

EDICIÓN
2019



Foro inale

Uruguay

*Tendencias y desafíos
de la lechería mundial*
*Trends & challenges
of global dairy*

**Evolution of dairy production systems in the
world's leading exporters**

David Beca

Miércoles 5 de junio, 7.30 h., Montevideo

Presentation outline

- Confirm countries to be reviewed and compared
- Observe trends over last 17 years
- Support each ratio with statistical relevance to dairy farm profitability
- Forecast forward for next 5 years
- Draw conclusions including for Uruguay
- Summarise conclusions

Countries to compare

Countries include:

1. Uruguay
2. Argentina
3. New Zealand
4. Australia
5. South Africa (non-exporting)
6. United States (recent major exporter)

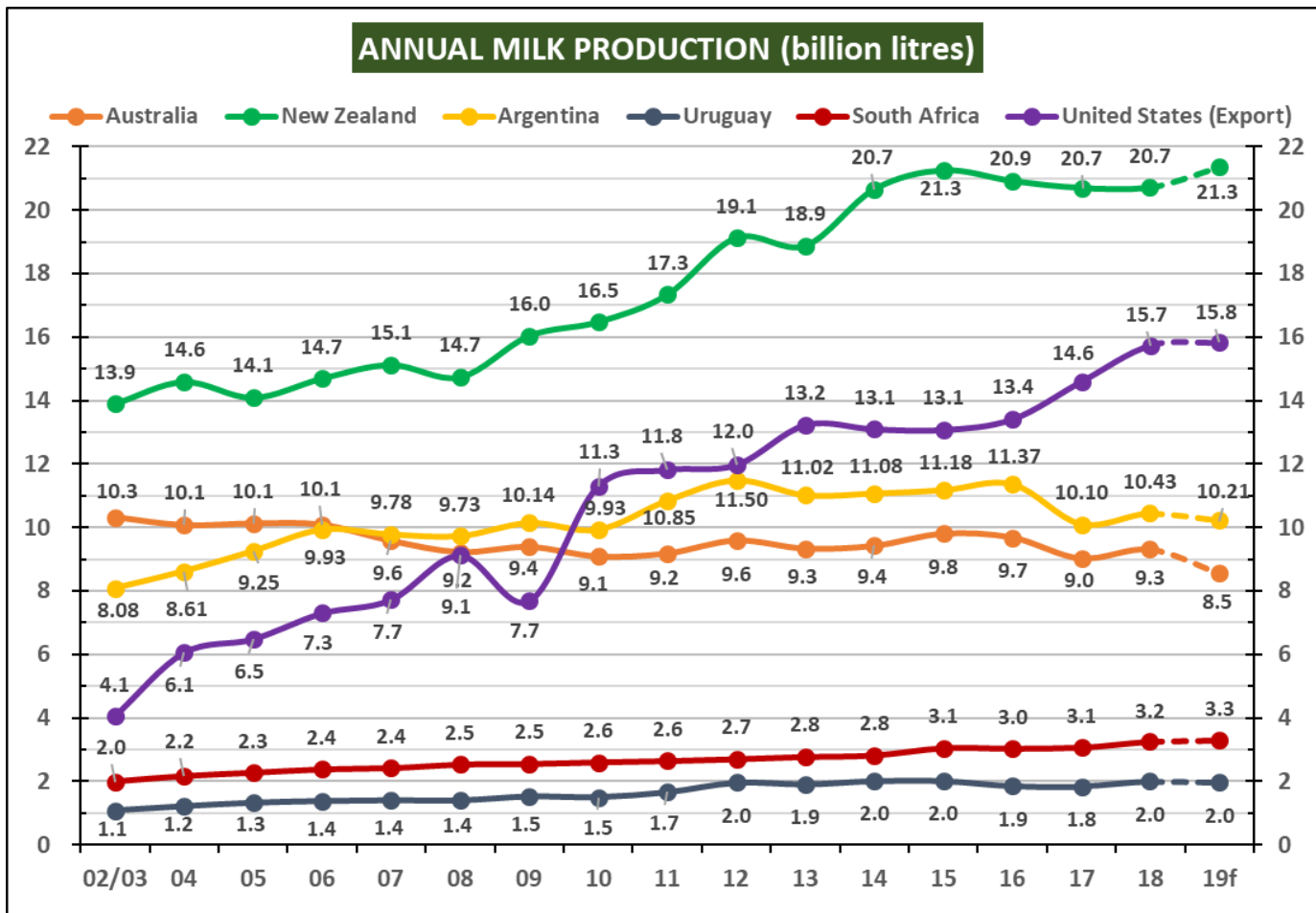
General trends within the countries

Reviewing the trend data over the last 17 years:

- Uruguay; **excellent**  **problematic**
- Argentina; **excellent**  **poor**
- New Zealand; **good**  **great**
- Australia; **good**  **terrible**
- South Africa; **poor**  **excellent**
- United States; **good**  **excellent**

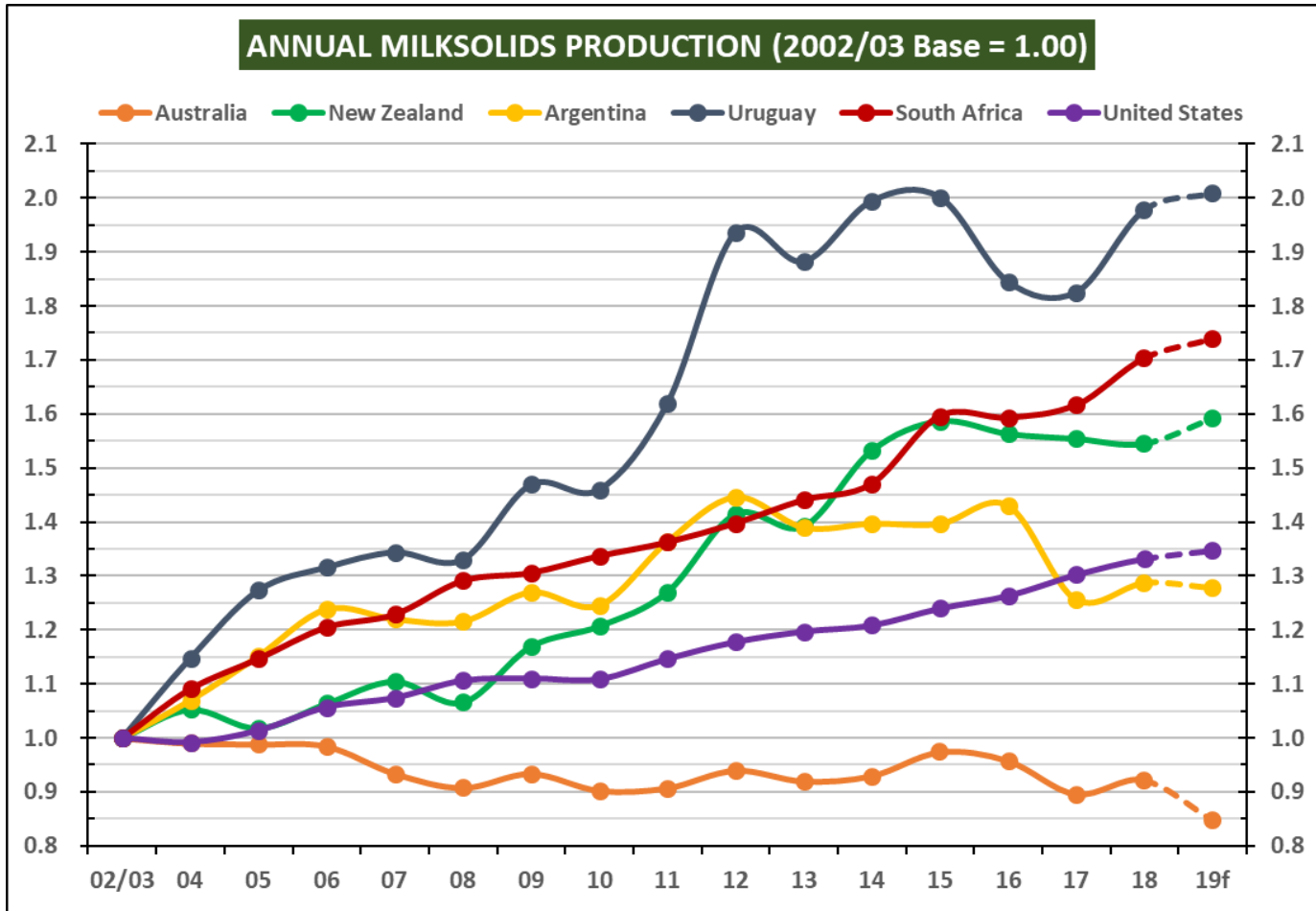
Annual milk production

United States total production is approximately 4 times greater than New Zealand



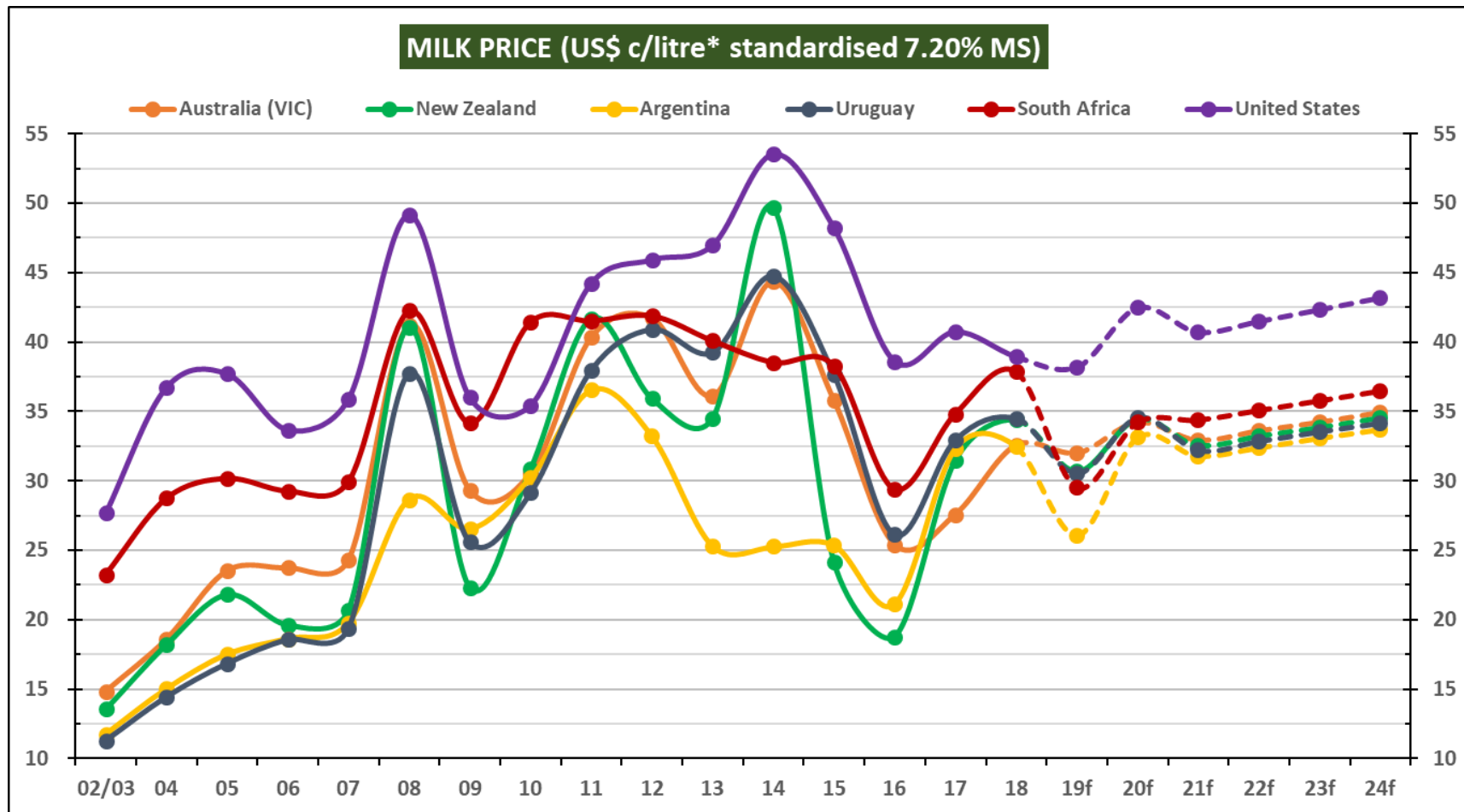
Source: Dairy Australia, DairyNZ, MAGYP (ARG), INALE (URY), MPO (ZAF), USDA

Annual milk production



Source: Dairy Australia, DairyNZ, MAGYP (ARG), INALE (URY), MPO (ZAF), USDA

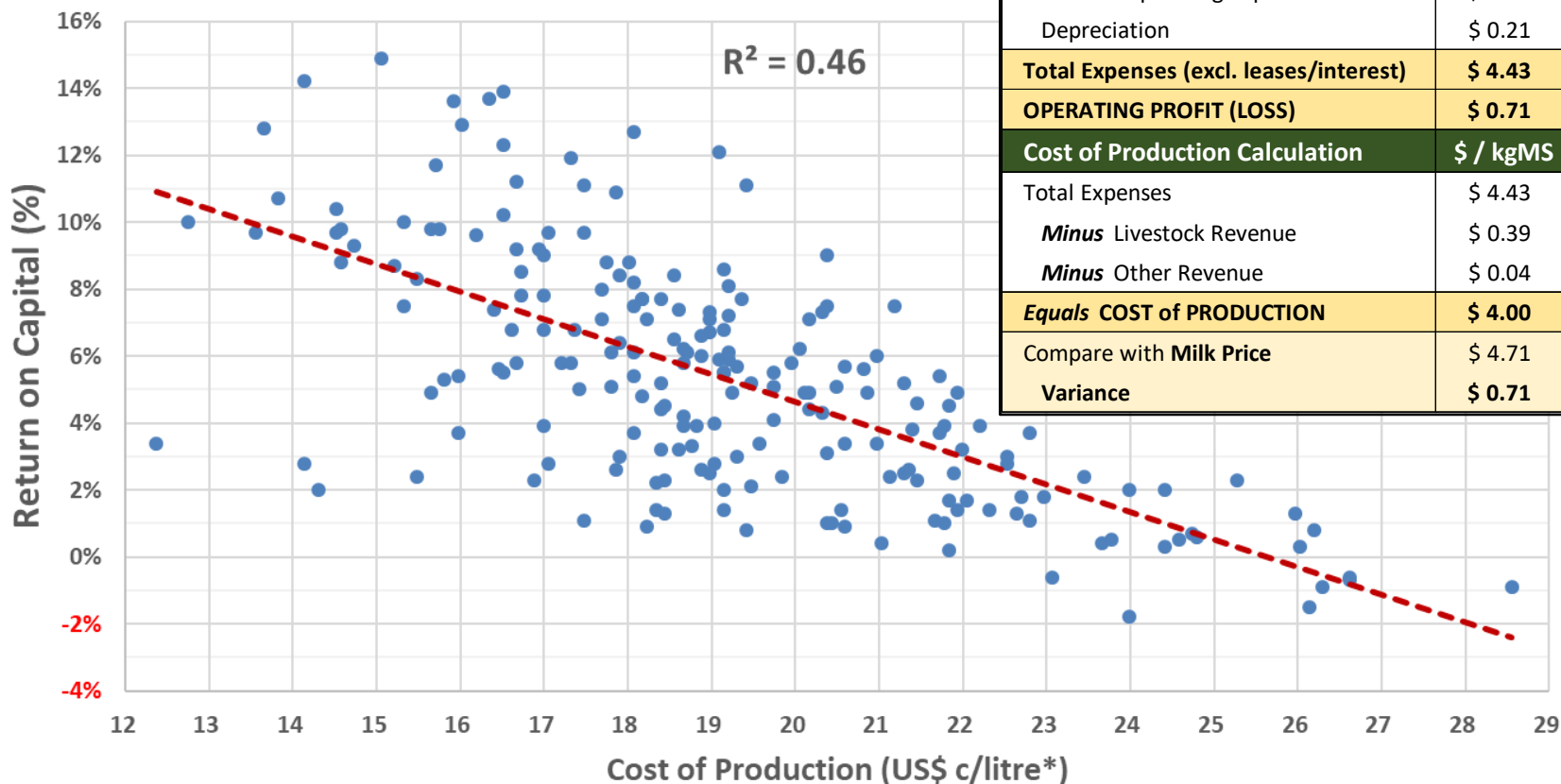
Milk price (US\$ c/litre)



Source: Red Sky, Dairy Australia, Dairy Farm Monitor Project, DairyNZ, DairyBase, MAGYP (ARG), INALE (URY), MPO (ZAF), USDA

Cost of production (COP)

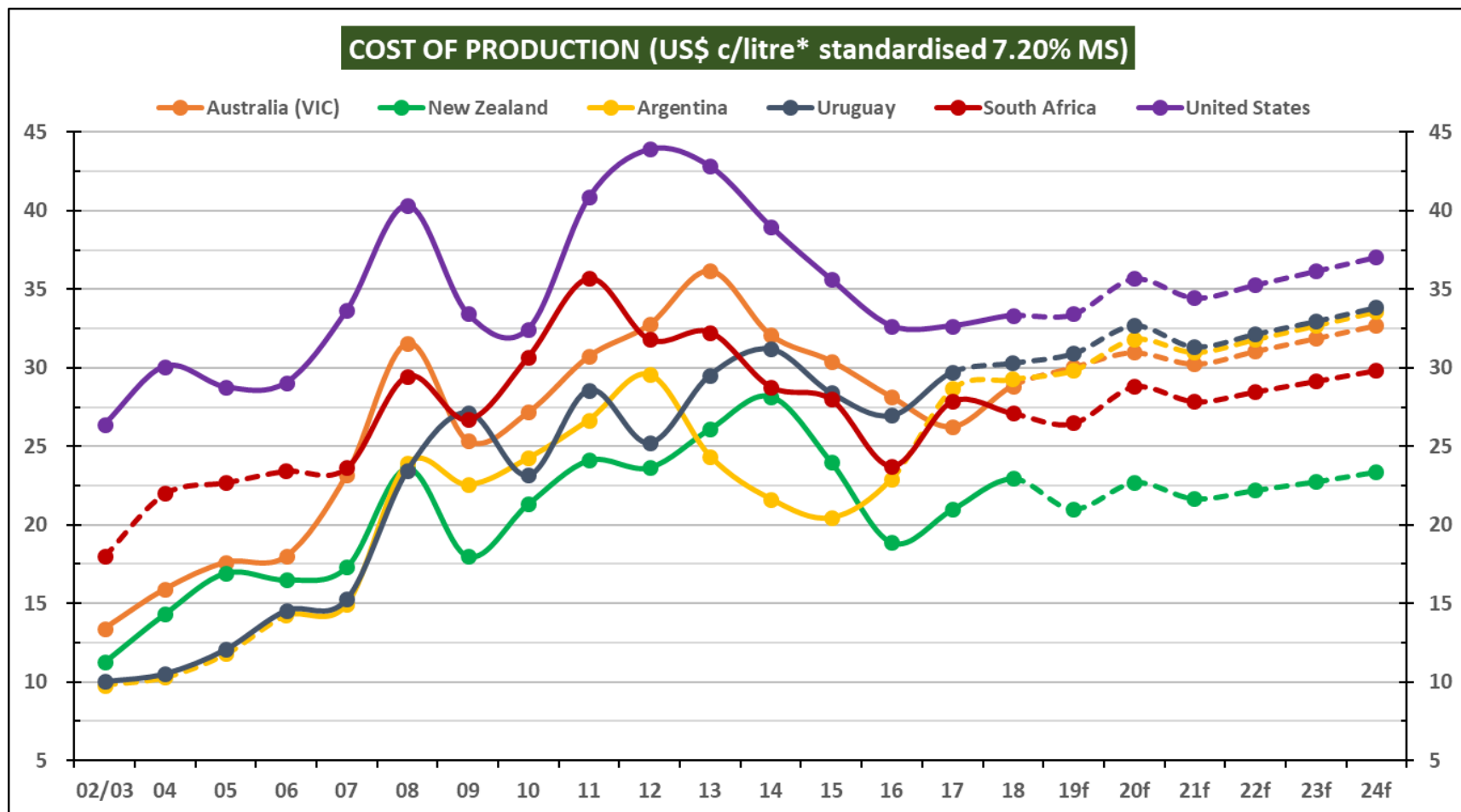
Profit vs Cost of Production



CALCULATION OF COST OF PRODUCTION

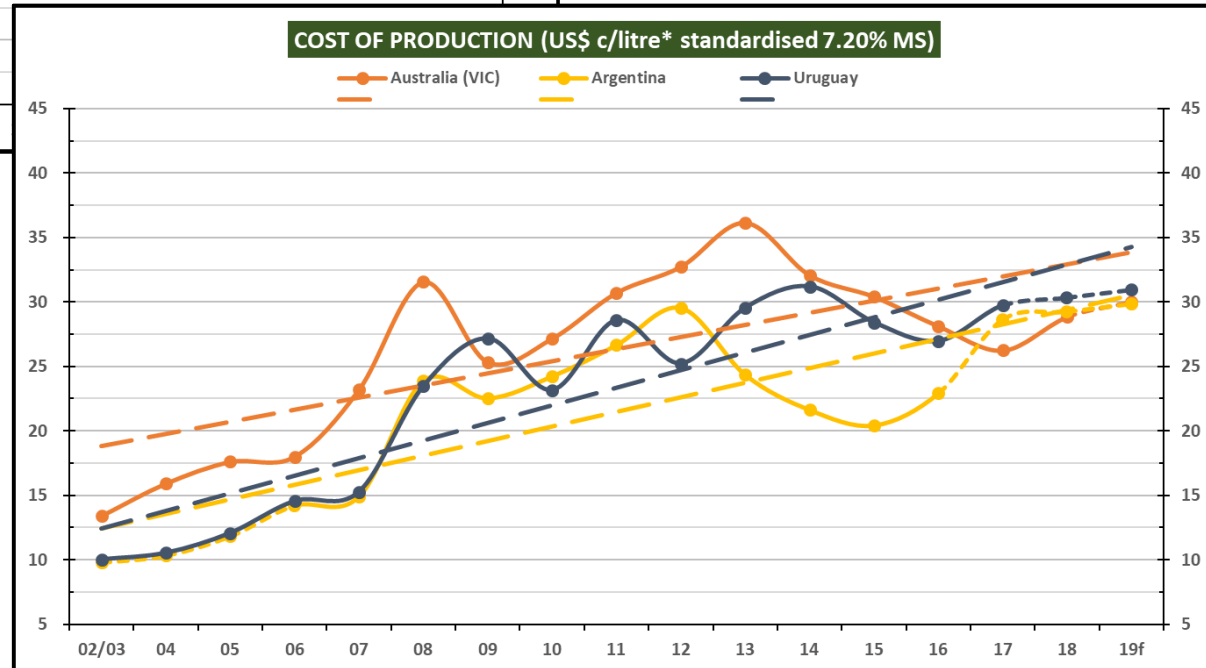
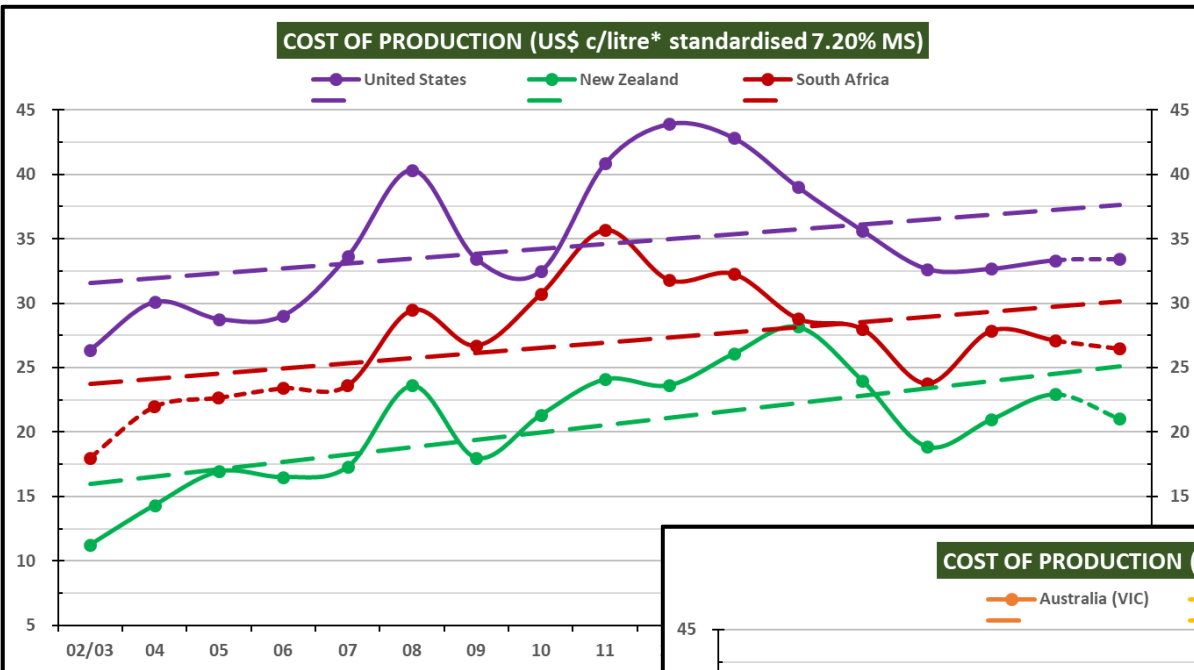
Operating Profit Calculation	\$ / kgMS	c / litre
Milk Revenue (= Milk Price)	\$ 4.71	33.0
Livestock Revenue	\$ 0.39	2.7
Other Revenue	\$ 0.04	0.3
Total Revenue	\$ 5.14	36.0
Direct Operating Expenses	\$ 3.71	26.0
Indirect Operating Expenses	\$ 0.50	3.5
Depreciation	\$ 0.21	1.5
Total Expenses (excl. leases/interest)	\$ 4.43	31.0
OPERATING PROFIT (LOSS)	\$ 0.71	5.0
Cost of Production Calculation	\$ / kgMS	c / litre
Total Expenses	\$ 4.43	31.0
<i>Minus</i> Livestock Revenue	\$ 0.39	2.7
<i>Minus</i> Other Revenue	\$ 0.04	0.3
Equals COST of PRODUCTION	\$ 4.00	28.0
Compare with Milk Price	\$ 4.71	33.0
Variance	\$ 0.71	5.0

Cost of production (COP)



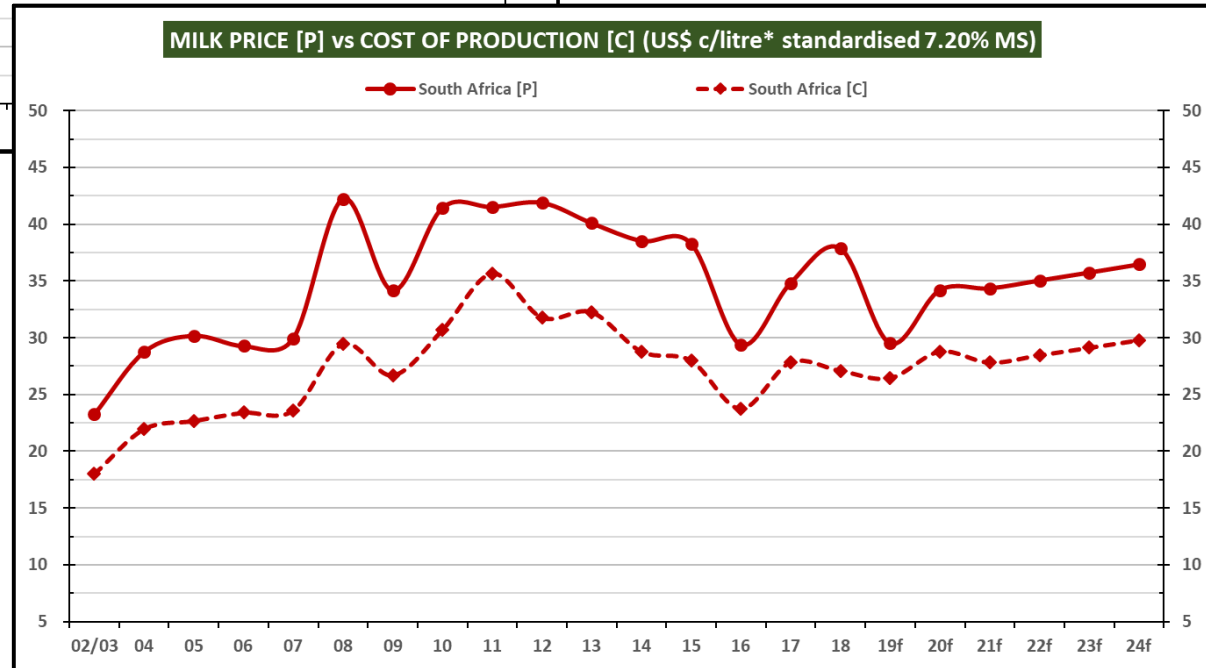
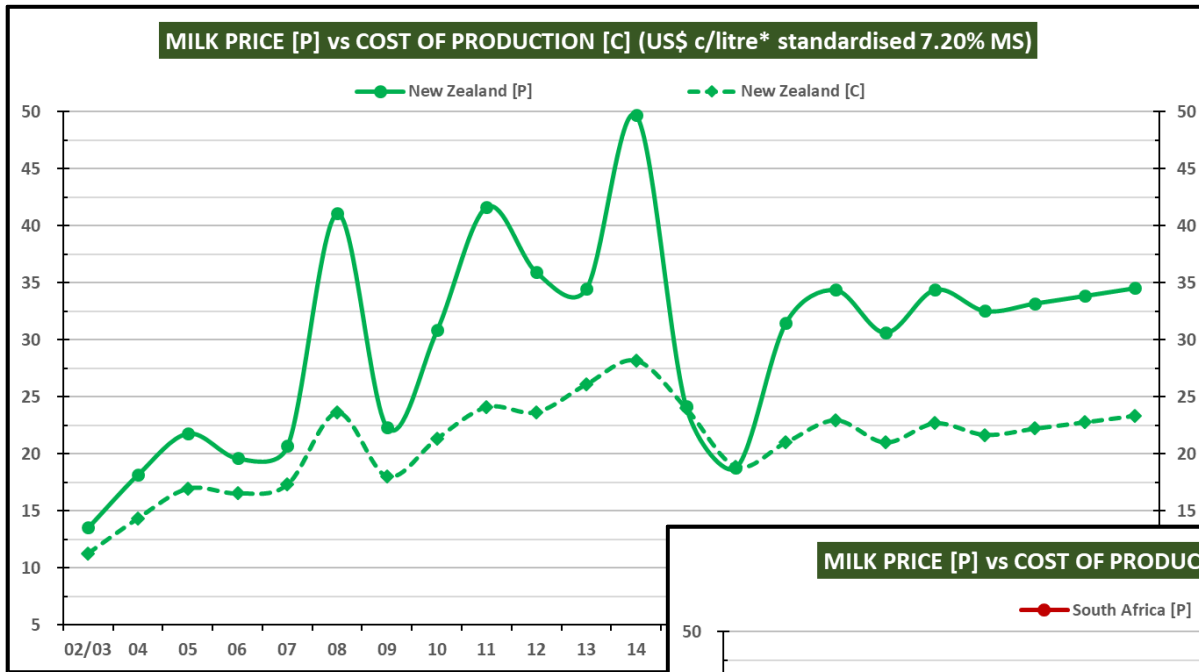
Source: Red Sky, Dairy Farm Monitor Project, DairyBase, AACREA, FUCREA, USDA, Genske Mulder

Milk price [P] vs Cost of Production [C]



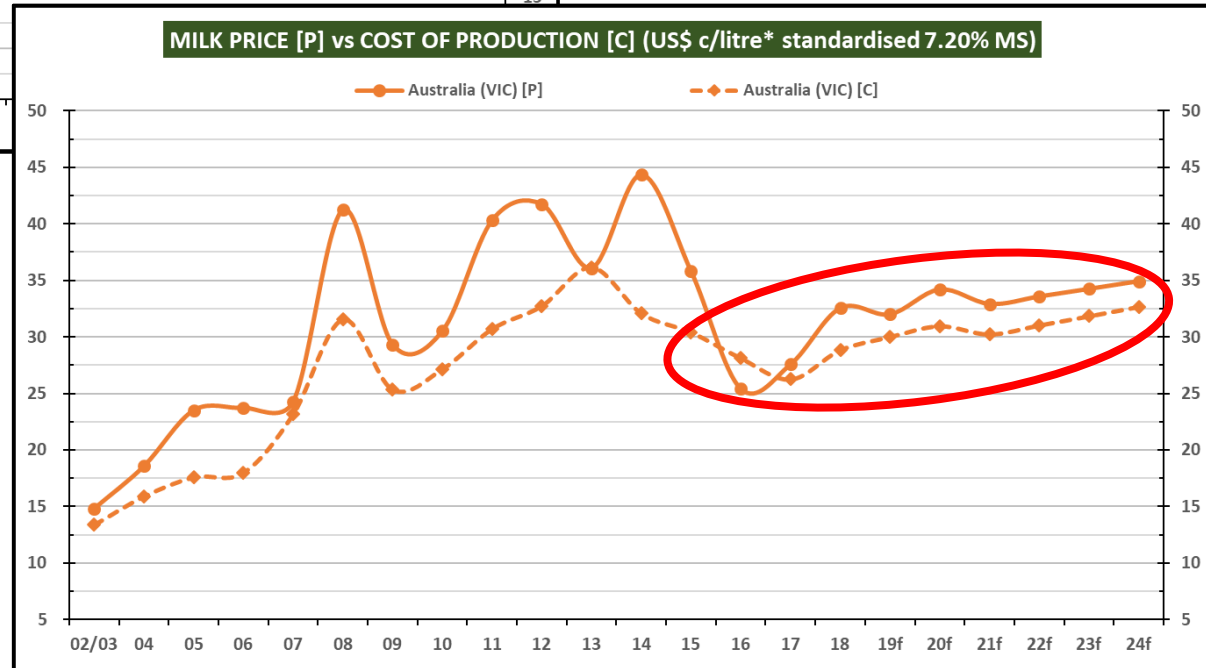
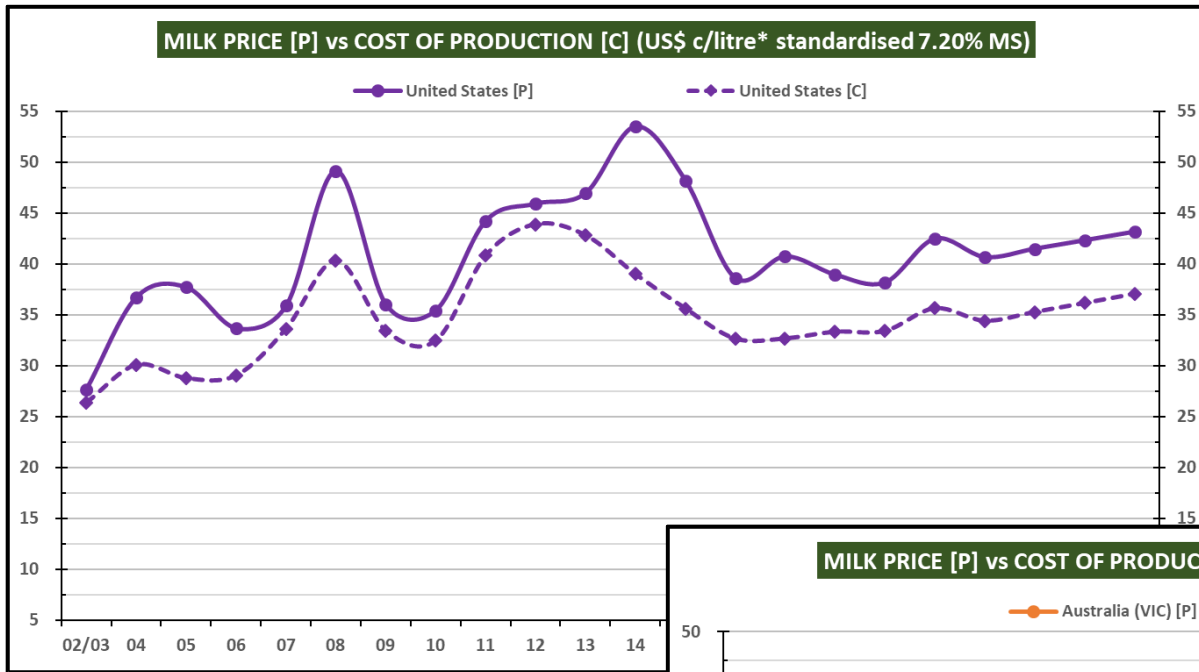
Source: Red Sky, Dairy Australia, Dairy Farm Monitor Project, DairyNZ, DairyBase, MAGYP (ARG), AACREA, INALE (URY), FUCREA, MPO (ZAF), USDA, Genske Mulder

Milk price [P] vs Cost of Production [C]



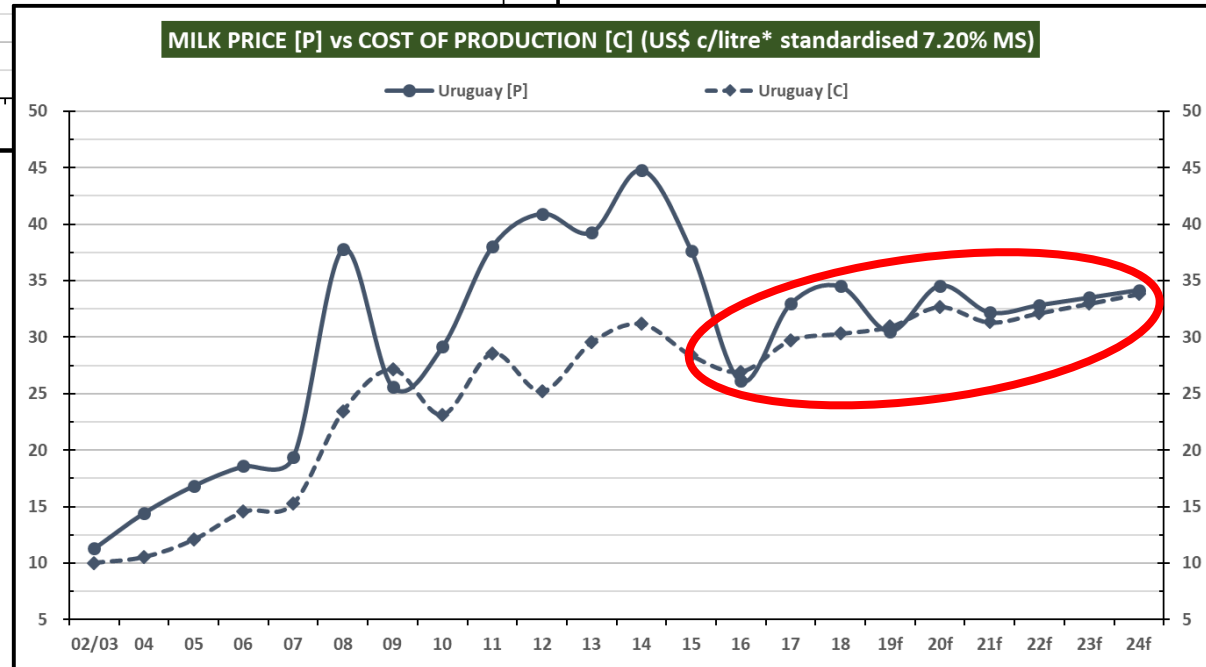
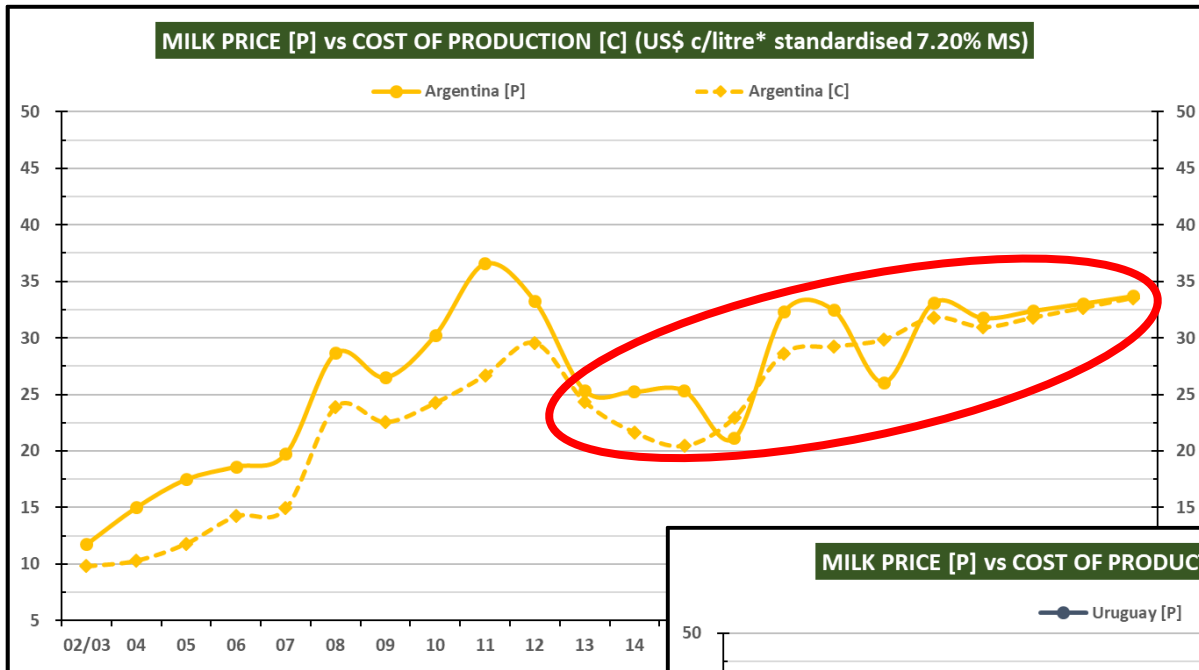
Source: Red Sky, Dairy Australia, Dairy Farm Monitor Project, DairyNZ, DairyBase, MAGYP (ARG), AACREA, INALE (URY), FUCREA, MPO (ZAF), USDA, Genske Mulder

Milk price [P] vs Cost of Production [C]



Source: Red Sky, Dairy Australia, Dairy Farm Monitor Project, DairyNZ, DairyBase, MAGYP (ARG), AACREA, INALE (URY), FUCREA, MPO (ZAF), USDA, Genske Mulder

Milk price [P] vs Cost of Production [C]



Source: Red Sky, Dairy Australia, Dairy Farm Monitor Project, DairyNZ, DairyBase, MAGYP (ARG), AACREA, INALE (URY), FUCREA, MPO (ZAF), USDA, Genske Mulder

Why the differences between countries?

What is creating New Zealand's huge advantage...and supporting growth in South Africa and United States

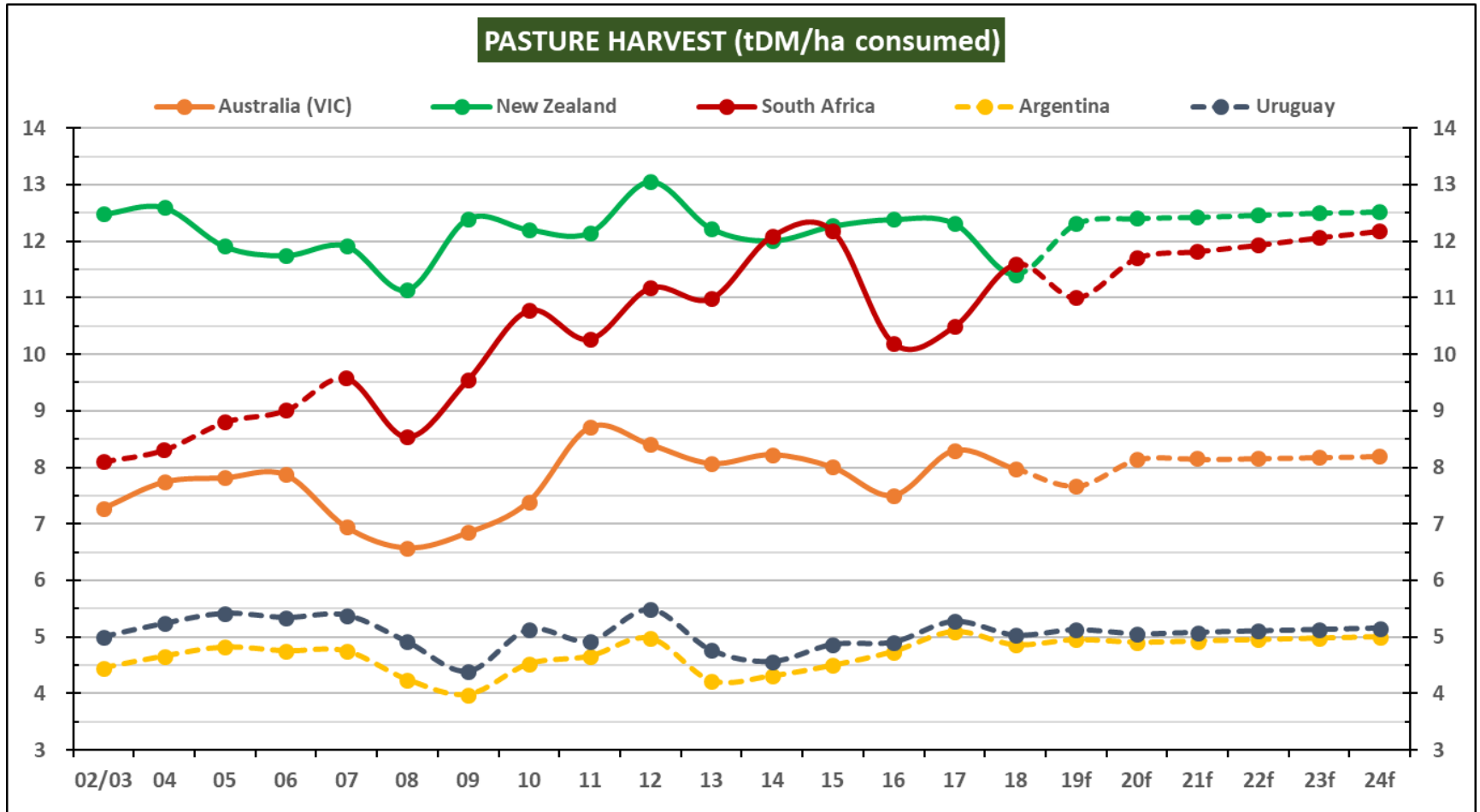
And what is creating the existing problems in Australia and Argentina...and the emerging problems in Uruguay

Firstly, what are the impacts of pasture production levels?

...and stocking rate

...and cost of pasture per tDM

Pasture harvest



Source: Red Sky, Dairy Farm Monitor Project, DairyBase, AACREA, FUCREA

What is the impact of farm production systems?

What has been happening to the farm production systems?

What are the impacts of changing production systems?

Milk production per cow...

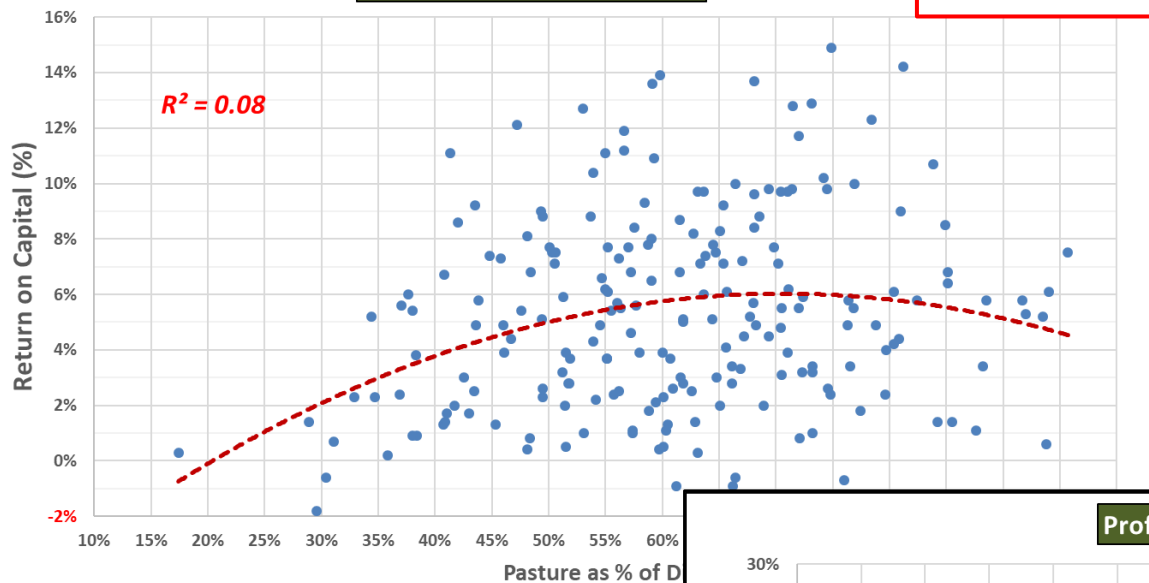
...and milk production per hectare

...and pasture as % of diet

Pasture as % of diet

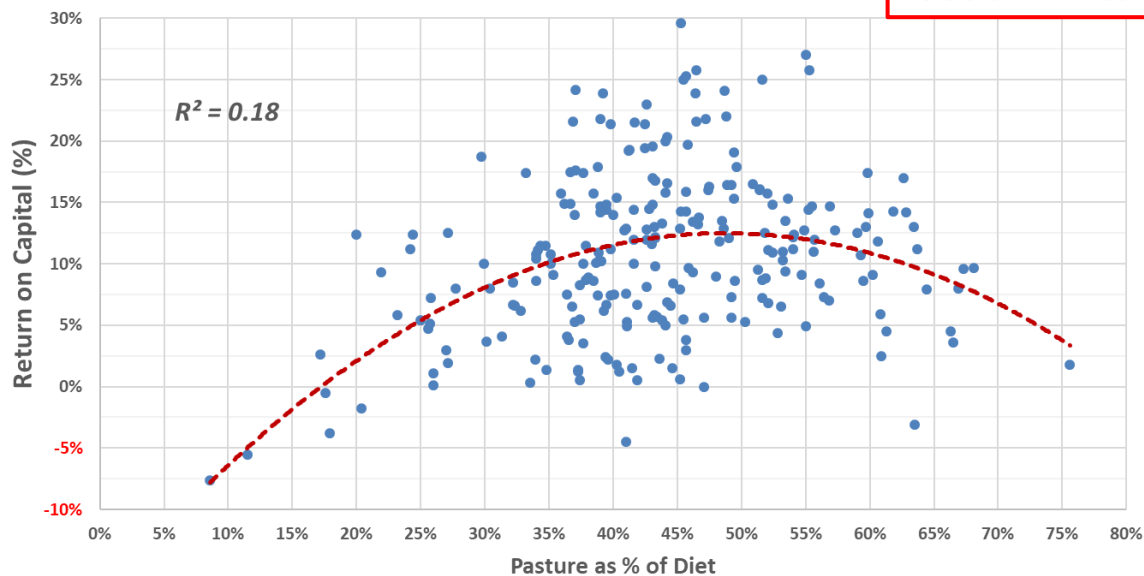
Profit vs Pasture as % of Diet

Australia

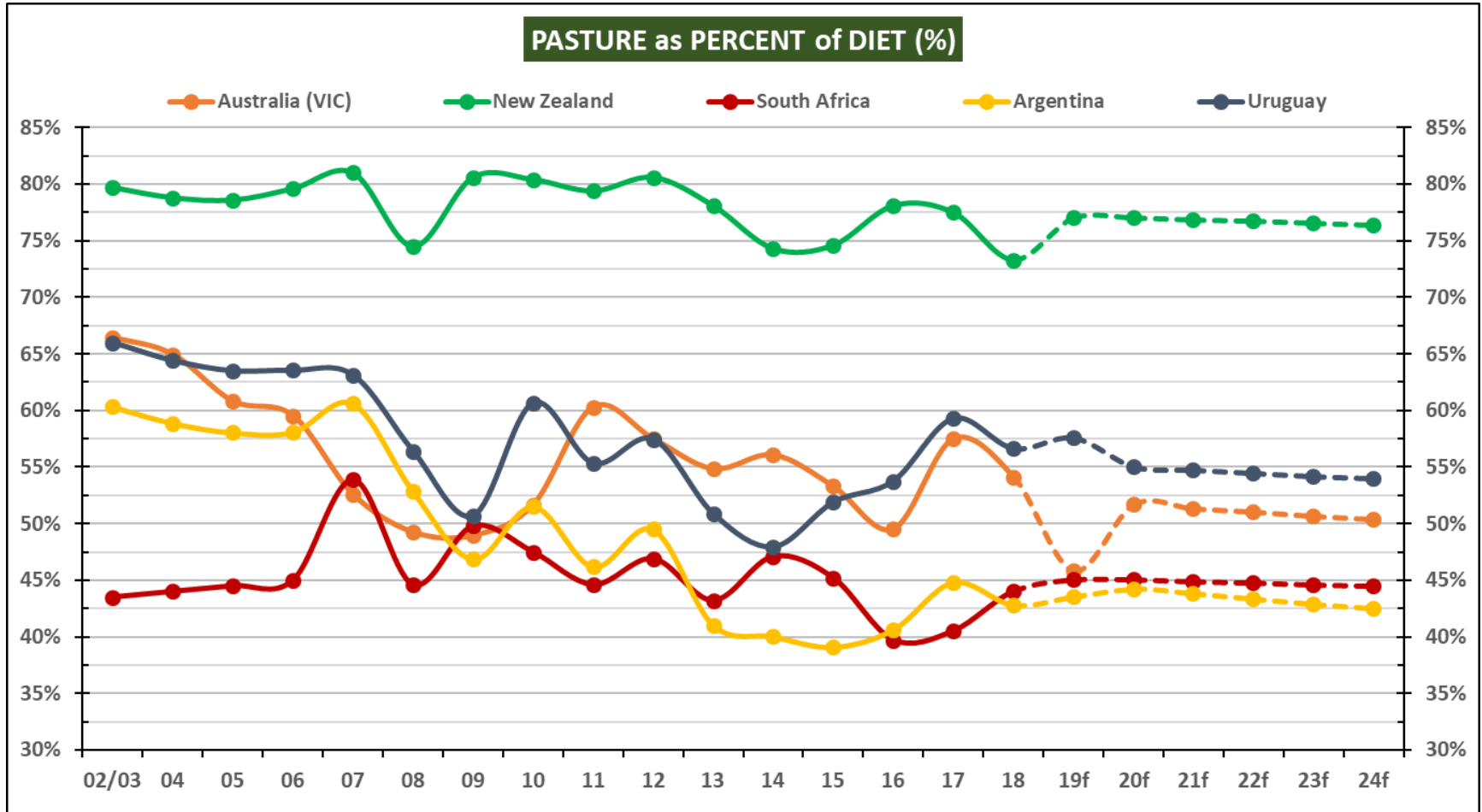


Profit vs Pasture as % of Diet

South Africa



Pasture as % of diet



Source: Red Sky, Dairy Farm Monitor Project, DairyNZ, DairyBase, AACREA, FUCREA

What are the financial impacts of these changes?

What has been happening to farm costs/expenses?

And what is creating these variations between countries?

Cost of supplements per litre...

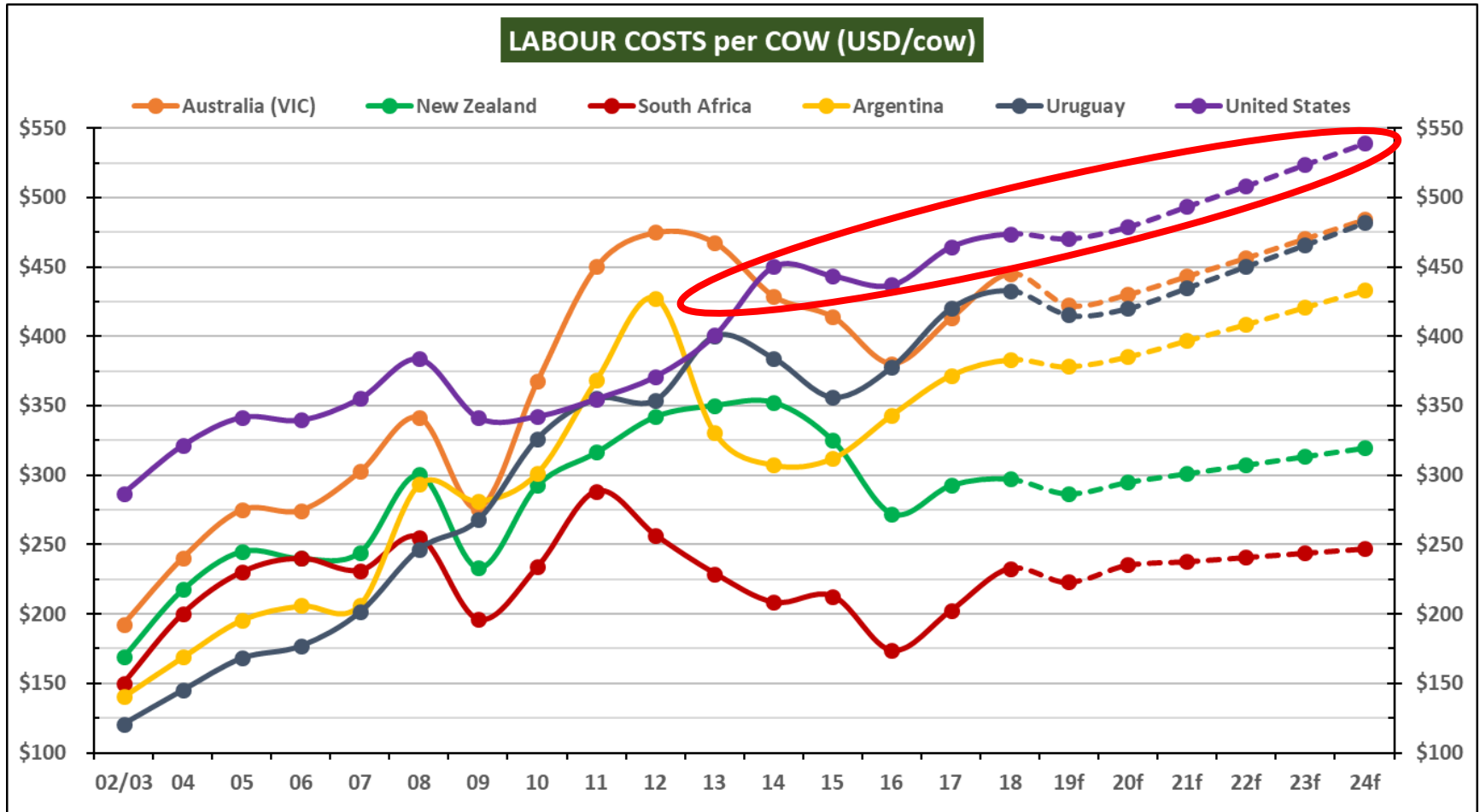
...and core per cow cost

...and core per hectare cost per tDM of pasture

...and labour cost per cow

...and total expenses per litre

Labour cost per cow



Source: Red Sky, Dairy Farm Monitor Project, DairyBase, AACREA, FUCREA, USDA, Genske Mulder

What are the impacts on profitability?

What has been happening to farm profitability?

And what are the variations between countries?

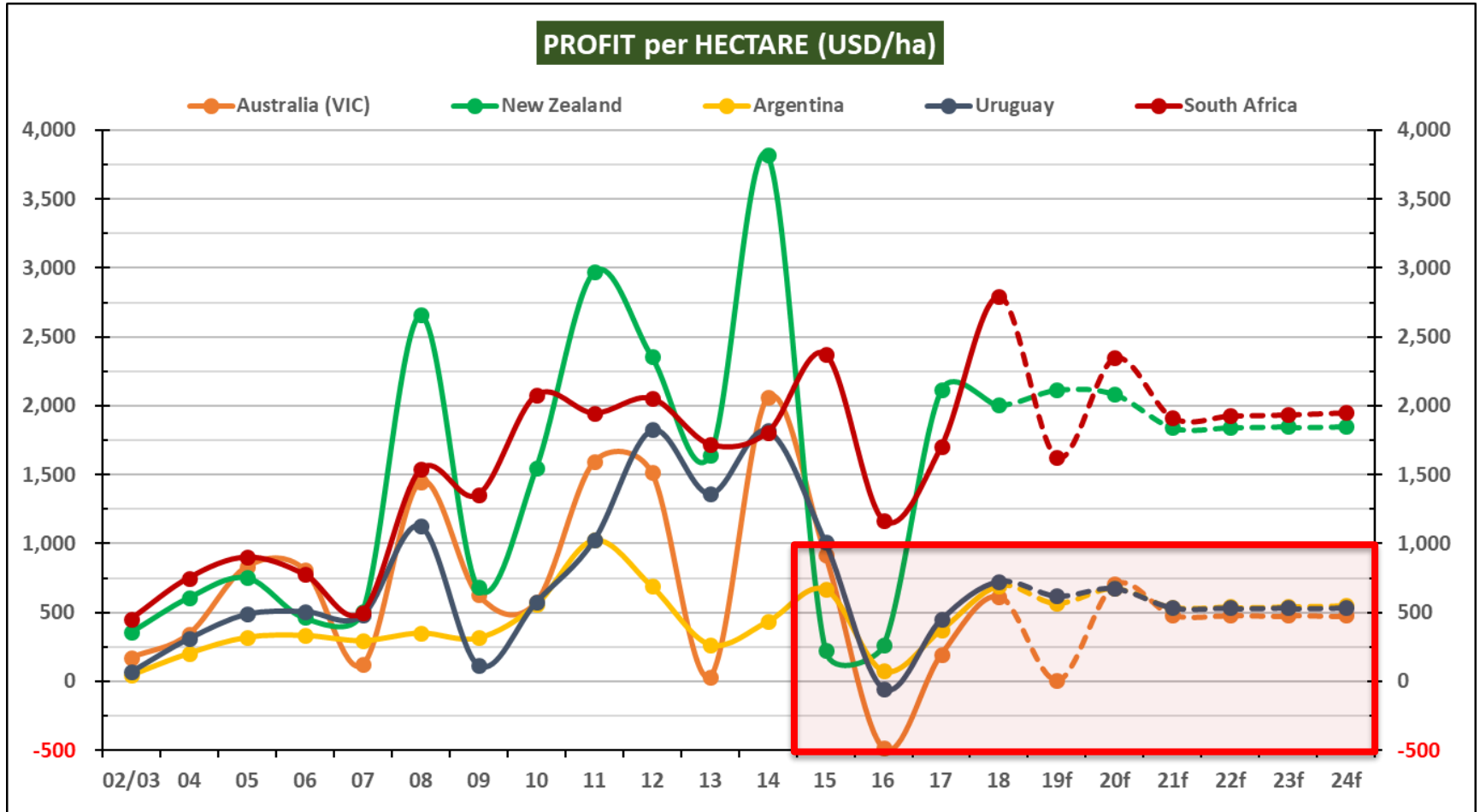
Profit per cow...

...and profit per hectare

...and operating profit margin

...and return on (total) capital

Profit per hectare



Source: Red Sky, Dairy Farm Monitor Project, DairyBase, AACREA, FUCREA

What does the future hold?

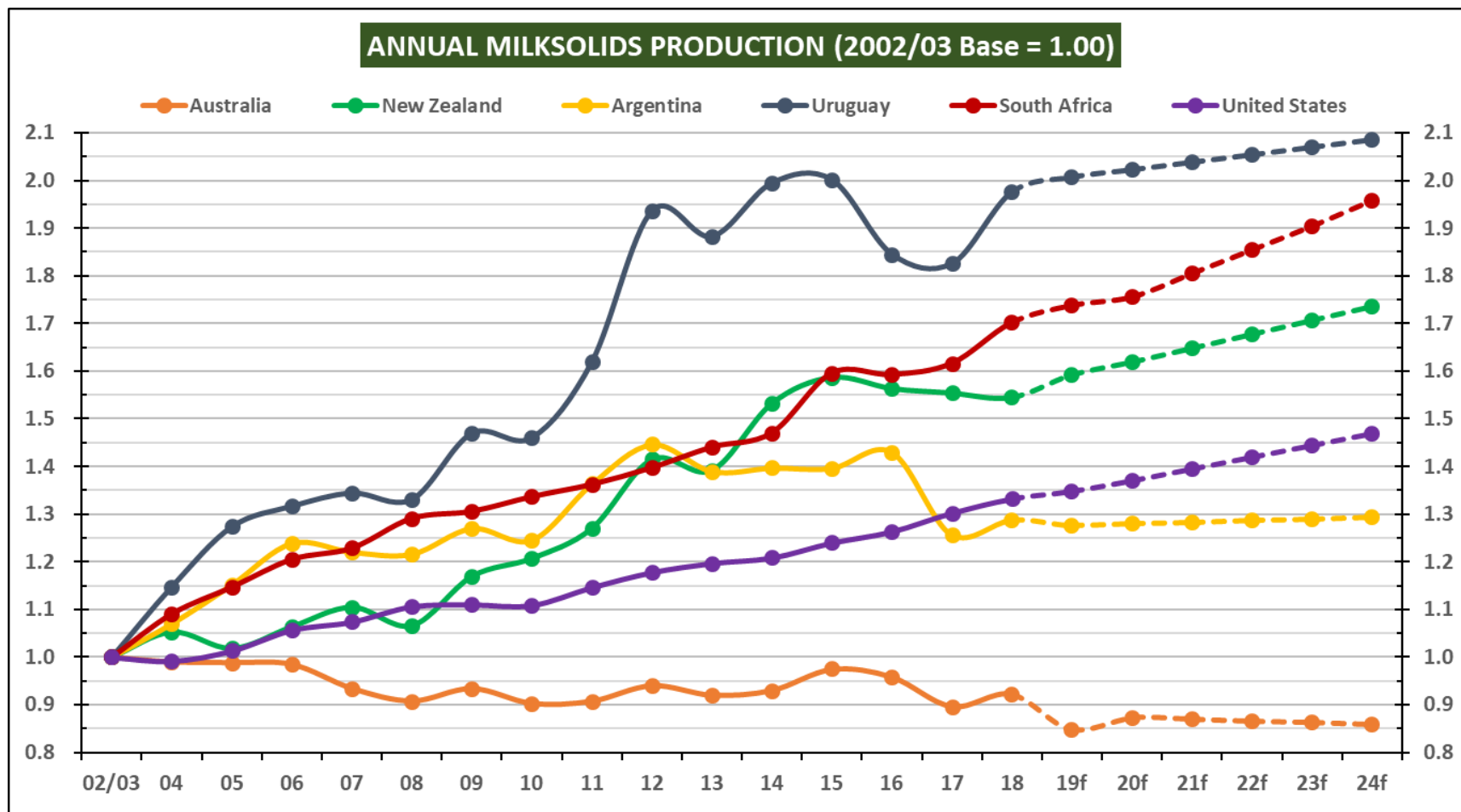
What is the likely result of all of these factors?

What is the probable outcome in regards to milk production growth?

Annual growth year-on-year...

...and total annual milk production

Annual milk production



Source: Dairy Australia, DairyNZ, MAGYP (ARG), INALE (URY), MPO (ZAF), USDA