

australian BEEF 07.1

abare

LIVE CATTLE EXPORT TRADE IMPORTANCE TO NORTHERN AND SOUTHERN AUSTRALIAN BEEF INDUSTRIES

Peter Martin, Thuy Van Mellor and Stephen Hooper, ABARE

Exports of live cattle are an important segment of the Australian cattle market and add to the total value of Australian exports. In 2004-05 and 2005-06, exports of live cattle accounted for around 7 per cent of total Australian cattle turnoff and 5 per cent of the total value of cattle production.

In the three years to 2002-03, live cattle accounted for an even higher proportion of total Australian cattle turnoff – around 9 per cent. Since 2002-03, appreciation of the Australian dollar, high Australian cattle prices and competition from other beef and buffalo meat exporters have combined with slower economic growth in major live export markets to reduce demand for live cattle exports from Australia (figure A).

Australia's live cattle export industry has faced pressure from animal welfare groups for several decades, with pressure for greater restriction of the trade increasing in recent years. Action from industry and government to address animal welfare issues has resulted in the implementation of the world's most stringent livestock export standards.

There are regions in northern Australia where a specialised industry has developed to supply the live cattle trade. In these regions, a high proportion of cattle are sold each year for live export.

As live cattle exports are very important to the economies of some regions of Australia, the economic impacts of changes to livestock export standards or fluctuations in live cattle markets are likely to be concentrated on particular producers and regions.

fig A live cattle exports, Australia

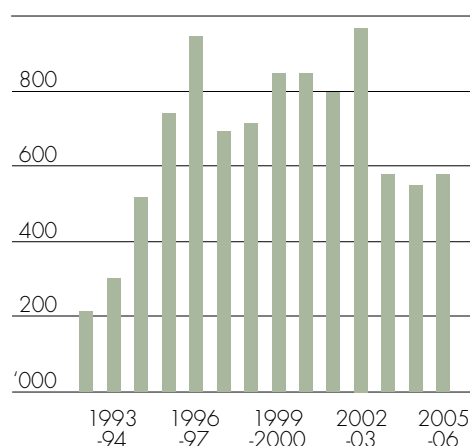




fig B value of live cattle exports

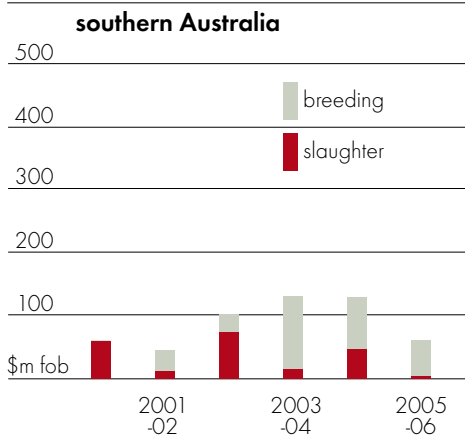
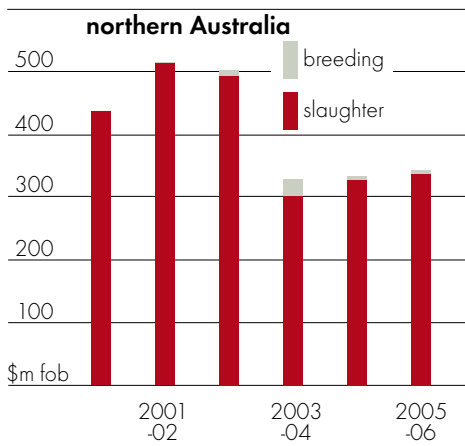
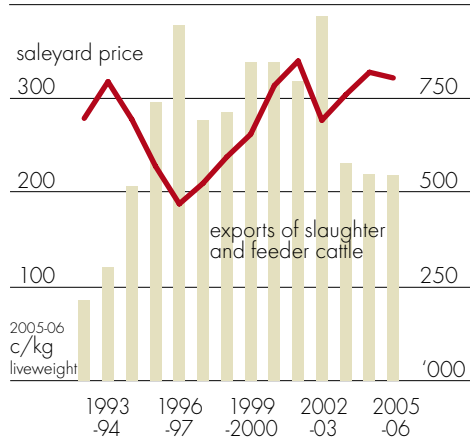


fig C live cattle exports and saleyard prices, Australia



This report highlights the regional importance of the live cattle trade to the Australian beef industry and analyses the recent financial performance of properties supplying the live export trade.

production of live export cattle

The majority of cattle exported from Australia are sourced and exported from northern Australia. In the three years to 2005-06, only 11 per cent of cattle exported live were from the southern states of New South Wales, Victoria, South Australia and Tasmania or from southern Western Australia. Apart from cattle exported to Japan for further finishing before slaughter (feeder cattle), live cattle exports from southern Australia (by value) have been mainly for breeding purposes (figure B). In contrast, live cattle exports from northern Australia have mainly been for slaughter.

southern live export industry

In the period 2003-04 to 2005-06, dairy cattle accounted for the majority of live cattle exports from southern Australia. Dairy cattle exports have been dominated by supply from Victoria, with 90 per cent of all dairy cattle exports in 2005-06 shipped from the Victorian port of Portland. An industry has developed to support live sheep and cattle exports from this port, with some dairy producers, particularly in south western Victoria, adjusting their farming operations in recent years to produce cattle for live export.

China has emerged as the largest single market for this trade. Of the 49 000 dairy cattle exported in 2005-06, around 54 per cent were shipped to China. Mexico was the second most important export destination in 2005-06, accounting for 31 per cent of this market. Other smaller export markets include Kuwait and the United Arab Emirates.

northern live export industry

Export of live cattle began on a small scale from northern Australia over a century ago, but did not become a dynamic and substantial alternative to the slaughter industry until the early 1990s when trade in feeder steers grew, particularly to the Philippines and Indonesia. Australia's competitiveness in these markets is enhanced by the short sea voyages, usually less than five days, to these countries and by the availability of acclimatised cattle in northern Australia.

Indonesian demand for feeder cattle from Australia has also been enhanced by Indonesia's restrictions on imports of cheaper frozen buffalo meat from India and frozen beef from Brazil. This policy is driven by the



desire to avoid the risk of any incursion of foot and mouth disease (FMD) as well as to encourage the availability of fresh beef throughout regional areas, where refrigeration is limited.

Australian live cattle exports reached 950 000 head in 1996-97 (figure A). Indonesia was then Australia's largest market for live cattle as it still is today. The economic downturn in south east Asian countries in 1998 reduced live cattle demand, especially from Indonesia, and total exports of live cattle to the region fell by 35 per cent. Some of the effects of the downturn in demand from south east Asia were offset by improved demand for live cattle from north African and Middle Eastern markets. Exports to south east Asia recovered after 1999-2000, as demand from Indonesia and the Philippines began to strengthen. Total Australian live cattle exports reached a record 977 000 head in 2002-03.

In 2003-04, Australian live cattle exports declined by 40 per cent (figure A) as exports to Egypt collapsed and exports to Indonesia, Malaysia and the Philippines fell. Live cattle exports have since remained around 570 000 head. Indonesia continues to be the key export market, accounting for 70 per cent of total export value. Malaysia also remains an important market, but exports to the Philippines have fallen by almost 80 per cent since 2000-01.

competitiveness of Australian live cattle exports

Year to year changes in live cattle exports result from a number of key factors affecting the Australian live cattle industry. These include Australian cattle prices, exchange rates, economic growth in importing countries and competition from other suppliers.

Australian cattle prices

The period of expansion in Australian live cattle exports coincided with a prolonged fall in Australian cattle prices between 1993-94 and 1996-97 (figure C). Since 1996-97, Australian cattle prices have generally risen – increasing by over 50 per cent in real terms between 1996-97 and 2005-06. During this period, live cattle exports initially averaged around 800 000 head a year and then fell to around two-thirds of that level. A short lived increase in export numbers occurred in 2002-03 when drought resulted in a sharp fall in Australian cattle prices, encouraging producers to sell on export markets.

exchange rates

Appreciation of the Australian dollar against the currencies of importing countries, particularly since 2002, has further increased the relative cost

fig D **saleyard prices for Australian cattle in importers' currencies**



fig E **value of Australian slaughter and feeder cattle exports, by destination**

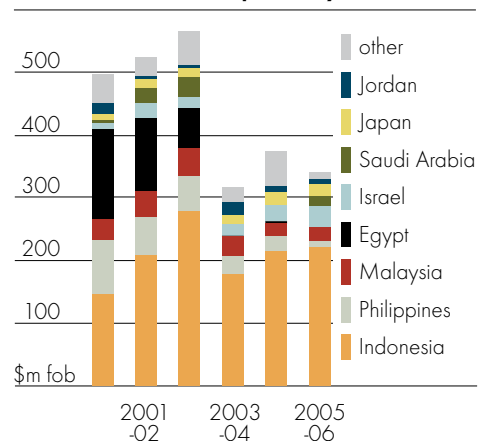


fig F **value of live cattle imports, principal south east Asian importers**



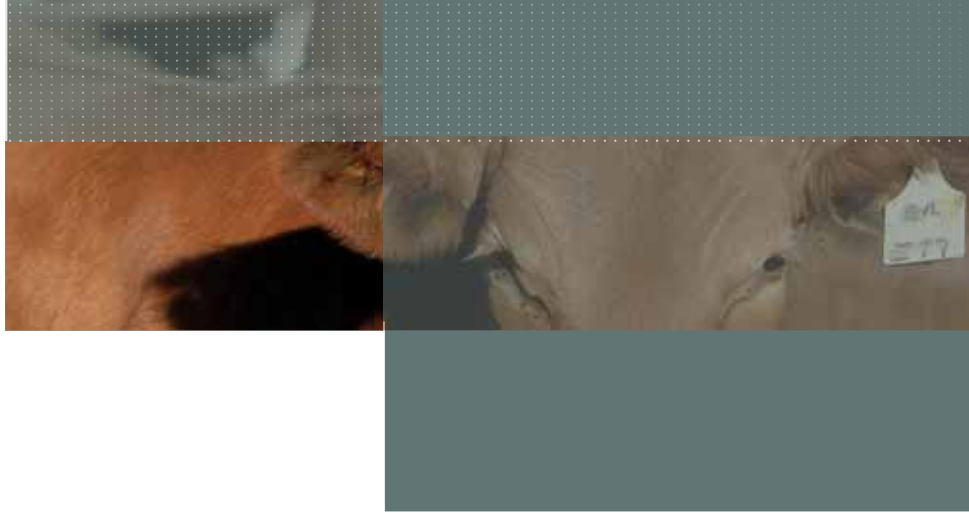
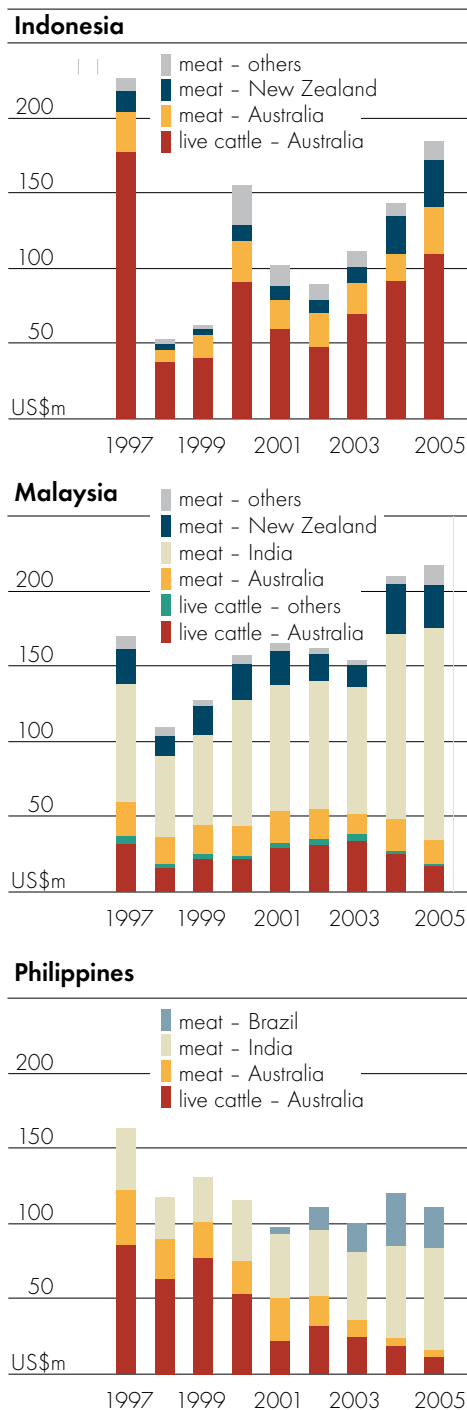


fig G value of total imports of live cattle and bovine meat



of Australian cattle for major cattle importing countries (figure D). The combination of rising Australian cattle prices and appreciation of the Australian dollar resulted in the price of Australian cattle doubling in Philippine pesos between 2002 and 2005 and more than trebling between 1998 and 2005. Similarly, Australian cattle prices in Indonesian rupiah and Malaysian ringgit doubled between 2002 and 2005.

Australian live cattle exports to Egypt were as high as 215 000 head in 2000-01. However, exports to that destination fell dramatically in 2003-04 when the Egyptian economy collapsed (figure E). The Egyptian pound fell by 50 per cent against the Australian dollar and since 2005-06 the Australian live cattle trade to Egypt has ceased altogether.

economic growth in importing countries

Economic growth has been relatively subdued in the Philippines and Egypt and some other cattle importing countries in recent years, which partly explains the recent slowdown in Australia's live cattle export trade.

competition from other suppliers

The decline in the value of Australian cattle imported by Indonesia, Malaysia and the Philippines has not been accompanied by any significant increase in the value of imports of cattle from other countries (figure F). Malaysia has an open import policy and imports a small number of cattle from Thailand and Cambodia, but these imports have not changed significantly in recent years. Indonesia and the Philippines import only a small number of mainly breeding cattle from other countries.

However, the value of Australian live cattle exports declined as a proportion of the total value of cattle and bovine meat imports in each of the three countries over the period 1997 to 2004 (figure G). The reduction in market share was relatively small in Indonesia and Malaysia. However, in the Philippines where Australian beef and cattle prices expressed in the local currency have increased most (figure D), there was a large increase in imports of cheaply priced buffalo and beef meat from India and Brazil. The Australian live cattle share of the total value of the Philippines' imports of cattle and bovine meat fell from around 50 per cent in the late 1990s to 10 per cent in 2005 (figure G).

In the longer term, some other factors will also have a bearing on the competitiveness of the Australian live cattle export industry. In particular, Australia's live cattle export industry has an advantage over other potential suppliers of meat to these markets, such as India and Brazil,



because of its disease free status. In the absence of the Indonesian government policy to restrict entry of beef from Brazil and India to minimise the risk of an FMD incursion, competition in this market would be more intense.

Productivity growth in the Australian beef industry will also be important in maintaining and improving competitiveness in international markets. In the past two decades the northern cattle industry has generated relatively high productivity growth rates and has been competitive in its ability to attract and maintain investment. If the northern beef industry is able to record better productivity growth than its competitors into the future, then this will further enhance Australia's competitiveness in live cattle export markets.

northern Australian live cattle producers

Over 80 per cent of total live cattle exports in recent years, including most slaughter and feeder cattle, have been sourced from the area of northern Australia outlined in map 1. This northern Australian live export zone accounts for just over a third of the Australian beef herd.

management change in the northern live export zone

Australia's success in meeting the growth in south east Asian demand for live feeder cattle in the early to mid-1990s was made possible by some important changes to the breeding and management systems of northern Australian properties. Traditional breeding and fattening systems that turned off bullocks at four to five years of age were converted to enterprises with a higher proportion of breeders turning cattle off at a younger age. This was a major contributing factor to the steady increase in turnoff rates observed in northern Australia over the past fifteen years (figure H).

Expansion of the live cattle trade was partly built on improved management systems that were a byproduct of the brucellosis and tuberculosis eradication campaign instigated in the 1980s, including increased fencing, better livestock control and consequent regulation of cattle supply even in the wet season. In addition, the live export trade also further reinforced moves toward *Bos indicus* breeds in northern Australia helping to improve branding and turnoff rates and reducing cattle death rates. The majority of cattle sold into the south east Asian market have been *Bos indicus* breeds, with the largest markets, Indonesia and the Philippines, generally requiring animals with a minimum of 50 per cent *Bos indicus* genetic content.

map 1 northern Australia live export zone

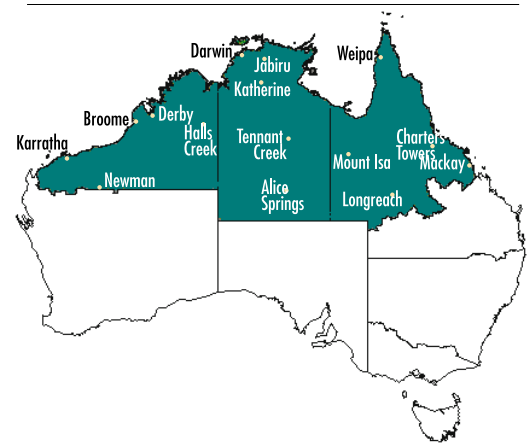


fig H beef cattle turnoff rates specialist beef farms

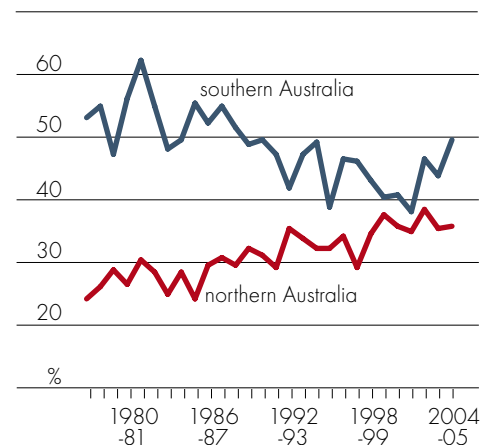
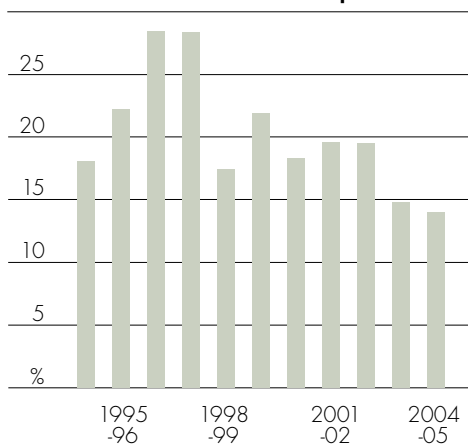




fig 1 **proportion of northern Australian cattle turnoff for live export**



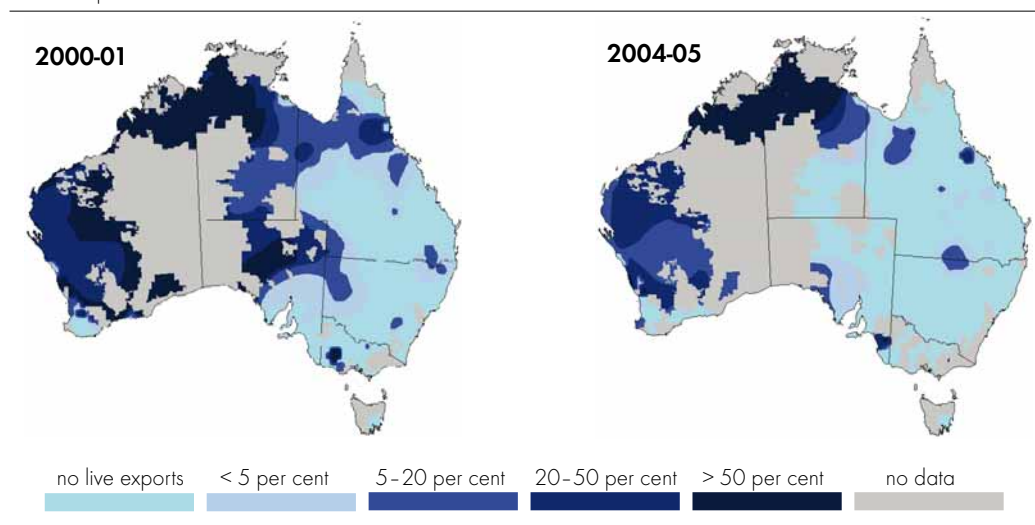
regional downturn in northern live cattle exports

The number of cattle exported has declined in all northern states in recent years, the reduction being largest in Queensland (map 2). According to data from ABARE's Australian agricultural and grazing industries survey, 15 per cent of total cattle turnoff from the northern Australian zone in the past three years has been for live export, down from an average of 20 per cent for the three years to 2002-03 (figure 1).

The proportion of cattle turnoff for live export remained high in the upper Northern Territory and northern Western Australia at around 50 per cent but has contracted elsewhere, falling to just 5 per cent in northern Queensland in 2004-05 (map 2).

Contraction in the geographical spread of the industry, particularly in Queensland and the Northern Territory, has been substantial. Only the core live export areas, such as the Northern Territory Top End and Victoria River districts, and the Kimberley area of Western Australia, indicate relatively little change in the proportion of cattle sold for live export between 2000-01 and 2004-05 (map 2).

map 2 **proportion of beef cattle sold for live export**
producers with more than 50 head of beef cattle





producer reliance on live export markets

The relative importance of the live cattle trade varies both between properties and also over time. According to ABARE's survey data, 75 per cent of properties in the northern live export zone that carry more than 300 beef cattle were either partially or substantially reliant on receipts from live export cattle over the ten years 1995-96 to 2004-05. As the focus of the remainder of this report is on large beef farms, all data presented in the remaining tables and charts are for beef properties with more than 300 cattle.

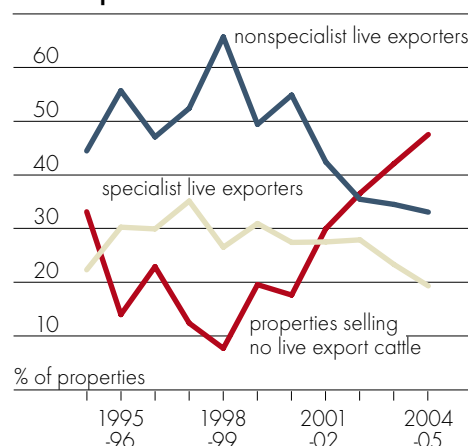
In this study, properties that receive more than 25 per cent of their receipts from the sale of live export cattle are referred to as 'specialist live cattle exporters'. The proportion of such specialists in the northern live export zone rose steadily to almost 35 per cent in 1997-98. Since then the proportion has declined to 20 per cent in 2004-05 (figure J).

ABARE survey data indicate that only a relatively small number of properties sell most of their turnoff for live export each year. These properties are concentrated in the core live export areas stretching from the Top End of the Northern Territory across to the Kimberley area of Western Australia. Typically these properties run herds that are much larger than average for the northern live export zone.

Properties that sell cattle for live export but receive less than 25 per cent of their receipts from this source are referred to here as 'nonspecialist live cattle exporters'. The proportion of properties in the northern live export zone classified as nonspecialist live cattle exporters increased to a high of 66 per cent in 1998-99, before declining to 33 per cent in 2004-05. The decline in the number of nonspecialist properties has occurred at a much faster rate since the late 1990s than that for the specialist live cattle producers, suggesting that there are some within the latter group who have a more substantial or longer term commitment to production of live cattle for export.

In the late 1990s, when the live export industry was at its peak, the properties that did not sell live export cattle ran smaller herds and were more likely to have been located in eastern Queensland, where slaughter market options were better. Many were also located in the southern margins of the Northern Territory and Western Australia, areas with a lower proportion of *Bos indicus* cattle suitable for live export. The proportion of properties selling no cattle for live export fell to just 8 per cent in 1998-99. With the downturn in the trade, this proportion has increased to almost 50 per cent in 2004-05.

fig J **beef property types – northern live export zone**





financial performance of northern live cattle export properties

Historically, the financial performance of specialist beef properties in the northern live export zone has exceeded that of specialist properties in southern Australia, as exemplified by higher average rates of return (excluding capital appreciation) (figure K). In part, this reflects the greater predominance of larger scale farms in northern Australia compared with in the south that are able to use capital and management more efficiently.

However, the higher rates of return for northern live export zone properties over the past fifteen years also reflects a number of other factors, including better productivity growth and, in recent years, the lesser impact of drought in northern Australia compared with southern areas.

Productivity growth has been particularly strong in northern Australia. Productivity growth is a measure of the gains from technological change and the adoption of better farming methods

financial performance of beef properties—northern live export zone average per property

| | | 1999-2000 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | |
|------------------------------------|-------|-----------|-----------|-----------|---------|---------|---------|------|
| physical | | | | | | | | |
| area operated at 30 June | ha | 154 900 | 161 800 | 144 200 | 133 800 | 144 600 | 129 400 | (7) |
| number of beef cattle at 30 June | no. | 5 700 | 6 200 | 5 600 | 5 500 | 5 400 | 4 700 | (9) |
| number of beef cattle sold | | | | | | | | |
| - total | no. | 1 390 | 1 380 | 1 260 | 1 200 | 1 260 | 1 190 | (11) |
| - for live export | no. | 580 | 480 | 520 | 410 | 310 | 260 | (26) |
| turnoff rate a | % | 34 | 30 | 31 | 30 | 32 | 33 | (9) |
| average beef cattle price | | | | | | | | |
| - sold for live export | \$/hd | 440 | 480 | 560 | 430 | 480 | 540 | (5) |
| - sold to other markets | \$/hd | 480 | 650 | 650 | 610 | 580 | 620 | (5) |
| financial performance | | | | | | | | |
| receipts | | | | | | | | |
| beef cattle | \$ | 700 100 | 843 300 | 805 400 | 667 900 | 706 200 | 726 400 | (10) |
| proportion from live export sales | % | 37 | 27 | 36 | 26 | 21 | 19 | (22) |
| total cash receipts a | \$ | 973 700 | 1 010 600 | 1 055 200 | 869 300 | 967 900 | 927 900 | (8) |
| costs | | | | | | | | |
| beef cattle purchases | \$ | 66 200 | 53 000 | 69 500 | 72 000 | 64 200 | 84 300 | (97) |
| total cash costs | \$ | 761 900 | 618 700 | 669 300 | 728 800 | 734 000 | 709 400 | (18) |
| farm cash income | | | | | | | | |
| farm business profit | \$ | 211 800 | 391 900 | 385 900 | 140 500 | 233 800 | 218 500 | (43) |
| rate of return b | | | | | | | | |
| - excluding capital appreciation | % | 5.0 | 7.6 | 5.9 | 1.7 | 1.4 | 1.7 | (38) |
| - including capital appreciation | % | 9.4 | 21.2 | 13.6 | 10.2 | 10.0 | 5.6 | (48) |
| estimated population of properties | no. | 1 070 | 1 090 | 1 110 | 1 120 | 1 140 | 1 160 | |

a Includes cattle transferred to other properties. **b** Calculated as farm business profit adjusted to full equity as a percentage of total opening farm capital. Financial estimates are in real terms expressed in 2005-06 dollars.

Note: Figures in parentheses are standard errors expressed as percentages of the estimates provided.



to improve on-farm efficiency. The key measure of improvement is total factor productivity, calculated by dividing an index of the volume of total outputs by an index of the volume of total inputs.

Total factor productivity for northern beef properties grew on average by 3.6 per cent a year over the period 1988-89 to 2001-02. In contrast, there was relatively little productivity growth for southern Australian beef properties. High productivity growth coincided with major developments in the northern beef industry, including the emergence of the live cattle export trade which enabled cattle to be turned off at a younger age.

financial performance since 1999-2000

Farm cash incomes for northern live export zone properties were at record levels in 2000-01 and 2001-02 on the strength of high cattle prices and high cattle turnoff for both live export and other markets. Farm cash incomes then fell sharply in 2002-03 as lower cattle prices reduced total cash receipts and farm expenditure on cattle purchases and fodder increased (table 1).

Farm cash income is a measure of the cash funds available for farm investment and consumption after paying all costs incurred in production, including interest payments, but excluding payments to family workers. A longer term measure of profitability is farm business profit, which takes account of the cost of family labour as well as capital depreciation and changes in live-stock inventories from destocking or herd rebuilding. Farm business profit for northern live export zone properties also fell in 2002-03 and by a much larger amount than the decrease in farm cash income (figure L, table 1), mainly because of a reduction in the number of beef cattle on farms in Queensland where the effects of the drought were severe.

Increased cattle purchases and transfers from southern and eastern areas of Queensland that were more affected by drought increased cash costs in the Northern Territory in 2002-03. However, the buildup in cattle numbers was then important in boosting income from the sale of cattle in 2003-04.

In 2003-04, average farm cash incomes increased, despite the downturn in numbers of cattle sold for live export. The reduction in the number of cattle sold for live export was more than offset by increased sales of cattle to slaughter markets at higher average prices (table 1). However, farm business profits remained relatively low as the increase in total turnover was partly achieved through a further reduction in herd numbers.

fig K rate of return excluding capital appreciation specialist beef farms

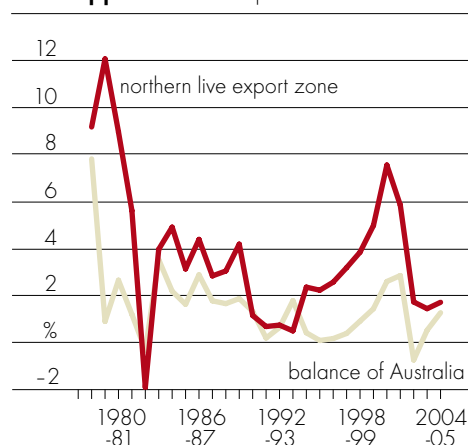
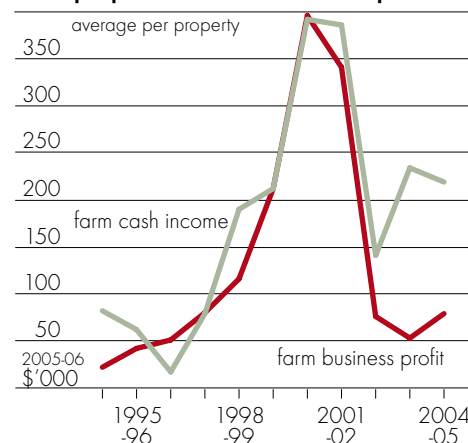


fig L financial performance of beef properties – northern live export zone



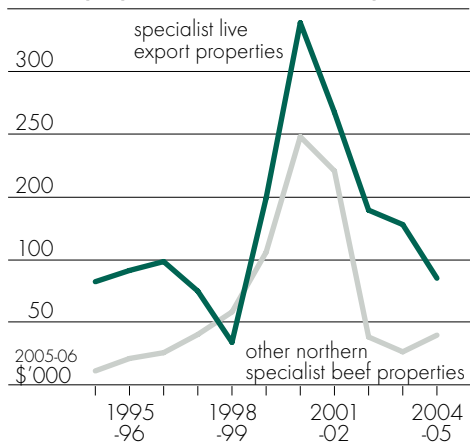


Farm cash income fell slightly in 2004-05 despite an overall increase in receipts from beef cattle with higher prices. Turnoff of both live export and other cattle was reduced, together with off-farm transfers of cattle as properties undertook herd rebuilding. This led to an increase in both herd inventories and farm business profit (figure L).

Rates of return, excluding capital appreciation, for northern live export zone properties remained lower in the period 2002-03 to 2004-05 than in the previous three years. This partly reflected the reduction in farm business profits since 2002-03 relative to the previous three years and partly because of the very large increase in capital values resulting from rapidly escalating land prices in northern Australia over the six years to 2004-05.

specialist live export properties

fig M farm business profit of beef properties – northern live export zone



Specialist live export properties accounted for 75 per cent of live cattle exports in the period 1999-2000 to 2001-02 and for more than 90 per cent of live cattle exports in the period 2002-03 to 2004-05. These properties are larger than average, both in terms of area operated and the size of the cattle herd. The number of cattle sold as a proportion of total cattle numbers is similar to other properties in the northern live export zone. However, the total turnoff rate is slightly lower for specialist live export properties because there are proportionally fewer transfers to other properties.

On average, the financial performance of specialist live export properties was better than that of nonspecialist exporters and nonexporters in each of the six years to 2004-05 (figure M, table 2). Specialist live export properties generated higher farm business profits and higher rates of return than nonspecialist exporters and nonexporters in both the pre-downturn period 1999-2000 to 2001-02 and the post-downturn period 2002-03 to 2004-05. While the financial performance of specialist live export properties has declined in recent years, their financial performance has remained relatively strong in historical terms.





2 financial performance of beef properties, by reliance on live exports – northern live export zone

average per property

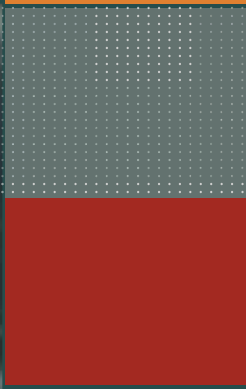
| | | specialist live export properties ^a | | nonspecialist live export properties ^a | | | properties with no live export sales ^a | | |
|------------------------------------|-------|--|--------------------|---|--------------------|--|---|--------------------|--|
| | | 1999-2000 to 2001-02 | 2002-03 to 2004-05 | 1999-2000 to 2001-02 | 2002-03 to 2004-05 | | 1999-2000 to 2001-02 | 2002-03 to 2004-05 | |
| physical | | | | | | | | | |
| area operated at 30 June | ha | 238 000 | 180 500 (9) | 132 700 | 149 400 (15) | | 100 600 | 97 900 (14) | |
| number of beef cattle at 30 June | no. | 8 700 | 7 800 (16) | 5 600 | 5 900 (13) | | 2 900 | 3 200 (18) | |
| number of beef cattle sold | | | | | | | | | |
| - total | no. | 2 130 | 1 800 (16) | 1 270 | 1 370 (21) | | 490 | 760 (19) | |
| - for live export | no. | 1 440 | 1 280 (23) | 240 | 70 (57) | | na | na | |
| turnoff rate ^b | % | 27 | 30 (7) | 36 | 36 (19) | | 31 | 29 (10) | |
| average beef cattle price | | | | | | | | | |
| - sold for live export | \$/hd | 480 | 480 (5) | 540 | 520 (11) | | na | na | |
| - sold to other markets | \$/hd | 550 | 520 (6) | 580 | 610 (6) | | 710 | 620 (8) | |
| financial performance | | | | | | | | | |
| receipts | | | | | | | | | |
| beef cattle | \$ | 1 183 100 | 915 600 (16) | 751 100 | 839 600 (19) | | 357 100 | 463 800 (22) | |
| proportion from live export sales | % | 59 | 65 (11) | 18 | 4 (57) | | na | na | |
| total cash receipts | \$ | 1 279 800 | 1 145 000 (13) | 1 108 800 | 1 226 900 (19) | | 521 100 | 552 300 (20) | |
| costs | | | | | | | | | |
| beef cattle purchases | \$ | 86 000 | 92 100 (43) | 71 400 | 80 100 (36) | | 15 100 | 50 600 (89) | |
| total cash costs | \$ | 812 900 | 887 500 (14) | 763 000 | 904 100 (20) | | 377 300 | 493 800 (33) | |
| farm cash income | \$ | 466 900 | 257 500 (34) | 345 800 | 322 800 (32) | | 143 800 | 58 500 (349) | |
| farm business profit | \$ | 436 800 | 234 800 (59) | 370 000 | 75 300 (332) | | 55 100 | -28 900 (365) | |
| rate of return ^c | | | | | | | | | |
| - excluding capital appreciation | % | 7.6 | 3.1 (44) | 5.9 | 1.5 (80) | | 2.2 | 0.3 (282) | |
| - including capital appreciation | % | 16.1 | 9.2 (22) | 14.0 | 9.3 (34) | | 12.1 | 8.3 (138) | |
| estimated population of properties | no. | 312 | 268 | 533 | 391 | | 245 | 480 | |

^a Note that properties change category as the share of receipts earned from live exports changes. ^b Includes cattle transferred to other properties. ^c Calculated as farm business profit adjusted to full equity as a percentage of total opening farm capital. **na** Not applicable.

Note: Figures in parentheses are standard errors expressed as percentages of the estimates provided. Financial estimates are in real terms expressed in 2005-06 dollars



beef



australian BEEF 07.1



www.mla.com.au

Meat & Livestock Australia Limited

Level 1, 165 Walker Street, North Sydney NSW 2060

Postal address Locked bag 991, North Sydney 2059

Phone 02 9463 9333 **Fax** 02 9263 9393

Free phone 1800 023 100 (Australia only)



Farm survey data for the beef, lamb and sheep industries

www.abareconomics.com/ame/mla/mla.a

www.abareconomics.com/interactive/agsurf

abare

www.abareconomics.com

abare
www.abareconomics.com