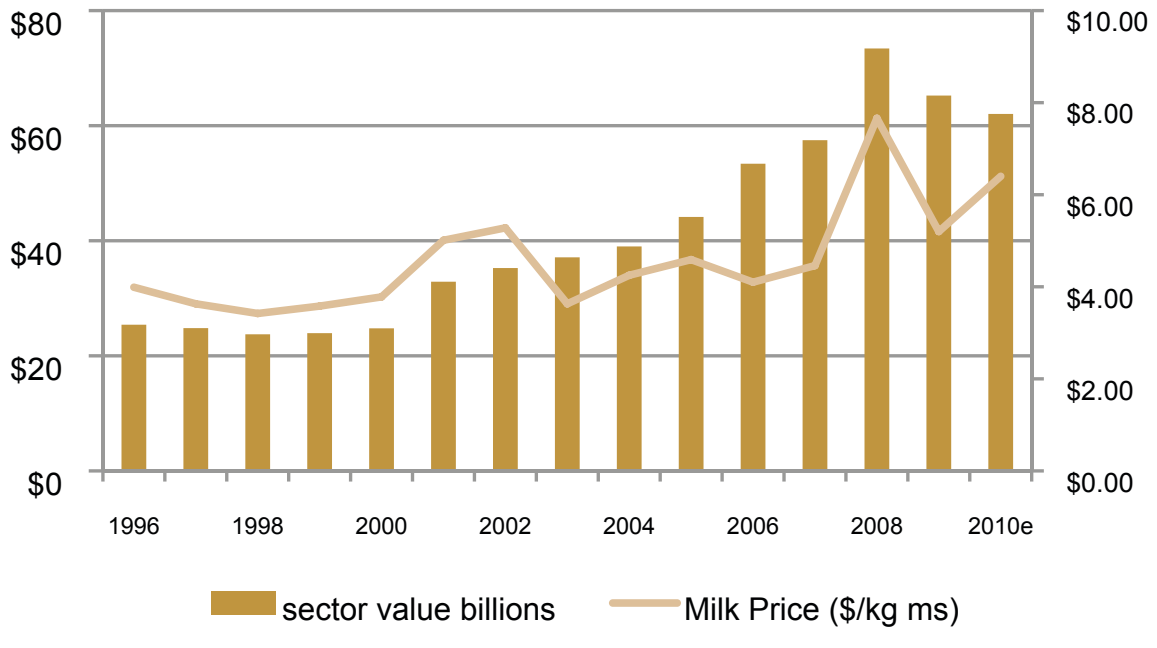
Value down 15% to $62b (even though more land, more cows and more milk)

Industry EBIT up to $3.8 b

Farm value per ha at $27,000

Global financial crisis plus fall in milk price has had an obvious effect on farm value

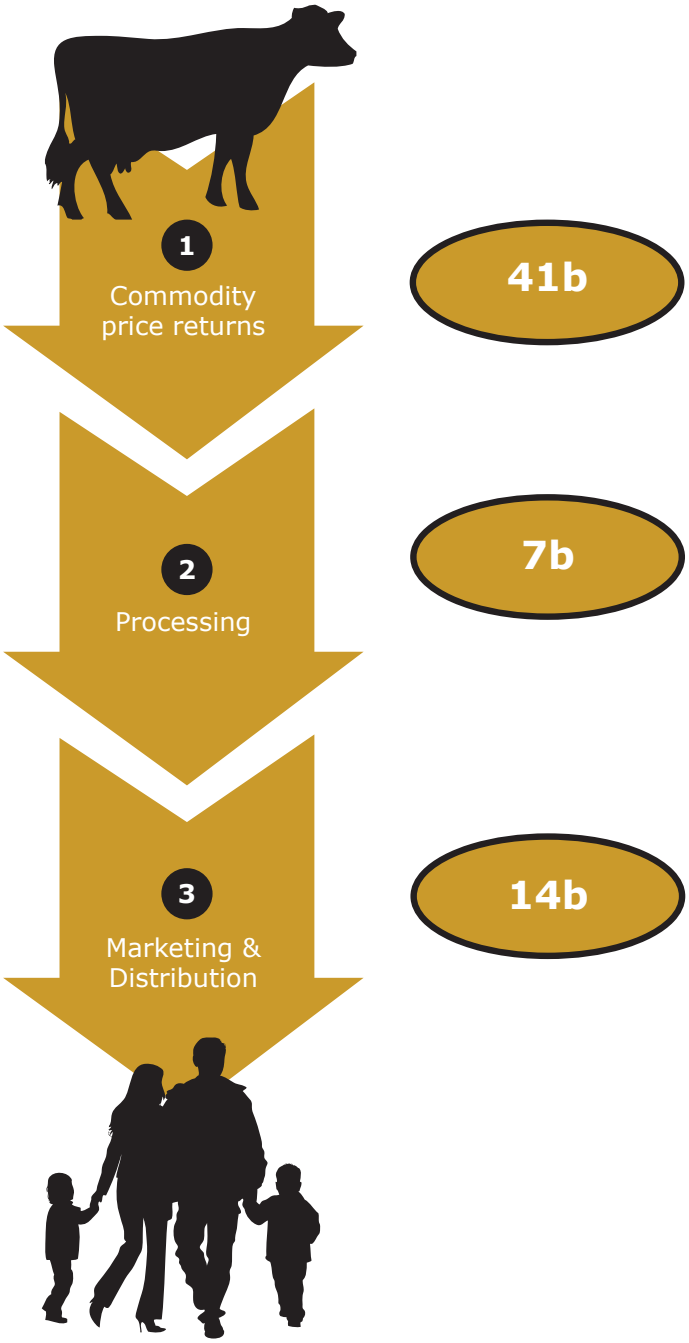
(Sector Value = Farms + Cows + Processors + Distributors + Marketers)



Industry data

What assets make up the industry?

Cow to customer unbundled into 3 sectors



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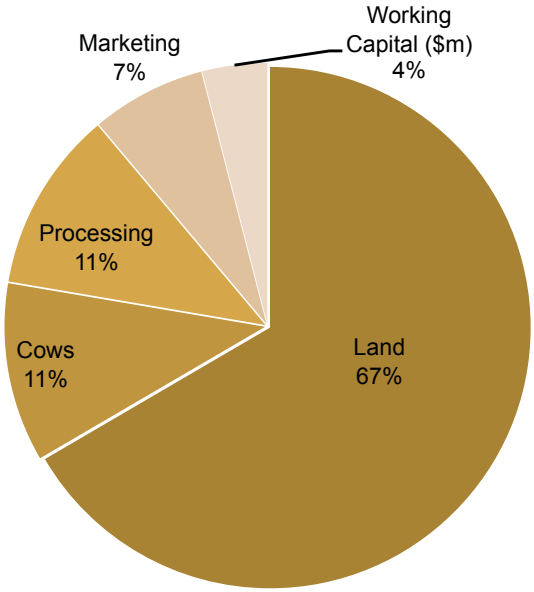
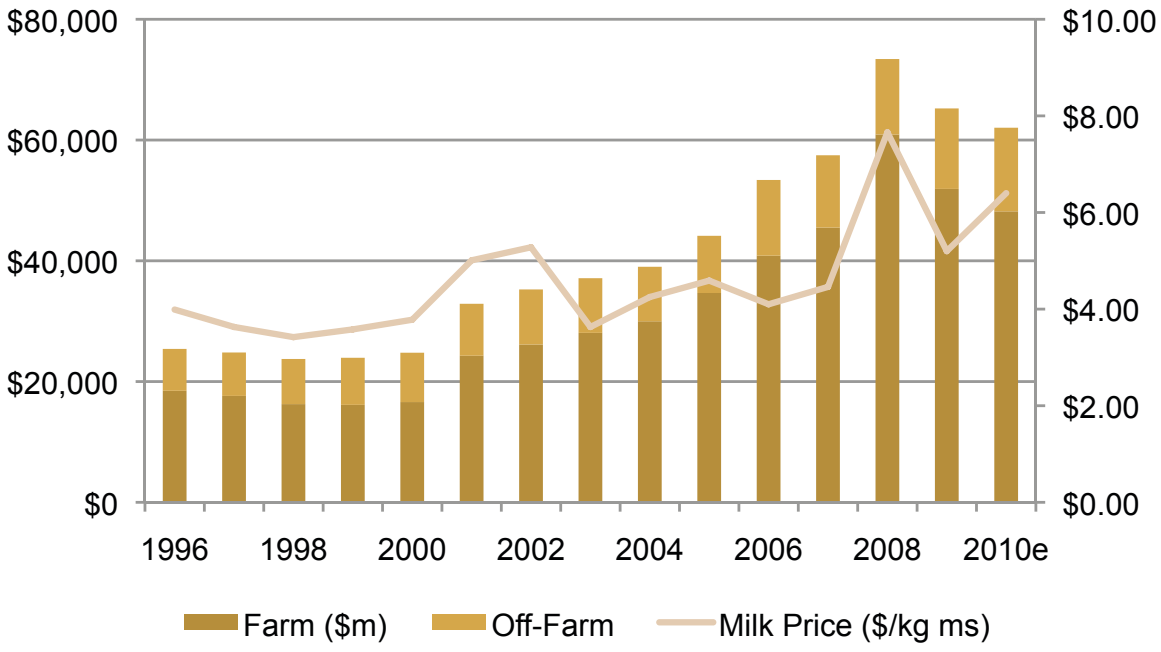
Industry data

What assets make up the industry?

Off-farm assets 20% (est) or $13b of industry value and growing in size.





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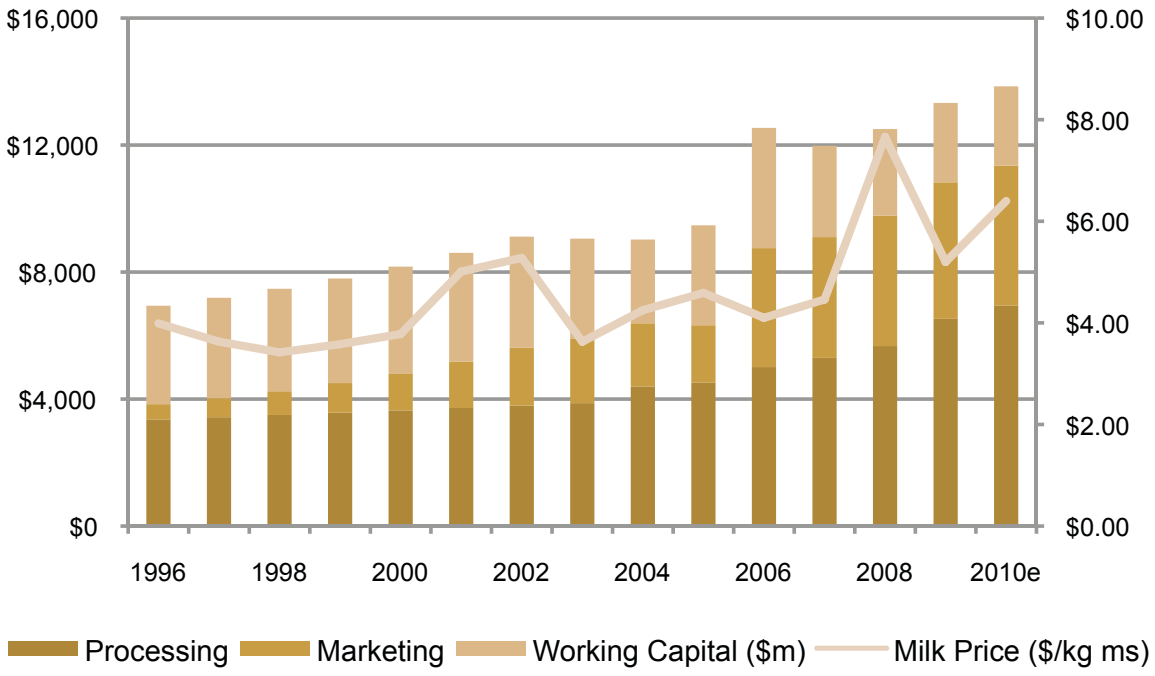
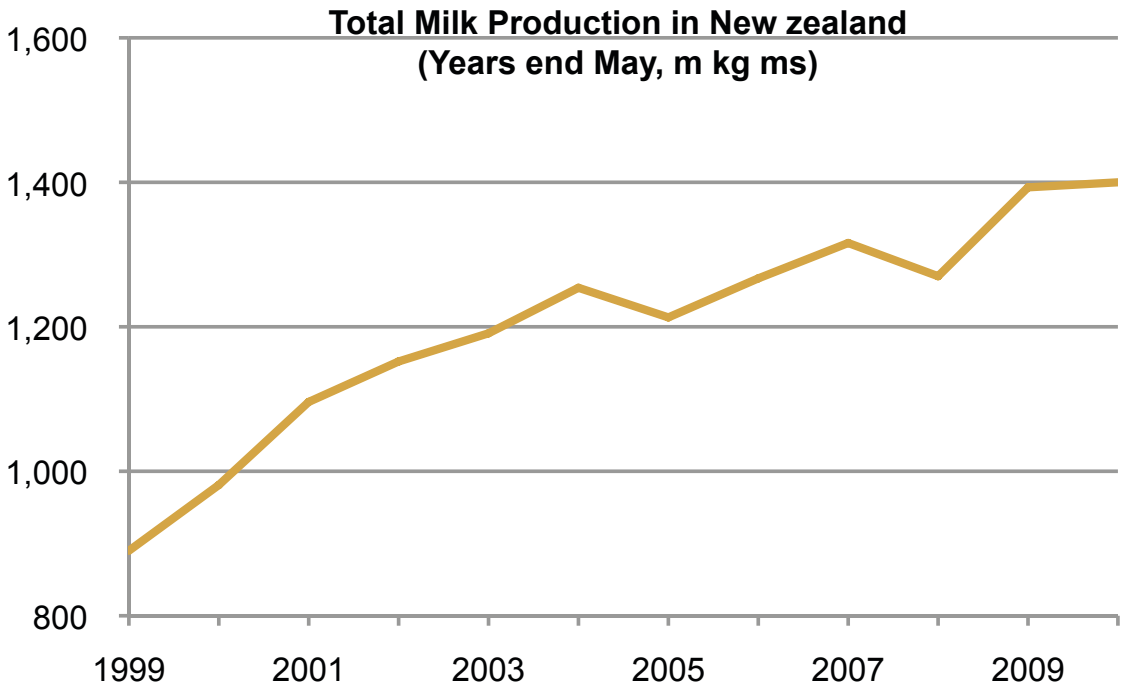
Industry data

What assets make up the industry?

Growth in off-farm investment driven by increased milk volume and value.





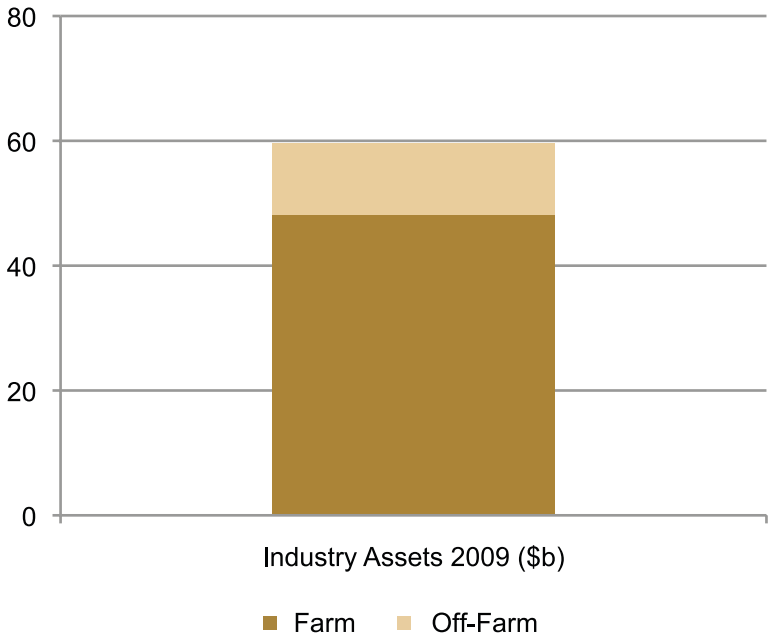
Industry data

How is the industry funded?

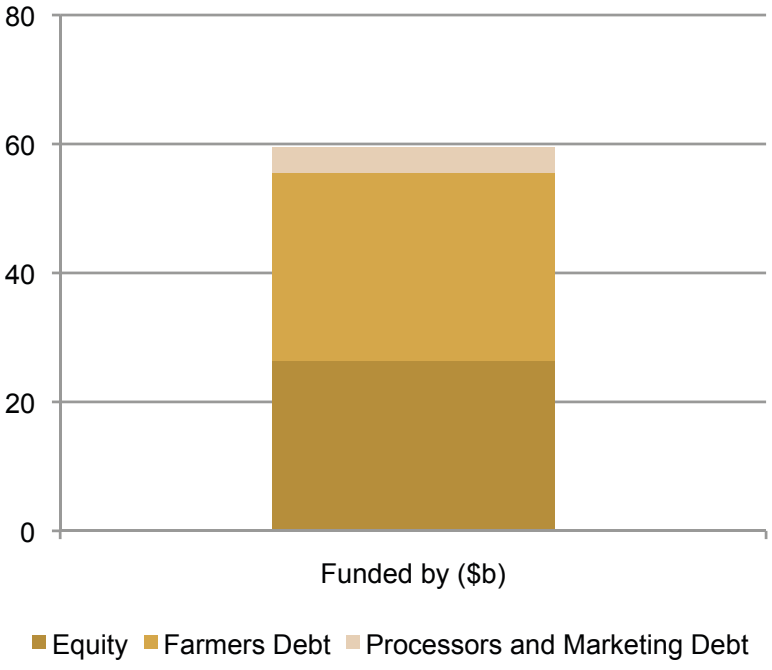
Most of the debt is on farm...

Farm assets represented 80% of the sector.

Fonterra owns 90% of off-farm assets.



Total debt is $33b... most of that lent directly to farmers but the Fonterra debt is effectively guaranteed by Fonterra farmer shareholders.



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Industry data

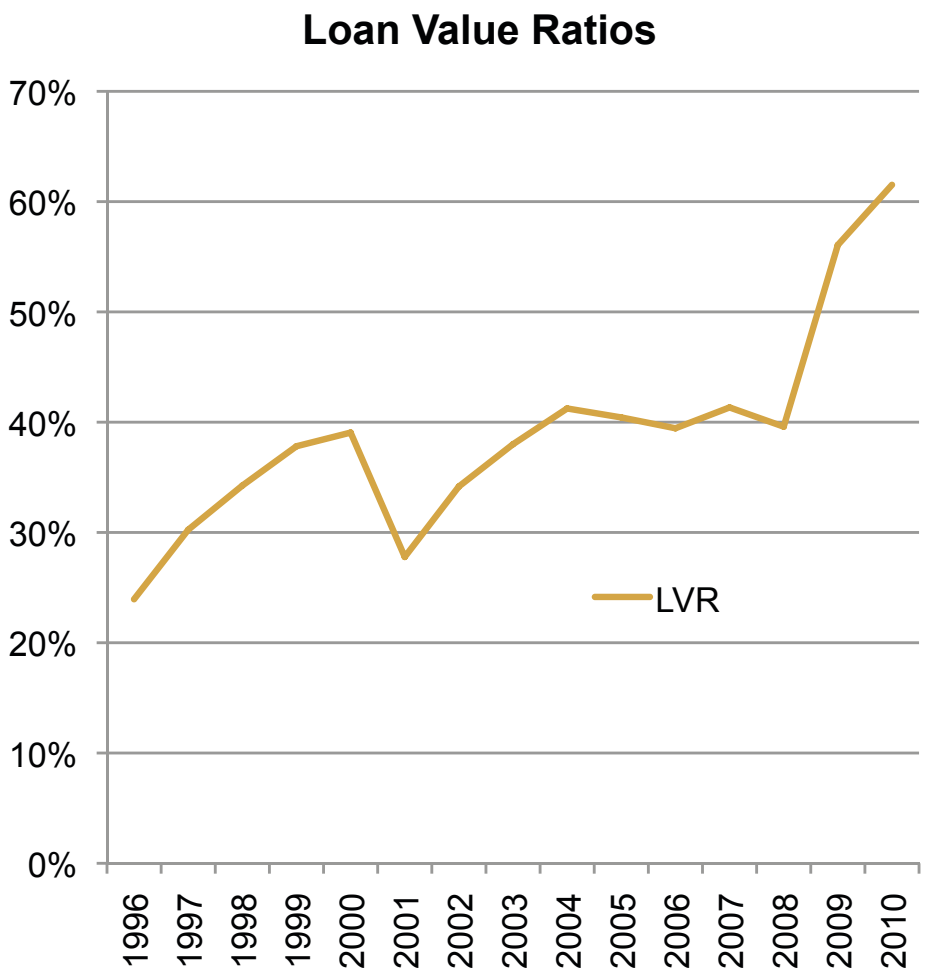
How is the industry funded?

Too much debt!

Debt is now funding just above 60% of industry value

That calculation is based off (average) farm values of NZ$27,000 per Ha

Farm values in our opinion will fall lower in next 12 months....so equity will get skinnier and bank exposures will remain too large as a % of total assets.... regulatory issues will limit current industry lenders from increasing their exposures



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Industry data

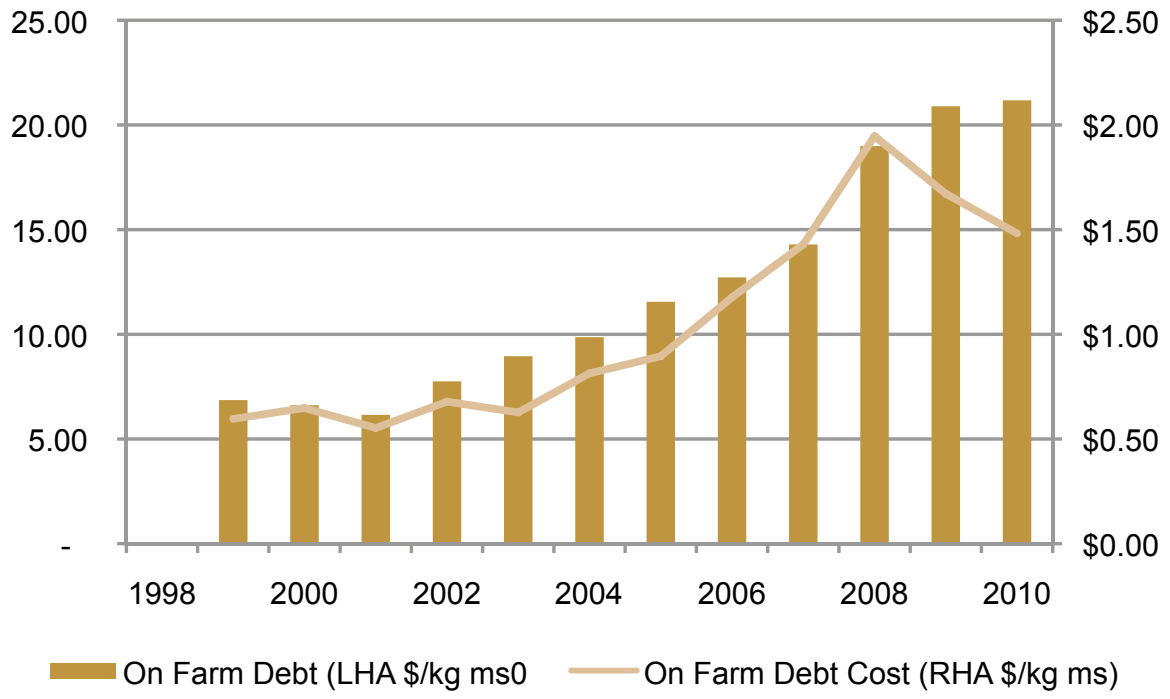
How is the industry funded?

On farm, AVERAGE debt has grown to $20 per kg ms but stabilising. Nominal cost of debt is falling but credit margins are widening significantly.

That said, debt servicing as percentage of gross income has increased from around 15% in 1996 to an estimated 25% in 2010.

Debt servicing cost buffered 2005 to 2008 as a significant proportion of debt fixed at low rates (2002 to 2004) but similar amount also fixed at higher rates in 2007 and early 2008.

Cost of debt servicing now fallen for many as revert from fixed to lower fixed and floating rates.



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SECTION TWO
Returns

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Returns

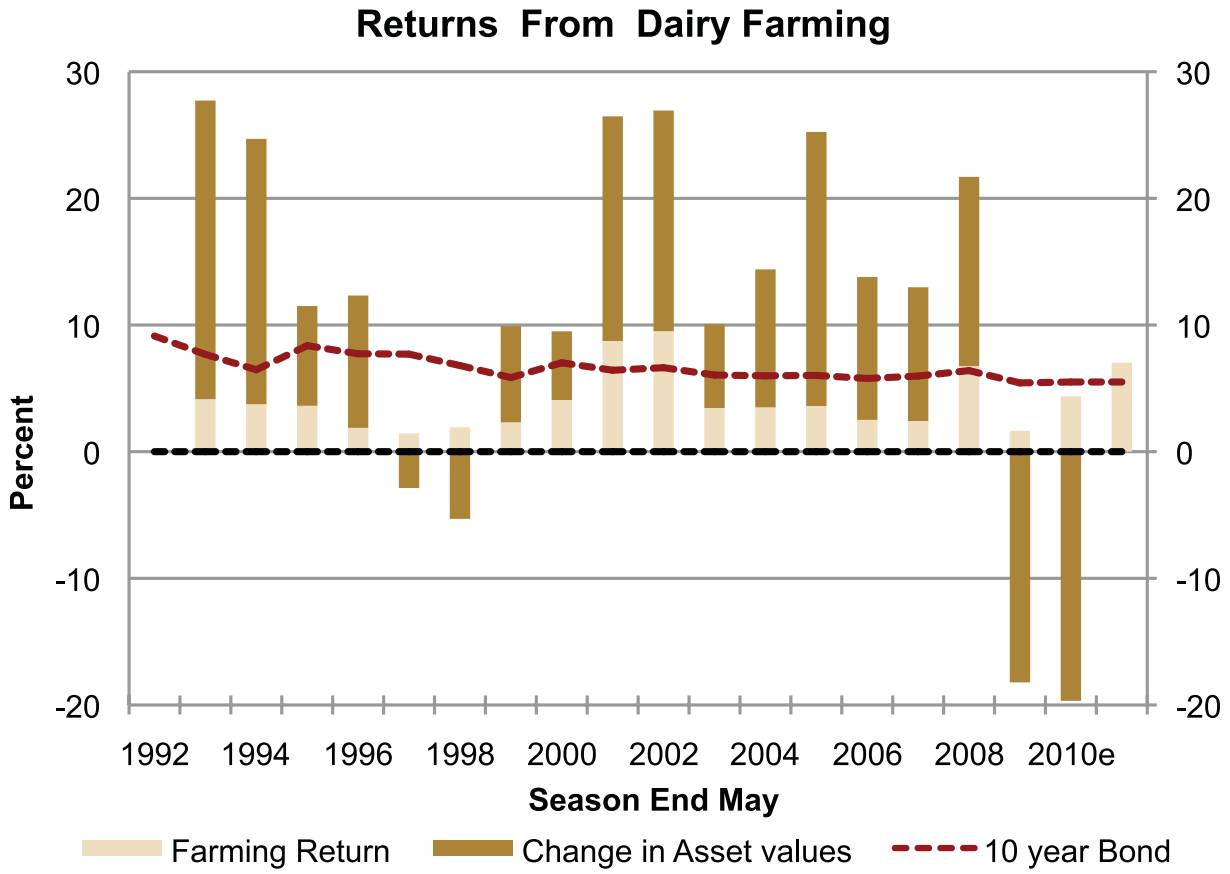
Total returns

Have averaged 11% since 1993, 4% above risk free.

Two thirds of historic return from increase in asset values until too much growth was built into land values

The de-leveraging of the farm assets is playing out in a relatively orderly way with on farm positive cashflows softening the effects of the fall in land values… on farm yields will need to stay high…

So either the gross margin increases, new equity enters the industry, or **some combination of the two**.



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Returns
Farm values

Ultimately linked to EBIT returns.

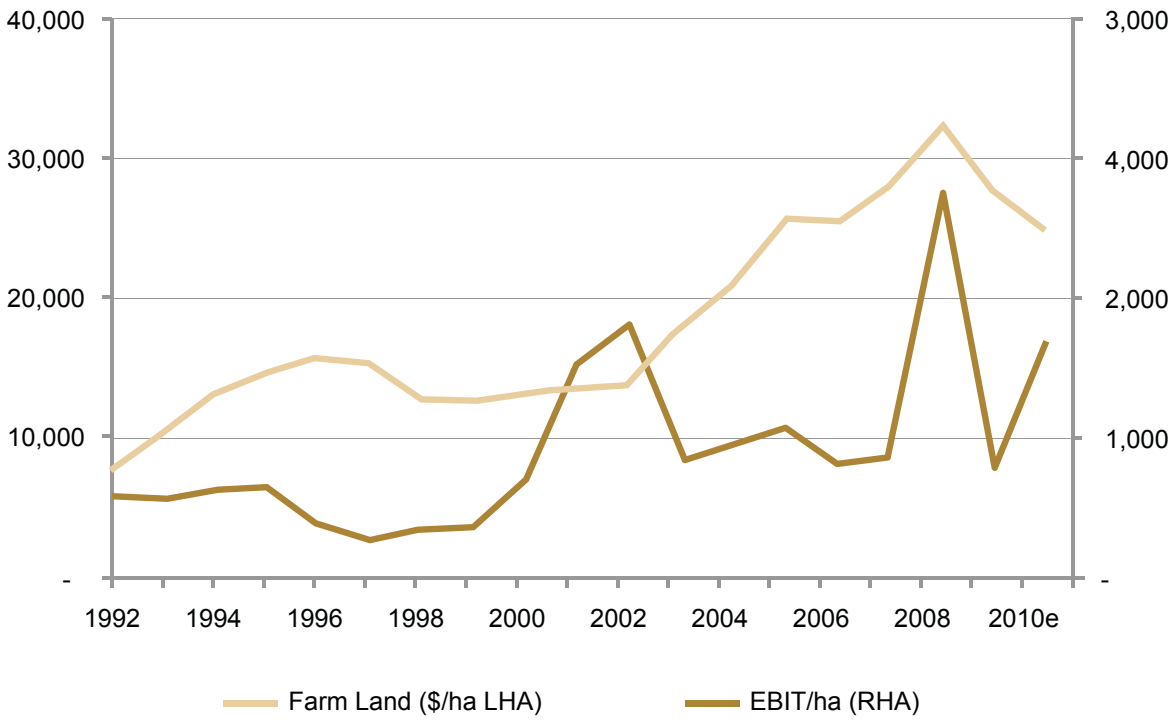
Farm asset values (mainly land) escalated rapidly between 2002 and 2008 on an expectation of continued higher revenue **and readily available credit**.

Higher revenue prices were not sustained and total costs were close to or exceeded income - EBIT/ha lagged.

The 2008 commodity boom was short lived.

The outlook really changed in 2009 with the initial very gloomy revenue forecast for 2009/10 and the impact from the global financial crisis (cost and availability of credit).

Land prices have fallen and we expect them to fall further.



Note: EBIT = farm income less (farm working expenses + depreciation + an allowance for a manager)

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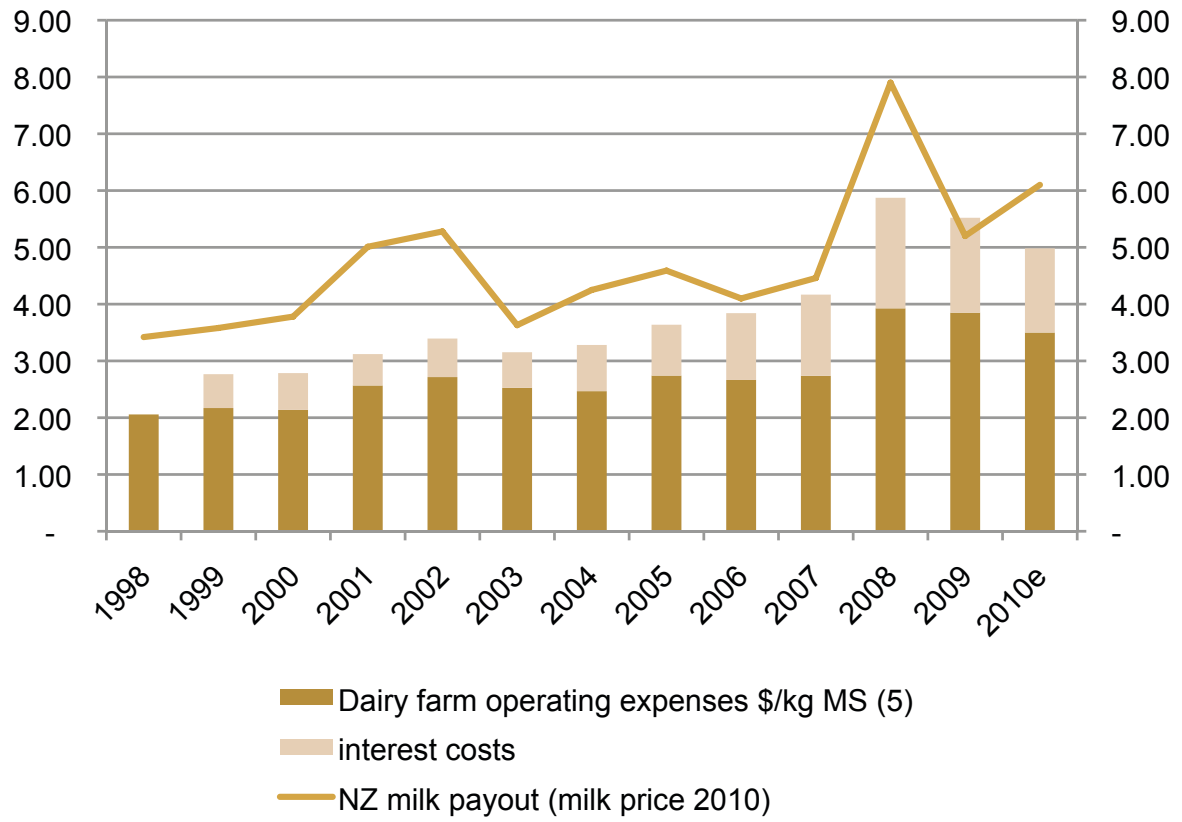
Returns

Farm profitability

Average breakeven before depreciation and other non cash charges has fallen to about $5.



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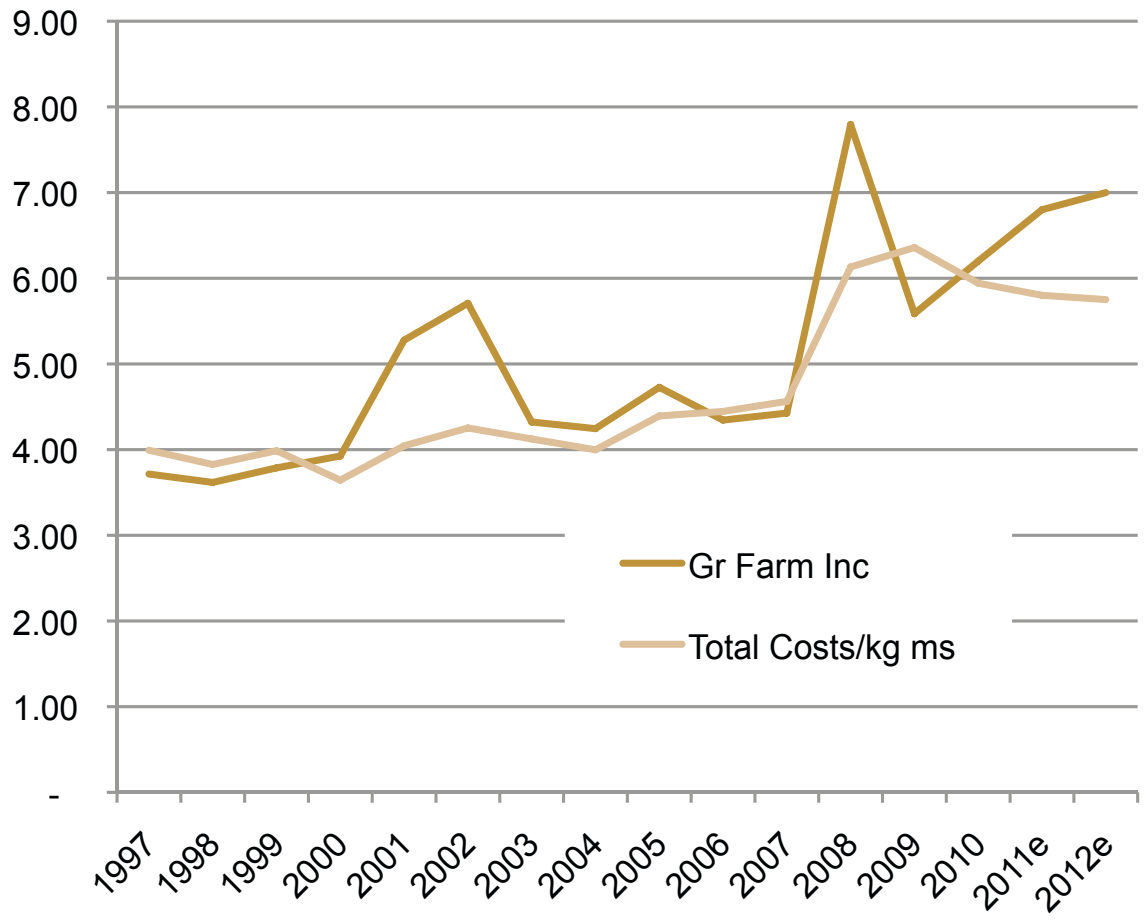
Returns

Farm profitability

When we add depreciation and drawings for owners... breakeven rises by about $1 to $6.



Total cost = farm working expenses + depreciation + interest + allowance for manager
Source: Dairy NZ

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Returns
Farm profitability

So where is breakeven milk price… about NZ $6.00

Massive jump in farm working expenses in 2008, spent more and unit cost up. 2009 over-run from 2008. 2010 forced down by liquidity crunch. Costs not expected to go lower but milk revenues are forecast to be materially higher.....$7

	2006	2007	2998	2009	2010	2011e	2012f
Rev (Milk + Livestock)	**4.34**	**4.43**	**7.79**	**5.59**	**6.20**	**6.80**	**7.00**
F.W.E	2.65	2.73	3.92	3.85	3.50	3.60	3.70
Manager	0.47	0.44	0.47	0.47	0.48	0.49	0.49
Depcn	0.34	0.36	0.42	0.45	0.46	0.46	0.46
Op Cost	3.47	3.53	4.81	4.77	4.44	4.55	4.65
EBIT (Rev less Op Cost)	0.88	0.89	2.98	0.81	1.76	2.25	2.35
Interest	0.98	1.03	1.32	1.58	1.50	1.60	1.60
Total Cost (Op + Int)	**4.45**	**4.56**	**6.13**	**6.36**	**5.94**	**6.15**	**6.25**
Surplus/Deficit (Rev less Total Cost)	**(0.10)**	**(0.14)**	**1.66**	**(0.77)**	**0.26**	**0.65**	**0.75**

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Returns

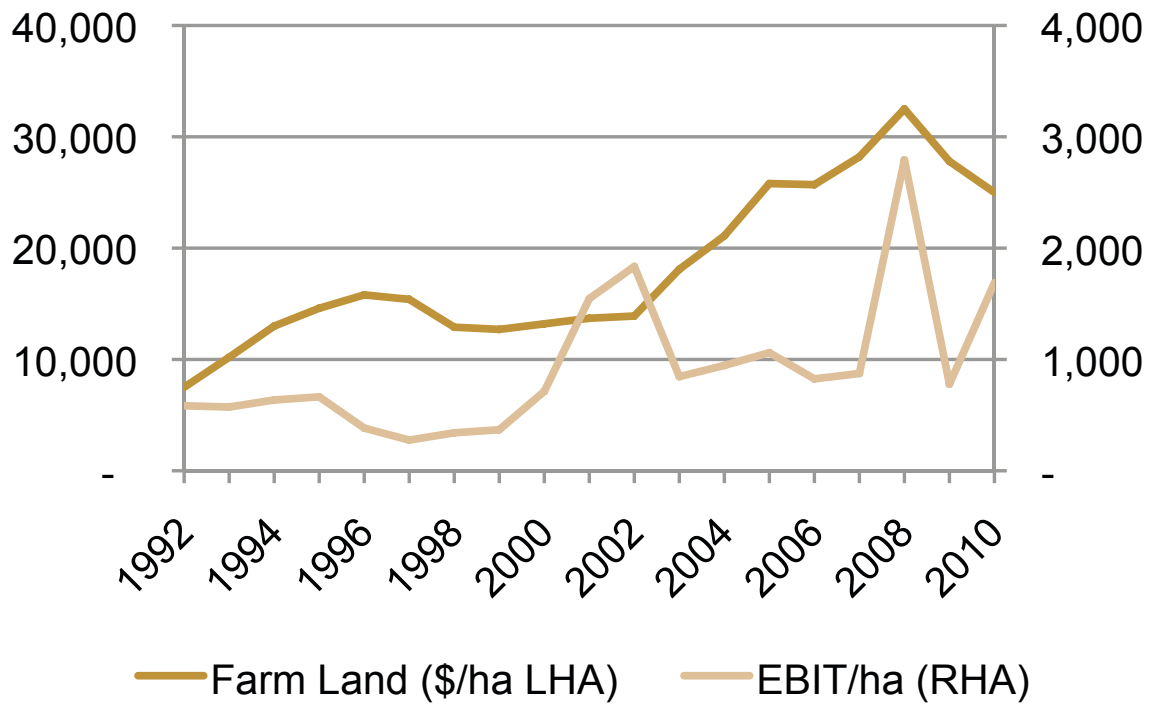
Farm profitability

What is the EBIT we are valuing?

EBIT per Ha recovering while land prices fall

There is a "floor" at NZD$1,000 (this is the point that the NZ industry is in crisis)

2010/11 EBIT will rise above NZ$2,000 per Ha (or NZ$2 per KGMS)



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Returns

Farm profitability

Limited ability to reduce farm costs further.

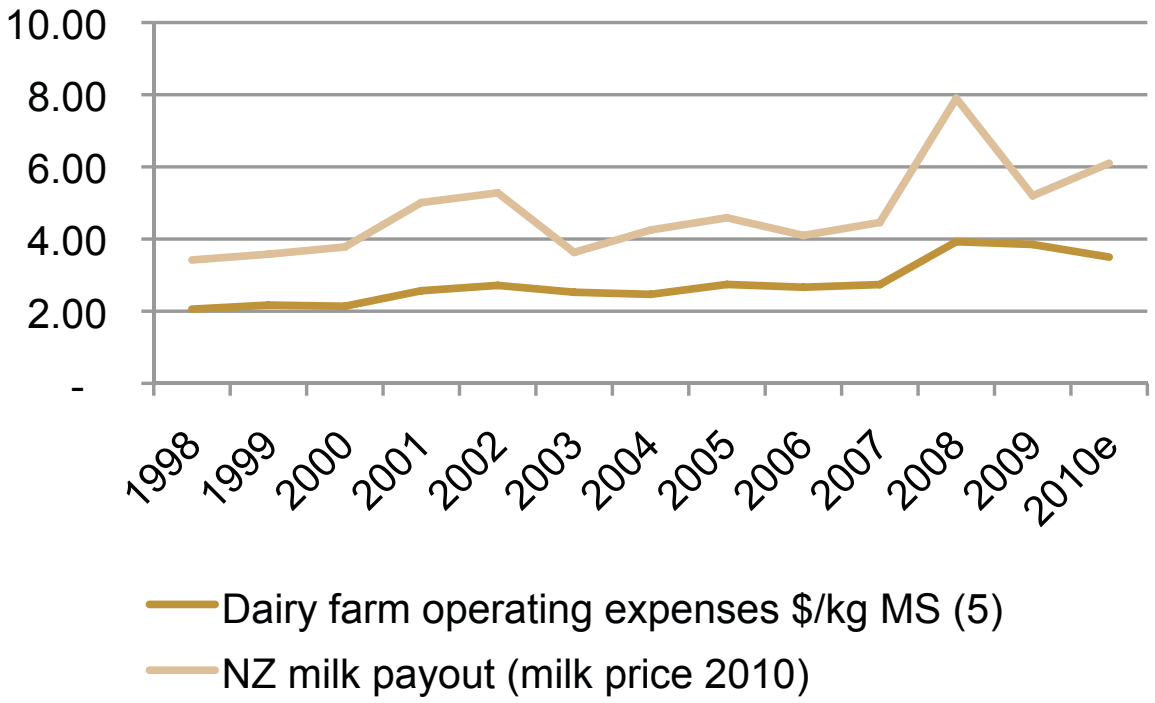
Highest ever profitability in 2008

Surprising NZD cost correlations to NZD payout...

High productivity improvements (each cow produces 50% more kgMS now than it did 16 years ago) have not translated into an identifiable increase in profits.

Costs did not fall as far as we expected in 2010

Forecast positive free cash flows to repay debt in 2011 and 2012



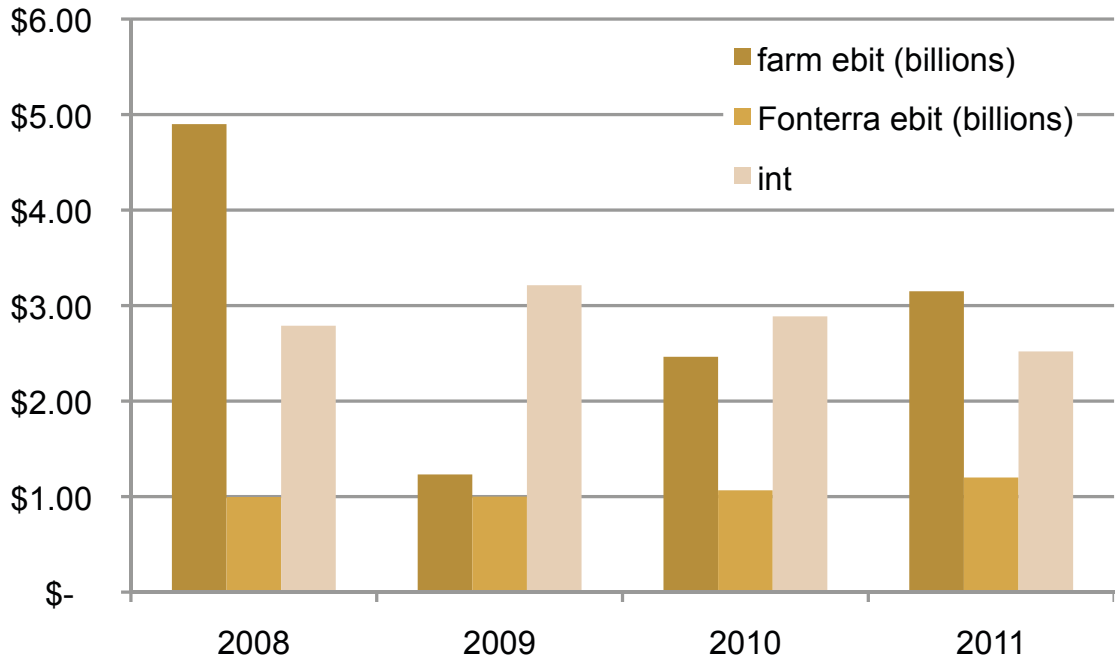
Returns

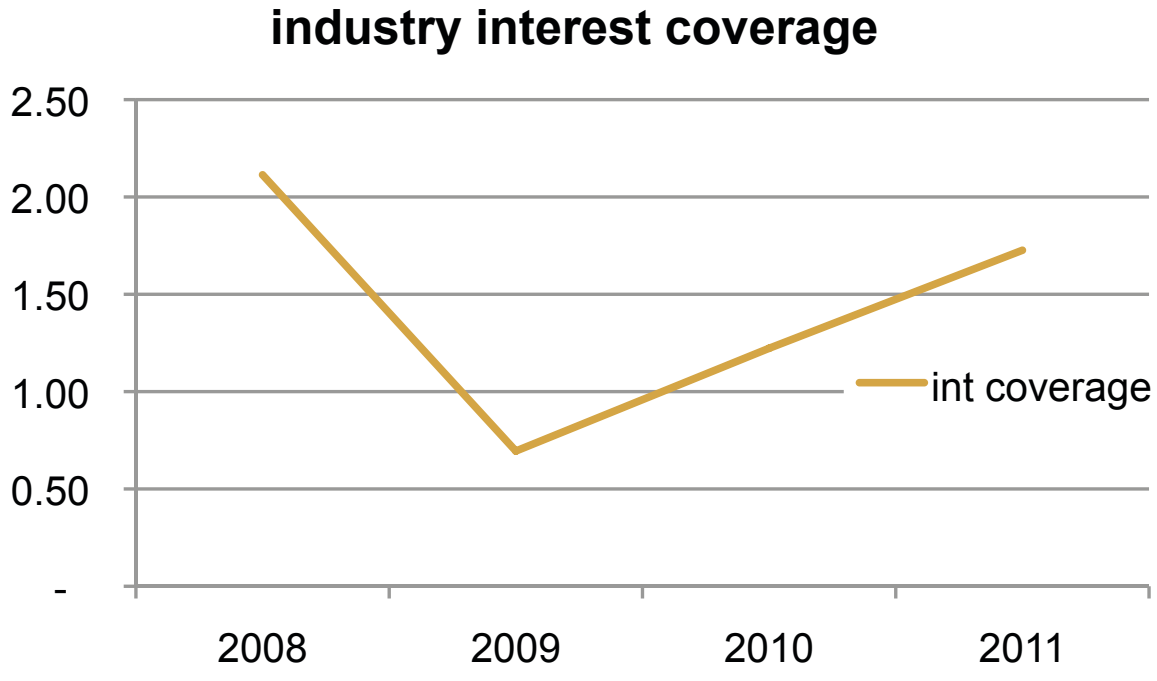
Forecast profitability

Interest coverage ratios

The recovery in EBIT gets the industry well above interest coverage ratios of 1.

Forecast continued improvement in 2011





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SECTION THREE

NZ dairy farm valuations

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NZ dairy farm valuations

Valuation of EBIT

What is the EBIT we are valuing?

EBIT per Ha recovering while land prices fall

There is a "floor" at NZD$1,000 (this is the point that the NZ industry is in crisis)

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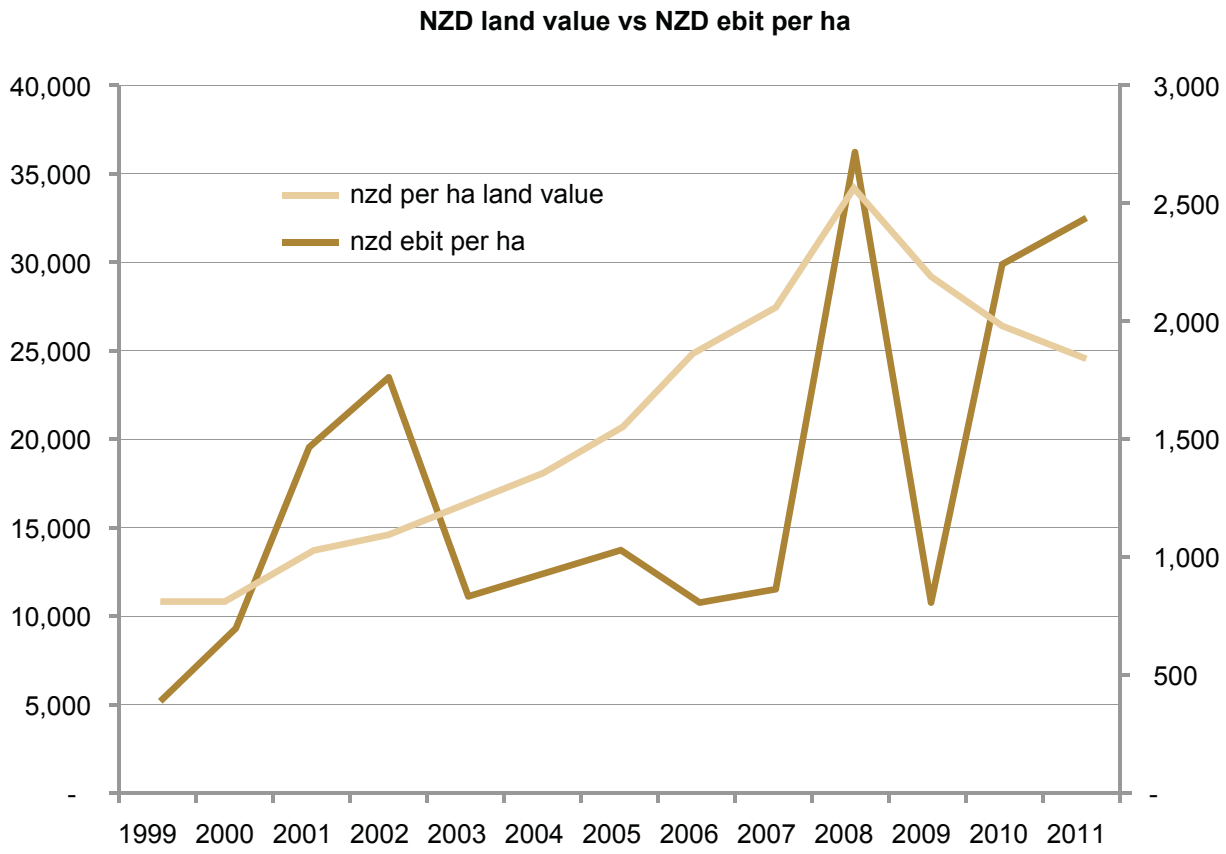

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NZ dairy farm valuations

DCF valuation

Where do we value NZ dairy farms?

Methodology

- DCF...of free cashflows (EBIT per Ha)

WACC....6.9%

- Risk free = 6.0%
- MRP = 7.0%
- Debt (US)=4.25%
- D/D+E=50%
- Asset beta=0.35

EBIT per Ha = $1750 NZD

EBIT per Ha (NZD)	1,750.00
Farmer WACC	6.9%
growth rate	2.5%
tax rate	30.0%
Total Ha's	1,519,120
EV	$ 41,936,270,423
Less Cow value	$ 6,485,535,250
EV NZD	$ 35,450,735,173
NZ EV per Ha	$ 23,336

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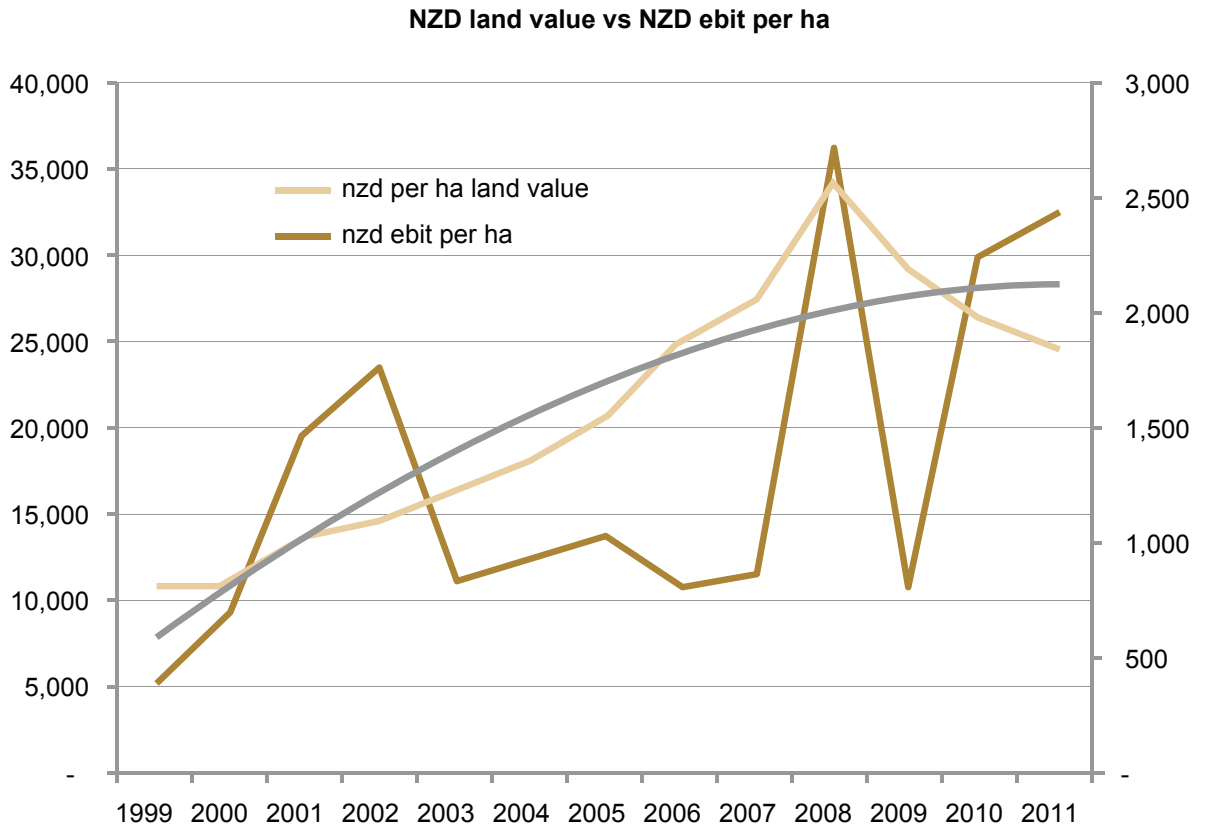
NZ dairy farm valuations

Valuation sensitivity

No surprise that as we are just capitalising sustainable earnings, values are very sensitive to WACC, EBIT and growth (yes EBIT is growing see graph)

NZ has a good history of productivity improvements

- Each cow produces 50% more kgMS now that it did 16 years ago
- Productivity improvements per Ha have averaged approx 2.5% across the last twenty years



		NZD EBIT per ha						
	$23,336	$1,150	$1,350	$1,550	$1,750	$2,000	$2,250	$2,500
EBIT growth	1.25%	$9,885	$12,346	$14,808	$17,269	$20,346	$23,423	$26,500
	1.50%	$10,535	$13,110	$15,685	$18,259	$21,478	$24,696	$27,915
	1.75%	$11,249	$13,948	$16,646	$19,345	$22,719	$26,092	$29,466
	2.00%	$12,035	$14,870	$17,705	$20,541	$24,085	$27,629	$31,174
	2.25%	$12,904	$15,891	$18,877	$21,864	$25,597	$29,331	$33,064
	2.50%	$13,872	$17,027	$20,181	$23,336	$27,280	$31,224	$35,167
	2.75%	$14,955	$18,298	$21,641	$24,984	$29,164	$33,343	$37,522
	3.00%	$16,175	$19,731	$23,286	$26,842	$31,286	$35,731	$40,175
	3.25%	$17,561	$21,358	$25,154	$28,951	$33,697	$38,443	$43,188
	3.50%	$19,149	$23,222	$27,294	$31,367	$36,458	$41,549	$46,640
	3.75%	$20,986	$25,378	$29,770	$34,162	$39,652	$45,142	$50,633

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NZ dairy farm valuations

Regional valuations

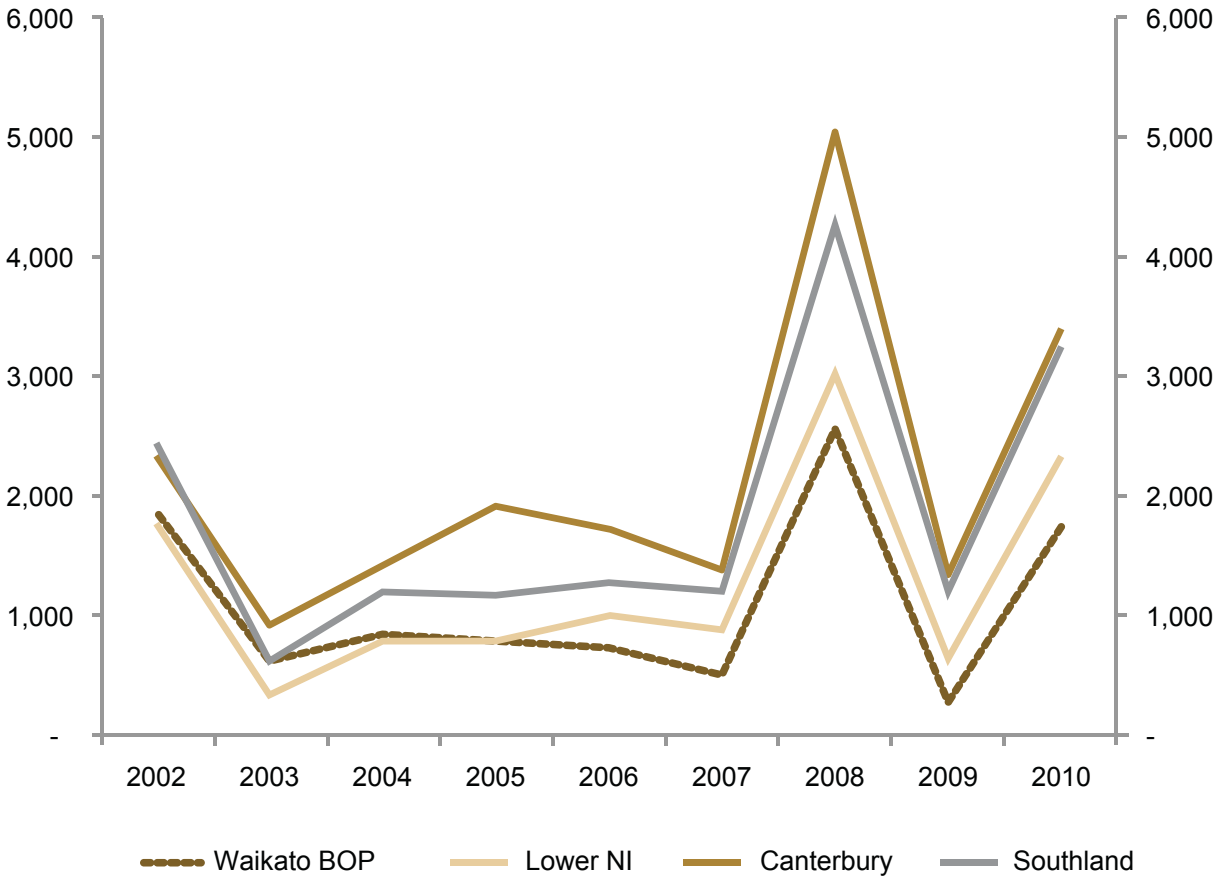
Different regions, different returns, different WACC's.

Average returns are highest in Canterbury and Southland with the traditional pastoral based farming regions having a lower cash return per Ha.

This does not reflect in values, where farm values are highest (in order)

- Waikato
- Canterbury
- Southland

This is partially explained by risk, the higher returning farms rely on supplementary feeds, water and energy (in NZ water is not yet costed).



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NZ dairy farm valuations

NZ rural land cycles

What's different about this cycle and previous ones?

86/87 & 96/97 were characterised by inability to pay interest

2002/3 recovery was fuelled by supply of bank finance

2010 was an earnings crunch, but profitability quickly restored and *now loan value ratios are a significant constraint*

- De-leveraging still to play out (low demand)
- Far greater "overhang" of farm sales (high supply)

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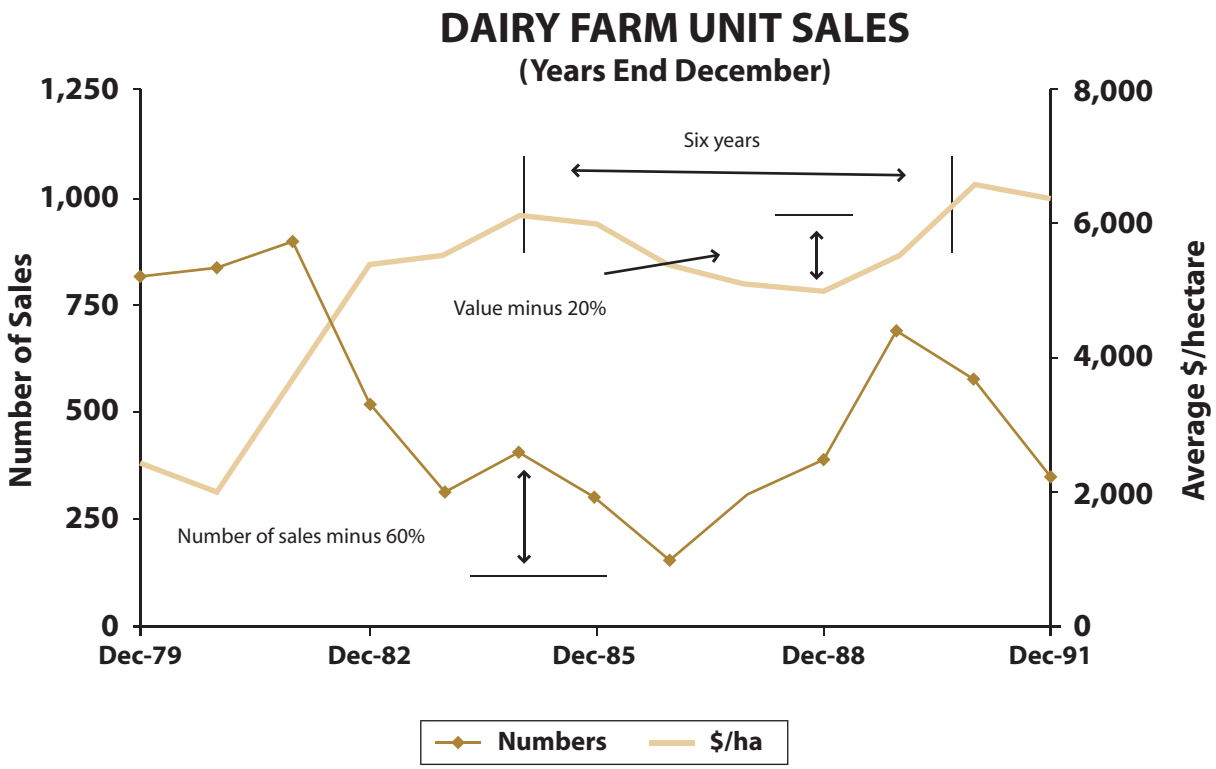
NZ dairy farm valuations

Dairy Farm values – 1979-91

The Douglas Reforms: The number of sales fell 60% from peak price, price fell 20% and took six years to regain previous level



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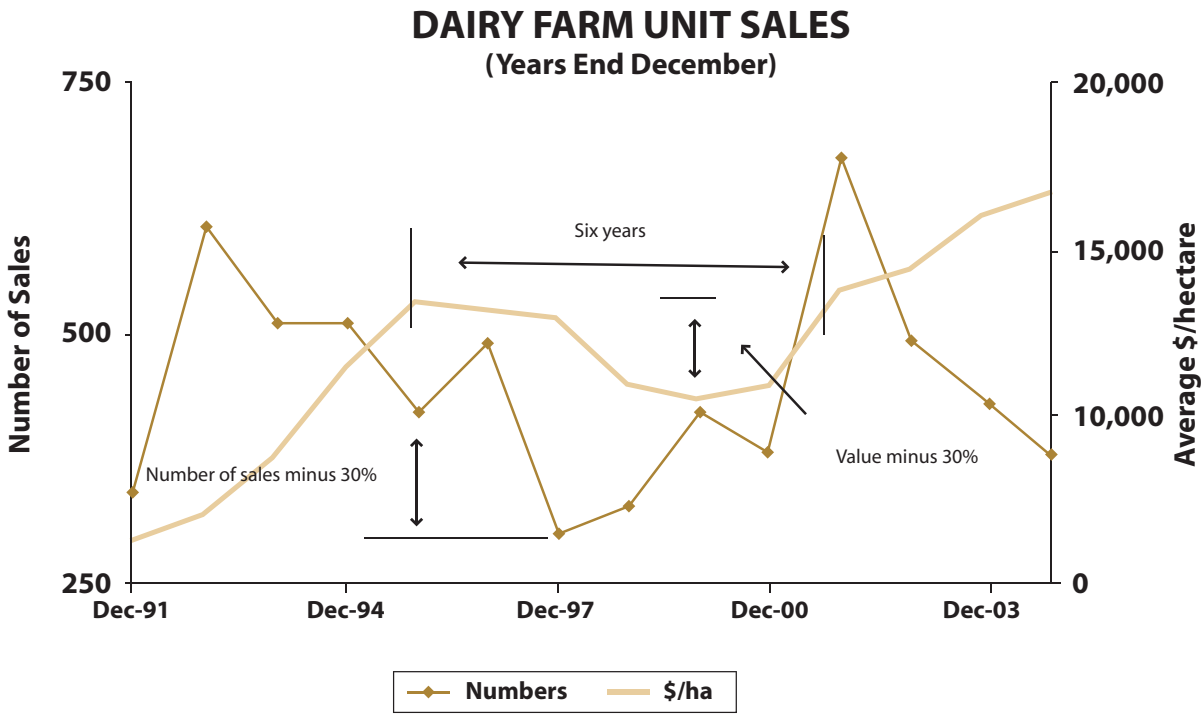
NZ dairy farm valuations

Dairy Farm values – 1991-04

The Asian Crisis: The number of sales fell 30% from peak price, price fell 30% and took six years to regain previous level



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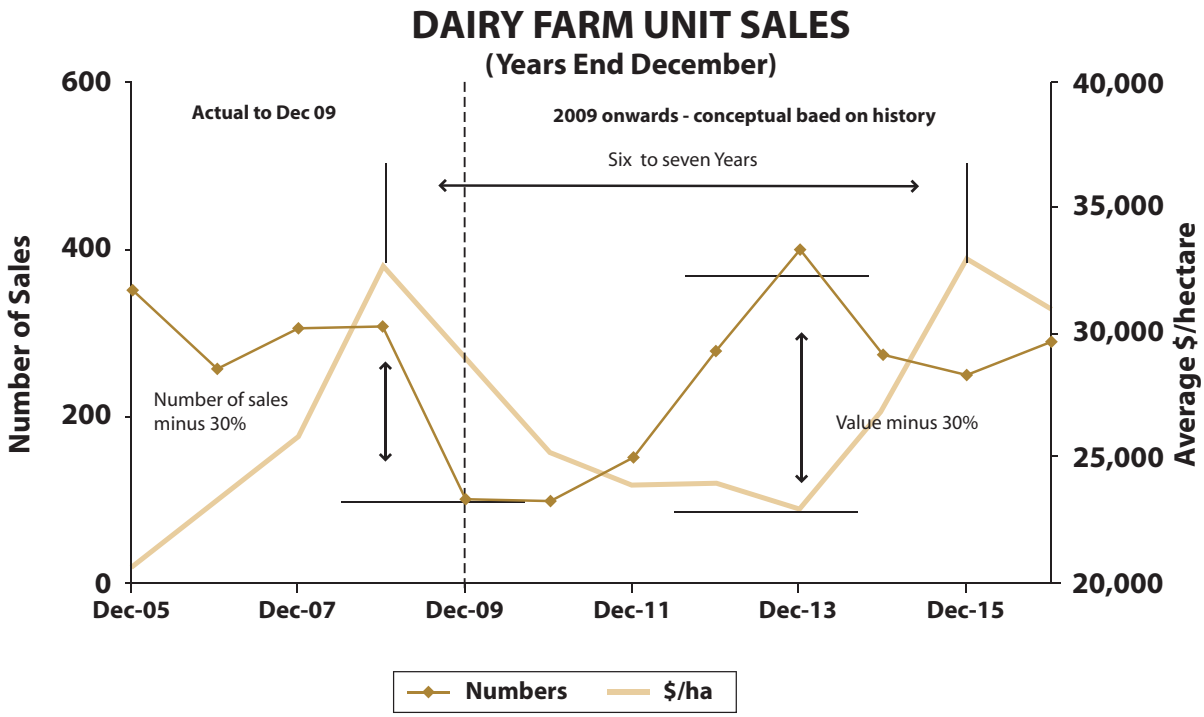
NZ dairy farm valuations

Dairy Farm values – 2004-15?

The Global Financial Crisis and aftermath: In one year, the number of sales has fallen 30% from peak price in 2008, and price has fallen 15%.

The scenario is history will repeat itself.

Implication – prices will fall further from the Dec 2009 measure.



NZ dairy farm valuations

The rural land market

Does history repeat itself ?

The availability of capital was not a constraint in 1985-90 or in 1995-2001. The constraint was its cost.

This time is different.

The capital required to be held by registered banks is higher and liquidity buffers are greater. Discussions are being held about extra capital requirements for agriculture. Higher risk borrowing will cost more relative to accepted benchmarks than in the past. Borrowers will place a greater focus on the cash return from the acquisition.

End result: more attention to the initial price paid.

Central banks are also looking at ways to restrict periods of excess credit growth. That in turn will put more emphasis on capital appreciation of land from actual earnings.

In addition we have about three years' of sales being offered to the market at the moment.

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SECTION FOUR
Key Findings

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Key Findings

Executive Summary

We are going into an extraordinary period – farm incomes rising and dairy farm prices falling.

The bad

- Dairy farm prices likely to fall further
- Loan value ratios under pressure and banks will continue to reduce their exposure
- De-leveraging will occur as affordability is re-established through lower capital values and operating margins
- About 10% of NZ dairy farms have negative equity, based on our (DCF) valuations
- The liquidity issue has moved from servicing debt (cash flow) to loan value ratios

The good

- Recovery in commodity prices better than anticipated
- Forward pricing of milk is still positive (current forward milk and currency prices imply a rise to $7)
- NZ dairy costs are not rising so gross margins are increasing materially
- NZ dairy well positioned for higher global food prices
- NZ in low cost position on the back door of Asia
- Too big to fail so correlation to NZD is good

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Key Findings

Significant reduction in industry risk

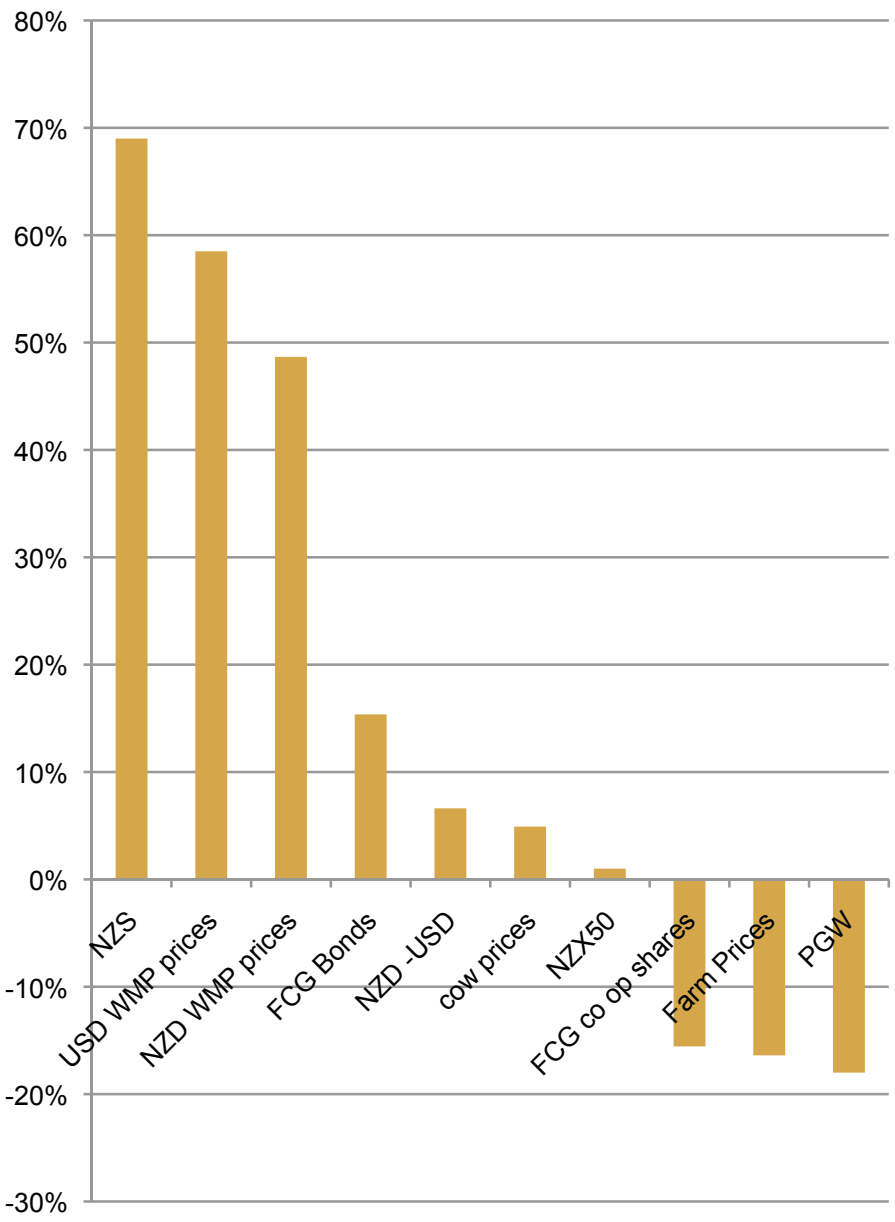
Changes in value Sept 2009 – Sept 2010

Significant rise in milk price has reduced industry risks significantly

- indicated by the rise in value of Fonterra Bonds

Very unusual historically to have such a large rise in NZD values and for dairy farm values to fall

But no surprise that anything upstream from farm has fallen in value (PGW, FCG co op shares)



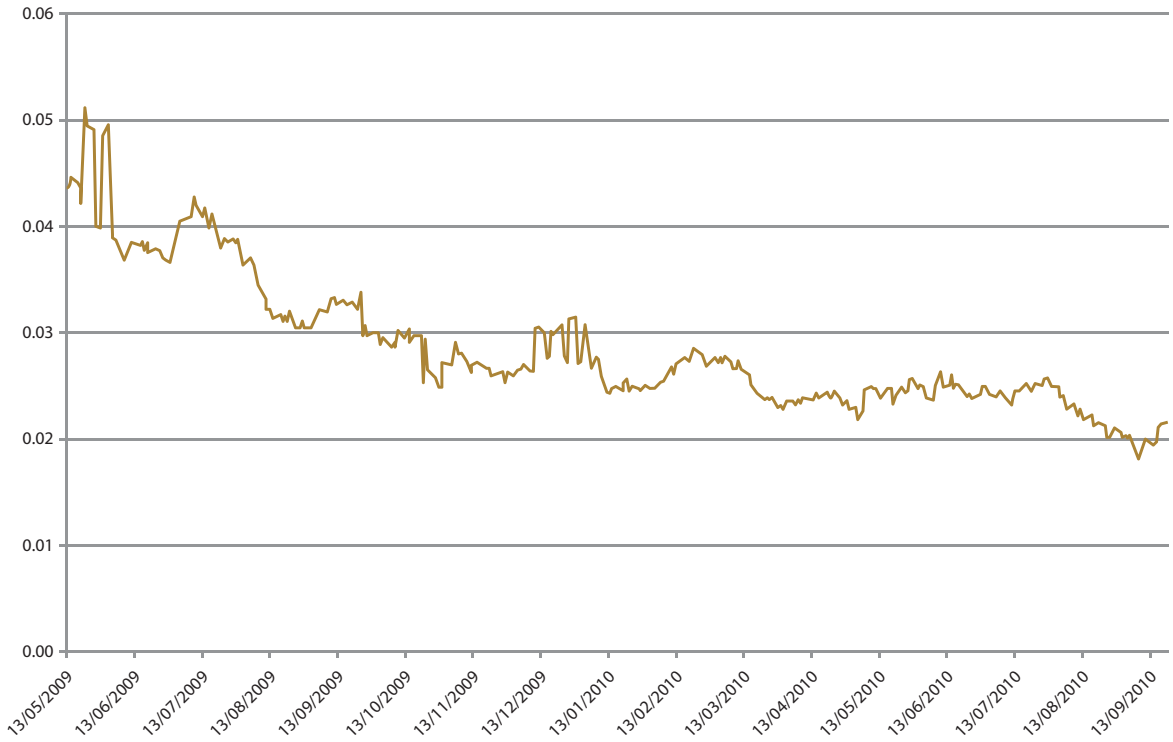
DAIRY INVESTMENT FUND LIMITED

Key Findings

Significant rise in Fonterra bond values

The longest dated Fonterra bond (2023 GBP) shows the relative reduction in risk compared with NZ Government....(Fonterra is effectively the risk free benchmark for the NZ dairy industry).

FCG long 2023 bond spread above NZGB



DAIRY INVESTMENT FUND LIMITED

Key Findings

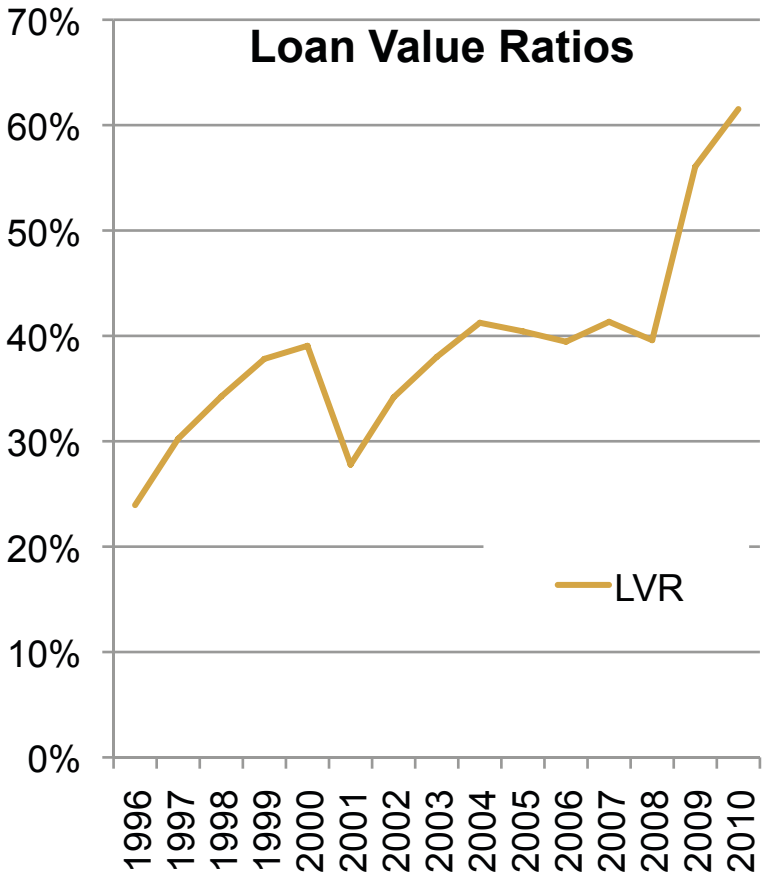
Capital constraints will have a negative effect on valuation

Loan to value ratios...NZ banks need to reduce their exposure.

This will reinforce the "all banks are bastards" thinking of some farmers

As farms fall in value and yet become more profitable banks will have less capacity to lend

Could be a good entry for a new lender.



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Key Findings

New capital will not come from the traditional sources

Retained earnings

- Yes – but profits will be channelled to debt repayment

Banks

- No – bank exposure is too large
  - New capital adequacy
  - Offshore banks want to reduce exposure

Large shareholders

- No – the top ten shareholders all look more likely to sell rather than increase investment
  - Govt (Transpower, Corrections Dept, SOE's)
  - Alan Hubbard/SCF
  - Graeme Hart
  - Crafars

Institutional investors

- Yes – Institutions will enter where cashflows can be purchased at 10% IRR (NZ Super Fund)

Offshore investors

- OIO approvals or not?

DAIRY INVESTMENT FUND LIMITED

Key Findings

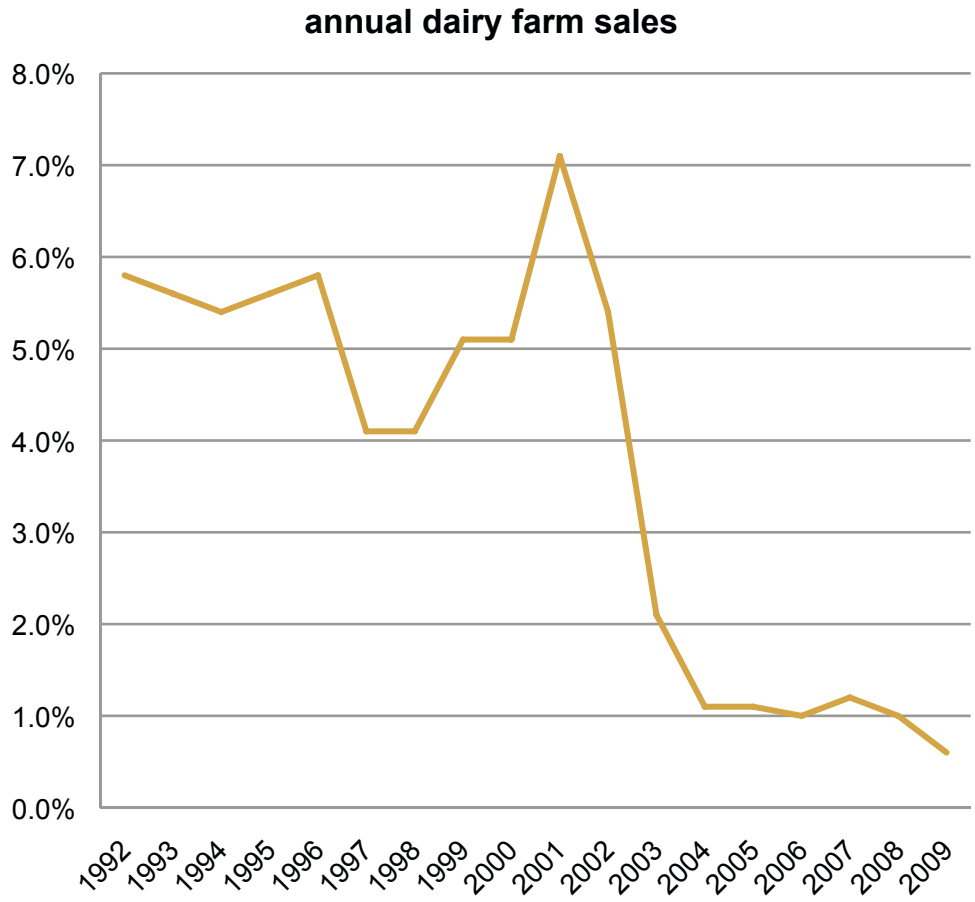
Significant overhang of farm sales.... significant supply

Volume of sales has reached all time lows

- Less than 1% of farms are turning over
- Average annual turnover is 3.5%

We estimate that over 10% of current dairy farms have negative equity (approx 3 years of normal sales)

- Large distressed farms (Crafar farms, CHH farms and Dairy Holdings) represent about 3% of industry farm value

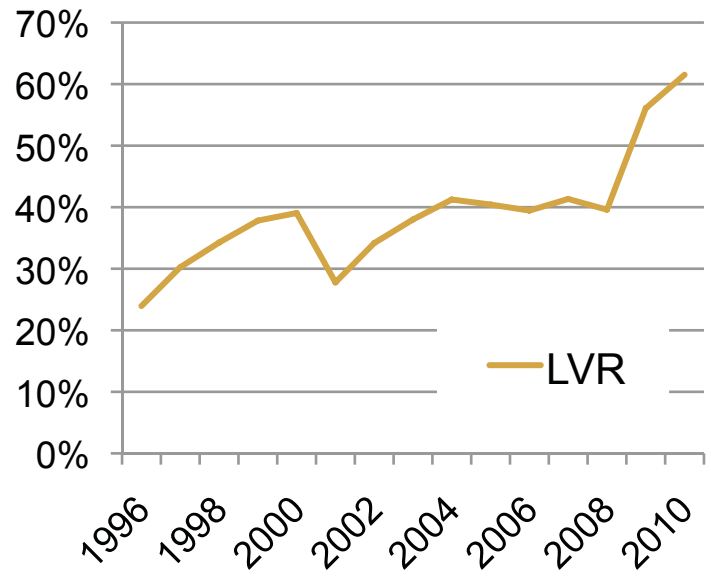


Key Findings

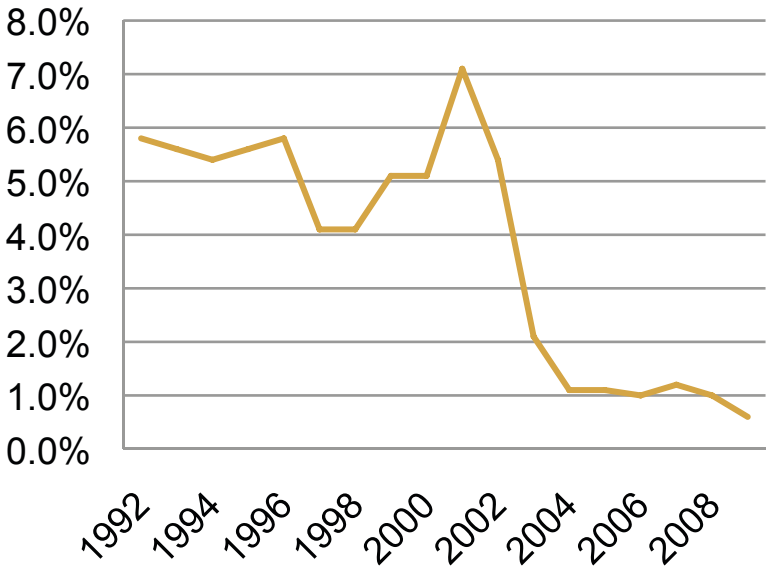
De leveraging still to play out

Large overhang of farm sales and banks needing to reduce their lending.

Loan Value Ratios



Annual dairy farm sales



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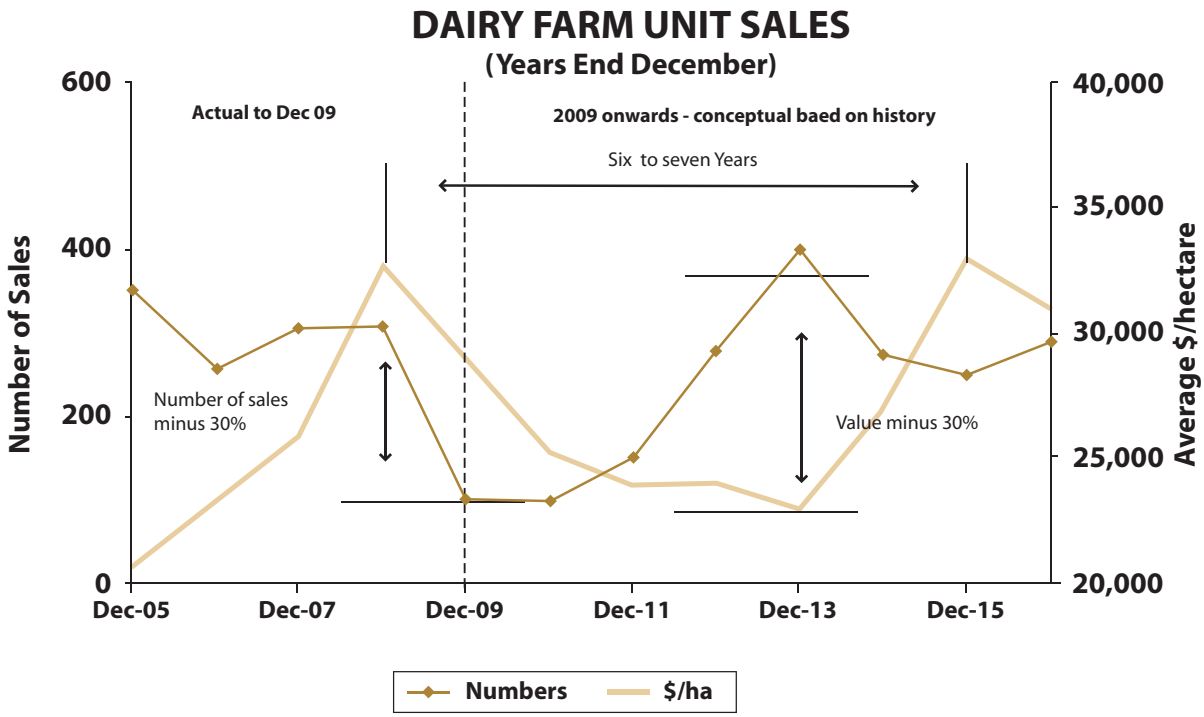
Key Findings

Dairy Farm values – 2004-15?

The Global Financial Crisis and aftermath: In one year, the number of sales has fallen 30% from peak price in 2008, and price has fallen 15%.

The scenario is history will repeat itself.

Implication – prices will fall further from the Dec 2009 measure (by our estimate $23,000 per Ha is "fair dcf value".



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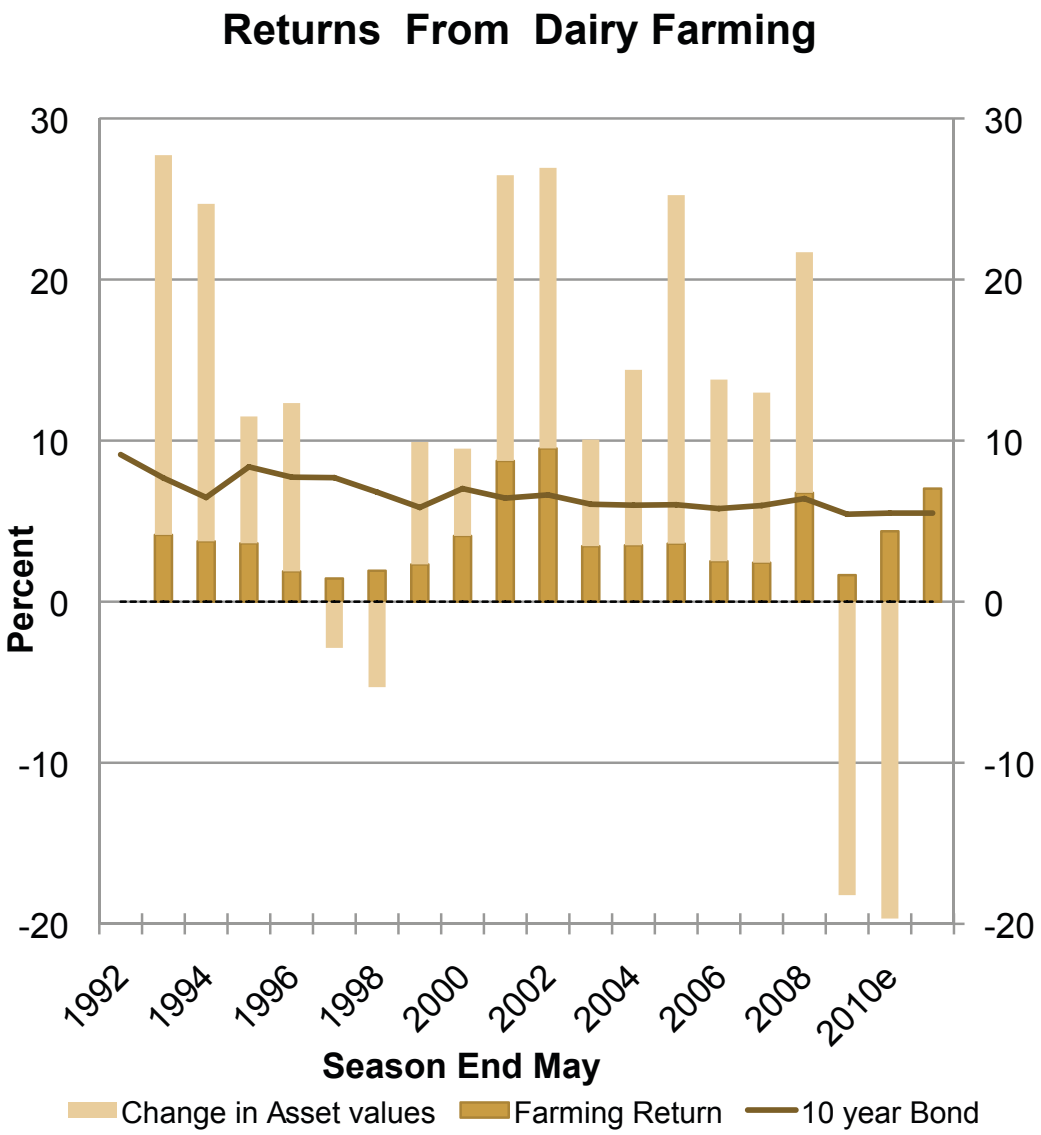
Key Findings

Very high pre interest returns in 2011

Farm EBIT's are rising well above risk free rates – this is very unusual in that prices usually immediately move higher and force yields lower.



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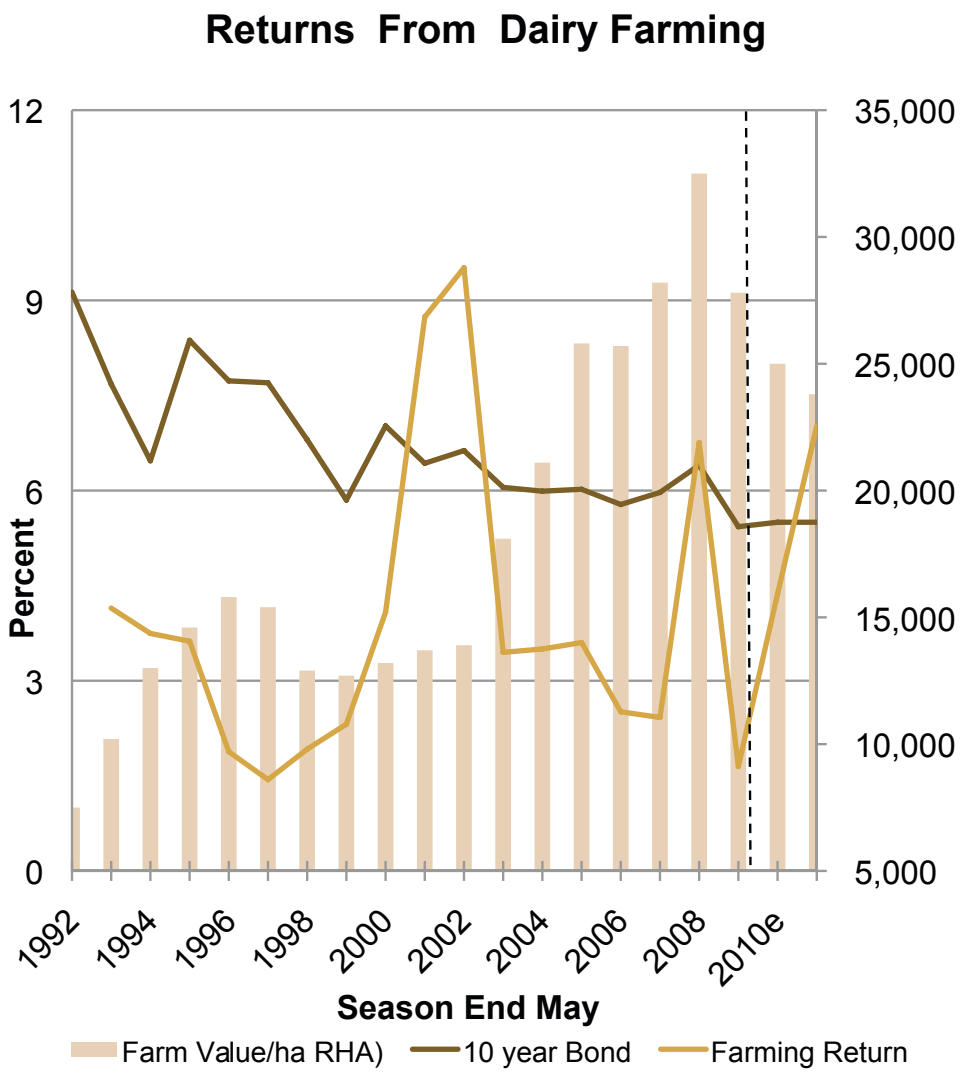
Key Findings

Rising profitability, falling farm prices?

Last year the story was about rising milk prices. This year it will be about farm values not following (and in our opinion falling further).



Key Findings

NZ as seen from offshore

Progressively more focus from offshore on the positive position of NZ if world food prices rise. (Below is a recent research report from Nomura that highlights the risks of a world food price shock and produces an index of winners and losers.)

Top 10 net food exporters

Rank	Country	Net food exports (% of GDP)
1	New Zealand	7.5
2	Uruguay	5.6
3	Argentina	5.6
4	Costa Rica	4.7
5	Chile	3.1
6	Malaysia	2.9
7	Thailand	2.7
8	Ecuador	2.5
9	Denmark	1.8
10	Brazil	1.8

Source: FAO, CEIC and Nomura Global Economics

Top 10 net food importers

Rank	Country	Net food imports (% of GDP)
1	Hong Kong	-4.4
2	Lebanon	-3.9
3	Bangladesh	-3.3
4	Algeria	-2.8
5	Sri Lanka	-2.7
6	Egypt	-2.1
7	Morocco	-2.1
8	Saudi Arabia	-1.8
9	Portugal	-1.8
10	Libya	-1.7

Source: FAO, CEIC and Nomura Global Economics

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Key Findings

NZ has an abundance of water in a world that is short of water for agriculture

- 500 km^3 falls on NZ annually as rain or snow
- Equivalent to total Australian rainfall, 2.5 times British Isles rainfall
- **390 km^3 of water per annum runs off into the sea** • 110 km^3 of water is returned to the atmosphere by evaporation and transpiration
- Rainfall averages 2 metres annually c.f. world average of 0.8 metres
- 600 km^3 stored as groundwater (400 km^3 under Canterbury)
- 320 km^3 stored in lakes
- 60 km^3 stored permanently as snow and ice
- Annual water runoff per person across globe averages 7,100 m^3
- Annual water runoff per person in NZ averages 80,000 m^3

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Key Findings

NZ dairy portfolio recommendations

Increase Exposure

- Assets that immediately increase farm production
  - Cows
  - Upstream assets
    - PGW
    - PGC
    - Fert and feed
- NZ dairy farms
  - At clearing prices in next 12 – 18 months

Neutral

- Assets that will lower in risk but increase yield in next two years
  - Lenders to dairy (strong cashflows; high gross margins once impairments are cleared)
- Assets protected by high costs of capital and barriers to entry
  - Independent dairy processors

Reduce Exposure

- Low growth assets
  - Fonterra Bonds
  - GF
- High cost of capital, illiquid upstream assets
  - Fonterra co op shares

GT & CO

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