A good thing for those that farm sheep, is that not everyone wants to do it. We’ve seen significant flock decline over the last 25 years and let’s face it, the peak number of over 170 million culminated a multi-generational success story, supported by a wool boom price and great margins.

We’ve moved past that time and today’s number both locally and globally represents a favourable balance for producers. And there doesn’t seem to be a race to rebuild the flock.

For grain growers to reintroduce sheep to their farming systems on the grounds of sustainability and diversity, the current restocking price can be a disincentive. In addition, fences, watering points, yards and wool sheds have fallen to disrepair or disappeared. And animal production requires a dedicated management focus.

For the sheep specialists, depending on the grazing zone, expansion can be difficult due to the high cost of land that has alternate use for cattle and grain. Then there’s the ongoing dilemma of breed choice and the balance between wool and meat production.

It seems there is scope to produce more sheep (though less so for wool) without upsetting prices. But high domestic sheep meat prices are squeezing margins along the supply chain and this situation may not be sustainable. In this report we examine global markets for guidance. But in the case of lamb, 42% is consumed domestically – so domestic trends cannot be ignored.

And in this battleground of animal protein, chicken meat is a leading low and stable cost product that has managed to out-compete for consumer taste and budget.

The capacity for chicken meat to maintain shelf price over the last 10 years while red meats have escalated, is largely due to rapidly improving scale and efficiency in animal production, even in the face of increasing regulation and compensations that support animal welfare. Controlled environments that avoid the vagaries of weather have also helped.

While our lamb and mutton hold important traditional and voluminous markets, the global consumption trend is not as dramatic as it is for beef. The focus on increased profitability in sheep production rests heavily on productivity, efficiency and marketing into our home market as well as competing globally to protect, grow and access markets. Of course productivity gain continues to be our agricultural and economic challenge here in Australia.

One of the really interesting things is that sheep enterprises present a far lower volatility profile compared to other broad acre farming systems. And as an investment case, numbers highlight a relatively low cost, high returning business. So why aren’t more farmers and external investors chasing this asset class? I think there is a strong upside case to be made.

But like I say, it’s not for everyone, and maybe that’s a natural protection. Hopefully this publication not only helps you form a view, but also brings some deserved attention to a critical component of Australian agriculture’s rich history and promising future.

Mark Bennett
Head of Agribusiness, Regional Business Banking
@bennett2_mark
The prosperity of the Australian economy from the late 1800’s to 1950’s has often been referred to as ‘riding on the sheep’s back’, for our reliance on wool exports. Today, Australia is one of the world’s leading producers of wool, lamb and mutton – but the industry today is vastly different from its peak.

Sheep and wool production is spread across Australia, but predominantly focussed in Southern Australia.

While the sheep industry accounts for approximately 11% of Australia’s agricultural production and 14% of agricultural exports, almost 30% of farmers across the nation farm sheep, primarily as part of a mixed farming operation (ABS, Agricultural Commodities). As a result, the success of the sheep industry remains integral to Australian agriculture.

**AUSTRALIA’S SHEEP PRODUCTION LANDSCAPE**

Source: Agricultural Commodities, Australia, 2014–15
In 1970 the Australian national flock peaked at over 170 million head and by 1989/90 Australia was producing 960,000 tonnes of wool (greasy), 295,000 carcass weight tonnes (cwt) of lamb and 333,000 cwt of mutton.

In 1990/91, the Australian Government suspended the Wool Reserve Price Scheme after the Australian Wool Board had amassed a huge wool stockpile fuelled by $2.8 billion of debt. The Eastern Market Indicator fell from a peak of 1332c/kg (clean) in 1988 to 412c/kg (clean) in April 1993.

The removal of the Wool Price Scheme encouraged many traditional wool growers to move towards a mixed farming operation, shift their concentration to sheep meat or exit the wool industry altogether. As a result, the shape of the industry has changed dramatically and, after falling to a historic low in 2008/09 of 67.7 million head, today Australia’s flock of 70 million head produces 350,000 tonnes of wool (greasy), 506,605 cwt of lamb and 214,446 cwt of mutton.

Since 1989/90 wool production has fallen from 5.6kg per head to 5.0kg per head, while meat production has risen from 3.7kg to 10.3 kg per head.

The composition of the Australian Sheep Flock has changed dramatically since the 1990s with a large decline in the number of wethers – for wool production – and increase in breeding ewe numbers and higher lamb turn-off rates. The rise of alternative breeds to Merinos including shedding, cross and composite breeds has been driven by an increase in numbers in New South Wales and Victoria in particular. Merino remains the dominant breed in the Australian flock, however increasingly they are being cross-breed with a terminal sire to increase lambing percentages and growth rate for meat production.

**HISTORICAL PRODUCTION VOLUME AND PRICE**

![Lamb and Mutton production](source: Australian Commodity Statistics (2015))

![Wool production](source: Australian Commodity Statistics (2015))

Source: ABS Cat. 7121.0 – Agricultural Commodities, Australia, 2014/15
INCREASES IN PRODUCTION

Increases in carcass weight (kg)

Changes in micron

The Australian sheep industry is estimated to generate $6.5 billion of goods in 2015/16 through a range of sources, including wool, lamb and sheep for slaughter or live exports, stud breeding and milk production.

Australia now stands as the world’s largest wool producer and the second largest producer, by volume, of lamb and mutton behind China.

The nature of Australia’s sheep production has altered significantly since the 1990s, where medium micron wool (19.6–24.5 micron) was the major type of wool produced.

Changing demands, the decline in profitability of wool and the increase in production of competing fibres has meant that wool production declined for medium quality wool, but increased as a proportion of the clip for fine and superfine wool and for broad wool as a by-product of meat production. As a result, the average fibre diameter of the Australian clip has declined from 22.43 micron in 1993/94 to 21.0 micron in 2014/15.

Meat production has tended towards a larger carcass size that is fit for the export market, which has been made achievable by improvements in genetics and animal husbandry.
Processors’ demand for Australian wool, mutton and lamb is driven by both domestic and international markets; however, the significance of either of these markets varies across the three major sheep commodities.

Demand for wool is heavily reliant on international markets with local demand significantly contracting over the past 20 years as our manufacturing base declined. In 2014/15, 459,000 tonnes (greasy) of Australian wool was destined for the international market, of which only 18% was semi-processed, scoured or carbonised prior to export.

### Australia’s Share of Exports

<table>
<thead>
<tr>
<th>Meat</th>
<th>Australia</th>
<th>New Zealand</th>
<th>United Kingdom</th>
<th>Ireland</th>
<th>Spain</th>
<th>Netherlands</th>
<th>India</th>
<th>Uruguay</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wool</td>
<td>Australia</td>
<td>New Zealand</td>
<td>United Kingdom</td>
<td>Germany</td>
<td>Romania</td>
<td>Uruguay</td>
<td>Spain</td>
<td>Argentina</td>
<td>Brazil</td>
</tr>
</tbody>
</table>

Source: United Nations Food and Agriculture Organisation (FAO)

### Destination of Australian Wool Exports

Source: Australian Bureau of Statistics, International Trade, Australia, cat. no. 5465.0, Canberra
International markets are the primary driver for mutton demand as local consumption has been steadily retracting over the previous two decades dropping from 9.60kg in 1991 to only 0.5 kg per capita 2015. The Australian mutton industry has become an export dominated industry and now exports over 169,000 tonnes shipped weight (swt) of mutton a year. Demand for lamb comes from both domestic and international markets, however as the major sheep meat exporter globally, Australian producers are less reliant on movements in international price.

Lamb enjoys a strong domestic market with 42% of Australian lamb being consumed locally. This is a result of lamb having a much higher per capita consumption than mutton, with the average Australian consuming 9.4kg of lamb a year.

This compares to:
- 10.5kg per capita in Sudan;
- 5.5kg per capita in Saudi Arabia;
- 3.0kg per capita in China;
- 1.8kg per capita in the European Union; and
- 0.4kg per capita in the United States.

Total domestic consumption of lamb has been increasing on the back of the expanding Australian population.

Export volume of lamb does not directly relate to the value each export market generates for the Australian lamb industry. Key Australian export markets demonstrate significant variance in the cut, quality and degree of finish and packaging of lamb products. America, as an example, import only 26% more lamb than China, however they generate 70% more in export value for the Australian market. Change of value and volume is not as significant for mutton, as mutton is typically exported as whole carcases.
Total domestic consumption of lamb has been increasing on the back of the expanding Australian population.
Domestically, the demand for sheep meat, particularly lamb, is price sensitive against other proteins as consumers can substitute lamb for a cheaper alternative. Across the previous two decades, mutton and lamb, have become more expensive compared to pork and chicken. This is largely on the back of heightened demand from international markets and a lower national flock limiting supply.

Internationally, the high demand driven price of sheep meat has restricted consumption in countries with developed economies, where consumers have a higher level of disposable income to spend on premium foods. In most countries, sheep meat is regarded as a niche product, with the average global citizen consuming only 1.2kg of sheep meat a year. International lamb prices remain very volatile, however, due to limits on supply from Australia and New Zealand.

Similar to sheep meat, wool is not competitive on price alone and historically demand has been negatively impacted by the price differential between other textiles, namely cotton and synthetics fibres (polyester and acrylic).

From 2000–2015, global production of fibre increased by 73%, with production of cotton and synthetic fibres growing by 32% and 104% respectively, while in direct contrast, global production of wool has reduced by 15%. In 2000, wool represented 2.5% of global fibre production while in 2014 it only represented 1.3%. This is reflective of garment and textile manufactures substituting wool for a cheaper alternate to maximise the consumer affordability of their product. Today, demand is reliant on consumer belief that wool is a superior textile and total consumption of woollen apparel is now closely aligned to per capita income, as wealthier consumers have the financial capacity to purchase luxury items.

Shifting retail consumer trends have also seen a shift in demand for Australian wool. The biggest change is the casualisation of work attire. This has seen a shift away from the traditional two piece suit and tie to a more ‘smart’ casual attire of separates, i.e. a shirt, sports coat, pants and no tie. The same trend has also seen a fall in demand for woollen womenswear (excluding woollen coats), but also an increase in demand for knitwear with sweaters becoming a common garment in the work place. The emergence of woolen active leisurewear and next-to-skin trans-seasonal garments is not likely to increase the overall demand, however may shift demand towards finer wool.
Modelling reveals two very different challenges for the sheep meat and wool industry. Where demand for lamb and mutton is expected to increase in line with growing demand for protein in developing economies, demand for wool is expected remain relatively stable to 2040. Meat producers must look to improving overall productivity, carcass quality and lambing percentages to take advantage of this demand. While demand for wool is not expected to increase at the same rate as demand for lamb and mutton, and while some wool producers may diversify their operations away from wool, for those farmers who continue to specialise in wool, limited global supply will also see farmers chasing productivity as well as an increase in the value of wool as niche product.

DEMAND FOR MEAT
Analysis of the global and regional demand for mutton and lamb shows that demand for sheep meat will continue to grow in coming years driven by global economic growth in developing nations. Modelling of current consumption patterns shows that global demand for lamb and mutton could increase by 2.8 million cwt by 2040 – an increase of 21% on current global supply.

In comparison, for the same period to 2040, global demand for beef is forecast to rise by 22 million cwt (33%), 25.6 million cwt (23%) for pork and 15.4 million cwt (15%) for poultry.

Under this scenario, sheep meat would maintain a slightly lower share of global meat consumption. However demand will differ between regions with different growth rates. Growth is expected to be strongest in Asia, where lamb performs slightly better than beef and pork, but not as well as poultry. The Asian region also includes the Middle East nations of Saudi Arabia and UAE which have a strong traditional demand for sheep meat, as well as China, where the demand for sheep meat is growing strongly.

On current consumption trends, demand for sheep meat is expected to fall in Europe by 522,000 cwt and rise only slightly in the Americas by 80,000 cwt. In these regions, the trend is clearly towards chicken and pork, with America also increasing their beef consumption.

In recent years the value of sheep meat production has increased markedly off the back of increased demand and a limited and volatile supply. If current trends in quantity relative to value of production of meat continue, the total value of sheep meat produced will increase by 30% by 2040 – compared to 34% for beef, 27.5% for pork and 9.8% for chicken (in current prices).

These trends do not reflect the capacity for further increase in value-add to sheep meat through processes such as dry-ageing of mutton and other traditionally lower quality meat to provide increases in value across the board.

DEMAND FOR WOOL
Modelling the trend in consumer demand for fibre shows that, on current trends, global demand for raw wool will increase by 8.8% by 2040, significantly less than increased demand for cotton, synthetics and, from a low base, cellulosics.

Demand for raw wool is expected to increase most strongly in Africa and Asia, but continue to decline in Europe and America.

It must be noted however, that this measure reflects trends in demand for wool by processors, not by end consumers. According to analysis undertaken by Australian wool market analyst and commentator Chris Wilcox (Poimen Analysis), increases in demand for woollen fabric could be anticipated in countries such as Turkey, Russia, Spain, France and even the United States which are consuming less wool per capita for their income than other nations at the same stage of economic development.

While demand for wool is not expected to be as strong as the increase demand for sheep meat, the global value of wool production is anticipated to outstrip demand. On current trend, the value of global wool trade is expected to increase by $1 billion or 13% by 2040. The value of global cotton production would increase by 35% in the same time.
## Increase in Global Protein Demand and Supply by 2040

<table>
<thead>
<tr>
<th></th>
<th>Beef</th>
<th>Pork</th>
<th>Sheep</th>
<th>Poultry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22M CWT</td>
<td>25.6M CWT</td>
<td>2.8M CWT</td>
<td>15.4M CWT</td>
</tr>
<tr>
<td>Increase in Demand</td>
<td>33%</td>
<td>23%</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>Increase in Value</td>
<td>34% ($61.4B)</td>
<td>27.5% ($76.6B)</td>
<td>30% ($11.6B)</td>
<td>9.8% ($19.8B)</td>
</tr>
</tbody>
</table>

## Increase in Global Fibre Demand and Supply by 2040

<table>
<thead>
<tr>
<th></th>
<th>Cotton (Raw)</th>
<th>Wool (Raw)</th>
<th>Synthetics</th>
<th>Cellulosics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9M Tonnes</td>
<td>96.6k Tonnes</td>
<td>7.4M Tonnes</td>
<td>2.8M Tonnes</td>
</tr>
<tr>
<td>Increase in Demand</td>
<td>34%</td>
<td>8.8%</td>
<td>12.2%</td>
<td>44.3%</td>
</tr>
<tr>
<td>Increase in Value</td>
<td>35% ($13.2B)</td>
<td>13% ($1.1B)</td>
<td>13% ($1.1B)</td>
<td>44.3%</td>
</tr>
</tbody>
</table>

Source: ANZ analysis, FAO
HOW DOES INDUSTRY PROFITABILITY STACK UP?

CASH COSTS AND RECEIPTS FOR AVERAGE AUSTRALIAN FARM

Cash costs of average farms ($)

Cash receipts of average farms ($)

PROFITS (AT FULL EQUITY) AND RETURN ON CAPITAL

Profits and Return on Capital - Sheep and Beef farming
($ per average farm)

Profits and Return on Capital - Dairy farming and Cropping
($ per average farm)

Source: ABARES Farm Survey 2012–13 to 2014–15
Australian sheep farming has maintained a stable and low cost and low receipts business since the early 1990s. Profits from an average sheep farm have improved in recent years, however remain below the profit levels of both cropping and dairy farms over a 10 to 15 years period. The profitability and returns from sheep farms are more closely aligned to the beef industry, and in recent years, an average sheep farm has maintained a relatively higher profit and return on capital than the average beef farm.

The top 10% of sheep farms by size have a 20% lower profitability than the top 10% of beef farms, however the equity held or invested by that top 10% of beef farms is more than twice that of the top 10% of sheep farmers.

This means that sheep farmers have a return on equity of 2.5% compared with a 1.3% rate of return for beef farmers. Analysis of ABARES Annual Farm Survey Results shows not only the relative returns, but also the volatility of an average farms’ costs, receipts, profits and returns.

Table 1 shows the relative ranking of each commodity in volatility based on a set of variables. Results indicate that sheep farming (and livestock farming in general) are lower volatility enterprises than dairy and cropping, even though historically cropping and dairy are more profitable.

### TABLE 1: VOLATILITY INDEX

<table>
<thead>
<tr>
<th></th>
<th>% change in cash costs</th>
<th>% change in cash receipts</th>
<th>Farm Business Profit</th>
<th>Return on Capital (ex. capital appreciation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEEF</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SHEEP</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>WHEAT AND OTHER CROPPING</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>DAIRY</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: ANZ analysis, ABARES Farm Survey

### CHANGES IN COMMODITY PRICES

Source: Australian Commodity Statistics (2015)

Sheep farming also has a potential role to play as a stabiliser for income of mixed-operations. It is noticeable that the price index changes for lamb and wool run broadly counter-cyclical to wheat and beef prices, and can be a risk mitigation strategy for those commodities which are strongly based on the international price and large players in global supply.

Mixed farming has historically been challenged by the declining terms of trade. Scale and specialisation was an industry response which saw many mixed sheep and cropping operations focus on cropping where automation and increased efficiencies through investment in machinery reduced sheep numbers. However in today’s best mixed farming enterprises, economies of scale are achieved in each. Mixed operations catering to specialised labour and talent, particularly within families, produce an earnings floor through wool production and sales, and are a positive step towards sustainability given pastures afforded regular rotations can deliver agronomic benefits to the cropping phase.
The Australian sheep industry has made considerable gains in productivity since 2000 after widespread declines both prior to the abolition of the Wool Reserve Price Scheme, and in the decade following. However those productivity gains have been almost exclusively made by reducing the cost of production – the next wave of productivity gains will need to retain a focus on costs and efficiencies but have greater emphasis on sheep productivity, genetics and wool/meat quality as well as broader supply chain enhancements.

**Livestock Management and Productivity**

The Australian national sheep flock currently sits at 70 million, and has made only small increases since the historic low of 68 million in 2009. The inability to increase national flock numbers comes as a result of persistently high lamb and mutton prices leading to high turn-off rates. Farmers wishing to expand are also facing increased competition for land from other high-performing agricultural industries including cropping, beef and dairy.

Improving the productivity of the existing flock will be central to increasing the industry’s output in the future. Advances in both management and genetics aimed at increased lamb marking rates will continue to play a significant role in improving turn-off. Fertility, a major driver of profitability, is of particular interest to Australia’s progressive Merino producers who, as an industry, are striving to increase average lambing percentages to a figure more in line with their meat sheep counterparts. One challenge in this process is increasing lamb survival rates, which is a multi-factor trait that has strong links to both genetics and practical animal management.

A trend towards optimising the potential of the Merino as both a wool and meat breed is emerging, with many stud breeders now focussing as much of their selection pressure on growth and fertility as on traditional wool characteristics. The uptake of genetic selection using objective data collected by breeders and collated by Sheep Genetics, Meat and Livestock Australia and Australian Wool Innovation’s joint data analysis program is steadily increasing.

The database, known as MERINOSELECT, is a valuable tool for producers who are seeking to transform their flocks to a true ‘dual purpose’ Merino breed, and follow the productivity and profitability gains seen by the meat sheep industries widespread uptake and reliance on their equivalent database, LAMBPLAN.

More advanced management techniques including utilising electronic technology to record individual ewe fertility rates, separating mobs based on pregnancy status and nutritional requirements, managing available shelter and lambing mob size, and utilising weight gain data for strategic, staged lamb sales, are some examples of methods used to improve productivity and maximise returns per hectare.

**Animal Husbandry Practices**

The industry is also changing in relation to its animal husbandry practices, such as mulesing and tail docking, lot feeding and slaughter practices. Changes to husbandry practices are being driven by sheep producers’ desire to introduce more cost and time efficient techniques that are also lower stress and lower risk to the animal and animal welfare. Activist groups are also placing public pressure on industry to improve husbandry techniques. The mulesing debate has existed for a significant amount of time, however to date, the products and techniques researched as possible alternatives to the surgical practice of mulesing have failed to provide a viable solution for industry.

Some high-profile fashion brands and retailers have moved away from using Australian wool as a result of the anti-mulesing campaign. In the meantime, the Merino industry has focused on gradually reducing the reliance on mulesing via genetic gains in body and breech wrinkle, flystrike prevention through chemical fly retardants, and the now widespread use of topical pain relief to the mulesing site to improve animal welfare and productivity post lamb marking. Animal welfare concerns relating to live sheep exports is also likely to remain to critical issue for many animal activists, and ensuring safety and welfare throughout the supply chain will remain very important for the growth of the industry.

It is anticipated that animal husbandry practices will continue to be key issues for both the wool and sheep meat industries, with a significant amount of time and money continuing to be invested by industry bodies to improve outcomes for all stakeholders.
The Advance of Digital Farming and Technology

Advances in digital farming also present significant opportunities to increase yield, reduce costs, identify and market produce, as well as access finance. While precision agriculture has been adopted in cropping, the potential use for water and pasture management, and livestock identification and management, are just as significant for the livestock sector as it has been for cropping.

Digital farming has the potential to dramatically lower the cost of labour associated with managing livestock by allowing for automatic management such as controlling stock movements, controlling access to supplementary feed and water and automatically drafting animals into management groups based on certain criteria. Digital and technological advances also allow farmers to track key productivity data over time for use in classing and selection.

Advances in digital monitoring and data also enable farmers to gather additional information to improve lifetime flock management and improve productivity. In the longer-term, this has the potential to lead to better forward contracts for the farmer.

PROCESSING

Australia exports almost 72% of its national wool clip to be processed in China. In recent years, the number of wool processing facilities in China has declined and the Chinese Government has actively supported the economy’s transition towards a services-based economy. The impact of this shift away from manufacturing is likely to see a gradual shift in processing facilities to countries with lower a labour cost base such as Vietnam or Indonesia. This retreat in China’s dominant position in the processing market may also open the door for innovative processing techniques occurring in Australia.

Domestic Australian meat processing is also evolving towards more efficient and tailored processing by utilising existing processing facilities for unique or niche processing, where large sheep producers can make agreements for particular processing standards for branded products.

MEETING CONSUMERS’ CHANGING DEMANDS

Consumers’ tastes for both fibre and protein are constantly changing and producers must move away from traditional uses if they are to expand demand. Wool cannot sustain demand through sales of fine suits or traditional knitwear alone. Currently, the growing markets in casual and outerwear has driven demand for both carded and worsted wool, while demand for worsted wool for traditional uses is in decline. The New Zealand company, Icebreaker, is a prime example of how developing new and innovative uses for wool can create new demands and markets.

Consumers are also increasingly seeing wool as an environmentally friendly and sustainable fibre, in contrast to synthetics, as well as being in favour again due to its resilience and durability. Opportunities also exist for wool producers to collaborate with other commodity producers, such as cotton, to create alternative blended fabrics to compete with synthetics.

Export demand for lamb and mutton meat is growing, particularly in Asia. Traditionally, lamb and mutton demand in Asia has been primarily for secondary cuts such as breast and flap for use in hotpots. However increasingly, China’s growing middle class is demanding prime cuts of lamb, and while not as commonly eaten as beef, pork or chicken, lamb remains a significant and growing part of both the urban and rural Chinese diets. Lamb and mutton in Asia are seen as a premium product, due to food safety, consistent quality standards, environmental sustainability and better animal welfare.

While the vast majority of Australia’s wool clip is exported, the domestic market remains the primary market for lamb, and unlike most export markets, Australians consider lamb to be a staple food. There remains opportunity for a greater degree of product differentiation for both the domestic and export lamb and mutton market based on quality, provenance and animal management as consumers become increasingly aware of where their produce is sourced.

BANKING AND INVESTMENT VIEW OF THE AUSTRALIAN SHEEP INDUSTRY

The sheep industry has been broadly overlooked by agricultural investors for a number of reasons. Firstly, the sector is highly fragmented with many small sheep farmers and a limited number of very large producers. The industry is also often seen as a poor cousin to the beef industry, which attracts significant investment, commonly in large scale northern Australian operations.

However, the sheep industry can provide farmers with the advantages of a stable and low cost return, where prices are not heavily reliant on international markets, as well as relatively high returns on capital. The industry has been through a significant restructure in the post wool stock pile era and again in the early 2000’s as producers faced the challenge of a worsening cost price squeeze. To a large extent, and as a result of these issues, the industry we see now is much better placed, with greater equity and stronger balance sheets to make the necessary investments required to leverage future opportunities.

Investment houses have also been reticent to provide capital for sheep farming enterprises. Wool and sheep meat are relatively niche markets with perceived risk on the demand side due to a domestic market which reacts strongly with price movements, and an export market which is highly concentrated to a few countries. Sheep farming is also a relatively high maintenance, if lower cost, enterprise which is often more suited to family farmers than corporate farming. However, the opportunities to attract investment may be there for those sheep farmers that can structure themselves in a way which presents clear, predictable returns to investors.
CASE STUDY
New uses for a traditional product

Icebreaker was the first company to develop a merino fibre layering system for the outdoors. The company was formally founded in 1994, but got off to an illustrious start when Sir Peter Blake, a legendary New Zealand yachtsman, wore prototypes of its early Merino wool garments when he set a world’s record circumnavigating the globe in 1993. After his voyage, Blake reported that, “Icebreaker is superior in every way to anything I’ve ever worn. I wore it for 40 days and 40 nights and it didn’t itch or get whiffy.”

This high-profile testimonial, along with his own experience with the garments convinced Jeremy Moon to join forces with the Merino farmers making the original Icebreaker apparel. As the company’s managing director, Moon helped launch the company across New Zealand and Australia. By 2010, Icebreaker had expanded to 37 countries across Europe, Asia, Australia, and North America. According to an article in TIME, its annual sales were more than US$100 million.

Icebreaker targets its products at active-minded people who enjoy the outdoors, and its brand has evolved to represent an exploration of “our relationship to nature, and to each other.” As stated in the Icebreaker corporate profile, “This phrase is at the heart of our company.” To meet the needs of its consumers, Icebreaker has engineered more than 25 distinct Merino fabrics, which it uses to create high-performance, “edgy” underwear, mid-layer, and outerwear products.

Icebreaker was also among the first companies to begin offering multi-year contracts to New Zealand’s Merino farmers. Icebreaker saw the value of offering price premiums to growers who could produce fibre that uniformly met the company’s stringent requirements. Today, New Zealand Merino facilitates wool contracts with the growers in partnership with Icebreaker. This includes price and volume negotiations, testing of Merino against pre-set standards, management of batching, and monitoring of on-farm ethics.

Source: New Zealand Merino
Sheep farming has fallen under the Australian agriculture industry’s radar over the recent decades, having been overshadowed by cropping, beef farming and the dairy industry.

However, despite suffering a severe downturn and loss of farmers since the Price Reserve was removed, it is now well and truly on the road to recovery. The scope for increased production and investment along the supply chain is significant. Sheep farmers have relatively low debt levels, high returns and is highly fragmented – meaning that there are many opportunities for investment and consolidation.

While sheep farming has had relatively high productivity growth of 1.4% per annum since 2000, this productivity is coming off productivity losses prior to the removal of the Wool Reserve Price. However, the majority of productivity gains made by sheep farmers have been through reducing input costs, such as labour and fertilisers, rather than increasing output.

In order to be competitive and take advantage of the growth opportunity, sheep farmers will need to improve productivity through increased farm size, flock size and better on-farm processes.

To put this in perspective, based on the above increase in global demand of 2.8 million cwt by 2040, if Australia is to even maintain its current share of global production of 7.6% at current carcass weights and stocking levels the Australian sheep flock would need to increase to 92.5 million. However Australia’s share of global production is capable of being far higher than this. If even half the global increase in demand is supplied from exports and Australia maintained its existing share of exports, the Australian flock would need to increase to 125 million head.

Given the competitiveness for Australian agricultural land, obtaining enough land for sheep production of this scale is unlikely. As a result, increases in the Australia flock will have to come through farm management efficiencies, better utilisation of land, increased lambing and weaning rates, reduced fattening times and intensive management.

To put this in perspective, based on the above increase in global demand of 2.8 million cwt by 2040, if Australia is to even maintain its current share of global production of 7.6% at current carcass weights and stocking levels the Australian sheep flock would need to increase to 92.5 million. However Australia’s share of global production is capable of being far higher than this. If even half the global increase in demand is supplied from exports and Australia maintained its existing share of exports, the Australian flock would need to increase to 125 million head.

This is not to say that family sheep farms will not exist in 10 years. Indeed the rise of oftake agreements and producer-purchaser buying arrangements through the internet, farmers’ markets and specialty stores mean that there are many opportunities for small scale farmers to sell niche, branded and marketed product directly to the market. Like all other agricultural enterprises, we are seeing trends towards increased scale, increased uptake of technology and increased awareness of the drivers of profitability, which when all combined, can only represent a stronger more robust industry for future generations of producers.
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