

Global Trends in the Dairy Industry & Future Outlook



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Agenda

Dairy demand

Dairy supply

Dairy prices

Dairy outlook

Summary



Global Trends in the Dairy Industry & Future Outlook

Dairy conference Greece 4.6.2026

The dairy story is told best by a glass of milk

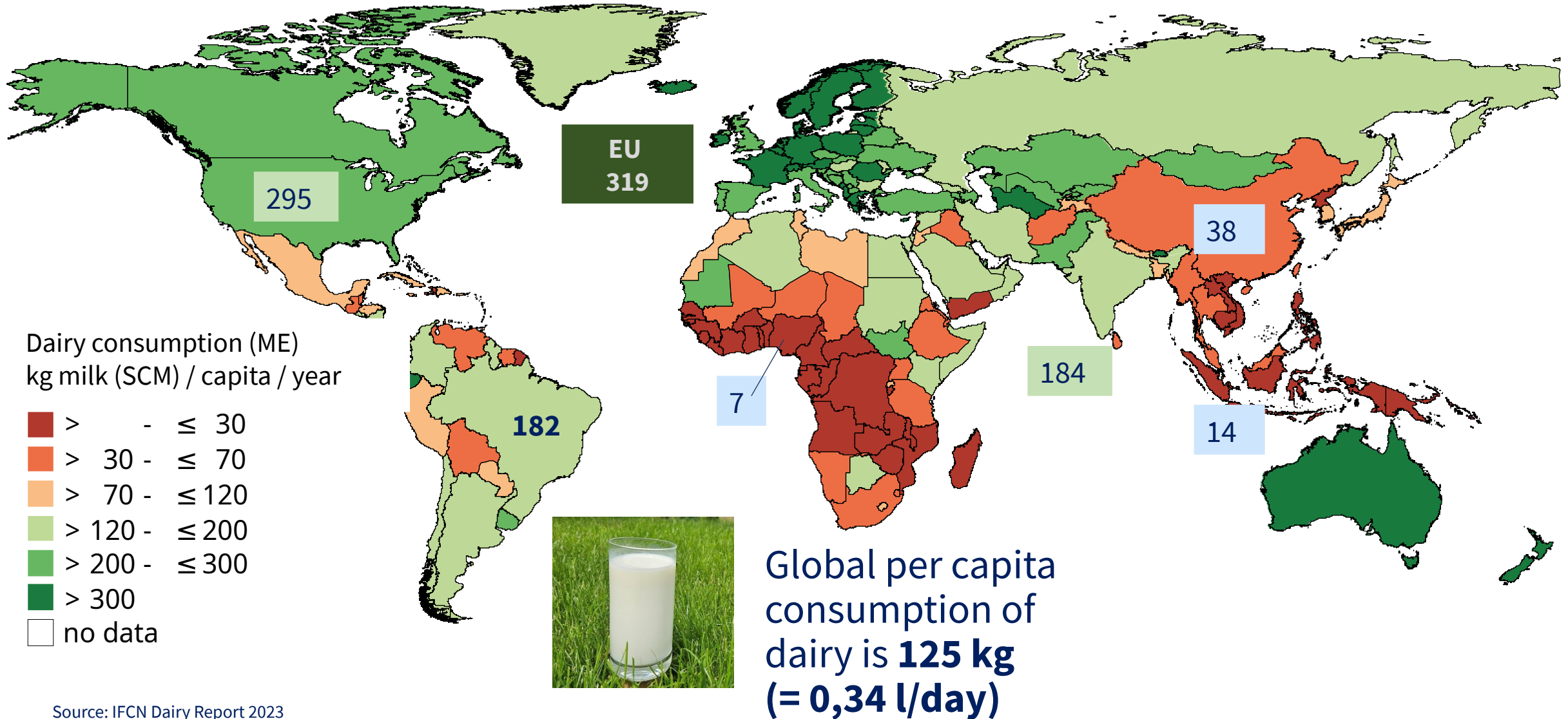


**A glass of milk,
0,34 l milk**

=

**the world average
dairy consumption
per person / day**

Dairy demand per capita differs between countries



Source: IFCN Dairy Report 2023
Remarks: Demand in per capita consumption in kg milk equivalents in 2023.

Story: Dairy alternatives – on the rise?

Superbowl 2021

30 sec slot

Its like milk but
made for
humans

No cows
No cows
No cows

Dairy & the Story
Loose, Loose, Loose
(Animals, People, Planet)



T. Petersson

0:20 / 0:30

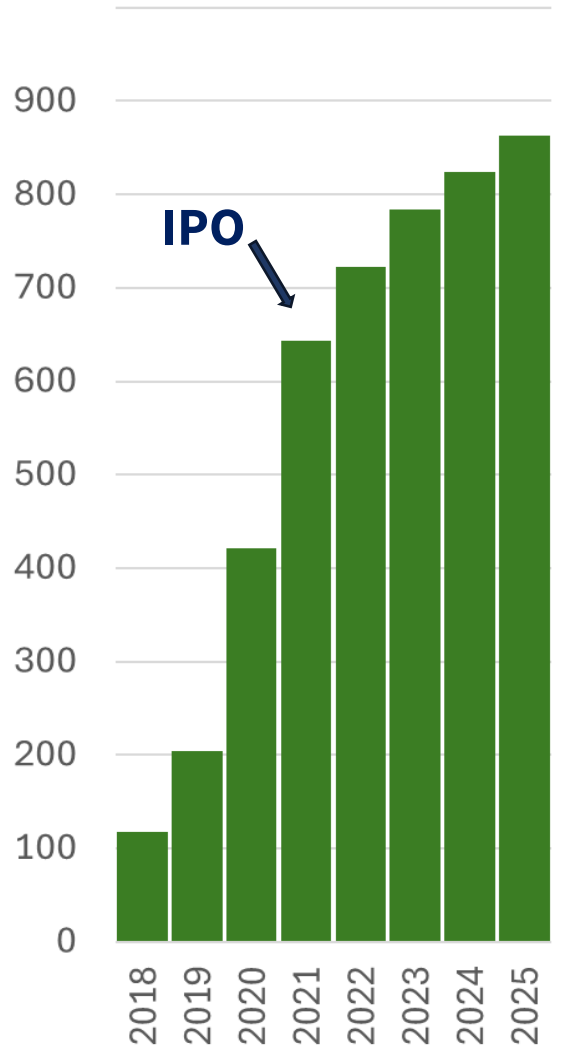
USA
TODAY
SPORTS

Oatly - Facts 2018 - 2026



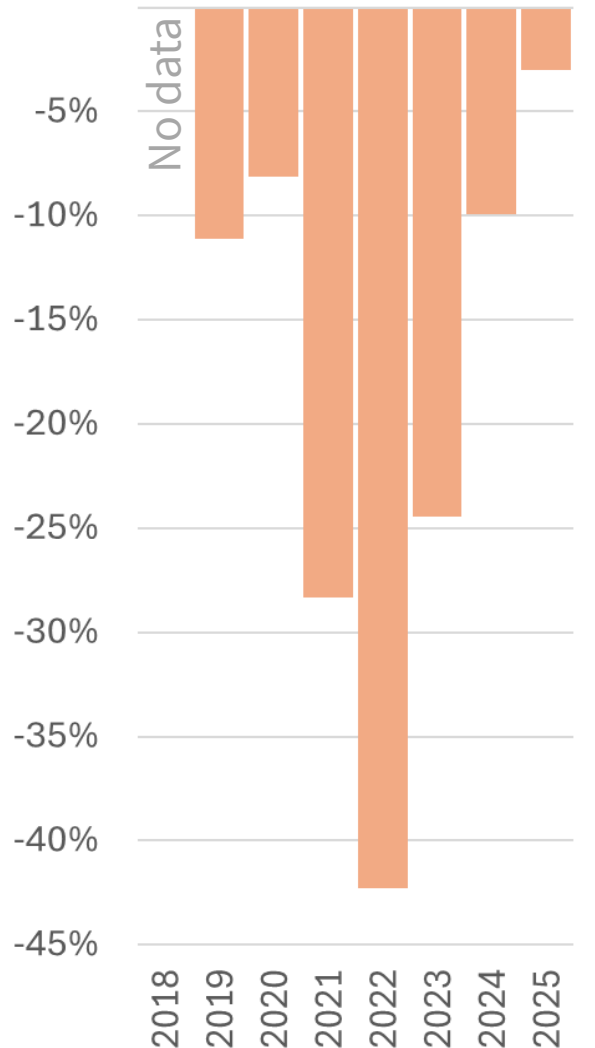
Sales

in 1000 US\$



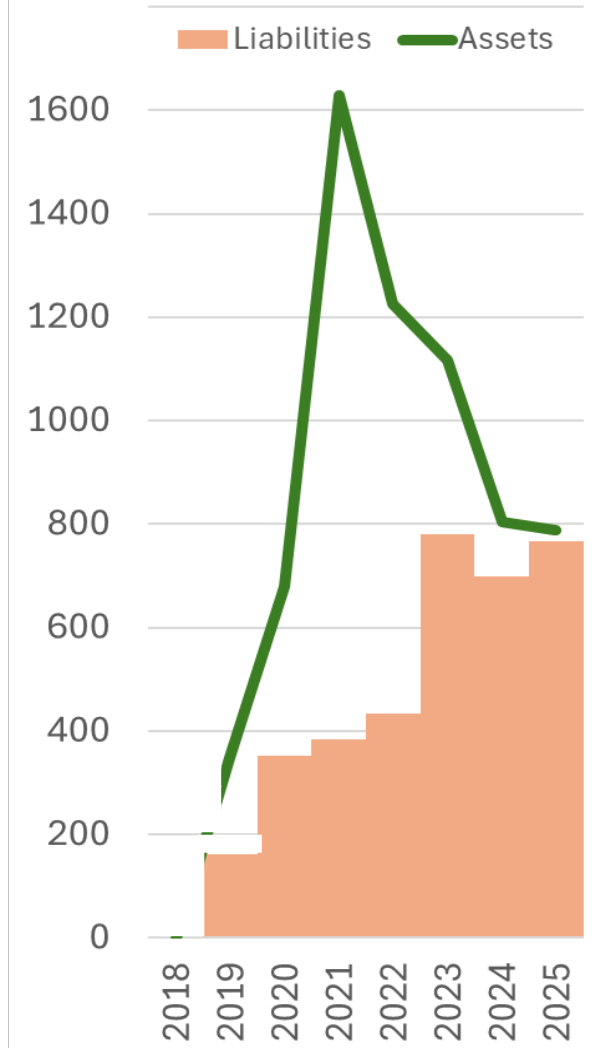
Profit Margin

EBITDA in %



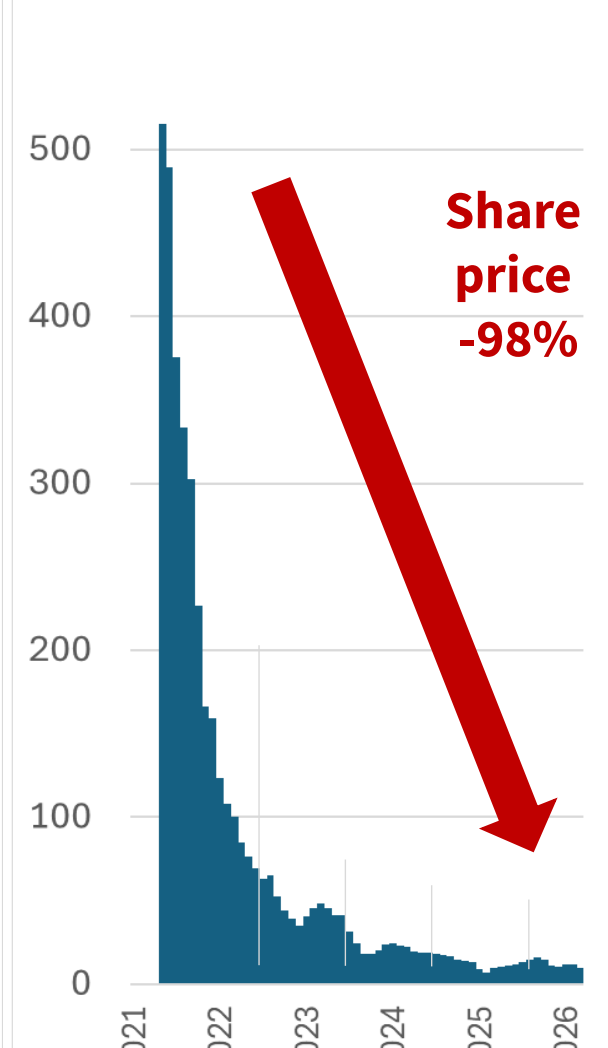
Balance Sheet

in 1000 US\$

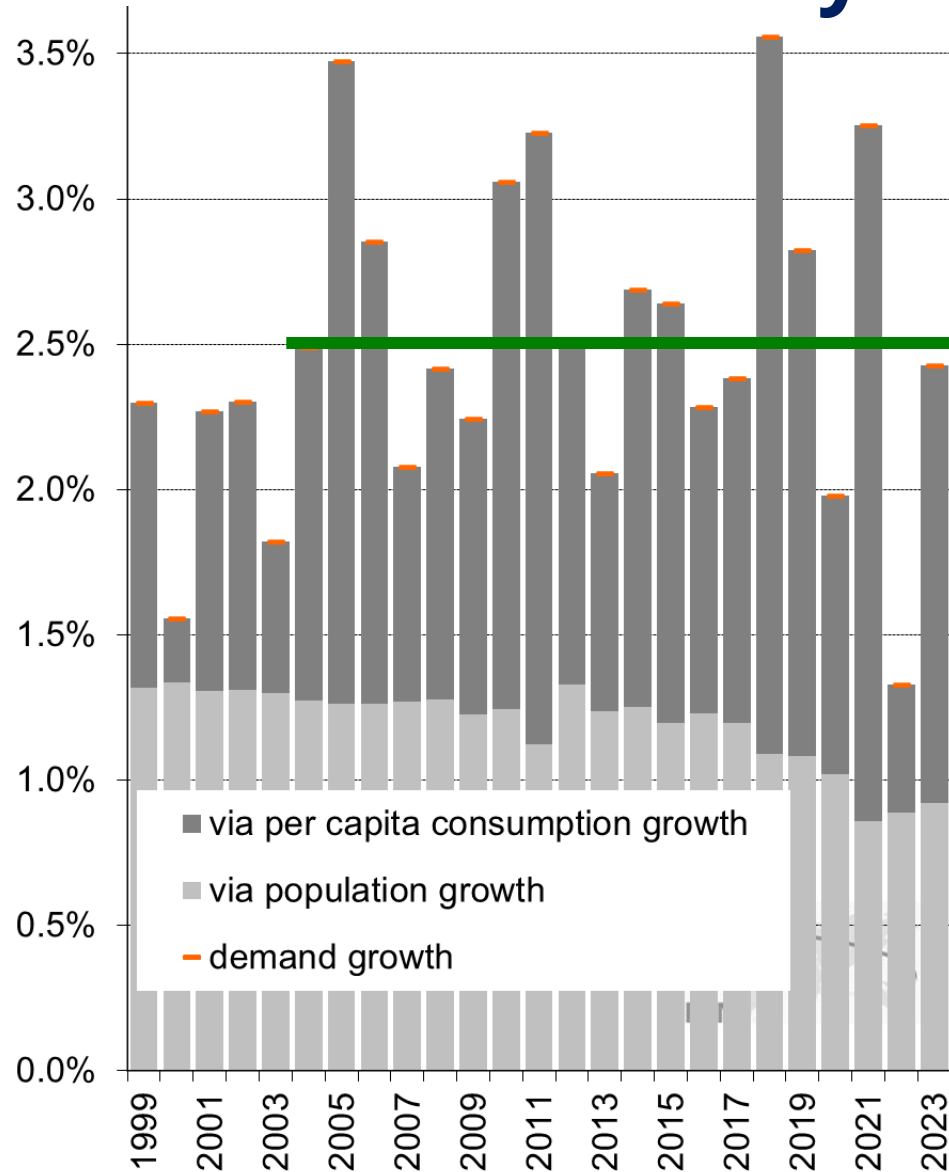


Share price

in US\$ / share



Facts on Global Dairy Demand growth in % per year



+2,5 % per year
= 20 mill t/ year; 1*NZ



Drivers for dairy demand

1. More people
2. More dairy / capita*
USA **+16%**;
EU-28 **+ 8%**
Asia **> + 25%**
Africa **-2%**





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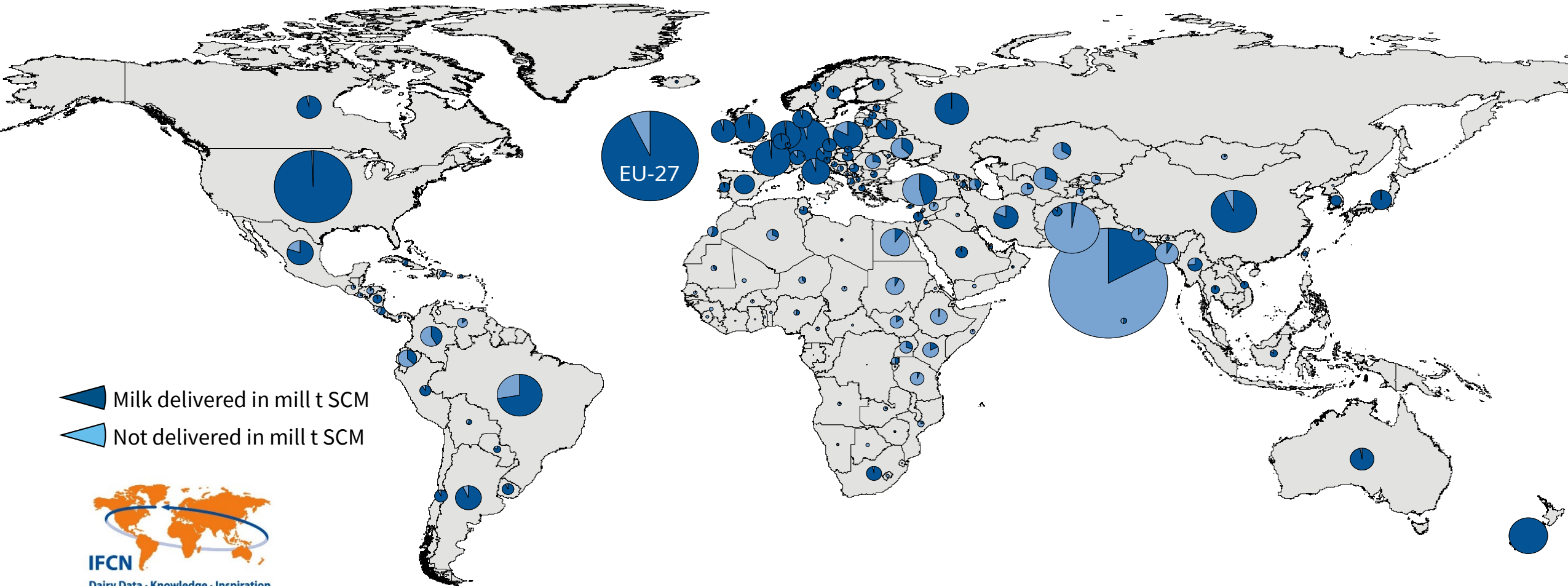
Dairy outlook

Summary



We now talk about 80% of the costs to produce a dairy product + ca. 80% emissions, employment in the dairy chain

Global Milk Production (Cows + Buffalo; 4% fat; 3.3% protein)

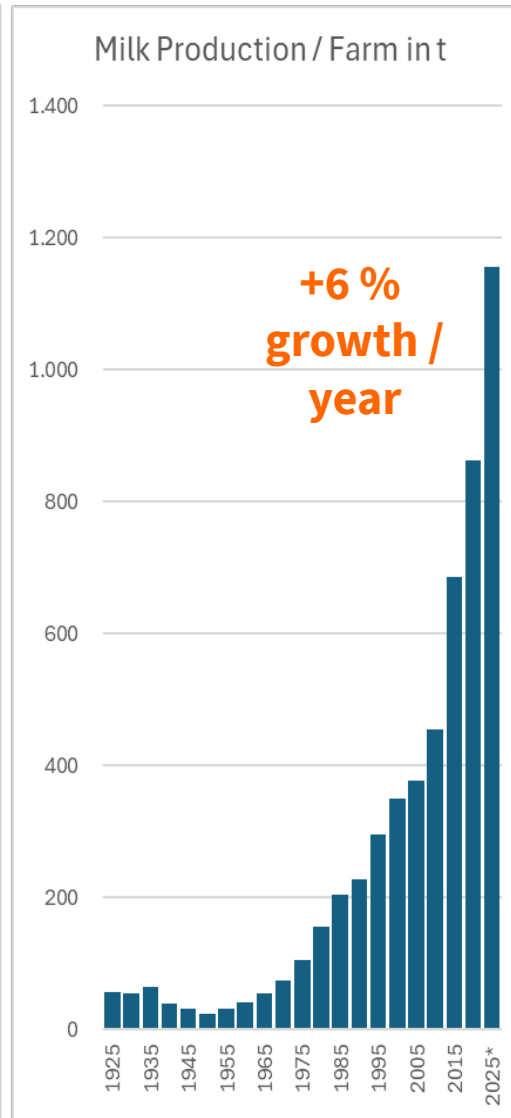
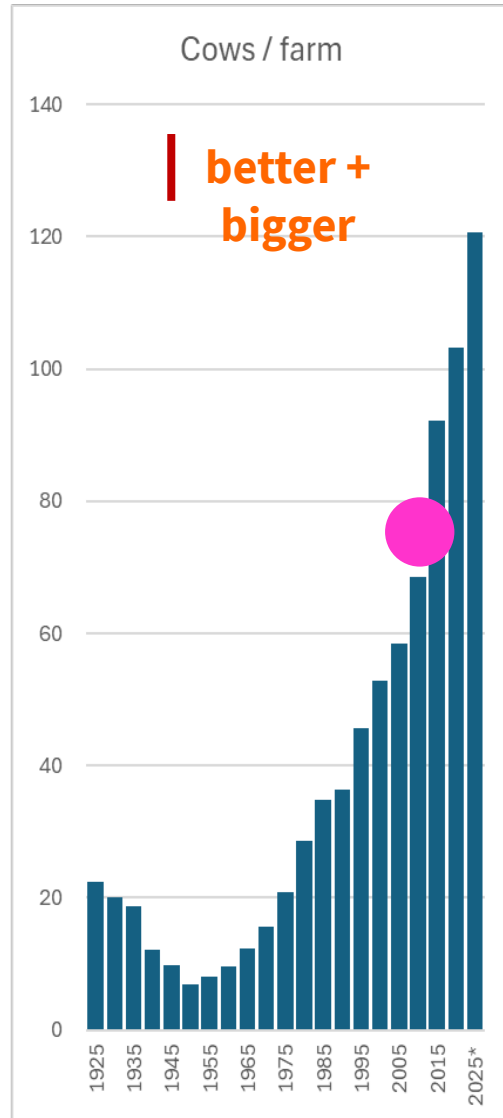
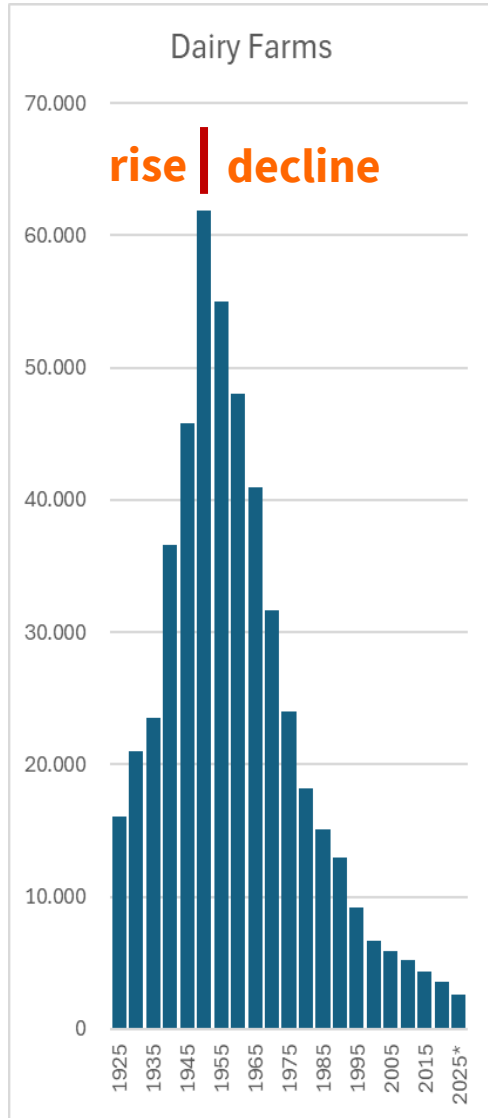


Source: IFCN Dairy Report

Remarks: Cow and buffalo milk production and milk delivered in mill t SCM – solid corrected milk (4% fat, 3.3% protein).

Philip Rasmussen, et. Al. (2024) Global losses due to dairy cattle diseases: A comorbidity-adjusted economic analysis – PubMed <https://pubmed.ncbi.nlm.nih.gov/38788837/>

100 years Dairy Farming in Germany (Province SH)



Milk production tripled: 1 =>3 mill t
Total carbon emissions stable since 1960s

Dairy farm numbers
 1925 to 1950 more dairy farms (+386%);
 1950 peak dairy farm numbers = 61.892 farms
 1950 – 2025 – 96% less dairy farms (-4,1%/ year)

Dairy farm size
 1925 to 1950 decrease of 7 cows/ farm
 1950 lowest farm size in history
 1950 – 2025 growth from 7 to 121 cows (1723%)

Milk production per farm
 1925 to 1950 decline 56t to 25t/ farm and year
 1950 – 2025 growth f. 25 to 1156 t / farm / year
 growth 47 times more than 1950 (+4700%)
 + 5,6% / year

2010 – 2025 post quota, more rapid change

Greece: 70 cows/ farm (?)
 (-7% less farms / year)

Source: national statistics, and regional statistics Schleswig Holstein; increase of milk fat content from 3,87 to 4,2% not considered in milk volume chart, n

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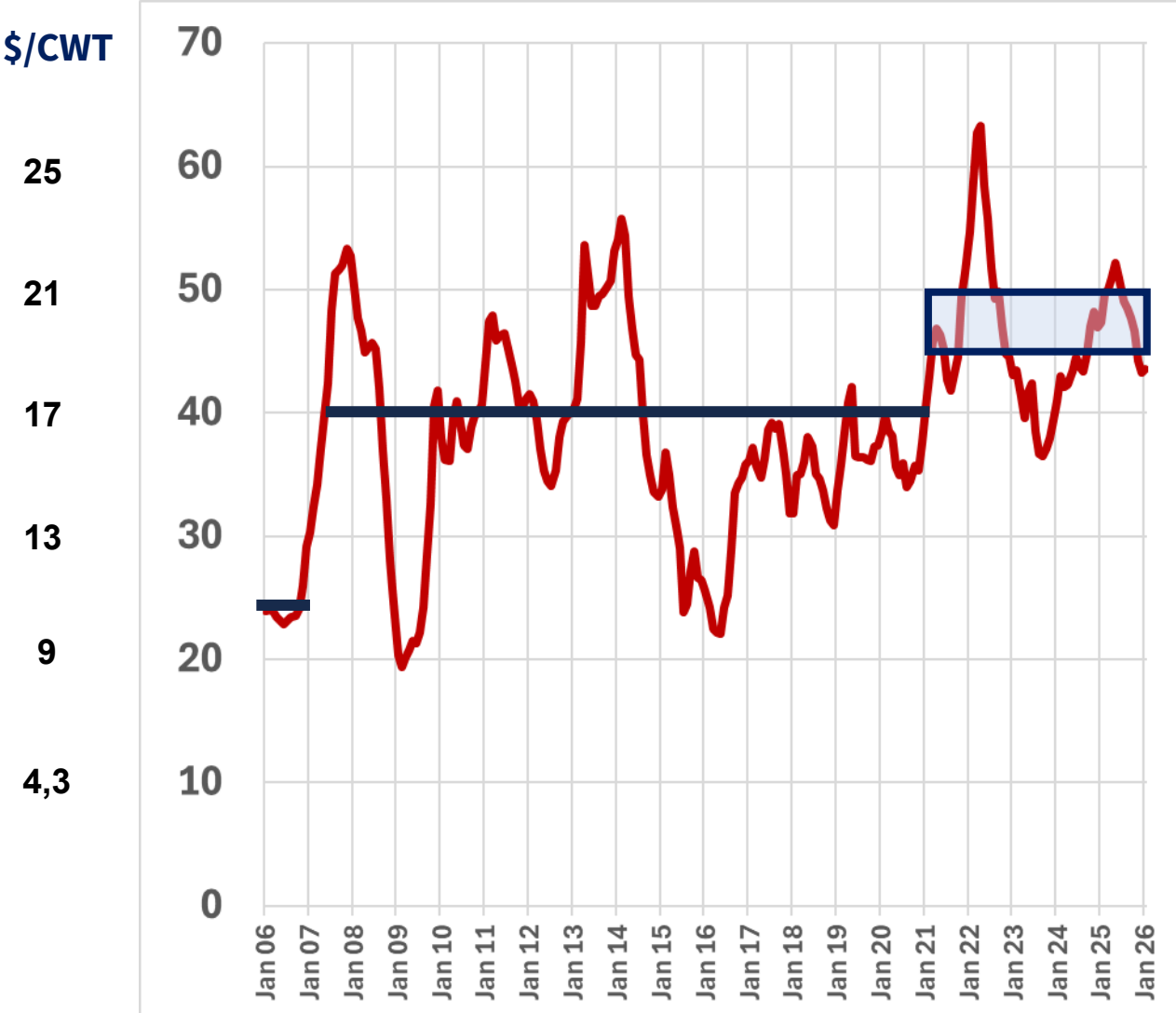
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World market price for milk, 2007 – Feb 2026



Three price levels (simplified)
 until – 2006 – **25** US\$ / 100 kg milk
 2007 – 2021 – **40** US\$ / 100 kg milk
 2022-24 new level **45-50** US\$ / 100 kg milk **(+20%)**

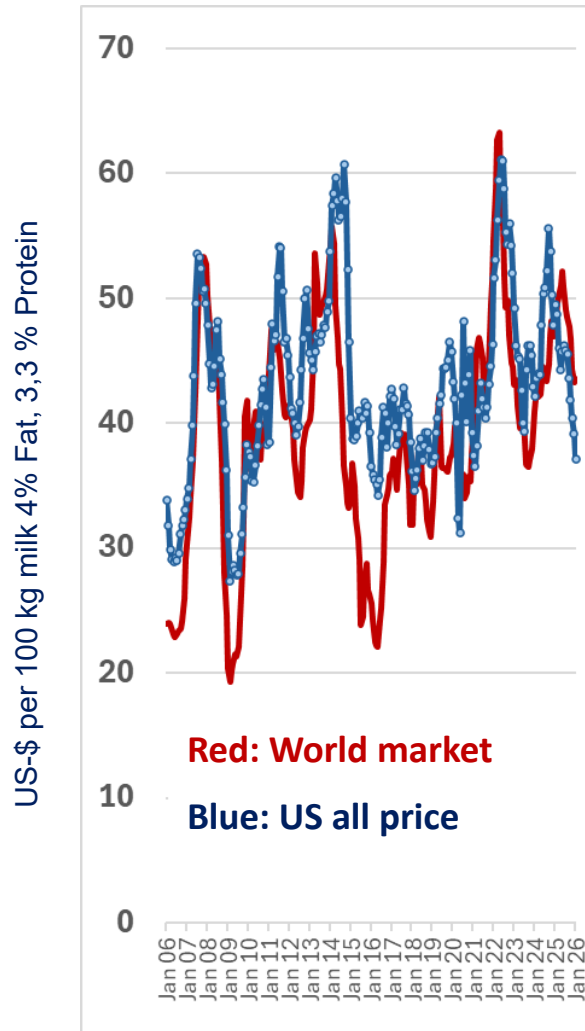


Source: IFCN world milk price is based on the dairy commodity prices butter/SMP, cheese/whey and whole milk powder; mainly Oceania prices

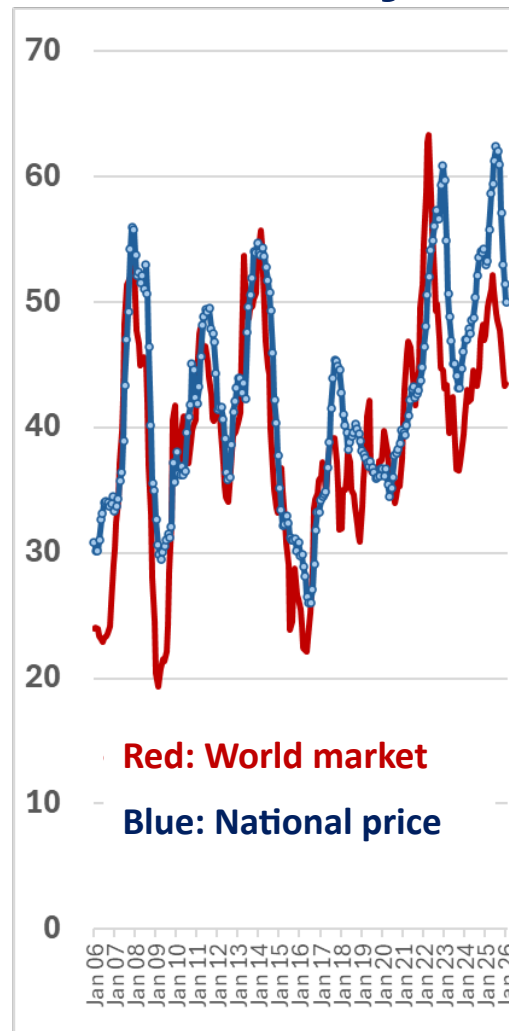
World milk price drives national milk prices

\$/CWT

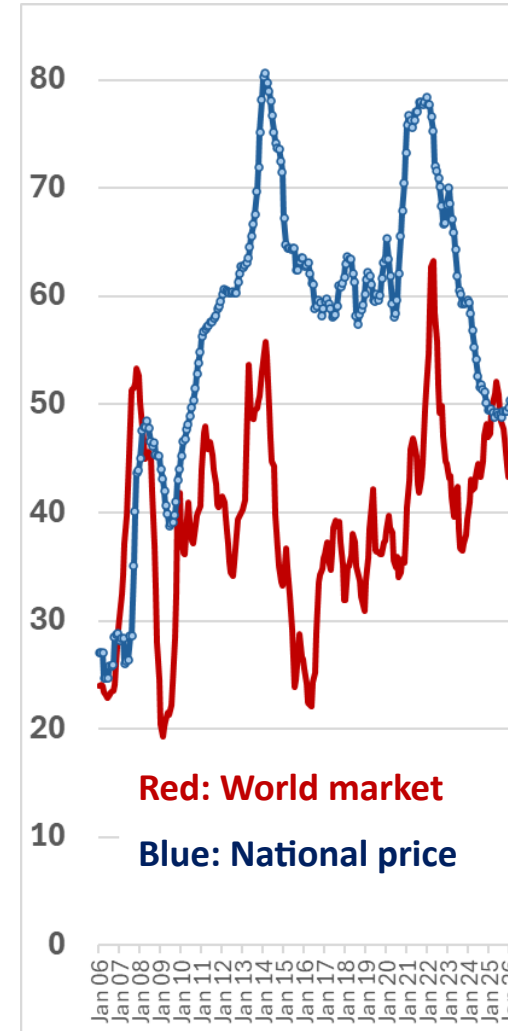
USA



Germany

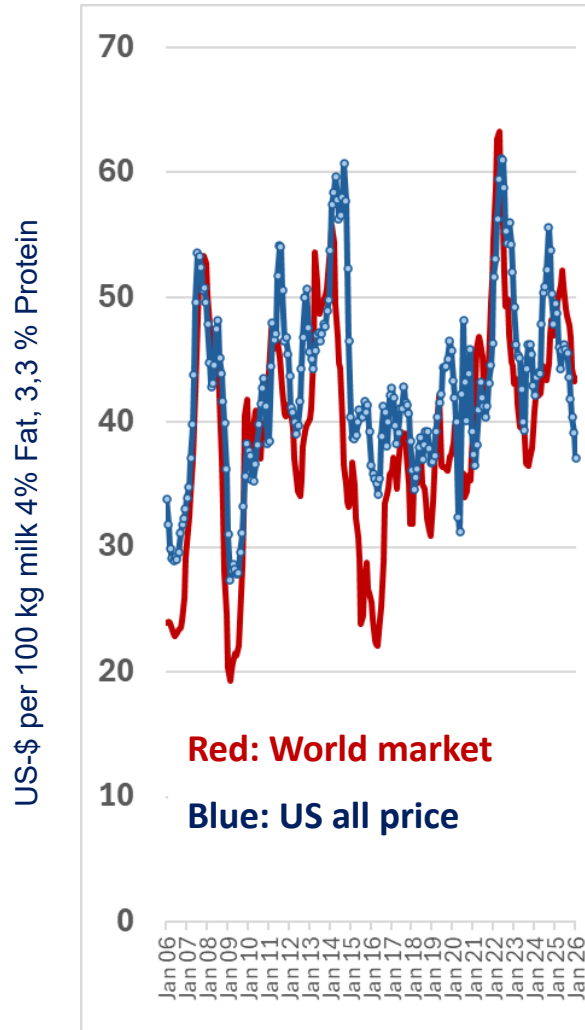


China

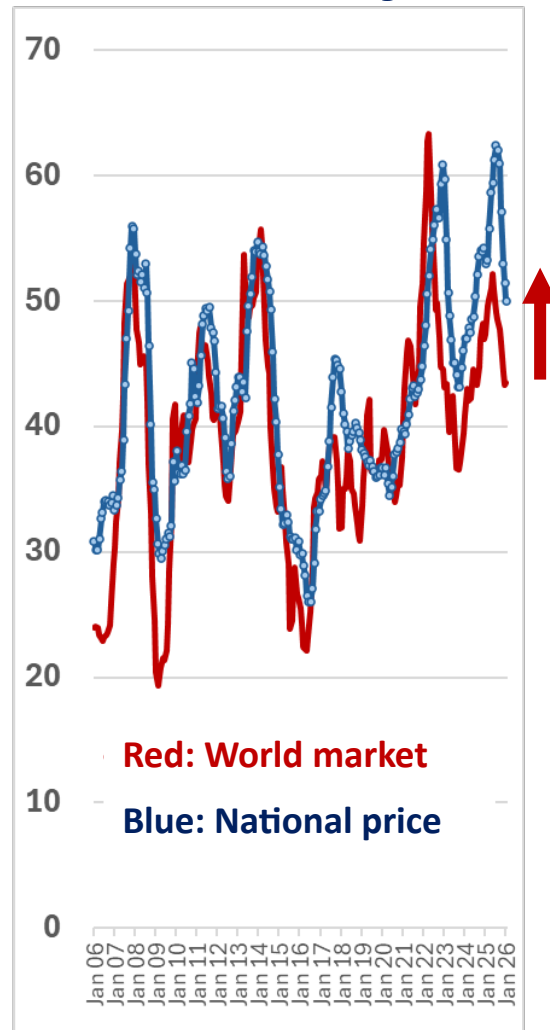


World milk price drives national milk prices

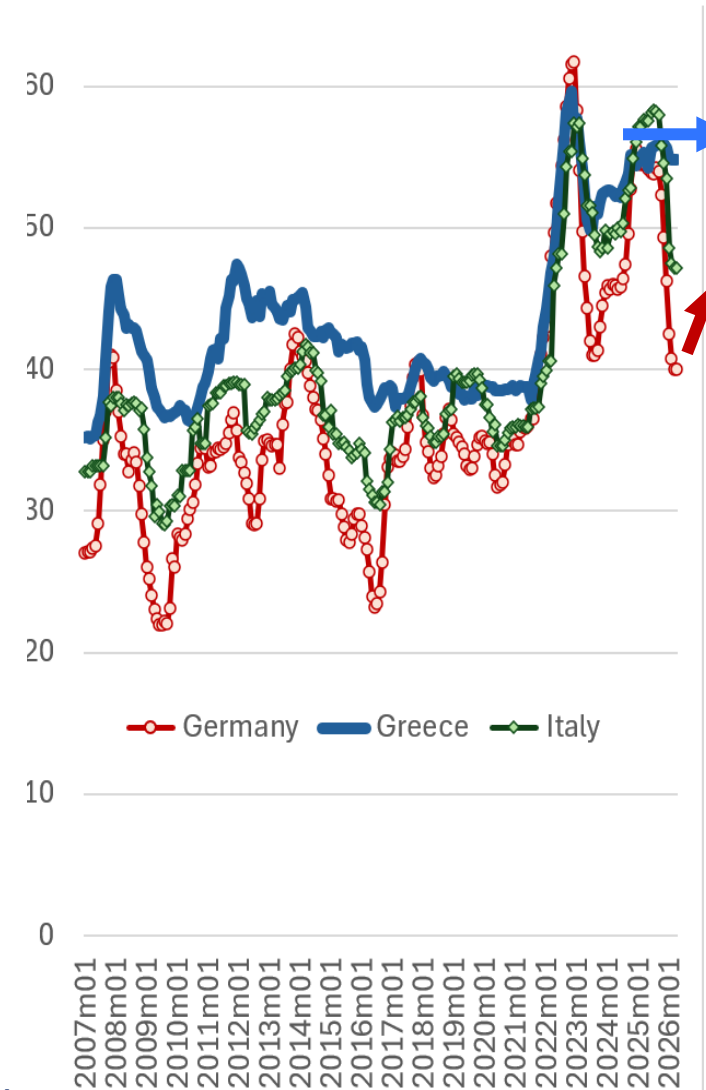
USA



Germany



Germany, Italy, Greece in Euro /100 kg



Italy ↓
Germany ↓

Dairy Outlook 2050 - Who will win?

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Nicole Kidman



Genesis Butler

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Four Scenarios for the Dairy Future

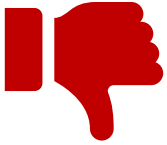
+ DEMAND Strong preferences for dairy products

IFCN SCENARIO

INCOME RESTRICTED



PRO DAIRY
DEMAND / SUPPLY GROWTH
 LIKE 2010 - 2020



+ POLICY & ECONOMICS

„STAGNATION OR SHRINKING ?“



RICH AND PICKY

- DEMAND More dairy-free diets (+ less food waste)

The Dairy World in 2050 vs 2020



9.6 billion people
+ 24% ;
+2 bn

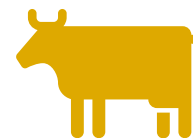
49% more milk consumed
+456 mill t milk
= 4,5x USA today;
ca. 20x NZ today



Less dairy farms
Increase in farm size



144 kg per capita/ year
+20%,
+24 kg milk /capita



Less dairy cows
Higher milk yields



Demand growth
driven by emerging
dairy countries

(Rest of the World)



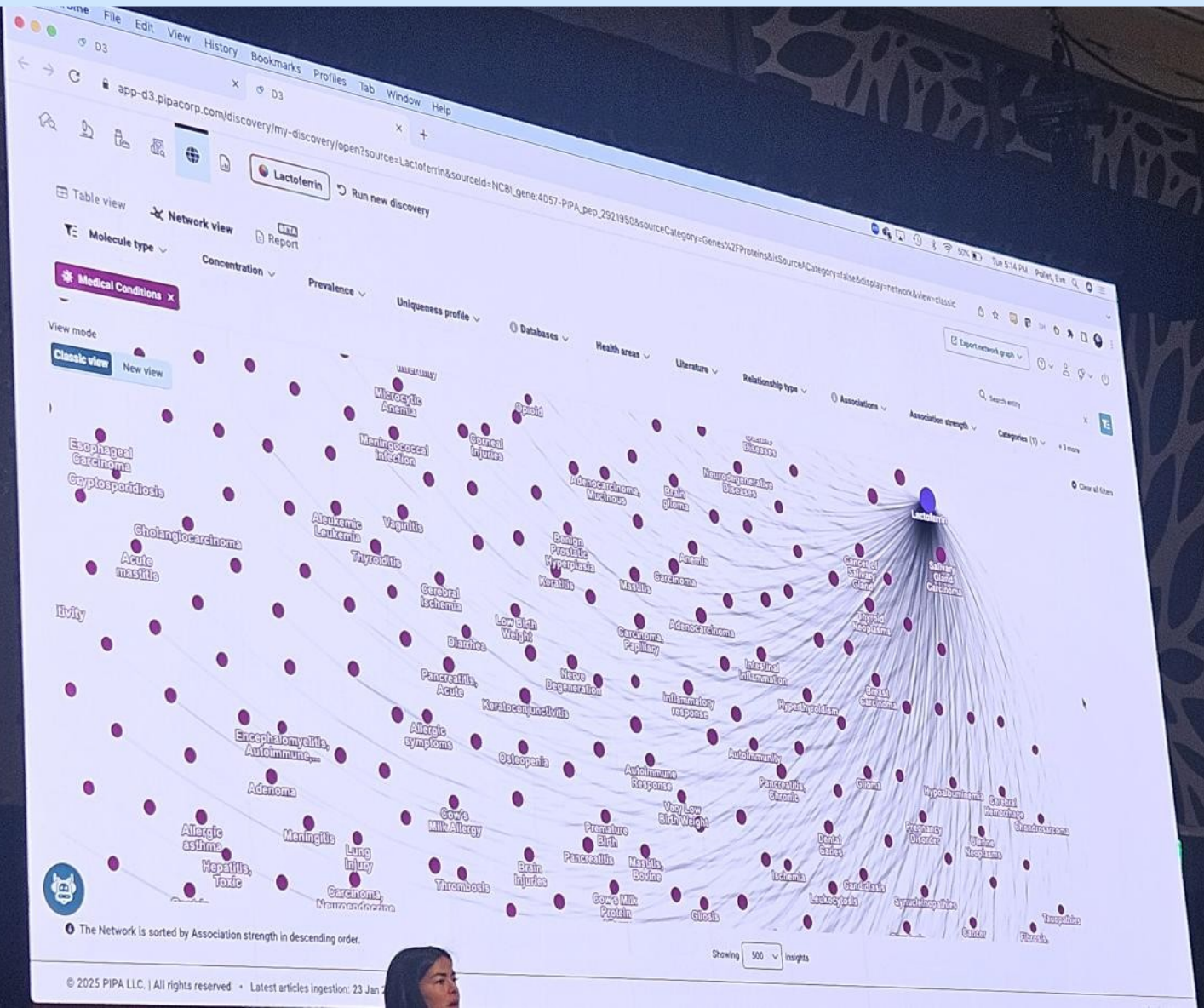
The balance defines future prices



Supply growth driven by

- 1. Local for local**
Emerging countries
- 2. Local for exports**
? tbd; NZ/AU; EU; US, AR/UY, others

Technology for new dairy products



Milk Molecules Initiative

How many different **active molecule types** exist in milk
> 6300

How many publications are done **per hour** on that topic?
170

This US project with AI helps to navigate and sets a base for new dairy products.

Future dairy farms = better + bigger

Dairy Farm Tech 4.0



SMALL Small companies are defined as technology start-ups whose innovation is touching fewer than 100,000 cows.



MEDIUM Medium companies are defined as early adoption companies who are touching between 100,000 and 1,000,000 cows.



LARGE Large companies are defined as those working with technology (research, development or acquisition) whose products touch more than 1,000,000 cows.



This poster tracks companies developing and deploying 21st Century technology advancements for use in handling, milking or managing cows or youngstock on dairy farms globally. Technologies that offer solutions for use in farming applications or in the dairy supply chain are not included. Manure-handling technologies are not part of the scope of this project. However, technologies for the management of enteric methane and a farm's carbon footprint are included.

Companies displayed on the map are startups or may be partially / fully owned by other companies. Companies owning or investing in these new technology brands may also be included. Companies that solely distribute technology owned by others are not included.

Disclaimer: This poster is meant to be inclusive. If you feel your technology company has been inadvertently left out or inaccurately categorized, please email the poster's creators to be added to future versions.

This Goes Too Fast for Me...



I can't keep up!

Too Much, Too Quick!

This Goes Over My Head...



I don't get it!

I'm Confused!

A road map of Technology 1.0 – 7.0

Industry 1.0
MECHANIZATION
1780s – 1870s



Steam Power
& Water

Early Factories

Industry 2.0
MASS PRODUCTION
1870s – 1970s



Electricity
Assembly Line



Industry 3.0
AUTOMATION
1970s – 2010s



Computers
& Robotics



Industry 4.0
DIGITIZATION
Since 2011



IoT,
Smart Factories



Industry 5.0
HUMAN-CENTRIC
Emerging



Collaboration
Sustainability



Industry 6.0
AUTONOMOUS FUTURE
Visionary



AI, Self-Organizing
Systems



Industry 7.0
CONSCIOUS / SYMBIOTIC
Future



AI + Biology +
Planet



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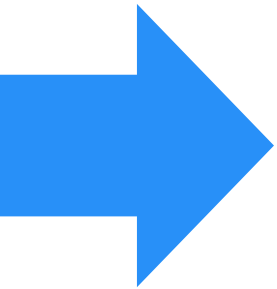
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Golden Times for Dairy?



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2000 - 2020 We had golden years for dairy

Even if we had bumpy roads sometimes.

2020 - 2050: Golden times also possible

Demand growth > Supply growth; Milk price shift possible

2020 - 2050: Dairy Industry

Competitive forces remain active and strong

Rapid change in dairy farming & farm structure

Huge opportunity for agriculture in 4.0, 5.0, 6.0, 7.0

* IFCN outlook– Pro dairy scenario (People positive about dairy, good economic growth)



**GOLDEN TIMES
FOR DAIRY**

