IFCN
Beef Report **2003**




Status and Prospects of Typical Beef Farms World-Wide

ISSN 1610-9880

Editors *Claus Deblitz, Lola Izquierdo, Zazie von Davier **IFCN researchers, co-editors** **

Western Europe

Rudolf Grabner

Chamber of Agriculture Styria,
Graf, **Austria**

Patrick Sarzeaud

Département Action Régionale,
Institut de l´Élevage,
Rennes, **France**

Claus Deblitz
Lola Izquierdo
Zazie von Davier

FAL - Federal Agricultural Research Centre,
Institute of Farm Economics and Rural Studies,
Braunschweig, **Germany**

Ernesto Reyes

TRAGSEGA,
Madrid, **Spain**

Eastern Europe

Jan Klapka
Petr Jakobe

Agricultural Research Institute, Kromeríz
Research Institute of Agricultural Economics (VUZE)
Praha, **Czech Republic**

Artur Wilczynski
Michael Switlyk

Akademia Rolnicza w Szczecinie,
Stettin, **Poland**

North America

Ronald D. Knutson
James W. Richardson

Texas A&M University,
Agricultural Food Policy Centre,
Department of Agricultural Economics,
College Station, Texas, **USA**

South America

Bernardo Ostrowski

Cátedra de Administración Rural,
Facultad de Agronomia,
Universidad Buenos Aires (UBA)
Buenos Aires, **Argentina**

Mariana Pereira
Fernando Paim

EMBRAPA Gado de Corte,
Embrapa Beef Cattle,
Campo Grande, **Brazil**

Enrique Fernandez

Instituto Nacional de Investigaciones Agropecuarios INIA,
Montevideo, **Uruguay**

Oceania / Asia

AA (Al) Charry
Kevin Parton

University of Sydney,
Orange Campus, **Australia**

Khalid Mahmood

Agricultural Policy Studies Institute, Lahore, **Pakistan**

Note: Data and information for Hungary and Namibia have been provided by the IFCN Centre Braunschweig.

* *In references to the Beef Report please cite: Deblitz et al. (2003): IFCN Beef Report 2003. IFCN/FAL, Braunschweig.*
** *In references to special studies and country reports please cite (for example): Frank, R. and Ostrowski, B. (2003): Inflation and its implications for farm level analysis. In: Deblitz et al. (2003): IFCN Beef Report 2003. IFCN/FAL, Braunschweig, p 100–101.*

Table of contents

Table of contents

2.6 Beef prices, non-beef returns and calf prices

Sale prices (beef and cattle prices)

2002 price levels of national beef prices went up in the EU-countries after the BSE and FMD depression in 2001. In addition, the € revaluated five percent against the US$. Both effects lead to price increases expressed in US$. Similar effects can be observed in Australia. In Argentina and Brazil, national price increases were compensated by devaluation of the national currencies against the US$, thus leading to a reduction of US$-prices. The US$-price decrease was about eight percent in Brazil and 40 percent in Argentina, the latter resulting from the dramatic economic changes at the beginning of 2002.

Three levels of beef prices (**not** including direct payments), expressed as US$ per 100 kg CW, can be observed:

- **High > US$ 225 per 100 kg CW** in the European Union (except the DE-81: Holstein), in HU-80 and the US-feedlot
- **Medium US$ 150–225** in the Czech Republic, HU-450 and Australia
- **Low around US$ 100–150** in Poland, Argentina, Brazil, Uruguay, Namibia and Pakistan

Price premiums for organic beef can be found in Austria and for some of the German farms. The DE-130-org and DE-132-org sell most of their beef at conventional prices. CZ-62-org even has a lower price than the conventional price. The main reason is regional price differences. Top-prices are realised by the DE-12-org that sells the beef from the beef enterprise to his own direct sale enterprise and then to the consumer. The price shown here is the transfer price to the direct sale enterprise including an organic price premium. The price difference observed between FR-90A and FR-90B, CZ-160 and CZ-780 is due to the different categories of animals the farms produce.

Non-beef returns

Only the European farms present non-beef returns in terms of direct payments

- In Austria, Germany, France and the Czech organic farm CZ-62-org, the direct payments play an important role (US$ 62-250 per 100 kg CW, with a top-value of US$ 410 for the DE-12-org)
- High levels of direct payments result on the one hand from high livestock payments. This is true for steer producing farms like AT-7, AT-15-org and the German organic farms except DE-132-org (bulls).
- On the other hand, the accumulation of different types of payments like livestock, organic/environmental and/or payments for less favoured areas lead to high payment levels. Examples are again the AT-7 and AT-15-org but also DE-130-org realising the highest level of direct payments resulting from high livestock payments, extensification payments (each of them twice for the steers) as well as crop and environmental payments.
- Conventional CEEC-farms receive direct payments as well but to a lesser extent (US$ 2–15).

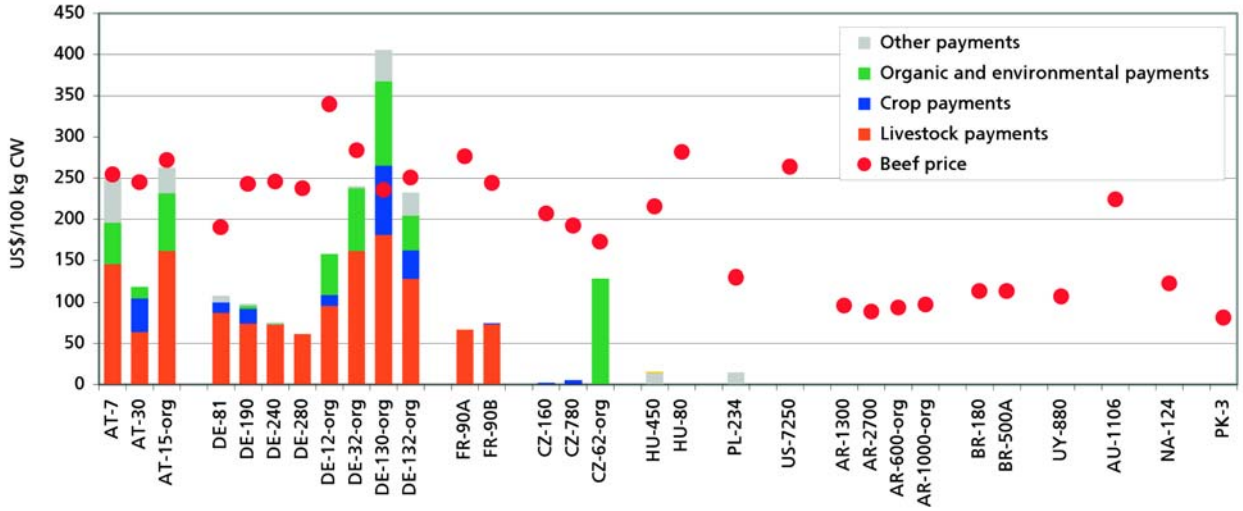
Purchase prices (calves and feeders)

For analysis of the prices the classification of animals into calves, weaners and backgrounders is used from Chapter 2.4. The purchase prices are expressed separately per 100 kg LW and per head, respectively, to make the price information more transparent. In general, prices for light calves appear high per kg LW but low per head and vice versa. The following explanations are given for prices per 100 kg LW.

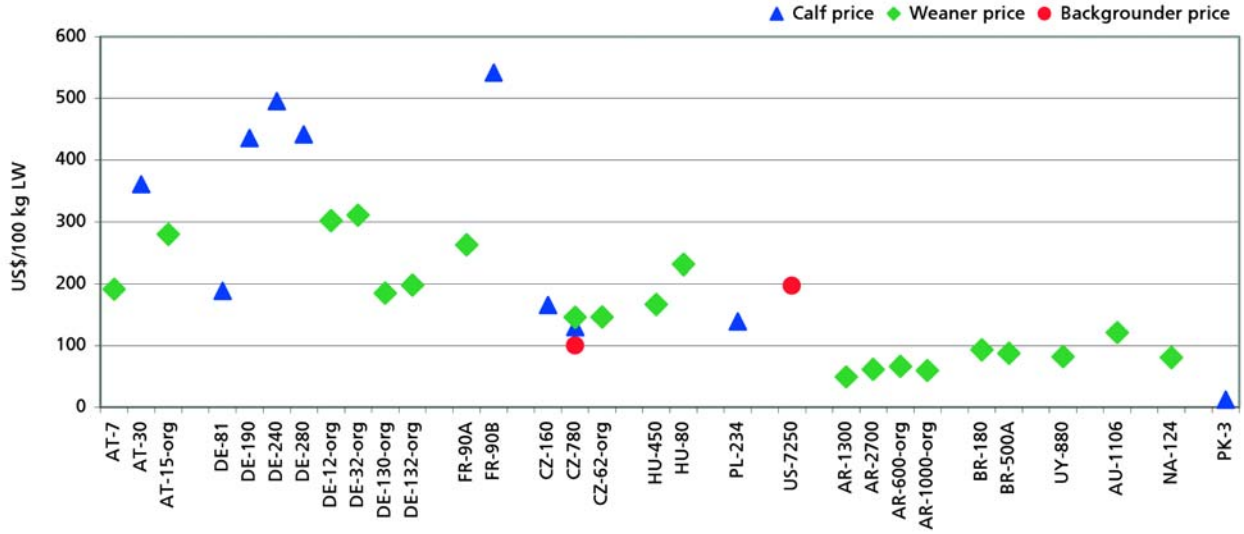
Explanation of variables

Beef price: *Average beef prices of the calendar year 2002 expressed per 100 kg carcass weight (CW).*
Non-beef returns: *Beef side products like hide and skin, manure for sale if not included in meat price and direct payments as specified.*
Purchase price: *Average purchase prices (for calves, weaners or backgrounders) of calendar year 2002 expressed per 100 kg live weight and per head.*
Calf: *Young animal of dairy origin between seven and 100 days of age.*
Weaner: *Young animal of cow-calf origin between 150 and 270 days of age.*
Backgrounder: *Animal of dairy or cow-calf origin between nine and 11 months of age entering a final finishing phase which had an initial feeding phase after weaning.*

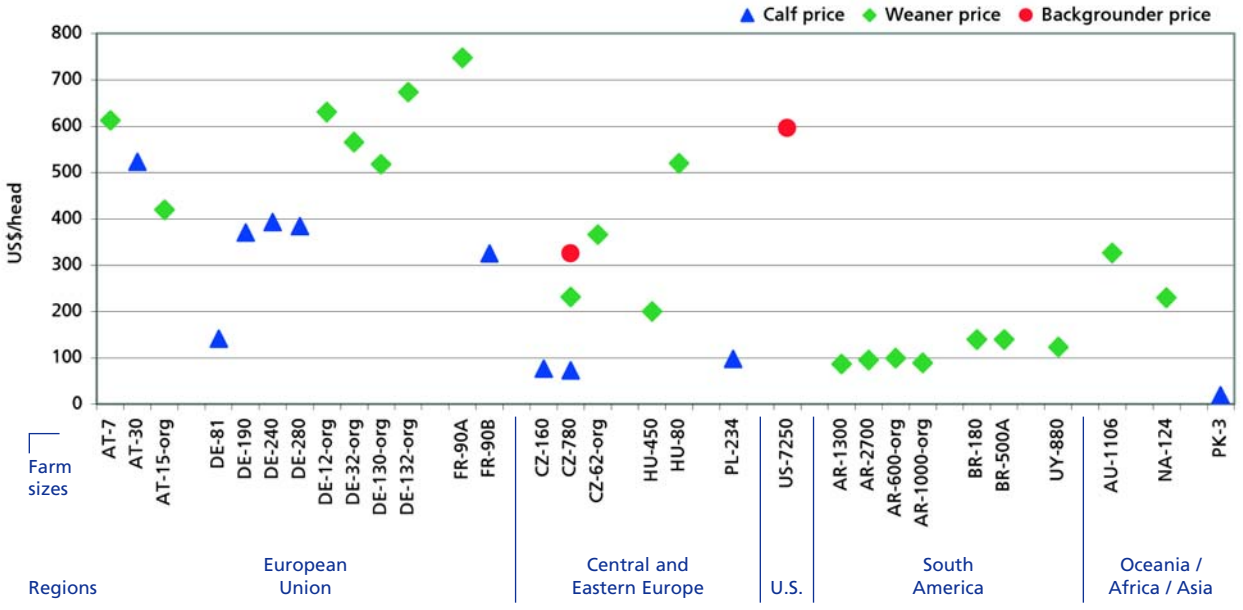
Beef sale prices and composition of non-beef returns



Purchase prices per 100 kg LW (calves, weaners and backgrounders)



Purchase prices per head (calves, weaners and backgrounders)



3.7 Total returns of the cow-calf enterprise

Total returns of the cow-calf enterprise

Total returns of the cow-calf enterprise are expressed in US$ per 100 kg live weight. For this purpose the total returns were differentiated into four sub-groups:

- Cull animals and slaughter receipts
- Breeding livestock receipts
- Weaner and transfer to beef receipts
- Direct payments

The total returns are then divided by the total live weight sold in the cow-calf enterprise (for calculation of live weight sold see Chapter 3.3).

Total returns can be grouped as follows:

- **Very high > US$ 300 per 100 kg live weight** in Austria, Germany and the Czech Republic
- **High US$ 200–300** in France and Hungary
- **Medium US$ 100–200** in Poland and Australia
- **Low < US$ 100** in Argentina and Brazil (around US$ 50) as well as in Namibia (US$ 69)

The composition of market returns basically follows the composition of live weight sold per cow (see Chapter 3.3). A slightly higher share of weaner and transfer to beef receipts is seen in farms with high shares of light animals like weaners which usually realise higher per kg prices.

Composition of direct payments

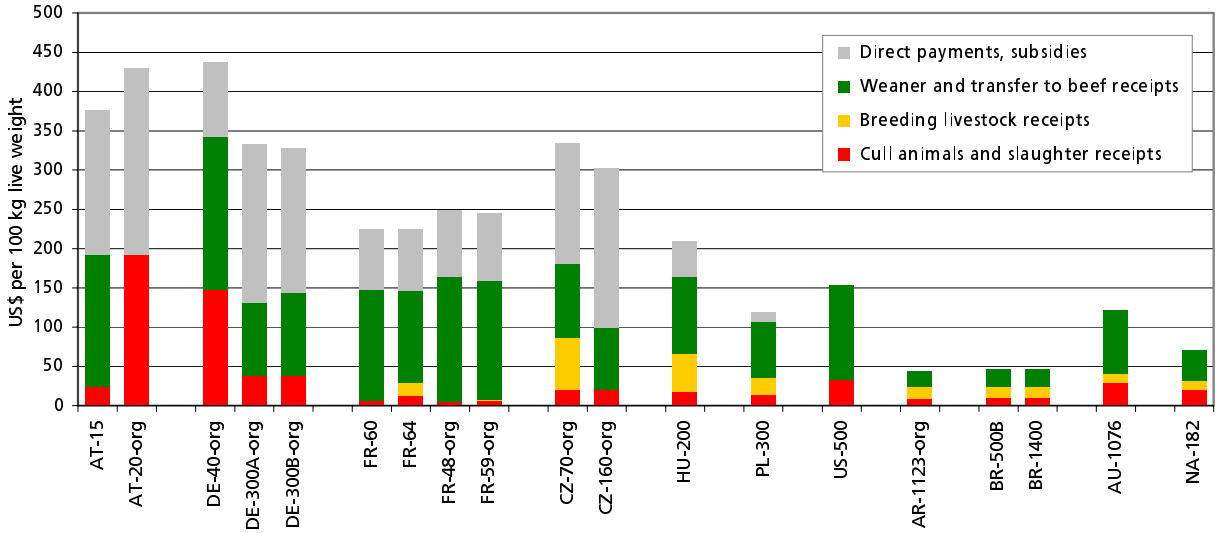
The most important difference to the live weight chart mentioned (Chapter 3.3) is the occurrence of direct payments in the EU-farms and the new EU member states. Direct payments contribute substantial parts of the total returns: more than 50 percent in the Austrian, East German and Czech farms and almost 40 percent in the French farms.

The most important direct payments are livestock payments, consisting of the suckler cow premium, slaughter premiums and special premiums for cull and slaughter animals. In second order there are environmental premiums (AT-15) and organic premiums for the organic farms. French organic farms only receive organic premiums for the five-year conversion period from conventional to organic farming. The farms analysed here have been organic for more than five years, thus none of them receives organic payments.

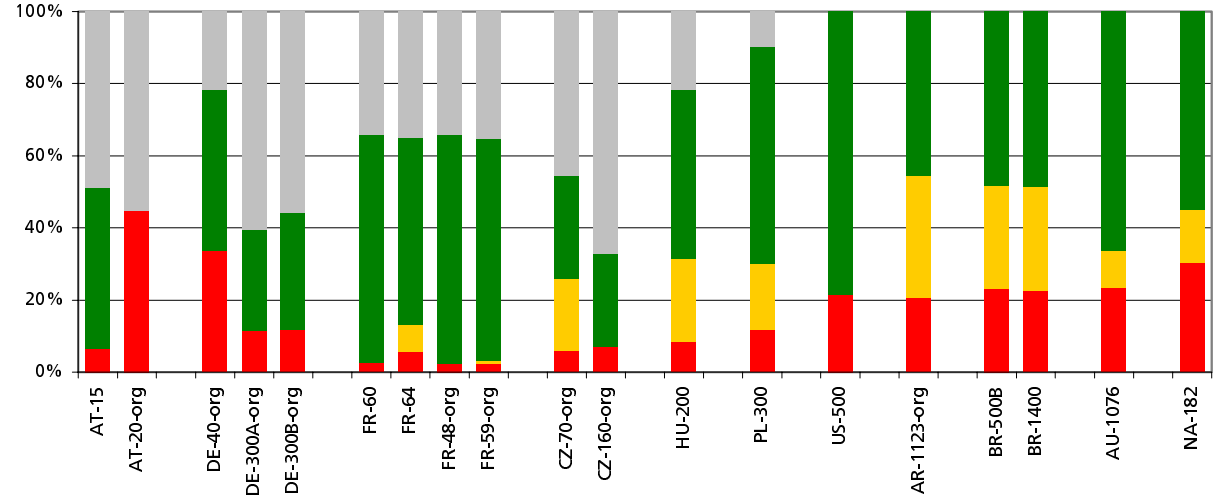
Explanation of variables

Total returns of the cow-calf enterprise: *All cash receipts minus the balance of inventory (for example livestock) divided by the total live weight sold per year.*
Total live weight sold: *Sum of the weight of cull animals (cows, bulls, surplus heifers), breeding animals (surplus heifers), weaner calves and adult animals sold or transferred to the beef finishing enterprise.*

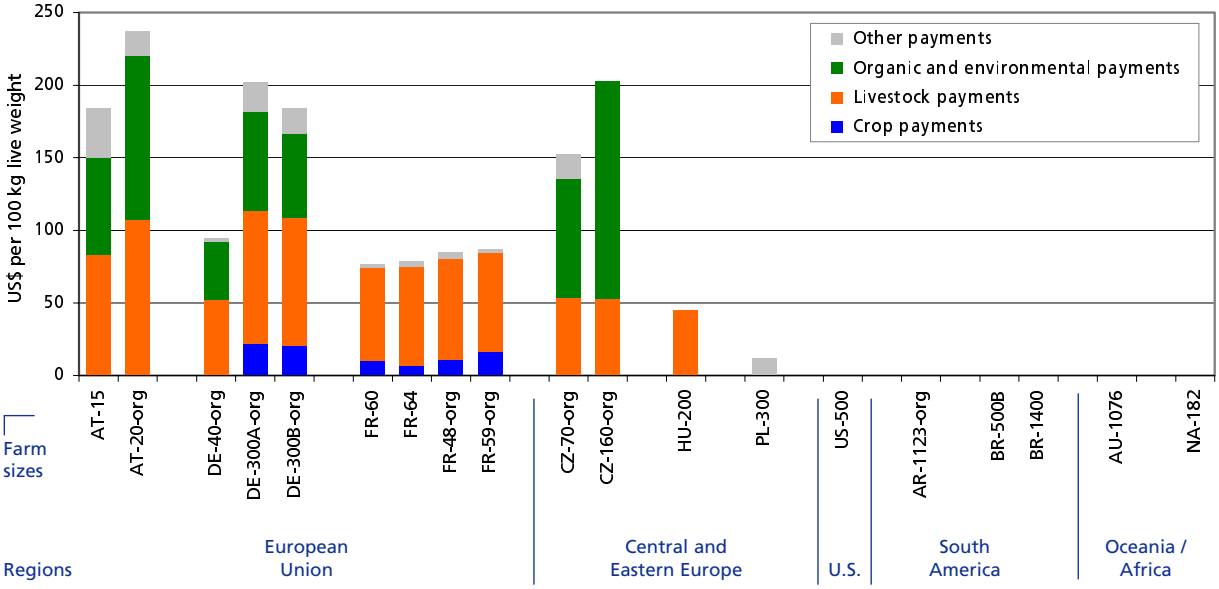
Total returns of the cow-calf enterprise



Total returns of the cow-calf enterprise in percent (Legend see above)



Composition of direct payments



4.12 Argentina

Bernardo Ostrowski

Herd composition and live trade

With around 19 million beef cows representing almost 40 percent of the total cattle herd, Argentina is clearly a beef-oriented country. Beef cows account for 91 percent of the total cow numbers. The steer's share is at 17 percent of the cattle herd. Trade in live animals has only minimal relevance and mainly involves breeding animals imported from Uruguay or exported to Bolivia and Brazil.

Composition of slaughter

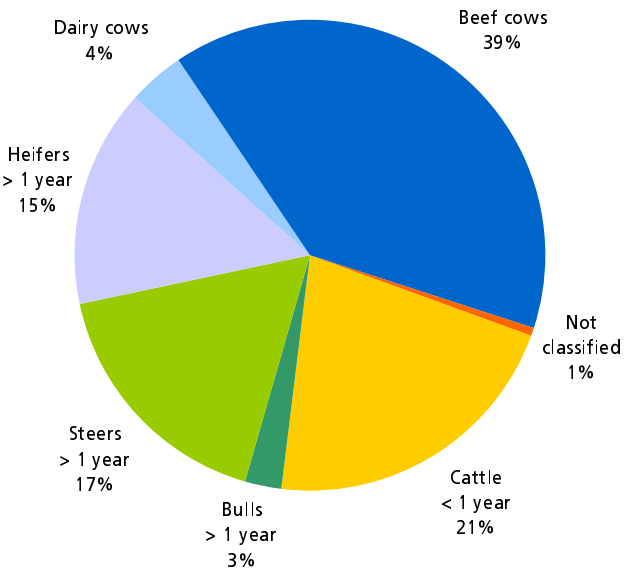
It has not been possible to obtain a differentiation between home and commercial slaughter. The figures shown in the graph have to be interpreted carefully due to the relatively high incidence of "black slaughter" (off the books, tax evasion) in the country.

Both total slaughtered animals and total weight show a predominance of steers, representing 53 percent of the total animals and 59 percent of the weight. Cows, heifers and calves are at comparable levels in terms of heads (16, 16 and 14 percent). In terms of weight and due to the different slaughter weights cows reach a 17 percent, heifers 13 percent and calves only eight percent.

Argentina exports ten percent of its meat production, with the European Union and USA being main destination countries. In the EU, Germany receives most of the Argentinian meat exports in the form of Hilton cuts. Imports play a minor role in the Argentinian beef sector, mainly from Uruguay (fresh meat) and offals from the U.S. (sweetbread thymus glands).

Herd composition and live trade (2000)

Composition in %



Live trade in head

Imports	'000 head
Uruguay	41
Rest	0,2
Total	41

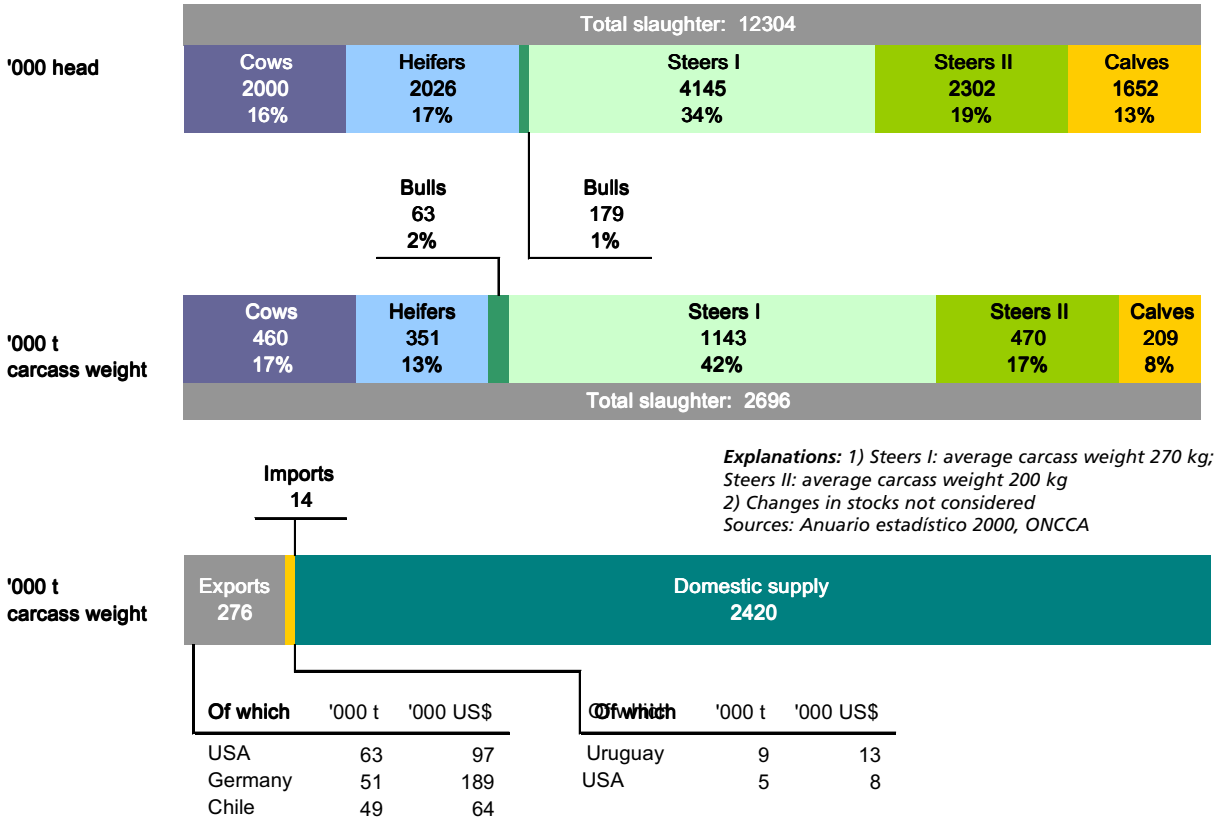
Exports	'000 head
Bolivia	4
Brasil	4
Rest	0
Total	8

Composition in head

Category	Cattle	Bulls	Steers	Heifers	Dairy cows	Beef cows	Not
Age	< 1 year	> 1 year	> 1 year	> 1 year			classified
No. ('000 head)	10413	1233	8370	7320	1850	19159	321

Sources: INDEC, Encuesta Nacional Agropecuaria 2000; SENASA, Oficina de Estadísticas de Comercio Exterior

Total slaughter and total use in 2000 (domestic and foreign orgin)



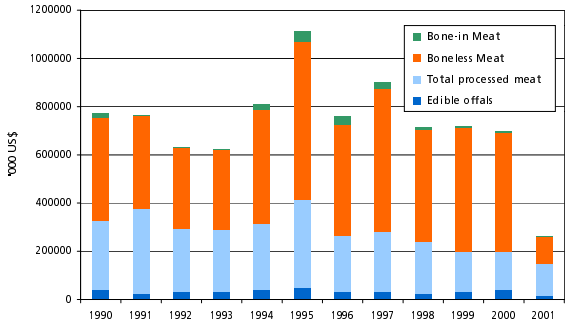
Beef trade composition and development

Argentina is a net beef exporter. According the FAO data, in the year 2000 the country exported beef for a total value of approx. US$ 700 million, while the imports for that year were only US$ 25 million. Argentine beef exports declined during the period 1990–1993. The total value of exports recovered the next two years, reaching a top value of almost 1,500 million US$ in 1995. The next years show a continuous decrease of the total value of exports until reaching the lowest value in 2001 when the international beef trade with Argentina was interrupted due to the FMD situation of the country. Irrespective of their level, the exports show a relatively constant composition with a higher share of boneless meats and processed meat and slightly reduced share of bone-in meat and offals.

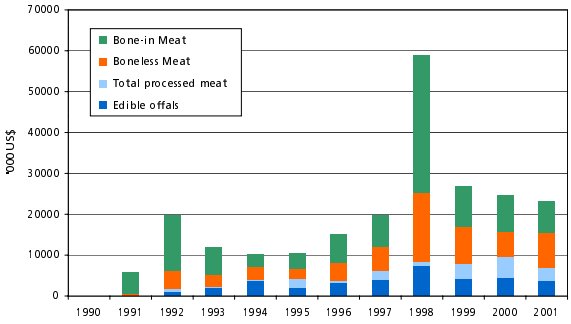
Regarding imports, a slight growing can be observed during the 1990's, with a peak in 1998.

Argentinian beef trade in values (1990–2001)

Exports



Imports



Source: FAOSTAT 2003 at http://apps.fao.org/page/collections?subset=agriculture

5.3 Choosing a reference unit for cow-calf analysis

Claus Deblitz

FAL

Situation

Unlike beef finishing where the final product is beef, cow-calf has different outputs. For a commercial non-breeding herd, the most important products are:

- Meat from cull animals
- Meat from calves/weaners going to slaughter (baby beef)
- Calves/weaners for sale or for transfer to the beef finishing enterprise
- Breeding animals like surplus heifers

Reference units

Once total returns and costs of the cow-calf enterprise are calculated, the question of the appropriate reference unit for the economic results arises. There are certainly numerous possibilities but for the type of international analysis done in IFCN, the most reasonable reference units appear to be:

1) The total number of beef cows, resulting in values per beef cow
2) The total number or weight of calves produced, resulting in values per calf or per 100 kg live weight calf produced
3) The total live weight produced or sold, resulting in values per 100 kg live weight produced or sold

It should be noted that in none of the cases any of the original cost and return information gets lost. It is just related to different units and makes the results – depending on the point of view or the interest of the readers – more or less transparent and useful.

Comparison of results

The results shown for the three reference units reveal substantial cost differences in absolute values. However, more important than the absolute cost level is the relative position of the farms depending on the reference unit chosen.

Cost per cow relate the result to the main input (i.e. the cow) of the cow-calf enterprise. The problem here is that the productivity of the cows is not visible, resulting in a relatively high-cost-picture in farms with a relatively high productivity (like in Austria) and in a relatively low-cost-picture in farms with relatively low productivity (like in Brazil).

The differences between the **live weight calves** and **total live weight** sold are determined by the cow-calf productivity and the share of calf sales in the total weight sold. This share can be grouped as follows:

- **Low < 30 percent** in Argentina, Brazil and Poland (low productivity)
- **Medium 30–50 percent** in France and CZ-160-org, Namibia and Australia (all with a further finishing of cows and/or heifers)
- **High 50–70 percent** in Germany, CZ-70-org and U.S.
- **Very high > 70 percent** in Austria

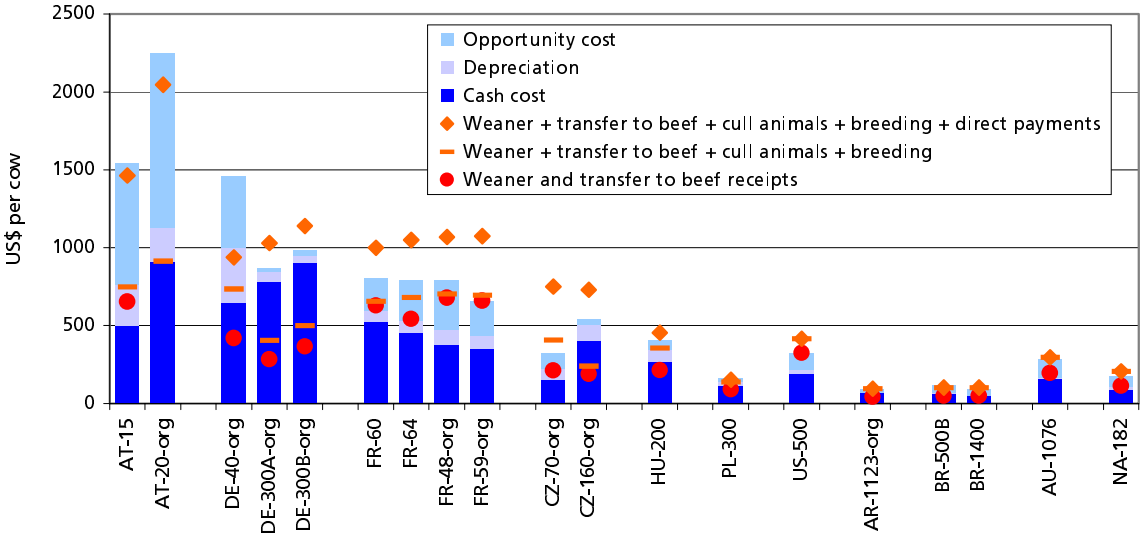
Cost per 100 kg live weight calves sold relates the result to an output/productive figure of the cow-calf enterprise. However, choosing the weight (or number) of calves reflects only a – albeit important – part of the output. In farms where calves have a relatively low share in the total weight sold, a high-cost-picture is created and vice – versa.

Cost per 100 kg total weight sold relates the result to the total output of the cow calf enterprise. This reference unit covers the complete economically relevant production of the cow-calf enterprise.

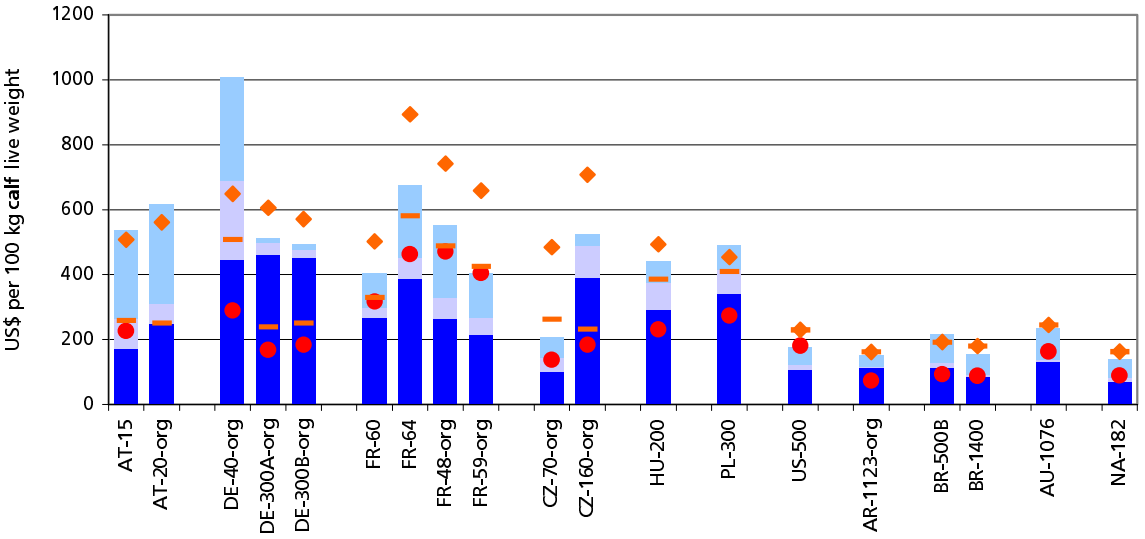
Conclusions

Using the number of cows as a reference unit does not appear to be the appropriate choice for comparisons with significant differences in productivity levels. The total live weight sold appears to be the most appropriate unit for comparison of the profitability of the cow-calf system because it covers the total output of the enterprise and not just a part, like the calves weight sold. Consequently, it was chosen for the cow-calf analysis shown in **Chapter 3.**

Total cost and returns per cow



Total cost and returns per 100 kg LW calves sold (Legend see above)



Total cost and returns per 100 kg total LW sold