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ECONOMIC AND POLICY CONSULTING

The Future of the Queensland Beef Industry and the Impact of Live Cattle Exports

Final Report prepared for Teys Bros, Swift Australia and Nippon Meat Packers Australia.

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The Future of the Queensland Beef Industry and the Impact of Live Cattle Exports

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Executive Summary

Overview

- The rapid and unchecked growth of live cattle exports is inflicting significant damage on Queensland's beef processing industry. In the past few years live cattle exports from Australia have risen by a third to reach 950,000 in 2009. Queensland's share of these exports has risen from 12 to 19%. On current expectations, live exports from Queensland could increase from around 170,000 to nearly 380,000 in the next 4 years. (These are statistics of exports from Queensland ports alone and do not allow for Queensland cattle transported to the NT and shipped out of Darwin.)

- The cattle lost to the meat processing industry will see a number of meat processing works either reducing output and employment or closing altogether. The beef industry is the "jewel in the crown" of Queensland agriculture. Not only is it the State's largest manufacturing industry and largest rural based industry, it is also the second largest industry overall in Queensland and the second largest export industry (next to coal) in Queensland. Furthermore, Queensland has by far the largest beef industry in Australia accounting for over 60% of Australia's beef exports to high value premium overseas markets. Australia is the world's largest exporter of premium FMD-free beef.
- The Queensland beef processing industry is big by any standard. It has assets of $3.5 billion, a turnover of $5 billion and generates employment for 36,000 people. While other States may turn a blind eye to live cattle exports if they do not have a significant beef processing industry, Queensland cannot.
- Live cattle exports are cannibalising Queensland's beef industry striking at the heart of its value chain. If left unchecked live cattle exports will bring the Queensland beef industry down with disastrous effects for asset values, investment, household incomes and employment.
- Live cattle exports have grown almost unnoticed over the last 15 years encouraged by subsidisation and protectionist trade policies. It is in no sense a "competitive" Australian industry operating on a level playing field. Imports of key beef cuts are banned outright by Indonesia, which also protects its domestic beef industry and live cattle imports by an escalating tariff.
- Cannibalisation of the Queensland beef industry from live exports has now reached a critical phase. The beef industry is at a crossroads in its history. It needs to plan and invest for major expansion to capture the huge growth in world beef demand in prospect. As many published studies show, world GDP growth over the next 30 years will be driven by Asian economies – China, India, Indonesia and other countries of the region. The massive income growth in these Asian countries as they develop into mature advanced nations will trigger huge demand for higher value food, notably premium beef, which the Queensland beef industry is uniquely positioned to supply provided the significant commercial and public investments in expansion can be made.

- Queensland has a long established, integrated and efficient world class beef export industry. Most importantly it is positioned in the high value premium disease free beef market because of Australia's long standing quarantine protection from FMD and other livestock diseases like BSE. As major Asian countries develop Australia's premium disease free beef will attract even higher consumer status with expanding export values and volumes contributing to Queensland's economic growth.
- But live cattle exports pose a major threat to this unique growth era in prospect. Live exports are increasingly taking our premium disease free cattle out of Queensland's beef industry value chain – cannibalising the industry - and allowing operators overseas to produce premium "Australian beef" in competition with genuine Queensland product. The inevitable end result of uncontrolled live export activity is a shrinking, and the ultimate demise of a major Queensland high value added industry with huge loss of assets, income and employment.

The Queensland beef industry – status and prospects

- Queensland's beef processing industry has developed over the last 100 years into the nation's largest producer and exporter. An integrated, state-of-the-art world class industry, it has assets of $3.5 billion, direct turnover of $5 billion, and generates employment for 36,000 people State-wide. It is the State's second largest industry after coal and the largest food manufacturing industry, and largest rural industry well ahead of wheat and sugar. The beef industry is a major source of investment, incomes and jobs in rural and regional Queensland with major impacts in the Fitzroy, Townsville, Toowoomba and greater Brisbane regions.
- The beef industry is built on the foundation of the State's outstanding comparative advantage in beef production, and Australia's unique disease free status. The beef industry is protected from FMD and other livestock diseases that plague most other countries by Australia's, and Queensland's, strict quarantine control. It is very important, in this context, to understand the world beef market is a "two tier" market divided into a premium high priced disease free market, and a lower priced secondary disease affected meat market. Queensland enjoys a leading status in the world's premium disease free meat market, and over the years has built its assets and its commercial prosperity and expansion around that lucrative market foundation to the long term advantage of all elements of the industry's value chain.
- The future prospects of the Queensland beef industry are outstanding. Like Queensland's leading energy and minerals industries world economic growth driven by rapidly developing Asia – with China, India and Indonesia stand out leaders – the State's beef industry is at the threshold of a new era of growth and prosperity. Rising incomes in these developing nations will trigger enormous growth for higher value added foods, including premium disease free beef, as is confirmed in numerous published studies.

- Queensland, already a major world beef exporter, should adopt a resolute strategy to secure the foundation for further investment in the industry's expansion which will be essential to capture these huge economic and commercial benefits which the "Asian Century" growth era now presents.

Live exports threat

- However, live cattle exports present a clear and major threat to Queensland in capturing the huge market growth in prospect for its export beef industry.
- Live cattle exports strike at a vital link in the industry's value chain. A reliable and expanding supply of livestock is, and has always been, the essential pre-requisite for the beef industry's growth and expansion. The growth of live cattle exporting over the last 15 years has damaged the beef processing industry and now presents a very serious threat to its long term viability.
- Earlier studies have shown that the key driver of live exports is not competitive market forces, but rather subsidisation and trade protectionism. This is still the case today, only more so. For example, imports of certain cuts are banned outright by Indonesia – cuts which are critical to Australian exporters and protect Indonesian processors, feedlotters and livestock importers. There are plans currently to extend these bans to a wider range of products.
- The discriminatory treatment against our beef exports explains why live exports have been able to expand against a background of increased demand for imported beef by consumers in Indonesia whose incomes are rising and who have access to more modern retail outlets.
- The subsidies for feedlotting and processing in Indonesia allied with subsidies for the live trade, and higher government influenced costs and charges for processing in Australia as well as barriers against Australian beef exports generate economic rents for beef processed in Indonesia, some of which are passed back along the value chain in the form of incentives for livestock producers in Australia to supply the live trade.
- Massive investments in port infrastructure, transportation and huge fast ships capable of taking 16,000 head on each voyage are now happening. These developments when fully operational in major ports down the Queensland coast from Townsville to Brisbane will have a profound economic cost on Queensland as higher value income and jobs are siphoned off overseas.
- As to in-market competition, there is clear and unmistakable evidence that beef from Australian live cattle is being produced and marketed overseas in competition with Australian exported beef.
- Some studies suggest this unsatisfactory situation inflicts no economic cost on Australia, and indeed suggest that live exports do not compete with processed beef exports. This is quite wrong. A measure of the economic benefits foregone in a study undertaken ten years ago are that live exports cost Australia $1.5 billion in lost GDP, $270 million in lost household income and around 10,500 lost jobs.

- To encourage the existing regime of unrestrained live cattle exports is tantamount to acquiescing in mercantilist policies which are anathema to Australia's long-standing policies of opposing subsidisation and protectionism in world trade and economic forums. In such circumstances it is fanciful to talk of a "level playing field".

Economic costs of live trade to Queensland and the industry value chain

- Significant economic costs to Queensland and to key regions of the State have been estimated from new economic research undertaken in this study set out in Chapter 4 and the Appendix. This research shows that taking flow on effects into account:

    1. In 2008-09 alone live cattle exports, now running at 170,000 head, cost Queensland $140 million in lost value added (Gross State Product) and 1,200 lost jobs.
    2. On a realistic basis of higher live cattle exports reaching 379,000 head by 2013 the economic cost to Queensland would be $260 million in State GSP and 2,180 jobs lost.
    3. Cessation of the live cattle trade from Queensland and the NT would generate an additional $382 million in gross state product for Queensland. This is actually more than the total value of live cattle exports from Queensland and the Northern Territory in 2008-09. Furthermore there are an additional 3,112 jobs that would be generated.

- This study confirms the findings of earlier work that live exports impose a net cost on the economy as high value added income and employment in Australia is siphoned off overseas. There is undoubtedly, a significant opportunity cost to the State of Queensland from live cattle exports – and to its regions including the Fitzroy, Townsville, Toowoomba and Greater Brisbane areas. The deadweight costs to the Queensland economy of live cattle exports will increase in severity especially in rural and regional areas.
- Short term and cyclical issues such as currency movements, the cattle cycle, drought, floods, etc, are not relevant to the unmistakable long term upward trend now apparent. Supporters of the live trade claim that it has flourished relative to beef exports because relative movements in the exchange rate (rather than live cattle exported in competition with beef) are inhibiting beef exports. For example, it has been asserted that assisting Australia's live cattle trade in 2009 was a comparatively good exchange rate between the A$ and the Indonesian rupiah, in that between March and the end of 2009 it is claimed the A$ only appreciated 12% against the Indonesia rupiah, while it rose 42% against the US$ (in which beef exports are denominated). However from January 2007 since when live exports to Indonesia have boomed, the AUD rose 16% against the USD but increased by even more (20%) against the Rupiah. Short term and cyclical issues such as currency movements are not relevant to the unmistakable long term upward trend now apparent.

- Continued expansion of live exports will cripple Queensland's beef processing industry. Productivity will progressively decline destroying its scale and operational economies and the returns of every element of its value chain - company profits, wages, cattle producers and feed-lotters income to name just a few elements of the significant value chain of this industry. These economic costs will be severe in rural and regional areas of the State as modeling reported in Chapter 4 shows.

The live trade – a free market?

The rapid increase in cattle live exports and recent expansion into the premier beef processing state of Queensland has been characterised as reflecting a free market in operation. If this is the case, then how come………

- *In Indonesia, imports of certain beef cuts are banned outright by Indonesia from Australia – cuts which are critical to Australian exporters and protect Indonesian processors, feedlotters and livestock importers*
- *There are plans currently to extend these bans to a wider range of products which if successful would effectively wipe out the recent inroads made by beef exports from Australia to Indonesia – exports that would have been far greater had it not been for the trade restrictions and subsides benefitting the live trade*
- *There is an escalating tariff for other chilled and frozen beef whereby higher tariffs are applied to beef than to live cattle imports by Indonesia*
- *Many Indonesia abattoirs are unlicensed and accordingly operate at costs which could not be possible in Australia given requirements for health, welfare and food safety*
- *Feedlots in Indonesia receive subsidies in order to develop reportedly including grants of land and subsidised utilities and other inputs*
- *Imports of slaughter weight cattle are supposedly prohibited but reports have suggested up to half of imports at certain times are slaughter weight, effectively pointing to the unsupervised and unregulated nature of the trade*
- *In Australia, live exporters receive substantial subsidies through infrastructure support provided by governments*
- *Live exports also receive subsides through foreign aid and trade promotion*
- *The live trade faces significantly lower government influenced taxes and charges - for example export inspection charges for beef are a multiple of those for live exports.*

As the examples above indicate, the live trade is far from free. The deep-seated nature of these distortions and the deadweight costs to the Queensland economy strongly suggest that the live cattle trade needs to be discouraged.

Introduction

Three leading beef processors in Australia who have major operations in Queensland commissioned research to:

- identify the economic cost to Queensland when cattle are exported rather than processed into beef (in particular impacts on employment and incomes)
- assess the likely impacts on the Queensland beef industry and associated communities if cattle exports continue at current levels or grow
- identify inequities that exist between the sectors.

Ten years ago SG Heilbron produced a report for the Australian Meat Processor Corporation on the *'Impact of the live animal export sector on the Australian Meat Processing Industry'*.

It reached a number of conclusions, notably the following:

Development and drivers of Australia's live animals export trade

- *Australia is the largest livestock exporter in the world. It has developed substantial live exports of sheep and cattle and these are forecast to continue growing. Live exports have come to account for a significant but variable share of cattle and sheep industry output in Australia, and this importance is also forecast to grow on present expectations. The impact on the processing industry of diversion of cattle from processing to live trade will therefore increase in severity.*
- *The demand for live animals has been derived from increases in living standards in developing countries, but the primary factor driving the trade has been market distortions in favour of live animals. If it were not for these factors, the rising foreign demand for beef, in particular, would have been met by imports of chilled and frozen beef rather than live animals.*
- *Governments in Australia have played a part in encouraging live exports. Significant support has given to the live export trade directly or indirectly over the years. Such support took place both in Australia and offshore.*
- *Recent developments in markets and some reduction in the more "visible" trade barriers have meant that some of the distortions to trade favouring live animals are being reduced and exports of chilled and frozen meat rather than live animals will be facilitated. However many important non-visible barriers remain in place.*

Assessment of the live animals trade

The development of the live animals trade has clearly provided an additional marketing option for many livestock producers. This marketing option appears to be highly profitable for some producers, although as one would expect there are concomitantly higher risks associated with it.

However the incentive structure that has driven the trade is riddled with distortions from what would be considered appropriate in a perfect market. These distortions occur in both the export markets (tariff and non-tariff barriers) and the domestic market (incentives biased towards live trade rather than processing).

There is insufficient evidence to support the familiar assertion made in past studies that substantial and sustained premiums exist for producers to sell to the live trade rather than for processing domestically, and that such premiums are based on the live product and Australian beef not effectively competing in the same market.

A competition policy analysis of the market suggests that the development of the live trade has meant an additional element of competition occurring at a number of levels in the value chain from producers to consumers.

The findings of this study are that the incentive structure in the live trade is distorted, and that competition, rather than complementarity, exists between the live trade and the processed product. This has very important implications for policy

Impact of the live animals trade

The live export trade could be costing Australia nearly $1.5 billion in lost GDP, around $270 million in household income and around 10,500 jobs.

The processing industry has not been able to effectively compete for the large numbers of cattle exported live. The major part of the reason for this can be found in the structure of incentives in the market for cattle, that has distorted the market in favour of live exports.

The major challenge for the processing industry is to remove these distortions and overcome any barriers to its ability to compete against the live trade.

The arguments SG Heilbron first proposed ten years ago have never been substantively overturned, and indeed have subsequently been echoed most recently in a study about the live sheep trade in Western Australia[1].

[1] *Australian live sheep exports*, ACIL Tasman, September 2009

This new study focuses on the impact of the live cattle export trade on Queensland – by far the most important cattle producing and beef processing State in Australia. It finds that the key conclusions of the 2000 study cited above remain valid.

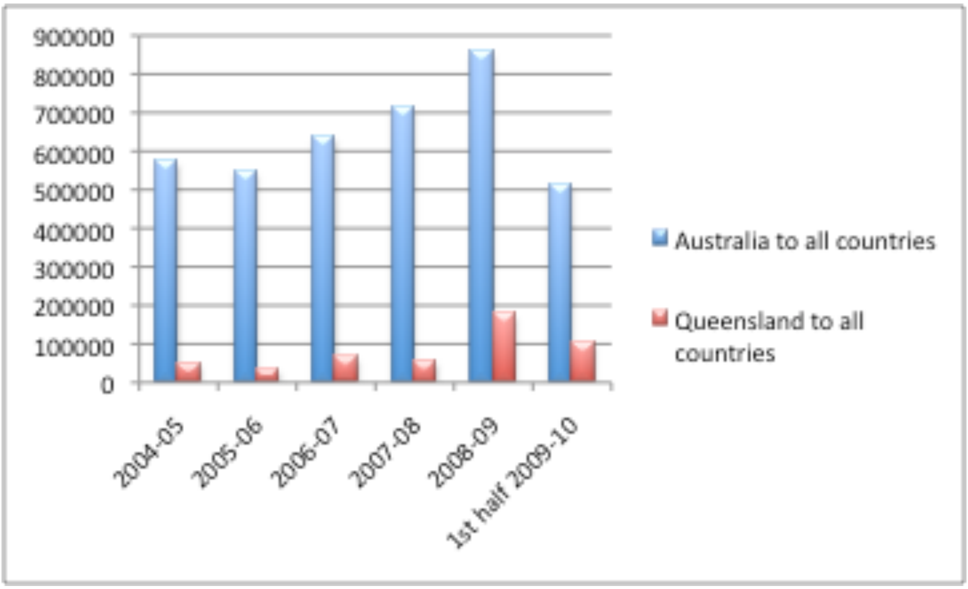
But the seriousness of the situation has increased dramatically. The decade-long neglect of the findings of the previous report, and the unwillingness of policymakers to face up to the impact of the live trade on beef processing, has meant a point of no return has now been reached for Queensland's, and indeed Australia's, largest value added farming-based industry.

1. What has happened with the live trade?

Cattle exports have risen very rapidly

The number of head (excluding pure-bred breeding animals) exported from Australia to all countries has risen from around 575,000 five years ago to over 850,000 in 2008-09 (Chart 1). In the first half of 2009-10, exports have surged further – and on an annualized basis would be over 1 million head.

Chart 1 – Live cattle exports to all countries (number of head)



Source: ABS

It should be noted that the numbers exported have far exceeded official long term forecasts. ABARE forecasts released in March 2009 suggested the number of head exported would rise from 785,000 in 2008-09 to 830,000 in 2013-14. As Chart 1 indicates, these forecasts have already been exceeded[2].

[2] *Australian Commodities*, ABARE, Vol 16 no 1, March Quarter 2009

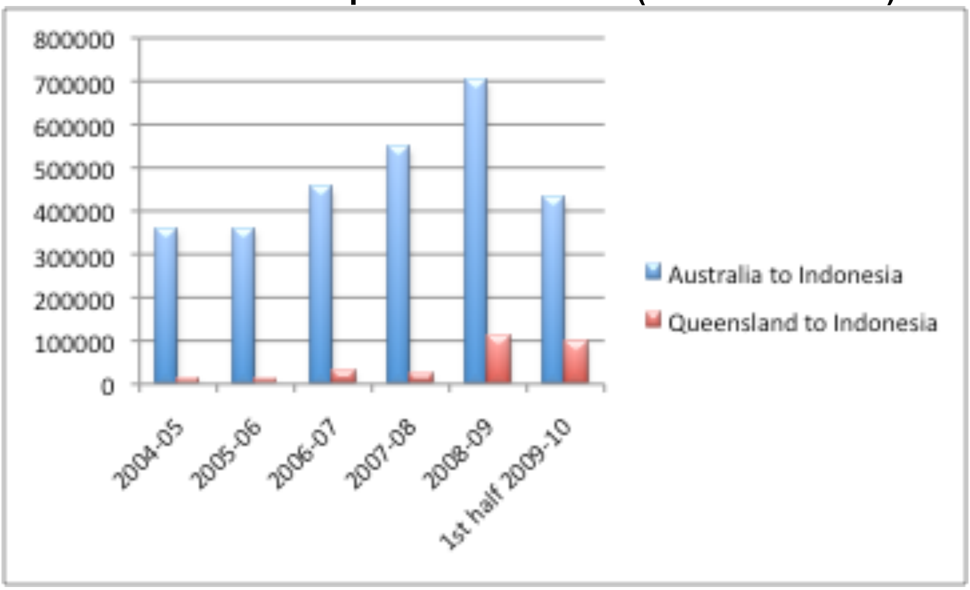
Exports have risen especially from Queensland

The increase in cattle exports from Queensland has been especially large – from around 50,000 to over 175,000 head annually over the same period, and this rise has been concentrated in the most recent year 2008-09 when exports trebled (Chart 1). Exports from Queensland in the first half of 2009-10 have exceeded 100,000 and on an annualized basis would be over 200,000[3].

Exports have been almost totally focussed on Indonesia

The rise in cattle exports has been totally focused on one market – Indonesia. Exports to that market have risen from 350,000 to just on 700,000 over five years to 2008-09 (Chart 2). In the first half of 2009-10 they have exceeded 400,000, which on an annualized basis will exceed 800,000.

Chart 2 – Live cattle exports to Indonesia (number of head)



Source: ABS

Queensland has been important in expanding sales to Indonesia

The rate of growth in Queensland exports has been far greater than that of Australian exports as a whole, with Queensland's exports to all countries rising by over 200% (10 times faster than Australia's rate) to 2008-09 – and Queensland's exports to Indonesia have risen by over 375% (13 times Australia's rate) – Chart 3. Queensland's share of Australian live cattle exports has grown by 7 percentage points in the two years to 2008-09 to reach 19%.

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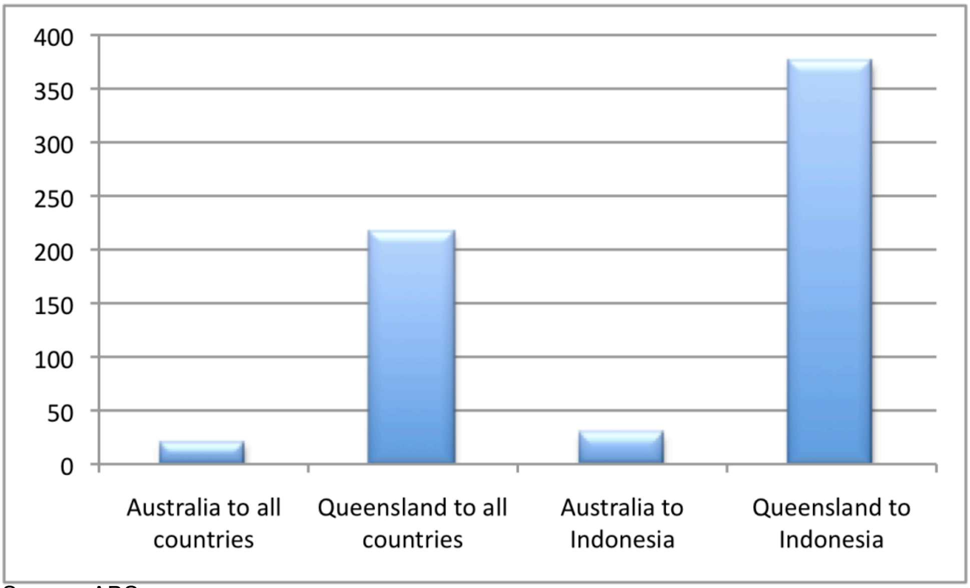
3 [3] Statistics relate only to exports from Queensland ports. It is widely recognized that some Queensland cattle are also exported out of Darwin (see *The Queensland Beef Industry*, April 2009, p 13, Department of Employment, Economic Development and Innovation, Queensland Government, Brisbane).

Chart 3 – Growth in number of cattle exported % 2004-05 to 2008-09

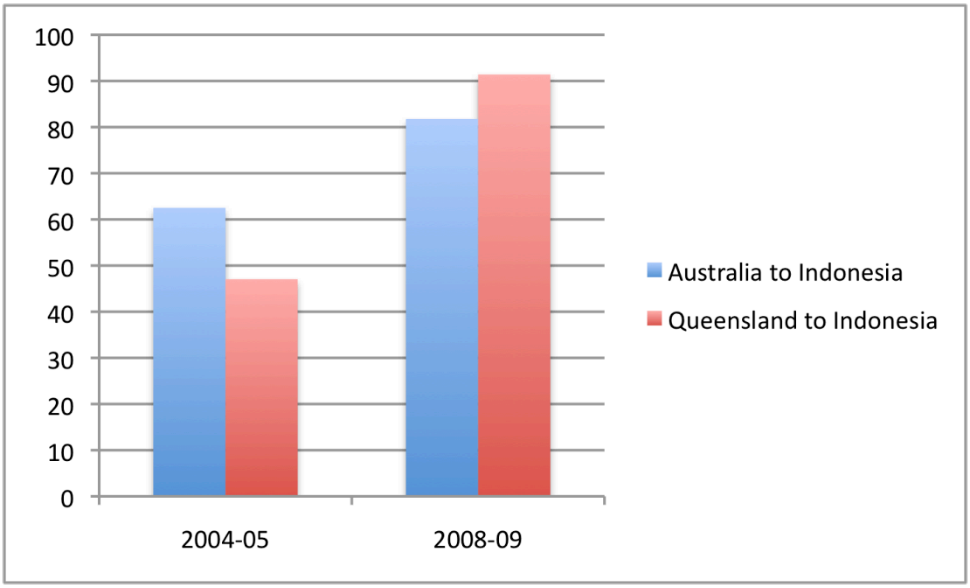


Source: ABS

The live cattle trade has become overwhelmingly dependent on Indonesia

The live cattle trade has over this period thus become hugely dependent on just one market – Indonesia. Over 80% of Australia's cattle exports go to Indonesia (up from around 60% five years ago) while Queensland's dependence is almost total – over 90% of cattle exported go to Indonesia (Chart 4).

Chart 4 – Proportion of total cattle exported to all countries in 2004-05 and 2008-09



Source: ABS

As a result of the expansion in live exports, the cattle farmers have become increasingly dependent on the live trade. According to farm survey data, 75% of properties in the northern regions of Australia that carry more than 300 beef cattle were either partially or substantially reliant on receipts from live export cattle over ten years to 2004-05. Given the huge increase in the trade indicated above since that year, the reliance is likely to have increased.

For cattle farmers such a high degree of dependence on the live trade exacerbated by the dependence on just one market for exports suggests an alarming degree of exposure to risk on their part although they presumably feel comforted that the large Australian beef manufacturing export industry is always there to fall back on should the live trade collapse. This may prove to be an illusion to the extent the live trade weakens, and ultimately destroys, the Australian beef processing industry on which Australian livestock farmers have traditionally relied.

2. Why has this happened?

The conventional explanation for the rise in demand for live cattle especially in Southeast Asian counties like Indonesia rests on a number of assertions.

What are these assertions?

On the demand side, which is of course the most important requirement for any market, the factors typically advanced are notably *low incomes and a lack of storage and refrigeration* which have limited the demand for chilled or frozen beef. The statement that *"A combination of transport and infrastructure logistics in importing countries, together with a range of cultural and religious practices, mean that there is currently a strong preference for live animals rather than chilled or frozen meat*" summarises this view. For live cattle exports, the absence of refrigeration is the major factor according to such a view – necessitating the supply of meat to the population by slaughter close to the point of consumption. In addition, Southeast Asian so-called 'industry reforms' to develop self-sustaining feedlot sectors are also cited[4].

A notable feature of this conventional description of live animal markets is that it represents *a distinct 'segment' of the overall market for meat*. This characterization serves to provide a justification for Australia supplying a lower value product – live animals - into overseas markets for meat. Because it is asserted that the two products do not compete in-market, the increase in live exports, on such reasoning, has no meaningful adverse impact on meat processing – and there is a 'win-win' outcome for the livestock and beef industry as a whole. Imports of live cattle allow shortfalls in demand to be met and also many Asian countries have a 'comparative advantage' in the latter stages of beef production.

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4. *Live animal exports – a profile of the Australian industry*, ABARE research report 08.1 p1, February 2008.

On the supply side, the Australian livestock sector was according to such explanations of the live trade's growth re-shaped from one principally breeding cattle for herd rebuilding to meeting the export demand for live cattle. This is seen, so the story goes, as an unambiguously desirable outcome, since without a market for the Bos Indicus cattle breeds used for live exporting, "*producers may return to the form of production that existed prior to the opening of the south east Asian and Middle Eastern markets – producing cattle for low quality manufacturing beef that commands a relatively low price*"[5]. Implicitly this is suggesting that <u>producers have simply responded to the higher price signals</u> emanating from the market for selling young live animals than for beef.

Moreover, the conventional view is that <u>*these conditions are not likely to change significantly, and hence producers presumably have nothing to be concerned about*</u> from the extreme level of exposure overseas importers have had to the live trade. "*For beef, the prospects for increased sales of carcasses and boxed beef to south east Asia and the Middle East appear limited*"[6] – reflecting a lack of storage and refrigeration, and also a dominance of wet markets where consumers buy the meat to ensure it is fresh. Other purported constraints are the absence of Halal certified abattoirs in the northern cattle producing region, and no demand and hence low prices paid for meat by Australian consumers, from breeds that currently supply the live trade.

What are the facts?

The above assertions are similar to those advanced a decade ago. As was the case then, the key explanations made about the drivers of the live trade notably on the demand side are commonly in the form of assertions with little or no substantive evidence to back them up.

What are the key facts about the drivers of the live trade – as opposed to the assertions?

Fact 1: The live cattle trade substantially competes with the beef trade in key markets

- Live cattle processed into meat in key export markets competes directly, and to a rapidly increasing extent, with Australian meat exports. Therefore there is an opportunity cost for Australia in exporting lower value raw materials than higher value meat.

[5] ABARE 2008 above, p25.
[6] ABARE 2008 above p26

Fact 2: Demand for live cattle is artificially enhanced to the detriment of beef exports

- The live trade is underpinned by distorted price signals that reflect, on the one hand, the subsidies and trade policy advantages given to the live trade and government-influenced taxes and charges and government policy handicaps imposed on meat exports. On the other hand, cattle farmers are responding to a distorted set of signals about what to produce. Signals being received by live exporters are encouraging an over dependence on live cattle exports that not only exposes farmers but also the beef industry, and the economy of Queensland, to significant long term costs.

Fact 3: The live trade directly impacts on the productivity and competitiveness of meat processing

- The live trade directly impacts on the economics of meat processing by reducing cattle throughput below what it otherwise would be, reducing plant capacity utilization and increasing unit costs. This reduces the competitiveness of meat processing to the long term disadvantage of all elements of the industry value chain and to Queensland's export income and economic growth.

Fact 4: There is no level playing field between live trade and beef processing.

- Because of a distorted market both in subsidization and trade barriers here and overseas, opportunities are being lost to add value in Australia in supplying fast-growing Asian beef markets. The idea that there can be a "level playing field" in the present corrupted state of world trade is fanciful. Rather, Queensland should pursue policies that discourage and frustrate trade distortions and support its long established world class beef industry.

These will be dealt with at greater length in the remainder of this Report.

The live cattle trade substantially competes with the beef trade in key markets.

i. <u>Indonesia is a major and rapidly increasing market for beef from Australia</u>

Indonesia takes over 80% of Australia's live cattle exports and over 90% of Queensland's. However Indonesia is also a significant market for Australian beef exports. Indonesia was the fifth largest market by volume for Australian fresh or chilled beef in 2008-09 and the fourth biggest market for frozen beef.

Although the volumes exported are much smaller than those going to the massive beef markets of Japan and the USA, the growth in exports to Indonesia has been much more rapid. Over the previous 5 years exports of fresh or chilled beef grew 260% and frozen beef 442%.

This is totally contrary to the assertion that the "*For beef, the prospects for increased sales of carcasses and boxed beef to south east Asia and the Middle East appear limited"* (see above). The rapid increase in Indonesia's beef imports reflects a number of factors, notably:

- There has been a significant rise in income of Indonesia's middle class resulting from strong economic growth and attendant increased disposable income and modernisation of food tastes. Indonesia has to date survived the Global Economic Crisis relatively unscathed and thus economic growth and rising living standards have been uninterrupted for a considerable period of time. With this has come a rising demand for beef which has exceeded domestic supply capacity and led to rising imports.

- Owing to restrictions by Indonesia on imports of cattle and beef from countries with Foot and Mouth Disease, Australia being FMD-free has been able to tap into a fast-growing premium beef market in Indonesia.

- Most significantly, there has been a rapid expansion of modern food retailing with refrigeration spreading well beyond the centre of Jakarta. This has provided the opportunity for imported chilled and frozen beef to reach the increasingly demanding population.

ii. Rising Indonesian demand for Australian beef reflects a profound and rapid modernisation of Indonesian food retailing

Numerous studies have attested to this development. One 2002 study pointed out that *"only a small proportion of beef consumers, particularly supermarket shoppers, are indifferent to whether the beef is from local cattle or imported beef"*[7].

This reflects domestic consumers' preference for domestic products (commonly trimmings and offal used in local specialties such as meat stews and meatballs for which a premium price is paid). However equally the study pointed out that *"The demand for beef from imported cattle or imported beef is tending to increase, especially in hotel, restaurant and supermarket outlets. The main reasons are the declining availability of domestic cattle, the tenderness of beef from imported cattle or imported beef, and the growing number of consumers who do not care about the source of their beef"*.

[7] Hadi, P.U., Ilham, N., Thahar, A., Winarso, B., Vincent, D. and Quirke, D. 2002. *Improving Indonesia's Beef Industry*, Australian Centre for International Agricultural Research Monograph No. 95 pp.51-52.

The report suggested that *"The market for beef will increase steadily in the future as per capita income and population increase"* and clearly indicated how imported beef in supermarkets competes with beef from other cattle sources, including beef processed in Indonesia from imported Australian live cattle.[8]

However subsequent studies have pointed to the extremely rapid expansion of supermarkets and other modern retail food outlets in Indonesia. One concluded *"Yet, while centuries old traditional food vendors, wet markets and new formats coexist to differing degrees in each Asian market, there is a clear trend in the growth of modern retail at the expense of traditional retail across Asia"*[9]. It estimated that modern retail outlets (convenience stores, supermarkets, minimarkets hypermarkets and other grocery outlets) accounted for 30% of total retail sales in Indonesia in 2006.

A 2007 study concluded that for Indonesia *"The share of modern retail in the retail market was 21.6% in 2000, and had rocketed to 29.6% by 2004, or an increase of 8 percentage points within only 4 years (2000-2004) based on 47 items surveyed in Jakarta This rate implies that at the time of this writing, the share of modern retail is about 35% in Indonesia approximately the same as Thailand in the late 1990s, South Korea in the mid 1990s, or Guatemala a few years ago) "*[10].

Significantly, it forecasts that *"There are several factors that indicate that this trend will continue, and that by 2010 nearly half of food retail will be through supermarkets (converging with the situation in Mexico or Thailand today)*"[11].

<u>iii Imported Australian beef and beef from Australian live cattle imports are competing head-on</u>

In an environment of rapid growth in modern retail outlets where consumers are indifferent to the source of beef, imported Australian beef and beef processed in Indonesia from Australian live cattle are increasingly competing head-on.

In a promotional video (see three minutes into "New beef recipe for Indonesia" – link provided at http://www.mla.com.au/video/MLAIndonesia.html) it is clearly shown how Australian beef is being sold in Indonesian supermarkets in direct competition with beef from imported Australian cattle.

The competition is further directly acknowledged in Hadi (cited above) which models the impact of a 20% increase in the landed price of live cattle from Australia that results in the share of imported beef in total consumption rising (beef imports increase 4.3%).

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[8] Hadi et al above, p94.
[9] *Food retail outlet formats – understanding format success*, IMB Global Business Services, 2006
[10] *Horticultural producers and supermarket development in Indonesia,* World Bank study 38543-ID, June 2007, p14.
[11] World Bank above, p15.

More imported beef is needed to overcome the deficiency in domestic beef supply as a result of the higher feedlot costs and reduced feedlot production.

This is in direct contrast to the assertions of some studies of the live trade which does not accept competition at all. For example, a 2006 study which simulates the impact of cessation of the live cattle trade on livestock producers in Australia simply makes an assumption, which is not supported by any substantive evidence, to the effect that "*A key assumption in the simulation of the closure of the live cattle export trade was that Indonesia would not simply switch to Australian boxed product*"[12]. It was assumed that if the supply of Australian live cattle ceased, Indonesia would change its current policy (of FMD freedom) to permit imports of Indian buffalo meat and South American product as is happening now in Malaysia and the Philippines.

The facts of rapid growth of boxed beef imports from Australia and the rising competition between that beef and domestic beef from Australian live cattle imports directly contradict the assertion made by that particular study.

The official Government agency ABARE makes a similar assertion that *"If Australia ceases to ship live cattle ………..there is likely to be a significant effect on some of the regional economies of Western Australia and the Northern Territory, although the magnitude of the potential losses is as yet unknown. What is known is that these market losses would stem from the substitution of demand of current export markets to alternative sources of supply. That is, countries that currently import live sheep and cattle from Australia are unlikely to substitute their demand for live animals for beef, veal or sheepmeat. Rather, they are likely to source the animals from elsewhere. This transfer of demand would be expected to result in economic losses to the industry and surrounding regional communities"*[13].

<u>(iv) Assertions ignore reality</u>

This ABARE assertion not only ignores the facts of substantial and rapidly rising competition described above but also plays on the fears of cattle producers in certain regions based on a presumed ban on live cattle exports. This begs a number of questions, such as:

- If the live trade were to cease not as a result of a live ban (which seems to be the 'straw-man' implied in the ABARE analysis), but rather as a result of simple competitive forces driven by the substitution of beef imports for live cattle in a rapidly growing and modernising meat market system, would ABARE be warning producers about these so-called "losses"?

[12] *The live export industry: value, outlook and contribution to the economy*, Hassall & Associates, July 2006 p29.
[13] ABARE 2008, p26.

- If the live trade were to cease as a result of such competitive pressures, would there not be any benefits that would flow to Australia as a whole (and potentially to the particular regions identified) from an expansion of the beef processing industry?

(v) Some further commercial realities

In essence, such studies as those cited above simply assume away the actual commercial situation in a rapidly changing Indonesian marketplace.

Importantly, a key feature of the $139 million total value of Australian meat exports to Indonesia in 2008-09 was the presence of not only major cuts but also trimmings and offal products. For example the value of offal exports rose 49% above the previous year to $30 million. The significance of this is that trimmings and offal compete most acutely with beef from live animals imported from Australia that are slaughtered in Indonesia.

The competition in the market from the so-called 'fifth quarter' of beef is especially critical for Indonesian beef processed from Australian live animals. Indonesian beef processing is a small scale activity which depends for its economic viability on selling all parts of the relatively small number of animals killed per slaughterhouse. Australian processing by contrast is a large scale activity allowing mass-production of large volumes of specific cuts, trimmings and offal for sale to global markets.

As Australian products, especially trimmings and offal trimmings enter a market like Indonesia in large volumes, it puts considerable pressure on local processors' ability to secure their returns from the so-called 'fifth quarter' and hence dispose of all the animal. As we shall see below, this has prompted a predictable protectionist policy response in Indonesia.

Demand for live cattle is artificially enhanced to the detriment of beef exports.

Despite the inroads being made by Australian beef in the Indonesian market, those exports could have been greater had it not been for the artificial enhancement of the live cattle trade through subsidies to the trade and barriers and imposts faced by Australian export beef processors.

(i) Australian live cattle exports have been artificially enhanced both in Australia through subsidy and trade protectionism and in Indonesia.

There is no level playing field between live trade and beef processing. In Australia, the live trade has benefitted from Federal and State financial supports for a considerable period of time (some of these were documented in the 2000 SG Heilbron Report cited above), and these continue to be provided.

Just a few current examples are:

- Within Australia, the Live Trade Animal Welfare Partnership includes $1.6 million from the Federal Government to support close cooperation between Australia and key trading partners. This builds on the Live Animal Trade Program which funded better infrastructure for the live trade. In 2008 more than $2.4 million of projects were approved under the Live Animal Trade Program, which was given a $7.6 million extension in 2008.

- The Federal Government is also providing $3.2 million for studies that will scope the infrastructure upgrading of the East Arm at the Port of Darwin. There is a further commitment of $50 million from the Federal Government to expand the port subject to further work by Infrastructure Australia. The East Arm is currently the largest live cattle export port in Australia.

- At the State level in Australia, the cattle export industry will benefit from the $1.5 million allocated to Wyndham Port through the Ord East Kimberley Development Package. The Western Australian government will be delivering $177.9 million of the Commonwealth Government's $195 million Nation Building investment into the East Kimberley region.

- The Northern Territory will also contribute to the East Arm expansion project mentioned above. The Northern Territory government is investing $150 million in the East Arm wharf upgrade.

Live exports also pay significantly lower government-influenced charges than their Australian beef processing industry competition. In Australia, for example, in the year to 30 June 2009 live exports were charged $1.25 per head to cover AQIS charges for export inspection of cattle sold to Indonesia. AQIS charges for meat processors exporting beef worked out at around $4 per head depending on various factors such as throughput levels – over 3 times the level of live exports.

In Australia, meat processors also face disadvantages as a result of favourable treatment given to live exporters in many areas. In transport, for example, the new port access road in Townsville will allow road trains of six-deck capacity to deliver cattle to ships berthed at the port. By contrast, road trains of only four decks are able to deliver to a major meatworks in the area.

In Indonesia, feedlotters and processors of Australian live cattle are subsidised in various ways by governments. For example:

- Indonesia has a clear self-sufficiency policy in basic food production, and this has been implemented in a number of ways. According to commercial sources, the expansion of domestic beef production via the live animals import trade has been underwritten by the provision of significant subsidies to feedlot development including provision of free land and other inputs to production for those developing feedlots. This also reflects a policy of regionalization to encourage investment and economic development in Sumatra and other regions outside of Java.

- Processing costs of live cattle in Indonesia are very low. However this does not reflect a comparative advantage based on inherent comparative resource availability but instead illegal and unregulated meat-works, subsistence wages (the average real wage per month in Indonesia for food industry workers is equivalent to $24.50 per month – the third lowest of all industrial workers), low levels of unionization and substandard working and health conditions typical of low income developing countries that would never be acceptable in Australia. A few extracts from one report on the beef processing industry in Indonesia will serve to illustrate this.

Indonesian beef processing – some features

"Illegal slaughter places are very small and of simple construction. They have no permanent location, which makes it difficult for the government to control them. Illegal slaughterhouses have developed so that people can avoid paying slaughtering charges and slaughter unhealthy or stolen cattle".

"The processing sector has a number of problems. First, the condition of most slaughterhouses, particularly those of type C, is unsatisfactory. Most were built during the Dutch colonial period and not enough has been spent on maintaining them in good working condition".

"The entry of 'wet beef ' into the markets is also a problem. 'Wet beef ' is beef from cattle forced to drink a lot of water before slaughter so as to increase bodyweight. This practice can reduce the beef selling price by 1000–3000 Rp per kilogram and can lower the price competitiveness of normal beef".

"Finally, the entry of beef from illegal slaughtering into the market can reduce the price competitiveness of beef from legal slaughtering".

Source: Hadi et al above, p42-44.

<u>(ii) At the same time, Australian beef exports face significant disadvantages both in Australia and in Indonesia</u>

In Australia, as noted above beef processors face significantly higher levels of government-influenced taxes and charges such as export inspection. And Australian processors would be prosecuted if they tried to operate under the unregulated conditions of their Indonesian competitors. In Indonesia however, beef exports from Australia are especially adversely impacted.

- In the first instance this takes place through an escalating tariff which levies a higher rate on meat imports than live animals. ABARE points out that in a 2007 report there is no tariff on imports of live animals, and the tariff on processed meat products is 5 per cent. It should be noted that a difference of 5% can serve as a significant deterrent to purchase a product such a beef which essentially trades on price. Australia and Indonesia have recently agreed to the lowering of tariffs under the Australia/New Zealand/ASEAN Free trade Agreement which will see the 5% tariff on fresh, chilled or frozen bone-in products eliminated immediately on the agreement coming into effect but the 5% tariff on boneless products remaining until 2019.

- However of greater significance for beef exports is the plethora of non-tariff barriers. ABARE has pointed out that in respect of Australian agricultural exports generally, *"While tariffs on many agricultural imports are low in Indonesia, import regulations are in place that either prohibit the import of some products or increase the cost of exporting to Indonesia"*[14].

- Of most significance is that a variety of meat offal products are prohibited imports into Indonesia. According to ABARE, there has been considerable uncertainty over Indonesia's approach to developing and implementing these regulations. It is expected that such a policy would be supported by a scientific risk assessment, and that the same requirements would be applied to offal produced domestically. As is explained above, these import bans on offal (most importantly on lungs, tripes and spleens) are critical to protecting the domestic meat processing industry and the live animals import industry from competition by imported beef from Australia. The significance of these bans is not mentioned by ABARE, possibly indicating a lack of understanding of the way in which the beef processing industry works in the real commercial world.

- Not only does the banning of offal imports adversely impact current levels of exports from Australia but also there is the prospect of these bans being dramatically expanded. At the time of writing this report, commercial intelligence indicates that the Indonesian Government is considering implementing a regulation that would ban imports of a wider range of cuts, most notably trimmings with less than 80 Chemical Lean content. This would potentially bring the expanding exports of beef from Australia to a shuddering halt.

- Processed meat products are also subject to various "trade regulations", according to ABARE. The example cited is that importers of meat products must obtain a 'letter of recommendation' from Indonesia's government. In addition, *"Indonesian customs officials use*

[14] *Indonesian agriculture*, ABARE, Australian Commodities vol14 no3, September quarter 2007 p537.

a schedule of arbitrary 'check prices' rather than the actual transaction price of imported food products when assessing tariffs. The practice of check prices aims to control illegal behaviour such as dumping inferior goods and to minimise underinvoicing, whereby local importers deliberately underreport the value of imports to evade a portion of ad valorem taxes. However, there is little transparency on how check prices are determined. Check prices are sometimes well above the prevailing international prices"[15].

The facts above beg another set of serious questions, such as:

- In most studies of the live trade, including those by ABARE which has described some of the import barriers against beef exports to Indonesia, why there is no mention of discriminatory trade barriers against beef being a factor explaining the rapid rise in live cattle exports?

- In the recently concluded Australia-New Zealand – ASEAN FTA, was there recognition of the import bans against certain beef products by Indonesia which are critical to Australia? If not, why not? If so why were they not eliminated?

The discriminatory treatment against beef exports explains why live exports have been able to expand against a background of increased demand for imported beef by consumers in Indonesia whose incomes are rising and who have access to more modern retail outlets.

The subsidies for feedlotting and processing in Indonesia allied with higher government influenced costs and charges in Australia and barriers against Australian beef exports generate economic rents for beef processed in Indonesia, some of which is passed back along the value chain in the form of incentives for livestock producers in Australia to supply the live trade.

This situation however is not benign. It does not reflect comparative advantage – instead the signals to Australian livestock producers are distorted by governments in Australia and Indonesia. And they potentially expose livestock producers to serious risks on a long term basis. But at the same time they have a major impact on the beef processing industry, which unchecked threatens to cause a major crisis for this key Queensland and Australian industry.

Finally the way to address the distortions described above is to deal with them directly – by acting to remove them at their source. Subsidising the diversification of live cattle exports away from Indonesia to other similarly distorted markets will only result in even greater adverse impacts on the beef processing industry.

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[15] ABARE 2007 above

3. Why is the future of the Queensland beef industry important?

Fact 1: The Queensland beef processing industry is the 'jewel in the crown' of the Australian beef industry and a key industry in Queensland.

- Queensland accounts for 60% of Australia's cattle and beef processing industry. It comprises the strategic core of the nation's beef export processing industry.

Fact 2: The Queensland beef processing industry supplies the premium world meat markets.

- Queensland supplies premium disease-free markets of North America and Asia (with outstanding growth prospects and virtually no competition given the North American problems with BSE).

Fact 3: The incursion of the live export trade into Queensland will cannibalise Queensland's premium markets.

- This will undermine the ability of the Queensland to realize the expanding opportunities provided by beef exports.

Fact 4: This begs the question of how can the government conceivably allow the live trade to undermine Queensland's future in this way?

- Governments cannot hide their heads in the sand that the expansion of the live trade in Queensland can proceed without the highly important meat processing industry suffering.

Each of these points will be discussed in turn.

The Queensland beef processing industry is the 'jewel in the crown' of the Australian beef industry and a key industry in Queensland.

The adverse impact of the live cattle export trade on the Queensland beef industry is important in a national and State context. Some key facts including flow on effects are:

- The beef industry is the biggest rural industry in Australia worth $7.1 billion in 2008-09 – larger than wheat at $6.9 billion.

- The Queensland beef industry is the largest of the Australian beef industry. It accounts for over 50% of Australia's cattle slaughtering. It accounts for over 60% of Australia's total beef exports.

- The Queensland beef processing industry is very important to the Queensland economy. It is Queensland's largest agricultural-based industry. It is Queensland's second largest export industry after coal. It generates employment for around 36,000 people, accounting for around 2% of total State employment and making it the largest manufacturing industry employer in the State.

The Queensland beef processing industry supplies the premium world meat markets.

- The Australian beef industry is the second biggest exporter of beef in the world. Moreover Australia is the biggest exporter of beef to the premium FMD-free market. The premium in price received by Australian beef relative to a major FMD-endemic exporter such as Brazil is illustrated by the fact that the average unit value of Brazil's beef exports in 2007 was around $US2.20 per kg compared with Australia's of around $3.00 per kg[16].

- Australia rivals the US as the leading world premium beef exporter with competition from smaller exporting countries such as New Zealand and Canada. Australia is perfectly positioned to take advantage of rising demand for premium beef from fast-growing Asian markets such as Indonesia which are concerned about allowing beef from FMD-endemic counties.

- There is no doubt that high quality beef demand will increase world-wide in the decades ahead driven by the fast growing developing Asian nations such as China, India and Indonesia triggering demand for higher value food, including beef, as countries develop with premium food demand supported by the rapid growth of supermarkets, refrigeration and state-of-the-art food services industries[17].

The incursion of the live export trade into Queensland will cannibalise Queensland's premium export markets.

- Live exports are increasing as a percentage relative to cattle slaughtering in Queensland. Live exports of cattle from Queensland are 8% relative to slaughtering – up from negligible levels at the start of 2007. However if one considers the cattle exported from the Northern Territory as also potentially able to be slaughtered in Queensland (after all, they are being transported all the way to Indonesia for feeding and/or slaughter – there is no reason why could this not happen in Queensland), then the NT and Queensland live exports are 22% relative to slaughtering – up from 5% at the start of 2007.

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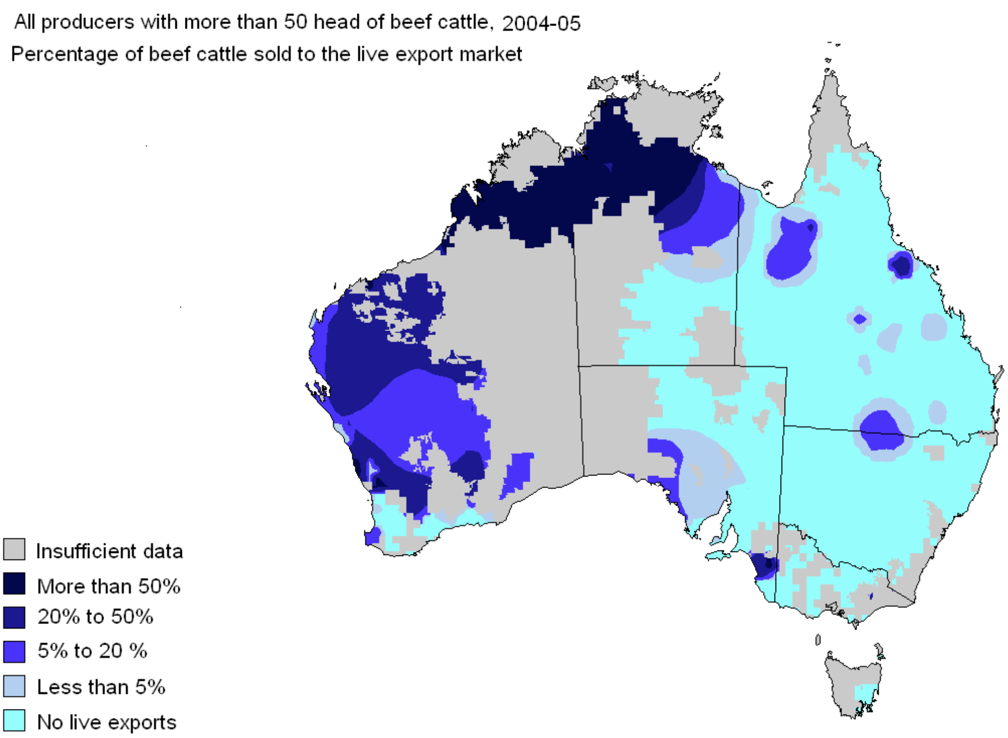
[16] Source: FAOSTAT database

[17] See for example Australian Farm Institute Report *Enhancing the Customer Focus of Australian Agriculture*, SG Heilbron & JT Larkin, October 2006; FAO Expert Meeting How to Feed the World, paper by S Msangi & Mark Rosegrant, IFPRI's *Long Term Outlook for Food and Agriculture*, p4, FAO, Rome; June 2009; and, paper by D van der Mensbrugghe, pp 4,5 & 18, FAO, Rome (op cit); Reserve Bank of Australia *The Growth of Asia and Some Implications for Australia*, Dr P Low, Deputy Govenor, October 2009; Australian Financial Review *Food's New Foe: Protectionism*; AFT, Sydney, 28 January 2010, pp52, 53; Ross Garnaut *The Great Crash of 2008*, pp180-189, Melbourne University Press.

- The incursion of the live trade into Queensland is shown by the maps below indicating the 'hot spots' from which live cattle are drawn for export (Maps 1 and 2). Given the rapid rise in the trade from Queensland since 2007, more recent maps can be expected to show even more and larger 'hot spots'.

- The live trade directly impacts on the productivity and competitiveness of meat processing. The live trade takes cattle which could either be fed in Australia for slaughtering in Queensland or which could be slaughtered immediately. Indeed a substantial proportion of cattle ready for slaughter are being imported by Indonesia despite perceptions (and also regulations) to the contrary. One study points out that *"According to Indonesian government regulations, the maximum allowable weight of imported feeder cattle is 350 kilograms, but the import statistics show significant imports of heavier cattle weighing up to 400 kilograms (33–49% of live cattle imports in recent years). The import of the heavier cattle reflects both orders from Indonesian importers and intentions from Australian exporters to include them. The weights of delivered cattle are not always exactly as ordered and depend to some extent on cattle availability in Australia. In Indonesia, cattle less than 350 kilograms are fattened in feedlots, but heavier cattle are slaughtered immediately"*[18].

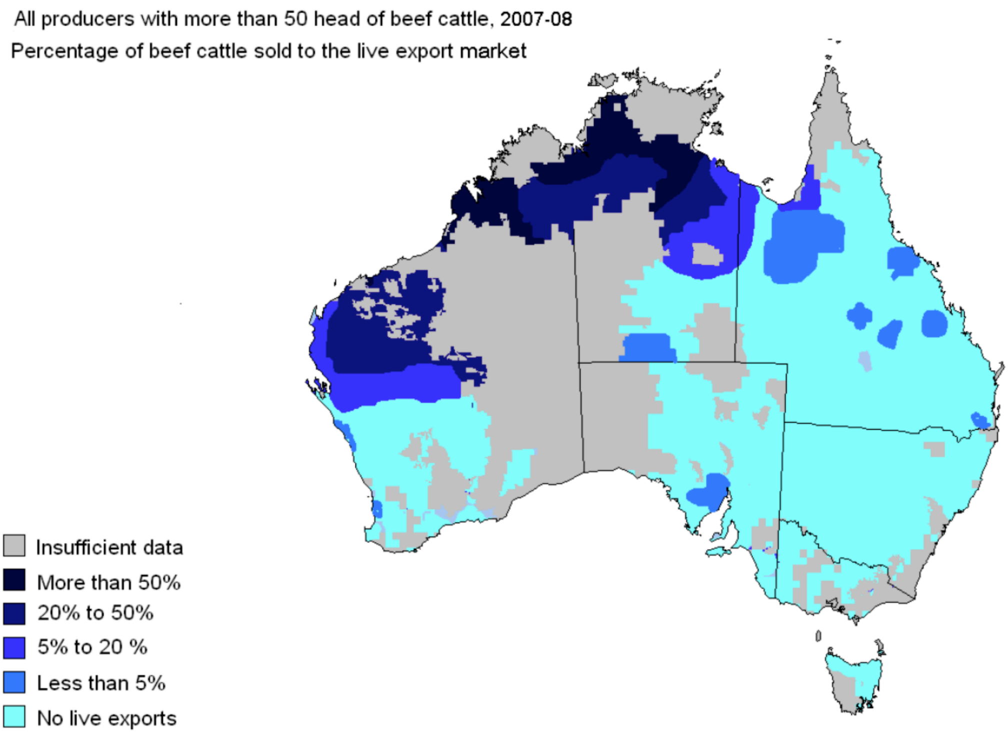
Map 1 – Live export 'hot spots' 2004-05



Source: ABARE

[18] Hadi et al above, p24.

Map 2 – Live export 'hot spots' 2007-08



Source: ABARE

- Live exports impact the Queensland beef processing industry's productivity and its ability to compete. Live exports mean that volumes processed in Queensland are lower than they otherwise would be. This raises unit costs and reduces the competitiveness of beef relative to other meats in the domestic Australian market. In international markets, the ability of beef to compete against other meats is reduced, and Queensland's exports of beef suffer relative to exports from other suppliers of premium FMD-free product.

- The ability of Queensland to capitalize on the growing markets for premium beef will be severely undermined by the incursion of the live trade into the State. The live trade will effectively 'cannibalise' the market by substituting a low value product for a high value one, and the economic cost will be experienced by the State as a whole owing to the significance of the processing industry in the State and the lost economic growth in the decades ahead.

This begs the question of how can the government conceivably allow the live trade to undermine Queensland's future in this way?

- Governments cannot hide their heads in the sand that the expansion of the live trade in Queensland can proceed without the highly important meat processing industry suffering.

The magnitude of the impacts as measured by economic modeling will be described in the following chapter.

4. What are the impacts?

In assessing the impacts of the live cattle export trade on Queensland and the beef processing industry, the approach in this study has been to:

- Measure the impact of the live trade on the industry currently (i.e. as at 2008-09) – this is modeled by assessing the impacts that a cessation of the trade would have on the industry, and

- Measure the impact of the continued expansion of the trade under a number of future scenarios.

In developing the future scenarios, a number of assumptions have been made covering the period 2009 to 2013, in particular industry forecasts are used for exports of Australian beef over the period and Australian beef production and slaughter numbers change at the same rate as exports.

These are:

Scenario 1 – Australian live cattle exports increase to supply the feedlot capacity that commercial sources indicate is being established in Indonesia – i.e. a capacity of 1 million head per year in 2011. This is equivalent to approximately a 10% increase in Australian live cattle exports over that period. For the period 2011 to 2013 exports are increased by 10% again. In addition, this scenario is based on Queensland's share of Australian live cattle exports remaining at its 2009 level of around 19%.

- ➢ Result: Within 4 years over **620,000** cattle from QLD and NT will be lost to the QLD processing industry (equal to 16% of the kill) – an increase of 137,000 head (or 28%) over 2009.

- ➢ Result: Live cattle exports from Queensland alone will grow from 170,000 in 2008-09 to **218,000** in 2012-13.

Scenario 2 - This scenario is the same as A above with respect to the increase in Australian live cattle exports, but Queensland's share of those exports increases by 7 percentage points every 2 years as it did in the period 2007-2009.

- ➢ Result: Within 4 years over **780,000** cattle from QLD and NT will be lost to the QLD processing industry (equal to 20% of the kill) – an increase of 298,000 head (or 62%) over 2009.

- Result: Live cattle exports from Queensland alone will grow from 170,000 in 2008-09 to **379,000** in 2012-13.

It is submitted that these scenarios are very conservative, entirely consistent with past trends and if anything underestimate the likely growth of cattle exports.

The impacts of this on the beef processing industry and flow-on impacts for Queensland and regional economies have been modeled as follows.

Economic impact of the beef processing sector in 2008-09

The three beef processors provided data on expenditure, income, wages and salaries, employment and number of cattle slaughtered in 2008-09. This information was provided for individual processing plants in Queensland.

The data were aggregated for processing plants in the following regions:

- Fitzroy statistical division;
- Brisbane statistical division;
- Toowoomba Local Government Area; and
- Townsville Local Government Area.

Aggregated data were also used to prepare an assessment of the entire beef processing industry in Queensland. The total number of cattle slaughtered in Queensland in 2008-09[19] was compared with the number reported by the three beef processors.

Income, expenditure and employment for the total Queensland beef processing industry was then calculated using this ratio. It should be noted that the number of cattle slaughtered by the three beef processors in 2008-09 represents 69.8% of the total number of cattle slaughtered in Queensland in that year.

Assuming a similar ratio of employment to cattle processed across the industry sector as a whole, would indicate that the Queensland beef processing sector had a total employment in Queensland of approximately 10,920 full-time equivalent (FTE) employees in 2008-09. In addition, based on the same assumptions, the Queensland beef processing industry had an estimated turnover of $4.9 billion in 2008-09.

The economic impact of the beef processing plants for which data was provided, on their immediate local economies, is provided below. In order to ensure confidentiality of data provided, the results are presented including

[19] Australian Bureau of Statistics Cat. No. 7215.0

flow-on effects. The results for the impact of the total beef processing sector on the Queensland economy are also provided.

Table 1: Economic impact of the beef processing sector, including flow-on effects, 2008-09[20] (Base Case)

	Value Added $m	Contribution to GRP	Employment FTE	Contribution to total employment
Fitzroy SD	546	4.2%	4,324	5.7%
Brisbane SD	736	0.8%	5,803	0.8%
Toowoomba LGA	412	8.4%	3,014	7.2%
Townsville LGA	79	1.2%	1,174	2.2%
Queensland	4,646	1.9%	35,679	1.9%

Gross state product (or gross regional product) is a measurement of the economic output of a state or province. It is the sum of all value added by industries within the state and serves as a counterpart to the gross domestic product or GDP. In economics, the difference between cost of materials and labor to produce a product, and the sale price of a product is the value added. Overall the beef processing industry in 2008-09 is estimated to generate $4.646 billion in value added (gross state product) and 35,679 FTE jobs. The above impacts reflect the beef processing operations only. Head office administration contributes a further $49 million in value added and an additional 343 FTE jobs when flow-on effects are taken into account.

Economic impact of cessation of the live cattle export sector in 2008-09

Modelling the impact of the live export trade on the beef processing industry in 2008-09 has been undertaken by assuming that the cattle exported from Queensland during the twelve month period were actually processed in the state.

In 2008-09 a total of 176,859[21] cattle were exported live from Queensland. If these cattle were slaughtered in Queensland it would represent an increase in the number of cattle processed of 5%.

It should be noted that in assessing the economic impact of this increase, the flow-on impact on the agriculture sector has been excluded as the cattle may be considered to have been produced and sold, irrespective of whether they are exported live or processed. In addition no allowance has been made for other employment directly involved in live cattle exports.

[20] The total value added and employment figures for the regions do not approximate to 69.8% of the Queensland total because of different multipliers. The multipliers for Queensland are higher than those for the individual regions as the state captures more of the flow-on effects.
[21] http://www.livecorp.com.au/Public%20Files/Cattle%20Stats/CattleState070809%20(1).pdf

The impact on the selected regional economies and on the Queensland economy is shown in Table 2.

Table 2: Economic impact of cessation of live cattle exports from Queensland, including flow-on effects, 2008-09

	Value Added $m	Change from base case ($m)	Employment FTE	Change from base case
Fitzroy SD	560	14	4,442	118
Brisbane SD	762	27	6,013	210
Toowoomba LGA	423	11	3,110	96
Townsville LGA	83	4	1,231	57
Queensland	4,785	139	36,892	1,213

If all the cattle exported live from Queensland in 2008-09 had instead been processed in the state, there would have been an estimated increase in FTE employment of 1,213 jobs and an additional $139 million in Gross State Product. The additional jobs would have been primarily in the beef processing sector (approximately 546 FTE positions) but other sectors such as retail trade, property and business services, health and community services and transport would have experienced increases in employment. These figures may be slightly overstated as a proportion of, for example, the flow-on employment in the transport sector may already be accounted for in the live cattle export trade.

The impact of cessation of the live export market from both Queensland and the Northern Territory combined has also been assessed in the same manner. If all cattle that were exported live in 2008-09 had in fact been processed in Queensland, this would have resulted in a 14% increase in the number of cattle slaughtered. The impact of this on the selected regional economies and on the Queensland economy is shown in Table 3.

Table 3: Economic impact of cessation of live cattle exports from Queensland and the Northern Territory, including flow-on effects, 2008-09

	Value Added $m	Change from base case ($m)	Employment FTE	Change from base case
Fitzroy SD	588	42	4,671	347
Brisbane SD	838	103	6,484	681
Toowoomba	445	33	3,280	266

LGA				
Townsville LGA	89	10	1,333	159
Queensland	5,028	382	38,791	3,112

If all the cattle exported live from Queensland and the Northern Territory in 2008-09 had instead been processed in Queensland, there would have been an estimated increase in FTE employment of 3,112 jobs and an additional $382 million in Gross State Product. Approximately 39% of the additional employment would have been created in the beef processing sector (1,222 FTE jobs) with an additional 500 jobs in retail trade, 233 in property and business services, 151 in the hospitality sector and 145 in transport.

Economic impact of continued expansion of the live cattle export sector

Continued expansion of the live cattle export sector has been analysed under two scenarios. Scenario 1 assumes an additional 137,000 head of cattle are lost from the beef processing sector by 2013. The impact of this (expressed in 2008-09 $ values) is shown in Table 4. Again, the flow-on impact on the agriculture sector has been excluded as the cattle may be considered to have been produced and sold, irrespective of whether they are exported live or processed.

Table 4: Economic impact of Scenario 1, including flow-on effects, 2013 (2008-09 $)

	Value Added $m	Change from base case ($m)	Employment FTE	Change from base case
Fitzroy SD	532	-14	4,209	-115
Brisbane SD	710	-26	5,599	-204
Toowoomba LGA	400	-12	2,920	-94
Townsville LGA	76	-3	1,132	-42
Queensland	4,526	-120	34,679	-1,000

The impact of the loss of an additional 137,000 head of cattle from the beef processing sector, in comparison with the throughput in 2008-09, would result in a loss of 1,000 FTE jobs when flow-on effects are taken into account. Over 40% of the job losses would be in the beef processing sector itself but other sectors such as retail trade, property and business services, the hospitality sector and transport would also be affected. There would also be a decrease of approximately $120 million in Gross State Product. At the regional level, 204 FTE positions would be expected to be lost in Brisbane statistical division whilst in Fitzroy statistical division there would be a decrease of 115 FTE jobs.

Ninety four FTE jobs would be lost in Toowoomba LGA while FTE employment in Townsville would reduce by 42 jobs.

Scenario 2 assumes an additional 298,000 head of cattle are lost from the beef processing industry in Queensland by 2013. The impact of this (expressed in 2008-09 $ values) is shown in Table 5.

Table 5: Economic impact of Scenario 2, including flow-on effects, 2013 (2008-09 $)

	Value Added $m	Change from base case ($m)	Employment FTE	Change from base case
Fitzroy SD	517	-29	4,074	-251
Brisbane SD	680	-56	5,360	-443
Toowoomba LGA	386	-26	2,809	-205
Townsville LGA	73	-6	1,081	-93
Queensland	4,388	-258	33,494	-2,185

At the local level, it could be expected that more than 250 FTE positions would be lost in Fitzroy statistical division, with almost 60% of these being in the beef processing industry. Approximately 440 FTE jobs would be lost in Brisbane statistical division with more than half of these being in the beef processing sector. In Toowoomba LGA some 205 FTE jobs would be lost with almost two-thirds of them being in beef processing while in Townsville almost 75% of the 93 FTE job losses would be in beef processing.

The impact of the loss of an additional 298,000 head of cattle from the beef processing sector in comparison with the throughput in 2008-09 would result in a loss of 2,185 FTE jobs in Queensland when flow-on effects are taken into account. More than 900 FTE jobs would be lost from the beef processing sector while the retail sector could be expected to shed approximately 330 jobs. There would also be a decrease of approximately $258 million per annum in Gross State Product.

Summary

The modeling results reported above quantify in stark terms the economic cost already inflicted on the Queensland economy of live cattle exports and the further economic cost if live cattle exports are allowed to continue their unrestrained expansion.

Tables 1 and 2 above show that in the year 2008-09 alone, live cattle exports cost Queensland around 1,200 jobs (of which 120 were in the Fitzroy Statistical District; 95 in Toowoomba; 60 in Townsville and 210 in Brisbane) and a $140 million loss in State value added (wages, profits and interest paid).

The cumulative cost to Queensland of live cattle exports over the last ten years would clearly have been substantial on the illustration provided above of 2008-09. Moreover, these costs inevitably must strike at the viability of the meat processing industry itself. Reduced processing plant throughput and the erosion of Australia's highest valued export markets which live exports cause inevitably must impact on the productivity, investment and prosperity of the beef processing industry and, thereby, its ability to reward all elements of its value chain (labour, livestock producers included) with increased returns. Growing productivity provides the basis for all elements of an industry's value chain to prosper while declining productivity must inevitably lead to decline[22].

The analysis demonstrates the increasing impact of live exports on Queensland. On a continuation of existing trends, by 2012-13 live exports from Queensland will increase from 170,000 in 2008-09 to 218,000 head, while on more likely assumptions of accelerating growth in the trade live exports would increase to 379,000 head.

The economic cost to Queensland of this so-called "success" in live exports is shown the table below:

Table 6: Additional Economic Cost to Queensland of live exports

Live exports in 2013	***Lost Value Added***	***Lost Jobs***
218,000 head	$120 million	1,000
379,000 head	$258 million	2,185

The inescapable conclusion is that there is a significant inverse relationship between live cattle exports and the Queensland economy (see Charts 5 and 6). Greater live cattle exports propelled by the subsidised and distorted trade policies of governments in Australia and abroad impose ever-increasing damage to the Queensland beef industry, reducing its profits, incomes and jobs. If these trends continue the ultimate result is erosion of productivity and scale economics in the Queensland beef industry, loss of its competitiveness and inability to capture expanding overseas markets[23].

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[22] Productivity is the essence of economic and business growth. This was reaffirmed most recently in the Prime Minister's Australia Day Address to the Nation (www.pm.gov.au). See also Submission to House of Representatives Standing Committee on Economics, September 2009, Ch 1, Productivity Commission, Canberra, ACT (www.pc.gov.au).

[23] Size and scale economies are the most important factor in driving productivity in meat industries (see for example, Morrison CJ *Economic performance, cost economies and pricing behaviour in the US and Australian meat products industries*, The Australian Journal of Agricultural and Resource Economics, Vol 41, Issue 3, pp 361-383.

Chart 5 – Queensland GSP and live exports

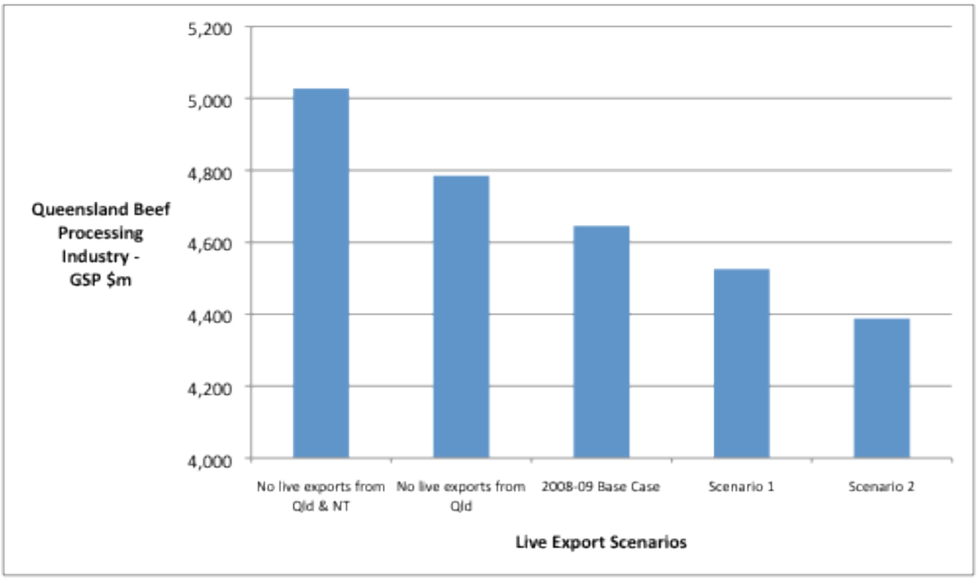
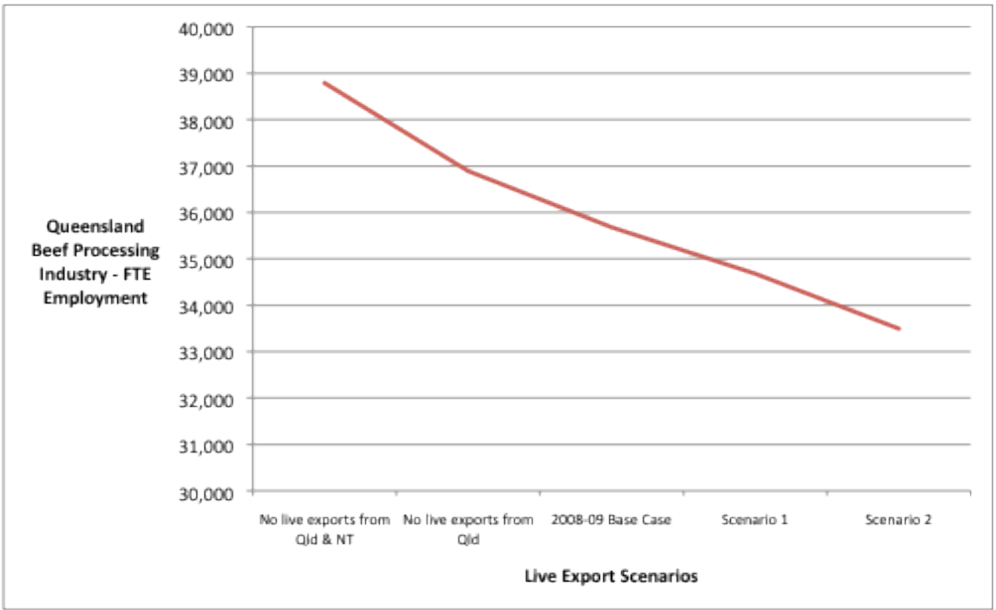


Chart 6 - Queensland jobs and live exports



Finally it might be noted the new research herein shows (Table 3 above) that cessation of the live cattle trade from Queensland and the NT would generate an additional $382 million in gross state product. This is actually more than the total export value of live cattle exports from Queensland and the Northern Territory in 2008-09. Furthermore an additional 3,112 jobs would be generated.

5. What are the conclusions?

The live cattle trade has developed from small beginnings around 15 years ago to sizeable proportions in 2008-09. Live exports have surged further in the first half of 2009-10. The live trade is clearly poised for further substantial expansion with major recent capital investment in huge state-of-the-art vessels costing about $0.5 billion each capable of moving 16,000 head in one fast non-stop voyage from Australia to Djakarta and significant investments planned in Indonesian feedlot facilities. Government assisted road, port and handling, infrastructure and dedicated quarantine services are provided at both ends.

This phenomenon was recently described in a documentary on Channel 7 television (*Mighty Ships: Becrux*) with the program guide stating *"The MV Becrux is the world's largest custom-built livestock carrier, capable of transporting 16,000 cattle from Australia to Indonesia in just four days. On its journeys, the Becrux faces heavy shipping traffic and pirate-infested waters."*

As this study has shown in Chapter 3, the remarkable development of the live cattle trade, and the significant capital investment now occurring in it, is not the consequence of classic competitive market forces. Rather the driver is subsidisation and trade protectionism.

Subsidisation in Australia occurs in government financial assistance and facilitation, both at Commonwealth and State levels, with assistance for infrastructure, market access, trade promotion and in foreign aid. At the receiving end a similar situation prevails supported by self-sufficiency policies and an understandable desire to capture the maximum value added from a burgeoning demand for high quality beef.

Policymakers and economists have long recognized that subsidies and trade protection impose a deadweight cost on an economy. In the live cattle case the deadweight cost is falling disproportionately on Queensland and its beef industry. There seems little doubt that the door has been opened wide – no doubt unwittingly – to large scale value capture of a unique and valuable national asset – the beef industry – with consequential growing economic cost to the Queensland economy and to rural and regional incomes and jobs, particularly in the Fitzroy, Townsville, Toowoomba and greater Brisbane areas.

It continues to be advanced in justification of the live exports that the trade is somehow "complementary" to our beef export industry and does not compete with it. As pointed out in Chapter 3 this is an absurd proposition and wrong on the facts in foreign markets.

The live cattle trade competes unfairly in overseas markets directly with Australian exported beef and increasingly will capture growing and lucrative world markets for premium disease free beef which Australia would expect to enjoy as a consequence of the huge Asian driven economic growth in prospect over the next 30 years. This report shows there is an economic cost to the live trade, not an economic benefit.

Chapter 4 quantifies the substantial economic cost to Queensland, and its premier rural-based industry, because of the live cattle trade. The consequences of ignoring this clear and present danger are very serious and warrant urgent Government attention.

Appendix - Input-output analysis

Input-output tables are part of the Australian national accounts. An input-output model provides a very detailed picture of the structure of an economy at a particular point in time. It includes all the transactions that occur during a specific period, usually one year.

- The rows of an input-output table show the disposal of the output of an industry to itself and to other industries as well as final demand categories (e.g. exports and household consumption); and
- The columns show the origin of inputs into production, whether they are intermediate inputs (i.e. intra- and inter-industry purchases) or primary inputs (e.g. labour and capital).

The main use of input-output tables is economic impact analysis, where the tables are used to estimate the benefits generated by new initiatives on each and every sector of an economy. For example, if there is a change in the purchasing or sales pattern of any industry, the flow-on, or multiplier, effects on upstream industries can be calculated.

One of the main attractions of input-output models is their relative ease of use and the level of detail obtained concerning the structure of the economy. The Australian Bureau of Statistics (ABS) notes the usefulness of input-output tables:

"Input-output tables provide detailed information about the supply and disposition of commodities in the Australian economy and about the structure of, and inter-relationships between, Australian industries. Detailed data on supply and use of commodities, inter-industry flows and a range of derived data, such as input-output multipliers, are provided for economic planning and analysis, and construction of models for forecasting purposes." (ABS *Introduction to Input-Output Multipliers*, Cat. 5246.0).

The application of input-output analysis to estimate the contribution of the beef processing sector to the economy involves four basic steps:

- Construction of appropriate national, state and regional input-output tables;
- Analysis of the value of the sales and purchases of the beef processing industry using data supplied by key commercial entities;
- Insertion of separate sectors representing the economic activities of the beef processing sector; and
- Balancing of the input-output tables using the RAS method.

The input-output table for this project was extracted from the Australian Bureau of Statistics (ABS) 2004-05 national input-output table using the Generation of Regional Input-Output Tables (GRIT) technique. The national table was adjusted to represent Queensland and subsequently the various regions using detailed ABS data from the 2008-09 publications *State Accounts* (ABS cat no. 5220.0) and *Labour Force, Australia, Detailed Quarterly* (ABS cat. no. 6291.0.55.003). These adjustments provide base tables for the 2008-09 financial year.

The GRIT technique derives regional input-output tables from the national input-output table using location quotients and superior data, such as employment and compensation of employees, at various stages in the construction of the tables. The GRIT procedure was developed by Associate Professor Guy West and Professor Rod Jensen of the University of Queensland and is the most widely used method of constructing regional input-output tables in Australia. The GRIT method is also widely used in America and Europe.

GRIT uses a series of non-survey steps to produce a prototype regional table from the national table, but provides the opportunity at various stages for the insertion of superior data. The system is "variable interference" in that the analyst is able to determine the extent to which they interfere with the mechanical processes by introducing primary or other superior data.

The GRIT system is designed to produce regional tables that are:

- Consistent in accounting terms with each other and with the national table;
- Capable of calculations to a reasonable degree of holistic accuracy; and
- Capable of being updated with a minimum effort as new data becomes available.

The GRIT technique is basically a hybrid method of deriving state and regional input-output tables from the national input-output table while at the same time allowing for the insertion of superior data (e.g. employment and income information from the Australian Bureau of Statistics) at various stages in the construction of the tables.

The final input-output tables were balanced using the RAS technique. The RAS technique is a bi-proportional iterative adjustment method designed to modify a base input-output matrix to fit new row and column totals. The rows and columns are simply adjusted proportionally to the new row and column totals in turn, and the cycle repeated until the actual row and column totals converge to the specified values. After the tables are balanced they are checked to ensure that the final tables are consistent and to identify any large discrepancies.

One of the main limitations of input-output tables is the assumption of linear coefficients. To address this problem and the associated problem of overestimation, the input-output analysis undertaken for the beef processing sector incorporates the marginal coefficients model.

The marginal income coefficients model attempts to overcome the limitations of traditional input-output analysis by removing the assumption of linear coefficients for the household sector. As is well documented in the literature, the household sector is the dominant component of multiplier effects in an input-output table so using marginal income coefficients for the household sector only provides a more accurate estimate of the multiplier effects and provides results closer to those of a computable general equilibrium (CGE) model.