

Comparing the profitability of a dairy business with off-farm investment options

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Background and approach

Examined performance over time of a dairy business in northern Victoria:

- Change in net worth
- Returns to capital
- Implications of different starting equity

Compared performance with other dairy farms and non-agricultural investments

Case study farm – Northern Victoria

338 ha purchased in 1998/99

130 ha leased block

Irrigated ryegrass/white clover
pasture and lucerne

60 unit rotary dairy and feedpad

450 cows (first year)



Change in capital

Historical data available from 2003/04 – 2014/15

Capital	2003/04*	2014/15*
Total capital (including leased area)	\$3,475,000	\$7,302,000

*Values in dollars of the year

Returns to capital

Annual return to total capital

$$= \frac{\text{Annual gross income} - \text{variable costs} - \text{overhead costs}}{\text{Total capital managed (owned and leased)}}$$

Average annual return to total capital

- Arithmetic average of annual return to capital over time

Compound annual return

- Mean annual growth rate after accounting for compounding returns over time

Returns to capital – compound annual return

	Case study farm
Time period	2003 – 2015 (12 years)
Compound annual return to capital managed (from owning assets and farming)	12.4%
Compound annual return from owning assets	7.6%
Compound annual return from farming	8.5%

Returns to capital relative to other dairy businesses in the Victorian Dairy Farm Monitor Project

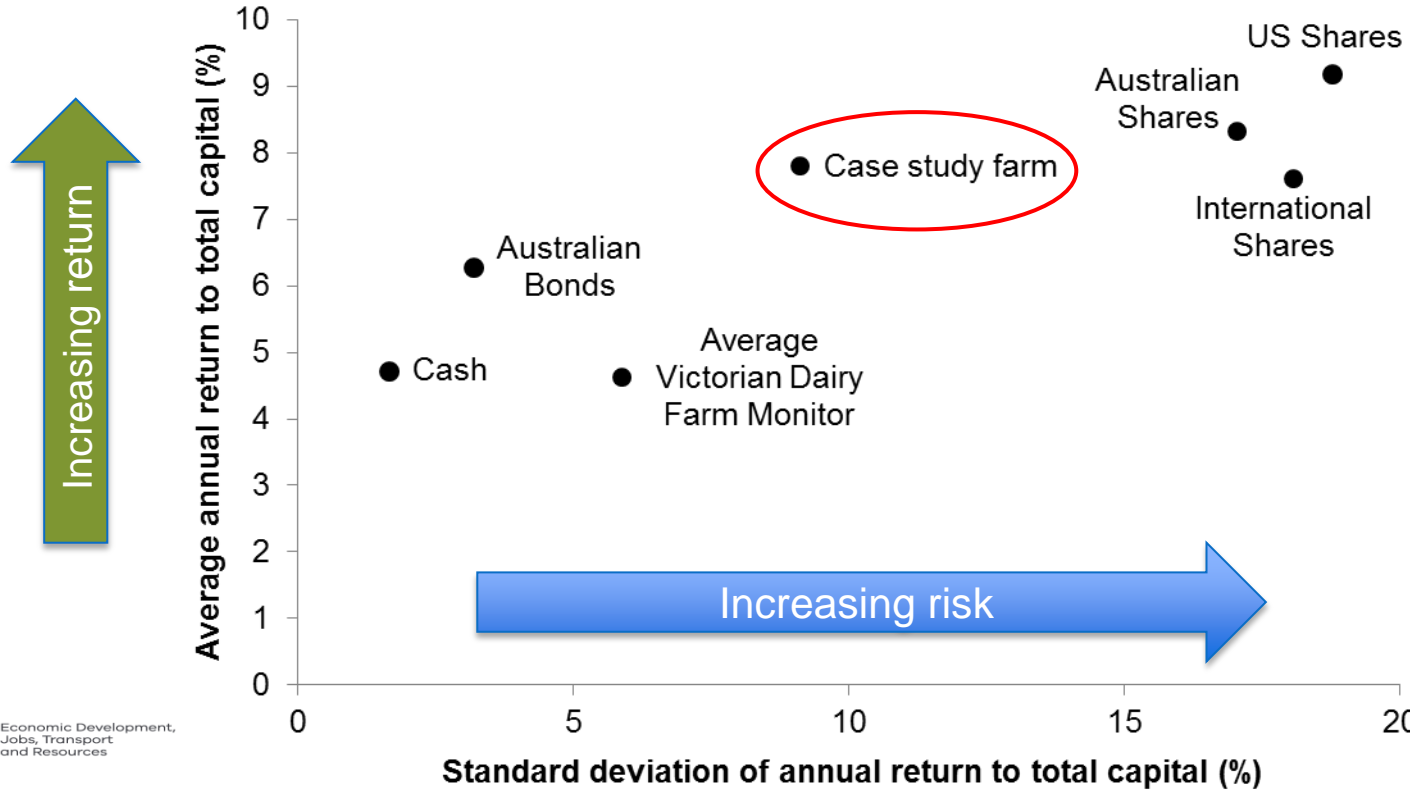
	Case study farm	Case study farm in DFMP	Victorian average DFMP (n = 13)
Time period	2003 – 2015 (12 years)	2006 – 2015 (9 years)	2006 – 2015 (9 years)
Compound annual return to capital managed (from owning assets and farming)	12.4%	14.6%	6.7%
Compound annual return from owning assets	7.6%	10.7%	2.9%
Compound annual return from farming	8.5%	8.2%	4.0%

Returns to capital relative to non-agricultural investments (2003 – 2015)

Investment class	Compound annual growth rate (%) [*]
Case study farm	12.4
Australian shares	7.1
Residential investment property	7.0
Australian bonds	6.5
Cash	3.4

^{*}Gross returns before tax or fees. Source: Russell Investments/ASX (2015)

Risk and return (2006 – 2015)



Key points

Case study farm performed well compared with the average of other Victorian dairy businesses and non-agricultural investments

Compound annual return to capital came from asset appreciation and farming operations