Australian dairy industry facts at a glance

National Dairy Herd: 1.74 million cows
Number of Dairy Farms: 6,128
Average Herd Size: 284 cows
Average Annual Milk Production: 5,430 litres per cow
Milk Production: 9.7 billion litres
Annual Sector Value: $13 billion farm, manufacturing and export
Annual farmgate value: $4.7 billion, ranks third behind beef and wheat
Workforce in the Australian Dairy Industry: 39,000 direct employees (approximately)
Percentage Exported: 35% of total milk production being 65% of total manufactured/processed product and 4% of drinking milk
Annual Export Value: $2.88 billion
Australian Percentage of World Dairy Trade: 6%
Major Markets for Australian Exports (volume): Greater China, Japan, Singapore, Indonesia, Malaysia
Australian Milk Utilisation: 31% Cheese
27% Skim milk powder/ Buttermilk powder
25% Drinking milk
6% Wholemilk powder
9% Other

* All $ figures are in AUD unless otherwise stated

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Foreword

The dairy industry continues to be one of Australia’s most important rural industries, generating $13 billion across the whole supply chain and employing approximately 39,000 people on dairy farms and in dairy companies.

On the global stage, Australia ranks fourth in terms of total dairy trade volumes and holds a 6% share. Our exports are valued at around $2.9 billion each year, with around 35% of the national milk production used for export products. Australia’s key export markets are Japan, China, South East Asia and the Middle East.

The Australian dairy industry has become increasingly attractive to investors from both international and domestic sources. Over the past 12 to 18 months, the Australian dairy industry has received an increasing number of enquiries seeking information regarding potential investment in the industry.

Such enquiries present an opportunity for the Australian dairy industry. It is well recognised capital investment in the dairy sector can increase efficiency and productive capacity and contribute to incomes, infrastructure and employment. The immediate and long-term future of dairy depends on building a sustainable industry vision through investment across the entire dairy supply chain, particularly on-farm.

Many Australian dairy farmers have been challenged by the burden of increased debt levels and now find themselves looking for ways to effectively capitalise on improved market conditions underpinned by strong global demand for dairy, particularly from the developing regions.

Investment on-farm is needed and Australian dairy farmers are being increasingly exposed to alternative models of attracting capital into their businesses from both on and off shore sources. Analysis has found for the Australian dairy industry to regain its share of global dairy trade lost during the past decade that a capital injection of up to $16 billion AUD is needed by 2020.

There is no better time to look at investing in our industry. The Australian dairy sector is poised to take advantage of the growing global demand for dairy products, presenting an attractive investment proposition.

The advantages of the Australian dairy industry in the global context are multiple. Our industry is focused on sustainability to ensure we will profitably grow our supply of dairy product to export markets. The industry boasts the most flexible farming systems in the world to adapt to the variable climate – our farmers operate on pasture based systems with supplementary feeding to provide a more consistent supply of high quality milk. Australia’s dairy food safety record is second to none – there has never been a major contamination in our herd and we are free of the diseases that could contaminate our milk. Finally, our industry is renowned for developing world-class innovative processes and product options for manufacturers as well as new technology and systems for farmers.

With this context, Dairy Australia believes now is the right time for a guide of this nature to showcase our industry and highlight the issues around capital investment in the sector. This guide covers Australia’s dairy producing regions, production systems, case study investment models and the industry’s financial performance.

As the industry-owned national services body, Dairy Australia has developed this resource as a platform to help inform further work and analysis in this area. Our aim is to provide a starting point for farmers and potential investors to understand the broad range of issues surrounding this complex area. It will also help equip our dairy farmers with a knowledge of the range of investment models available to them to enhance their businesses.

I trust you will find this guide remains a valuable source of information on our important industry.

Ian Halliday
Managing Director
SECTION 1: UNDERSTANDING THE DAIRY INDUSTRY
**Dairying across the globe**

The global dairy sector is a dynamic industry, with steady growing production trends (2.2% growth per annum on average since 2000), which are forecast to continue for the medium to long term. These growth trends are driven by increasing demand for animal proteins which is highly correlated to geographic areas of population income growth within emerging economies.

Demand for dairy products continues to grow across the globe, with significant growth occurring within the major ‘emerging’ food markets of India, Brazil, China and South-East Asia. Traditional marketplaces could be considered to be static for overall demand, however the major dairy growth markets are strongly aligned with the key growth areas of world trade – namely India and China. Supported by other emerging economies, the demand for dairy products, and the broad derivatives that come from the sector, are seen to be strong for the medium to longer term.

As diets within these emerging countries continue to “westernise” the global dairy sector stands to benefit strongly from an increasing consumer desire for products ranging from milk powders, cheeses, butters, infant formula, yoghurts and a wide range of other products. Consumption of dairy products, as estimated by both the Food & Agriculture Organisation of the United Nations (FAO) and the Organisation for Economic Co-operation and Development (OECD), is expected to increase by 20% or greater before 2021.

It is estimated that around 626 billion litres of milk is produced globally per annum by 260 million cows, representing gross value of production of around USD$292bn, or approximately 9% of the entire value of world agricultural production.

Global cross-border trade, in 2011, was estimated by the FAO to amount to 58.2m tonnes in milk equivalents, or 9% of total milk production – highlighting that the majority of production is consumed within domestic markets, with the exception of several major dairy production regions (New Zealand and Australia included) who are strongly focussed on export markets.

*Long term trends are illustrated for comparison in the following graphs over a period of 30 years*
Understanding the Australian Dairy Industry

Key numbers:
- World’s fourth largest exporter of dairy products.
- Export accounts for around 35% of Australia’s total dairy production.
- Australia’s third largest agricultural industry.
- $13 billion estimated gross value of farm, manufacturing and export production.
- 39,000 people directly employed on dairy farms or by dairy companies in Australia.

The Australian dairy industry is a vibrant and vital component of the Australian economy, with world class production and processing. The industry has positioned itself strongly to participate in the domestic and global demand for protein and dairy products which, when combined with Australia’s geographic position in close proximity to key global population growth areas, bodes well for future success.

The sector is one of Australia’s leading rural industries in terms of adding value beyond the farmgate through downstream processing. Since the industry was deregulated in 2001, there has been a significant rationalisation of the sector, which has seen many smaller producers migrate out of the industry, and a core of efficient producers with sustainable scale remain (a trend consistent across all Australian agricultural sectors). These producers have the skills, expertise and ability to compete with the leading producers in the world and provide an excellent springboard for the future of the industry.

Whilst the sector is spread across the breadth of the country, the majority of production lies within the temperate zone of South-Eastern Australia. Production in other regions of the country continues to be focussed on either the domestic market or on niche export opportunities.
The major production regions of Australia are export focused, and have exposure to the global dairy and economic marketplace, whereas those areas dedicated to supplying domestic demand are somewhat insulated from global issues.

The industry was characterised by strong growth throughout the 1990’s, however growth has somewhat stalled in the last decade as the industry recovered from the impact of severe drought conditions across many regions throughout the 2000–2010 period. Recent seasons have seen a return to a more “normal” pattern of weather across most production regions which has seen average or better rainfall and increased irrigation allowances in areas reliant upon this to support their production capacity. Variability in weather, and management of this variability, across the Australian dairy regions is a key feature of Australian agriculture.

**Strengths**
Efficient production and processing systems, food quality and safety, clean and green farms, effective supply chain, geographically well positioned for export growth, established global market participant, stable political environment, strong health protocols and disease free status, efficient processing sector driving innovation, skilled workforce, strong R&D support.

**Weaknesses**
Capital availability, climate volatility, currency volatility, labour cost and availability within production regions, underutilisation of production capacity.

**Opportunities**
Managing production risk, increasing demand from key countries within region, ability to drive greater processing efficiencies, ability to produce for tailored markets, investment driving efficiencies both on farm and in processing, capacity to expand.

**Threats**
Input prices (both farm and processing), protectionism of competitor markets, climate variability, competition for resources (physical assets and people), international economic volatility.

Export markets are a key focus of the Australian dairy sector. As the domestic market grows in line with domestic population growth, additional market opportunities are seen to come from international markets, where Australia is strongly positioned to take advantage. The proximity of the Asian marketplace to our market, provides a transport benefit along with a strong cultural alignment which will support growth for many years to come.
The charts below show the key markets for the Australian dairy industry.

Long term trends can be seen in the following two graphs which compare a period of 10 years.

**Key points**
- Japan – Stable
- China – Growing rapidly
- South East Asia – Growing rapidly
- Middle East – Growth potential
- Europe – Reducing

### Australian exports by region (2004/2005 AUD$m)

- **Japan**: 528 AUD$m
- **Greater China**: 234 AUD$m
- **South East Asia**: 147 AUD$m
- **Americas**: 93 AUD$m
- **Middle East**: 793 AUD$m
- **Europe**: 120 AUD$m
- **Other Asia**: 272 AUD$m
- **Other**: 116 AUD$m

### Australian exports by region (2014/2015 AUD$m)

- **Japan**: 483 AUD$m
- **Greater China**: 424 AUD$m
- **South East Asia**: 307 AUD$m
- **Americas**: 279 AUD$m
- **Middle East**: 19 AUD$m
- **Europe**: 147 AUD$m
- **Other Asia**: 793 AUD$m
- **Other**: 116 AUD$m
Understanding the Australian Dairy Industry

Inside the Farm Gate

The Australian dairy industry can be broadly described as having two primary production systems. The first being one where cows calve to match seasonal feed supply and the second being a year-round system where calving is spread throughout the year to target a “flat” production supply curve.

Flat supply curves traditionally occur in areas where local fresh milk consumption utilises the majority of milk produced, and seasonal production systems occur in areas where export or processing is more relevant.

There is scope for a significant increase in dairy cow numbers in Australia. At present Australia has around 1.6 million dairy cows, whereas New Zealand has around 4.6 million cows.

The tables below illustrate long-term trends over a period of 30 years.

Australian state dairy cow numbers ('000)

Australian average annual production per cow (litres)

Milk production by state (million litres)
The Australian average herd size of 284 cows is larger than those found in the US (115) and EU (35), but remains smaller than NZ (400). Whilst there are several large scale operations in Australia, particularly in the southern regions milking well over 1000 cows, the majority of producers are running smaller operations and looking to obtain efficiencies through production gains and strong cost management.

Over the past 30 years, Australian agriculture has seen a significant decline in farm numbers. This has also been reflected through consolidation of dairy farming operations. Whilst there were around 19,400 farms in 1985 with an average herd size of 93, cows, this has now changed to around 6,100 farms running an average of 284 cows per farm.

As with the majority of agriculture in Australia, family owned and operated businesses are the primary operating model, with 98% of Australian dairy farms family owned and 2% corporate entities. Of those family-owned businesses, 16% have sharefarming arrangements in place.

The majority of the Australian herd is Holstein (65–70%), with other breeds including Jersey, Guernsey, Holstein-Jersey cross, Brown Swiss, Ayrshire and the local breeds of Australian Red and Illawarra. Herd production and performance recording is practiced by at least half of Australian dairy producers, with the use of artificial breeding and global genetics supporting production increases.

Production within the Australian dairy herd has grown over the last three decades, on average, from 2900 litres to 5700 litres per cow.
Unlike many countries around the world, there is no legislative control over the price milk processing companies pay for milk in Australia with farmers operating in an open and deregulated market with exposure to both the domestic and international dairy markets.

Farmers generally operate under two operating models – either direct contracts (primarily in markets dominated by domestic drinking milk), and informal supply agreements (primarily utilised within markets where global export markets hold greater influence).

Dairy farmers in Australia are typically paid either based upon the milkfat and protein solids contained within the milk, or the total quantity of milk, delivered to the processor. Prices vary between processors (where multiple processors exist) and generally operate on a range of incentives and/or penalties related to the milk quality, production volume and seasonal bonuses.

A majority of the local dairy prices are driven by world prices given the prevalence of butter, cheese and milk powders in the sector and the influence of global markets. With a 90% correlation to world milk prices which are priced in USD, the USD/AUD exchange rate is particularly relevant in the AUD farmgate returns achieved by producers.

The Australian industry income “benefits” from a lower AUD (such as when it sat at USD 0.50–0.55 for much of the 2000’s) and is significantly impacted by a high AUD (such as when it is at USD$1.05–$1.10 in recent times). It is also noted that many farm input costs (fertiliser, machinery, etc.) are global markets priced in USD so the inverse of the above statement is true.

### Beyond the farmgate

The Australian dairy industry is well supported by both domestic and international processors. Processors generally focus on geographic areas and there are very few processors who have truly national coverage of all regions within the Australian dairy industry.

Six major firms (Murray Goulburn, Fonterra (Australia), Lion, Parmalat (Australia), Warrnambool Cheese and Butter, and Bega) account for around 85% of farmgate milk collections, processing about 8 billion litres per annum. The remaining 15% of farmgate production is collected and processed by a range of smaller, generally more regional organisations. Many of these producers focus on niche domestic or international markets, with several producing high quality boutique and artisan products.

Prices paid for milk can vary significantly across the production regions, as can the cost of production within the regions. The charts show the historic pricing, based on both cents per litre and dollars per kilogram of milk solids across the last six years.

### Factory milk price (cents/litre)
The focus for processors throughout the dairy production regions can vary significantly. Many of the larger organisations have fully integrated operations supporting both domestic and international sales, whilst smaller organisations may be focused in more niche, local or regional areas, and specific export markets.

Australian processors produce a wide range of product streams including:

- Drinking milk (fresh, ESL and UHT long life);
- Skim milk powder (SMP), buttermilk powder (BMP);
- Butter;
- Whole milk powder (WMP);
- Yoghurts, custards, dairy desserts and other consumer products;
- Specialised ingredients such as whey proteins and nutraceuticals.

The breakdown of the various products derived from Australian milk production is shown below.

**Utilisation of Australian dairy products**

- Cheese: 31%
- Drinking milk: 27%
- SMP/butter: 25%
- Other: 9%
- WMP: 8%
SECTION 2: INVESTING IN THE AUSTRALIAN DAIRY INDUSTRY
Investing in Agriculture

Economic and population growth in the developing world is creating a great opportunity for agriculture in Australia, due to increased demand for the produce and materials necessary to support industrialisation, urbanisation and the growing middle class.

Two primary forces are driving this demand growth:

1. **Rising incomes**: As income levels increase, demand for food increases both in terms of per capita consumption and also due to changes in dietary composition. Where urban lifestyles and higher disposable incomes bring about more diverse diets, consumption of quality protein sources such as dairy, meat and eggs increases and there is also greater demand for high quality fruit and vegetables, as well as wine. “Developed economy diets” require almost two and a half times the water (and almost three times the land) per person relative to the least developed countries, with developing countries somewhere in between (ANZ Insight / Issue 3, October 2012).

2. **Population growth**: Between now and 2050, the world’s population is expected to increase from about seven billion people to almost 9.3 billion people, an increase of around 35%. About half of the population growth is expected to come from Sub-Saharan Africa, while Asia will contribute the majority of the remaining growth (“World Population Prospects, the 2010 Revision”, United Nations, 2011).

The FAO estimates that, by the year 2050, the combination of these forces will result in agricultural production having increased by around 60% from 2005–07 levels, with the possibility of even higher demand depending upon convergence to developed nation dietary patterns and biofuel use. However, the FAO suggests that the potential for additional land to be brought into agricultural production is limited, with arable land estimated to expand by just 70 million hectares by 2050 (or less than 5% of the current area). The constraints on the availability of water could become more pronounced than those on land, particularly within individual rapidly growing economies, including China and India where agriculture faces intense competition from domestic and industrial uses.

With relatively high availability of renewable water and arable land per person, and with only 40% of its agricultural produce consumed locally, Australia is well-positioned to further develop export markets for high quality food products.

A recent report by Deloitte “Positioning for Prosperity: Catching the Next Wave” describes an Australian advantage score linking relative productivity (what Australia is good at) with relative advantage (where it is difficult for others to match or imitate our advantages). Agribusiness scores consistently highly in all comparisons.
In addition, the report describes the factors likely to cause further weakening of the AUD, and notes the potential offered by Australia’s “safe and secure” food resources. Quality, security and attractive production characteristics of Australian food are increasingly seen as Australian agriculture’s “trump card”. Australian agriculture does not have the capacity to meet the total volume requirements of Asian countries, and will rarely be able to compete on price alone in undifferentiated bulk commodity markets. However, where it is possible to position quality products at the premium end of Asian and Australian food markets, Australian food has several key advantages:

• High food safety and biosecurity standards, coupled with advanced product traceability systems;

• Strong sustainability credentials, with relatively low input ‘natural’ production systems;

• Very high standards of farm worker welfare and safety compared to virtually any other agriculture sector worldwide; and

• Low levels of taxpayer support.

If each of these characteristics is considered in turn, dairy products aimed at an increasing affluent Asian middle class make a compelling case for further market development:

• The Australian dairy industry is focused on sustainability to ensure we will profitably grow our supply of dairy product to export markets.

• The Australian dairy industry boasts the most flexible farming systems in the world to adapt to the variable climate. Our farmers operate on pasture based systems with supplementary feeding to provide a more consistent supply of high quality milk and greater care for our animals.

• The Australian dairy industry quality and safety processes are of the highest standard in the world. Australia has never had a major contamination within our dairy herd. We are free of the diseases that could contaminate our milk.

• The Australian dairy industry is renowned for developing world-class innovative processes, product options and resources for manufacturers as well as new technology and systems for farmers.

• The Australian dairy industry produces a diverse range of functional, ready to consume value-added products and ingredients.

• The Australian dairy industry comprises over 125 companies who export dairy products – providing flexible and agile supply, access to a broad product portfolio and the ability to respond to requests for niche product types.

• The Australian dairy industry has high levels of labour efficiency when compared to operating systems in other dairy producing countries. This ensures that whilst we may have higher individual wages, the overall labour costs of running a dairy in Australia remain competitive with costs in other producing countries.

However, as Australia’s dairy trade surplus alone will not meet the volume demands of China and other Asian importers, value creation from continual product innovation and product positioning to create specialty ingredient commodities is a key strategy for dairy processors (Harvey 2011). Processors also recognise the need to extract premiums over base commodity prices, and continue to invest in product and market development, specialist facilities and technology. The resulting clearer price signals and reduced volatility provide strong incentives for farmers and external investors to commit additional capital to expanding the milk supply base, in order to capitalise upon the wealth of opportunities within the sector.
Investing in Australian Dairy Farming

Dairy Farm Business Performance

Significant variation exists across each of Australia’s eight dairying regions and between each individual farm business.

For more specific information on farms within each region, visit www.dairyaustralia.com.au/farmmonitor

A “typical” Australian dairy farm (during the 2013/14 season) had $3.8 million invested in farm assets (land, plant & machinery, cows, other assets) and achieved a return on capital, excluding capital appreciation, of 3.6%.

The Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) produces an annual Farm Survey which captures the financial performance of Australian dairy farms. The latest results covering the average physical and financial estimates are highlighted in the table below.

Table 1: Farm business performance

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<tr>
<td><strong>Total cash receipts</strong></td>
<td>$573,840</td>
<td>740,000</td>
<td>(6) 677,000</td>
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<tr>
<td><strong>Total cash costs</strong></td>
<td>$529,710</td>
<td>576,100</td>
<td>(6) 579,900</td>
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<td><strong>Farm cash income</strong></td>
<td>$44,130</td>
<td>163,900</td>
<td>(9) 97,000</td>
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<td>Farms with negative farm cash income</td>
<td>33</td>
<td>16</td>
<td>(45) 17</td>
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<tr>
<td><strong>Farm business profit</strong></td>
<td>$-31,870</td>
<td>65,100</td>
<td>(22) -15,000</td>
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<tr>
<td>excluding capital appreciation</td>
<td>$34,550</td>
<td>135,500</td>
<td>(12) 55,000</td>
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<td>including capital appreciation</td>
<td>$19,010</td>
<td>152,900</td>
<td>(22) na</td>
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<td>Farm capital at June 30*</td>
<td>$3,683,040</td>
<td>3,819,100</td>
<td>(7) na</td>
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<tr>
<td>Net capital additions</td>
<td>$115,690</td>
<td>68,200</td>
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<td>Farm debt at June 30*</td>
<td>$765,970</td>
<td>821,400</td>
<td>(8) 854,000</td>
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<td>Change in debt – July 1 to June 30*</td>
<td>4</td>
<td>0</td>
<td>(933) 2</td>
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<td>Equity at June 30*</td>
<td>$2,910,970</td>
<td>2,988,700</td>
<td>(7) na</td>
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<td>Equity ratio**</td>
<td>79</td>
<td>78</td>
<td>(2) na</td>
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<td>Farm liquid assets at June 30*</td>
<td>$186,650</td>
<td>190,300</td>
<td>(17) na</td>
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<td>Farm management deposits (FMDs) at June 30*</td>
<td>$26,580</td>
<td>29,900</td>
<td>(24) na</td>
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<td>Share of farms with FMDs at June 30*</td>
<td>17</td>
<td>19</td>
<td>(32) na</td>
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a Excludes leased plant and equipment
b Average per responding farm
c Farm capital minus farm debt
d Equity expressed as a percentage of farm capital
p Preliminary estimates
y Provisional estimates
na Not available

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate provided.
Source: ABARES Agricultural Commodities - vol 5 no.1, March quarter 2015
Two key farm performance measures generated through the annual ABARES survey are farm cash income (defined as total cash receipts less total cash costs including interest payments) and farm business profit (which takes into account changes in trading stocks, depreciation and the value of farm labour).

The ABARES chart below shows the performance of farm cash income and farm business profit over the last decade and illustrates the variability seen across the dairy sector. This variability has been driven by a range of factors, either solely or in combination, including weather volatility, currency fluctuations and market dynamics.

**Australian dairy farm financial performance**

![Chart showing farm cash income and farm business profit](source: ABARES)

Focussing in on Return on Capital, ABARES also reports the impact that capital appreciation (primarily land values) has on dairy farming businesses.

The chart below highlights the strong growth in land values between 2003–2008 which have since flattened off and in some cases reduced from the highs seen in 2007–2008.

**Australian dairy farm returns on capital**

![Chart showing rate of return including and excluding capital appreciation](source: ABARES)
There are a variety of potential business structures which may be implemented by investors into dairy farming businesses. Broadly, these fall into three categories, namely:

1. **Owner operator**

   In this scenario, the owners of the land manage the farm business themselves, with or without additional staff. Obviously a more hands-off approach to routine farm management is possible where a farm manager and team of staff are employed to operate the farm on a day-to-day basis. However, even where a full management team is in place, the farm owner is still responsible for staffing and financing the operation, including compliance with employee health and safety requirements, industrial awards, working capital and financial management, procurement, administration etc. It is possible to delegate these tasks to certain agricultural asset managers, who are experienced in managing farms for absentee owners, however potential investors should note that ultimate responsibility for employee health and safety, animal welfare and business solvency rests with the business owners.

   Advantages of direct operation include exerting greater control over the farm and its management policies, and full entitlement to any farm profits after wages and management expenses have been met.

   Disadvantages include potential volatility of returns, and the amount of time and expertise required to effectively monitor and manage a dairy farm.

   Direct operation is therefore best suited to investors who have a sound knowledge of farm business management, in addition to specific localised dairy farm experience, or those who have close contact with trusted advisers and co-investors who have a sound track record in managing dairy enterprises.

2. **Sharefarming**

   Sharefarming, or share dairy farming is the term used within the industry to describe an arrangement whereby two parties, the farm owner and a ‘sharefarmer’, operate a dairy farm business together. This could also be construed as a form of co-investment or equity participation whereby two parties come together to own and operate the business under an overarching agreement.

   This style of agreement could be driven by an existing farmer looking to obtain capital to expand operations, or through an investor looking to establish a mutually beneficial partnership with a current farming business. The concept of sharing the equity in a farming business, whilst not new to Australian agriculture, is certainly one that requires time, effort and negotiation to obtain a clear and equitable agreement.

   Typically, there is a degree of separation between land ownership and operations – however these agreements can be structured in a myriad of ways. Given the most common operating structure currently in the industry is one where there is a separation between land ownership and farm management, this section will focus on this structure.

   The sharefarmer typically provides labour and management, and may own a variable percentage of the livestock and mobile plant. The farm owner is responsible for providing land, infrastructure, housing and equipment, and may also own some or all of the livestock, depending upon the structure of the agreement.

   Whilst there are a number of different types of sharefarming agreements, the basic principle revolves around income and cost sharing, with both parties exposed to varying degrees of risk in line with their asset contribution. Sharefarming agreements typically offer the sharefarmer the potential to increase their asset base and management skills, over and above those of an employed farm manager. In return, the farm owner can take a more passive role in the operation, whilst still preserving their land asset as a dairy farm.

   Successful sharefarming arrangements can realise the potential of individual resources, resulting in a profitable dairy business and long-term asset growth for each party. As with any business partnership, the working relationship between farm owner and sharefarmer is critical. If a share farming agreement is to be successful, it is important that the parties entering into the agreement identify and agree on the areas that each will control, and consistently work within these boundaries.
Parties considering a share farming agreement also need to be aware that it involves risk. For a landowner, the risk generally relates to volatility of profit share and preservation of their asset. Will the share farmer have the management skills expected to fulfil his/her part of the arrangement, and will they maintain the farm to the desired standard? Sharefarmers can also move on from the farm in the event of a dispute or to take on another contract at the end of the milking season, which would require the farmer to seek another sharefarmer if the farm is to remain in operation as a dairy. For a newly engaged share farmer, the risk is related to seasons, prices of inputs and outputs, and his/her ability to provide the necessary skills to reach stated targets.

Both landowners and share farmers need to understand the risks of operating within a share farming agreement and understand their risk exposure. The level of risk varies for each party as the level of share increases. The greater the capital invested, the greater the risk exposure to milk price, production and seasonal variation.

Historically, share farming arrangements were developed based upon standardised income and cost-sharing templates. However, intensive farm production systems have different income/cost ratios from the pasture-based farms upon which sharefarming contracts were initially developed. In addition, the advent of industrial relations laws relating to employees versus contractors has complicated the situation, and agreements must comply with Australia’s legislation surrounding independent contractors.

The majority of modern contracts fall into one of the following categories:

- **Low level of share farmer control and asset provision**, receiving 5–25% of income with limited or no cost sharing.
- **Medium level of share farmer control and asset provision**, receiving 25–40% of income with more substantial cost sharing and control. In these arrangements the share farmer may provide some plant or livestock.
- **Higher level of share farmer control and substantial asset provision** (herd, mobile plant or land), receiving 40–60% of income and sharing in a large proportion of costs.

As with any individually developed contract, the involvement of skilled external advisers is critical, and discussing and developing a share farming arrangement may benefit from the involvement of an experienced dairy industry consultant together with specific advice from accountants and solicitors.

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**Share Dairy Farming in Australia - Model Code of Practice**

Dairy Australia has prepared a “Model Code of Practice” for Share Dairy Farming in Australia. This document, and the process underlined within it, will provide all parties involved in a sharefarming arrangement with a wealth of information to utilise when establishing and evolving their relationship.

Co-Investment/Equity Participation

Increasingly talked about across the breadth of agriculture, including the dairy sector, is the co-investment or equity participation option of investing in agricultural land and businesses.

Whilst there are many variants of co-investment/equity participation, the general theme is that the two parties (the investor and the operator) share in the returns generated by the business based upon an agreed structure or payment waterfall. The primary benefit of this structure is the alignment of interests between the investor (or group of investors) and the operator. Both parties are working together to achieve the best possible result from the asset base and seasonal conditions.

As a general point, net income (after provision of management “salary”) will be split in line with equity participation level. In many instances there will be additional incentives put in place for the physical operator (over the investor) to incentivise them to drive profitability from the business.

The range of potential investors interested in this style of investment is broad, including:

- Existing farm owner/operators looking to move on from the business (retire or move out of dairying) whilst maintaining their investment (farm, dairy plant, cows, etc.).
- Investors looking for exposure to the dairy sector without having to operate the business and willing to share the costs/income as opposed to employing staff to operate the farm.
- Investors looking to gain exposure to the dairy sector, utilise a co-investment/equity structure for an initial period prior to taking over the operation of the business.

Whichever structure you choose to explore, ensuring that both parties outline their individual requirements and that the contractual agreements are designed with these in mind.

Dairy Australia, in conjunction with DairyTas and the National Centre for Dairy Education Australia has established a program entitled “Stepping Stones” which can lead an individual, or a family, through the process of how an investment within the dairy industry could unfold over time.

The detailed information contained within this program is a framework for establishing the short, medium and longer term goals of an investor looking to have an active participation in the industry. Conversely it also provides information for a more passive investor on the options that exist around the actual operations of a dairy farming business.
3. Leasing

Leasing a dairy farm is the most “passive” option for an external investor as it essentially removes all responsibility for employment, farm management, asset management and financial control. For a farmer it becomes attractive when the cost of leasing is lower than their net returns and/or cost of capital. It also enables a farmer to expand their operation with a limited amount of risk.

Farm leases are typically negotiated on the basis of a fixed return on assets, or a fixed amount per acre/hectare.

Key advantages to the external investor include predictable returns, without the volatility associated with direct operation or sharefarming, and no operational management requirement. However, leases can also present some challenges, and as with all commercial leases, the quality of tenant and their ability to pay is paramount. Default on lease payments during poor seasons or in the event of management disruption is quite possible, and there are many instances of highly lucrative five year farm leases not being renewed as the rental cost was unviable for the farmer.

It should also be noted that leased farms are rarely maintained to the same level as owned properties. Whilst rental agreements can include clauses relating to fertiliser application, maintenance of infrastructure, and other requirements, it is inevitable that a leased property will not receive the same level of re-investment and maintenance expenditure as the farmer’s own land, particularly where lease terms are short.

Nonetheless, with a long-term lease and carefully selected tenant in place, leasing should not be overlooked by external investors seeking to participate in long-term capital gains without the requirement to maximise their operating returns.

Fund Investment in production dairy industry

Institutional investment in dairy production is reasonably limited within the Australian dairy industry. Within Australia there is currently no retail investment fund pathway into the sector and there are a limited number of wholesale funds available to institutional investors.

While there have been other opportunities to invest in sectors within the dairy industry the wholesale and retail fund industry has struggled to find the opportunities to invest that can meet their required benchmarks. Any potential investor within this area should take the time and effort to undertake their due diligence on the fund manager to determine whether their approach, structure and investment profile meets the investors’ specific requirements.
Buying a dairy farm: The key facts and due diligence suggestions

1. Critical importance of management

Whilst dairy farms have relatively predictable income streams when compared to other agricultural enterprises, there is still a substantial variation in operating returns achieved by businesses in any given year, even between those operating in close geographical proximity. Factors which influence farm profitability include:

- Stocking rates: the ability to match feed demand and availability within the constraints of prevailing milk and feed prices.
- The growth and utilisation of pasture and forage crops.
- Local climatic and seasonal conditions within years.
- The growth and utilisation of pasture and forage crops.
- Availability of irrigation water and irrigation efficiency.
- Appropriate farm infrastructure and labour efficiency.
- Herd health and reproductive efficiency.
- Animal genetic merit.
- Soil type and fertility.

The majority of these factors are strongly influenced by the decisions made by the farm manager over time, both operational and strategic. Therefore the most significant factor in determining long-term farm profitability is the quality and timeliness of decisions, and in turn, the ability and experience of the farm manager.

Regardless of the structure pursued by investors, whether direct ownership and operation, syndication, sharefarming or leasing, the successful operation of a dairy farm business is heavily reliant upon the expertise and commitment of management and staff.

The very first questions which any prospective dairy farm investor should ask, therefore is “Who is involved? Who is going to operate and manage the business on our behalf?”

Without a satisfactory answer to these questions, potential investors who remain interested in investing in the Australian dairy sector should potentially consider a form of indirect exposure to the sector, rather than direct farming investments.

2. Sourcing farms

Dairy farms in Australia may be presented for public sale by real estate agents, or alternatively offered off-market through private expressions of interest, sometimes via professional services firms or investment advisers. Other opportunities for farm investment arise through farm syndications, equity partnerships (whether publicly or privately promoted), and receivership/mortgagee sales.

It is important to note that the majority of these methods involve agents operating on behalf of the vendor. Whilst they represent a valuable source of advice, particularly in terms of local knowledge and understanding of the local farming scene, potential investors should also seek information from as many sources external and independent to the potential transaction as possible. These include local farm consultants, agronomists, milk supply officers working for dairy processors, accountants, rural bankers and veterinarians.

Whilst some of these people may later be employed as part of due diligence proceedings, an initial general conversation may serve to confirm early impressions or raise warning signals.
3. Farm purchase and due diligence

Conducting due diligence on a farm business can be divided into three stages: initial appraisal, more detailed technical/financial investigations when an initial offer has been accepted, and legal due diligence leading up to contract exchange and settlement.

**Initial appraisal may involve the following investigations:**

- Location, services and amenities, including availability of milk processors in the district.
- Effective farm area assessment using farm maps. Check status of forestry or protected areas. Establish cow walking distance from dairy.
- Infrastructure – Assessment of farm facilities and suitability for intended farming system.
- Water resources – Water rights and access to external water sources, assessment of on-farm water resources. Review water typical allocations and pumping costs.
- Climate assessment – Rainfall extent, reliability of rainfall, temperature, likelihood and impact of undesirable weather events (drought, floods, heat waves, frost etc.).
- Soils – Soil type and physical characteristics; quality and production potential, agronomic limits, past fertiliser history, soil tests if available, remedial fertiliser requirements.
- Assess pasture composition and weed populations, obtain local pasture growth data if available.
- Management and production history.

Upon deciding to proceed further with the potential purchase, a buyer may submit an offer, subject to due diligence and other conditions, frequently related to procurement of finance. If the offer is accepted, a contract of sale is drawn up.

**Prior to contract exchange, more detailed investigations may include:**

- Obtaining herd production records to verify milk production forecasts and stocking rate assumptions.
- Checking milk quality results and grades - compliance with milk purchaser requirements.
- Investigate incidence of disease outbreaks and known animal diseases and infections locally, also local weed/pest issues.
- If herd to be purchased - review herd breeding policies, use of AI and predicted calving spread, as well as vaccination policy.
- Taking stock water quality/salinity tests.
- Conducting soil tests if not previously available.
- Environmental – Soil or landscape degradation and risks, historic environmental compliance.
- Reviewing historic stocking rates, feed and fertiliser inputs to develop pasture consumption and feed requirement forecasts.
- Checking variable and overhead expenses, including repairs and maintenance expenditure, to assist in preparation of budgets;
- Preparing a list of assets/inventory, including housing condition and condition of other buildings and infrastructure.
- Preparing a plant and equipment inventory and condition report, including milking plant test.
- Identifying post-acquisition capital expenditure requirements in order for property potential to be realised.
- Checking historic capital expenditure and/or obtaining quotations on farm infrastructure/expansion.
- Investigating the local area infrastructure and facilities from a staffing perspective.
- Current land use and zoning – Comment on future development potential, effect on returns.
- Development of an operating plan, including expansion/ improvement opportunities and range of potential productivity.
- Financial and investment analysis – Past performance, likely future financial performance, investment appraisal and sensitivity testing.

In addition, an independent valuation report is typically commissioned and may be required by finance providers, including a comparison against other properties currently on the market, comparison with recent similar sales, price and sale history.
Conducting title searches is part of the legal due diligence process, which may also involve an investigation of:

- Limitations to land use, liens and encumbrances if any.
- Building consents and restrictions.
- Existing leases.
- Existing contracts with purchasers and suppliers.
- Environmental compliance.
- Existing environmental management plans/risk assessment.
- Tree clearing permits and forestry plans, if applicable.
- Irrigation water licences and permits/rights.
- Workplace health and safety records and outstanding legal proceedings, where buying into a going concern.

Upon satisfactory completion of the above steps, the potential buyer may choose to re-negotiate the purchase price, based on due diligence findings, or may decide to proceed as previously agreed, providing that they are able to procure finance. It is also common at this stage to introduce specific conditions into the contract of sale, usually regarding condition of the property at settlement, supplementary feed provision, machinery inclusions/exclusions or livestock valuation policies.

When and if agreement is reached, contracts of sale are exchanged and the buyer pays the vendor a deposit, typically 10% of the purchase price. “Completion” or settlement follows at a later date, once all conveyancing processes are complete.

**Stamp duty**

Stamp duty is a general tax imposed upon certain documents and some undocumented acquisitions in Australia. These include title transfers as a result of selling real estate, vehicles, business assets and other property; gifts; insurance policies and home loans, and is paid by the purchaser or borrower, typically shortly after property settlement.

Stamp duty rates vary between States and there are occasional exemptions or special conditions, but the imposition of stamp duty is a substantial cost in farmland transactions and requires careful pre-purchase investigation. Transactional legal advisers are best placed to advise upon stamp duty implications of specific acquisitions, however each Australian State also produces a “Stamp Duty Calculator” which can be accessed online to provide an indication of potential stamp duty charges for transactions of varying size.
FIRB – A Relevant Consideration?

Foreign investment is recognised as bringing many benefits to Australia. It supports existing jobs and also the creation of new jobs. It encourages innovation, introduces new technologies and skills, and brings access to overseas markets and capital.

Whilst encouraging foreign investment, Australia also has a process for reviewing these investments to determine whether they are in the Australian national interest.

At present the following rules exist around obtaining FIRB approval prior to executing an investment in Australia:

- All foreign government investors must notify the Federal Government and obtain prior approval before making a direct investment in Australia. This is regardless of the value of the investment. This also relates to foreign government investors commencing a business, or acquiring an interest in land, in Australia; and

- For non-government foreign entities, or individuals, notification to the Federal Government must occur before acquiring a substantial interest in a corporation, or control of an Australian business that is valued above AUD $248m (a figure which is indexed annually). There is an exception to this rule for New Zealand and United States investors where there is no threshold for investment in the Australian dairy sector (however there is a threshold for certain prescribed sensitive sectors).

Rural land, being that used wholly and exclusively for carrying on a business of primary production (as defined by the Income Tax Assessment Act 1997), has a separate definition to Retail or Commercial Real Estate. For Rural Land the rules described above (Zero threshold for sovereign entities, and AUD $248m for non-sovereign entities – or AUD $1,078m for New Zealand and United States investors [as at March 2014]).

Investment proposals for foreign individuals/entities and sovereigns will be made against a national interest test on a case-by-case basis. A degree of flexibility has been maintained within the process to ensure that valuable investments are reviewed and considered on their merits, whilst protecting Australia’s national interests.

From a timing perspective, the Treasurer has up to 30 days, to consider an application and make a decision. This can be extended to 90 days at the Treasurer’s discretion (generally utilised on complex transactions). A decision will be advised to the investor within 10 days of that decision having been made.

The legislation supporting FIRB is one that is constantly under review and has the potential to change from time to time. Any queries or concerns around this process should be directed to either your investment advisor or directly to the FIRB.

Further enquiries can be made in the following manner:

Phone: +61 (0)2 6263 3795  
Email: firbenquiries@treasury.gov.au  
Web: www.firb.gov.au
Financing a dairy farm investment

Australia offers a very competitive landscape with banks and financial services organisations competing for quality opportunities in the agricultural sector.

In general, there are three types of debt available to fund businesses within the Australian dairy sector:

1. Short term – Overdraft or bill finance;
2. Equipment finance; and
3. Long term – Term lending or bill finance.

1. Short Term Financing

Short term debt is generally utilised to finance business working expenses and capital requirements that have less than a 12 month payback period. Generally, these will be operational funding requirements such as covering production costs until the dairy cheque comes in, or for seasonal expenditure such as cropping, pasture improvement or dairy maintenance.

Short-term finance requirements can be funded in several ways. The most common way is by use of the overdraft facility through a bank or financial services organisation.

An overdraft facility structured correctly provides the producer with an extremely flexible and cost effective source of short term finance. However, if structured incorrectly it can be expensive. It is critical to pay particular attention to forecasting and managing the forward cash flow position of the business.

Table 2: Forms of short-term finance

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>What is it</th>
<th>Suitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchant Finance</td>
<td>Rural Merchants/Suppliers/Dairy Processor can provide significant short term finance to support the client for a range of inputs (fertiliser, feed, chemicals, herd health requirements, breeding requirements, etc.)</td>
<td>In many cases the merchant, as an inducement to sell chemicals, will provide short-term finance at a considerable discount to that offered by a bank (they build it into the stock margin) or they may offer it as an inducement to secure your milk for processing. From a risk exposure perspective, it may be advantageous to the bank for clients to use this type of finance and thereby the bank shares the risk with a third party. This type of finance can be very useful to manage a short-term spike in cashflow, which may be outside bank guidelines and/or come at considerable cost.</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>Up to 30 days credit</td>
<td>Utilisation of credit card debt has increased with primary producers due to the loyalty programs and the ease by which banks have allowed clients and non-clients access to credit card debt. The key issue here is managing repayments as the interest rates are significantly more expensive than those offered on overdraft or term lending facilities.</td>
</tr>
<tr>
<td>Commercial Bills</td>
<td>Short term treasury based finance offered by most Australian banks.</td>
<td>Short term commercial bill finance is mainly used where there are large short-term debt finance requirements, and predominantly for sophisticated businesses that understand market movements and are happy to be exposed to this volatility.</td>
</tr>
</tbody>
</table>
2. Equipment finance

There are three types of equipment finance:

1. Commercial lease.
2. Commercial lease Purchase (HP).
3. Equipment loan.

This style of financing could be readily utilised across a range of areas within a dairy farming business, from the core dairy plant and equipment (milking machines, vats, etc.) through to broader farming (tractors, machinery, irrigation plant) and vehicles (cars, trucks, motorbikes, etc.).

All of these products are specifically designed to finance income-producing equipment. The difference between the products is in ownership of the equipment and therefore how they handle GST. This allows the business to design the equipment finance package that best suits its cash flow requirements.

It should be noted that it is especially important to obtain independent financial advice when looking at the most appropriate form of equipment finance for your business.

<table>
<thead>
<tr>
<th>Equipment Finance Type</th>
<th>Who owns the equipment</th>
<th>GST/Tax implications (please seek independent advice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Lease</td>
<td>Where an income producing asset is acquired by the bank (as lessor) and is rented to the farmer/business (as lessee).</td>
<td>The bank purchases the asset/s from the supplier and pays GST on the purchase. The bank can claim an input credit for the amount of GST paid. The bank then leases the asset/s to the farmer/business calculating rentals based on the net cost to the bank. The full rental is tax deductible for the farmer/business.</td>
</tr>
<tr>
<td>Commercial Lease Purchase</td>
<td>Where an income producing asset is acquired by the bank and hired to the farmer/business. Although the sale is considered to have taken place at the start of the arrangement for GST purposes, legal ownership of the asset does not pass to the hirer until the final installment is paid.</td>
<td>Upon commencement of the agreement, the bank is considered to have on-sold the asset to the hirer (farmer/business) resulting in a GST liability at this stage. Instalment payments do not incur GST. The hirer has four options for financing the GST component: 1. Financed as part of the contract (amortised over the life of the contract). 2. Not financed as part of the lease (a once-off up-front repayment equivalent to the GST amount is paid up-front). 3. Financed short term as part of the lease (a one-off repayment equivalent to the GST amount is paid but timed to coincide with the hirer claiming an input tax credit in their next reporting period). 4. The interest and depreciation is tax deductible.</td>
</tr>
<tr>
<td>Equipment Loan</td>
<td>Similar to the commercial lease purchase product, except the customer has ownership of the equipment from the date of purchase and the bank has a registered Goods Mortgage over the equipment.</td>
<td>As an equipment loan is considered to be a supply of money (a financial service) and is therefore an Input Taxed Supply, no GST is collected or claimed by the bank. Equipment loan payments do not incur GST but attract registration stamp duty. If you are using cash accounting, it allows you to finance the GST with repayment to coincide with input tax credit, as is the case with a commercial lease purchase. The interest and depreciation is tax deductible.</td>
</tr>
</tbody>
</table>

From a debt structuring perspective, equipment finance is structured to be amortised over the economic life of the equipment. It is very flexible in how it can be structured to take into consideration monthly, quarterly, or annual payments in line with cash flow.

The important issue is to ensure that the debt repayments are amortised in line with the life of the equipment. If the business opts for low repayment amounts and high residual amounts it could be left in the situation where the sale of the equipment will not cover the loan residual. This can become a real issue at times of cash crisis as it will place the rest of the business at risk.
3. Term Lending

Although term lending can take different forms, there are essentially two types, interest only and principal and interest. These need to be mixed and matched to ensure that the facilities align with the business’ ability, and willingness, to repay debt and indeed the broader goals and objectives of the owners.

Table 4: Forms of Term Lending

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>What is it</th>
<th>Suitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Drawn Advance (FDA)</td>
<td>Where the amount of money is fully drawn from the commencement of the loan. Repayment is a fixed principal amount with interest cost reducing in line with reductions in the principal amount.</td>
<td>Suitable for smaller capital purchases such as irrigation equipment or vats for terms of three to five years.</td>
</tr>
<tr>
<td>Interest Only Loan (Fixed &amp; Variable)</td>
<td>Interest only loan which can either be at the prevailing variable rate or the fixed rate for the desired period.</td>
<td>Suitable for long term asset purchases (land, plant, livestock) or short term requirements such as in a Bridging Finance situation*.</td>
</tr>
<tr>
<td>Instalment Loan (Fixed &amp; Variable)</td>
<td>Usually for amounts greater than would be funded by an FDA and for longer terms. Repayment is usually Credit Foncier style+.</td>
<td>An instalment, or principal and interest, loan is suitable for property purchase and can be for up to periods of ten years. The interest rate can be either variable or fixed.</td>
</tr>
<tr>
<td>Commercial Bill Finance (Fixed &amp; Variable)</td>
<td>Commercial bill finance is a bank treasury product which provides finance for either short term or long term uses. In the past this type of finance has only been available to large corporates. Over the years the threshold has been reduced to the point where commercial bills can be offered for loan amounts a small as $500,000</td>
<td>Commercial bill finance enables the business to take advantage of many of the banks’ extensive range of interest rate risk management products (swaps, caps, collars, floors, etc.). Commercial bill finance also provides the flexibility to structure debt to suit both required interest protection and repayment structure. Some banks have developed bank loans that mirror the flexibility and competitiveness of bills but are interest in arrears rather than in advance as is the case with commercial bills.</td>
</tr>
</tbody>
</table>

* Bridging Finance is where you are providing finance for the purchase of a property whilst awaiting receipt of funds for the sale of an existing asset which will be utilised to fund the new asset.

+ Credit Foncier means a loan repayment structure that is the same for the length of the loan. However the proportion of principal and interest component varies over the length of the loan. For example, a loan that is taken over ten years, the repayment may be $20,000 a quarter. Of that $20,000, $18,000 is interest and $2,000 is principal. In year nine of the $20,000, repayment, principal is $18,000 and interest is $2,000.
**The key to a successfully structured debt repayment program:**

1. Identify the components of the debt requirement that is fully fluctuating over the 12-month period. This will equate to the size of the overdraft. Remember, buffer for a margin of error – an extra month or two without any milk income is a good rule of thumb.

2. Any machinery that can be financed through equipment finance should be done so, rather than by use of the overdraft or other term bank facilities. Make sure that the finance structure suits the economic life of that piece of equipment.

3. What is left is the term debt proposition. Identify what this debt has been used to finance. Structure the debt used to finance capital assets such as land, which has a long or appreciating life, over a longer term such as 10 to 15 years (or 25 years where applicable). Funding requirements that are more short term in nature, such as covering losses and funding livestock, will be over a shorter term, for example three to five years.

**Other forms of Finance**

Beyond the mainstream financing products, there are several additional means to finance an investment into the dairy sector. These methods are not as common as those previously detailed, and are only available in certain circumstances, however may provide an attractive proposition for certain investors.

- **Vendor Finance**
  
  It is quite common in Australia for the individual or entity selling a farming property (the vendor) to provide finance based on a pre-determined set of terms and conditions which are often stated in the contract of sale. Essentially this involves the vendor “leaving” an amount of their equity in the property for a specified period of time.
  
  If vendor finance is used the title to the property stays in the vendor’s name until all repayments and obligations under the sale contract have been fulfilled. The wording and structure of the contractual agreement supporting this style of financing is critical to understand prior to commencing a relationship on this basis.

- **Livestock Finance**
  
  It is possible to access finance for dairy cows that is not dependent on the offering of land as security. This can either be done under a lease arrangement, whereby the provider of the finance owns the cows and leases them to the farmer like they would a car, or using a traditional form of finance such as a term or seasonal loan.
  
  Under a term loan the farmer owns the cows and the financier will generally take a registered charge over the animals. Given the fact that the livestock provide the only security, normally a higher interest payment or lease costs will be applicable than if land and cows were utilised as security.
Terms and Conditions of Debt Financing

The following information provides some insight into how a financier (bank or otherwise) may establish the terms and conditions applicable to a debt financing structure. It is important to note that each financier operates under their own guidelines and the information contained is designed to provide a broad understanding to support a discussion with either the financier or professional advisors.

Loan pricing

Pricing policy and interest rate calculations can vary greatly between banks and are significantly influenced by competition and internal funding and risk management. Whereas certain loans, such as home loans or credit cards, generally have the same interest rate no matter the risk profile, loans for financing businesses, including farms, generally operate on a base rate (fixed or variable) plus an associated credit risk margin.

The following information should be considered a generic approach to setting the credit risk margin, and as a basis for discussion with your preferred financier.

Banks generally establish the credit risk of a loan based on three elements:

1. Value and saleability of the supporting security (if it exists).
2. How proven (historic) and strong (future) are the cash flows from the business.
3. The management strength and character of the client.

Banks will derive a credit or risk rating that combines the expected trading performance of the business with strength or value of the supporting assets to loan value.

Valuing supporting security.

In deriving the security value used in assessing the risk margin, Australian banks have developed what is commonly referred to as ‘Bank Value’ of the security.

This value is a discount to current ‘Market Value’ of the underlying security, be it land, water, machinery, shares, cash, or livestock. The difference between the market and bank value is seen as a ‘safety factor’ for the banks which will vary in accordance with the underlying volatility of the security utilised. This strategy is undertaken by the banks as they will generally need to take action to recover monies in times of commodity or sector slumps and therefore corresponding depressed asset values and demand for assets can greatly impact values.

The discount value is usually derived after taking into consideration:

• Volatility of that asset’s price over time.
• The saleability of the asset.
• How perishable or removable the asset is.
• Legal standing of charge securing the asset and the ability of the bank to enforce it.

These discounting factors will vary from asset class to asset class and indeed bank to bank. The table below is an example of the type of discount factors used to derive bank value.

<table>
<thead>
<tr>
<th>Term Deposit (Cash)</th>
<th>Rural Property</th>
<th>Residential Property</th>
<th>Industry &amp; Retail Shares</th>
<th>Mining &amp; Oil Companies Shares</th>
<th>Livestock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Value to Market Value</td>
<td>100%</td>
<td>70%</td>
<td>80%</td>
<td>70%</td>
<td>60%</td>
</tr>
</tbody>
</table>
As the table shows, a term deposit (or cash) used as security does not require discounting. Using the above guidelines we can see that:

1. There will be no volatility in value of the term deposit (cash). A $1 invested in a term deposit will always be $1 – so long as the loan is in the same currency.

2. The asset is already in a cash form and easily liquidated by the bank.

3. It is not perishable or removable. A term deposit value will not be affected by drought or flood; in addition the bank has total control over the term deposit.

4. The bank can act on its security readily as long as it acts within the contract terms.

In contrast is the bank’s value of livestock used for security:

1. The value of the livestock is volatile and affected by international and domestic price movements and climatic conditions.

2. The asset would need to be traded in the market and the value at time of trading may vary from the original purchase price of the livestock due to falling condition of stock and/or market prices.

3. Livestock die and go missing. There is a significant chance that if you need to take action under your stock mortgage that many of the original livestock secured may have perished. Livestock can be sold in the market place without the bank knowing, at present there is not a strong system that the bank can register a charge against an individual animal.

4. For the bank to enforce its charge it must get or have permission to access the livestock, find the livestock and then sell the livestock.

Once bank value is established, banks will then give the proposal a lending category depending on where the debt falls in comparison to the bank value of security.

For example, using a four tiered approach, lending categories could be graded as follows:

<table>
<thead>
<tr>
<th>Security Category</th>
<th>Loan Value to Bank Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A</td>
<td>70% of bank value</td>
</tr>
<tr>
<td>Category B</td>
<td>Up to bank value</td>
</tr>
<tr>
<td>Category C</td>
<td>Value between bank value and market value</td>
</tr>
<tr>
<td>Category D</td>
<td>Loan amount is higher than market value or no security is offered.</td>
</tr>
</tbody>
</table>
Setting the price of a loan

Using Table 7 below, a business with a rating of category A1 (Where A is the security category and 1 is the rating of the business performance) would be considered minimal risk to the bank and would not receive a risk margin. However, a business classified as a rating category B3 would receive a 2% interest margin.

So, as the performance of the business becomes weaker and the value of the security to loan ratio becomes smaller the price for the loan becomes higher. However, if the combination of performance and security ratio is too weak the risk will be too great for the bank to lend and the proposal will be declined.

Please note that this structure is hypothetical and the approach and pricing structure will vary between all banks, however the concept is generally utilised within the Australian banking sector.

Table 7: Hypothetical pricing matrix

<table>
<thead>
<tr>
<th>Security Category</th>
<th>Category A</th>
<th>Category B</th>
<th>Category C</th>
<th>Category D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat A</td>
<td>0%</td>
<td>0.5%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Cat B</td>
<td>1%</td>
<td>1.5%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Cat C</td>
<td>2%</td>
<td>2.5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Cat D</td>
<td>3%</td>
<td>3.5%</td>
<td>Not considered</td>
<td></td>
</tr>
</tbody>
</table>

Not all financial institutions use a risk grading system. Some simply have a yes/no approach. That is, if the operation falls within the risk tolerance of that bank, then they are offered a price. If the business does not, then they are declined.

Interest Rate Risk Management

In dealing with interest rates business owners must ensure they keep rate movements in perspective. Firstly a business must ask, “How critical would an adverse interest rate movement be to my business?”

The following table calculates the cash impact of a change in interest rates on a $200,000 loan.

Table 8: Effect of interest rate movement in dollar terms

<table>
<thead>
<tr>
<th>0.25%</th>
<th>0.5%</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total extra cost to the Bottom Line p.a.</td>
<td>$500</td>
<td>$1,000</td>
<td>$2,000</td>
<td>$4,000</td>
<td>$6,000</td>
<td>$8,000</td>
</tr>
</tbody>
</table>
SECTION 3: REGIONAL SNAPSHOT
Regional snapshot

Dairy Farming Areas by Regional Development Program

- Dairy NSW
- Dairy SA
- Dairy TAS
- GippsDairy
- Murray Dairy
- Subtropical Dairy
- WestVic Dairy
- Western Dairy

Map showing regions of Australia with different dairy farming areas.
VICTORIA – Gippsland

The Gippsland dairy region covers an area from the fringes of Melbourne, eastward to the far eastern coast of Victoria. The area produces around 21% of Australia’s total milk production from a range of areas, although dominated by the southern and central areas surrounding the towns of Leongatha, Traralgon, Sale and Maffra.

There are many high rainfall areas in this district which support strong pasture production, and a limited amount of irrigation within certain sub-districts. Land is tightly held and generally trades at a premium to many other dairy areas within Victoria and indeed Australia.

The industry plays a very important role in creating wealth for the region, being the biggest agricultural contributor to the local economy.

Key Statistics

- Number of farms: 1410
- Number of cows: 345,000
- Average herd size: 245
- Milk produced: 2.08 billion litres
- Percentage of national production: 21%
- People employed in the sector: 6810
- Value of product exported: $724,000,000
- Percentage of national exports: 25%
Northern Victoria/Southern New South Wales (Murray)

The Murray region straddles the Murray River from the Alps in the east, through to Swan Hill in the West and running both north into southern New South Wales and south into central and northern Victoria.

Deniliquin, in the north has an annual rainfall of 420mm with 90 rain days per year, whilst Shepparton has 563mm and 109 rain days, and Corryong, in the Alpine Valleys, has an annual rainfall of 774mm and 113 rain days per year.

With the Murray and Goulburn Rivers, amongst other irrigation schemes and rivers providing such a valuable source of water, the use of irrigation in this region is prevalent and supports the overall dairy sector.

Farms in the region are smaller, but carry more cows and produce more milk than the national average.

Key Statistics

- Number of farms: 1500
- Number of cows: 410,000
- Average herd size: 275
- Milk produced: 2.36 billion litres
- Percentage of national production: 24%
- People employed in the sector: 7740
- Value of product exported: $820,000,000
- Percentage of national exports: 29%
Western Victoria is one of the largest milk producing regions in Australia, and also holds significant processing capacity which is utilised to process milk sourced from both within and outside the region.

The region extends from the outskirts of Melbourne and heads west to the South Australian border, with a strong concentration in the coastal areas surrounding Warrnambool.

With low rainfall variability, the consistent and longer growing season for pastures and fodder crops makes it suitable for dairy production. The environment supports a pasture based system which is supplemented by irrigation in several localised areas. Average annual rainfall ranges from about 600mm to about 900mm a year with rainfall increasing in the areas closer to the coast.

Dairy delivers a third of the economic activity in the Great South Coast region.

**Key Statistics**

- Number of farms: 1300
- Number of cows: 415,000
- Average herd size: 320
- Milk produced: 2.18 billion litres
- Percentage of national production: 22%
- People employed in the sector: 7150
- Value of product exported: $760,000,000
- Percentage of national exports: 26%
Outside of Victoria, the area of NSW included in this region are
namely the coastal regions from Bega in the South to Kempsey in
the mid-coast, and the inland areas including Wagga Wagga,
Bathurst, Forbes, Dubbo, Tamworth and the broader Hunter Region.

Production within these areas has a very strong and deep history as
Australia expanded its agricultural production, so too did the dairy
industry expand. Primarily the region is characterised by dryland
production, although there are areas of irrigation throughout the
production regions. Close proximity to major cropping regions,
especially the inland areas, provides potential for the ability to
support a more intense feeding regime.

Farmers in NSW generally focus on drinking milk and fresh products,
and manage calving/feeding systems to ensure year round
production.

**Key Statistics**

- Number of farms: 485
- Number of cows: 155,000
- Average herd size: 315
- Milk produced: 785 million litres
- Percentage of national production: 8%
- People employed in the sector: 8300
- Value of product exported: $190,000,000
- Percentage of national exports: 7%
This region is known as the subtropical dairy region, extending from Kempsey on the northern coast of New South Wales up to Atherton on the far northern Queensland coast. This is one of the largest regions from a geographic perspective (over 2000km between Kempsey and Atherton), with a broad variety of environmental, climatic and production conditions which pose some unique challenges to dairy farming within the region. A large number of farmers rely on irrigation.

The region is primarily focused on drinking or whole milk production, as opposed to the manufacturing milk focus of the larger southern markets. Almost all farms in the northern region adopt year-round or batch calving production systems to produce in line with plant demand and there is a high rate of grain feeding used.

There are 15% of farms with more than 300 cows across the northern region, but farm sizes are on average smaller in southern Queensland and northern New South Wales, than other regions. About 40% of farms across the total region are less than 100 hectares in size.

Key Statistics
- Number of farms: 575
- Number of cows: 105,000
- Average herd size: 180
- Milk produced: 550 million litres
- Percentage of national production: 6%
- People employed in the sector: 4100
- Value of product exported: $50,000,000
- Percentage of national exports: 2%
South Australia represents approximately 6% of the national milk output, with a long history of high productivity and quality produce. The state is divided into four main production areas being the South East, River and Lakes, Fleurieu Peninsula and Barossa-Mid North.

The South East area is regarded as the primary production area with over 50% of the state’s milk sourced from this region through production predominantly supported by summer irrigated pastures.

The River and Lakes area, primarily around the lower Murray River region has been hit hard by both drought and water restrictions in recent years. The businesses remaining in this region are extremely resilient and migrating towards a more flexible style of dairying.

The Fleurieu Peninsula region is primarily a dryland farming area and while the Barossa–Mid North is primarily known for its wine and crop production, it has had a long history of dryland dairy production. Milk production has increased in the past few years as these farmers actively aim to develop their production skills and feeding regimes.

**Key Statistics**

- Number of farms: 250
- Number of cows: 75,000
- Average herd size: 305
- Milk produced: 515 million litres
- Percentage of national production: 5%
- People employed in the sector: 1000
- Value of product exported: $50,000,000
- Percentage of national exports: 2%
Tasmania is home to a thriving dairy industry, with the sector being the largest contributor to the State’s broader agricultural industry. Milk output has increased more than 20% over the last decade as farmers have driven on-farm production enhancements.

Operations are spread across the state, with exposure to the varying climatic conditions delivered through quite a temperate climate which supports the primarily pasture based system.

The major dairy areas are located on the North-West coast of the state, including the Circular Head area, as well as the Central Coast, the North-East, around Deloraine, the south and a growing production area in the Northern Midlands in line with irrigation scheme expansions. High-value production dedicated to cheese and other products occurs on King Island. There is growing interest in dairy conversions across the state.

Tasmania is highly export oriented and has a high exposure to national and international dairy markets.

Key Statistics

- Number of farms: 440
- Number of cows: 170,000
- Average herd size: 385
- Milk produced: 890 million litres
- Percentage of national production: 9%
- People employed in the sector: 1900
- Value of product exported: $245,000,000
- Percentage of national exports: 8%

*Due to international shipping routes the overwhelming majority of Tasmania’s dairy exports are transferred domestically via the Port of Melbourne in Victoria. Therefore export figures presented are merely an estimate.*
The West Australian dairy industry is located in the south-west of the state around three main areas – Harvey in the north, and Margaret River and Denmark on the south coast. The industry is primarily a pasture based system producing milk for local and export markets. As a major regional employer, the industry value-adds through the processing of milk to produce fresh lines such as butter, cream, cheese and yogurt.

Western Australia

This region enjoys a reliable climate and good water supply and has good access to grain and fodder supplies from the Western Australian grain belt.

Key Statistics

Number of farms: 155
Number of cows: 65,000
Average herd size: 415
Milk produced: 365 million litres
Percentage of national production: 4%
People employed in the sector: 1600
Value of product exported: $50,000,000
Percentage of national exports: 2%
The following information is provided to readers for information purposes. The lists provided are not necessarily complete listings of all of the entities that an investor may need to utilise during a due diligence process. Further advice and guidance should be taken on an individual basis.

**Federal & State Government Organisations**

The entities listed below are government entities (Federal or State) which may be able to provide assistance to an investor looking to invest within the Australian dairy industry.

**Austrade**  
Austrade is the first national point-of-contact for all investment enquiries. Working in partnership with Australian state and territory governments, Austrade can provide your company with the information and the right industry and government contacts needed to establish or expand a business in Australia.

**Department of Agriculture, (Commonwealth)**  

**Department of Foreign Affairs and Trade**  

**Foreign Investment Review Board**  

**Australian Competition and Consumer Commission**  

**Australian Taxation Office**  

**Victorian Department of State Development, Business & Innovation**  

**Tasmanian Department of State Growth**  

**New South Wales Department of Trade & Investment**  

**Queensland Department of State Development, Infrastructure & Planning**  

**South Australian Department for Manufacturing, Innovation, Trade, Resources & Energy**  

**Western Australian Department of State Development**  

**Invest Victoria**  

**Milk Processors**


**Banks/Financiers**

The listing below provides a range of financiers to the Australian dairy industry. Each of the organisations operate across a range of geographic areas and provide a range of products and services. Discussing your individual requirements with a financial advisor, accountant or other independent body is strongly advised.

**ANZ Bank**  

**Bank of Queensland**  

**BankWest**  

**BankSA**  

**Bendigo Bank**  

**Commonwealth Bank**  

**CowBank**  

**National Australia Bank**  

**Rabobank**  

**Rural Bank**  

**Rural Finance Corporation of Victoria**  

**St George Bank**  

**StockCo**  

**Suncorp**  

**Westpac Bank**  
Real Estate Agencies

Unfortunately there is no single source of information on agricultural properties listed for sale in Australia, so the listing below provides a range of the major real estate agencies that specialise in dairy properties. This may not be a complete list for a specific region and we encourage you to speak with the relevant state real estate industry body to determine members within a region of interest. For more significant transactions it is also advisable to commence discussions with a reputable and registered valuer who can provide an indication on the value of the asset you are looking to purchase.

Real Estate Institute of Australia
www.reia.com.au

Real Estate Institute of Western Australia
www.reiwa.com

Real Estate Institute of South Australia
www.reisa.com.au

Real Estate Institute of Victoria
www.reiv.com.au

Real Estate Institute of Tasmania
www.reit.com.au

Real Estate Institute of New South Wales
www.reinsw.com.au

Real Estate Institute of Queensland
www.reiq.com.au

Alex Scott & Staff
www.alexscott.com.au

CBRE
www.cbre.com.au

Charles Stewart & Co.
www.charlesstewart.com.au

Colliers
www.colliers.com.au

Elders
www.eldersrealestate.com.au

Jones Lang LaSalle
www.jll.com/australia

Knight Frank
www.knightfrank.com.au

Landmark-Harcourts
www.landmarkharcourts.com.au

Meares & Associates
www.meares.com.au

Pat Rice & Hawkins
www.prh.com.au

Ray White Rural
www.raywhiterural.com.au

Ruralco
www.ruralcoproperty.com.au

The Australian Property Institute (Valuers)
www.api.org.au

The Australian Valuers Institute (Valuers)
www.valuersinstitute.com.au