Growing the Family Farm

A report for:



By James Dempster

2016 Nuffield Scholar

January 2018

Nuffield Australia Project No 1606

Supported by:



© 2017 Nuffield Australia

All rights reserved.

This publication has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Nuffield Australia does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose. Readers are responsible for assessing the relevance and accuracy of the content of this publication. Nuffield Australia will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information in this publication.

Products may be identified by proprietary or trade names to help readers identify particular types of products but this is not, and is not intended to be, an endorsement or recommendation of any product or manufacturer referred to. Other products may perform as well or better than those specifically referred to. This publication is copyright. However, Nuffield Australia encourages wide dissemination of its research, providing the organisation is clearly acknowledged. For any enquiries concerning reproduction or acknowledgement contact the Publications Manager on ph: (02) 9463 9229.

Scholar Contact Details

James Dempster

PO Box 55

Mingenew WA 6522

Phone: 0458191183

Email: jamespdempster@gmail.com

In submitting this report, the Scholar has agreed to Nuffield Australia publishing this material in its edited form.

NUFFIELD AUSTRALIA Contact Details

Nuffield Australia

Telephone: (02) 9463 9229

Mobile: 0431 438 684

Email: enquiries@nuffield.com.au

PO Box 1021, North Sydney, N.S.W. 2059

Executive Summary

The economics of broadacre farming in Western Australia suggest farmers need to get bigger to better absorb the pressures of price and yield volatility, and rising costs. Focus needs to be on reducing cost of production and realise that business expansion plays a key role in driving that production efficiency through improved economies of scale. Unfortunately, the traditional option of buying more land, funded by the bank, is leaving many farmers in significant debt. This represents a barrier to young farmers looking to expand as well as encouraging new entrants to the industry.

In the next five-to-ten years, the author believes there will be a significant transfer of farming assets in Western Australia as the baby boomer generation look to retire. This represents an opportunity for farmers who want to expand, however this situation presents some questions as to how this process will be funded.

Introducing other strategies for family farm expansion is the purpose of this report. Whether it be gaining control of land through owning or leasing, family farms can partner with institutional investors, private equity or form equity partnerships and even collaborate with other farmers to achieve their expansion goals. This report provides examples of these options from businesses visited around the world.

The report outlines key steps farmers can take to prepare their business and become investor ready to attract outside capital or find other partners in their expansion.

It is important to note that the vast majority of family farming businesses have a bank as their major equity partner in a trusted and long -lasting relationship. Buying farmland is still an ideal way to expand. However, there are certainly alternatives which this report explores.

Table of Contents

Executive Summary	3
Table of Contents	4
List of Tables	5
List of Figures	5
Foreword	6
Acknowledgments	8
Objectives	9
Chapter 1: Introduction	10
Chapter 2: The Decision to Expand	13
The own/lease decision	14
Chapter 3: Investing in Farmland	17
Models for investment	
Case study – Radar (Brazil)	19
Case study – Canterra Capital Corp (Canada)	21
Case study – Lone Star Family Farms (Texas)	21
Chapter 4: Private Equity	24
Case study – Rabo & Co (International)	24
Case study – Crowd funding (Holland)	25
Chapter 5: Equity Partnerships	27
Case study – Klinefelter (Texas)	28
Chapter 6: Collaboration between Farmers	29
Case study – Morrison farming (New Zealand)	29
Case study – Contract farming (UK)	31
Chapter 7: Diversity	32
Case study – PX Farms (UK)	32
Chapter 8: Farm Management Companies	35
Case study - Highfield Asset Services (Texas)	36
Chapter 9: The Role of Government	37
United States of America and Canada	37
United Kingdom	38

Ireland	38
Australia	38
Conclusion	39
The decision to expand	39
The decision own or lease	39
Investing in farmland	39
Private equity	40
Equity partnerships, joint ventures and collaboration	40
Diversity	40
Farm management company	40
The role of government	40
Recommendations	41
References	43
Plain English Compendium Summary	
List of Tables	
List of Tables	15
List of Tables Table 1. Advantages and disadvantages to owning land	
List of Tables Table 1. Advantages and disadvantages to owning land	16
List of Tables Table 1. Advantages and disadvantages to owning land	16
List of Tables Table 1. Advantages and disadvantages to owning land	16
List of Tables Table 1. Advantages and disadvantages to owning land	16 10 11 12 14
List of Tables Table 1. Advantages and disadvantages to owning land	16 10 11 12 14 20
List of Tables Table 1. Advantages and disadvantages to owning land	16 10 11 12 14 20 corn at
List of Tables Table 1. Advantages and disadvantages to owning land	16 10 12 14 20 corn at 22 d land,
List of Tables Table 1. Advantages and disadvantages to owning land	16 10 12 14 20 corn at 22 d land, 25
List of Tables Table 1. Advantages and disadvantages to owning land	16 10 12 14 20 corn at 22 d land, 25 30 inhemp

Foreword

Following time at university studying agriculture and a short agronomy career, I returned to the family farm in 2008, joining my parents Phil and Liz, and brother Tim. We are a mixed crop and sheep enterprise at Mingenew, in the northern Wheatbelt of Western Australia.

Our business has undergone a significant transition over the last ten years. From a farming point of view, we have shifted focus from livestock to a predominately cropping enterprise. This decision was based on increased returns from cropping.

Our business has had a focus on transitioning my parents into retirement, with the challenges of building a house on the coast, adding to a superannuation fund and shifting the management of the farm to my brother Tim, and I.

Our situation would not be dissimilar to many farm businesses, with the majority of mum and dad's earnings over the years being put back into the farm.

Recent seasons have been volatile, but returns have been solid with the business having a six-year average return on capital of 9%. This has allowed us to not only fund my parent's retirement but also upgrade machinery and expand the business to the point where we are farming 6,200 hectares (ha) on a combination of owned and leased land today. We crop 5,200 ha of wheat, lupins and canola and run a self-replacing Merino flock of 1,500 ewes.

The challenges for the business remain not only with the volatility of the seasons and prices but also with succession, as Tim and I now both have families of our own to support. We have all identified that our business must continue to grow and by Tim and I remaining in partnership we are in a much stronger position to do so. Our parents are very supportive of our endeavours.

We farm in an area of relatively high land values, with good farmland keenly sought by local families and corporations which can make expansion difficult and costly. In addition, leases have been difficult to come by and, in my experience, tend to be short-term as they are typically a stepping stone to the property being sold.

The aim of this Nuffield study was to investigate how successful family farms had expanded their businesses and whether our expansion plans could be leveraged of the interest in investment in farmland by others. I visited many brilliant businesses and organisations, and this was all made possible by the generous support of my investor Grains Research and Development Corporation (GRDC) and the incredible Nuffield network.

Acknowledgments

I would like to thank Nuffield Australia for awarding me with this incredible scholarship. The opportunity to travel and experience agriculture in different parts of the world has been amazing and the friendships and contacts forged along the way will last a lifetime. I would also like to thank GRDC for their investment and support of both Nuffield and myself.

2016 has been incredibly busy with my Nuffield experience coinciding with Fiona and I starting a family with baby Halle arriving in August. I would like to thank Fiona for her support and patience and also my parents-in-law for building the nursery whilst I was away. The farm also experienced its best production year on record, which was a great result and testament to Tim and dad's hard work in my absence and I thank them for that.

Throughout my journey I have had many people contribute to the overall experience, and I will be forever grateful. I would particularly like to thank my mates on from the Brazil Global Focus Program, Angus Duddy, Fred Appleton, Robbie Moore, Suzanna Ruesink, Tom Skerman, Randall Wilksch, Tom Dinneen and Liz Manchee, which was an absolute highlight of my Nuffield experience.

I would also like to acknowledge the following people from around the world, who greatly assisted me in my travel: Richard Gray, Colin Hudon, Tim and Tammy Smith, Justin Bruch, Justin Crownover, Kyle and Nicky Amos, Danny Klinefelter, Ross Kingwell, Jim and Kelleen Vercammen, James Peck, Rodney and Claire Down, Duncan Rawlson, Richard Marsland, Richard and Rebecca Hinchcliff, Djuke Van Der Matt, Anneckien Ten Have, Gea Bakker-Smit and William Morrison.



GRDC sponsored family farmers at CIMMYT Mexico

Objectives

The aim of this Nuffield topic is to explore the options for farm expansion in broadacre farming, using learnings from agricultural enterprises worldwide.

This report is structured around proving insight to the following questions, through a number of farm businesses experienced during travel, as part of case studies. Objectives include:

- What are the pros and cons of owning vs leasing land?
- How do institutional investors manage their farmland assets and what are the opportunities for the family farm?
- Is attracting capital from private equity, such as high net wealth individuals or utilising crowdfunding, a viable alternative to bank finance for family farms businesses?
- Can we reduce capital outlay by forming equity partnerships in farmland?
- Can we expand through collaboration between like-minded farmers?
- Can we diversity to create alternate income streams to de-risk the business?

Chapter 1: Introduction

Farm businesses in the Western Australian wheatbelt are expanding to achieve efficiencies and to better manage risk.

This expansion has often occurred by purchasing the farm next door, financed by the bank, with the land then remaining in the family over a number of generations. This expansion strategy has been a trusted source of wealth creation over the years, on the back of rising land prices (Figure 1). Rural Bank (2015) reports the average 20-year growth rate as 6.1%.

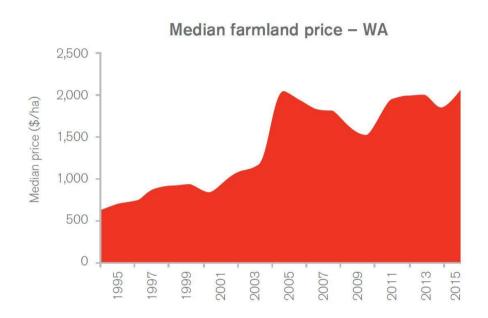


Figure 1. Farm land values in Western Australia

Source: Rural Bank (2016)

Historically in Australian agriculture there has been a reliance on bank finance, with the majority of family farms using a trading bank as a major equity partner. Farm business managers generally have a good understanding of their obligations and financial commitments under this arrangement.

Planfarm (a Western Australian based farm consultancy group) compile data on the financial performance of a selection of Western Australia broadacre grain businesses each year, to provide a benchmark for farm performance. The benchmarks currently position the average equity level of Western Australian broadacre farms at 81% - a level at which Planfarm now expect greater interest from farmers in business expansion (Planfarm 2016).

There are however limitations with using bank finance to grow family farm businesses, in that a farm business is constrained by its peak borrowing capacity. The purchase of new farmland and associated reduction of equity can leave businesses vulnerable to poor seasons, which is certainly not unprecedented in Australia's dryland environment. This has implications on the viability of many family farms, as things like economies of scale and managing risk becoming increasingly important.

As the author undertook study he was conscious of the fact we farm in a time of relatively low interest rates which are expected to stay low for the foreseeable future (Figure 2). In weighing up the options for expansion, a key question is can you beat the bank? Ultimately, farmers need a very good reason to step away from the bank, a cushion of profit so to speak. Without it farmers may as well stick with the bank, as they are a trusted partner in business.

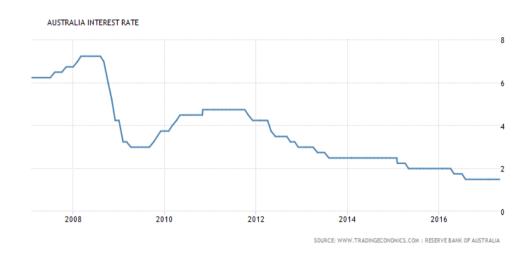


Figure 2. Interest rates in Australia from 2007 to 2017

Source: www.tradingeconomics.com, Reserve Bank of Australia

The economics of broadacre grain farming suggest farmers need to continue to expand and focus on reducing costs of production to better manage risk. Efficient businesses can better absorb pressures such as climatic variability, fluctuating commodity prices, rising costs and be better placed to be flexible with the issues of succession. The graph in Figure 3 demonstrates the variability in wheat production in Western Australia. Many family farms have the experience, skills and machinery base to manage a larger area but are restrained by the amount of capital required to purchase the land and service the debt. In Australia, for

example, the Greener Pastures Global Soft Commodities Opportunities for Australia and New Zealand reports that there is a \$9 billion annual capital gap, which highlights the need to attract investment in Australian agriculture (Port Jackson Partners, 2012).

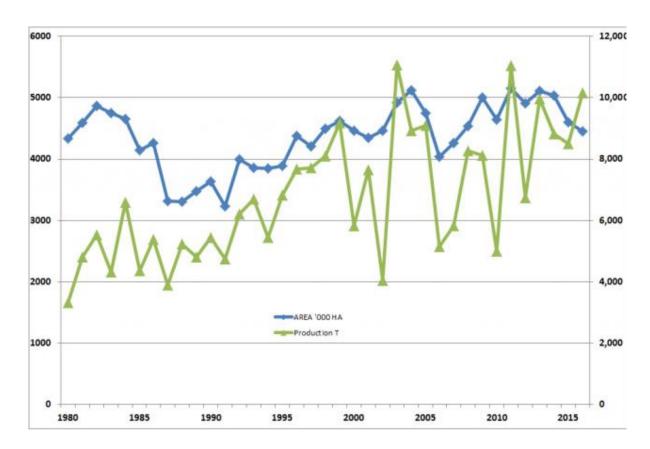


Figure 3. Western Australian wheat area and production 1980-2015

Source: Department of Agriculture and Food Western Australia (2017)

The average age of broadacre farmers has risen from 40 to 55 in the past 25 years and the average farmer is more likely to sell when they retire than transition to an internal successor (Sappey et al. 2012). On this basis, farmers can expect to see a significant asset transfer over the next 5-10 years as the baby boomer generation looks to retire. This represents a significant opportunity for Western Australian broadacre farmers looking to expand.

Chapter 2: The Decision to Expand

Expansion of a broadacre farm business could be done in a number of ways. Acquiring more land, through lease or purchase, adding or increasing livestock, contracting operations such as harvesting or spraying, owning a part of the supply chain, or value adding to the commodities produced. Over 90% of farm businesses in Western Australia are owned by families and most have achieved their scale of business through a combination of bank lending, leasing and share farming (Stevenson, 2017).

When considering expansion, a farm business must ascertain the goal of this expansion. Expansion usually occurs for three reasons:

- to address succession;
- to achieve scale; or
- reduce production risk.

Other questions that need to be answered include, how much land is needed, and how do farmers acquire it?

The answer to these questions will, more than likely, depend on what the expansion goal is. For example, buying the neighbours farm may increase scale and ease of management, but it does not reduce production risk.

To buy and manage well is a useful philosophy to work by. For example, the price paid for a property will affect return on capital figures and can affect future capital gain potential. There are times when buying well may not be possible e.g. paying over market rate to secure the neighbouring farm. Managing well is also critical, i.e. not having enough land can limit the efficiency of other resources used on the farm, (labour, machinery, improvements) which can limit the ability to expand into the future. Having too much land can compromise the ability to manage things properly and reduce the opportunities to make other investments.

Management capability can be difficult to acquire rapidly, the family business is limited by the skills and interests of the family members – and it is not always possible to bring in skills required to expand into currently profitable commodities like livestock. In the author's

business, it is fortunate that there are skills in cropping and livestock, which would make an expansion into either possible.

There are many more questions to be addressed in the expansion phase. For the family farm business these are critical, given the limitations of capital and labour. Included below is a quick check list of the important ones, in the author's view.

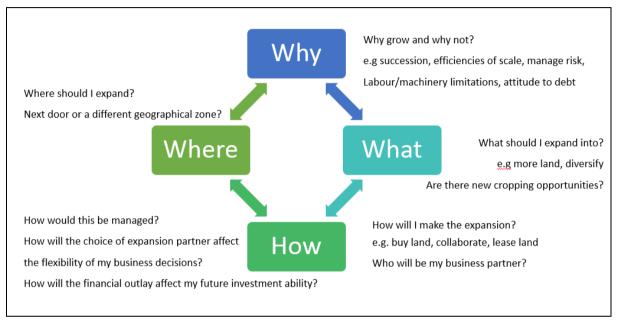


Figure 4. Decision process for family farm expansion

Source: Author

The own/lease decision

ABARES (2015) Farm Survey reports that 5-7% of Australian broadacre farmland is leased. Whilst this is increasing it is still well short of the USA, where nearly 40% of all farmland is leased, and in the grain growing states of Illinois and Iowa where it is over 50% (USDA, 2012).

There are advantages and disadvantages to owning land, opposed to leasing, outlined in Table 1 below.

Advantages

Security of tenure: Owning the title removes the uncertainty of losing a lease and the impact this would have on the entire operation.

Autonomous management decisions: In owning the land the farmer can decide what and where to make investments that improve productivity. For example, whether to upgrade infrastructure to meet their growing needs or invest in soil management that have long term affects, such as lime sand.

Accumulated equity: created though operating profits and capital gain and can provide an excellent source of collateral to borrowing against.

Disadvantages

Liquidity: Land is considered a non-liquid asset. It's difficult to sell in and out of this investment, compared to shares.

Loan repayments: can create cash flow problems and reduce equity and limit the ability of the business to make other investments. Reducing the amount that can be produced off the land and therefore the profitability.

Stamp duty and other Government taxes: such as capital gains tax.

Limited capital: Attempting to own all land on the farm can restrict the farm to a size that is inefficient and unable to employ new technologies effectively.

Low return rate of land compared to other investments: Land often has a lower rate of return then that of other uses of the capital e.g soil renovation machinery, livestock annual operating inputs.

Table 1. Advantages and disadvantages to owning land

Source: Author

Through the author's business's experience with leasing farm land, the advantages can be described below in Table 2.

Advantages

Availability of capital: If capital is not tied up in land purchases it can be used to purchase other productive assets, such as machinery, livestock and operating inputs, or improve on the assets currently owned, such as soil. Or diversify e.g on-farm storage, or off-farm assets.

Availability of intellectual property: In some circumstances the leasing owner is a farmer, available to provide knowledge on the farms historical management, which can assist in improving the current management.

Maintain a dynamic business strategy: Due to the (often) short term nature of leases, the business can remain dynamic by changing their business size and location of operation quickly.

Flexibility: Leases are generally more flexible then bank loans and can often be renegotiated regularly.

Efficiency of existing capital: Being able to quickly acquire more land to farm allows for an improvement of the efficiency of existing machinery, labour etc.

Disadvantages

Short length of tenure: The short-term nature of many leasing arrangements (1-3 years) is too short to justify significant investment in asset improvement. The uncertainty of tenure can also have an effect on the strategic plan for the business.

Lack of incentive for farm asset maintenance: In my experience, individual landlords are generally reluctant to make improvements to the land or buildings, as is the tenant because of the uncertainty of the future control of the property. Institutional investors in farmland seem to be more willing to invest in the asset because they have such a focus on achieving a capital gain over the investment cycle.

Reliance on operating profits: The business is limited in the size of investments that can be made on the farm as money can only be borrowed against an operating profit rather than a capital gain on land.

Table 2. Advantages and disadvantages to leasing land

Source: Author

There are many examples of leasing agreements. The author's business has been involved in two leasing agreements and the devil is often in the detail. Leases can either be based on the value of the land, the productivity of the land or a combination of both. Rental can be paid in either dollars or produce. Examples of further inclusions in the lease agreements, such as cost sharing of lime, asset maintenance and use of houses, differ largely as each lease agreement is a negotiation between farmers, often mediated by an agent.

Chapter 3: Investing in Farmland

Interest in farmland from investors has accelerated since the global downturn in 2008, when farmland values performed well against other investments (Conrad, 2016). The fundamentals of supply and demand seem to generally support agriculture as a good investment. As the world population increases, and there is economy growth in emerging markets, there will be an increasing demand for food into the future. As land and water are limited worldwide, this bodes well for farmland prices.

There has recently been more publicised activity from institutional investors looking to purchase farmland in Australia. An example would be the Westchester Group buying farmland throughout Australia.

Institutional investors, like pension or superannuation funds, currently own less than 5% of the freehold farming area in Western Australia but are expected to increase that share to 25% by 2050 (Stevenson, 2017). Farmland is known to have a negative to neutral relationship to stocks and bonds so many fund managers now include farmland as part of a diversified investment portfolio.

The Rural Bank 2015 report on Australian farm land values identifies three distinct periods of land value growth in Western Australia, since 1995:

- From 1995 to 2005 there was an average annual growth of 12.3%.
- From 2006 to 2010 there was negative annual growth averaging -5%.
- From 2011 to 2015 there was positive growth averaging 5.7%.

Increased investor activity could also be attributed to a stable political environment and the low Australian dollar, which has made farmland in Australia more affordable, especially when compared to the United States of America (USA) or United Kingdom (UK). In addition, farmland values have historically performed well during inflationary periods.

Regardless of this positive economic environment, Australian super funds have not traditionally invested in agriculture, for a number of reasons outlined below (GRDC 2014):

- **1. A multitude of investment options:** Agriculture in Australia contributes 3% GDP, meaning there is competition for investment from many other industries.
- **2. Fluctuating profits:** The agricultural profit cycle of Australian farms can fluctuate significantly in the short term, due to drought, flood, frost etc. it's a long-term game.
- **3. Return on capital:** The average return on capital for broadacre Western Australian farm business is 4.3% (Planfarm 2016), which is lower than other investment options. e.g. the average return of Australia shares on the ASX is 5.5% (ASX 2016). The volatility from season to season is also a concern for investors, compounded by the lack of risk management tools such as subsidised crop insurance.
- **4. Size of investment:** Superannuation funds generally have large blocks of capital to invest and those transactions can be difficult to find in broadacre agriculture e.g. \$50-100 million.
- 5. Liquidity: Australia funds are discouraged from investing in farmland because of our superannuation legislation, which states that a vast proportion of the fund must be able to be shifted between providers at short notice (i.e. within three days of a request; Marshall, 2017). Land is considered a non-liquid asset.
- **6. Government taxes**: Stamp duty is a significant cost on land investment and doesn't apply to other investment options such as shares.
- **7. Benchmarking:** Lack of an agricultural index in Australia to be able to quantify the performance of agricultural businesses. In the USA, the NCREIF property index provides a historical measurement of property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class.

Models for investment

External fund investment could be an opportunity for Australian farmers looking to expand their farming businesses without involving the bank. The operation or management models could take a number of forms, but there seems to be three distinct options for investors: the own/lease model, direct operation and a hybrid lease model. Each have different risk and return trade-offs. Each is briefly described below.

1. **The own/lease model**; the farmland owner leases the land to the farmer at an agreed cash rate. It is commonly known as the Westchester model in Western Australia. The

tenant negotiates with the landlord to have access to the property for a designated period for a set cash amount. Anecdotally these cash leases are generally based on the market value of the property. In this situation the farmer is taking all the risk, with the cash lease paid to the owner regardless of the farms performance.

- 2. Direct operation: the owner (the institutional investor) hires a manager to run the farming operation. In this case the investor is exposed to both yield and price risk, the same as a farmer, but can also achieve high returns after a successful season. There are examples of this approach within Australia, such as Hassad Foods and Lawson Grains.
- 3. A hybrid lease: is a mixture of the cash lease and the direct operation models. A negotiation between the tenant and owner sets a base lease rate and then the owner is further entitled to an incentive payment. This can be based on any number of parameters but commonly yield or gross margins are taken into account. In this case the risk of farming is shared between both parties.

There are significant opportunities for family farms to use institutional investors to assist their expansion, but the challenge for farming families is to attract these investors and understand that some changes to the way their business operates may be necessary.

Case study - Radar (Brazil)

Radar, a subsidiary company of TIAA-CREF (an American teacher's superannuation fund), is a financial management and advisory company based in Sao Paulo, Brazil. According to CEO Colin Butterfield, Radar are now the biggest landowners in Brazil, investing in both permanent and row crops with approximately \$2.5-3 billion worth of assets under management. Radar sees huge opportunity in Brazil due to the amount of farmland available and the capital gains being achieved. Land values double approximately every three years. Land values are rising due to Brazil's competitive advantages with an abundance of land, rain and sun, making it arguably the best agricultural environment in the world.

Despite their large landholdings the business does not own any plant or equipment, rather it tenants land to the best professional farmers in Brazil, utilising the own/lease management option. Radar invests in growing a workforce of "scouts", who's role is to search for land acquisition opportunities and the best farmers to take on the management of the land

acquired, through long, five-year leases. Many land acquisitions have come about by farmers contacting Radar when land becomes available in their area. Radar has purchased this land and then offered the farmer the opportunity to lease it. Radar is focused on building the relationship with these farming businesses, which it demonstrates by offering five-year leases with an annual rent review clause. Colin Butterfield believes the farmers view Radar as a sound and long-term partner, with a high level of confidence in the security of their land tenure, a view partly formed by Radar's AAA credit rating.

Colin says that the standard rate of return on farmland worldwide as a rental is 4%, with Europe being slightly lower at 3%. He believes this figure is reasonably stable, and if it were much higher land values would just increase.



Figure 5. Global Focus Group in the Matto Grosso

Source: Author

Case study - Canterra Capital Corp (Canada)

Canterra Capital Corp. is an agricultural management company based in Regina, Saskatchewan. The company was tasked with overseeing the agriculture portfolio of the Canadian pension fund, which is worth over \$245 billion, including ownership of 165,000 acres in Saskatchewan and over 10,000 acres in Alberta. All this land is rented back to local growers, using a cash lease which is generally based on production potential rather than land value.

Historically, land in Saskatchewan has been a controlled market, as prior to 2014, only local residents could buy more than ten acres. This policy changed in 2014 and Saskatchewan farmland was available for purchase from both domestic and foreign buyers. The Canadian pension fund took the opportunity to invest in what was considered undervalued land by engaging Canterra Capital Corp. to begin building a land portfolio.

The author met with Justin Busch, the Acquisitions Manager for Canterra Capital Corp. Justin estimates that 80% of the land acquired by Canterra Capital Corp. is sold by current farmers and leased back to the farmer under a long-term agreement. In Justin's experience, the farmer's motivation to sell and lease back the land has been to assist with a transition to retirement, pay-off debt, free up capital for other investments or help with tax planning. In the last five years, land values have doubled in Saskatchewan, providing an ideal time for farmers to sell at the top of the market.

Justin has a structured and fair approach to negotiating lease price. The price agreed is different for each property and delivers a 15% return on capital for the farmer and a 5% return on capital for Canterra Capital Corp. To achieve a 15% return for the farmer the lease price is worked out through a farm budget and gross margin calculator, using expected grain prices and yield. Justin believes a 15% return for the farmer is a sustainable number as the farmer can afford to reinvest in the land and help Canterra Capital Corp achieve a long-term capital gain.

Case study – Lone Star Family Farms (Texas)

Lone Star Family Farms is owned and operated by the Crownover family in the Texas panhandle, near Sunray. The farm business is a diversified grain production unit and is a terrific example of a business that has used a combination of techniques to expand. The business is

thriving, despite facing some incredible hardships along the way - the loss of two family members in separate accidents.

Lone Star Family Farms was founded in 2009 by a few Crownover family members collaborating by combining their individual farming operations to gain efficiencies and create the scale required to be a significant player in the agricultural marketplace. In 2006, the family farmed 12,000 acres. Through collaboration, leasing, vendor term deals, vertical integration and partnering with institutional investors, Lone Star Family Farms is now farming over 50,000 irrigated acres. The farm is spread over 50-100 miles and has built sufficient scale to be able to employ 45 staff who specialise in the various areas of the business: irrigation, operations, spraying, mechanical, HR and financial management.





Figure 6. On farm storage (left) and owner, Justin Crownover in a paddock of irrigated corn at Lone Star Family Farms, Amarillo Texas

Source: Author

Lone Star Family Farms have bought land every year since 1999. Much of this land has been purchased using vendor terms, as a partnership with retiring farmers. Justin's approach to negotiating these agreements is through discussion with the retiring farmer about his objectives and a mantra of being prepared to give up more than you get. Reputation is very important and trust within the community is the cornerstone of these deals. Now he uses past sales as a template to give the selling farmers confidence in the transaction.

50% of the land under management by Lone Star is owned and 50% is leased. Two of the leased properties are owned by the Hancock Agricultural Group and one by a local college. One of the Hancock-owned properties was originally owned by Lone Star but was sold under

a lease back model. This freed up capital was used by Lone Star to invest in irrigation and onfarm storage, which created the opportunity for Lone Star to partner with multinational companies to produce and store pedigree seed at significantly greater margin than the standard commercial crops. This investment in irrigation and on-farm storage has a significantly high return on capital than any investment in farmland making the Hancock leaseback decision very successful.

The business has diversified beyond crop production by opening two irrigation shops and joining an agricultural consulting group. The irrigation shops create some degree of vertical integration. The motivation was to not only provide parts and expertise to themselves but also to the community. Lone Star are regarded as industry leaders with many other farmers copying techniques used on the properties and Justin sees the shops as an opportunity to capture some of that interest.

The agricultural consulting venture is called the Family Farms Group and connects like-minded farmers from all over the USA. It helps Lone Star remain an industry leader by providing benchmarking, financial services, training and succession advice. In addition, Lone Star has met other farming families through the group and collaborated to lease land in Illinois. This has diversified the business from the Texas panhandle, reducing climatic and commodity price risks as they can now grow a greater variety of crops and have an extended harvest window. A collaborated approach for this new venture allows Justin to benefit financially but not be required to manage the day to day operation, which would be difficult from Texas. Into the future he sees the group developing a procurement and marketing arm to leverage off the strength of having many farming families working together.

In conclusion, Lone Star Family Farms is a business that has been able to expand rapidly and sustainably by using a combination of techniques. Underpinning the expansion has been the reputation and integrity of the operation in the community which has given others the confidence to do business. Justin believes this would have been impossible to achieve if the business relied purely on bank debt to fund the expansion.

Chapter 4: Private Equity

Private equity is a source of capital from high net wealth individuals or private investors who look to invest and acquire ownership in companies.

Case study - Rabo & Co (International)

Rabo & Co is an online platform that provides financing to businesses from high net wealth individuals. This 'peer to peer' lending platform is being trialled in a pilot program and supplements exiting forms of lending such a regular bank credit. It is an opportunity for farmers to connect with private equity to fund expansion with the investors getting a 7% return on their investment. Seven percent is significantly higher than what they can return from a bank deposit and represents the increased risk involved in investing in private business projects. At this stage Rabobank will provide 50% of every loan using regular bank credit.

The author met with Rabobank in the Netherlands to discuss the trial and learnt that while there was significant interest in Rabo & Co from investors, there was currently a lack of agricultural projects to invest in. This is due to farmers being able to borrow money at significantly lower rates than the 7% offered in this trial. Farmers usually have significant assets and collateral on their balance sheet so often qualify for lower interest rates compared to start-ups and small businesses.

It was the view of Gea Bakker-Smit from Rabobank that the future prospects of this type of lending were very good, and maybe of more interest to agriculture in the future. Due to issues with solvency since the global financial crisis and the tightening of the banks' lending criteria, businesses were becoming dependant on alternate sources of financing. Rabobank would still manage the financing but without fully utilising its own balance sheet. Including Rabobank as a participant in the connection between private equity and the farmer increases the level of trust and confidence in the arrangement from the farmers perspective.



Figure 7. Gea Bakker-Smit from Rabobank discussing Rabo & Co at reclaimed land,

Emmerloord

Source: Author

Case study - Crowd funding (Holland)

Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people.

Whist in the UK, the author met with Duncan Rawlson, who is a director of European Farming and Food Partnerships, a consultancy firm working toward a better connection between farmers, food processors and the general public. Duncan has had experience with agricultural businesses that had utilised crowdfunding to expand their businesses. Examples of crowdfunded projects included a hiking path on a farm, to larger projects such as a farm business expansion into a new dairy. In the case of the hiking path, the investors' return is not monetary but rather access to the recreational benefits of the path. In the case of the dairy expansion the investor was paid a return of approximately 7.5% for their contribution.

In Duncan's experience, consumers are taking a greater interest in where their food comes from. For this reason, private investors seem willing to invest in agricultural projects and crowd funding represents a platform for this to occur.

In Duncan's experience, having a website, using social media and letting it be known farmers are seeking investment can be effective strategies. He gave an example of a relatively small dairy business which, through the techniques listed above, became an example where their brand was much bigger than their business, which resulted in a very successful foray onto the SEEDR crowdfunding platform. Even though the contribution was very small these investors were now seen as ambassadors for the company with potential to be utilised for future marketing opportunities.

In other example, a goat milk farmer in the Netherlands visited, used the Colins crowdfunding platform to raise 200,000 Euro to expand their milk parlour. Amazingly the 200,000 Euro was raised in one hour, from 207 investors. In this situation, the farmer had to pay the money back at 7.5% and repay the loan in full within four years. Unfortunately, this resulted in the farmer being placed under too much pressure and he was forced to shut down the business.

The author sees crowdfunding as a platform for smaller projects or niche products. There is significant potential as the consumer's interest grows in where their food comes from (e.g. traceability in supply chains) and farmers can take advantage of this interest through branding and social media. However, in the situation of a large-scale farm expansion crowdfunding is not likely to be suitable due to the high interest rate on the borrowed money when compared to rates offered by the bank.

Chapter 5: Equity Partnerships

A farmer equity partnership is a joint venture between farmers and investors to pool capital and possibly skills to either purchase farmland or invest in a farming operation. The concept is designed to harness the experience and capabilities of farmers by injecting fresh capital.

A successful equity partnership must have a clear plan with realistic projection and budgets. All participants must have a clear exit strategy and an agreement must exist to address all decision making and disputes. It is important that all parties have "skin in the game" and bring something to the table.

Equity partnerships are very common in New Zealand, particularly in the dairy industry with the sharemilking model. This strategy helps young farmers work towards farm ownership over time and can assist older farmers to scale back. Typically, a sharemilker may own the cows and uses the arrangement to slowly buy out the landlord or even just to save for their own property. It can also help young farmers work without the financial burden of farm ownership and help retired farmers earn rental from their parlours and farms.

A major disadvantage of the sharemilking model is the loss of total control of the business from the original landowner. A major difference between New Zealand and Australia is that farmland doesn't attract a capital gains tax in New Zealand. This means that participants can sell in and sell out of equity partnerships relatively easily in New Zealand, whilst the sale of business assets in Australia has a capital gains tax applied, reducing liquidity, which is possibly the major reason why the equity partnerships model in Australia have never been that successful.

Nevertheless, there is great potential for equity partnerships in Australia. Pooling funds from investors to buy land which is then leased by farmers can meet the objectives of all parties if done professionally. The farmer business expansion objectives are met with a long-term lease and the equity partnership shareholders receive a cash lease and hopefully over time the property receives a capital gain.

Case study - Klinefelter (Texas)

An example whilst travelling was an equity partnership by Texan farmer Skip Klinefelter. Skip put together an equity partnership between ten people, with each contributing US\$15,000, the money was pooled and put into a new private company to buy farmland. Once the farmland was acquired, Skip's farm operation company leased the land from the new company under a ten-year agreement. The rental agreement had the NCREIF property index applied so the lease rate was a function of current agricultural conditions including climate and price. Participants earnt the cash lease and were hopeful of a capital gain over the ten-year period. Initially the exit strategy was to sell the property at the conclusion of the ten-year lease, however the arrangement was such a success Skip's lease was extended and the partnership has since purchased more land which Skip also leases.

For Skip, the equity partnership has also been very successful, giving him access to farmland he couldn't otherwise afford and the security of tenure allowing him to make long-term decisions and reinvest in the land. Anecdotally, Skip believes this long-term view has contributed to the value of the land increasing. Another big advantage in Skip's arrangement is the equity partnership exists only to invest in the farmland rather than Skip's operation business. This leaves Skip in complete control of his business management and free from any obligations from the investors other than honouring his commitments in the lease agreement.

Chapter 6: Collaboration between Farmers

There are many ways by which farmers can collaborate to expand. One example is contract farming or share farming, which is a collaboration between farmers structured in a number of different ways.

A contract farming agreement is a joint venture between two parties, with both parties retaining their identity as farm businesses in their own right. The agreement sets out the terms of the arrangement, including length, and the formula for calculating remuneration to each party.

For example, from speaking with a handful of farmers about contract farming in the UK, the general model is that the farmer carries out all management and operations and the landowner contributes the land and the operating costs, such as the fertiliser, chemical and seed expenses. The split of the profits varies depending who get the subsidy payout but is generally around 50-50.

Case study - Morrison farming (New Zealand)

In New Zealand, near Palmerston North there is an example of a collaborative farming arrangement between the members of the Morrison family including two brothers, a cousin and their partners. This area has experienced significant rises in land prices due to the dairy boom with many of the Morrison's neighbours converting to dairy in recent years. The flats are now valued at \$40-50,000/acre and the hill country \$1,800/acre. The Morrison's are predominantly a livestock operation running cattle and sheep on the hill country and growing specialty crops on the flats.

Initially the two families ran their own farming operations on neighbouring properties, but due to high prices were finding it difficult to expand. After 18 months of weekly meetings discussing what the new business would look like, the merger took place joining two family operations to form one with a corporate structure. The business is now run by five directors who are full time employees and who oversee separate parts of the business which they are accountable for at board meetings. The regular meetings allow the directors to discuss the key performance indicators and also remain dynamic and capable of responding to all opportunities such as farms for sale or lease. The motivation was initially about scale and not

needing to duplicate machinery but also made sense in that some were considering leaving the industry if they couldn't expand.



Figure 8. GFP group with directors of Morrison farming, New Zealand

Source: Author

The merger had pooled the participant's capital (including land) to create a larger more efficient operation. This collaborative farming venture was unique from others visited on the trip in that the arrangement was all in, including land which gave them the capital base to fund expansion. An example being the recent purchase of 2,500 acres of hill country to expand the livestock operation.

William Morrison said the key to the merger was goodwill, and the participants all seemed very enthusiastic and motivated. To be able to share in the highs and lows of farming with others and be able to work in a team seemed a positive aspect of the arrangement. With the corporate style management structure employees and directors appeared to be achieving the correct work-life balance, something many family farmers struggle to achieve. The economic gains from the increased scale were significant and are obviously also a very important measure of success. As in all joint ventures, having a clearly defined exit strategy is critical. William Morrison stated it would have been very difficult in the early days to pay out an exiting director but with the success of the business overtime it would now be possible.

A collaborative farming arrangement and joint ventures in general often require a shift from the family farming model to a more corporate one. Good governance and communication become more important and often an advisory board is required. The barrier appears to be the personalities and mindset of individuals involved and the challenge of finding likeminded farmers to enter such an agreement.

Case study – Contract farming (UK)

One such case visited was a dairy farming operation in Somerset. The farmer operated a total of 1,400 acres of which 150 acres is owned and the balance farmed under a variety of contract faming arrangements. Joint venture partners included retiring farmers and individuals who have invested in farmland to get relief from the inheritance tax.

Under these arrangements the farmer would purchase the standing crop just before harvest at cost price (effectively reimbursing the landlord for input costs) and provide the landowner with a \$100 per acre lease payment for the land. Under this arrangement the landowner would receive the subsidy payment.

This arrangement frees up working capital for the farmer to invest in other areas of his business and gives him access to land which would otherwise be unaffordable. The extra farm land allows for improved efficiencies of scale to help reduce his cost of production.

Share farming (or contract farming) is a good option to share risk and remuneration between parties. For Australian farmers, this could be a lower risk option than a cash lease. Global examples demonstrate this is a successful way to expand and achieve scale, when capital is limited.

Chapter 7: Diversity

An important consideration when considering farm business expansion is off-farm investment or creating other income streams outside of the core business of farming. This strategy was particularly popular in the UK, where excessive land values and the low returns from farming have made farm expansion difficult. Diversifying the business can certainly help with succession and can reduce risk as the business is less exposed to market forces associated with agriculture.

Case study - PX Farms (UK)

A great example of diversification in agriculture is PX Farms, near Cambridge, where the author met with the owner, James Peck. PX Farms has diversified the farming business through purchasing farmland, grain and fertiliser storage facilities, seed cleaning services, transportation, non-agricultural real estate interests, and light industrial buildings available to lease. James's motivation to build a portfolio outside of agriculture was to de-risk the operation, by creating multiple income streams, and solve succession issues. Many of these alternate business interests have significantly outperformed the farming operation.

James Peck made the comment that the key to the success of PX Farms diversification strategy was a clear and defined plan. By taking a long-term view PX Farms has created multiple income streams to cater for both the older generation and family members should they want to retire or want to pursue interests other than farming. In the meantime, the business has less reliance on the market forces of farming due to diversity of income. James believes that a certain percentage of profits each year should be directed towards off farm investments. He believes there is less emotion attached to off-farm assets and this can be very handy when dealing with succession issues or setting up other generations. It is far easier to hand over or sell off-farm assets and businesses then the heartache involved with having to sell off some or all of the family farm.

PX Farms is currently farming 6,000 acres, of which 1,500 acres is owned and the balance share farmed using contract farming arrangements. The business farms a range of crops including corn, sugarbeet and wheat and has a fleet of modern machinery and access to the latest

technology due to the scale of the business. Along with good management, this ensures the quality and timeliness of the farm operations.

On farm there is a 75,000-tonne grain storage facility which handles grain for surrounding farmers and grain merchants for a receival fee. James likes to have "no-liability" in the business so he seeks to take out long term arrangements (some up to ten years) to store grain, regardless of the tonnage that gets put through the building. This means the income generated from the facility is consistent and not reliant on the crop yields and the fortunes of farmers in any given year.

PX Farms has invested in two operations that value add to the grain storage facility. The first is a grain transportation business, using a fleet of 12 lorries. With significant tonnages carted in and out of the site, PX Farms has positioned itself well to capture value from any of the grain movements.

At the time of the visit, James was constructing a state of the art seed cleaning plant, located on the end of the grain shed. There is significant demand for such a plant in the area due to issues such as Ergot.

A particularly innovative diversification strategy by PX Farms was the conversion of an old piggery and dairy infrastructure, which had been sitting idle, into a light industrial precinct. The area is now a hive of activity, with a range of businesses including restaurants, art galleries and gymnasiums, now leasing these buildings. This strategy had been made possible by PX Farms being located so close to the population base of Cambridge (approximately 124,000 people) and the immense difficulty in the UK to get building approvals - therefore creating a huge demand to utilise existing structures such as old farms sheds.

There are certainly opportunities to diversify broadacre grain businesses in Western Australia. Agricultural ventures such as a wider variety of crops, livestock, contracting businesses or attempts to move up and down the supply chain could be pursued.

Due to the isolation of many farming businesses, there is a lack of nearby population to support some on-farm non-agricultural income streams, as PX Farms has done. Where possible, it is very important to allocate a proportion of profits to off farm investments to

diversify income and help with succession. Residential or commercial real estate are examples of such options that have been taken up by many broadacre businesses.

Chapter 8: Farm Management Companies

Instigating a partnership with institutional investors or private equity, or by creating an equity partnership can be difficult. Farmers may not know where or how to find a financial partner. In addition, many farmland investors have a limited knowledge of production agriculture and lack the expertise to successfully manage an agricultural asset. Worldwide there seems to be a distinct lack of agricultural professionals able to direct these investors to farmers, which has provided a gap in the market for farm management companies. The farm management company works to alleviate the significant barriers that currently exist for the farmer/investor partnership.

Farm management companies can offer a range of services to their clients, but generally they partner with landowners to build investment-grade farmland portfolios. They can do due diligence on properties, acquire them on behalf of the client and then advise on the best management strategy to meet the goals of the investor. Clientele range from superfunds, high net-wealth individuals to retiring farmers. The farm management company will often act as a broker to connect the farmland investors with professional farmers, to be tenants on the land.

The companies visited are very much active partners in the investment, often managing tenants or managing the property themselves, meaning they are directly responsible for the financial performance of the farm.

Other services provided by the farm management company include advisory on market conditions, investor grade budgeting and reporting and benchmarking.

Farm management companies provide a great opportunity for family farms looking to grow their business by connecting farmers with potential landowners. The company can manage any arrangement to ensure transparency and that the objectives of both the investor and the farmer are met.

Colin Hudon the owner of SAMC (Strategic Asset Management Corporation), a farm management company from Rosser in Manitoba, Canada, made the comment that there is great opportunity for his company to partner with existing farmers who may be looking to expand or scale back, exit the industry or set up off farm siblings. He also commented that

there is huge potential for farm management companies to create partnerships with farmers and landowners in Australia, with the asset transfer that is happening as the baby boomer generation looks to retire.

Case study - Highfield Asset Services (Texas)

Highfield Asset Services are a farm management company in College Station, Texas, managed by Kyle Amos. Kyle manages over \$100 million of farmland assets on behalf of institutional and private clients and directly operates over 6,000 acres of organic farmland. Kyle is a licenced real estate broker with a background as the acquisitions manager for the Hancock agricultural group.

Kyle's company gives investors exposure to agriculture in the form of real estate and/or production. His experience allows him to advise clients on profitable geographical regions, commodity types and management styles to create various risk profiles. His business is based on executing real estate decisions to create value for the investor and achieve the returns possible from farming through best practice or by connecting investors with the professional farmers. In addition, Highfield asset services offer direct farming operations, lease negotiation, market analysis, budgeting, reporting and tenant acquisition.





Figure 9. Highfield owner Kyle Amos in a crop of organic corn and inspecting organic Sunhemp with Nuffield scholar Richard Fowler. College Station Texas

Source: Author

Chapter 9: The Role of Government

It became apparent during the study that the policies of individual governments can play a critical role in the way that family farming businesses can expand. Examples are the crop insurance schemes in the USA and Canada, the inheritance tax and the implications on farming in the UK, the long-term leasing tax incentives in Ireland, and the lack of a capital gains and stamp duty tax in New Zealand making equity partnerships easier to sell in and out of.

United States of America and Canada

The crop insurance program is a vital part of the American agricultural industry and a key risk management tool for farmers, basically providing a financial safety net for farmers. Federal crop insurance is a complex arrangement between the government and private insurance companies that offer farmers insurance over a range of agricultural commodities and a number of perils. Over recent years products that combine yield and price coverage have been introduced so growers can effectively insure a gross margin. Information from the farmers I met is that typically the government subsidises the growers' insurance premium by 60 to 80% making it affordable to the grower.

An affordable multi-peril crop insurance program can greatly reduce a farmer's production risk. As a result, banks view USA farmers as a lower risk proposition as they have first right on the insurance money in the event of a payout. Compared to Australia the author observed that grain growers in the USA were able to borrow money at lower interest rates and more aggressively leverage their business to fund farm expansion or investment. In addition, USA growers were able to lease great tracts of land without the buffer of land ownership that is required in Australia to help absorb poor seasons. This is a major reason why more farmland is leased in the USA rather than owned, as it is in Australia.

Economists have shown that the monetary benefits of the crop insurance policies are built into land value.

United Kingdom

Farmland values in the UK have increased by 277% over the past ten years (Savillis World Research, 2015). Some of this rapid appreciation can be attributed to the introduction of the inheritance tax - a 40% tax on a person's estate upon death - which farmland is exempt from. The tax break has meant that current landowners are hanging onto their land after retirement from farming and land that comes up for sale is keenly sought after. To qualify for the tax exemption the landowner must be assessed, by the tax office, as an active farmer and be taking on risk as a farmer would. Despite often living in the cities and attaining their wealth in other industries, these new landowners are partnering with farmers and creating farming operations to avoid these taxes.

The tax has created significant opportunity for innovative United Kingdom farmers to expand their operations. These arrangements are called contract farming models, these farmers have been able to obtain operational control of farmland that would have been otherwise unaffordable, as the price of land has moved far beyond its agricultural productivity capabilities.

Ireland

The infrequent changeover of land in Ireland means farm expansion is often reliant on renting opportunities. In a move to encourage new entrants into the industry the Irish Government introduced policies to make the profits obtained by the lessor from an agreement ten years or longer to be tax free. If a young farmer was able to obtain a lease of that length it would provide both the farmer and the bank the confidence to invest in machinery or livestock to follow whatever agricultural pursuit.

Australia

In Australia, introducing the tax-free policy of Ireland would not only provide a pathway for new entrants into the industry but may encourage the retiring generation to lease their farms rather than sell them, reducing the capital required by young farmers to expand. The ten-year length of tenure would also add incentive for the lessee to treat the property as if it were their own, which could then be realised in the form of capital gain.

Conclusion

The decision to expand

The key to any business expansion is to have clear goals and recognise that expansion and scale play an important part in production efficiency. There will be an abundance of opportunity to expand in the next five to ten years, so farmers will need to be disciplined and strategic about which opportunities to purse. The success of any expansion will be underpinned by the strategy of buying well and managing well.

The decision own or lease

The acquisition of land should be thought of in terms of control, with that control being achieved through both ownership or leasing. The decision to own or lease will be different and unique to individual cases, based on the factors listed in Table 1 and 2 and the land that is available.

It is common for successful farming businesses overseas to have a combination of owned and leased land. Owned land provides the security and equity, and the leased land helps to achieve scale and drive efficiencies without taking on too much debt.

Investing in farmland

Institutional investors have three distinct management styles of agricultural assets, which provide great potential for family farms.

There is great potential for the hybrid lease model as, anecdotally, family farms outperform (in terms of return on capital) institutional investment farms. A few reasons are the manager of the family farm (the owner) has ownership over the success of the farming business and a significant amount of intellectual property on variabilities of farming.

To facilitate a relationship the first step is for the family farm to be become an attractive business partner.

A strategy to attract equity capital and drive investment in agricultural farmland - other than bank debt - requires the farm business to be investor ready.

Private equity

There is significant interest in agricultural projects by private equity. Although crowdfunding, and various other platforms are a great fit for niche products and small projects they are currently not suitable for large scale farm expansion. The expected returns for the investors are greater than the interest rates most farmers can achieve with the bank.

Equity partnerships, joint ventures and collaboration

There is great potential in Australia for equity partnerships, joint ventures and collaboration as a means for expansion. The critical factors to making it work are good governance and communication. This often requires a shift from a family management structure to a corporate structure, such as employing a farm advisory board. Farmers could talk to finance and advisory professionals to put in place the best corporate structure for their needs and obtain advice regarding the best practice and good governance.

Diversity

Creating multiple income streams can help de-risk agricultural businesses. They can also be very helpful when dealing with succession, as a means to avoid the sale or splitting of farmland. It is good practice to try and allocate a proportion of profits annually to off-farm assets.

Farm management company

Farm management companies can work to connect family farms with farmland investors. They can manage the relationship with transparency and ensure the goals of all parties are met.

The role of government

Subsidies and tax breaks can affect the way in which farmers can expand. The motivation for some governments to support farmers is often a combination of both food security and a need to ensure people remain living in regional areas. In contrast, Australia's broadacre farming is built on efficiency, which unfortunately is leading to a reducing rural population and the decline of many small communities.

Recommendations

- Western Australian farming businesses need to focus on costs of production to better absorb climatic and price volatility and rising costs. Farmers need to understand that expansion can play a key role in that production efficiency.
- Farmers need to be strategic and disciplined when assessing expansion opportunities.
 Seeking advice is recommended.
- Farm expansion should be thought of as control of tenure, which can be achieved through both owning and leasing land. A combination of both owned and leased land can help businesses achieve economies and scale yet remain strong on the balance sheet.
- To attract outside capital or a financial partner family farms must become investor ready. These steps include:
 - Business plans and budgets;
 - Public liability insurance;
 - Corporate governance structure;
 - Historical benchmarking against other farm enterprises;
 - Thorough record keeping;
 - Human Resources policies, occupational health and safety procedures, environmental plans; and
 - Consider branding the business.
- Private equity is a potential funding source for farmers but the bank, which provides a known, stable and low interest rate, is currently the best on offer.
- Farmers should consider shifting from family management structure to a more corporate
 one, where good governance and communication are the critical factors for successful
 joint ventures and equity partnerships. A clear exit strategy is also advised.
- Farmers should consider collaborating with like-minded farmers to pool resources to achieve their expansion goals.
- Create multiple income streams to de-risk a farming business and assist with succession.
- Seek farm management companies or suitable expertise to connect with investors.

• The Australian government could take steps to assist with the transfer of assets from one generation to the next, for example reducing stamp duty to encourage equity partnerships and tax incentives for long term leases.

References

ASX, 2016, Long-term investment report, www.asx.com.au

Conrad, G, 2016, Geoff Conrad on the agriculture industry, YouTube.

Department of Agriculture and food Western Australia, 2017, Western Australian Wheat Industry, https://www.agric.wa.gov.au/grains-research-development/western-australian-wheat-industry

GRDC, 2014, Funding Agriculture's Future, Farm Business Update Southern Region, Issue 23. www.grdc.com.au

Port Jackson Partners, 2012, Greener Pastures: The Global Soft Commodity Opportunity for Australia and New Zealand, prepared by ANZ, http://www.anzbusiness.com/content/dam/anz-superregional/AgricultureInsightsGreenerPastures.pdf

Rural Bank, 2016, Australian Farmland Values 2015.

Hicks, John; Sappey, Richard; Basu, Parikshit; Keogh, Deirdre; and Gupta, Rakesh, Succession Planning in Australian Farming, Australasian Accounting, Business and Finance Journal, 6(4), 2012, 94-110.

Marshall, A. 2017. Super laws starve ag of capital needs, Farm Weekly, vol. 108, no. 4873. December 14, 2017.

Savillis World Research, 2015, Market Survey UK Agricultural Land, http://pdf.euro.savills.co.uk/uk/rural---other/alms-2015.pdf

Sevenson, K. 2017. Future opportunities for capital and investment in agriculture. https://grdc.com.au/Research-and-Development/GRDC-Update-Papers/2017/02/Future-opportunities-for-capital-and-investment-in-agriculture

USDA, 2012, Farms and farmland: numbers, acreage, ownership and use. www.agcensus.usda.gov

Plain English Compendium Summary

Project Title:	Growing the family farm
Nuffield Australia Project No.: Scholar: Phone: Email:	James Dempster 0458 555 803 jamespdempster@gmail.com
Objectives	 What are the pros and cons of owning vs leasing land? How do institutional investors manage their farmland assets and what are the opportunities for the family farm? Is attracting capital from private equity, such as high net wealth individuals or utilizing crowdfunding, a viable alternative to bank finance for family farms businesses? Can we reduce our capital outlay by forming equity partnerships in farmland? Can we expand through collaboration between like-minded farmers? Can we diversity to create alternate income streams to de-risk the business?
Background	The economics of farming suggest we need economies of scale to better absorb price and climatic variability, and rising costs. Unfortunately, farmers are taking on significant debt to fund land acquisition, leaving many businesses vulnerable.
Research	Study alternative expansion options for broadacre farming, including leasing, partnering with institutional investors, private equity, equity partnerships, collaboration and diversify. The research was conducted in USA, Canada, Brazil, UK, The Netherlands, Ireland and New Zealand using a combination of interviews, farm visits, conferences and personal study.
Outcomes	Farmers can find financial partners, other than the bank, for their expansion providing that their businesses are prepared for such a partnership. Farmers must become investor ready as it is very competitive to attract capital. In many cases, the bank is still the preferred financial partner due to lower interest rates.
Implications	This report informs readers of the key alternatives to bank financing a broadacre farm expansion through case study examples from around the world.
Publications	Presentation at 2017 Nuffield National Conference, Darwin, NT.