

Looking under the covers

How identity, financial literacy and patient capital can prepare the Australian Family Farm for the next 50 years

A report for



by Claire Osborn Booth

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Executive Summary

If you want to go fast, go alone. If you want to go far, go together¹

The Australian family farm is a mixed bag.

Some start out great, having had their ancestors work hard to stockpile capital assets, operating productive and innovative operations. Others start out with an old ute, a few savings and a big dream.

This report investigates the financial literacy of great family farm businesses and how this will assist the farming family transition over the next 10-20 years and beyond. It is targeted at two types of readers:

- The family farm business² tackling that next hurdle (either succession or expansion); and
- The family farm's advisor assisting that family through this period of change.

Key findings

This report focuses on key themes:

1. Identity, self-awareness and clarity regarding long term personal legacy.
2. The secret ingredient is not an expensive tractor: family farms are people businesses.
3. Agriculture is in the business of patient capital, and this capital needs a financially literate farmer to make it succeed over the long term.

¹ African proverb

² This report adopts the definition of "Australian Family Farm" from ABARE and a copy of this definition is outlined in a detailed figure in

What will the Australian family farm learn from this report?

- A. Being aware of “why” *you do what you do* is common in other business sectors³, but for the multi-generational Australian family farming business it is critical. A level of self-awareness allowed successful farmers to imagine themselves sitting on their grave stone, and look back on their life’s legacy. This clarity enabled them to encourage other members of their families to do the same, and together they created a long-term family plan which everyone understood, including the bank.
- B. Successful family farm businesses self-identify as being “in the people business, which produce agricultural products”.
- C. Family farms who scaled quickly and to great effect had the following traits:
- Structured daily, weekly, and monthly communication processes with *all* people within the business;
 - Had clearly defined roles within the business structure;
 - Communication included regular reports to with their bank (as debt associated with the scaling process); and
 - Acknowledged great communication is a lifelong pursuit, and normally a “work in progress” over many years
- D. The business of agriculture requires debt structures and equity partners which are patient, flexible and support to long-term business plans, rather than a 12-month cashflow budget. The highly successful family farms:
- invested in their financial literacy over time and developed their vision;
 - once developed, these literacy skills enabled them to articulate their plan to their bank, accountant and sometimes other equity partners; and
 - a level of discipline was required to monitor and enforce financial performance.
- E. Family farms are also in the real estate business, and their production business is a separate business. Succession businesses understood:
- their assets and the trends in capital growth (and loss); and
 - debt, including the limits and opportunities, and implemented financial rules which helped them remember “farming wasn’t their *birth right*”.

³ Simon Sinek, “Start with Why”, 2009

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Foreword

It's Thursday morning in the Supreme Court of New South Wales, Phillip Street Sydney. Justice Hallen's eyes look out from under his wig and rest on the family before him – a family divided.

One member of the family didn't like the Dad's Will, and two years after Dad has died, the lawyers have got involved: it's personal.

This family has been farming for many years. They have survived many challenges – the wool crash, the dismantling of the wheat board, dairy de-regulation, droughts, floods and changing weather patterns which make it difficult to plan.

They are a hardworking family; they bought the neighbours block a few years ago and have a mortgage to the bank, with an overdraft which helps them each year if cashflow gets tight.

This family grow high quality produce – lamb, wool, grain, cotton, seafood, vegetables and beef.

They are proud to be Australian farmers.

This report is written for the Australian farming family – it is intended to be a warning sound as we enter into an increasingly risky and challenging future.

The main purpose of the report is to encourage the farming family to look long down the road:

- what does your family look like in 50 years' time?
- what does your farm asset base look like?
- is my family prepared for the next 50 years and beyond?

Increasingly media headlines scream the 'end of the family farm is near'⁴; that foreign corporates are the food producers of the future. Yet, the statistics don't share the media headlines: Karen Schneider, Executive Director of ABARES in March 2016 revealed that the family farm unit, when well operated, outperforms corporate agriculture⁵.

"If you're looking at broadacre and dairy, except in the case of beef, family farm structures have outperformed the corporate sector in terms of operating returns.

⁴ <https://www.theland.com.au/story/4063475/farmers-quitting-in-droves-and-not-happy-about-going/?src=rss>

⁵ Karen Schneider March 2016 address at ABARES Outlook Conference, Canberra, Australia:

<http://www.agriculture.gov.au/abares/outlook/Pages/presentation-videos-transcripts/karen-schneider.aspx>

And those differences between family farms and corporates are similar in Canada and the US. It's not just an Australian story. It's been this way for a long time, and it's one of the main reasons that family farms continue to dominate agricultural industries around the world. And it's the reason that we don't expect to see corporate agriculture transform the family farm model in Australia any time soon."

This report supports the belief that opportunities exist for family farms to transform themselves into profitable, resilient and enduring businesses, which survive and prosper for many generations to come.

Some family farms in Australia have already seized this opportunity and are operating tremendously great businesses.

Others are keen to start the transition, whilst there is a segment of the agricultural community who reject change, defiantly clinging to the past and hoping this won't happen to them.

For those family farms who wish to avoid sitting before a Justice of the Supreme Court and don't want to experience the bitter and expensive process which rips families apart following the challenge of a Will; this is a report for you.

Like any good lawyer, I can't guarantee the results. This report embodies some great learnings: the power of farmers teaching farmers⁶ is truly inspirational.

About the writer

Together with my husband Brendan, our employees, contractors, and childcare support, we run a family farming business. We are a dryland and irrigated mixed cropping business with livestock trading, situated in the Central West of New South Wales. Our business operates across 1800 hectares in the regions of Goolma, Wellington, Geurie and Dubbo. We own three of the farms and lease another. We commenced our business in 2012.

We farm in an area with relatively high land values (river flats sold for \$12,000/HA in April 2018), with land tightly held, expansion is difficult. Running a business on this type of farm land demands debt (unless you inherit ample), and debt forces our focus.

⁶ A term I first heard from farmers who attended a course operated by Little River Landcare, Yeoval, New South Wales from the early 2000's to present day.

Acknowledgments

My husband Brendan is a quiet, hardworking fellow and prefers open spaces over city lights.

When our son Lachlan was eight weeks old, I was looking down the barrel of 12 months at home on maternity leave. As a lawyer who enjoyed being busy, I was keen to “fill in” my time (!) Whilst many *many* people have supported, leaned in and helped, it has been Brendan who made my Nuffield journey possible.

Lachlan had his first birthday, three days before I flew to Brazil for 26 days. Together with the amazing Catherine (our childcare, gardening and emergency pivot extraordinaire), my parents Rhonda and Roger, and Brendan’s mum Alex, Brendan farmed by day and endured teething by night.

Brendan drove a Campervan 4,000km around the South Island of NZ, whilst I madly called and interviewed farmers and then wrote up my notes. Brendan jumped on a plane to London (with his mum), to join me for a few weeks in May, and then returned to sow our chickpea crop. Two weeks later, he jumped on a plane to Texas, USA and then Canada to grab another Campervan and do another 4,000km.

I acknowledge the support of our accountant Mike Nangle of Boyce, and Nigel Kerin of Kerin Poll, for supporting my application – two men I greatly admire, and without their blessing, I would not have submitted my application.

I acknowledge the support of the team at Booth Brown Legal, the law firm which generously allowed me to extend my maternity leave to 18 months.

There have been many raised eyebrows – mainly other women – who didn’t get this. My mum did, she understood the “career break” maternity leave affords a lawyer, was the only time I had to investigate future proofing for our farm business - before I returned to the complex demands of a professional life.

I must acknowledge Nuffield for the opportunity to undertake a once in a lifetime opportunity.

Finally, but by no means last, I now understand why Rabobank supports the Nuffield program – Rabobank is quite literally invested in the future of Australian agriculture, and understands primary production happens because of its people. Thank you, Rabobank – without your financial support of the Nuffield bursary, amongst other financial you provide Nuffield, this report wouldn’t have been written.

Abbreviations

ABARES Australian Bureau of Agricultural and Resource Economics and Sciences

GFP Global Focus Program

GRDC Grain Research Development Corporation

HA Hectare

NZ New Zealand

LSU Livestock Unit

LVR Loan to value ratio

Objectives

This report has two objectives:

1. The objective of reducing the number of farming families finding themselves before the Supreme Court of New South Wales by:
 - a. Describing the characteristics of successful family farms who transition between the generations; and
 - b. Encouraging Australian farmers to do some deep self-reflection and obtain clarity as to their legacy to their family long after they have passed.

2. The objective of looking under the covers of some of the most profitable agricultural businesses in the world and what role financial literacy played in their success:
 - a. Suggesting how financial literacy can assist with scaling the Australian family farming business;
 - b. Outlining the learnings mature agricultural capital markets can teach the Australian context over the coming 50 years, in particular the role of long term debt plans.

Chapter 1: Introduction

Australian history informs identity

Agriculture as a sector in Australia is relatively young, with European settlement only 231 years ago⁷. By 1860, only 70 years after settlement, there were already 1.2 million acres (or 480,000 hectares) under crop and livestock numbers had increased to 25 million head. By 1913, “The Haber process”, made it possible to produce ammonia, and thereby fertilize, on an industrial scale.

By comparison against other major agricultural economies, the Australian agricultural industry has developed very quickly during these 231 years. Our competitors hold a 400-year advantage:

- Canada’s ‘modern’ agricultural sector commenced in 1605⁸;
- the Native American crop rotation being traced back to the mid 1400’s well before the arrival of Columbus; and
- Early cropping programs in Prussia in the mid 1500’s (parts of modern-day Germany)

Whilst our production systems have developed quickly, the aspect of the Australian family farm which doesn’t focus on production, is still developing.

In the development of this report, the writer spent time with farming families in:

- Conquista, Minas Gerais, Brazil;
- Handrup, Germany;
- Sarnia, Ontario, Canada; and
- Canterbury, New Zealand,

which provided valuable insight into the investment and focus on the **non-production** aspects of the agricultural business.

Whilst this report is based on learnings and research far greater than four farming families, it is interesting to extract the real-life success stories.

These case studies were selected because they were relatable – they grow similar crops/received similar prices to broadacre farmers in the Central West of New South Wales. Whilst the cost of labour in Minas Gerais was much cheaper than the cost of labour sourced near Dubbo, New South Wales, this business had much higher costs in terms of logistics, transport and regulatory risks which appear to offset the gains achieved from lower labour ratios.

⁷ Although an emerging trend indicates Indigenous Australians had an pre-colonial agricultural economy. Once example being the Gunditj Mirring Traditional Owners Aboriginal Corporation applying to the World Heritage Register to recognise an aquaculture network of over 6,000 years old in Western Victoria.

⁸ Dick, Lyle; Taylor, Jeff (2008). "Agriculture, History of". The Canadian Encyclopaedia. Historical Foundation of Canada

An overwhelming trend became apparent from my time with these four families – they identified as a *family business* who prioritised their financial literacy. They were unashamedly in business. Each business had significant debt resulting from investment in on-farm infrastructure or from recent land acquisitions.

Before this report shares how financial literacy was a central focus of those interviewed, it is important to consider if Australian family farms have an identity crisis.

Does the Australian family farm have an identity crisis?

Australian farming families since European settlement have been primary producers. Farmers consider that they “produce” a primary product.

The Australian family farm “identity” can be broadly summarised in Figure 1 below:

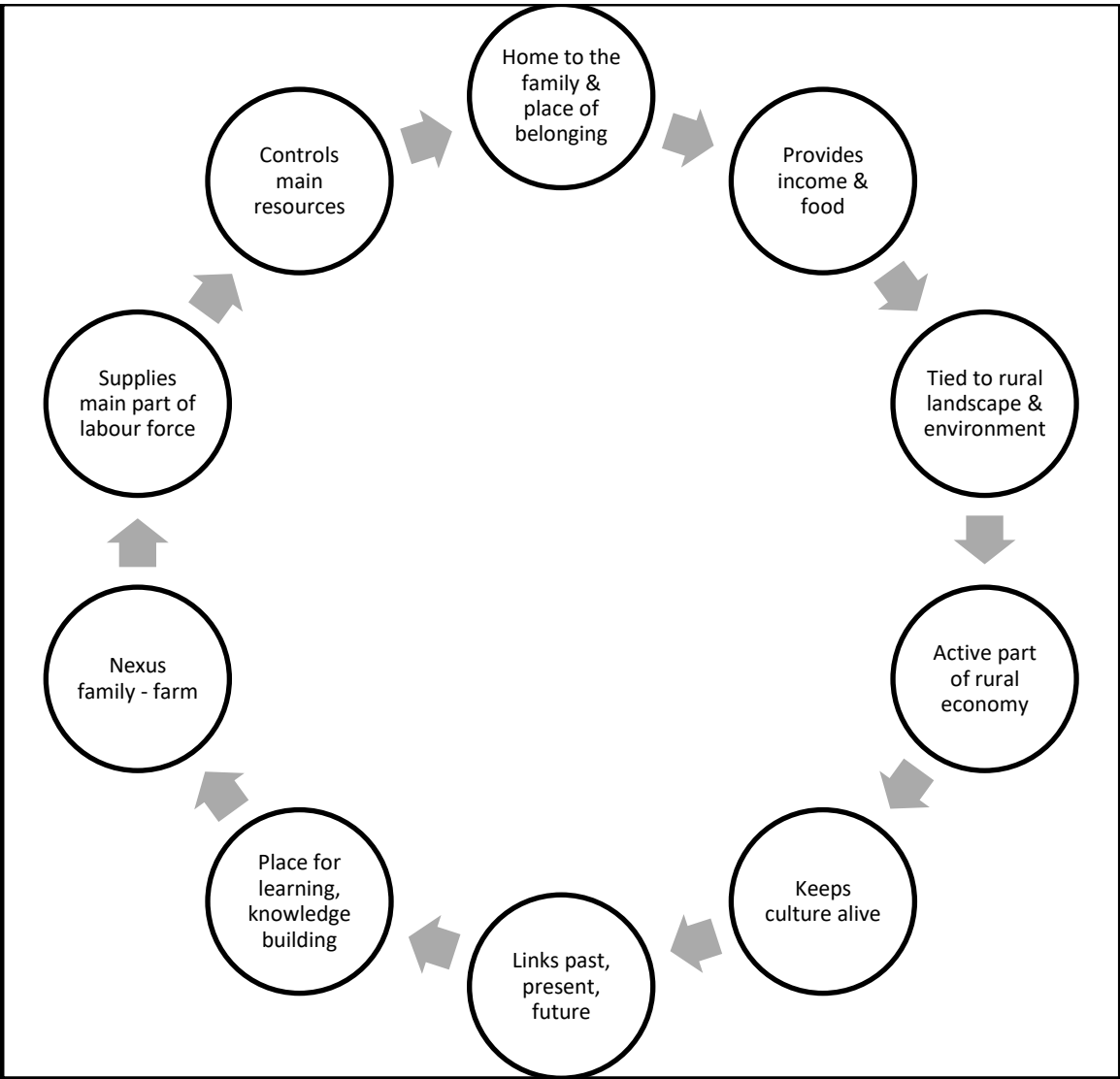


Figure 1: Key characteristics of the identity of a farming family⁹

⁹ I have used the image of Prem Baboo of the Dangote group of Projects in Fertilizers group, Lagos Nigeria, as it summarises my understanding of the identity of the Australian Family Farm

In March 2019, the United Nations announced that 2019 through to 2028 would be the “decade of the family farmer”. The imagery used by the United Nations (see Figure 2) reiterates the connection between production and family.



Figure 2: United Nations graphic¹⁰

Cultural legacy from our early production years

When I write a Will in 2019 and ask which occupation the will maker would like noted on their Will, they will tell me they want to be referred to as a “Farmer and Grazier”. This is very different anecdotally to the response to the same question asked to the local pharmacist or

¹⁰ Sarah K. Lowder, Jakob Skoet and Saumya Singh, “What do we really know about the number and distribution of farms and family farms in the world?” Background paper for The State of Food and Agriculture 2014

Food and Agriculture Organization of the United Nations <http://www.fao.org/family-farming-decade/en/>

butcher, who are more likely to refer to themselves as a “Businessman” or “Director”. For many reasons¹¹ most farmers do not consider themselves as a business people.

Historically, farmers grew the produce, delivered it to market, and were paid by the merchant or buyer who manufactured the produce into a finished saleable item.

Whilst our farming families are familiar (with varying levels of skill) with concepts of leverage, hedging, future markets and currency markets, most farming families have gained incredible gains in efficiency through technology and focusing on soil health. The concept of a farmer calling themselves a businessperson is limited to a small section of the farming community.

History informs identity, but export markets force change

Culturally, human beings tend to take a while to undergo change. The transition from foraging to agriculture that shaped the history of humanity, our society, psychology, and even landscapes to this day - took a millennium of slow changes¹².

The farmer eventually changed during the agricultural revolution when he was more food than his family needed and he would supply surplus product in exchange for monetary payment at local market places.

Farming has a social and familial aspect to it, historically it has been an important part of our society as farmers would work together within their family groups and the food they grew, kept their society fed. In times of military conflict, food [used to be] an essential part of the success of the military campaign¹³.

Historically, local food production was necessary, as markets were localised and supply from overseas imports was confined. Now in 2018 Australia exports an estimated 65% of Australian agricultural produce.

Whilst our production patterns have changed, our sense of identity and the culture in which the farming family unit operates appears still connected to a historical localised market place, which no longer exists.¹⁴

¹¹ The labelling of occupation is often an interesting reflection on a person’s self-image – how they perceive themselves and how they portray themselves to the wider world - an entire topic for a Nuffield Scholarship!

¹² Michael Gross, The Paradoxical evolution of Agriculture, Current Biology, Volume 23, Issue 15, 19 August 2013

¹³ Tanfer Emin Tunc and Annessa Ann Babic *Food on the home front, food on the warfront: World War II and the American diet*. Food and Foodways Journal, Volume 25, 2017

¹⁴ It is unknown how much of Australian agricultural produce is sold to the domestic Australian consumer via local farmers markets: Vicki Woodburn, Understanding the characteristics of Australian farmers’ markets, RIDIC, 2014

Globalisation, increasing costs, and decreasing commodity prices

Not only has the marketplace to which the Australian farming family is selling changed, but so has the cost of growing the produce, and price the family is paid for their produce.

It is well understood amongst the agricultural sector that inputs have increased, whilst farmgate prices have declined. However, it is an important aspect of present day Australian farming and ABARES have the following statistics:

- Since the early 1970's, prices received by Australian farmers have been paid relative to the cost they pay for inputs has been on a steady decline, as shown in Figure 3.

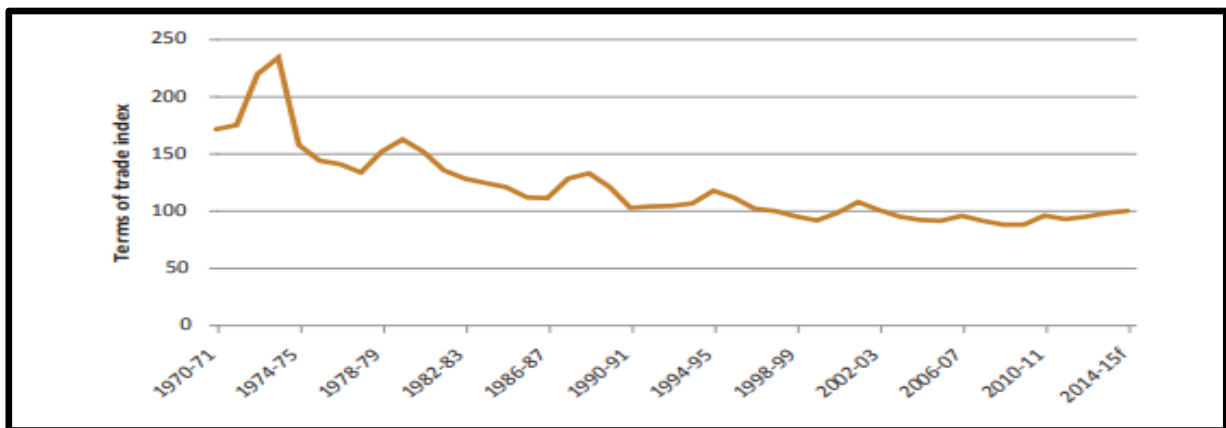


Figure 3. ABARES forecast – terms of trade index 1997: present¹⁵

A reduction in the prices Australian farmers get paid, and the increase in costs the Australian farmer pays for inputs is shown in Figure 4 and Figure 5 below¹⁶.

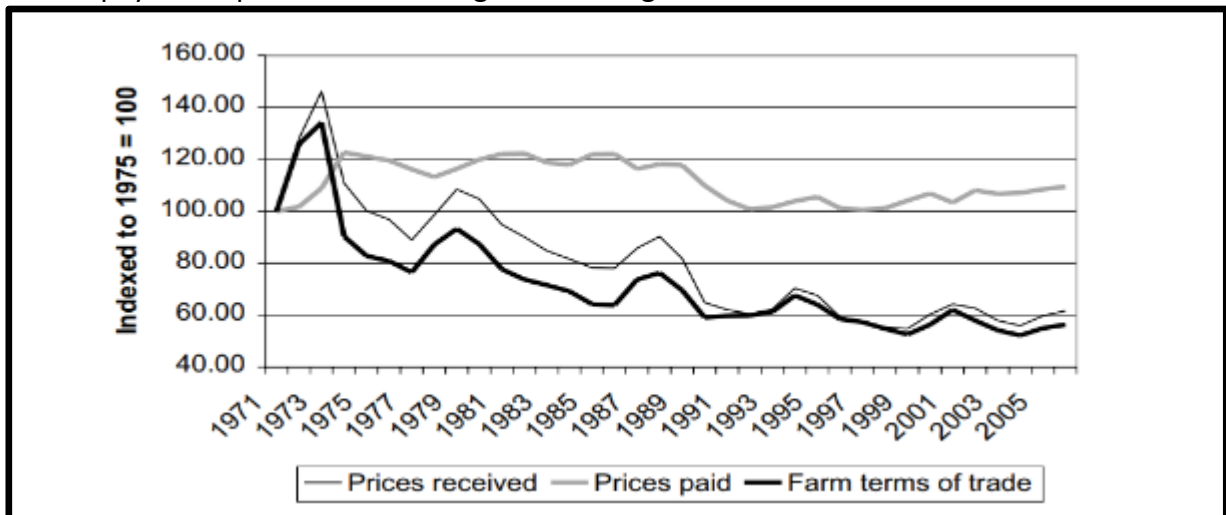


Figure 4. Trends in Aust wheat price and major farm inputs 1975:2009 (index to 1975 prices)

¹⁵ ABARES 2015 Forecast: Terms of Trade Index, "Australian farmers' terms of trade"

¹⁶ Barr, Neil Francis Barr, *The House on the Hill, The Transformation of Australia's Farming Communities*

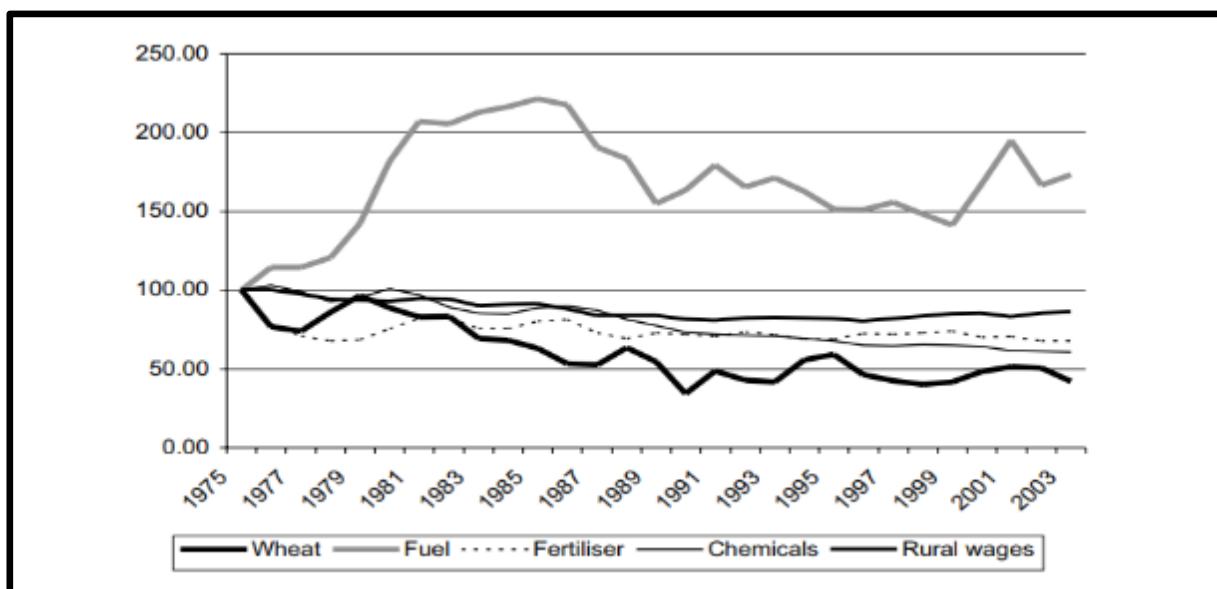


Figure 5. Australian farmer's terms of trade: real input prices and prices indexed '75 to '03¹⁷

The recent 2015 Australian Agricultural Competitiveness White Paper¹⁸ aptly describes the situation:

“The relatively small, independent nature of farming means that farmers can be at a commercial disadvantage relative to buyers who are able to exercise significant market power.”

Duncan Ashby writing for GRDC in 2016 explored the long-term trend in Australian farming which reveals poor profitability among small farm businesses drives the process of farm consolidation, where Figure 6 189,000 farms in 1973 is now 120,000 farms in 2014.

Year	Number of farms	Farm area (million hectares)	Wheat and crop area (million hectares)	Beef (million cattle)	Dairy (million cows)	Sheep (million head)
1973/74	189,000	500	13	27	4	145
2013/14	120,000	397	25	25	3	73

Figure 6. Farm business trends

The trends from the 1970's until present day are sobering reading and demonstrate the inability for a farming family to operate a business using historical metrics – the production process remains the (largely) the same, however the person and family undertaking the production process must quickly adapt to modern business processes in a low margin business model.

¹⁷ Department of Agriculture and Water Resources ABARES Farm Survey and analysis – Grains industry (<http://agriculture.gov.au/abares/research-topics/surveys/grains#detailed-farm-debt-and-equity-findings>)

¹⁸ <http://agwhitepaper.agriculture.gov.au/>

Chapter 1: What is identity, self-awareness and personal legacy?

There is a conundrum facing Australian family farms – in a relatively ‘short’ 231 years, Australian farmers have become world leaders when it comes to production. However, unlike many “older” agricultural economies around the world, Australia’s focus on production has sacrificed opportunities for self-reflection on identity and legacy.

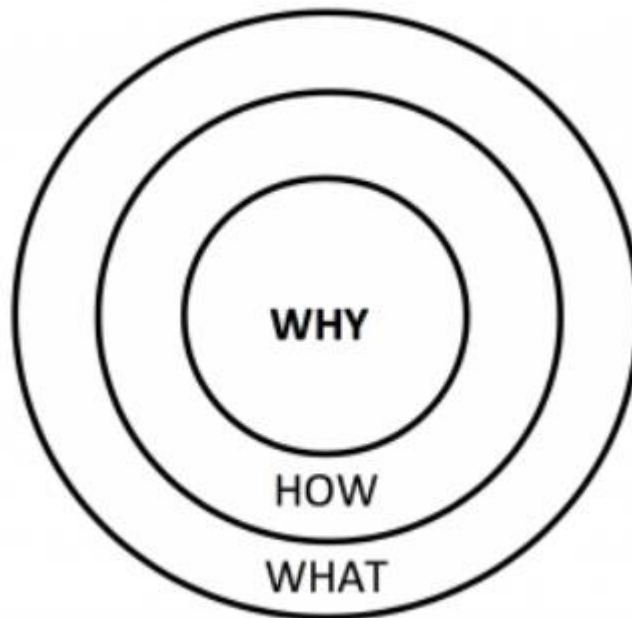


Figure 7: “The Golden Circle: It Starts with Why”

How identity shapes a family farm business

Identity means different things to different people. The world of psychology describes identity as being largely concerned largely with the question: “Who are you?” What does it mean to be who you are?¹⁹

Identity relates to our basic values that dictate the choices we make (e.g., relationships, career). These choices reflect who we are and what we value. For example, we can assume that the investment banker values money, while the college professor values education and helping students. Dr Shahram Heshmat, writes that “few people choose their identities”. Instead, he writes “they simply internalize the values of their parents or the dominant cultures”.

In 2007, a large study of Finnish farmers was undertaken to attempt to record the identity traits of the conventional farmers compared to the “entrepreneurial” portfolio farmers. The study examined the issue European agriculture was (is?) facing with increasing pressures for restructuring. The study concluded the skills of the conventional farmers in the areas of

¹⁹ Shahram Heshmat, Ph.D, “The Science of Choice”.

marketing or willingness to take risk was creating a major challenge to their local agricultural sector.

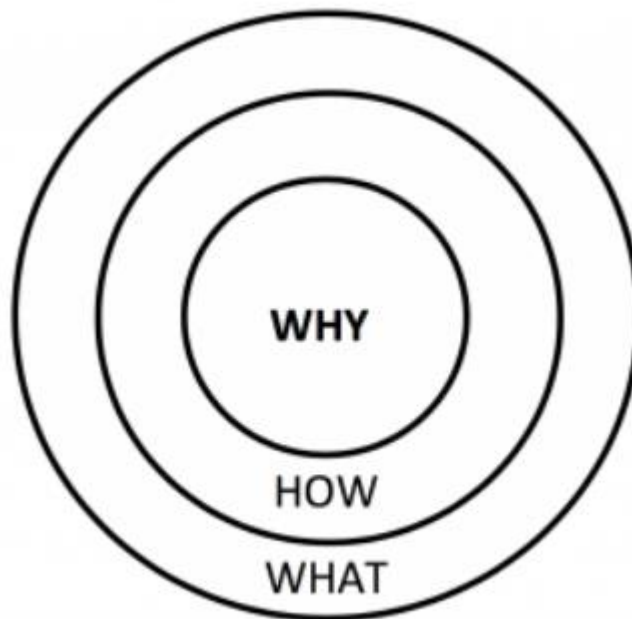
The paper summarised that government training was needed for the conventional farmer to create an “entrepreneurial identity”. Compared to conventional farmers, the “entrepreneurial” portfolio farmers in the sample perceived themselves as growth-oriented, risk-takers, innovative, optimistic and having more personal control upon their business activities.²⁰

Self-awareness

Self-awareness²¹ in terms of being part of a team of people who operate a family farming business relates to: having a conscious knowledge of one's own character and feelings²².

Self-awareness and developing a legacy for the family farmer

Most farmers have business goals to work towards, as well as a desire to help others achieve their personal goals.



²⁰ Kari Mikko Vesala, Juuso Peura and Gerard McElwee (2007) "The split entrepreneurial identity of the farmer", *Journal of Small Business and Enterprise Development*, Vol. 14 No. 1, pp. 48-63

²¹ There is already an excellent Nuffield report on the role of self-awareness in farming (Ben Allomes, 2015 NZ Nuffield Scholar) which I would highly recommend, and due to this, I won't expand on this topic in this report.

²² Definition of "Self Awareness" Oxford Dictionary

Chapter 2: What is financial literacy?

Financial literacy is a combination of financial knowledge, skills, attitudes and behaviours necessary to make sound financial decisions, based on personal circumstances, to improve financial wellbeing.

Why is financial literacy important?

As an essential everyday life skill, being financially literate means being able to understand and negotiate the financial landscape, manage money and financial risks effectively and avoid financial pitfalls.

However, financial literacy for the family farmer means all of the above, as well as navigating the specific pitfalls of agriculture such as:

- Managing cashflow in time of prolonged drought or flood;
- Structuring debt and business expenses to align with the seasonal timing of payments;
- ...

Financial pitfalls in farming can be temporary or permanent. More often, the impact of financial pitfalls is devastating and can impact families for generations.

Duncan Ashby writing for GRDC in 2016 explored the long-term trend in Australian farming which reveals poor profitability among small farm businesses drives the process of farm consolidation, where Figure 8 189,000 farms in 1973 is now 120,000 farms in 2014.

Year	Number of farms	Farm area (million hectares)	Wheat and crop area (million hectares)	Beef (million cattle)	Dairy (million cows)	Sheep (million head)
1973/74	189,000	500	13	27	4	145
2013/14	120,000	397	25	25	3	73

Figure 8. Farm business trends

Chapter 3: Understanding capital growth and the role of debt

27% of Australian farms have debts of more than \$1,000,000. This 27% of farms are classified by ABARES as generating a high proportion of the value of our agricultural production²³, with the largest 10% of Australian farm enterprises producing 48% of the total broadacre output. These businesses have the lowest equity positions, with most businesses having at least 60% equity in their land, however the larger businesses (especially cropping enterprises) are operating businesses with less than 50% equity.

Equity ratio	No debt	Less than \$100,000	\$100,000 to less than \$250,000	\$250,000 to less than \$500,000	\$500,000 to less than \$1m	\$1m to less than \$2m	More than \$2m	Total
More than 90%	25	12	9	5	4	1	0	56
80 to less than 90%	0	0	2	5	5	5	2	19
70 to less than 80%	0	0	1	1	2	4	3	12
60 to less than 70%	0	0	0	0	1	3	4	8
Less than 60%	0	0	0	0	1	1	3	4
Total	25	12	13	11	13	14	13	100

Figure 9. Distribution of farms, by farm debt and equity ratio, grain farms, Australia 30 June 2017²⁴

Australia’s total rural borrowings fluctuate between \$75Billion to \$68Billion. Typically, farm businesses try to ensure no more than 15% of total farm income is paid on interest costs.

CASE STUDY: Dean and Pip Pye, New Zealand

One of the farmers interviewed for this report was Dean Pye, the Managing Director of Pye Produce Limited, located in the Canterbury and West Coast areas of New Zealand’s South Island.

Dean and his wife Pip farm 1600HA in mainly horticulture crops, process vegetables, seed crops and potatoes (mostly for French fries). The growth that Pye has undergone during his farming career is impressive, with seven full time staff and multiple contractors employed on a permanent basis. Whilst the produce which Pye grows was impressive, the interview with Pye was purely business focused. Dean considered “Debt a way to turn a hobby business into a structured business”, with health and safety regulations and environmental compliance the other main aspects where his energy is spent. Dean comments whilst he was “allergic to the office” and enjoys physically working on the farm, his wife and business partner Pip is in constant communication about all matters in the office.

²³ <http://agriculture.gov.au/abares/research-topics/surveys/grains#farm-capital-and-investment>

²⁴ Table 4. <http://agriculture.gov.au/abares/research-topics/surveys/grains#farm-capital-and-investment>

Dean is a relatively young farmer at 45 years of age, having commenced his business at a young age through contract baling.

Debt – repay only interest in the early days

Significantly, Dean attributes his philosophical approach to debt as a result of his early years. Pye says “I grew up and didn’t know what the word “principal” meant”, and as a result, Pye from the beginning of his farming career would pay only interest on his loans, never debt reduction.

Debt – focus the debt on capital appreciating assets (not P&E)

The beginning of their farm business was to obtain as much land as they could afford, with minimum plant and equipment: “the horsepower per hectare was very low!”. Every 2 years they have bought another farm. Pye worked extremely hard to build scale within his business, working long hours, with a young family and taking no wages. Pye identified within himself from a young age that he would develop and lease blocks, so he kept leasing.

Debt – think long term in relation to capital gains

Pye was mindful to acknowledge the significance of his wife in their business – Pye explained that Pip had the foresight for locating assets which were not adjoining their main farm area, but would be useful at a future date to sell off to fund the purchase of neighbouring land – that is: Pip Pye played a defensive capital hand. She had a hunch that land values would increase over time and wanted to have the most amount of exposure to capital growth that they could afford.

Debt – always spend it properly

Pye explained debt for land is only one part of business debt, the other being debt for plant and equipment or infrastructure. Pye has an approach to always spend the dollars properly the first time, “I don’t cut corners, and don’t buy cheap and will wait and do it properly if I can’t afford to do it properly”.

Debt – the difference between bullish and stupidity

Pye explained that he will not engage in second tier lenders and his approach to lending to date has been “If the banks are happy, then I do it, but if they say no, I wait”.

The formal financial literacy within the business is Pip’s commerce degree and combined with tenacity and an entrepreneurial streak, Pye Produce Limited is certainly utilised underlying capital land gains since 1992 to expand their business.

When the Pye’s purchased land in 1992, they paid \$1,500/HA. In August 2017, land in the same area sold at auction for \$57,112/HA – part of a 144HA irrigated farm which grew grasses, wheat, barley and potatoes with sheep and beef grazing complimenting the rotation.

In 2018, New Zealand’s farm businesses are leveraging against high land values, see Figure 10.

\$/ha - April 2018	All	Arable	Dairy	Finishing	Forestry	Grazing	Hort	Special
New Zealand	27,309	35,277	36,028	29,427	7,349	10,692	278,258	28,621
Northland	18,368	15,423	18,553	24,218	23,218	8,752	93,973	
Auckland	39,755	21,201	35,080	41,941		24,115	178,630	126,256
Waikato	38,202	108,096	42,504	35,856		12,358	212,500	32,787
Bay of Plenty	103,324	45,458	42,525	37,780		16,392	431,457	
Gisborne	101,900	2,290,000			9,366	5,566	158,263	
Hawkes Bay	11,870			42,481		10,677	147,811	11,159
Taranaki	51,890		54,006	56,338		12,775	97,929	
Manawatu/Whanganui	23,801	35,272	26,765	26,140		8,306	28,024	47,362
Wellington	14,593		49,872	31,507	2,088	11,161		
Nelson	25,804	16,908		34,357	6,450	17,522	233,287	28,621
West Coast	10,682	3,354	15,412			10,682		4,110
Canterbury	32,097	38,293	45,496	33,189	11,361	10,276	198,788	
Otago	17,619		26,027	26,479	7,349	9,500		
Southland	20,972	38,482	31,477	24,991		14,644	37,382	20,807

Figure 10. Farmland values in New Zealand, April 2018

At the same time land values were increasing, the level of rural debt in New Zealand has also increased in the same period.

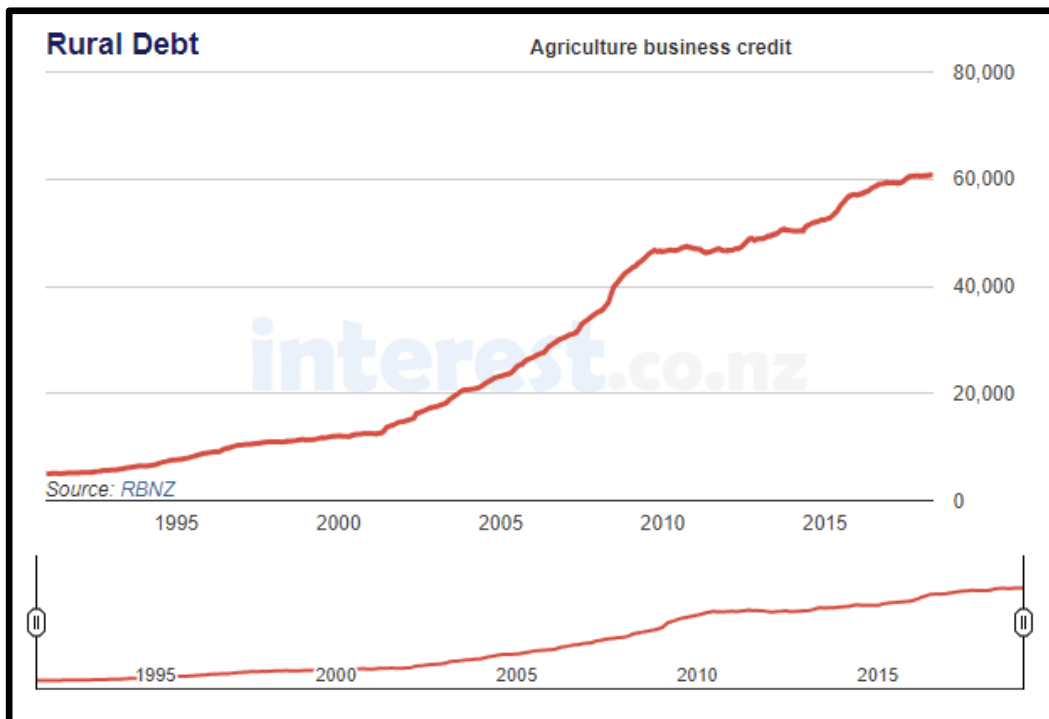


Figure 11. Agribusiness Business Credit (Farm Debt levels) 1995 - 2018

Interestingly during this same time, Capital Gains Tax has been absent on capital gains on rural land, and interest rates have declined significantly as outlined in Figure 11.

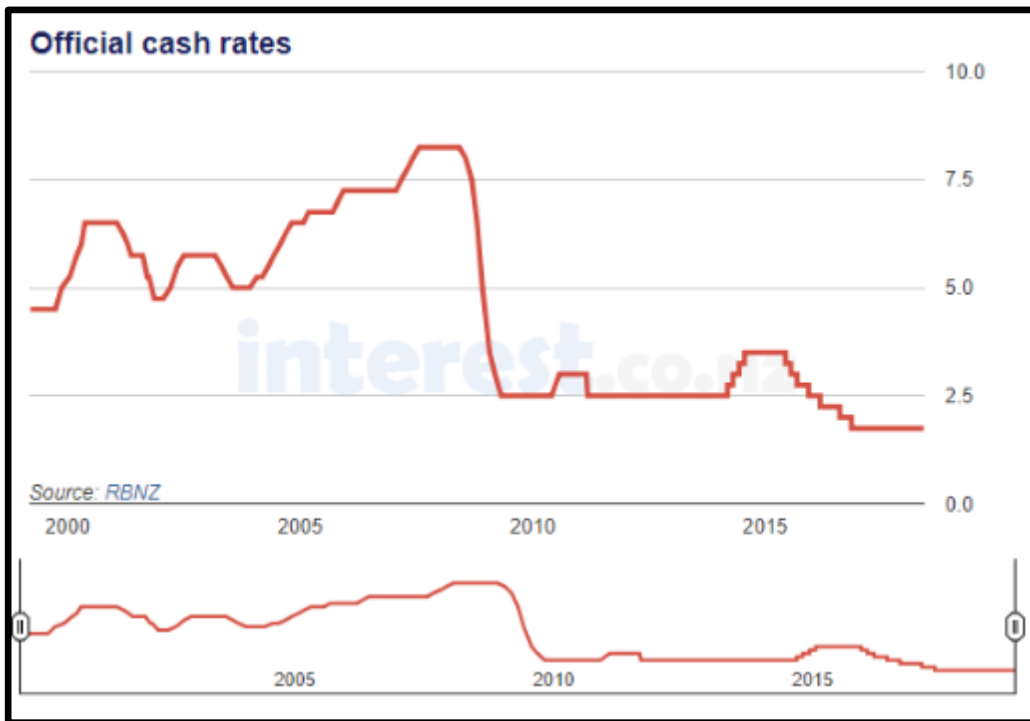


Figure 12. Official interest rates (cash) 2000 - 2018²⁵

As land prices climbed, interest rates declined, farm debt rose - there was extreme volatility on the income received. For the purposes of this report wheat has been chosen as the commodity, given its relative global trade and broad growing regions. Below indicates the price paid for one tonne of wheat from May 1998 until 2018, showing a range of NZ\$185.87/tonne to NZ\$575.23/tonne.

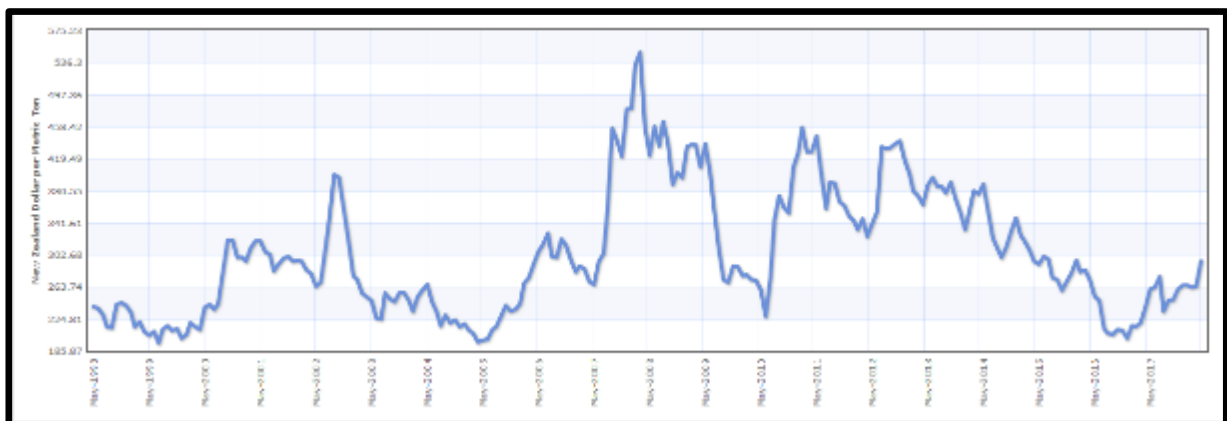


Figure 13. Wheat Monthly Price \$NZ/tonne export price delivered 1998 - 2018²⁶

²⁵

²⁶ <https://www.indexmundi.com/commodities/?commodity=wheat&months=240¤cy=aud>

Factors causing capital gains in land values

There are a variety of factors pushing land prices in the meteoric rise (no capital gains tax, increased demand for rural land from international purchasers etc), but the concept of wealth creation within each farmer's business was a common thread – the increase in their underlying capital asset was a double edged sword: they were able to re-borrow against the asset to either fund business cashflow or supply an equity position from their could borrow against to expand their land footprint, but the flipside to this opportunity was they were purchasing land which was so expensive, the actual business return as a percentage of the asset was eye-wateringly low.

New Zealand Economists Corey and Kerr analysed the increase in land values in Canterbury from 1980 until 2018 and concluded land growth was strongly linked to:

1. A long run relationship between profits and land values; and
2. Whilst there was a period when the value of rural land is higher than the implied profitability, this was due to two factors:
 - a. Credit being easily available, so land use change is more rapid (ie converting sheep grazing land into intensive diary or arable or horticulture land)
 - b. The general economy doing well which provides underlying confidence²⁷.

Are there lessons in New Zealand's relationship with debt for Australian family farms?

²⁷ Allan, Corey; and Kerr, Suzie *Examining the Drivers of Rural Land Values in New Zealand* 2014 a presentation at the New Zealand Association of Economists Annual Conference, Auckland.
<https://motu.nz/assets/Documents/our-work/environment-and-resources/lurnz/Examining-the-Drivers-of-Rural-Land-Values-in-New-Zealand.pdf>

Annexure 1: Financial aspects of family farm businesses

These are the financial topics which the businesses interviewed raised as matters they consider during the management of their family farm business:

Benchmarking:	Pre-harvest direct costs / HA
	The finance costs
	Overhead costs (costs of running the business (insurance, rates, labour etc)
Documents:	Farm business plan
	Vision for the future of their farm business
	Farm business cashflow budget
	Debt reduction plan
	Debt serviceability plan - to measure the farms ability to service debt in various growing conditions
Human resources	Regulatory compliance with labour laws
	Management skills in managing staff or contractors within the business
Alternative sources of capital	Maintaining an understanding of vendor finance (if the neighbour comes up for sale)
	Leasing arrangements – perhaps as a way to increase access to land to grow the business before purchasing land;
	Retiree superannuation equity release - typically based on relationships –where an older farmer and a younger farmer form a business relationship to enable the scaling of the younger farmer whilst the retiring farmer reduces their involvement or equity in the business or assets over time
	Plant and equipment facilities – banks or second tier lending institutions obtaining a “chattel mortgage” (now referred to as a Personal Property Security Registration) over the item of plant which is repaid typically within 5 years of the loan establishment
	Venture capital – wealth individuals or organisations who enjoy supplying finance to farming businesses in exchange for financial return;
	Livestock facilities – local livestock agents who provide finance to a client who may not have access to cash to purchase livestock, and is repaid the loan on sale of livestock

	venture capital – wealth individuals or organisations who enjoy supplying finance to farming businesses in exchange for financial return;
	family money – parents or grandparents is so willing, may wish to loan or gift cash or assets for varying lengths of time to assist in the early stages of the farming business
Contracts and forward selling	Will the farming business secure regular customers who wish to lock in a supply of product, or will the product will be supplied “on the spot”?
	Will the farming business enter contracts to supply an amount of product at a certain quality and be locked into a price for the supply?
	Will they consider paying for options to access contracts for not only this years produce but the following year/s?
Currency	Is the farming business supplying a product to a local or export market?
	Will the business become proficient in hedging? If so, what will be hedged?
	Is there any need to protect against the change in the Australian dollar against the currency where the product is being supplied?
Capital expenditure	How much will it cost to replace or repair part of the business infrastructure or plant and equipment?
	When the time comes to repairing or replacing, how will this be funded?
Profit	How much profit is the business making?
	What is the business turning over?
	If the farm business owns the land, what is the return business profit as a percentage of the value of the capital asset?
	Are the business owners being made an appropriate salary for their skills and experience? Or is the business being subsidised by “low market salary” of the farm workers or owners? Is there any “family slave labour” or “sweat equity” within the business which is propping it up?
	If the farm business really a real estate business – making more money in capital growth of the land than from the business profit?
Enterprise selection	Is the farm business making enough profit from the average rainfall for the region?

	Is the type of farm business matched to the environment – could it be more profitable if the business changed the way it worked the land (or sea)
Taxation	Accountant selection: does the accountant for the business work with farming clients regularly?
	Is there an awareness between the difference between capital gains tax, income tax, and GST?
	Does the business have an awareness between tax accounting and management accounting? Does the accountant do everything or can a bookkeeper assist or should the business owner do the accounts personally?
	The depreciation of assets and its taxation impact as well as the physical; effect of using plant and equipment and the need to fund replacement or repairs and maintenance throughout the years
	Is any off-farm income going to impact the business in its ability to obtain subsidies or government grants?
	Does the business have the benefit of farm management deposits to take advantage of the highs and lows of irregular primary production income?
Bank loan features	Does the bank require debt reduction, and at what regularity?
	Should the business utilise a deferred principal arrangement (balloon)
	How is interest paid under the mortgage: Fixed, floating, capped or otherwise
	What impact does a personal guarantee have on the business
Business growth:	How will the business expand?
	How will it fund this growth?
Finance rules:	Does the business have any finance rules – are they implemented by: <ul style="list-style-type: none"> • the accountant? • the family? • the bank
What are the future business income targets?	How long will it take for that to happen?
Will the farm business fund the retirement of the owners?	
How are the financial rules or the above questions	Weekly? Monthly?

discussed within the business:	Quarterly? Annually?
Who makes the finance decisions about the business:	Farmer? Accountant? Bank? Family?
At what point does the financial health of the business need reviewing to ensure pitfalls are avoided?	
If the financial performance is not progressing to plan, when does the farm/assets need to be sold to avoid bankruptcy? Is there a debt reduction plan in place?	transfer the business and/or assets to a family member? sell the land to a neighbour? sell to the general public at auction?
Focusing energy	How much time will the business spend on production?
	How much time will the business spend on thinking about profit?
	How will the business change if the profitability of the business is below expectation?
What level of discipline will be business have regarding its financial literacy - will the business be held to account?	

References

¹ African proverb

¹ This report adopts the definition of “Australian Family Farm” from ABARE and a copy of this definition is outlined in a detailed figure in

¹ Simon Sinek, “Start with Why”, 2009

¹ <https://www.theland.com.au/story/4063475/farmers-quitting-in-droves-and-not-happy-about-going/?src=rss>

¹ Karen Schneider March 2016 address at ABARES Outlook Conference, Canberra, Australia: <http://www.agriculture.gov.au/abares/outlook/Pages/presentation-videos-transcripts/karen-schneider.aspx>

¹ A term I first heard from farmers who attended a course operated by Little River Landcare, Yeoval, New South Wales from the early 2000’s to present day.

¹ Although an emerging trend indicates Indigenous Australians had an pre-colonial agricultural economy. One example being the Gunditj Mirring Traditional Owners Aboriginal Corporation applying to the World Heritage Register to recognise an aquaculture network of over 6,000 years old in Western Victoria.

¹ Dick, Lyle; Taylor, Jeff (2008). "Agriculture, History of". The Canadian Encyclopaedia. Historical Foundation of Canada

¹ I have used the image of Prem Baboo of the Dangote group of Projects in Fertilizers group, Lagos Nigeria, as it summarises my understanding of the identity of the Australian Family Farm

¹ Sarah K. Lowder, Jakob Skoet and Saumya Singh, “What do we really know about the number and distribution of farms and family farms in the world?” Background paper for The State of Food and Agriculture 2014

Food and Agriculture Organization of the United Nations <http://www.fao.org/family-farming-decade/en/>

¹ The labelling of occupation is often an interesting reflection on a person’s self-image – how they perceive themselves and how they portray themselves to the wider world - an entire topic for a Nuffield Scholarship!

¹ Michael Gross, The Paradoxical evolution of Agriculture, Current Biology, Volume 23, Issue 15, 19 August 2013

¹ Tanfer Emin Tunc and Annessa Ann Babic *Food on the home front, food on the warfront: World War II and the American diet*. Food and Foodways Journal, Volume 25, 2017

¹ It is unknown how much of Australian agricultural produce is sold to the domestic Australian consumer via local farmers markets: Vicki Woodburn, Understanding the characteristics of Australian farmers’ markets, RIDIC, 2014

¹ ABARES 2015 Forecast: Terms of Trade Index, “Australian farmers’ terms of trade”

¹ Barr, Neil Francis Barr, *The House on the Hill, The Transformation of Australia’s Farming Communities*

¹ Department of Agriculture and Water Resources ABARES Farm Survey and analysis – Grains industry (<http://agriculture.gov.au/abares/research-topics/surveys/grains#detailed-farm-debt-and-equity-findings>)

¹ <http://agwhitepaper.agriculture.gov.au/>

¹ Shahram Heshmat, Ph.D, “The Science of Choice”.

¹ Kari Mikko Vesala, Juuso Peura and Gerard McElwee (2007) "The split entrepreneurial identity of the farmer", Journal of Small Business and Enterprise Development, Vol. 14 No. 1, pp. 48-63

¹ There is already an excellent Nuffield report on the role of self-awareness in farming (Ben Allomes, 2015 NZ Nuffield Scholar) which I would highly recommend, and due to this, I won't expand on this topic in this report.

¹ Definition of “Self Awareness” Oxford Dictionary

<http://agriculture.gov.au/abares/research-topics/surveys/grains#farm-capital-and-investment>

¹ Allan, Corey; and Kerr, Suzie *Examining the Drivers of Rural Land Values in New Zealand 2014* a presentation at the New Zealand Association of Economists Annual Conference, Auckland. <https://motu.nz/assets/Documents/our-work/environment-and-resources/lurnz/Examining-the-Drivers-of-Rural-Land-Values-in-New-Zealand.pdf>

<http://www.financialliteracy.gov.au/media/218309/financial-literacy-and-behavioural-change.pdf>

Martin, Peter; Levantis, Caroline; Shafron, Walter; Philips, Paul and Frilay, James, *Farm Debt: Broadacre and dairy farms, 2014-15 to 2016-17*. 18 April 2018 (<http://www.agriculture.gov.au/abares/research-topics/surveys/debt>)

Weragoda, Aruni and Ashton, Dale, *Farm Financial Performance, Vegetable Industry*. 16 November 2017 (<http://www.agriculture.gov.au/abares/research-topics/surveys/vegetables#farm-financial-performance>)

Plain English Compendium Summary

Project Title:	Looking under the covers: How identity, financial literacy and patient capital can prepare the Australian Family Farm for the next 50 years
Nuffield Australia Project No.:	1714
Scholar:	Claire Booth
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Objectives	<p>1. Reducing the number of farming families finding themselves before the Supreme Court of New South Wales by:</p> <ul style="list-style-type: none"> • Describing the characteristics of successful family farms who transition between the generations; and • Encouraging Australian farmers to self-reflect and obtain clarity as to their legacy to their family long after they have passed. <p>2. looking under the covers of some of the most profitable agricultural businesses in the world and what role financial literacy played in their success:</p> <ul style="list-style-type: none"> • financial literacy will assist with scaling the Australian family farming business; and • mature agricultural capital markets can inform change in land values in an Australian context over the coming 50 years.
Background	To identify characteristics of family farms which assisted with successful transition between generations and the role financial literacy in these businesses
Research	Interviews and visits with family farmers, banks, financial service providers, accountants and policy groups in multiple agricultural sectors. Assessment of available literature.
Outcomes	Australian family farming families can achieve long term plans for their business if the business self-aware of the importance of identity and personal legacy for the retiring generation of Australia farmers. A key aspect of transitioning the family farm from a production focused business to a business which focuses on its people, includes structured communication processes and policies. Successful agricultural businesses deeply understand farming is primarily the business of patient capital, and these businesses invest resources and time in developing the financially literacy of the family members and non-family employees to ensure growth over the long term.
Implications	Clear long-term planning with a family farm combined with high levels of financial literacy will enable the Australian family farm sector to better manage the risks of climate change, and reduce the costs associated with family provision litigation.
Publications	Nuffield Australia National Conference, Melbourne, September 2018