Investment models in Agriculture: supporting Owner operators to enter or expand.

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Executive Summary

The Australian agricultural sector faces a complex landscape of challenges and opportunities in an ever-evolving global market. Climate variability, water scarcity, and evolving consumer preferences necessitate adaptability in farming practices, pushing farmers to innovate and adopt new technologies.

The industry's significance to the Australian economy cannot be overstated, accounting for 2.4% of GDP and 10.8% of exports. This substantial contribution underscores the sector's importance in maintaining Australia's economic stability and global trade position. The sector is predominantly composed of family-owned and operated businesses, with 98% of agricultural enterprises falling into this category. This statistic underscores the importance of supporting and empowering family farms to ensure the industry's long-term sustainability. Farm size emerges as a critical factor in determining business performance, with larger farms demonstrating higher profitability and superior rates of return on capital. This trend is attributed to economies of scale, increased bargaining power, and the ability to invest in advanced technologies and equipment.

Australian farmland has proven to be a lucrative long-term investment, outperforming other asset classes with a national median price growth of 8.5% from 2003 to 2023. This impressive growth rate highlights the potential for capital appreciation in agricultural land assets. However, achieving viable returns from operating entities remains challenging due to factors such as volatile commodity prices, increasing input costs, and the unpredictable nature of agricultural production.

The Australian agriculture industry offers diverse investment models, catering to various investor profiles and risk appetites. These include debt financing, equity financing, vendor financing, lease arrangements, and share farming. Each model presents unique advantages and considerations, allowing investors and operators to tailor their approach based on their financial goals and operational expertise.

Key conclusions from the report are:

1. The Australian agriculture industry is a sound investment for both Owner Operators (OOs) and Corporate Investment Groups, given its economic importance and strong farmland appreciation.
2. Achieving viable returns from operating entities is challenging due to various factors, including climate variability and market conditions.
3. Farm size significantly impacts profitability, with larger farms generally performing better.
4. Sound commercial acumen and financial literacy are crucial for OOs to make informed business decisions and attract investment.

The recommendations for owner operators either seeking to enter or expand in the Australian agriculture industry include:

1. Separate land assets from the operating entity when evaluating business performance to allow clearer assessment of both capital appreciation and operational returns.

2. Establish a routine business evaluation process to regularly assess key financial metrics, particularly Return on Equity (ROE), Return on Assets (ROA), and turnover ratios.
3. For new entrants, consider leasing or share farming as initial strategies to enter the market, leveraging networking within industry groups and local communities to source opportunities.
4. Existing OOs should seek to grow their enterprises to ensure ongoing profitability, considering both expansion of current operations and diversification into new revenue streams.
5. When expanding, evaluate whether purchasing land assets without corresponding operating activities might achieve better growth outcomes through leasing or share farming arrangements.
6. Consider diversification to spread risk and open new revenue pathways, but ensure current operations are efficient and there is sufficient equity in real assets to support growth.

By implementing these recommendations, OOs can enhance their commercial acumen, make informed investment decisions, and position themselves for sustainable growth in the evolving agricultural landscape.

Keywords:

Owner Operator, investment, lending, Australian agriculture, financial models, capital appreciation, farm size, financial metrics

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Investment models in Agriculture: supporting Owner operators to enter or expand.

Foreword

The agricultural landscape in Australia is evolving rapidly, driven by a complex interplay of factors, including climate change, technological advancements, and shifting global markets. As a fourth-generation farmer from Victoria, my journey through the agricultural sector has been marked by both tradition and innovation. This report explores the dynamics of investment and funding models in agriculture, drawing from personal experiences and insights gained through the Nuffield Scholarship program.

The impetus for this research stems from a pivotal moment in my farming career. Following family succession processes that granted financial and business independence, I found myself at a crossroads, seeking ways to expand my allotted part of the business. This quest for growth led me to explore various financing options and investment models available to OOs in the agricultural sector.

My family's business background in beef cattle and sheep provided a solid foundation but also highlighted the limitations of a business strategy centred on similar commodities. The financial cycle of the operation, while predictable and stable, was slow and restrictive for growth and expansion. This realization prompted a shift in perspective, leading to the diversification of our farm business to incorporate crops. This strategic move not only increased production but also created synergies between different commodities, enhancing the overall business efficiency and profitability.

The decision to venture into dairy farming in 2021 marked a significant turning point in our business. The appeal of dairying lies in its rapid turnover cycle, with daily milk production translating to a consistent revenue stream. This characteristic is not only attractive to financial institutions but also provides a measurable productivity target, further facilitating business growth.

The Nuffield Scholarship offered an unparalleled opportunity to broaden my understanding of global agricultural practices and explore other investment models. The Global Focus Program (GFP) exposed me to diverse agricultural landscapes in Singapore, Japan, Denmark, Israel, and the United States. Table 1 outlines the travel itinerary and key visits in each location. Each country provided unique insights into the challenges and opportunities facing the agricultural sector globally.

The global agricultural landscape is undergoing profound transformation driven by technological advancements, environmental challenges, political intervention, and shifting consumer demands. My observations and learnings from visiting each country during my GFP as they relate to my topic are summarised below.

- **Singapore's** focus on food security and reliance on foreign agricultural investments highlight the growing importance of international partnerships in ensuring food supply.
- **Denmark's** agricultural sector is characterized by its strong focus on sustainability and organic farming practices. The country is a global leader in organic food production, with a significant portion of its agricultural land dedicated to it. Finally, the visit showcased the intricate relationship between politics and agriculture within the European Union (EU), emphasizing the impact of environmental regulations on farming practices and their underlying profitability.

- **Israel**, known for its agricultural ingenuity in challenging environmental conditions, offers valuable insights into water management and desert farming practices. The country's advanced irrigation systems and water-conservation techniques have enabled productive agriculture in arid regions, serving as a model for other water-scarce areas worldwide. The kibbutz model of collective farming, which has evolved to adapt to modern economic realities, demonstrates an alternative approach to agricultural organization and resource-sharing. Furthermore, Israel's integration of cutting-edge agricultural technology with traditional farming practices demonstrates how innovation can enhance productivity while preserving cultural heritage.
- **The United States**, with its vast and diverse agricultural landscape, provides a comprehensive view of large-scale commercial farming operations and their efficiency models. From the expansive grain belt to specialized crop production regions, the U.S. agricultural sector illustrates the complexities of managing diverse agricultural ecosystems at the national scale. The country's experience with agricultural subsidies and policies offers valuable lessons regarding the impact of government interventions on farming practices and investments. Additionally, the U.S. experience highlights the challenges and opportunities of balancing productivity with environmental sustainability in a highly industrialized agricultural system.

These international experiences, combined with interviews conducted with prominent farming owner-operators and corporate farming enterprises in Australia, shaped the focus of this report. The global COVID-19 pandemic and subsequent economic shifts have further complicated the agricultural investment landscape, necessitating the re-evaluation of previously held assumptions.

This report aims to explore the various investment models available in agriculture, with a particular focus on their applicability and potential benefits for OOs (OO). By examining case studies from my travels and interviews with both industry and finance experts, combined with my personal experience, this report aims to provide practical insights and actionable strategies for Australian farmers looking to grow and adapt their businesses in a rapidly changing environment. Furthermore, the report seeks to contribute to the ongoing dialogue regarding the future of Australian agriculture and the role of investment in shaping that future.

Table 1. Travel itinerary for Global Focus Program

Travel date	Location	Visits/contacts
Week 1	Singapore	David Leong – Australia and New Zealand Banking Group (ANZ) Headquarters Andrew Cox – Meat and Livestock Australia (MLA) Food Markets
Week 2	Japan	Shota Farms Agri Shinoya Ministry of Agriculture Citrus Farm Muchachan Assai Farm

		Kagawa Fishing Wagyu Beef farm Yoboku
Week 3	Israel	Netafirm Kibbutz Ketura Tovia Research Centre Tom and Zoha Beef Ranch The Kitchen (Strauss Group)
Week 4	Denmark	Sonderjysk Biogas SLF Advisory Axel Mansson – Local farmer Argo Food Park Mushroom Sea Farming Nordic Harvest Noumeal Danish Agriculture Food Council Think dk Garden
Week 5	USA Washington DC Texas	Bayer, Washington DC Santa Rosa Ranch, Texas Volleman's Wildcat Dairy, Texas Womack Nursery, Texas Tarleton University, Texas Dudley Brothers Hereford , Comanche Angelina Sawmill, Texas

Acknowledgments

I would like to express my sincere gratitude to Rabobank for their generous funding of my scholarship which enabled my travels and this report to be possible. As an important sponsor of the Nuffield program over many years, and also a core foundation of financial support and agri-business for the Australian agriculture industry, it was a privilege to represent them on this journey.

To my parents, Alix and Kim, I am extremely grateful for the opportunities you have provided me over the course of my life, some of which have led to this scholarship program. You have both worked tirelessly at our home farm, “Mooramook”, for decades and built up the business to a point which then enabled you to provide an incredible foundation for me and my two brothers to launch our own farming careers and legacies. The unwavering support and your selfless determination to provide us with the best possible start in their farming careers is as admirable as it is inspiring to me. I can only hope to pass on this legacy to my own children. I am also deeply grateful for your willingness to manage the business and support my family while I was away.

The biggest thank you goes to my partner, Prue. The encouragement, belief, engagement and commitment to me through this experience has been exemplary. We have been on our Nuffield journey since 2019 and your support has been unwavering. Over the six years, in parallel we have announced our engagement, welcomed three amazing children, and started our own agricultural business, including buying a dairy(!). You have all sacrificed so much for the fruits that this journey has brought and may continue to bring. After the challenges of seasons, Nuffield report writing, becoming parents, and dairy farmers, nothing seems out of reach. I look forward to what we can achieve next.

Lastly, I want to extend my deep gratitude and appreciation to the incredible scholars that I had the opportunity to meet both in Australia and abroad, some now becoming close personal friends and crucial mentors in my life. The opportunity to share the Global Focus Program with you, and the many other Nuffield connection points along the way has provided a rich and meaningful experience, far beyond my initial expectations when I applied for the scholarship. Thank you all for your time, energy, ideas and willingness to share.

Abbreviations

ABA	Australian Banking Association
ABARES	Australian Bureau of Agriculture and Resource Economics and Sciences
ABS	Australian Bureau of Statistics
$B	Billions
CIG	Corporate Investment Groups
E'ee	Employee
EU	European Union
EVAO	Estimated Value of Agricultural Operations
EYCI	Eastern Young Cattle Index
GDP	Gross Domestic Product
GFP	Global Focus Program
GRDC	Grains Research and Development Corporation
IGC	International Grains Council
NVFP	Net value of farm production
OECD	Organisation for Economic Cooperation and Development
OO	Owner Operator/s
RBA	Reserve Bank of Australia
R&D	Research and Development
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
TBL	Triple Bottom Line
USA	United States of America

Objectives

1. Explore whether agriculture is an attractive industry to invest in, and who is it attractive to
2. Overview the relevant financial metrics OO should attend to when evaluating their business performance and ability to grow or expand
3. Overview and evaluate investment models applicable to OO in Agriculture
4. Provide practical insights and actionable strategies for farmers looking to start or grow their agricultural businesses

1. Introduction

1.1 Overview of Australian Agriculture industry

In 2021, Australia was the 13th largest economy in the world by Gross Domestic Product (GDP) (Macrotrends, n.d), of which 2.4% was attributable to agriculture, behind industry and services as the major contributors to Australia's GDP. As shown in Figure 1 below, the Australian agriculture industry employs 5.9% of the rural working population and approximately 2.5% of the national working population (including agriculture). These figures have remained stable in recent years; however, they are still almost 2% lower than they were a decade ago (Australian Government, 2025). The industry also accounts for 10.8% ($71.5B) of all goods and services exported (Australian Government, 2025).

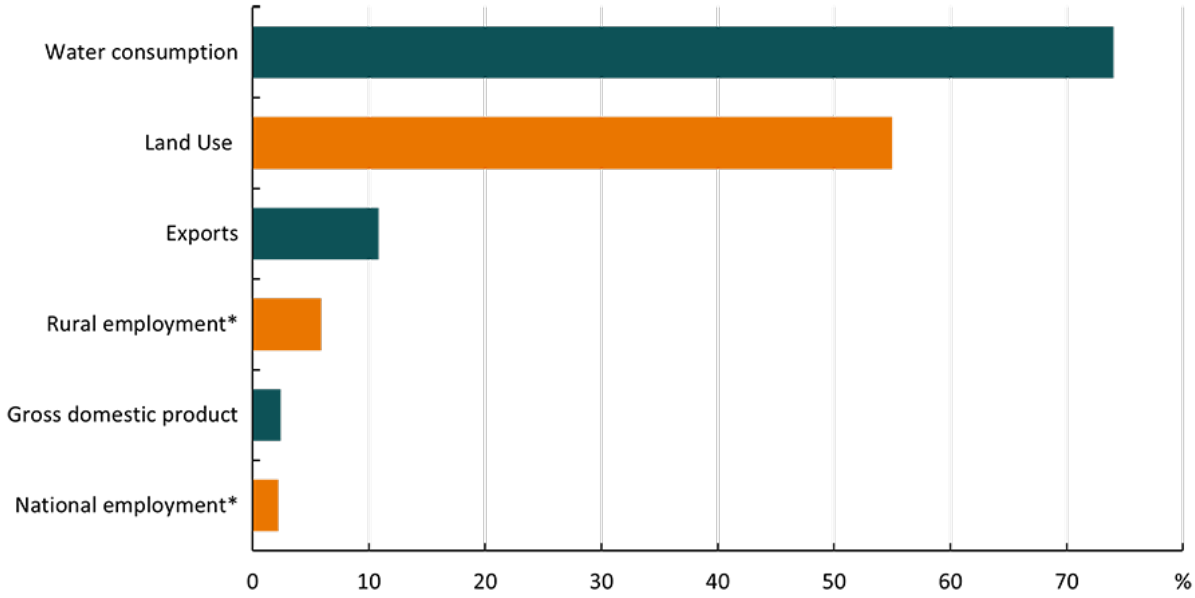

Figure 1. Australian agriculture's share of national economic and environmental indicators (Australian Government, 2025).

The following statistics were obtained from the Australian Government's ABARES Snapshot of Australian Agriculture 2025 report:

- The Australian agriculture sector currently comprises approximately 85,000-90,000 businesses with an Estimated Value of Agricultural Operations (EVAO) of $40,000 or greater derived from agricultural activities.
- Greater than 99% of these businesses are entirely Australian owned, and 98% of these businesses are family owned and operated, known as Owner Operators
- 88% of Australia's agricultural land and 87% of Australia's agricultural water entitlements are wholly owned by Australian businesses.
- Although land, water, and businesses are predominantly Australian owned, it is important to note that foreign direct investment approvals in agriculture average approximately $7B per annum, indicating ongoing international interest in Australian agricultural assets.

1.2 Overview of Australian agriculture businesses

There are various ways in which Government or private research bodies have sized up Australian agricultural businesses for the purposes of research or reporting. Appendix A details how four (4) organisations have used variables like employee numbers, turnover, and reported exposure, to classify the size of Australian agricultural businesses. Using this data, and research from the Australian Banking Association (ABA) (2022), it is evident that in 2021, Australian Agribusinesses were overwhelmingly classified as small or micro-businesses, either by the number of employees or turnover. Approximately 73% of all registered agribusinesses are non-employing, and 60% have an annual turnover of less than $200,000 (ABA, 2022). These statistics are aligned with the fact that 98% of Australian agricultural businesses are OOs which highlights both the significant stronghold and contribution that family farming has in the Australian agriculture industry, but also the fragmentation and segmentation that comes with many small operators within one industry.

1.3 Importance of Owner Operators to Australian agriculture

Ultimately these data points demonstrate the prevalence and significant impact that OOs have on the broader Australian agricultural industry success. The Australian agricultural sector is at a crossroads, facing both unprecedented challenges and opportunities. Climate variability, water scarcity, and evolving consumer preferences are forcing farmers to reconsider traditional practices and explore new avenues for growth and sustainability. Simultaneously, technological advancements and innovative financial models open new possibilities for expansion and diversification. In order for OOs to continue to contribute into the future success of this industry, they need to have the capability and capacity to grow, adapt and compete to remain viable.

This report seeks to provide insight into investment in agriculture and evaluate the different funding tools and mechanisms available to OOs to support entry or expansion into the agricultural industry. To do this, an Agricultural Investment is defined as one that is for the purpose of producing food and/or fibre (primary production), and an OO is an agricultural business owner who has purchased land and an associated operating entity.

While evaluating and providing advice on business strategies is beyond the scope of this report, the Triple Bottom Line (TBL) model will be reviewed to highlight how the three pillars work together (and conflict) in relation to Australian agricultural businesses, and ultimately whether it impacts investment opportunities.

The following sections provide an overview of investment within the agricultural sector, including the parties investing and their motivation, and evaluate what models and business structures are being employed to support investment for OOs to enter or expand existing operations.

2. The Australian agriculture industry – an investment overview

2.1 Attractiveness of the agriculture industry

Is the agricultural industry an attractive investment? The simple answer to this question is yes, definitely. The rationale for why that is the case, is more complex.

Agriculture occupies a unique position on the risk-reward scale. There are two parts to an agricultural investment: (1) the operating entity and (2) the agricultural land. Agricultural land is a real asset, and in its purchase, the investor seeks to make a return through capital appreciation. The operating entity exists to generate turnover and retain profits.

It is possible to invest in one or the other, but more commonly in Australian agriculture, OOs are investing in both without segregating their investments to evaluate performance. This report reviews the two in isolation before considering the merits of either maintaining a level of separation or combination. However, before analysing the two components of agricultural investment, it is important to look at the industry as a whole.

2.1.1 Porters Five Forces of competition

Porter's Five Forces analysis tool can be applied to the Australian agriculture industry to assess the competitive landscape, financial viability, and risks, which supports investors and businesses operating within the industry to make more informed strategic and operational decisions. The five forces analysed in Porter's Five Forces Analysis tool are (1) competitive rivalry, (2) supplier power, (3) buyer power, (4) threat of substitutes, and (5) barriers to entry (Porter, 1979).

The analysis of the Australian agriculture industry is presented below.

1. Competitive rivalry – high
    - As demonstrated in Section 1, the Australian agriculture sector is largely characterised by OO businesses across diverse sub-sectors of the industry, such as dairy, beef, wheat and oilseeds, and horticulture. This fragmentation leads to intense competition among producers and reduced capability to create economies of scale leading to high cost of production and thin margins (Australian Government, 2025).
    - Agricultural products are often traded as commodities on the open markets e.g. wheat, canola, rice, milk, beef and lamb which creates intense price competition
    - Australian agriculture is heavily reliant on the export market, with approximately 70% of the total volume of agriculture, fisheries, and forestry production exported overseas (Australian Government, 2025). The export orientation of each industry within agriculture depends on the commodity

type e.g. wheat and beef are more export oriented than dairy, horticulture and pigs (Australian Government, 2025). See Figure 2 for breakdown.

- Reliance on the export market makes it sensitive to price fluctuations and competition from other producing countries. The value of agriculture, fisheries, and forestry exports has fluctuated from $45.8B to $86.1B since the 2004-05 financial year (Australian Government, 2025). Taking the wheat industry as an example, this industry faces intense global competition and is managed via international markets

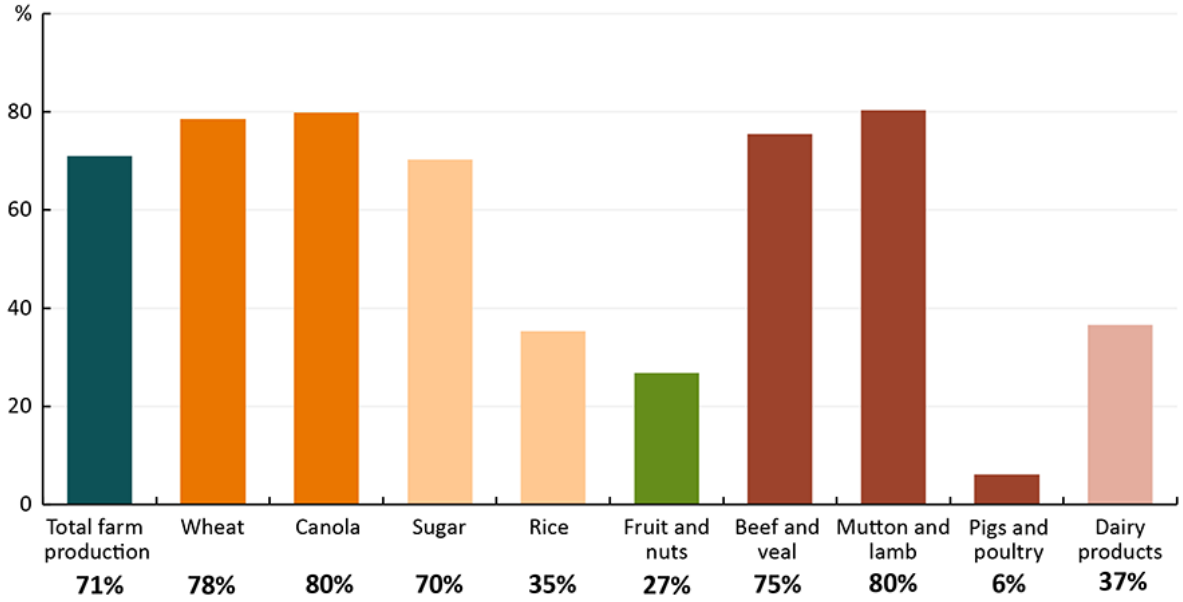

Figure 2. Export orientation of Australian agriculture Note: Share of agricultural production exported by sector, 3-year average, 2021–22 to 2023–24. (Australian Government, 2025).

- Workforce – labour remains one of the most crucial inputs in Australian agriculture. While technological advancements are available and developing to provide opportunities for efficiencies, the workforce remains critical for everyday operational requirements throughout the industry's supply chain.
- The industry's labour requirements are also unique owing to seasonal demands and often remote geographic locations of available work. This, coupled with Australia's Industrial Relations laws, which are driving a reduction of casual employment opportunities and increasing the cost of labour through modern awards and federal and state taxation laws (e.g. payroll tax), contributes to a significant cost of doing business within an industry that is already stretched.
- The industry is struggling to attract and retain skilled and experienced workers willing to work in regional and rural areas, which results in significant competition between employers for the declining eligible and interested workforce.

2. Supplier power – moderate to low
    - Production of perishable goods in the farming supply chain further reduces bargaining power for farmers – the limited shelf life of some products like milk, eggs, fruit and vegetables limit farmer's flexibility to negotiate prices

- Farmers are often negotiating with a few large buyers (either processors or retailers) who hold significant market power which translates to unfavourable contract terms
- Further, there is often a lack of transparency or inadequate information about market prices and contracting arrangements which leaves farmers at a disadvantage and subject to market forces which they have little ability to influence
- Farmers are also heavily reliant on freight to transport goods and services to markets, processors, ports, or retailers. The cost of freight has been steadily increasing since the beginning of the COVID-19 pandemic and continues to be influenced by supply chain disruptions, both domestically and internationally, creating port congestion and bottlenecks, increasing fuel prices, and chronic labour shortages (Australian Government, 2021). These costs are subsequently passed onto the farmer, further impacting costs at the farm gate, and then again ultimately to the consumer once the product hits the shelf.
- Favourably, farmers typically face a less concentrated group of suppliers for inputs such as seeds, machinery, and fertilizer, and rarely are these arrangements contracted or on retainers, which provides farmers with marginally more negotiating power on prices compared to buyers.

3. Buyer power – high
    - In Australia, retailers (supermarkets or food processors) are relatively concentrated and control a significant portion of the market giving them power and leverage to negotiate prices with suppliers
    - Mature supply chains are characterised by few large processors and distributors that dominate the supply chain. These operators can exert power over farmers who are dependent on these processors for access to domestic and international markets which further increases their bargaining power
    - Buyers, particularly in the food and retail sectors, are increasingly price-sensitive. These sensitivities are felt across the supply chain, however the farmer bears the ultimate brunt of this pressure to lower costs and improve value on already thin margins

4. Threat of substitutes – moderate
    - Threat of substitutes exists two-fold for the Australian agriculture industry – firstly, changing consumer preferences with a focus on healthy eating and environmentally sustainable practices are driving emerging technologies to innovate food production to produce plant-based alternatives to meat and dairy. Second, as Australia's agricultural industry is export-focused, the availability of similar and potentially cheaper agricultural products from other countries acts as a substitute threat for domestic producers.

5. Barriers to entry – high
    - By far the greatest barrier to entry is the high cost of capital investment required for land and machinery, and access to productive arable land. Land is not liquid and investment in this asset class takes time, often months or even years for acquisitions to be finalised.

- Second, variable and unpredictable weather patterns act as a deterrent for new entrants and even an incentive to leave the industry for existing players, as droughts, floods, and bushfires wreak havoc on farming enterprises. There is little that can be done to prepare for sustained periods of drought, flash or devastating flooding from major rain events, or unexpected bushfires occurring in national parks which are often close neighbours for agriculture land holdings. Often these events create significant financial and operational burdens throughout the supply chain.
- There are also minimal incentives for entry from the Australian Government or other organisations. The Australian agriculture industry is barely subsidised from an operational perspective, with Australian farmers being some of the least subsidised in the world (Australian Government, 2020). Following reforms and recommendations from the World Trade Organisation obligations, government support is now dominated by investments in Research and Development (R&D) to improve sector capacity and risk management or disaster relief tools to help manage Australia's uniquely variable climate (Australian Government, 2020).

2.1.2 Australian agriculture compared to global peers

The Australian agriculture industry's strengths and opportunities compound when compared to global peers. For example, Australia's taxation system does little to influence the ownership of agricultural land compared to the American system, which incentivises city-based ownership with no suggestion or incentive for landowners to operate the farming enterprise. This arrangement gives rise to the high utilisation of lease models. Lease models will be explored in more depth later in this report as an important mechanism for entering or expanding farming operations. Australian farmers are also minimally subsidised, which provides greater freedom and autonomy for farmers to conduct their operations and use inputs discretionally to boost production. The Australian geopolitical risk is also minimal compared to countries in South America, and the politically motivated investment hurdles are relaxed compared to the prospect of investing in China and wider Asia. Finally, the Australian consumer mix is also significantly different from what African countries need to supply. Like all these countries, the Australian agriculture industry is unique and can be summarised as follows:

- Relatively high cost of production
- Low subsidies
- Relatively low political risk
- Relatively secure tenure of land
- Highly variable weather and climatic conditions
- Highly developed supply chains

In summary, the Australian agricultural industry faces significant challenges, including intense competition, high buyer power, and environmental uncertainties. However, it remains a crucial sector of the economy, contributing to the GDP, employment, and exports. To maintain competitiveness and sustainability, the industry needs to continue focusing on innovation, efficiency improvements, and strategies to address workforce challenges. Developing stronger negotiating positions with buyers through collective or cooperative-style organisational mechanisms and exploring alternate funding

models to attract investment and adapt to changing consumer preferences could help mitigate some of the pressures identified in the analysis.

2.1.3 Considerations for Agricultural investment evaluation

As with all investment classes like bonds, cash deposits, the share market, or the real estate market, there are differentials for agricultural investments. It is arguable that the share market and the real estate market have similar components for their investments like has been described for agriculture – a real asset, and an operating entity. For example, the share market offers growth stocks which act like a real asset, and dividend shares which act like the operating entity where revenue is earned from the business' operations. The same can be said of investments in commercial or residential real estate. However, the key difference in Australian agriculture investments, is that the majority of land holdings are also operated by the owner. These OOs are not only seeking a return on their real asset (land) through capital appreciation, but they're also seeking an operating return on their business (profit). This is the fundamental reason why these two components need to be separated when reviewing the investment performance in agriculture and making strategic decisions for market entry or expansion opportunities.

The three other concepts that are of importance to evaluating an investment in agriculture are:

1. **Risk reward profile** – What does the return have to be to justify the investment risk? The risk reward profile is different for every investment class. For example, investors demand a far greater return from a technology stock which holds no physical assets and may be redundant tomorrow, compared with a bank bond. To compete with other investment classes, the risk reward profile of agriculture will dictate its viability, and how agriculture attracts investment from current and future investors.
2. **Cyclical and potentially volatile nature of the agriculture industry for operations and investment** – the agriculture industry does not provide a consistent and stable operating paradigm to invest in. The industry is exposed to climate, market and commodity price shifts, input costs, consumer sentiment and cost of finance that all fluctuate which makes timing critical for investment and operation returns.
3. **Using longer term averages rather than a point in time –** as discussed, primary production is highly variable, and as a result, sensitising analysis of returns over a longer term average is imperative. Factors like the Eastern Young Cattle Index (EYCI), commodity prices, input prices and interest rates all require a longitudinal horizon to wash through cyclical fluctuations which may over or under emphasise potential returns.

Figure 3 demonstrates the volatility of these variables across the industry, noting that if they were applied to a particular region, the volatility would be amplified. Indexing these five drivers demonstrates that the further they are from the trend line, the faster they ultimately return to the average.

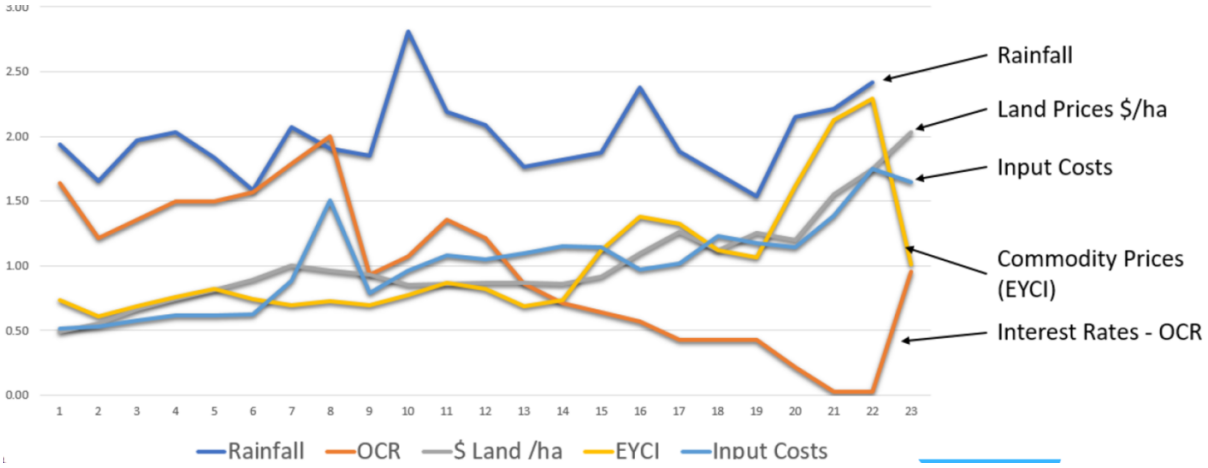

Figure 3. Comparison of rainfall, interest rates, land price, EYCI and input costs over 20 years in Australia.

3. Analysis of Australian agriculture business performance

3.1 Australian agriculture operating entity performance

The use of an operating entity or company enables agricultural businesses to engage in daily operations and generate revenue. The operating company is responsible for all operational activities like employee engagement and management, supplier contracts, production of goods and services, and sales, as well as holding the physical (e.g. machinery) or intangible assets (e.g. intellectual property) required to operate the business (Hayes, 2025). The operating company will usually form part of a broader company structure which may include a holding company or trusts to provide for asset protection, limit liability and create flexibility when managing diversified businesses. Whilst advice on optimal company structures for commercial performance is out of scope for this report, the use of an operating entity is widely understood in agricultural operations which is why it is being discussed for the purpose of evaluating the financial performance of agricultural investments.

3.1.1 Farm size

According to ABARES (2025), farm size is an important determinate of business performance. Compared to smaller farms, larger farms tend to:

- Be more profitable;
- Invest more;
- Generate a higher rate of return on capital;
- Have a greater capacity to reduce costs through scale; and
- Have a greater ability to invest in productivity-enhancing capital additions.

This is evidenced by data collated by ABARES for 2020-21 and 2022-23 which sorted Australia's broad acre and dairy industries into 10 equally sized groups (deciles) based on farm cash receipts which is a measure of total revenue received by the business in a given financial year (ABARES, 2025). The data shown in Table 2 is averaged over 2020-21 and 2022-23 and demonstrates a clear positive relationship between the size of the farm's operation and its rate of return on investment.

Table 2. Rates of return and output contribution by top and bottom deciles for broadacre, beef, cropping and dairy enterprises (ABARES, 2025).

Industry and decile	Output	Rate of return
Broadacre – Top 10%	55%	15.7%
Broadacre – Bottom 10%	0.5%	5.3%
Beef – Top 10%	60%	12.7%
Beef – Bottom 10%	0.6%	7.1%
Cropping – Top 10%	40%	16%
Cropping – Bottom 10%	0.4%	4.2%

Dairy – Top 10%	35%	14.5%
Dairy – Bottom 10%	1.2%	7.7%

Finally, in the 2020-21 year, ABARES data reports the average rate of return to capital (excluding capital appreciation), was 2.9% for broadacre cropping, 0.8% for livestock, and 2.5% for dairy (ABARES, 2021).

These factors are driving a trend towards fewer, but larger farming businesses as farmers strive to make a financial gain from their operations.

3.1.2 The Triple Bottom Line Model of business performance

The Triple Bottom Line (TBL) model evolved in 1994 as a way to broaden business performance measurement beyond standard metrics of profitability. The TBL includes environmental factors (planet) and societal issues (people) to engender organisations to have a more holistic and sustainable approach to performance (Miller, 2020). Traditionally the TBL has been implemented by large scale organisations, particularly those listed on various stock exchanges, as fund managers, banking institutions, and retail investors have become increasingly conscious of sustainable operating practices as part of evaluating profitability and willingness to invest. In July 2025, during an interview with an Australian agribusiness banker, the banker acknowledged that banks do not **yet** consider sustainable farming practices when deciding on loans for agribusinesses. However, financial institutions are exploring ways to include it and motivate farmers to adopt better practices in return for more favourable lending terms. Given the majority of Australian farms are small scale, and there is no incentive or penalty from lenders or investors when seeking funding, agribusiness' are less inclined to adopt the TBL. Despite this, consumers and lenders expect farmers to act responsibly and engage in practices that will protect the environment and support their communities.

Consumers want to know more about how their food and fibre are produced. They have high expectations, but are also increasingly price sensitive. This creates a problem for producers who need to spend more money to meet these demands. From discussions with producers and innovators, three consumer groups emerged:

1. Consumers who socioeconomically do not have the ability to make many choices about the food and fibre they consume;
2. Consumers who socioeconomically have the ability to make choices about the food and fibre they consume but remain price conscious; and
3. Consumers who have full socioeconomic autonomy for the food and fibre they consume

In the first group, the Organisation for Economic Co-operation and Development (OECD), a group of mostly wealthy countries made up of the USA, Northern Europe and parts of Asia (e.g. Australia) has an average net-adjusted disposable income of around $30,490 per year per capita (not accounting for wealth disparities within the population) (World Population Review, 2025). Even though they want to buy sustainable or organic products, their income limits their ability to do so. Given the significant size of this group, this makes it hard for producers to make sustainable changes because of the costs involved which further erodes profit margins.

The focus is on the second and third groups, which are small but demand ethically produced products like free-range or organic. These methods cost more and often require more land or labour which raises production costs. As individual farmers have little power to charge more for these products, the profitability of these operations is further impacted.

In summary, until farming becomes more efficient and the cost of production meets consumer price sensitivity, most farms cannot include sustainable practices and still make a profit. Farmers need to keep improving their methods, adapt to changes, and ensure that sustainable practices are also profitable. Therefore, whilst I acknowledge the importance of the TBL core business pillars, this report will focus predominantly on the financial drivers for a successful agriculture business investment.

3.1.3 The financial drivers for operating entity performance

There are short and long term drivers of operating entity performance. Short term drivers include climate and seasonal conditions, commodity prices and the cost of inputs. Longer term drivers of performance relate to adaptation of technology and productivity growth, farm management practices, including the commercial acumen and operational experience of the business owner, international markets and government policy (Australian Government, 2025). The majority of the short and long term factors are largely influenced by macro-economic or environmental triggers, and as has been established above, agricultural business owners at the “ground level” are price takers in almost every aspect of trade. These factors have a significant impact on the bottom line of an agriculture business, with little control or influence from the business owner. Here are a three (3) examples:

1. Climate conditions – the climate conditions across Australia vary intensely year on year. This creates both sensible seasonal supply and demand for stock, but can also drive overreactions and exaggerations in market supply and demand that are exclusive of consumer demand factors. For example, restocking patterns for livestock sectors like beef and sheep follow seasonal climatic conditions and impact farmer confidence which increases or decreases the supply of animals to market or processing as farmers replenish or decrease their stocking numbers based on the amount of feed on hand. Figure 4 below shows the fluctuations in the value of livestock disposals and products for beef and sheep markets over the last five (5) years. The value of cattle, sheep and wool products have decreased between 8 – 10% in 2023-24 compared to 2022-23, declining further off the back of 2021-22 season (Australian Bureau Statistics (ABS), 2023-2024). This variability has a direct impact on the profitability of farming operations over time.

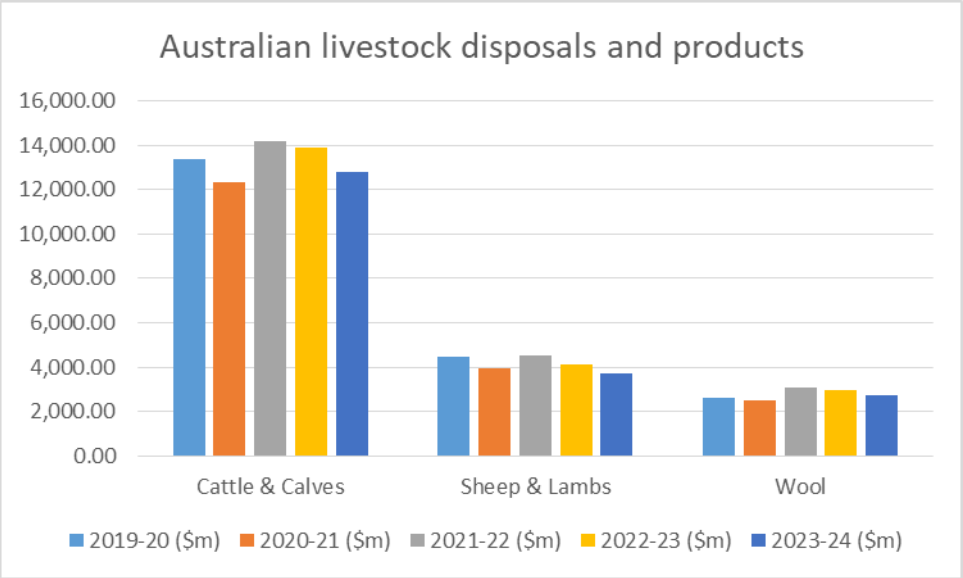

Figure 4. Australian livestock disposals and products over five (5) years (ABS, 2019-2024)

2. Seasonal conditions – whilst linked to climatic conditions, the seasonal changes that occur each year as a result of shifting rain patterns can create unexpected financial burdens for agricultural businesses. Broad acre cropping businesses typically sow and harvest at the same time of year every year based on anticipated and reasonably consistent weather patterns. However, seasonal changes like early or late rainfall can not only impact on crop growth, but also increase the need for inputs to support crop health and maturity. This is difficult to predict and make budget allowances.
3. Commodity prices – the Ukraine war caused an initial spike in canola and wheat prices due to supply chain disruptions and reduced planting during Ukraine's 2022/23 harvest (European Council for European Union, 2025). Ukrainian farmers planted 22% less crop than the previous year thereby reducing global supply. The continued uncertainty of export routes and sanctions contributed to further price volatility in the price of wheat and war-related energy prices have increased the costs of other agricultural commodities and inputs like fertiliser. These changes have made it increasingly difficult for farmers to absorb prices in their operations. Figure 5 from the International Grains Council (IGC) as cited in the European Council of the European Union's article (2025) on the Russian invasion of Ukraine, shows the significant fluctuation of grains prices worldwide since January 2021 as mechanisms within the warring parties have been established and dismantled over time. This highlights the significance of global forces on fragile industries like agriculture.

Figure 5. Grain prices worldwide since January 2021 (IGC, 2025).

Finally, the last factor that is one of the most difficult to evaluate, but of equal importance, is the commercial competency of the agriculture business owner. Owner operators are in primary production for a variety of reasons which include personal hobby, the opportunity (or imposition) of generational farming, to create the highest quality or niche product, or to run complementary mixed farming enterprise, all within in an unparalleled community environment. These driving forces and business goals are unique to each OO, and therefore cannot be easily evaluated and benchmarked for their impact on the financial outcomes of the business, and translation into potential rates of return or profitability over the long term. Notwithstanding the significant head winds that external factors highlighted above exert onto the operational entity, financial institutions still place a significant amount of importance on the curriculum vitae and practical experience of the farmer. When farmers are seeking seed, or additional funding, to support land acquisition or operational expansion, it is not just the financial metrics that determine the level of finance available. Lenders make adjustments for the farmer's learning, and performance within the existing industry, or benchmark other traits if a track record of growth and performance is not clearly established. During the interview with the Agribusiness banker in July 2025, the banking representative cited recent cases where the bank was evaluating an OO's loan documents to expand into a new industry. The loan was approved but a condition of the loan was that the OO needed to retain the existing corporate management structure for the first 12 months of ownership to support their learning curve and secure the investment.

In conclusion, the financial performance of agricultural operating entities is influenced by a complex interplay of short-term and long-term factors. While the TBL model emphasizes the importance of environmental and social considerations alongside profitability, the current economic realities of the agricultural sector often necessitate a primary focus on financial viability. External factors such as climate conditions, seasonal variations, and commodity price fluctuations significantly impact profitability, often beyond the control of individual farmers. The commercial acumen of business owners plays a crucial role in navigating these challenges and is taken into consideration by investors. As the industry evolves, there is a growing awareness of sustainable practices among consumers and financial institutions. However, the adoption of these practices must be balanced with economic feasibility. Moving forward, the success of agricultural investments will likely depend on the ability of

farmers to adapt to changing conditions, leverage technological advancements, and maintain financial resilience in the face of ongoing challenges.

3.2 Australian agricultural land asset performance

3.2.1 Land Asset performance

According to research done by Rural Bank, from 2003 to 2023, the national median price for farmland has risen by 8.5% (excluding income generated by farming operations). This investment class outperforms equities and housing over the longer term. Further, according to The Australian Financial Review (Tamblyn, 2023), Figure 7 demonstrates that Australian farmland has outperformed ASX200 and US S&P500, and the Australian residential property investment classes over 1, 5, 10 (US S&P excluded) and 20 years, delivering reliable and consistent returns.

Figure 6. Asset class comparison over 1, 5, 10 and 20 years. (Tamblyn, 2023)

It is important to note that the long-term growth and returns from agricultural land are in contrast to the volatile performance of the agriculture sector itself, which is demonstrated by the factors influencing operating entity performance outlined in Section 3.1. Looking at the specific growth of Australian farm land over time, the national median price for farmland has tripled in the past 10 years, rising by 201 per cent (Lee, 2024).

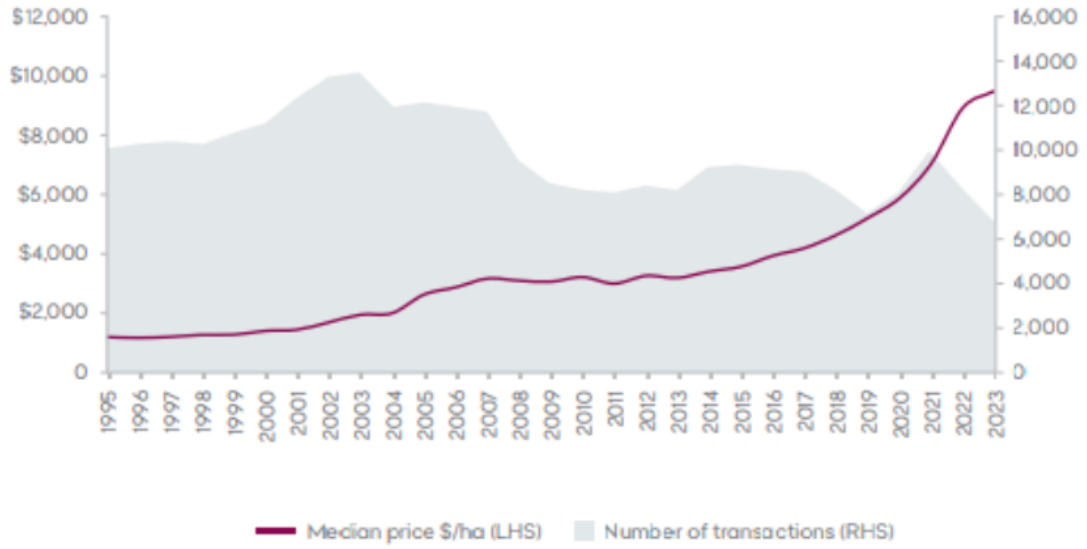

Figure 7. Australian historic median price of rural land per hectare. (Lee, 2022).

This growth has been supported by low interest rates, a drought breaking on the Australian east coast in 2020, and strong performance of beef, sheep and cropping enterprises which boosted farming businesses financial returns. These factors have combined to not only encourage OOs in particular to expand their land holdings, but also attracted international investors, mostly institutional investors like superannuation/pension funds seeking long term returns (Lee, 2024). These investor groups consider Australian farmland cheaper compared with other jurisdictions and less developed in terms of productive value. Purchasing underdeveloped land provides an opportunity for long term capital growth returns for investors by developing the productive value of the land, and producing more food and fibre for the rest of the world. The scarcity of agricultural land is also a contributing factor for price rises; the COVID-19 pandemic drove an increase in urban populations seeking regional and coastal lifestyle changes, further reducing the amount of available agricultural land as these communities sprawl to accommodate a growing population (Tamblyn, 2023).

In a report recently published by Bendigo Bank Agribusiness (2025), the relationship between operating entity performance and farmland price per hectare was explained. Traditionally these variables are closely positively correlated, although the net value of farm production (NVFP) per farm has significantly more volatility compared to the price per hectare of land. The NVFP captures the impact of commodity prices and production trends on farm income while also accounting for costs. Figure 8 below shows how the exceptional run of high earning years in 2020-21 and 2021-22 fuelled a period of huge appetite for farmland purchases (and little impetus to sell) driving the price per hectare higher at a rapid rate. The recent slowing of the operating environment which has seen the lowest NVFP since 2019-20, has contributed to a plateauing of farmland values across most farming regions in 2023 and 2024.

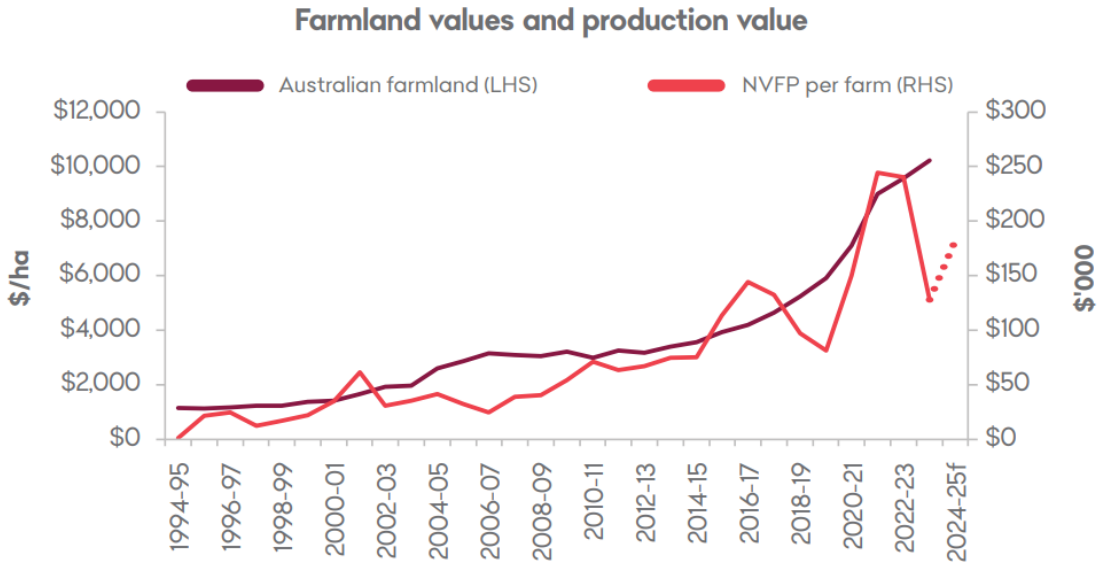

Figure 8. Australian farmland values and production value over 20 years. (Bendigo Bank Agribusiness, 2025).

In summary, Australian farm land represents a highly competitive investment opportunity for a number of investor groups, including OOs. Land ownership provides unique long term growth and development prospects which appeals to all investor groups, and whilst the price per hectare of land is correlated with the NVFP, the price per hectare trajectory is growing consistently, and projected to increase due to scarcity of arable land in Australia and food security issues in Asia. These factors provide a strong foundation for the investment to provide a reliable rate of return.

3.2.2 Rate of return on investment – to include or exclude capital growth?

To answer this, data was retrieved from ABARES Farm Data Portal for the last five (5) financial years across all broadacre farming businesses and split into high, medium and low performance categories focussing on rate of return, inclusive or exclusive of capital appreciation. For a list of definitions and the tabulated data, refer to Appendix B. The analysis of this data demonstrates that the inclusion of capital appreciation exponentially improves the rate of return for the operating entity. For example, for the middle 50% of farm populations, rate of return increases from an average 0.4% to 8.38% when capital appreciation is included in the rate of return.

3.3 Conclusion: importance of evaluating operating entities and land assets separately

In conclusion, this analysis demonstrates the importance of reviewing the land asset and the operating entity as independent investments. When grouped together, the strong capital appreciation and rate of return for a land asset over the last decade may mask any issues with performance in the operating entity and therefore create an imperfect representation of overall business performance. Keeping the entities

separate ensures that the land value can be evaluated for equity purposes, and the operating entity can be evaluated for its viability to support future operations and any expansion plans. Keeping the entities separate also enables any recommendations to take place for improving the performance of the operating entity.

4. Australian agriculture industry investors – who are they?

There are a wide variety of investors in agriculture in Australia. In this report, investors have been placed into two groups – Owner Operators and Corporate Investment Groups (CIG). The OO group is comprised of family (first or multi-generational) farmers, and private owners and investors, and CIG is made up of foreign investors, pension funds, corporate/ institutional investors and management companies, and high wealth individuals.

Following interviews with representatives from both groups, clear themes emerged relating to importance of growth versus operating return, decision making capabilities, and the importance of people.

Compared with OO, CIGs are disproportionally realising increases in asset value/growth and are significantly more mature in their use of data and analysis to make decisions on buying or selling agricultural investments. Using this data, CIGs are accessing a broader geographic investment region and asset classes for comparison and incorporating that into a strategic framework that outlines the opportunity that can be presented to potential and current investors. CIGs have pre-determined targets and measures of success, and their governance and accountability frameworks are regularly monitored for compliance and status of investment success. Structurally, corporates have a greater challenge to ensure that all stakeholders are working towards and understand the common objective. The layers that exist within a CIG often breed misalignment between the decision makers (the Board of Management and Investors) and the operational support functions who are primarily responsible for the operating return as each party has a different level of understanding and awareness of what is important in order to be successful. The factors that need to be stringently aligned to enable success include:

- Asset growth or operating return strategy and goals
- Production strategy and understanding of trade-offs for input use, direct or contractor labour and machinery acquisition
- Timeframes to hold assets and or realise operational returns depending on the nature of the agricultural business for example, cropping versus beef cattle versus dairy
- Growing importance of ethical investments.

Ultimately, the CIGs use their resources, structure and capabilities to enter and exit investments more frequently and create stronger asset growth outcomes. Failure to have unity of purpose, and appropriately defined and incentivised decision making and financial delegations of authority at all levels of the business, appears to be the most significant reason for operational return failure.

Conversely, despite having limited resources and structural support, the OO can be more agile, and use real time data and information to make and act upon localised operational decisions without worrying about overarching leadership structures and financial delegations of authority. The OO are also more likely to have an emotional tether to the real asset (land) as it is often held through generations, or it is part of a smaller land holding, than what the CIGs have amassed, so if it was acquired or off boarded at an inopportune time in the farming cycle, it could have adverse impacts on

operational returns or realising capital gains. Owner Operators real assets are often more stable in market as they fail to exploit or realise the capital gains at the right time of the cycle.

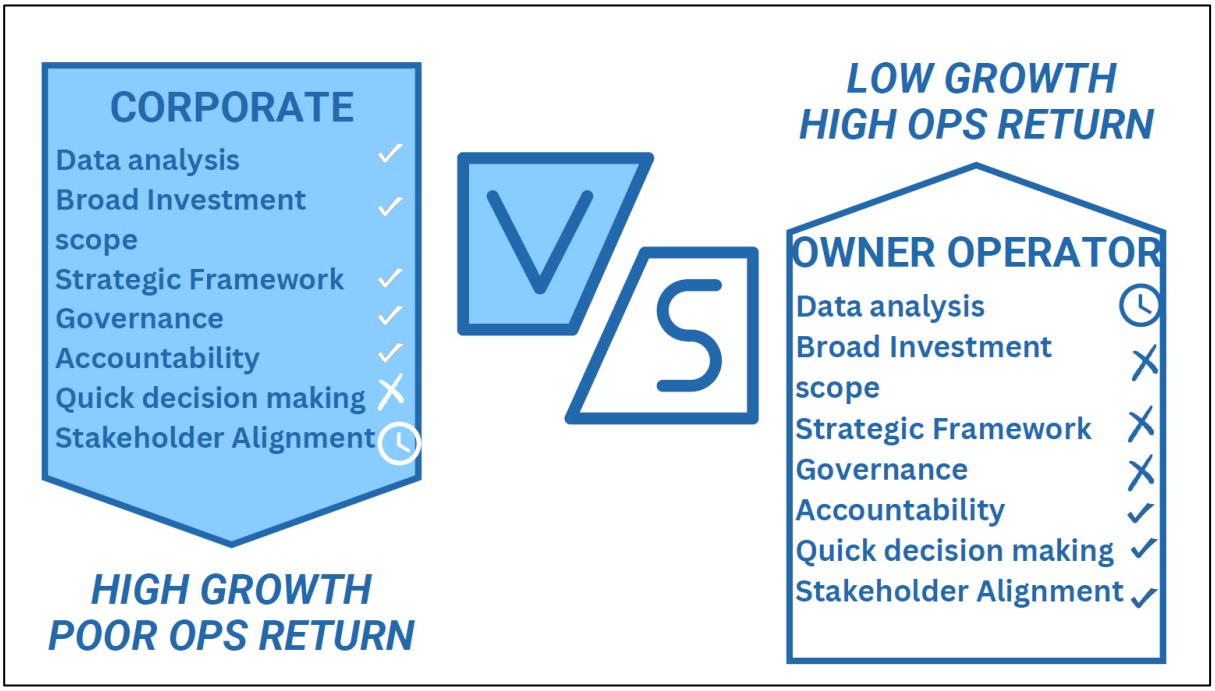

Figure 9. Comparison of outcomes for Corporate Investor Groups and Owner Operators. (Source: author)

In summary, OOs are often realising comparatively better operating returns while CIGs are capturing capital gain of land value often driven up by the improvements to the productive value of the land.

5. Financial metrics used to evaluate business performance and support investment opportunities for owner operators

Financial metrics, leverage, and hurdle rates are crucial components of investment analysis, providing valuable insights into a company's performance, risk profile, and potential returns. These tools help investors, managers, and stakeholders make informed decisions about resource allocation and investment strategies (Ross et al., 2017). Key metrics include revenue growth, turnover, profit margins, and return-based ratios such as Return on Investment (ROI), Return on Assets (ROA), and Return on Equity (ROE) (Ross et al., 2017). These metrics offer different perspectives on a company's profitability and efficiency in utilising its resources.

ROE and ROA are particularly important to potential investors to evaluate current business performance. ROE measures profitability in relation to equity invested, indicating how efficiently a company uses equity to generate profits. OO's should use ROE to measure their financial performance and profitability, whilst banks use ROE to assess the lending risk; if the operation's ROE is lower than the cost of borrowing (interest rates), it can be a predictor of load delinquency and conversely, a higher ROE generally suggests better use of investment dollars. However, it's important to note that ROE can be inflated by high leverage (debt), potentially masking financial risk (Ross et al., 2017).

ROA, on the other hand, measures profitability in relation to total assets, providing insight into overall operational efficiency. ROA is less affected by financial leverage than ROE and gives a broader view of company performance across all resources (Ross et al., 2017). In discussions with agribusiness bankers, banks are typically prepared to lend up to 60% of asset value for owner operators, compared with 50% for CIGs, because CIG typically generate lower returns due to a higher cost base, and lower "sweat equity" than OOs.

When seeking funding, using both ROE and ROA provides a comprehensive view of financial performance. A high ROE may attract equity investors, but it's crucial to ensure it's not solely due to leverage. A strong ROA demonstrates efficient use of all resources, potentially appealing to both equity and debt investors.

Turnover is an important metric for both OOs and potential investors. For an agri-business, two of the largest assets owned by a business are usually working capital and inventory. Working capital in agriculture is related to having cash available to cover short-term operating expenses like inputs, labour and managing seasonal cash flow gaps (Hayes, 2025), while inventory can be defined as the value of livestock, harvested crops, machinery and inputs, that are on farm and available to generate a return from (Kenton, 2025). Turnover ratios like working capital turnover and inventory turnover calculate how quickly and efficiently a business conducts its operations and uses inventory to generate, and collect cash (Kenton, 2025). For agriculture, working capital turnover is an important measure of financial stability as strong working capital enables farmers to manage cash flows effectively during the year (Wilcox, 2024). Maintaining strong working capital also enables OOs to take advantage of variations in market conditions which occur due to commodity price volatility; the ability to hold onto harvested crops or livestock during periods of low prices and wait for more favourable market conditions (market timing) can lead to higher profits (Wilcox, 2024). To support

strong working capital, sound budgeting and financial planning is required to identify potential gaps in cash flows and take corrective actions where possible (Wilcox, 2024).

Liquidity ratios, such as the current ratio and quick ratio, gauge a company's ability to meet short-term obligations. Debt-related metrics like the debt-to-equity ratio and interest coverage ratio provide insights into a company's financial leverage and ability to service debt (Ross et al., 2017). Debt-related metrics are of particular importance to debt financers who place a strong emphasis on borrowers' ability to cover the interest on borrowings.

Financial leverage significantly impacts both operations and investment opportunities (Ross et al., 2017). It can enhance returns during favourable economic conditions but also increases financial risk by amplifying the volatility of earnings. Leverage allows farmers to pursue larger investments or acquisitions by expanding capital access. However, it also increases interest expenses and can strain operational cash flows during seasonal earning lulls.

From an investment perspective, leverage can lower the overall cost of capital, as debt is typically cheaper than equity. It also offers tax benefits, as interest expenses are tax-deductible (Ross et al., 2017). However, high leverage may lead to stricter covenant requirements from lenders and influence the types of investments a company can pursue.

Hurdle rates represent the minimum acceptable rate of return for an investment and vary across industries due to differing risk profiles, capital requirements, and market conditions (Ross et al., 2017). In the context of Australian agriculture, particularly farming practices, it is reasonable to expect that hurdle rates are generally higher compared to other industries due to weather-dependent risks, commodity price volatility, and the long-term nature of investments in land and equipment.

In conclusion, financial metrics, leverage, and hurdle rates are essential tools for comprehensive analysis. They provide a multifaceted view of a company's financial performance, risk profile, and potential for future growth and enable potential investors or OOs to make informed decisions about resource allocation, investment strategies, and operational improvements.

6. Financial investment and funding models available to owner operators

6.1 An overview of investment models

Agricultural investment models play a crucial role in facilitating market entry for new players and enabling growth or expansion of existing investment portfolios or operational paradigms. One of the main reasons OOs seek funding or other arrangements is to expand their existing farming operations and improve profitability. One of the key ways to improve profitability is to gain economies of scale by spreading the operating costs over a greater land mass. As demonstrated in Section 3, this practice is optimal when the operating entity is already efficient; expanding land mass to continue running an inefficient operation will only exacerbate negative rates of return. This section provides an in-depth analysis of various investment tools and models in the agricultural sector, each with its unique characteristics and risk-reward profiles.

6.1.1 Debt Financing

Debt financing is a method of raising capital by borrowing money from lenders, typically with the agreement to repay the principal amount plus interest over a specified period. It is most commonly used to finance agricultural operations or expansion projects typically relating to land or equipment. While it can provide necessary capital, it is important to note that borrowing for operational purposes, rather than capital expansion can be challenging.

Debt financing is a prominent investment strategy and is commonly used by the following investors:

a) OOs
b) agribusinesses
c) agricultural cooperatives

Debt financing is a particularly useful tool in agriculture due to:

- the seasonal nature of income
- large capital investments e.g. land or machinery
- emergencies or unforeseen circumstances
- modernisations or efficiency improvements, or value-add initiatives
- generational transfers
- risk management

Debt financers are more inclined to lend for capital expansion projects because these are real assets and as demonstrated in Section 3, the rate of return and capital appreciation of real (land) assets in Australia is performing strongly giving lenders confidence in the investment returns for both parties. For borrowers seeking to acquire more land, debt financing is advantageous because they can leverage some or all of the existing land assets, and create a multiple of current value to enable more rapid growth, and retain ownership and control. Debt financing for operating expenses is

more difficult because operations are generally short-term recurring costs that don't create a long term asset or act as collateral for lenders (Ross, 2025).

There are many providers of debt financing for farming land and operations. A growing number of farmers are utilising livestock financing as an alternate financing arrangement to traditional bank loans. Livestock financing recognises livestock as an appreciating asset which enables farmers to use it as collateral without putting land or other assets at risk. This is an important differentiator as it keeps land assets clear and unimpeded from future borrowing opportunities. According to ABARES (2025), specialised financing like livestock loans have a direct, positive impact on cash flow management; by leveraging livestock, producers can optimise their capital without burdening their existing assets, making them more resilient to fluctuating market conditions. Livestock financing can be used to purchase livestock, improve operational efficiencies or take advantage of changing market conditions faster and more efficiently than traditional loan models. The obvious detractor of this financing arrangement is higher interest rates on loans, however funders like Agrifunder, argue that the flexibility, faster loan approval time and tailored financing solutions outweigh the higher interest expense (Agrifunder, n.d.).

While debt financing can provide necessary capital for agricultural operations, it is crucial to consider the risks associated with repayment obligations and interest rates, especially given the unpredictable nature of agricultural income due to factors like weather, market conditions, and policy changes.

6.1.2 Equity Financing

Equity financing involves selling a portion of the farming business in return for capital to fund business expansion. This model allows for shared risk and potential returns. The main benefit of equity financing is that there is no obligation to repay the money acquired, and no regular repayment plans which means the business has more capital available to invest in growth (Maverick, 2024). Equity financing is suitable for businesses that have strong growth potential but limited cash flow to service debt. The venture requires patient capital with no immediate pressure for returns, and when there is a strong balance sheet to support future debt financing (Maverick, 2024). Equity financing requires the owner to give investors a percentage of the business, share in profits, and potentially decision making rights. The only way to remove the investors is to buy out their original investment plus interest (Maverick, 2024).

Entities commonly using equity financing in agriculture include:

- Agtech startups and new ventures
- High-growth potential businesses
- Large-scale commercial farms
- Vertically integrated farming operations
- Sustainable agriculture ventures
- Agricultural processing and value-addition companies
- Farm management and advisory services
- Agribusiness conglomerates seeking to diversify

There are a number of sources of equity financing, for example venture capital firms, high wealth individuals or corporate investors. Whilst securing equity finance can be

simpler than debt financing, OOs need to have a very compelling business case and favourable financial return projections to attract investment.

Following strong returns in agricultural land assets, equity financing is increasingly popular with corporate and high wealth investors seeking to diversify their investment portfolio and capitalise on rates of return higher than other investment classes (Tamblyn, 2023). From interviews with high wealth individuals, who wish to remain anonymous, investing in agricultural land assets is providing a mechanism for them to contribute to Australian agriculture via land ownership which has a flow on impact to enabling farmers to increase the scale of their businesses and provide more food and fibre to the world. These investors are seeking both a return on assets, and an operating return, however, are realising that the return on assets is more stable compared to the operating return. This experience is consistent with the findings in this report outlined in Section 3. The investor decision making power and ownership structure is also regularly reviewed as often there is low levels of familiarity and understanding with operating agricultural businesses and diluting operational control to the farmer has greater detrimental effects on operating returns.

6.1.3 Vendor financing

Vendor financing in agriculture refers to a financial arrangement where one party provides credit to the other party to purchase their land, assets, products or services. Key aspects of this arrangement include:

a) Seasonal credit
b) Input financing
c) Equipment financing
d) Risk mitigation
e) Supply chain integration
f) Technology adoption
g) Market access
h) Capacity building

Vendor financing arrangements can take a number of forms which could also include lease arrangements, or delayed or periodic payments over the life of the agreement. The main advantage of vendor financing is that the arrangement does not attract the same level of scrutiny and parameters that traditional lending models via financial institutions require. The vendor and buyer need to be cognisant of timeframes for financing especially as the market conditions could change during the life of the agreement and impact either the value of the asset, or the buyer's financial situation has not eventuated as originally planned and the sale falls through.

6.1.4 Lease arrangements

Leasing arrangements in agriculture are financial agreements where OOs or agribusinesses rent land, equipment, or other assets instead of purchasing them outright. Leasing provides farmers with an alternative to expand their business and land holdings, and reduce the cost of production via economies of scale, without the direct expense, and financing activities that purchasing land requires. For vendors, leasing provides a steady stream of income for land they are not currently farming.

These arrangements are best used in several scenarios:

a) OOs in transition phases – entry, expansion or exit
b) Expanding operations
c) Seasonal or short-term needs
d) Accessing modern technology
e) Flexibility in operations
f) Tax benefits
g) Corporate farming entities
h) Cooperative farming arrangements

While leasing offers numerous benefits, it's important to note that it doesn't build equity for the lessee. Unlike purchasing, where each payment contributes to building equity in the asset, lease payments do not result in any ownership stake or long-term value accumulation for the lessee.

Another risk of lease arrangements is on the vendor side; land that has been leased out over a long period of time and to multiple tenants, can become run down with poorly maintained infrastructure like fences and equipment, weed management and poor soil fertility. These outcomes generally arise when there are loose or unenforced contractual requirements for maintenance as the lessee has no investment in the owner’s land.

6.1.5 Share Farming

An alternative to, or an extension of leasing, is share farming. Share farming provides farmers with the opportunity to expand their land holdings with a different risk profile (GRDC, 2025). By definition, share farming means that both the farmer and the land holder share in the risks, costs and profits of the operation. All share farming agreements have variations in percentages of shared costs, inputs and profits, however it is generally acknowledged that whichever party is taking the greater risk, therefore takes a greater percentage of the profits (GRDC, 2025). Unlike leasing, share farming creates a mutual bond between the farmer and the land holder to ensure that the operation and the land are taken care of for the benefit of both parties longer term.

Share farming is common practice in dairy and cropping industries and provides the landowner with an income stream without needing to physically farm the land, and the share farmer has the opportunity to expand their business, or gain farming experience without the heavy capital investment of buying land. Share farming also provides a pathway towards ownership as the share farmer is given the opportunity to build capital in either livestock or equipment, generate an operating return and turnover by operating a business within the industry. This demonstrates to debt financers that they are able to cover loan interest expense and improves their potential borrowing power.

6.1.6 Investment Considerations

When considering these investment models, it's crucial to constantly review the business's placement on a risk-reward profile. The choice of investment model should enhance the triple bottom line, taking into account economic, social, and environmental factors.

Investors in agriculture should approach their investments with the same rigor as they would when investing in stocks or residential real estate. They need to use available data to decide on a hurdle rate of return, which could range from 5% to 12% or more, depending on various factors. The appropriate rate of return will depend on the risk involved, the reliability of the investment, and the highest and best use of the assets. It's important to note that this rate will vary over time as the economic environment changes.

7. Conclusions

There are three main conclusions from this report:

1. The Australian agriculture industry is a sound and productive place to invest either as an OO or a CIG for the following reasons:
    - Australian agriculture plays a vital role in the national economy, contributing 2.4% to the GDP and accounting for 10.8% of the country's exports. This underscores the sector's importance in driving economic growth and maintaining Australia's position in global trade
    - Australian farmland has proven to be a lucrative investment over the long term, outperforming other asset classes such as equities and housing. The national median price growth of 8.5% from 2003 to 2023 illustrates the strong appreciation of agricultural land values, making it an attractive option for investors seeking stable, long-term returns.
    - Compared with ROI from Australian farmland, achieving viable returns from the operating entity is difficult. The industry faces a complex landscape of challenges and opportunities; climate variability and water scarcity pose significant risks to production, while evolving consumer preferences necessitate adaptability in farming practices and product offerings.
    - A notable trend in the industry is the differing performance patterns between CIGs and OOs. CIGs tend to achieve better asset value growth, potentially due to their ability to leverage economies of scale and access to sophisticated financial strategies. In contrast, OOs often realize stronger operating returns, possibly attributed to their hands-on management, deep understanding of local conditions, and personal connection both financially and emotionally to the farm’s viability.

2. The Australian agriculture industry is characterised by a predominance of family-owned and operated businesses, with an overwhelming 98% of agricultural enterprises falling into this category. This structure reflects the deep-rooted tradition of family farming and highlights the importance of supporting these businesses for the sector's sustainability.

Noting that the vast majority of Australian farms are classified as small or micro, with 60% having a turnover of less than $200,000 per annum, farm size emerges as a critical factor in determining business performance within the sector. Larger farms generally demonstrate higher profitability and superior rates of return on capital. This trend suggests that economies of scale play a significant role in agricultural success, potentially driving consolidation in the industry.

As a result, OOs who are seeking to become more profitable and sustainable enterprises, need to consider how they can expand the size of their business efficiently to compete and remain viable for their own personal livelihoods and the longevity of their assets.

3. The agricultural sector offers a diverse range of investment models for OOs, catering to different financial needs and risk appetites. These include traditional debt financing, equity financing, vendor financing, lease arrangements, and share

farming. Each model presents unique advantages and considerations, allowing farmers to choose the most suitable approach for their specific circumstances. In order to access these investment models, OOs need sound commercial acumen to support business decisions. The following financial metrics are important:

- ROE and ROA, are crucial indicators for evaluating agricultural business performance. These metrics not only provide insights into operational efficiency but also play a vital role in attracting investment to the sector.
- Turnover metrics like working capital and inventory turnover also demonstrate to investors that the OO can reliably manage their assets to generate cash to pay for ongoing operations and obligations
- Investors and financial institutions rely on these measures to assess the viability and potential of agricultural enterprises.

The selection of an appropriate investment model in agriculture requires careful consideration of the risk-reward profile. Hurdle rates can vary significantly depending on the specific project, market conditions, and investor expectations. This variability underscores the importance of thorough financial analysis and strategic planning in agricultural investment decisions.

8. Recommendations

Based on the conclusions above, this report makes three headline recommendations focussed on commercial acumen and investment strategy, industry entry or expansion. These recommendations are not mutually exclusive and should be read in conjunction to stimulate ideas and opportunities.

8.1 Commercial acumen and investment strategy

8.1.1 Real assets (land) vs. operating entity

Owner operators should consider separating land assets from the operating entity when evaluating business performance. By establishing a structure that distinguishes between land ownership and farm operations, such as creating a separate land-holding entity, owner operators can then work with relevant financial advisors or accountants, to maximise the performance of both entities both individually and collectively. This approach will allow for clearer assessment of both capital appreciation and operational returns to facilitate attracting outside investment, and can also provide greater flexibility in estate planning, and risk management.

Once the OO has a firm grasp of the financial performance of both their land and operating entities, they can then make some strategic decisions about whether any future investments are for the purpose of producing food and fibre, or realising capital appreciation in their real assets.

8.1.2 Regularly evaluate business performance

It is imperative for all owner operators, either those seeking to enter the market, or those seeking to expand, that they develop sound commercial acumen and financial literacy skills to support them to make informed business decisions and effectively communicate with potential investors or lenders.

Owner operators should establish a routine business evaluation process to regularly evaluate and benchmark financial metrics, particularly ROE and ROA, and turnover ratios to assess business performance. By implementing a robust financial reporting system that allows for frequent analysis of these key performance indicators over time, this can then be used to identify areas of opportunity for improvement, or as the basis for a business case to attract future investors.

8.2 Entering the agriculture industry as an owner operator

As discussed in Section 2, agriculture has high barriers to entry and long lead times which can make it difficult and discouraging for keen prospective market entrants to obtain financial lending or investment to support land purchase or commence operations. In Section 6 this report discussed a number of investment models and financing arrangements available to agricultural businesses. For the majority of prospective new entrants, leasing or share farming, combined with livestock financing

models, will be the most viable entry strategy to enable them to start operating relatively quickly and move towards land acquisition over time.

Networking within industry groups, local communities, livestock/grain brokers or real estate agents (and many others) is a crucial tool for new entrants to enable the sourcing of lease or share farming arrangements that may not be advertised broadly, or advertised at all. Often these arrangements can arise from mature age farmers seeking to step back from day to day operations but are unwilling to sell the asset outright – entering into a lease or share farm arrangement offers both parties valuable opportunities. Vendor financing may also eventuate from these arrangements as part of the land holder's transition or succession planning.

New OOs can also access lease models for machinery and livestock, contract machinery or agist other farmers' herds on their land to create financial stability and cash flows while establishing operational returns.

8.3 Expanding or diversifying agricultural businesses as an owner operator

8.3.1 Farm size

As discussed in Section 3, farm size has a direct correlation with profitability; larger farms tend to have higher rates of return on capital and greater capacity to reduce costs through economies of scale. It is therefore practical, and pragmatic to recommend that owner operators seek to grow their existing enterprises to ensure ongoing profitability and viability in the sector.

8.3.2 Does growth have to come from land acquisition and associated farming operations?

Often OOs only consider land ownership and operation as the principle mechanism to expand the business. However, based on the analysis above, the current rate of return on real assets (land), is outperforming many other investment classes, and the rate of return on the operating entity (excluding capital appreciation) is unfavourable for the majority of agriculture businesses. Therefore, OOs should consider whether the purchase of a land asset, without the corresponding operating activities, would achieve better growth outcomes. The newly acquired land could be leased out or a share farming arrangement could be established which reduces the operating expense for the OO and provides a more passive income stream to support operational returns and cover interest expenses on borrowings, whilst achieving capital appreciation on a real asset.

8.3.3 Diversification

As part of exploring expansion opportunities within the agricultural industry, OOs should review their existing revenue streams and decide whether to expand the current revenue streams or diversify into new ones. Expansion or diversification requires the equivalent levels of financial commitment, however diversification requires the OO to

have the capacity and capability to adapt and learn a new industry, which can also attract a greater level of scrutiny from lenders or investment partners. The benefits of diversification for the current business is that it spreads risk and opens up new revenue pathways that may enhance key financial metrics like ROA or turnover, making the overall business more robust and attractive to future investors or lenders.

Owner Operators willing to diversify into different agricultural commodities should consider how the turnover and production cycles complement or conflict with their current operations both from an operational perspective, but also a financial perspective. For example, the dairy industry has a fast turnover cycle in terms of inventory (milk) and low working capital which makes it attractive to lenders and investors who are seeking guarantees on debt coverage, however the operational cycle is arduous and intensive requiring labour or capital investment to support efficient operational returns. This is in contrast to cropping or livestock breeding which are lower intensity operationally, but have slower turnover cycles and higher working capital ratios.

Finally, expansion or diversification should only be undertaken, and will likely only be supported by lenders or investors, where the current business operations are efficient and there is sufficient equity in real assets to support future growth.

References

AgriFutures Australia. (2019). *The Impact of Freight Costs on Australian Farms.* Canberra: Deloitte Access Economics. Retrieved from https://www.agrifutures.com.au/wp-content/uploads/2019/05/19-005-1.pdf

Agrifunder (n.d). The Benefits of Livestock Financing: boosting your farming operations. Retrieved from: https://www.agrifunder.com.au/blogs-news/the-benefits-of-livestock-financing#:~:text=is%20Livestock%20Financing?-,%E2%80%8D,complications%20of%20traditional%20bank%20loans.

Australian Banking Association. (2022). *Agribusiness Report 2022.* Retrieved from: https://www.ausbanking.org.au/wp-content/uploads/2022/05/ABA-AgriBusiness-Lending-Report-2022-Web.pdf

Australian Bureau of Statistics. (2023-24). *Australian Agriculture: Livestock*. Retrieved from https://www.abs.gov.au/statistics/industry/agriculture/australian-agriculture-livestock/2023-24

Australian Government. (2025). *A Snapshot of Australian Agriculture Report 2025*. ABARES Research Report. Canberra: Commonwealth of Australia. Retrieved from: https://www.agriculture.gov.au/abares/products/insights/snapshot-of-australian-agriculture#:~:text=Source:%20Greenville%20&%20Cameron%20(2022,agriculture%2C%20fisheries%20and%20forestry%20exports

Australian Government. (2020). *Analysis of government support for Australian agricultural producers.* ABARES, Research Report. Canberra: Commonwealth of Australia. Retrieved from: https://www.agriculture.gov.au/abares/research-topics/trade/analysis-of-government-support-agricultural-producers

Australian Government. (2021). *Financial performance of sugarcane farms 2020-2021 to 2021-22.* ABARES. Canberra: Commonwealth of Australia. Retrieved from: https://www.agriculture.gov.au/abares/research-topics/surveys/sugar#improved-financial-performance-in-202021

Australian Government. (2025). *Farm Data Portal.* ABARES Data Portal last updated July 2025. Canberra: Commonwealth of Australia. Retrieved from: https://www.agriculture.gov.au/abares/data/farm-data-portal

Australian Government. (2025). *Disaggregating farm performance statistics by size.* ABARES, Research Report. Canberra: Commonwealth of Australia. Retrieved from: https://www.agriculture.gov.au/abares/research-topics/surveys/disaggregating-farm-size#:~:text=Key%20points%20for%202020%E2%80%9321,rate%20of%20return%20of%204.2%25.

Australian Government. (2025). *Farm Performance.* Canberra: Commonwealth of Australia. Retrieved from: https://www.agriculture.gov.au/abares/research-topics/surveys

Australian Government. (2021). *Delivering Ag2030.* Delivering Ag. Canberra: Commonwealth of Australia. Retrieved from https://www.agriculture.gov.au/sites/default/files/documents/ag-2030.pdf

Bendigo Bank. (2025). *Australian Farmland Values Report 2025*. Adelaide: Bendigo Bank Agribusiness. Retrieved from

https://www.bendigobank.com.au/siteassets/business/industries/agribusiness/agriculture-insights/_reports/2025-farmland-values-report.pdf

European Council for European Union. (2025). *How the Russian invasion of Ukraine has further aggravated the global food crisis.* European Union. Retrieved from https://www.consilium.europa.eu/en/infographics/how-the-russian-invasion-of-ukraine-has-further-aggravated-the-global-food-crisis/#:~:text=A%20line%20chart%20with%20the,Organization%20of%20the%20United%20Nations

Grains Research and Development Corporation (GRDC). (February 2025). Leasing and Share farming land Fact Sheet. *GRDC*: Kingston. Retrieved from: https://grdc.com.au/__data/assets/pdf_file/0029/618806/leasing-and-share-farming-land-grdc-20250221.pdf

Hayes, A. (2025, May 13). Holding Company: What is it, Advantages and Disadvantages. *Investopedia.* Retrieved from: https://www.investopedia.com/terms/h/holdingcompany.asp

Hayes, A. (2025, July 25). Working capital turnover ratio: meaning, formula and example. *Investopedia.* Retrieved from: https://www.investopedia.com/terms/w/workingcapitalturnover.asp

Kenton, W. (2025, July 14. What is turnover in business and why is it important?. *Investopedia.* Retrieved from https://www.investopedia.com/terms/t/turnover.asp#:~:text=Why%20Turnover%20Matters,Working%20capital%20turnover

Lee, T. (2024, August 17). Australian farmland prices outpace housing market with "stunning growth". *ABC News*. Retrieved from https://www.abc.net.au/news/2024-08-17/farmland-prices-australia-housing-market-cost-rises/104222710

Miller, K. (2020, December 8). The Triple Bottom Line What is it and why its important. *Harvard Business Review.* Retrieved from https://online.hbs.edu/blog/post/what-is-the-triple-bottom-line

Maverick, J. (2024, 13 June). Equity financing vs. debt financing: what's the difference? *Investopedia*. Retrieved from: https://www.investopedia.com/ask/answers/042215/what-are-benefits-company-using-equity-financing-vs-debt-financing.asp#:~:text=Equity%20financing%20involves%20selling%20a%20portion%20of%20a%20company's%20equity,investor%20in%20return%20for%20capital.

Porter, M. E. (1979, March – April). How Competitive Forces Shape Strategy. *Harvard Business Review*. Retrieved from https://www.hbs.edu/faculty/Pages/item.aspx?num=10692

Ross, S. A, Drew, M, Walk, A, Westerfield R, Jordan, B. (2017). *Fundamentals of Corporate Finance 7th Edition*. North Ryde, NSW: McGraw-Hill Education (Australia) Pty Ltd.

Ross, S. (2025, August 31). CapEx vs. OpEx: Key differences explained. *Investopedia*. Retrieved from: https://www.investopedia.com/ask/answers/112814/whats-difference-between-capital-expenditures-capex-and-operational-expenditures-opex.asp#:~:text=Different%20strategies%20are%20needed%20for,a%20company's%20productivity%20or%20efficiency.

Tamblyn, S. (2023, August 29). This asset class has outperformed shares and property. *Australian Financial Review.* Retrieved from https://www.afr.com/wealth/personal-finance/this-asset-class-has-outperformed-shares-and-property-20230826-p5dzng

Macrotrends: Australian Gross Domestic Product. (n.d.). Retrieved from https://www.macrotrends.net/global-metrics/countries/aus/australia/gdp-gross-domestic-product

Wilcox, D. (2024, March 5). Strong working capital can serve as a farmers' security blanket. *FarmProgress.* Retrieved from: https://www.farmprogress.com/farm-business/strong-working-capital-can-serve-as-farmers-security-blanket

World Population Review: Disposable income by country 2025. (n.d.). Retrieved from https://worldpopulationreview.com/country-rankings/disposable-income-by-country

Appendices

Appendix A – Sizing of Australian agricultural businesses by research body

Table 3 below shows how four (4) different research, financial or government bodies have used these variables to classify the size of farming businesses for research and/or reporting purposes.

- Australian Bureau of Statistics (ABS) – employee numbers
- Reserve Bank of Australia (RBA) – business turnover size and access to finance (reported exposure)
- DBM Atlas (recently acquired by RFI Global – a global leader in data and insights for financial services – turnover (Australian Banking Association ABA, 2022)
- Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) – turnover (Australian Government, 2025)

Table 3. Overview of variables used by four agencies to size agricultural businesses.

Size	ABARES (Turnover)	ABS (Employee numbers)	RBA (Reported exposure and turnover)	DBM/RFI Global (Turnover)
Micro	NA	0	NA	<$1m
Small	<$250,000	1 – 19	Reported exposure <$1m Turnover <$50m	$1m - $5m
Medium	$250,000 - $750,000	20 – 199	Reported exposure $1m+ Turnover <$50m	$5m - $40m
Large	$750,000 - $2m	200+	Turnover $50m+	$40m+
Very Large	>$2m	NA	NA	NA

Appendix B – ABARES Data Portal – Farm performance by size: Rate of return (ABARES, 2025).

Table 4. Farm performance data by size focussed on rate of return inclusive and exclusive of capital appreciation.

Financial Year ending	2018	2019	2020	2021	2022	Avg RoR (%)
Rate of return ex. capital appreciation (%)	**0.7**	**-0.57**	**-0.97**	**1.90**	**2.07**	**0.63**
High	5.4	4.7	4.1	5.6	6.5	5.26
Low	-3.8	-5.8	-6.2	-1.3	-1.8	-3.78
Middle	0.5	-0.6	-0.8	1.4	1.5	0.4
Rate of return inc. capital appreciation (%)	**4.2**	**2.83**	**2.23**	**21.03**	**16.13**	**9.29**
High	11	10.3	7.3	27.1	22	15.54
Low	-1.8	-4.4	-3.1	17.1	11.9	3.94
Middle	3.4	2.6	2.5	18.9	14.5	8.38
Grand Total	**2.45**	**1.13**	**0.63**	**11.47**	**9.10**	**4.96**

Definitions:

Farm size:

High: Top 25% of farm population
Middle: middle 50% of farm population
Low: bottom 25% of farm population

Capital: The value of farm capital is the value of all the assets used on a farm, including the value of leased items but excluding machinery and equipment either hired or used by contractors.