



BEEF AUSTRALIA 2021 - A GREAT FUTURE AHEAD

MAY 2021

A YEAR OF STRENGTHS AND CHALLENGES

On many counts, the Australian beef and cattle sector is in one of the strongest positions in its history. Its recovery from the drought period has been strong, the prices producers are receiving for their cattle are at record levels, and despite the unprecedented pandemic disruptions to the global economy, demand for beef remains fundamentally strong.

Importantly, with strength comes a positive challenge – the need to maximise on the position in which the industry finds itself, and ensure that the good fortune isn't taken for granted, or leads to complacency. Given the renowned resilience and innovativeness of all stakeholders across the Australian beef supply chain, it is clear that this is the stance that the industry is continuing to take.

Approaching the middle of 2021, it is clear that for most of Australia, the good season which followed the end of two difficult years of drought is largely continuing. And while only the brave would forecast the weather a long way ahead, knowing that droughts will always happen eventually, there is every indication that the positive rainfall patterns are likely to continue for some time. For many producers, the aim will be not just to restore herds to pre-drought levels, but if anything to make them even stronger, to capitalise on what they see as boom times ahead for beef demand.

For decades, the demand story has been driven by the same strong factors which continue to be important today – the growing incomes and changing diets of consumers across middle income countries, as they can increasingly afford to buy beef, and continue to increase it as a component of their diets.

While the recovery from the initial Covid impacts in many countries will be unpredictable, and potentially longer than anticipated, the eventual economic recovery will see demand for beef strengthen, both in domestic and export markets, whether through consumers eating out again, or seeing a recovery in their household spending budgets. Yet while demand for beef globally remains strong, if anything, Australia's competitors are growing even more strongly, whether in scale, sophistication, or food safety.

Domestically, the structural position of Australia's beef production landscape continues to strengthen, as the number of farms goes down, while the size of the average farms goes up. At the same time, many beef producers are looking to the industry challenges facing them, and translating these into tools for success. These include an increased use of family succession to build operations, a re-evaluation of many farm strategies as producers increasingly look at diversification options, and a move to embrace sustainability developments as a potential economic benefit, rather than a threat.

There will always be discussion, debate and disagreement on issues within the beef and cattle industries, and so there should be - that's how ideas are analysed and dissected, and how new strategies arise.

We trust that you will find this an interesting discussion, and we look forward to working with many of you as part of this exciting and essential industry.

BETTING THE FARM

Australia's cattle industry entered 2021 on a strong note with record high cattle prices, better weather conditions, and minimal disruption to operations due to Covid. With all the positivity, it can be easy to forget that around a decade ago, the mood was arguably somewhat different. For many observers around the start of the 2010s, farming and agricultural production were inevitably heading to a model where the larger corporate farms would dominate, and many family farms would be unable to compete.

Fast forward to the present time, when family farms have clearly emerged stronger than ever and find themselves in a robust position both financially and agronomically. Importantly, many are making long term strategic decisions with far more complexity than would have been the case a decade ago.

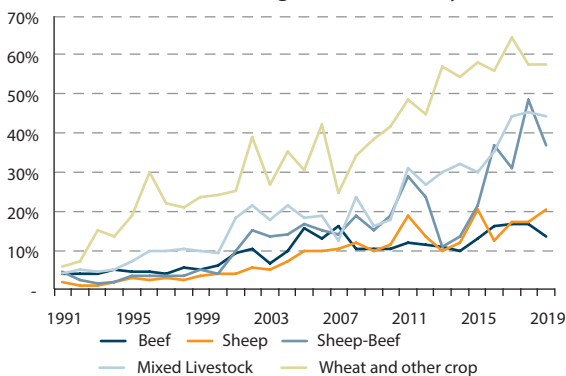
The New Family Farm

One sign of the relative strength of the family farm is how the average operation has evolved not just in scale, but generationally. While it is hard to quantify, it is clear across many parts of rural Australia that the approach to succession and generational change has evolved in a positive way. Not that long ago, many families viewed succession as the departure of the parents and the arrival of the children onto the property. These situations were often quite difficult, with issues such as management responsibility handover, as well the financial restructuring required for parents to move on from the farm.

With the ongoing process of farm consolidation growing the scale of many operations, the ability increasingly exists for two generations to work together on a farm positively and constructively. In addition, more and more, the younger generation will return from a tertiary education not just with training in agriculture, but with new skills and knowledge of areas such as agtech and new financial skills, which positively benefit a farming operation.

This all translates back into more innovative and efficient farming operations, and ultimately adds to the strength of the overall sector.

Share of Medium & Large Scale Farms By Sector



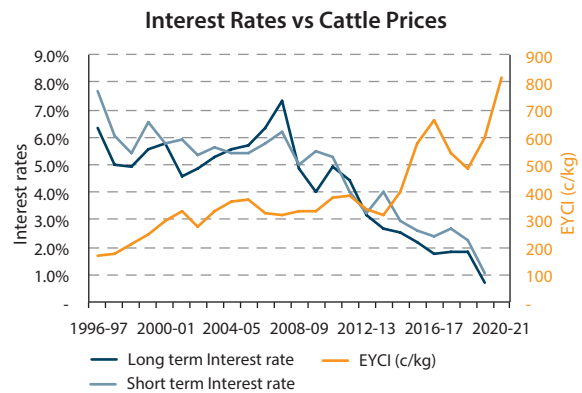
Source: Agsurf data from ABARES, ANZ

Note: Medium scale is defined as farms with revenue between \$0.5 to \$1 m per annum, while large scale is defined as farms with over \$1m in revenue per annum

The process of consolidation across all parts of the Australian agri landscape, resulting in greater levels of efficiency and increased strategic options for producers, also remained fundamental to the growth of successful multi-generational family operations.

As the chart shows, one increasing trend over the past thirty years has been the growth of diversified operations, rather than pure play cattle or sheep operations. Importantly, while the findings are based on revenue sizes of farms, rather than acreage or stock numbers, they still highlight the trend toward consolidation. While the biggest growth in consolidation has come from wheat and cropping operations, the next two strongest areas of consolidation are either sheep and cattle operations, or mixed livestock and grazing.

Where Are We In The Cycle?



Source: ABARES, RBA, ANZ

Like every agri sector, the Australian cattle industry is currently in the midst of a cycle encompassing high cattle prices, escalating farmland prices, a generally good season, and a bumper grain crop. Combined they created a great deal of confidence for many in the sector, a view which may well shape many of their individual farm strategies going forward.

It is interesting to compare cattle prices over the past two decades to the direction of interest rates over the same period of time and it is quite notable that cattle price rises have moved very much in contrast with interest rate declines. Accepting that many other factors impact cattle prices, it is also worth considering that interest rate rises, whenever they will inevitably happen, will have an impact on producer decisions, including stock and land purchasing, as well as the prices they may receive for these. While this observation shouldn't dampen confident strategies for many producers, it should still consider some reflection that the market will inevitably change at some stage.

The Agri Investment Flow

A lot of the questions in past years about the future of average farms and not just been about their own performance, but how they would compete with the "corporate farms", with their forecast higher levels of efficiency, or whether many family farms would be purchased by an influx of new investors.

The position of the family farm on the agri investment landscape now is a far stronger one. With many investors actively seeking skilled agri managers, this opens up further possibilities to attract new capital partnerships into their operations, although bringing its own challenges of co-managing with a new entity. Certainly, as the flow of capital into Australian agri increases, the opportunities also increase for farms to increase scale through consolidation

Investment flows into Australian agri has been somewhat stifled by the recent travel restrictions, but will grow strongly when disruptions ease further. This could provide the incentive for interested producers to explore their options to take advantage of these opportunities.

Importantly, investors will increasingly be looking for data to a greater degree than before, including agronomic and financial. With the modern institutional investor motivated by the metrics of long term returns, many are looking for as much data as they possibly can from agri partnerships or assets, putting the onus on the producer to collect and maintain this.

Sustainability Opportunities

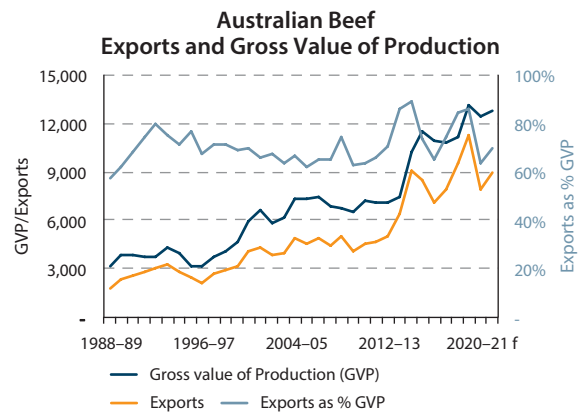
While it is a complex and evolving field to a lot of people, many innovative farmers are now exploring the opportunities that the increasing emphasis on sustainable practices are likely to bring. Inevitably, sustainability practices and requirements will become more a part of the agri landscape, and while that may feel uneasy to some, many producers will understand that this is path they have been heading down for years in their own operations. These opportunities are likely to come in a number of forms, from sustainability-linked animal management practices and new beef certification projects, to on-farm carbon projects. While many of these opportunities may not eventuate for some time, and may take a while to become clearer, they are certainly prospects being explored by many innovative producers.

AUSTRALIA VERSUS THE WORLD

The Big Picture

The importance of export markets to the Australian beef industry cannot be overestimated. Last year marked the fiftieth anniversary of the first year that the exports of Australian beef surpassed domestic consumption. Since that year, the share of exports has continued steadily upwards, to the point where exports now account for 70 percent of the volume of Australian beef.

Since 1960, beef export volumes have grown by around 3.5 percent, almost eight times the rate of domestic growth, (0.45 percent per annum) from 165,000 tonnes to a forecast 1.39 m tonnes in 2021. In terms of the value of exports to the beef industry, the numbers become even stronger again. While the numbers have dipped in the past couple of years due the drought and tight supply through restocking, in 2013/14 and again in 2018/19, exports accounted for around 90 percent of the total gross value of production of the overall Australian beef industry.



Source: ABARES, ANZ

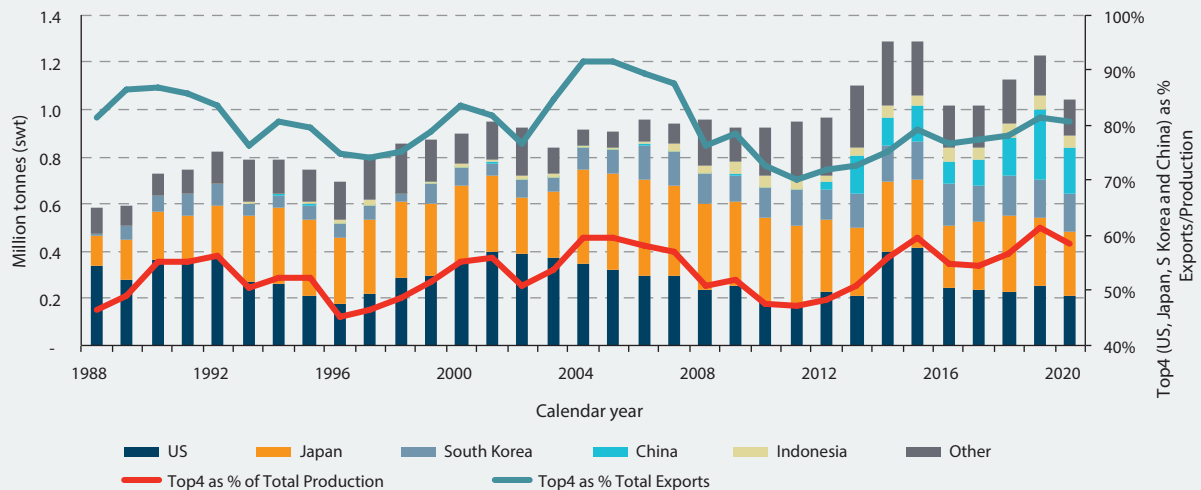
Looking ahead, export growth is forecast to continue for at least the next four years. As the Australian herd rebuild continues, the flow of cattle back into saleyards will gradually increase, as producers' restocking strategies generally reach farm capacity. Given that the main reason for the recent decline in exports has been tightness of supply, exports are likely to resume steady upward growth and continue to influence producer revenues.

Globally, the outlook for beef consumption over the rest of this decade continues to be strong. According the FAO/OECD (Food and Agriculture Organisation of the United Nations/Organisation for Economic Co-operation and Development), global beef consumption is forecast to rise by almost seven percent between 2020 and 2029. Unsurprisingly, growth is forecast to be considerably higher for developing countries (ten percent) than developed countries (2.6 percent). Between them, the US and Brazil are expected to account for almost one fifth of the global increase in demand over that period.

Interestingly, of the next seven markets forecast to see major increases in their beef consumption, few are on the radar of Australia's major export markets. Between them – Pakistan, South Africa, Turkey, Indonesia, Egypt, India and Vietnam – they are forecast to account for around 33 percent of the world's increased beef consumption by 2029. For some of them, ample domestic beef production means they will remain exporters, particularly Brazil and India, while for most of the others, the beef import needs are likely to be met by a different quality of exports, such as those from India.

The FAO/OECD forecasts provide interesting reading on some of Australia's other markets. South Korea is forecast to see reasonable consumption growth of around 4.5 percent, while Japan's beef consumption growth is forecast to decline by 3.7 percent. Also notable is that Australia is forecast to see marginal growth of 2.2 percent, while China's beef consumption is forecast to fall by three percent, albeit subject to its recovery in its domestic pork sector.

Australian Beef Exports by Destination



Source: MLA, ANZ

What Is The Outlook For The Big Four?

In looking to the future for Australian beef exports, it is unavoidable that the focus needs to be on the big four markets – China, Japan, South Korea and the US. Between them, these four markets have accounted for an average of around 75 percent of Australia's annual beef exports over the past ten years. While this figure has fluctuated, the fact that it has not fallen below 70 percent in the past three decades is testament to the importance of these markets to the Australian industry.

On the other hand, however, even though having four major buyers is less risky than one, it still highlights the concentration risk, and the need to be aware of the possible actions of these markets.

South Korea has long been a steady market for Australian beef, and in recent months has become the second largest market for exports, behind Japan. South Korea brings in over 90 percent of its beef imports from Australia and the US. Interestingly, until very recently, beef from the EU has been banned from export to South Korea since 2000, due to BSE (bovine spongiform encephalopathy, or "mad cow disease"). The market has recently opened to exports from the Netherlands and Denmark, with Ireland also in the process of seeking market access.

The **Japanese beef market**, which in recent months has regained its mantle as Australia's largest market, also provides a reminder of the importance of food safety to particular consumers and countries. Australia's biggest competitor in the Japanese beef market, the US, was largely banned from exporting to Japan from 2003 until 2007, due to BSE. The US remains a strong competitor to Australia's beef market share in Japan, having steadily rebuilt its market share since the ban was lifted.

Longer term, the Australian beef trade with Japan would appear to be one of the strongest trading relationships, although the need to maintain market share through strong trade agreements will need to be a focus of trade negotiators.

The US market continues to be a strong one for Australia, though has recently struggled with Australia's tight supplies, as well as the challenging impacts of the relatively high AUD/USD exchange rate, particularly in relation to the

currencies of the major South American beef exporting competitors. The US market relies largely on manufacturing beef, to feed the unquenchable hamburger appetite of Americans, but the rebuilding and restocking process has added to the challenge in this market. Farmers are holding back many of their cows to build their own herds, which would otherwise have been destined for manufacturing beef, while those cows which do hit the market are often being sold at very high prices.

Regardless of the headlines over the past year, and accepting the uncertainty of future trade changes, the **Chinese beef market** remains a fundamentally strong one for Australian exports. While it is difficult to predict any sudden trade restrictions which may arise impacting Australian beef exports to China, a number of major reasons would suggest that China would be unlikely to drastically reduce its imports of Australian beef.

China's consumers will continue to require major supplies of beef, which the country is unable to provide from domestic production. While the impact of African Swine Fever on the Chinese pig herd, and its subsequent reduction on domestic pork production is declining, the rate is apparently slower than originally forecast. Impressively, China is taking the opportunity of the rebuilding of its pig herd to refine the entire pork production process, into a more industrial one, with far greater food safety characteristics, and far less likely to see a repeat of similar food safety scares. However, while pork production can be achieved on an industrial scale, replicating this for beef would be a far greater challenge, given the difference in scale between China's beef needs, and its availability of pasture, water, and feed production capacity. This is despite China's announcement in its most recent Five Year Plan that it would seek to achieve far higher levels of domestic production in areas such as beef.

Looking ahead, it seems quite foreseeable that America may look to gain further market access into China for its beef producers, given the tight supplies from Australia as well as the opportunity for the new US administration to boost its support with US cattle producers. That said, it seems reasonably unlikely that China would reduce beef imports from Australia much further than the current restrictions on a set of Australian processors.

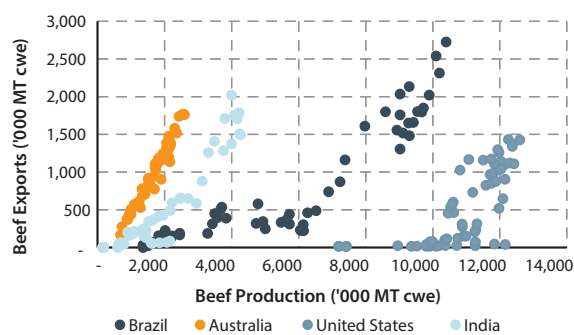
In addition, while markets such as **Vietnam** and the **Philippines** may currently be continuing to be impacted economically by Covid disruptions, their long term population and income growth will provide important opportunities for Australia to increase exports of quality beef.

Finally, while the **Middle East** has long been a target for increased exports, sometimes more so for sheep meat, a range of factors may increase its potential. The opening up of a number of these countries, particularly Saudi Arabia, may well see opportunities for beef at a restaurant level to grow, and per capita consumption to increase.

Aust Beef's Competitors – how are they looking?

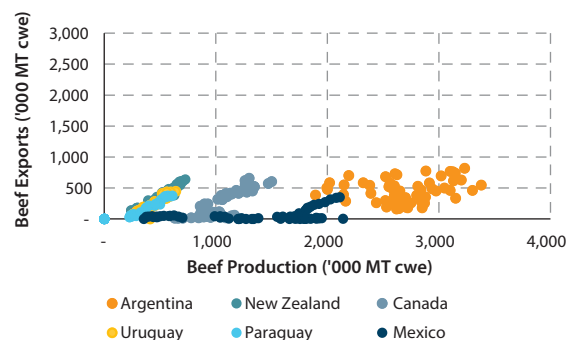
In the global beef trade, Australia has three major competitors in terms of volume, but each with very different characteristics. Of the largest exporters, India provides potentially the least competition with Australia, though still requires attention. Indian beef exports are essentially buffalo meat, or carabeef. While the carabeef is highly unlikely to compete directly with Australian beef in high end markets, or as manufacturing beef in the US, it could increasingly provide an affordable alternative protein in countries such as Indonesia, as well as Vietnam and Malaysia, three of its biggest current markets.

Top 4 Beef Exporters: Exports vs Production



Source: USDA PSD, ANZ

Next 6 Beef Exporter: Exports vs Productions



Source: USDA PSD, ANZ

While the short term challenge may not be immense, in the longer term, the consumption of Indian beef could potentially start to impact the live cattle trade to Indonesia. Many Indonesian consumers currently base their beef buying habits on the lack of a sophisticated cold storage supply chain. As this gradually develops, consumers may move away from the wet markets, to retail beef options. When this happens, Australian product may remain expensive compared to other options that are more budget friendly.

The **US beef export sector** has largely recovered from the Covid disruptions to its processing sector in 2020. At the time, Covid related shutdowns of US processing operations led to a build-up of animals, until current meatworks could resume normal operations. There were also concerns that this backlog would flood onto world markets, reducing global beef prices, though this didn't occur. With Australia's tight supply, the US is now the world's second largest beef exporter, well behind Brazil and marginally in front of Australia.

The US and Australia "co-exist" as the major suppliers to two of their biggest markets – Japan and South Korea. Both countries dominate those markets, but are restricted from advancing their market share much further than the current figure, due to safeguard tariffs which kick in under each country's free trade agreements, in a bid to protect the domestic cattle sectors of Japan and South Korea.

Australia's **biggest competitive challenge** remains from **South America**. Each of the major players – **Brazil, Argentina, Uruguay and Paraguay** - have their own characteristics, from beef quality and price to political relations with major importers. Additionally, each are also continuing to grow strongly in terms of their market sophistication, as well as the quality of their product.

In the longer term, the competition from South American exporters shows every sign of continuing to strengthen. The inflow of global investment money to the supply chains, from production to processing to infrastructure, and the consolidation and growth of major farms in the main cattle production regions will only see this grow further.

Outside of these major competitors, the Australian beef industry will continue to be aware of the fortunes of other reasonable sized beef exporters, and where they may compete in the same markets. While **Canada** is currently the world's seventh largest beef exporter, around 70 percent of its product ends up in the US. **New Zealand** will also continue to provide some competition in the China and US markets, although the impact of incoming environmental regulations on its beef production and export volumes remains to be seen.

Looking Ahead

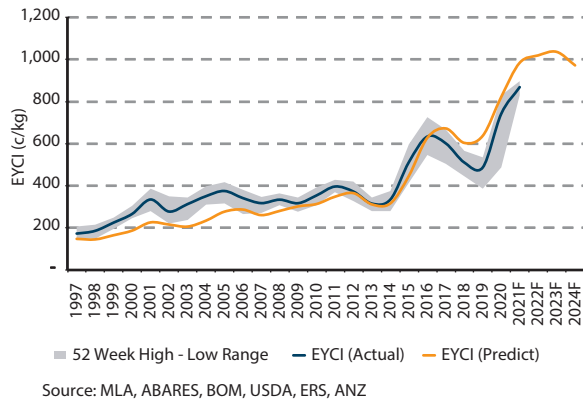
With Australian cattle prices having continued to hit record levels in the first few months of 2021, market observers will continue to speculate about where the market will head, not just over coming months but years. Given that few observers would have forecast the current situation a year ago, it's unsurprising that forecasts will differ widely.

While this paper makes no claims to be able to look into the future, we have constructed a model aimed at identifying the variables which, when combined, may have the strongest impact on the direction of cattle prices, and as a result, be able to provide some slight guide on where they may head in future.

Our pricing model utilised three variables (**female cattle slaughter ratio (FCSR), Australian and USA cattle herd ratio and the AUD/USD exchange rate**) in seeking to understand changes in EYCI annual average between 1971 and 2020. While there are certainly other variables which impact the EYCI, these three variables were used due to the sophisticated forecasts available.

As the chart shows, while there has been some deviation at times, the predictions from the forecast have relatively closely reflected the actual price.

EASTERN YOUNG CATTLE INDICATOR PRICE FORECASTING MODEL



Using these variables, the model comes up with quite an interesting result. Rather than prices beginning to decline later in 2021 as restocking eases (which is the view of most observers – including the authors of this report), the model forecasts prices to stay around the 1,000 c/kg mark for the next two years, before returning to the high 900s by 2024. Accepting that the average standard deviation of error (predict vs actual) averaged 17 percent in the historical data, this could mean prices heading back to the mid 800s.

While we make no strong claims to the accuracy of these forecasts, it does importantly raise the question of how the industry would operate in the longer term if prices did indeed remain around current levels, or even higher.

Some of the implications could include:

- An increasing number of re-stockers finding difficulty in accessing affordable cattle
- Strong returns, potentially for larger operators, able to strategically offload stock
- Tighter feedlot economics, potentially enhancing the need to lock in ample feed supplies
- Challenging processor margins, possibly leading to further capacity reductions
- Increased retail beef prices and possible consumer reaction.

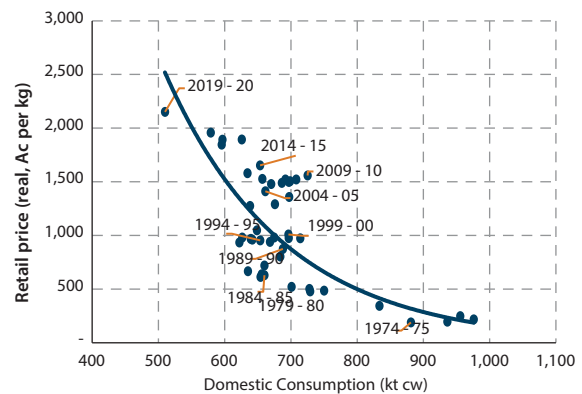
While these scenarios are all speculation, it is worth considering that many across the supply chain are basing their outlook on prices easing, and while this may well turn out to be the case, it could also be prudent to prepare for the opposite.

THE CONSUMER

While much of the analysis of the beef supply chain can focus on the production aspect, it is ultimately the consumer who will have the final say in much of the direction of the beef industry. In terms of per capita animal protein consumption, the average Australian diet has barely changed over the last fifty years, remaining at around 100kg per year. What has changed markedly has been the composition of the different meats which make up that diet. From making up around two thirds of the average Australian meat diet fifty years ago, the proportion of beef consumed has plummeted, now making up around only twenty percent. For twenty years Australians have eaten more chicken than beef, for the past seven years they have eaten more pork.

While these figures are not catastrophic, they do emphasise the need for the beef industry to continue campaigns to push the benefits of beef to consumers. This is especially so, given that the challenge now is not just from other animal proteins, but from the steady growth in plant based proteins.

Australian Domestic Consumption vs Retail Price



One interesting discussion point in this is whether the record cost of cattle could translate into noticeably high beef prices on the retail shelves, and the impact this could have on consumer behaviour. To examine that possibility, this report modelled the correlations between the retail price of beef and the average level of domestic consumption. Interestingly, the model found the impact of price on consumption rates was actually declining. With consumption continuing to fall, this would indicate a more structural change in Australian diets, such as developing a preference for other meats, or basing their diets on their perceptions of the health implications of other foods versus beef.

On top of the declining per capita consumption, this trend again emphasises the need for the industry to maintain strong and positive marketing campaigns around beef to Australian consumers.

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