



milestone report

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Assessment of price transparency in the beef supply chain

Milestone 4: The likely benefits of improved beef price transparency

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Abstract

Examined the range of segments in cattle and beef price transparency. Use an outline to unbundle the supply and value chain to establish issues, scale of issues and estimate benefits of improved beef price transparency.

Any increase in price disclosure will assist Australian cattle markets to work more efficiently in matching beef and co-product production to customer requirements.

The clearest benefit of OTH and paddock sale price transparency would be enabling producers to easily ascertain who to sell to on any given day and at what price, thus boosting competition between processors (and live exporters) and raising average producer prices.¹

A closely related benefit is in helping producers to better meet processor target specifications or grades – hence, raising average producer prices (as well as significantly benefiting processors and consumers).

The values of wholesale, retail and export beef price transparency include:

Enhance and allow clear transmission of price signals to allow producers to supply target markets and increase their return on investment. Improved market shares for beef versus competing protein. Potential to increase MSA premiums and generate improved retail sales and industry value added. Greater diversity of market options, more transparent values along supply chain.

The study team having reviewed the potential options believe the following offer the most potential to both improve price transparency and have the most prospect of success.

- Beef export prices – review and negotiate release of the shipment values and volumes held by Australian Customs. This data would eventually be used to develop cutouts for a number of categories including export steer, export cow and, subject to data availability, grain fed steer.
- Retail beef prices – review availability of individual bar code data for the full volume and value of retail beef cuts and trimmings transacted in the major

¹ USA study. Data from the Fed Cattle Market Simulator (FCMS) were used to assess the impact of limiting information on the efficiency of the fed cattle market. Results of the econometric models developed here indicate that the absence of current market information created inefficiencies. This was evidenced by increased transaction price variance and by the increased marketing of fed cattle at less industry-efficient weights as a consequence of the removal of information from the market. The results of this experimental simulation also provide evidence that traditional, predictable economic relationships may be altered in the absence of public market information, thereby contributing to pricing inefficiencies. Anderson 1998

supermarket retail sector. Calculate a supermarket steer cutout. Nielsen SKU scan data.

Over the hook grid cattle prices – subject to processor and producer support, exploring the options to increase and expand cattle price transparency in relation to grid prices, prices for cattle actual sold and treatment of discounts, downgrades - to enhance value based marketing

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perspectives about their section of the cattle and beef value chain in Australia or overseas.

1 Milestones 4 achievement criteria

Use information collected in milestones 2 and 3 to describe the likely benefits of improved price transparency at each point of typical cattle supply chains in Australia, including benefits from:

- Improved marketing decision making on farm utilizing additional price information
- Attracting investment - the value of accurate price information to potential investors in beef cattle production.
- Increased competition from new entrants with accurate price information allowing new entrants to do due diligence.
- Any other identified benefits.

2 Background & methodology

This task is an exercise to describe the potential benefits to grassfed cattle producers if full beef price transparency² were to be achieved at all stages of the beef supply chain. While price transparency is never fully achievable, it is still useful to pose this hypothetical question, without introducing the additional complicating issues surrounding individual transparency options or mechanisms (to be covered in milestone 5).

However, the authors have not quantified value of full transparency to Australian cattle producers, as it is seen as extremely variable, not feasible, or particularly useful. The benefits of better price information are indirect and cannot be separated from other (often much more important) factors which go into cattle producer decision making and the operation of markets. Potential approaches to valuation are discussed where relevant.

In attempting this exercise, the authors drew on knowledge of the beef chain price transparency gaps (from milestone 3), the reported benefits of better beef price transparency overseas, especially in the US (milestone 2), and the interview responses from Australian cattle producers, buyers and others – as well as the considerable combined knowledge and experience of the team in providing price and other market information to the Australian beef industry.

² A market in which prices always "fully reflect" available information is called "efficient". Efficient capital markets: A review of theory and empirical work EF Fama - The Journal of Finance, 1970

3 Benefits of fully transparent cattle price transactions

In milestone 3 it was concluded that “...cattle sales for major beef supply chains involving primarily cattle sales direct to processor or exporter or paddock sales are not very transparent. This particularly applies to good quality grown steers (especially Japan ox), HQ cattle for specialised markets (e.g. EU, China and domestic foodservice), domestic supermarket cattle and live export cattle.”

Unlike most other countries (especially the US), a substantial proportion of slaughter cattle in Australia are still sold via fully transparent and well-reported auctions.³ Furthermore, producers can obtain useful price information for sales of cattle direct to processors, supermarkets and live exporters by obtaining grids from processors and watching NLRs average weekly OTH state price reports, live export price quotes and auction sales of similar cattle. However, the administration of the penalties and discounts as part of processor OTH grids is not fully transparent and has added to cattle producer disquiet.^{4 5} In the case of live export, lack of reported transactions and no representative price series is not viewed as seriously as in the beef sector due to premiums being paid for live export cattle due to the size of consignments and more control of the selling prices of livestock compared to overseas markets setting prices for beef.

In a general sense, any increase in price disclosure will **assist Australian cattle markets to work more efficiently in matching beef and co-product production to customer requirements.**⁶

This occurs by producers being able to more quickly direct production towards areas of greatest demand, to better meet latest market specifications and to produce at times when demand is highest – speeding up the process of price discovery and

³ ABARES survey samples indicate 27.9% sold by auction c/kg in 2013. <http://apps.daff.gov.au/MLA/mla.asp>. The range in the sample from 2010-2013 was 22-23%. This is Australia wide.

⁴ It is the non transparent nature of grid selling where the discounts appear to be arbitrary and inconsistent. Producers have little control and there is no reporting of the premiums and discounts as per USDA direct sales report weekly: http://www.ams.usda.gov/mnreports/lm_ct155.txt

⁵ In addition there is evidence from discussions with two key industry participants (corporate pastoral and beef CRC Director and leading processor organisation rep) that grid consistency and ease of understanding linked to feedback and working with cattle producers would assist transparency. <http://www.mla.com.au/mbfp/Meeting-market-specifications>

⁶ Market signals. *Meeting market specifications*. “Every producer strives to: gain a reputation as a reliable supplier of quality beef maintain market access to as many markets as possible be financially rewarded when a high proportion of stock consistently meets customers’ requirements. This is a ‘win-win’ situation for both you and your customers.” <http://www.mla.com.au/mbfp/Meeting-market-specifications>. In order for any of this to work, there must be price transparency. Price signals are basic to meeting consumer requirements.

smoothing out price peaks and troughs. It may also facilitate more accurate due diligence by potential investors at various segments of the supply and value chain.

The clearest benefit of OTH and paddock sale price transparency would be **enabling producers to easily ascertain who to sell to on any given day and at what price**, thus boosting competition between processors (and live exporters) and raising average producer prices. However, the extent of this price benefit depends on how good producers currently are in obtaining the best price on offer, through agents, contact with processors (or live exporters) or watching OTH and saleyard prices for similar cattle.

A closely related benefit is in **helping producers to better meet processor target specifications or grades** – hence, raising average producer prices (as well as significantly benefiting processors and consumers).⁷ The current large, complicated, changing and varied nature of processor price grids and lack of useful processor feedback to producers (and ready advice on how to profitably rectify such shortfalls) makes meeting specifications a difficult task for many producers. Livestock data link 2013 indicates that bruising and butt shape penalties were not applied in their sample. Our sample of grids indicate penalties for bruising and butt shape and some grids have exclusions. Our review of grids suggested they are geared to heaviest weight in meatworks. E.g. they generally promote carcase weight to very high levels except for supermarket supply chain partners. Most of the upper weight ranges in grids far exceed the average carcase weight in Australia in recent months.

It is the recognition of **this major production inefficiency** that has led to the MLA's Livestock Data Link (LDL)⁸ project, though this has been slow to get traction with processors. Full OTH price transparency would not automatically overcome this issue, as the information generated would still need to be simplified, analysed and probably customised (together with production advice) to assist individual producers to better target profitable processor grades.

Similarly, full cattle price transparency could assist producers to **decide whether to target different cattle grade(s)**, though this is probably possible, to some degree, now with the use of detailed processor grids.

⁷ These benefits are not going to apply to all producers, but they are included if, in the assessment of the authors, they are likely to apply to a significant number of producers.

⁸ Price transparency is all about actual prices being paid (not base offer prices) and if the discounts are not clearly understood, communicated or applied, it affects price transparency.

It would also help producers in **other medium- to long-term production, marketing and investment decisions**, such as when to sell, whether to alter cattle breeds or feeding and whether to purchase more land or sell.⁹

The above potential impacts on cattle producer marketing, production and investment decisions will likely have an impact on cattle prices received, particularly if they place them in a better position to negotiate a better price or to meet customer requirements. However, many will also have implications of production and costs (negative or positive).

Forward selling platforms are utilised in almost every other commodity. The beef industry has had two or three attempts at setting this up but it failed¹⁰. Maybe clearer price transparency could alleviate earlier problems. From some investors perspectives entering a trade that does not have forward contracts, futures markets or other derivatives, can be a deal breaker so they invest elsewhere. All investors need to lay off or at least spread risk one way or another.¹¹

Another likely benefit from full cattle price transparency would be to **assist potential investors (especially those from outside the industry) and capital providers (banks) to more confidently assess the merits and risks of potential investments in Australian cattle farms**. How cattle perform in price and quality, what grade they make and what market niche they fill, together with potential for improvement, are vital inputs into any due diligence on cattle farm alliances or investments.

Currently, potential investors can only compare a property's cattle prices and quality with NLRS published state average OTH grid prices to assess performance. This price comparison provides some indication as to whether weights fall out of the 'state average' processor specification and whether there is a premium over the state average offer price. **However, it would be far more valuable to an investor to be able to compare a property's cattle prices to actual prices received OTH by other producers of similar cattle, ideally to same local processors, or at least in the same region (rather than state), on the same day.** When price

⁹ From interviews and general industry consensus based on experience of study team and, in particular, Mr Warriner's experience in dealing with sale of cattle properties, as an advisor and consultant to large cattle station owners and frequent negotiations with investors looking to acquire pastoral holdings over the past two years.

¹⁰ MLA reports of the SFE cattle contract in 2009 indicate no trades and falling open interest. Comments by both MLA and Rabobank refer to "as the cattle industry's appetite for the use of risk management tools has been slower to develop than previously thought." MLW&Stats 21-08-09

¹¹ Quote from large pastoral company "Price transparency enables derivative mechanisms to offset risk. Australia needs this as there are none. Past two attempts failed. One based on deliverable contract. The other based on non-deliverable contract. Total price disconnect between beef and cattle."

transparency is achieved investors will have a better understanding of the balance and variability of that balance through the value chain. Risk can then be better understood. Investment in an integrated strategy would be better advised. Competition would then be greater and thus a better price back to producers.

Assisting potential investors and capital providers is likely to increase the flow of capital to the sector and lower the cost of capital.

There are likely to be other secondary or indirect benefits of full cattle price transparency, such as **ensuring the integrity of cattle sales and allaying concerns about increased beef processing industry concentration**. This seems a particularly attractive benefit of price transparency in the Australian context, given the current lack of trust between many producers and processors and retailers.

In the US, the advent of mandatory processor cattle purchase prices has also assisted to **underpin the provision and uptake of a broad range of cattle selling options**, including forward, formula and futures markets.¹² The benefits to be derived by producers from this in Australia would probably be even greater than in the US, as the lack of credible and secure product prices has been a major factor preventing the development of forward selling of cattle, futures markets and other derivatives. If all prices for cattle were reported with integrity, it would almost likely provide a base for a range of new cattle (and beef) selling options. For example, derivative type mechanisms such as futures, options and a range of risk mitigation tools.

Full cattle price transparency is likely to be of **direct benefit to processors themselves (as occurred in the US), in better benchmarking** their prices against those being paid by others.¹³ Together with wholesale price transparency, it would also **assist existing processors or potential new entrants to make investment decisions**.

¹² Study team initial report and interviews with USA cattle organisations and producers, literature and full range of market options reported by USDA MPR.

¹³ The Chicago Mercantile Exchange (CME) comments in relation to depth of US cattle futures market and full participation from a range of processors and producers as well as speculators to ensure the liquidity is there for entry and exit to contract. Interview with CME by study team. These comments were given on the understanding that they not be referenced publicly

3.1 Outline of supply chains, issues, possible solutions, benefits and the potential scale of benefits

The following table includes possible solutions which have been identified by industry participants and are not necessarily supported by the study team, nor have they been subject to benefit cost analysis at this stage. It is a means of summarising the issues and possible solutions in tabular form.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
Cattle Price Transparency	Live export index	Single agent's price	The industry does not use this price in the day-to-day market. It is an historic price "for the record"	Enhanced price surveillance and efficient dissemination of good information	Market planning and industry development	Trend to higher unit livestock values

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
	EYCI (Eastern Young Cattle Indicator)	Issues raised by live export sector and supermarket cattle buyers. In the case of supermarket buying, unfinished store cattle creating volatility and distorting the index or abrupt contractions of supply after drought breaking rain. ¹⁴¹⁵	EYCI Index may be returning a higher price by inclusion of store cattle since 2004	Develop system for excluding unfinished store cattle from the EYCI. EYCI could be the basis for a more interactive platform.	Increase confidence in the index Producers better able to interpret movements in the EYCI	Closer tracking of EYCI to domestic supermarket cutout.

¹⁴ Importance of southern beef industry for domestic consumption. Figure S1 ABARES 2012. EYCI weighted too heavily by northern cattle.

¹⁵ As the EYCI is an indicator, and the largest end users of young cattle in Australia are supermarket chains, their views must be included but have not been subject to detailed investigation. They are opinions sought as part of the project and were rated an issue.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
	OTH Grids	Lack of published prices	Qld major beef state – up to 2 million cattle per annum sold OTH However this is a national issue as OTH pricing is increasing, particularly in supermarket sector. ¹⁶	1. "Open platform" with compulsory price submission website (based on AUDA offer board concept) or 2. Improved reporting across the board	New investment in beef production sector Increased competition	Long term trend reflecting cutout indicators Farm gate price is possibly improved.

¹⁶ Over 80% of Queensland beef production is exported and this was also identified in the ABARES 2012 report for the Northern Australian Ministerial forum.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
	OTH Grids	Grid inconsistency ^{17 18}	Slow up-take of Livestock Data Link and lack of meaningful feedback to producers from processors. Reduced productivity, lower efficiency dividends, levy payer/producer dissatisfaction.	More standardised grid formats. Otherwise, a model where individual grid data is entered to create a close approximation of a forecast price per kg.	New entrants to production and processing sector can access detailed data Increased competition Levy payer/producer satisfaction increases	Potential losses estimated at up to \$280 per head by LDL research. ¹⁹

¹⁷ Evidence from a review of a range of OTH grids indicate larger processors exclude cows under 160 kgs carcass weight.

¹⁸ Inconsistency with processor and retailer grids. Given that no grids are actually publicly available via a very comprehensive Internet search by skilled team members, it is critical that the transparency of price as well as discounts or premiums need to be understood and investigated. MLA published one document in a website in 2013 called <http://www.mla.com.au/files/ead0e6fe-3879-4000-9bc8-a18600ba73f6/Average-market-requirements-and-discounts-across-Australia.pdf> Website: <http://www.mla.com.au/mbfp/Meeting-market-specifications/Tool-71-Beef-cattle-market-specifications>

¹⁹ Livestock Data Link – Program Overview (Cattle) 2014

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
Cattle Price Transparency	OTH Grids	Grid complexity	Grid penalties and less efficient beef processing as insufficient cattle are meeting the target weight and grade “sweet spot”. Grids are not lining up with AUS-MEAT language	Enhance up-take up of Livestock Data Link and troubleshoot individual producer issues via workshops. Appropriate response to the current beef language enquiry	Increased volume of cattle inside targets ²⁰	Losses quantified by MLA in carcasses not meeting weight or other key grid elements
	OTH Grids	Price averaging ²¹	Lack of incentive for producers to increase production efficiency	Ability to identify weaknesses on individual livestock or any other basis with value based marketing.	Enhance farm and cattle industry returns by closer targeting of trade and consumer requirements.	ABARE returns model trend ²²

²⁰ "During 2011/12, MLA conducted a number of research projects to identify the potential benefits of the LDL program at a national level. At the processor level, research conducted across four significant markets indicated that the Australian beef industry loses an estimated \$127 - \$163 million per annum by producing cattle that do not meet customer requirements." MLA Livestock Data Link – Program Overview (Cattle) 2014

²¹ "Part of the problem plaguing the beef industry is an antiquated cattle price discovery process that prices slaughter cattle at about the same average price. Consumers might be willing to pay a price premium for high-quality products that differ from the commodity standard." Martinez 2008

²² ABARES annual surveys conducted of beef properties which is supported by MLA. The samples highlight continued loss making by smaller farms in Australia and was referenced in this report.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
	OTH Grids	Price averaging	Producer farm welfare issues with numerous farms making losses and lowering overall industry returns ^{23 24}	Develop key performance indicators to measure improvement. For example returns achieved in various segments of ABARES surveys	Enhance and increase competition and improvement in cattle producer returns and forge ahead of input cost increases – improve the terms of trade	Increase average weights to target and trend increases in beef production
Cattle Price Transparency	OTH Grids	Difficult to forecast the net price that will be received after penalties etc.	Across all OTH Grid quotes unless in penalties are waived or a flat rate is agreed upon	More standardised grid formats. Otherwise, a model where individual grid data is entered to create a close approximation of a forecast price per kg. ²⁵	Measure or understand added value, premiums e.g. MSA, branding	Range of premiums derived from MLA models

²³ “Structurally, the relatively large proportion of small, generally unprofitable farms has significantly affected industry-level profitability.” ABARES 2015

²⁴ MLA reference to value based marketing <http://www.mla.com.au/Livestock-production/Preparing-for-market/Selling-options> Value-based marketing - Based on the principle of being paid for the inherent value (quality and quantity) of the product to the buyer and the end user, such as systems that provide clear feedback from the consumer to the producer and has a pricing system supporting these signals. Also ABARE costing: CostOfProductionABARE.xls. This indicates that high cost smaller producers lose money if they receive average prices.

²⁵ Our evidence is a study of OTH grids from a range of beef processors and lack of standardisation of weight ranges, with some processors excluding light cows below 160 kgs HSCW.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
Beef Price Transparency	Wholesale prices	No published data	Lack of accurate trends and market information on wholesale sector	1 MPR 2 MPR derivative 3 Voluntary disclosure 4 MLA produce accurate report from current sources i.e. Customs etc.)	Clear line of sight for producers down the supply and value chain	Trend increases in values
	Wholesale prices				Encourage expansion of producers into custom processing of cattle	Value of enhanced market intelligence and wider choice of service processing options
	Wholesale prices				Enhance and allow clear transmission of price signals to allow producers to supply target markets and increase their return on investment	Potential savings to processing sector by higher average carcass weights, with more pass pack of premiums to producers.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
Beef Price Transparency	Retail prices	Butchers Not published, collected MLA Millward Brown surveys	No reasonable method for establishing retail beef trends, volumes and segments		Track promotions, evaluate marketing and advertising campaigns, actual measures of beef consumption trends from volume data	Improved market shares for beef versus competing protein
	Retail prices	Supermarkets – no data collected	No reasonable method for establishing retail beef trends, volumes and segments	Arrange for supermarkets to approve sale of their retail scan data to MLA. ²⁶	Encourage new entrants to supermarket sector and expansion of chain retail shops	Improved market shares for beef versus competing protein
	Retail prices		There is no wholesale market for supermarket domestic beef due to contracted supply chains.	More emphasis on generating a retail butcher cutout based on Millward Brown sample prices	Clear line of sight for producer down the supply and value chain	Potential to increase MSA premiums and generate improved retail sales and industry value added.
Beef Price Transparency	Export prices	Very limited published data	Lack of accurate and weighted export prices for business modelling and industry programs	Explore use of raw Customs Data	Volume and price weightings to determine export market trends and issues	Higher trend unit values

²⁶ Recent MLA advice indicates Nielsen may provide full stock keeping unit (SKU) detailed scan data.

Value chain category	Component	Issue	Scale of the issue	Possible methods, solutions	Benefits	Scale of benefit
Beef Price Transparency	Export prices			Enhanced surveys of beef processors and exporters by MLA	Encourage expansion of producers into custom processing of cattle	Greater diversity of market options, more transparent values along supply chain.
	Export prices				Expand supply chains and encourage new entrants to beef processing	Trend increases in cattle values over time.

3.2 Cattle Price Transparency Benefits, Scale and Costs Estimate

Benefits	Estimating benefit –indicative
Transparency around live export index, EYCI, OTH grids	
<p>Live export Market planning and industry development</p>	<p>Trend to higher unit livestock values</p>
<p>EYCI Increase confidence in the index. Producers better able to interpret movements in the EYCI.</p>	<p>Closer tracking of EYCI to supermarket cutout</p>
<p>New entrants to production and processing sector can access detailed data</p>	<p>Increased demand, a greater range of selling options and improved trend nominal and real cattle prices</p>
<p>Increased competition</p>	<p>Higher livestock prices at farm gate and increased range of selling options including forward contracts</p>
<p>Levy payer/producer satisfaction increases</p>	<p>Stability for levy, improved industry planning. Reduced cost of advocacy and staff savings.</p>

Increased volume of cattle inside targets

Savings to processors and more predictable prices and premiums to producers

Enhance farm and cattle industry returns by closer targeting of trade and consumer requirements

Increases in trend ABARE returns in small, medium and larger specialist beef farms

Enhance and increase competition and improvement in cattle producer returns and forge ahead of input cost increases – improve the terms of trade

Net returns to farms increase, improved ability to service debts and returns on capital invested

Measure or understand added value, premiums e.g. MSA, branding

Price signals reaching producers to enhance grading premiums and target higher value market segments

In general terms, the cost is increased focus and expenditure by on farm and off farm MLA programs working together to transfer information and promote benefits to all stakeholders. Probable savings in advocacy, meetings, communications, PR and staff time offsetting costs and expenditure on developing the programs.

3.3 Beef Price Transparency Benefits, Scale and Costs Estimate

Benefits	Estimating benefit –indicative
Collection of Australian wholesale prices	
Clear line of sight for producers down the supply and value chain	Price signal improved, increases in confidence to invest and improve production
Encourage expansion of producers into custom processing of cattle	Broaden knowledge of custom processing costs and benefits and encourage cooperative movement
Enhance and allow clear transmission of price signals to allow producers to supply target markets and increase their return on investment	More cattle reaching the target sweet spots of weight and grade

Cost estimate. This will depend on data search to establish willingness of industry participants such as wholesale butchers and foodservice industry to disclose data. Unlikely to be recommended by study team.

Benefits	Estimating benefit –indicative
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Collection of Australian beef export prices	
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Volume and price weightings to determine export market trends and issues

Requires discussion with Customs, Department Agriculture and Australian Bureau of Statistics

Encourage expansion of producers into custom processing of cattle

Increase confidence in data to provide accurate costings of cutouts of a range of export beef specifications

Expand supply chains and encourage new entrants to beef processing

Grow the whole beef market either with new supply chains, for example grass fed beef to retailers and foodservice in key export markets. Expand target market customer base.

Accurate trends in market values and ability to target importer, distributor and general trade promotion.

Accurate data as input to projections and market promotion evaluation. Ability to calculate key performance indicators such as increased return for secondary beef cuts.

Estimate cost. Unable to estimate until discussions are conducted with key organisations. Based on user pay systems, a cost will be developed depending on detail of data available, frequency of collection and potential automation of data collection providing savings.

Benefits Retail Prices ²⁷**Estimating benefit –indicative****Collection of Australian beef retail prices**

Track promotions, evaluate marketing and advertising campaigns, actual measures of beef consumption trends from volume data

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Retail scan data by SKU. Includes volumes and prices. Calculate usage accurately

Encourage new entrants to supermarket sector and expansion of chain retail shops

Enhance competition and increase range of market options and niche market premiums

Clear line of sight for producer down the supply and value chain

Calculation of the retail beef cutout will provide estimates of the value chain and its segments

Estimated cost. Nielsen have provided a range of pricing options to MLA including full collection of retail meat scan data. Range of \$100,000 - \$200,000 depending on volume and frequency of data collection.²⁹

3.2 and 3.3 tabulates all the possible options to improve cattle and beef price transparency.

²⁷ There is no wholesale price in supermarket purchasing of young cattle for the largest segment of the domestic market for beef. Once cattle are sold by grids offered by the supermarkets, the next phase of price information is retail.

²⁸ SKU stock keeping unit and generally displayed as a bar code

²⁹ Sourced from communication with Nielsen Sydney staff member

The study team having reviewed the potential options believe the following offer the most potential to both improve price transparency and have the most prospect of success.

- Beef export prices – review and negotiate release of the shipment values and volumes held by Australian Customs. This data would eventually be used to develop cutouts for a number of categories including export steer, export cow and, subject to data availability, grain fed steer.
- Retail beef prices – review availability of individual bar code data for the full volume and value of retail beef cuts and trimmings transacted in the major supermarket retail sector. Calculate a supermarket steer cutout. Nielsen SKU scan data.
- Over the hook grid cattle prices – subject to processor and producer support, exploring the options to increase and expand cattle price transparency in relation to grid prices, prices for cattle actual sold and treatment of discounts, downgrades - to enhance value based marketing.
- A means of mandatory or voluntary entry of cattle prices into an online board after the final price is established and the HSCW is obtained. Preliminary evaluation.
- Use learnings from USA Mandatory Price Reporting and other programs including those of US Beef Board to assess tools to improve cattle and beef price transparency.

Export prices. 80% of Queensland beef production is exported. Approximately 2.7 million cattle sold OTH with total state beef slaughter of 4.1 million head. Australian beef exports account for over 70% of total production. (Export beef figures adjusted to carcass weight equivalent for comparison purposes).

Retail prices. Supermarket supply chains account for up to 2 million head of cattle, mainly in southern Australia.

4 Discussion of benefits of fully transparent wholesale/export beef and co-product prices

4.1 Summary of benefits from full wholesale price transparency

The prices which Australian cattle processors receive for the large array of beef products and co-products derived from cattle is not transparent, with limited price reporting. Hence, cattle producers are deprived of the one set of price information that would, most of all, assist them to know the underlying demand for products derived from their cattle.

However, it is by no means clear how such knowledge would assist producers to obtain a higher price or level out price fluctuations. The key reason for this is that cattle need to be sold when they are market-ready or when feed, water or cash is running short, so producers often have little flexibility to withhold cattle when it is clear that cattle prices are too low (relative to beef and co-product demand).

Another difficulty in producers making use of wholesale prices would be the sheer number of beef products derived from one animal, which would make it impossible to relate individual cut prices to the actual value of an animal on-the-hoof. In the US, a beef cut-out value is generated which gives an indication of overall trends in beef cut value, but without co-products.

There is an opinion³⁰ among producers that transparency will identify current weaknesses (potential opportunities) in the supply chain that could be taken up therefore adding competition to the trade and therefore increasing livestock values.

At least a good vision of trends in the demand for beef and co-products would make for **more informed cattle marketing, production and investment decisions** by those producers with the ability and flexibility to decide.

It is also true that evidence in 2014 that cattle prices were not reflecting the buoyant export demand for beef (in the shape of beef and co-product prices), would have fuelled the **producer, media and public pressure on processors to pass back more of the profits** to producers. However, it is doubtful that this would have significantly changed processor cattle price bids that were being dictated by abundant drought-forced cattle supply and abattoir capacity-constrained demand. Conversely, in good seasons, cattle become scarce and prices increase and processors show negative margins when purchasing livestock at the higher prices.

The US experience tells us that the producer benefits of product price knowledge can extend well beyond short-term producer cattle selling decisions (timing and

³⁰ From interviews and general industry consensus

price) – to assisting in longer-term production, marketing and investment decisions, in risk management and in attracting capital.

It can **assist producers to make the medium- to longer-term production, marketing and investment decisions** necessary to better target areas of growing product demand, even if cattle prices and processor feedback are not clear, stable or adequate enough to provide this guidance. If producers (especially with young cattle and cows) had a clearer picture of the gap that was opening up between trends in product prices and cattle prices in 2014, some may have decided to hold on for the inevitable cattle price catch up – despite the inherent additional feed cost and risk of the drought continuing³¹. As research in detail on options for improving price transparency has not been conducted it is too early to speculate on detailed measurement of transparency improvement.

There are likely to be other secondary or indirect benefits of full product pricing, with perhaps even more profound outcomes for cattle producers in the long-term, such as **promoting trust along the supply chain** – all (to some degree) outcomes of mandatory prices in the US.³² This would seem to be at least as beneficial in Australia where there is a high degree of producer distrust towards major processors and supermarkets.³³

More transaction integrity and trust could **encourage more along-the-chain alliances and branding**. This would also be assisted by a **greater range of cattle and beef selling options** that would likely come from full processor beef price transparency. An example is incentive to increased rate of forward contracting.

Wholesale price transparency would be also be of assistance to processors, exporters and wholesalers in benchmarking their sales/buying performance and for retailers and foodservice outlets (and importers overseas), in their price negotiations with wholesalers or processors.

³¹ It is also likely that producers who made that decision in 2013, when the wholesale price and cattle price trends first widened, would probably have suffered major losses from the decision – having been forced to sell these cattle at low prices in 2014, as the drought continued through another year, feed costs mounted and cattle reached maturity (grown steer weight and age specifications).

³² Continued endorsement by the National Cattlemen's Beef Board of MPR over a period of 15 years. Also now supported by the peak meat processor organisation, the North American Meat Institute. Industry participants use the data and their futures market is active.

³³ NSW and Victorian Farmers have pushed and succeeded in having a Senate enquiry into the red meat processing sector in Australia – particularly market concentration. NSW Farmers Press Release <http://www.nswfarmers.org.au/news/media-releases> March 18 2015

5 Benefits of fully transparent retail prices

Why look at retail beef prices? There is no wholesale segment in supermarket purchasing of young cattle for the largest segment of the domestic market for beef. Once cattle are sold by grids offered by the supermarkets, the next phase of price information is retail. Consumer choices and wants and needs are transferred up the supply chain to producers who require transparency of the largest segment of the domestic beef market to make sound investment decisions

There is limited beef retail price transparency in Australia, with:

- monthly butcher (around 100 respondents in recent surveys) retail prices for a list of 14 beef cuts excluding topside(12 cuts for MSA beef) provided to MLA by Millward Brown; and
- MLA subscription to part of the data from the Nielsen panel survey of 10,000 household which scans the weekly shopping basket.

The main benefit of better retail price transparency would seem to be in **assisting retailers to benchmark their pricing**.

It could also **assist processors and wholesalers in beef price negotiations with retailers**.

Full beef retail price transparency would also **assist new and potential butcher and supermarket entrants** to establish size and value of beef counter with confidence. New entrants, such as Aldi, Costco and others, could value the important fresh beef component of retail meat sales.

A fresh meat offering is vitally important for supermarket chains as the perishables section of fresh fruit and vegetables and the fresh meat displays and self-service counters bring shoppers into supermarkets. Fresh food is a staple and a large segment of the grocery market.

Butcher shops and larger chain and bulk outlets for meat in a fully serviced retail environment could also improve their understanding of beef retail dynamics and invest in larger or more stores, increasing competition at retail. Retail competition and increasing volumes would increase demand for supermarket type and domestic type cattle, particularly in faster growing cities and regional centres in southern Australia.

The data would also be **valuable to MLA in developing promotional programs**. It would enhance the ability to measure advertising effectiveness and to target advertising and promotion based on price and sales data, rather than the Millward Brown and Nielsen samples, which are relatively small.

Coupled with wholesale and export beef price transparency, retail price data and analysis would help to **give cattle producers a clearer line of sight down the beef supply and value chain.**

For example, together with enhanced feedback from processors, it could help producers to **target and grasp the premiums generated by the brands and MSA grading.**

In 2009, a paper was released on Characteristics of Different Consumer Segments in the Australian Beef Market which noted: “Beef consumers in Australia have shown differences in their preferences for products and sensitivity to price. This can be explained by the influence on expected quality of cues related to health, production process and eating experience. Eating experience is difficult to predict as consumers generally do not have enough information to form reliable expectations. In this context, branded beef can help to signal quality and reduce the degree of uncertainty that consumers experience when shopping.”

One of the authors of the paper, has only this week discussed consumer research conducted at the University of Adelaide.³⁴ Findings such as these on the importance of price and appearance can assist marketing planning.

MLA commissioned a study which was released in 2012. “A Model of Meat Demand in Australia to Test for the Impact of MSA”. More recent research (2014) looked at producer feedback demonstration sites “Utilising MSA Feedback to Enhance MSA Compliance”. The MLA website link³⁵ also details: “Meat Standards Australia (MSA) underpins the quality of more than 40 retail beef and lamb brands. These are stocked by more than 500 independent butchers and supermarkets including Woolworths, Aldi, Costco and several IGA stores as well as more than 400 food service outlets.” Supermarket scan data would also show the branded and premium sector volumes and higher prices achieved.

³⁴ Wendy Umberger, University of Adelaide Price, fat and appearance of meat are more important than country of origin, production methods or other labelling claims

³⁵ <http://www.mla.com.au/Marketing-beef-and-lamb/Meat-Standards-Australia/Wholesale-retail-and-foodservice>

6 New processor entrants: the benefit of cattle and beef price transparency

6.1 Importance of cattle and beef price transparency in meat processing feasibility studies

There has been one new meat processing plant built in recent years (by AACo in NT) and several feasibility studies into potential meat processing plants have been conducted over the past five years. The newest study was for the Central Highlands Development Corporation of Queensland and it was completed in January 2015 by GHD. The Queensland Department of Agriculture completed one study in 2012 and a further study was conducted in Western Australian with assistance from the Rural Industries Research & Development Corporation. Of course, AACo conducted a study resulting in construction of the Livingstone Beef plant in the NT (opened this year).

All such studies have to develop business models and cattle throughput projections and rely on price and value chain data to ensure they are comprehensive and facilitate sound investment consideration. The lack of new plants being built in Australia may partly be the absence of detailed price information in all supply chain segments but also the continuing losses generated by processors from 2009-2012.

Acquisitions of existing beef processing plants are also based on detailed and accurate historical price trend data and appropriate models are also built to reflect returns and costs and need to be based on livestock, wholesale and retail beef price data. This is likely to hamper new investment as the detailed price information is not available to construct reliable business models for export and domestic cattle pathways.

6.2 Importance of contract and service killing of cattle

These facilities are essential to provide for increasing competition in beef processing and they also facilitate new entrants and value adding by cattle producers seeking to reach further down the supply chain. Such facilities are also needed in times of drought and high turnoff, such as during the recent two to three years of drought in Queensland. They provide an avenue for cattle producers to contract slaughter their own cattle and seek to add value by selling direct to exporters, retailers or foodservice outlets rather than accept lower OTH grid prices from major processors.

This has been recognised by the Federal Treasurer in his announcement for the approval of the JBS USA takeover of Primo Meat.

The announcement noted: *“As part of the proposal, JBS has agreed to:*

- *continue to maintain the custom service killings currently provided by Primo at its processing plant in Scone, New South Wales. (Custom service killing refers to arrangements between the abattoir and third parties whereby the*

abattoir provides processing services to a third party for cattle acquired by that third party.)

- *continue to maintain the custom service killings in good faith and to the best of its endeavours in both a competitive and profitable manner; and*
- *provide reports to the Foreign Investment Review Board (FIRB) on its compliance with the above condition every six months, until otherwise advised by FIRB.*

*The conditions will be reviewed in three years.*³⁶

7 Measuring the benefits of full cattle and beef price transparency

7.1 Measuring benefits to cattle producers

The difficulty in providing a measurement of the benefit to be derived by producers from full cattle and/or beef price disclosure comes from:

- uncertainty over the contribution raw price information can make to producer decision making, as it is but one input into decisions;
- the lack of any research precedents or means of obtaining producer valuation of decision benefits;
- insufficient knowledge about the extent (and cost) of the current price information gap, especially the role played by available processor grids and saleyard prices;
- the requirement for additional data analysis, customisation or 'value added' services in order for producers to use the additional price information³⁷;

The difficulties in valuing market information generally were extensively canvassed in CIE's *'Market Information Program: The value of good information' in 2009*³⁸. The CIE concluded that:

"Key messages from the consultation and the economic literature show, in practice, the difficulty in obtaining a value of the information provided by the MIP (Market Information Program) to industry."

and

³⁶ Treasurer of the Commonwealth of Australia, Foreign Investment Decision, 4 March 2015.

³⁷ Early studies of the value of mandatory price reporting in the US obtained negative feedback from producers, which was attributed, in part, to the volume and complexity of the price information it generated and the slow emergence of the required analytical and value added information services producers needed to use the results.

³⁸ CIE, *Market Information Program: The value of good information*, prepared for MLA, November 2009.

“An outcome of the consultation process was that in most cases stakeholders (producers) were either unwilling or found it difficult to enunciate the value of benefits provided by the MIP (Market Information Program).”

The CIE also noted that *“Empirical evidence of the value to businesses of any market information services is sparse in the literature.”*

A major component of the MLA’s MIP that was being valued was the saleyard prices reported by the NLRs.

These difficulties in obtaining a valuation and the cost of even CIE’s small sample survey (61 businesses) suggest that a consultative or survey approach is not feasible or useful to value full cattle and/or beef price transparency. Efficient markets require full price transparency as noted in the literature earlier in this report.

These difficulties are present for all farm decisions, whether marketing, production or investment (producer investment decisions or securing outside capital). It is the immediate selling decisions that would be impacted most by better price transparency, as other factors become more prominent for long-term production and investment decisions.

A suggested method would be:

- Use estimates provided by past LDL research to estimate the added value if a realistic proportion of cattle currently not meeting processor requirements were to meet specifications. This would require assumptions as to the producer share of this added value (from past CIE studies) and the added cost of producers meeting specifications (from the LDL program and MLA on-farm experts).³⁹

8 Summary and conclusions: the likely benefits of improved beef price transparency (milestone 4)

The key benefit of full cattle and beef price transparency is to assist Australian cattle and beef markets to work more efficiently in matching beef and co-product production to consumer or export customer requirements. It can speed up the process of price discovery and smooth out price peaks and troughs. This assertion of the study team needs to be tested as we gather data. Price transparency allows the implementation of derivative mechanisms such as futures and options which alleviate price volatility.

It achieves this by assisting cattle producers, processors, wholesalers, exporters, retailers and foodservice operators to more quickly direct production or purchases

³⁹ McKiernan Beef CRC for Cattle and Beef Quality Meat & Livestock Australia Report 2007

towards areas of greatest demand, to better meet latest market specifications and to produce at times when demand is highest.

8.1 Benefits to producers

For producers, cattle and beef price transparency can assist them to:

- easily ascertain who to sell to on any given day and at what price;
- better meet processor target specifications or grades;
- decide whether to target different cattle grades; and
- make other medium- to long-term production, marketing and investment decisions.

It can also assist potential investors (especially those from outside the industry) and capital providers (banks) to more confidently assess the merits and risks of potential investments in Australian cattle farms. This could raise the level of capital input and lower the cost of capital to the sector.

The US experience also suggests that cattle price transparency, when combined with enforcement, could help to ensure the integrity of cattle sales and allay any fears of further meat processing sector concentration and consolidation – something that some Australian producers are currently most concerned about.⁴⁰

It could also underpin the provision and uptake of a broader range of cattle selling options, especially forward selling and direct sales to end-users.

9 Success in meeting milestone 4

The Milestone report has summarised benefits of improved price transparency for cattle and for beef products; it has also summarised some of the issues identified at different stages of the supply chain.

⁴⁰ Current Senate enquiry into processor concentration and earlier comments by NSW and Victorian Farmers associations indicated concern with a group of processors who it is alleged agreed to boycott a Barnawartha Victorian sale.

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11 Appendix

11.1 Tracking beef unit values

We have included this appendix to indicate a suggested method of tracking unit values for beef exports. A unit value is a composite and is obtained from dividing export values collected by ABS by beef exports. Figure 1 approximates longer term values of beef exports while figure 2 indicates the surging export returns in 2014. Absence of beef export price transparency due the weighted volumes by beef cut illustrates the difficulty of cattle producers having a clear price signal for a range of cattle specifications and beef items and the individual export market movements which are currently only tracked by volume and not value in detail.

Australian trend beef export values since 2000 have undergone a series of setbacks due to trade disruptions with BSE issues in North America and Japan and later the global financial crisis.



Figure 1 Australia trends in unit values beef exports

Prices recovered more rapidly in 2013 with rapid expansion in Chinese demand and then soared into new territory with reduced US beef production and spiralling prices for lean grinding beef.

A scale of the benefit of improved beef price transparency are trend increases in beef export unit values. (Unit values and beef export tonnages shown in the chart below – by month 2014, 2015)

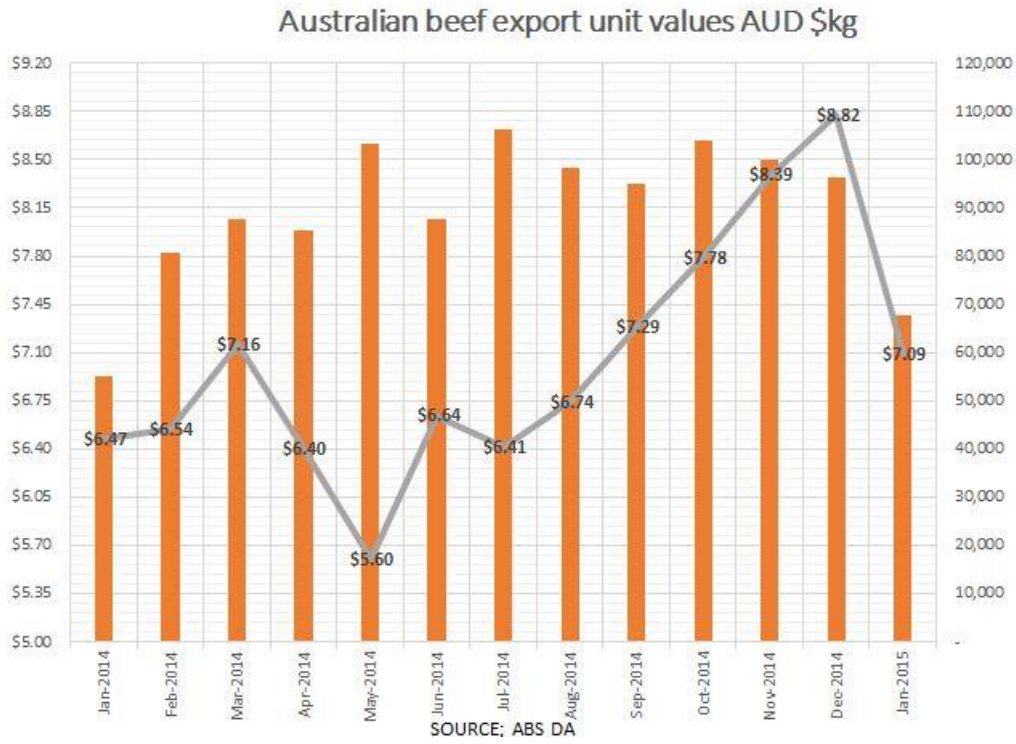


Figure 2 Australian beef export unit values