

18 September 2024

AHDB milk forecasting forum

AHDB Market Intelligence

<https://ahdb.org.uk/dairy-markets>



Housekeeping

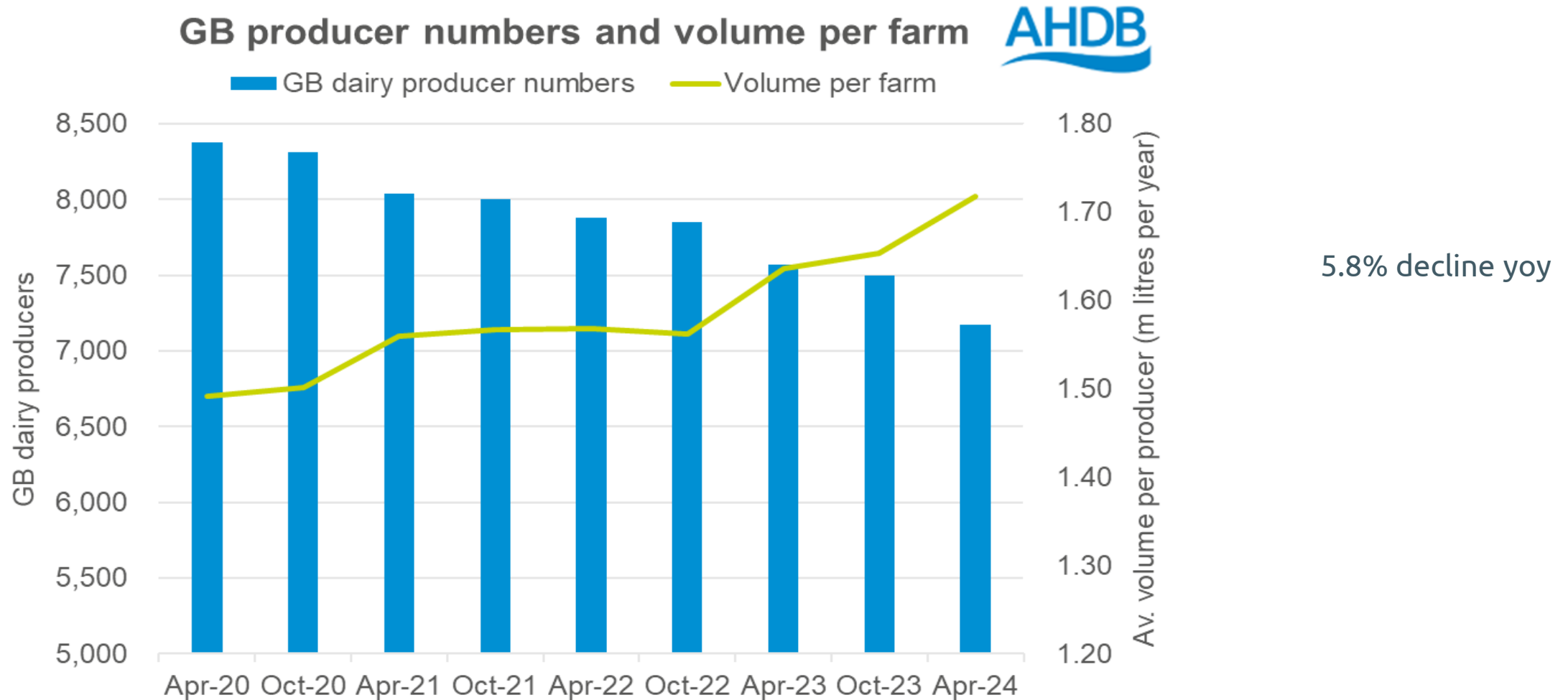
- This is intended to be a discussion so please do speak up
- But please mute your microphones when you are not speaking
- We will aim to have a discussion at the end of each key topic

Contents

- Key topics:
 - Herd size
 - Feed market update
 - Costs
 - Yields
 - Compositional quality
- Milk forecast
- Cost of Production

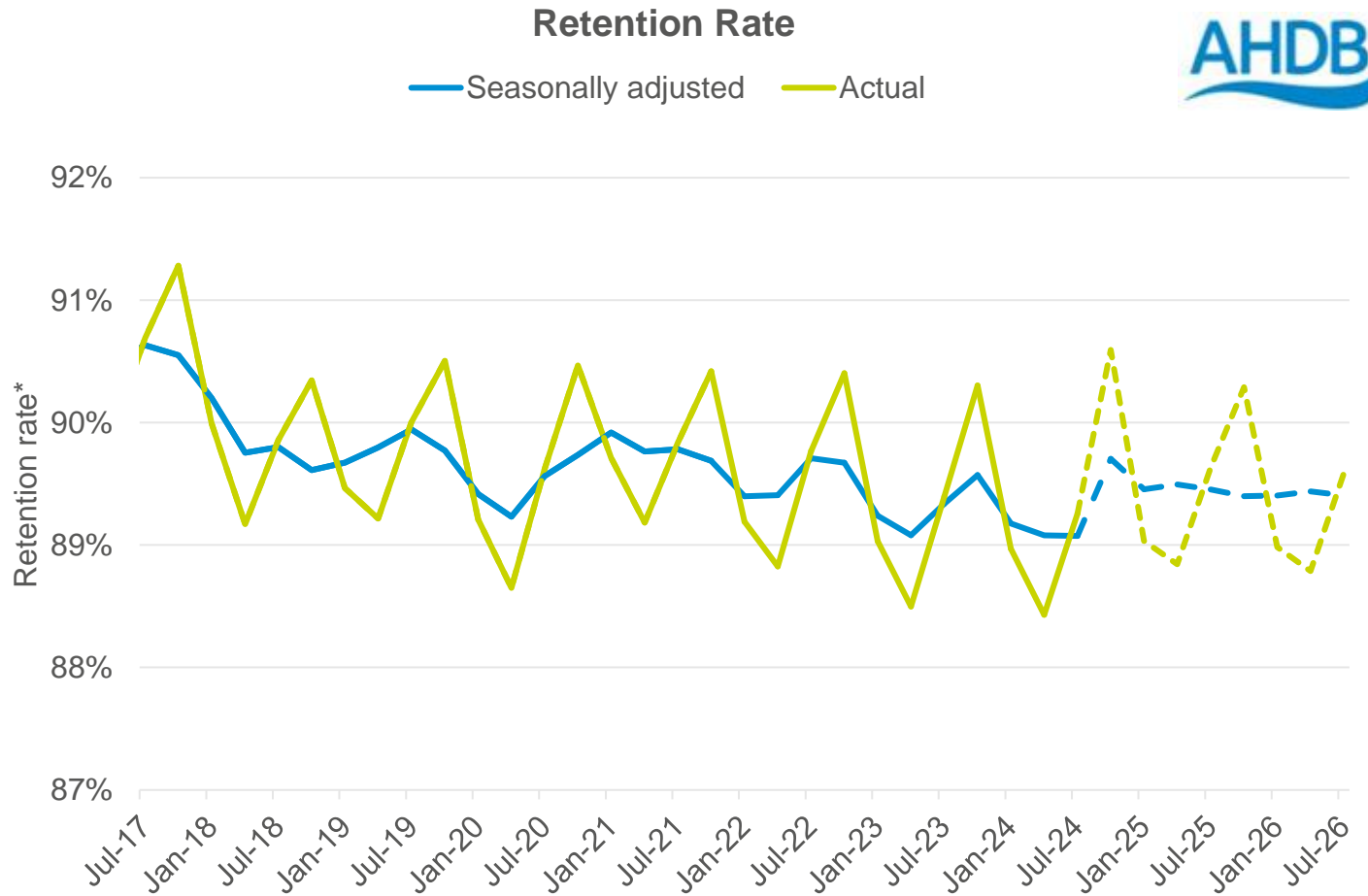
Herd size, inseminations and calvings

Loss of producers has continued – further consolidation in the sector



Source: AHDB

Retention rates

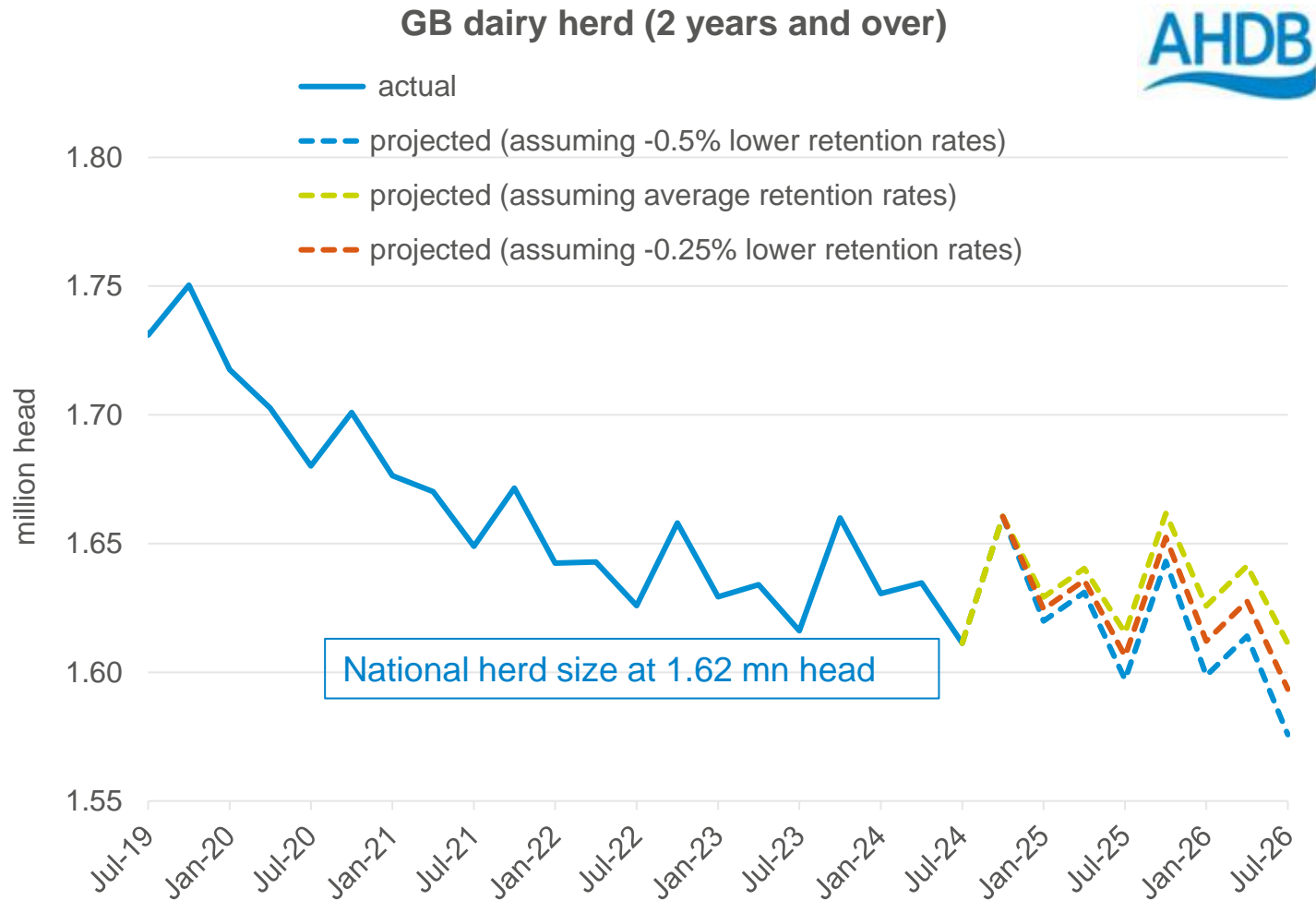


- Retention of cows over 6 month period
- We seasonally adjust because Oct always high and Apr always low – allows us to see trends more easily
- Retention rate will steady out at lower than historic levels over the next couple of years as herd size has consolidated

Source: BCMS, AHDB

*Seasonally adjusted 6-monthly retention rate for 2-8yrs

Herd size expectation

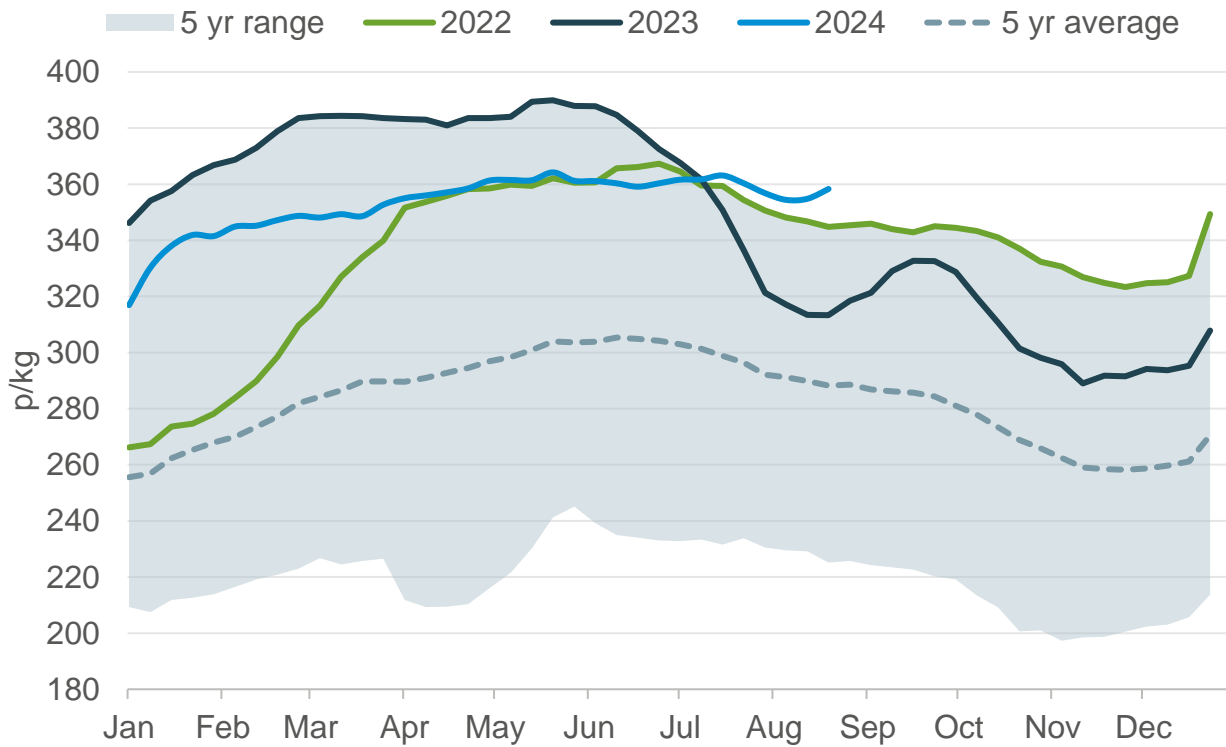


- Based on predicted herd numbers based on current BCMS figures and 3 year average retention rates
- Herd size will stabilise if retention rates return to average
- Herd size will decrease if retention rates run 0.25% below average
- Herd size will decrease if retention rates run 0.5% below average.

0.5% reduction in retention rate would mean herd size falling to under 1.6mn head in 2026

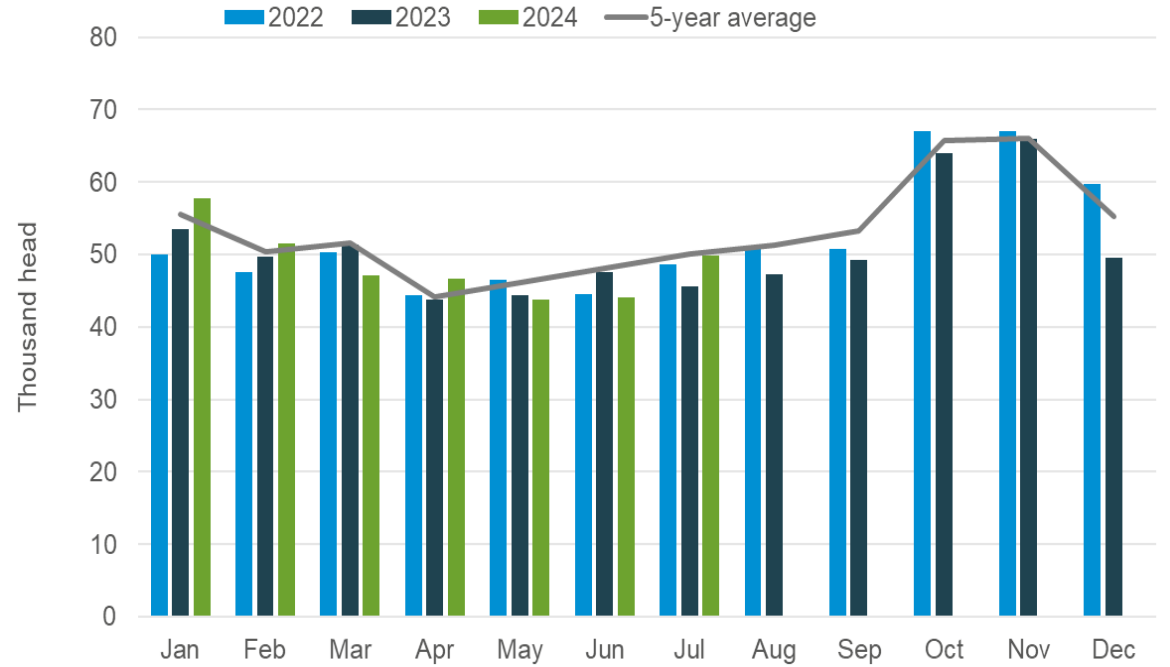
Cow prices are exceptionally high for the time of year but slaughterings are behind average over the summer

GB overall average deadweight cow price



Source: AHDB

UK cow slaughter

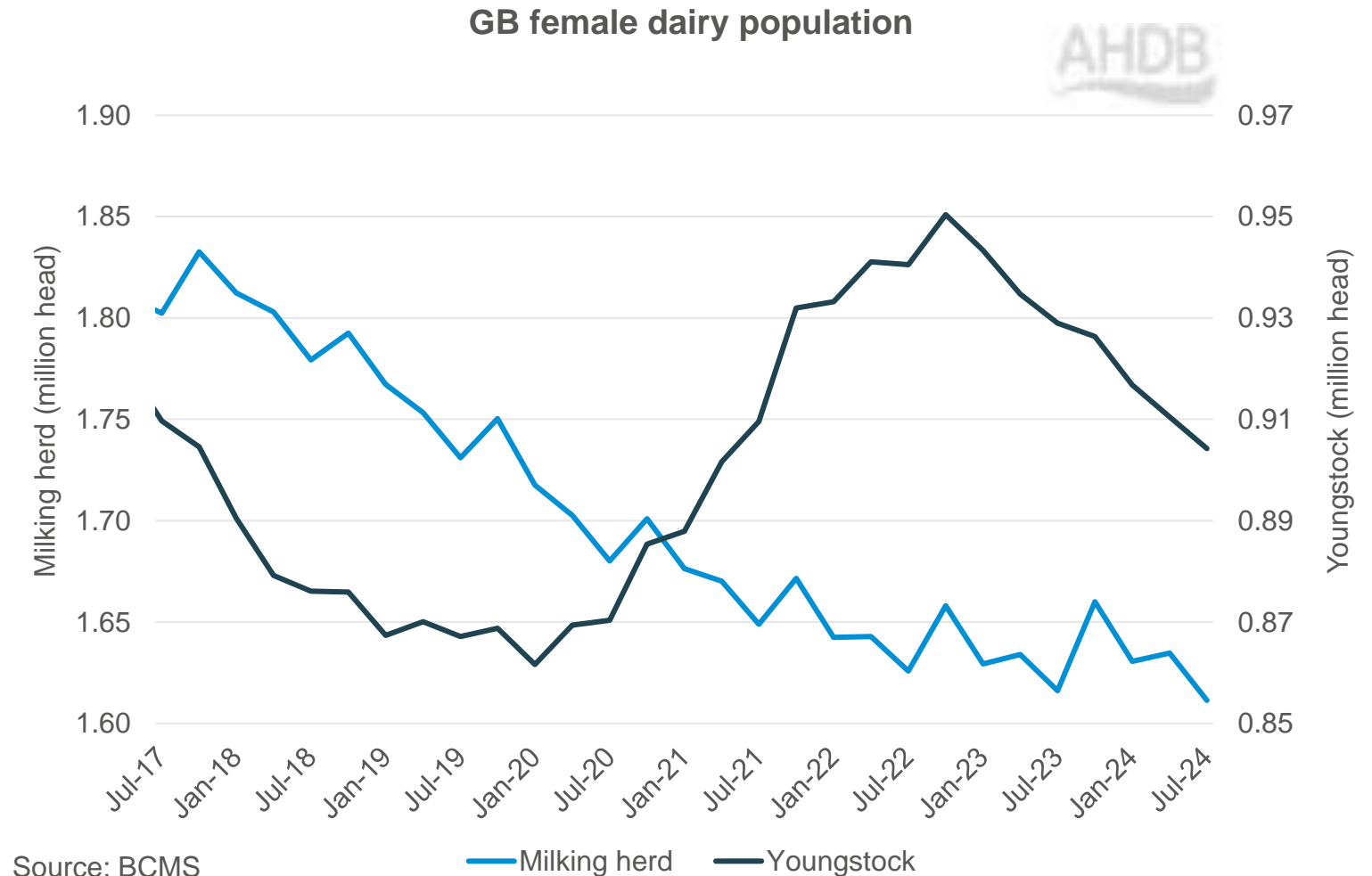


Source: Defra

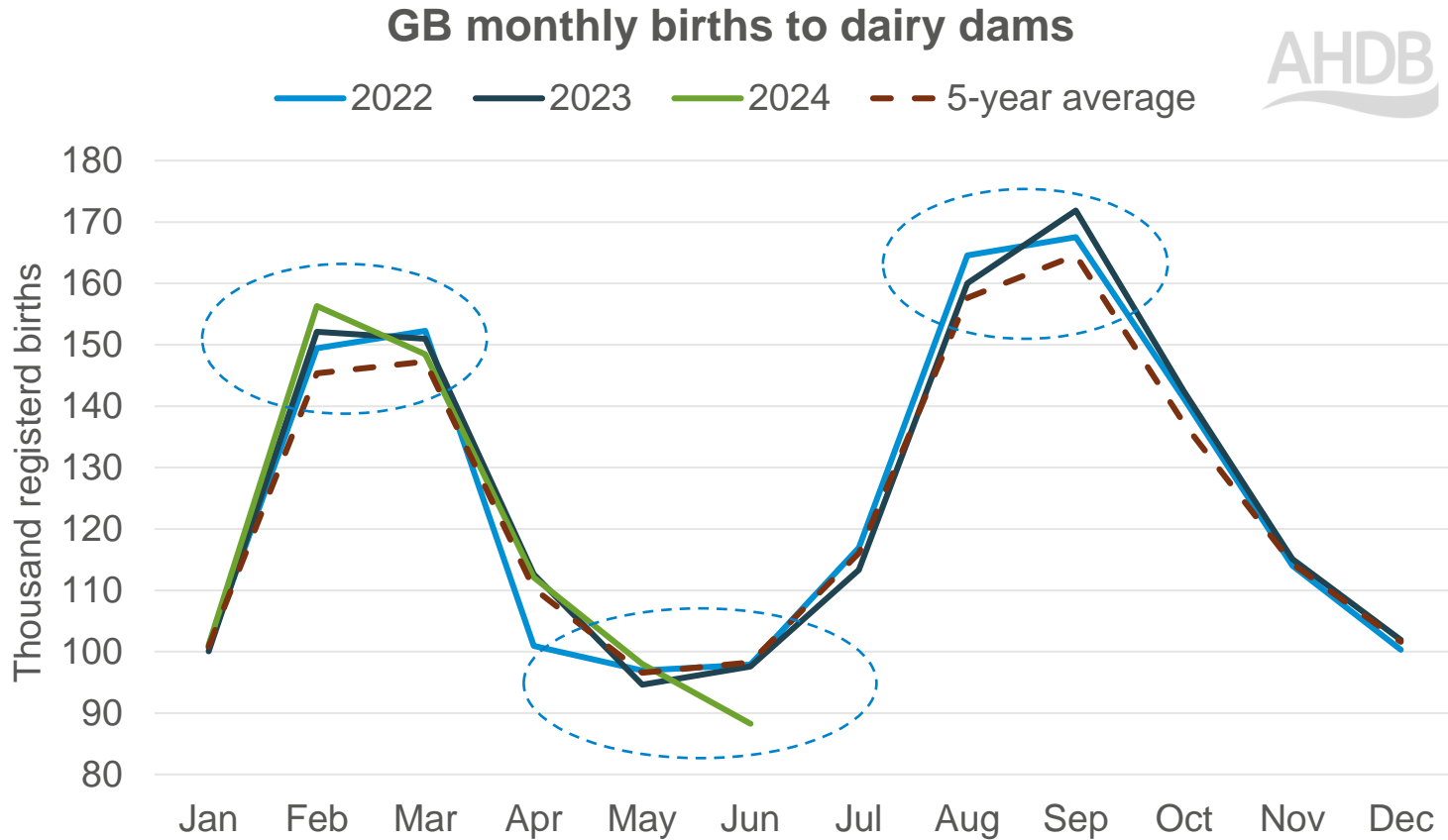
Note: data is for all cows so will include beef breeding cows as well as dairy cows

Population of the female dairy herd

- Youngstock numbers (0-24m) continue their decline after 2 years of increases
- Rising youngstock from 2020/21 have now entered main herd



Births to dairy dams ease in Q2 2024

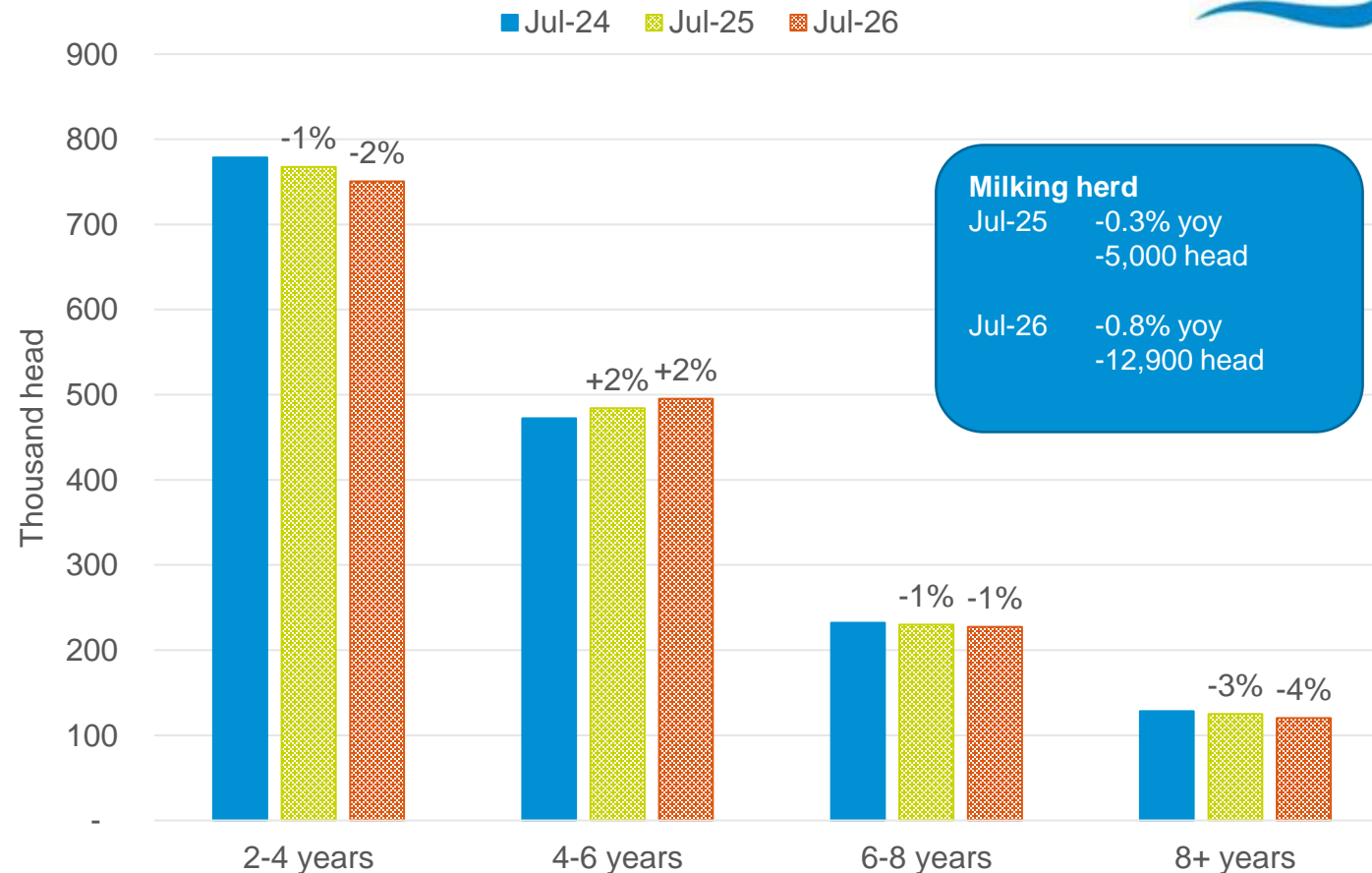


- Q1 registrations hit a new high, whilst Q2 saw much more variation over the three months.
- Is this a reflection of more block calving? Trend towards calving earlier?
- Is this the effect of poor producer sentiment last summer meaning fewer cows were bred?

Source: BCMS

Future age structure of herd

Projected evolution of the milking herd at July



Source: BCMS, AHDB

- Using current projections of -0.25% retention rate, 4-6 year olds will increase while youngstock and older groups continue to decline
- Is this a reasonable expectation?**

Herd size discussion

- What will happen now the current youngstock have aged into the herd?
- Will the declines in the milking herd continue, or stabilise as milk prices improve?
- Are our assumptions around calving still valid?

Calving assumptions

Number of calves born

1. Proportion of calves born to dairy females inseminated **88%**
2. Proportion of females from sexed semen **95%**
3. Proportion of females from non-sexed semen **50%**

Efficiency of sexed semen

1. Success of sexed relative to non-sexed semen **95%**
2. AI as % of all inseminations **90%**

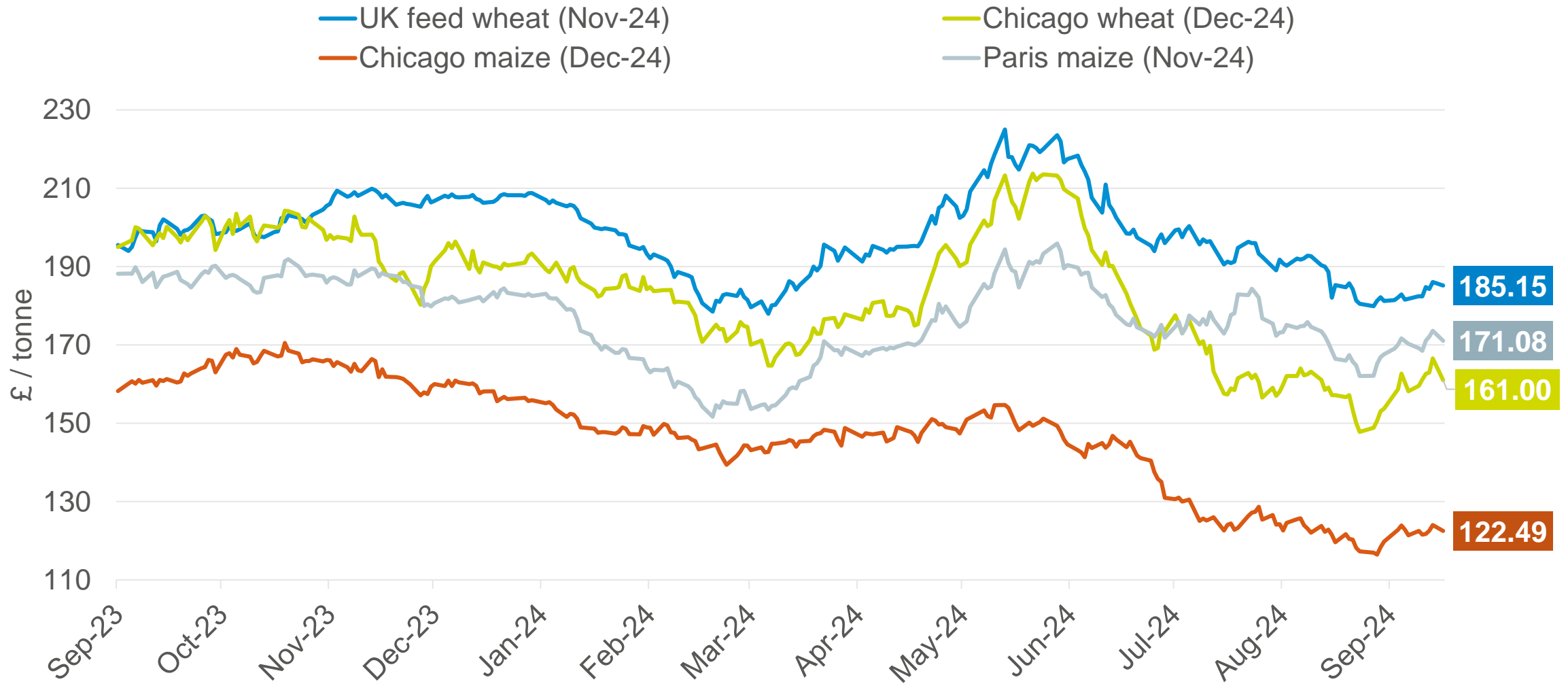
18 September 2024

What is driving feed grain and oilseed prices?

Olivia Bonser

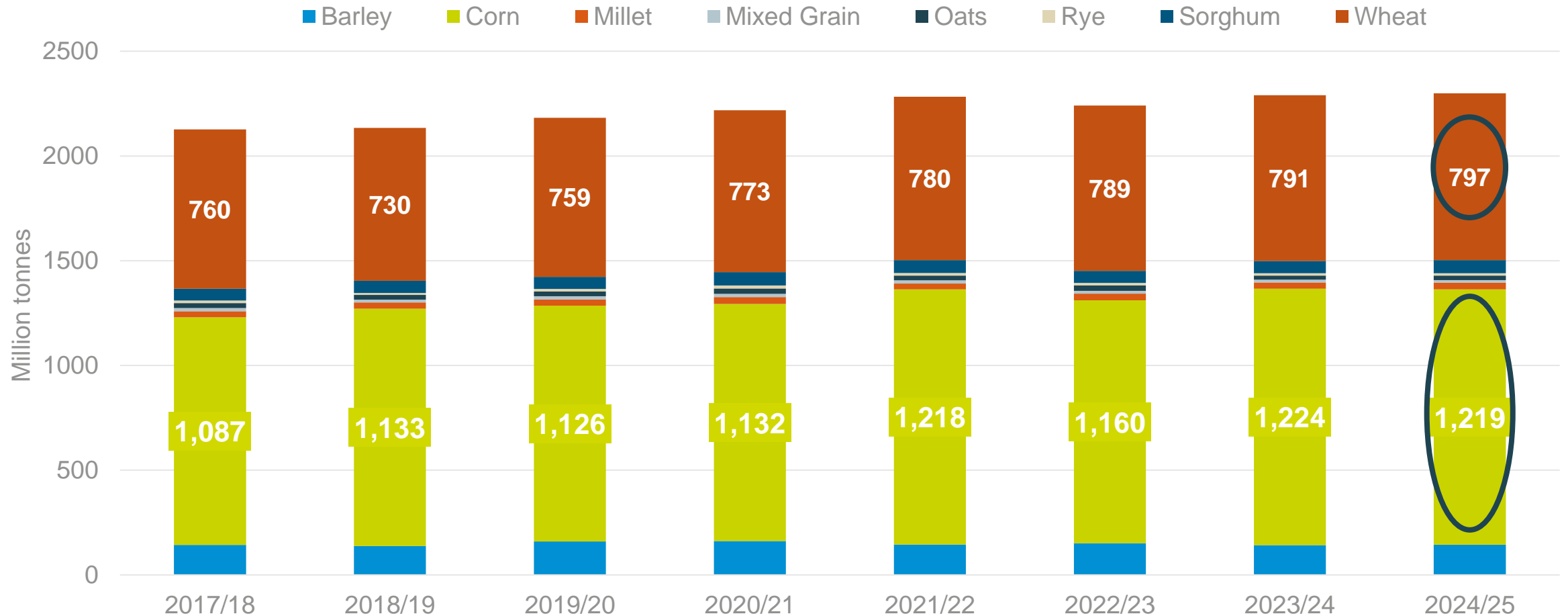


A downwards trend for feed grain futures?



Global grain markets are well supplied

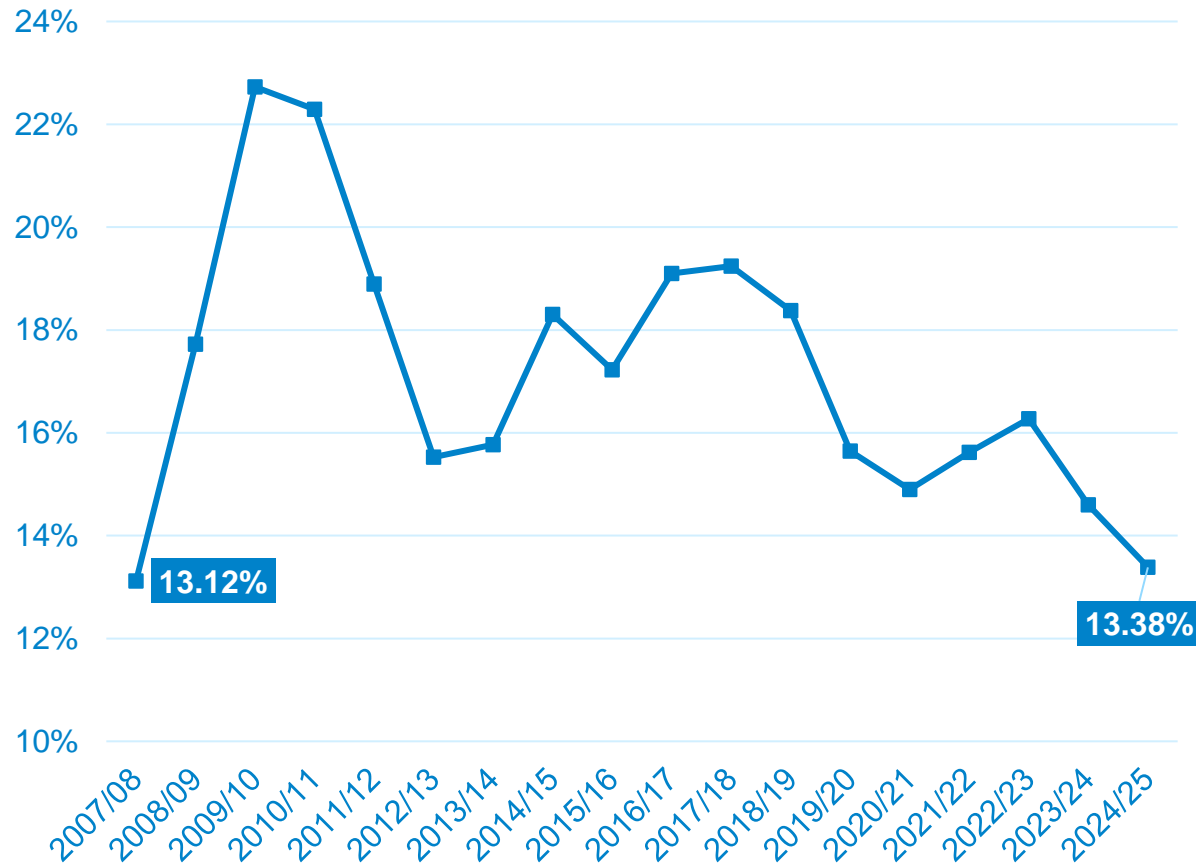
Global grain production is set to grow for 2024/25



Source: USDA

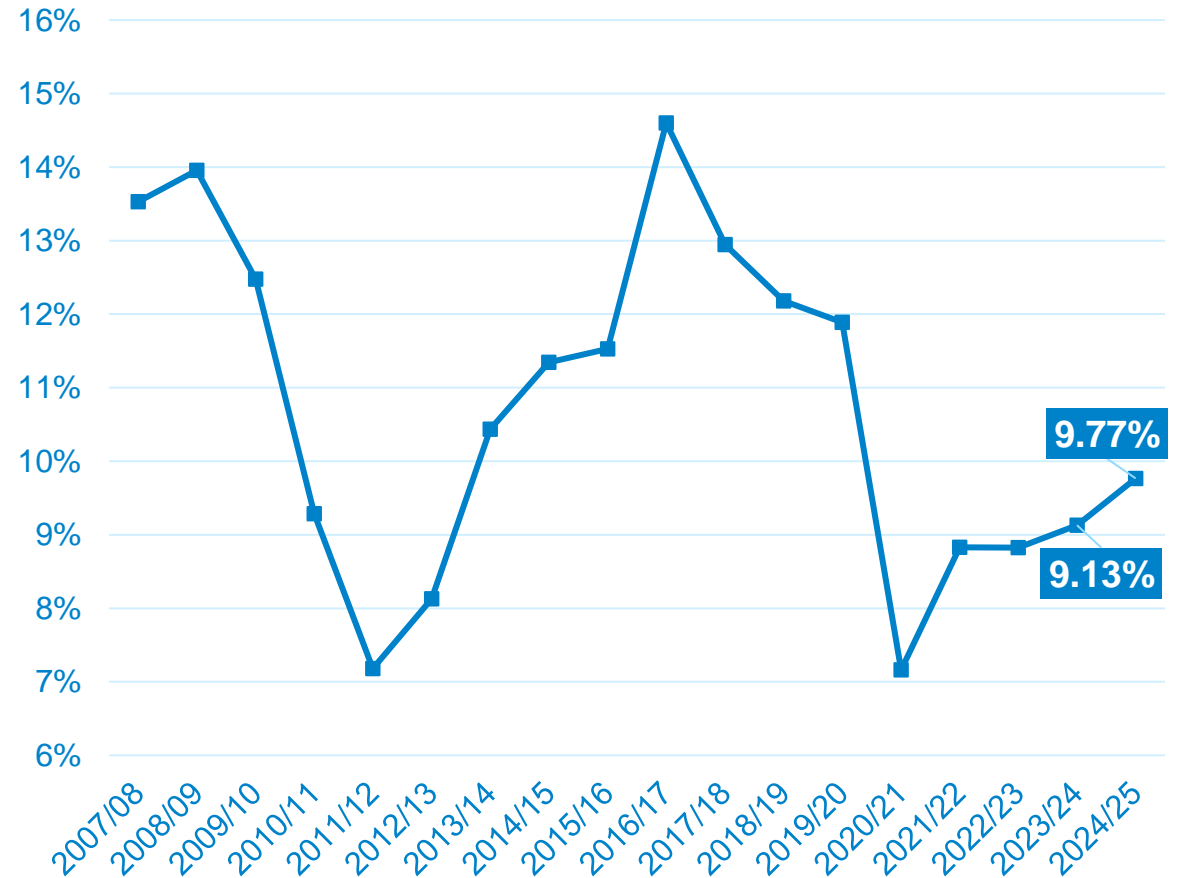
Major exporters tighter on wheat supplies

Stocks-to-use of major wheat exporters*



Source: USDA *incl. Argentina, Australia, Canada, EU, Kazakhstan, Russia, Ukraine, US.

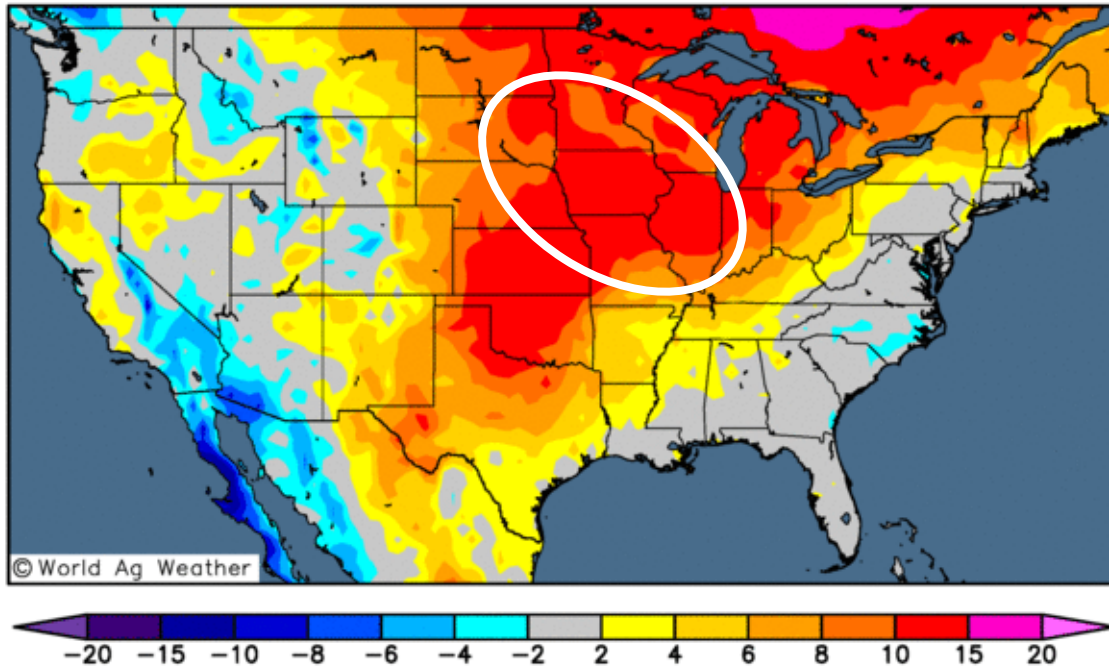
Stocks-to-use of major maize exporters*



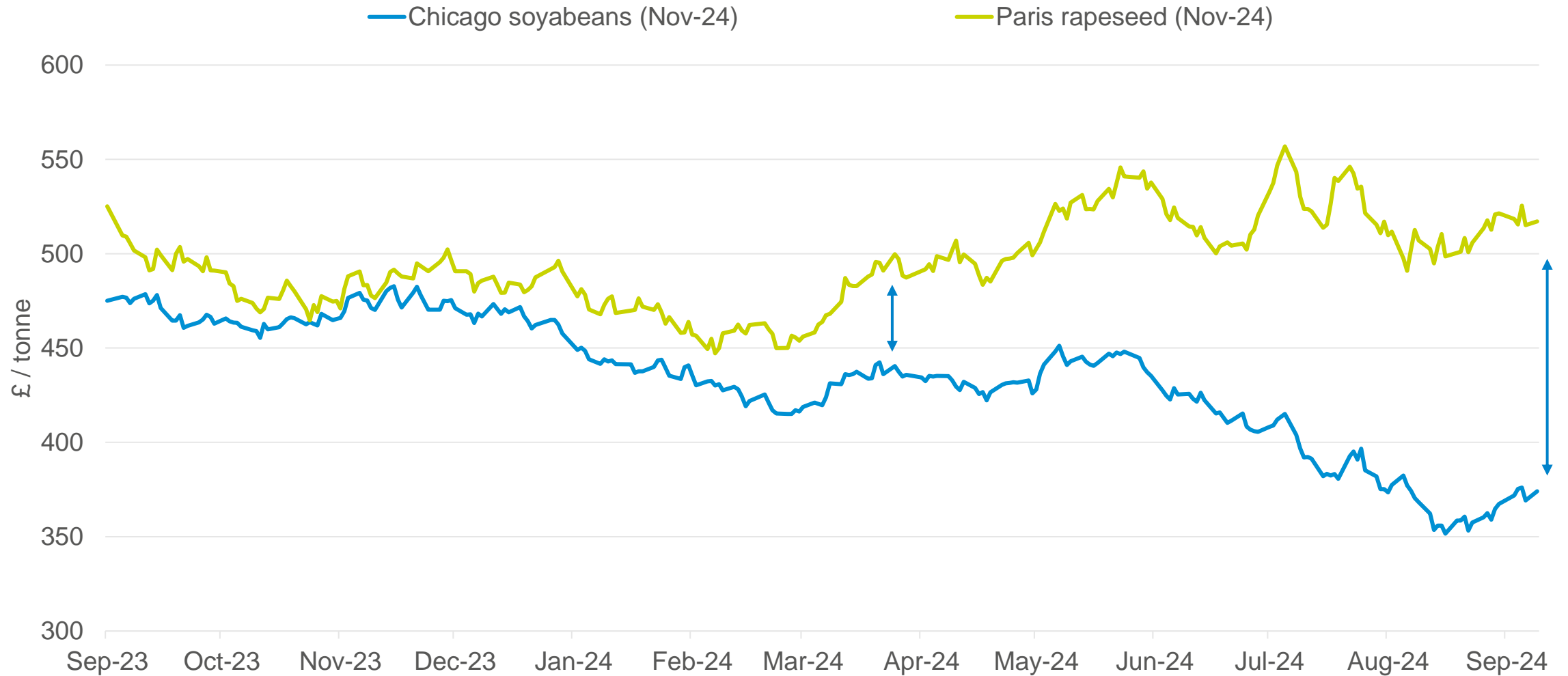
Source: USDA *incl. Argentina, Brazil, Ukraine, US.

Where next?

GEFS Ensemble Mean Temperature Anomaly (°F)
Days 1–7: 00UTC 18 Sep 2024 – 00UTC 25 Sep 2024
Model Initialized 00UTC 17 Sep 2024

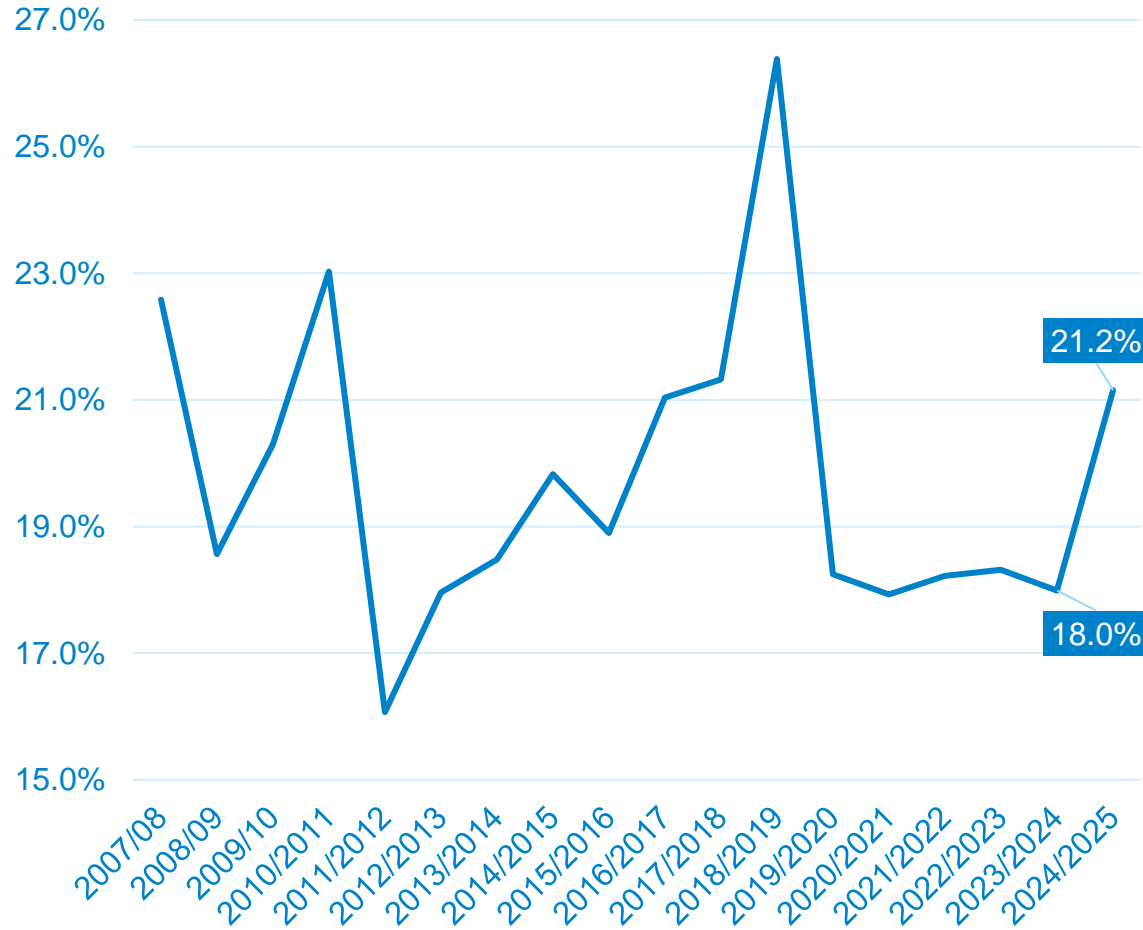


Rapeseed extends premium over soyabeans



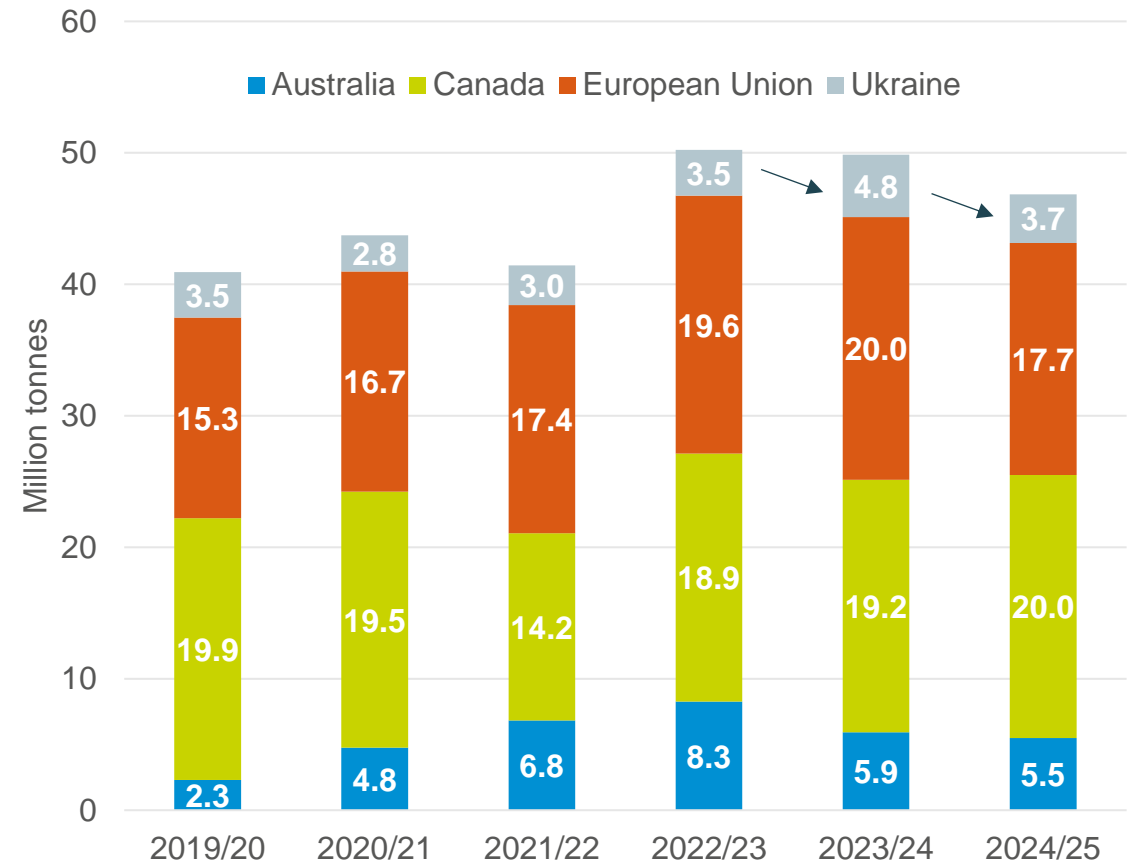
Oilseed markets overall well supplied

Stocks-to-use of major exporters* of total oilseeds



Source: USDA

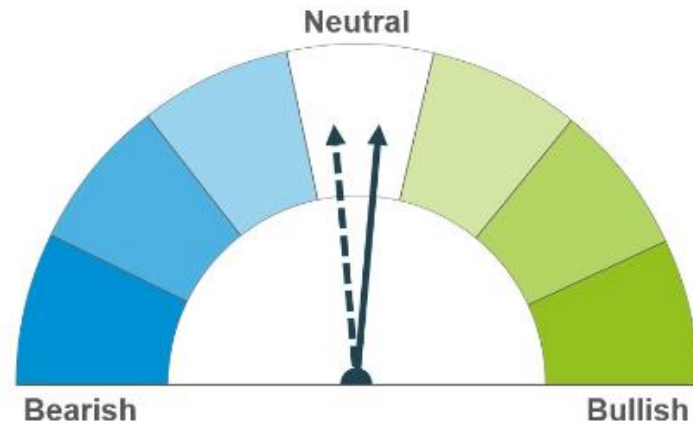
Major rapeseed production decreasing



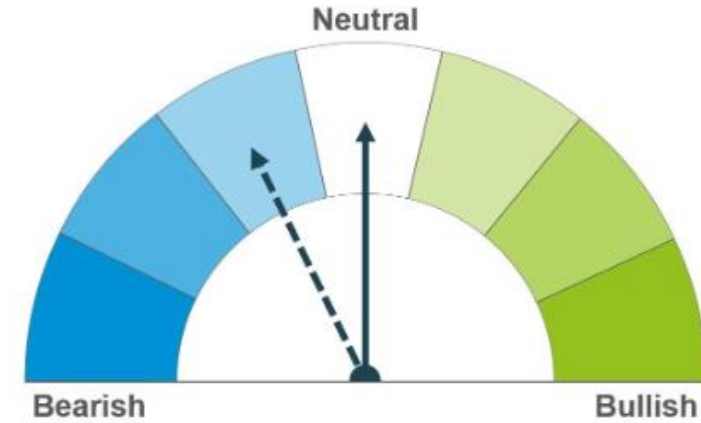
Source: USDA

Where next?

Rapeseed



Soyabeans



- Reduced rapeseed production in Europe underpinning market
- Spillover of vegetable oil markets
- Abundant soyabeans could weigh

- Dry weather in US & Brazil
- China purchasing
- Ample global supplies longer term in US & Brazil

Domestic situation



Lowest English cereals and OSR area in four decades

Arable area figures for England
in thousand hectares (Kha)



Arable Crop	June 2024*	June 2023	% difference 2023 to 2024	Five-year average
Wheat	1,402	1,580	-11%	1,569
Barley	849	799	6%	855
<i>Winter barley</i>	325	391	-17%	350
<i>Spring barley</i>	524	408	28%	505
Oats	148	134	11%	149
Oilseed rape (OSR)	250	342	-27%	354
<i>Winter oilseed rape</i>	244	339	-28%	347
<i>Spring oilseed rape</i>	6	4	57%	7
Total Cereals** and OSR	2,649	2,855	-7%	2,927

*Provisional estimates. **Wheat, barley and oats.

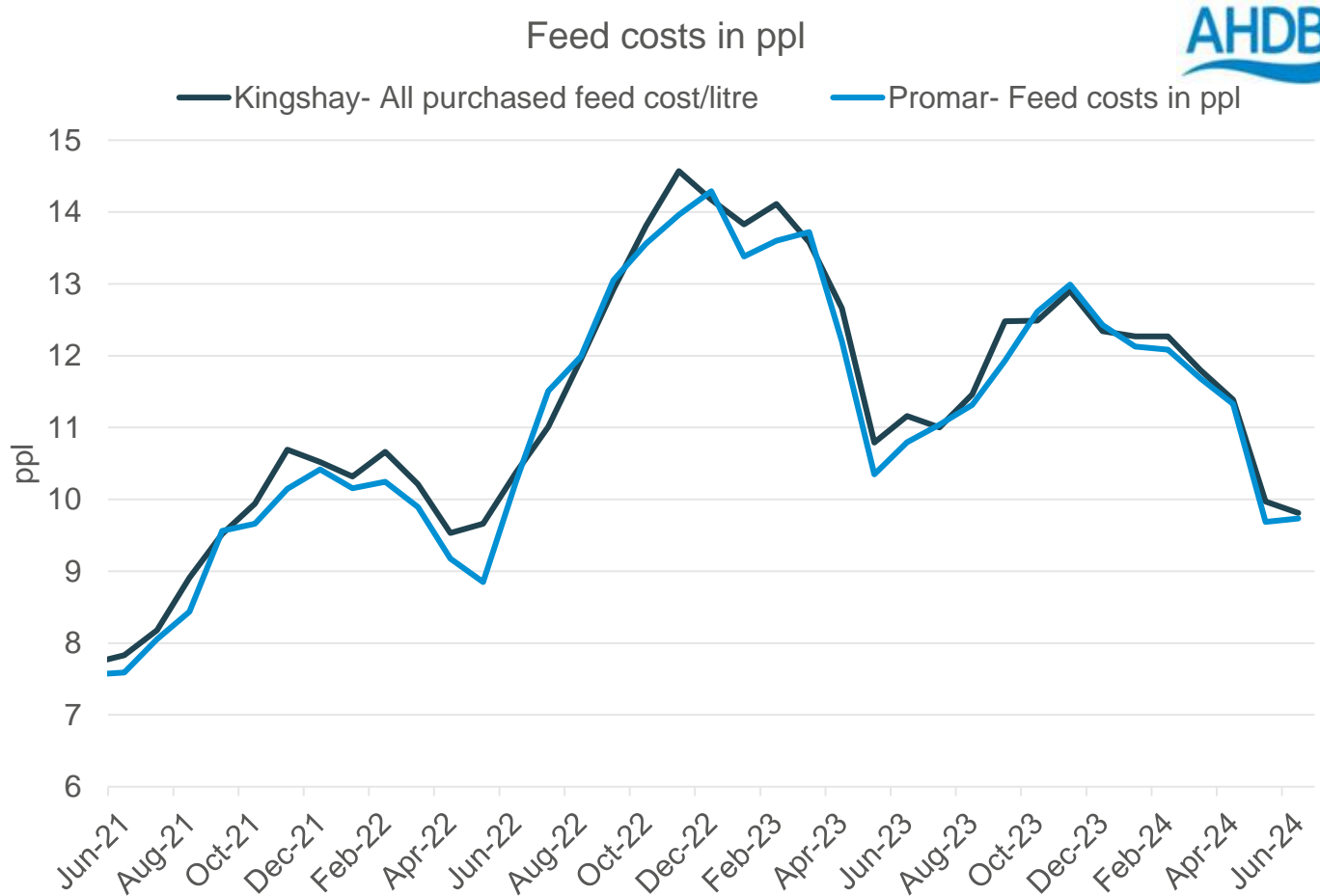
Source: Defra

Summary

- Feed grain prices unlikely to climb significantly as maize supplies look sufficient in the long term despite a tighter wheat balance.
- Rapeseed remains at a firm premium to soyabeans – heavy US and South American supplies.
- Due to limited availability, wheat will likely be comparatively expensive against other domestic grains. We will likely see more barley and imported maize in feed rations in at least the short-mid-term.

Costs & Yields

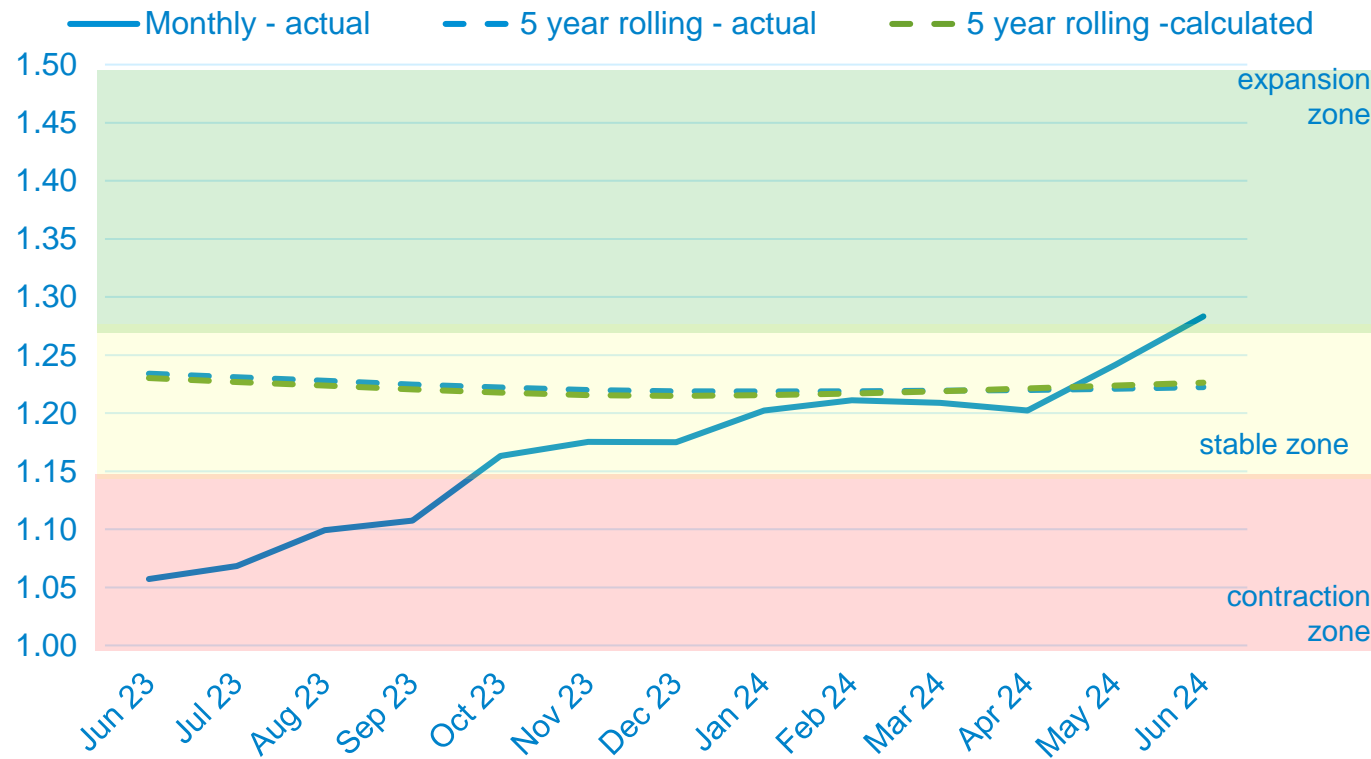
Purchased feed costs remain high



- Purchased feed costs only – cost of forage not accounted for.
- Prices remain high compared to historic levels although have come down
- Jun-24 costs were 12% down for Kingshay and 10% down for Promar on Jun-23.

Milk to (concentrate) feed price ratio

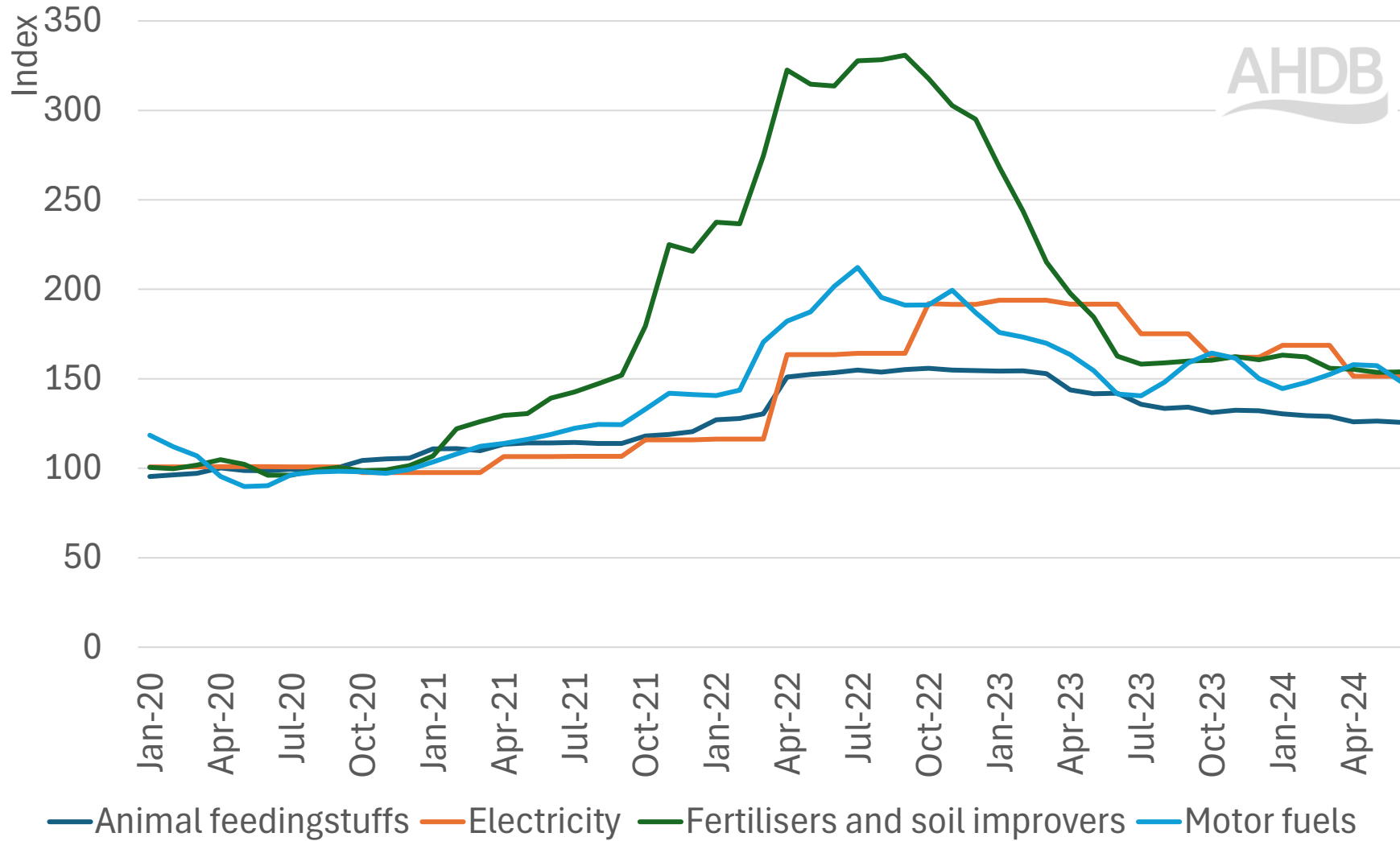
Actual vs calculated milk to feed price ratio - average



- MFPR is entering the expansion zone
- Production decline has slowed and will be watched carefully as we head into the autumn

Source: Actual - Kingshay, Promar, Defra, AHDB, Daera. Calculated - AHDB, Defra

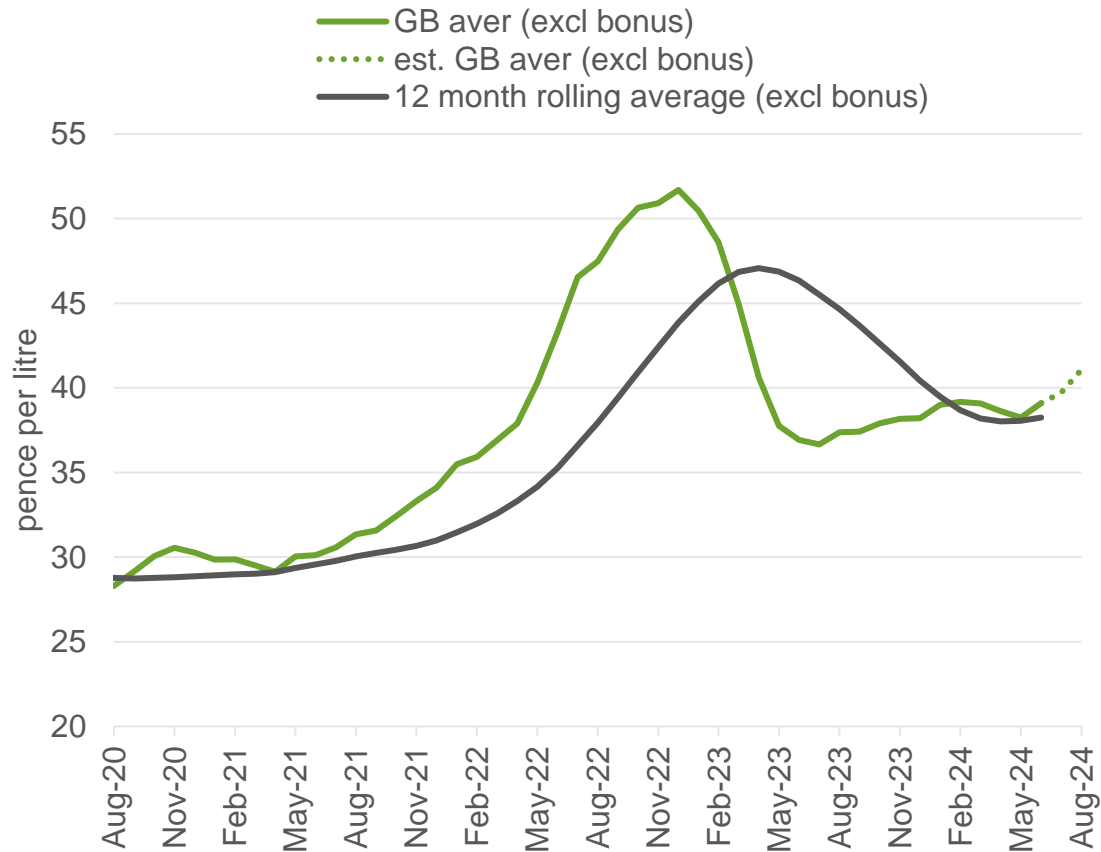
UK agricultural inflation



Average milk prices expected to recover based on increasing MMV

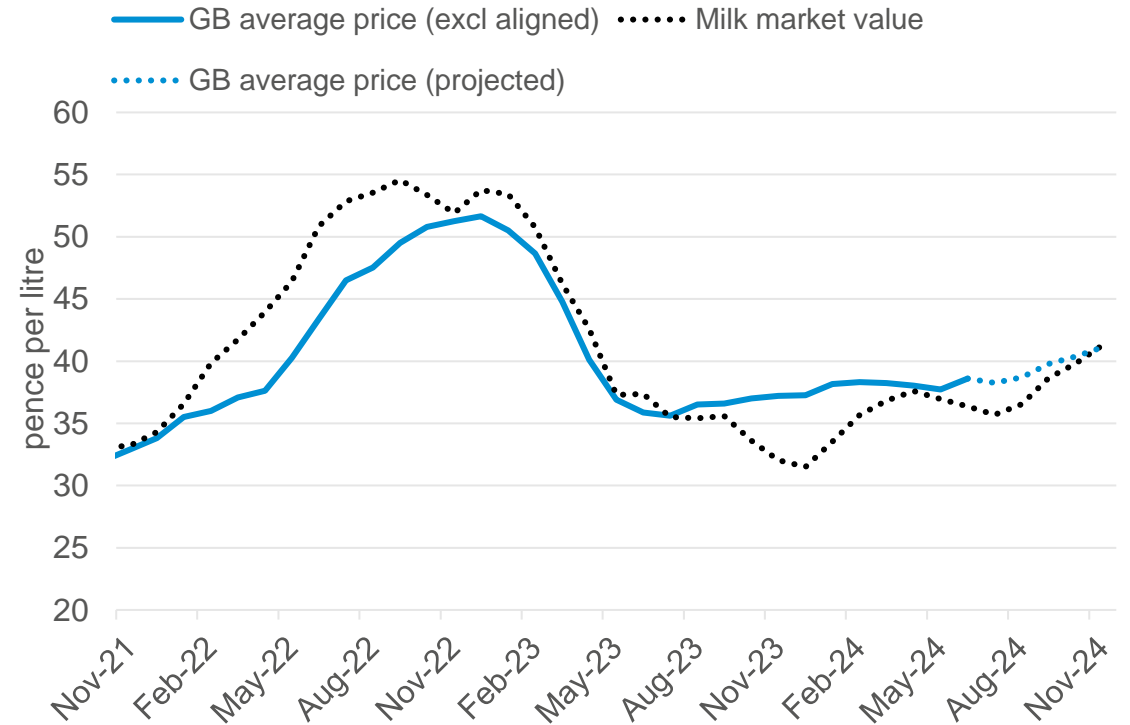


GB farmgate milk prices



Source: Defra, AHDB

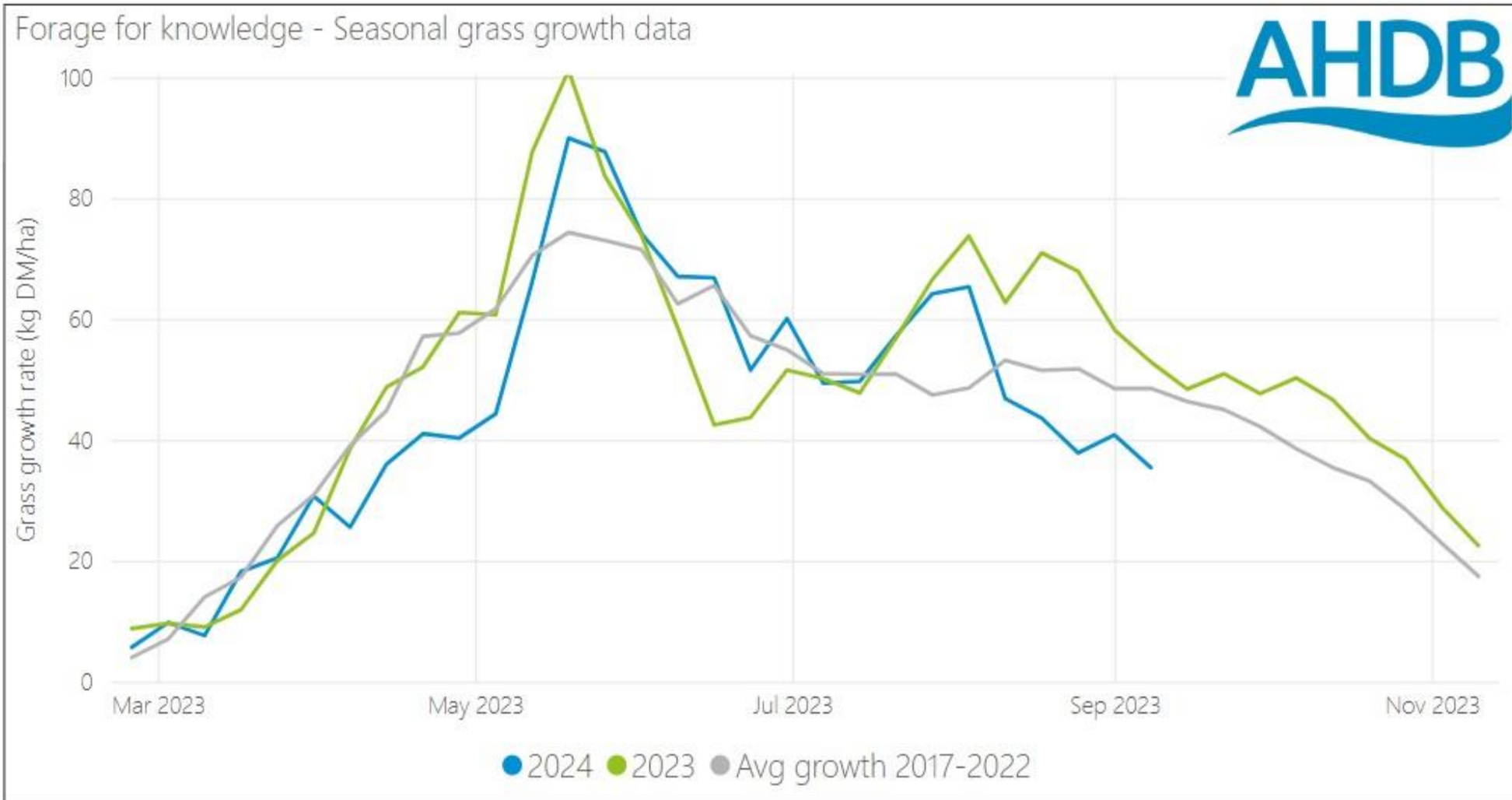
Milk market value* & projected farmgate price movements



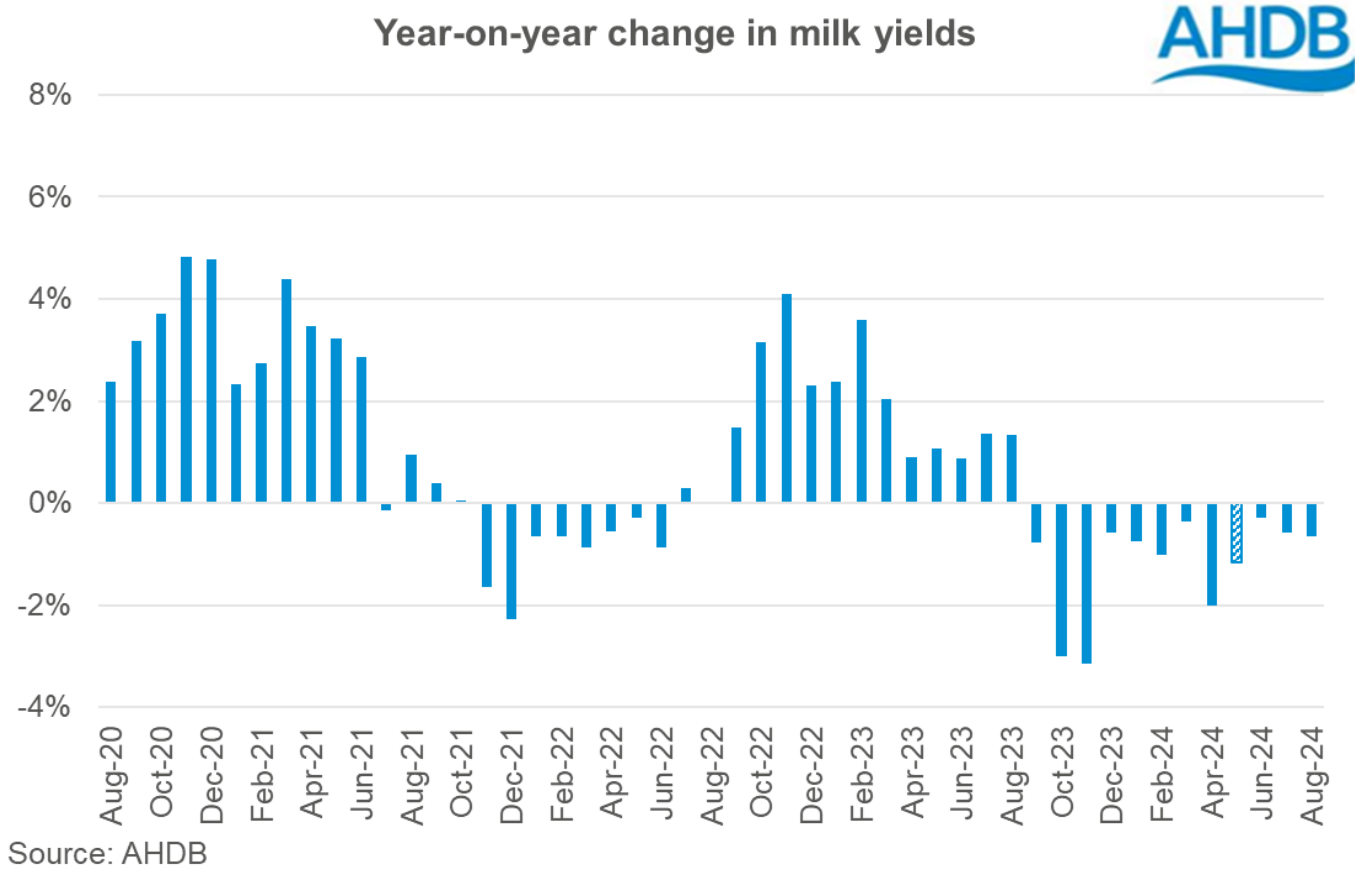
Source: Defra, AHDB

*weighted average AMPE/MCVE (20:80)

Grass Growth has had a mixed year. Quality?



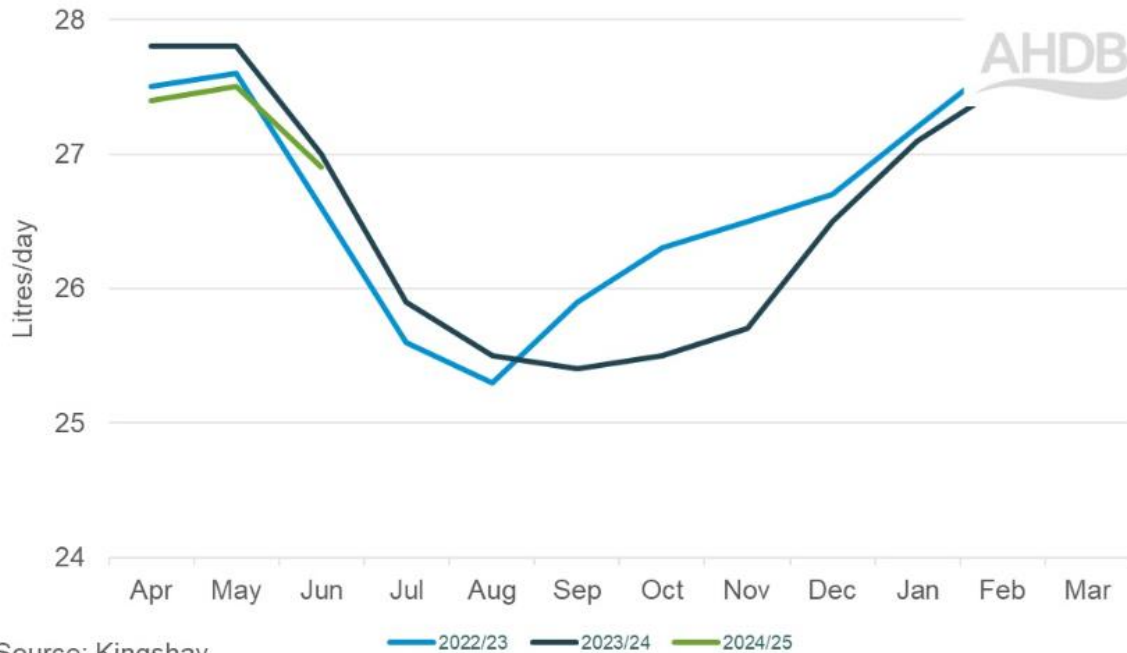
Milk yields



- Higher prices boosted yields in H1 2023
- Wet weather late '23/early '24 impacted yields through H2 2023 and 2024 till date
- Prior to this yield drop-off, we had been assuming 1.5% to 2.3% annual growth in yields
- Assumed yield growth of 0.5% from September onwards
- **Will the yield levels improve later in the year?**

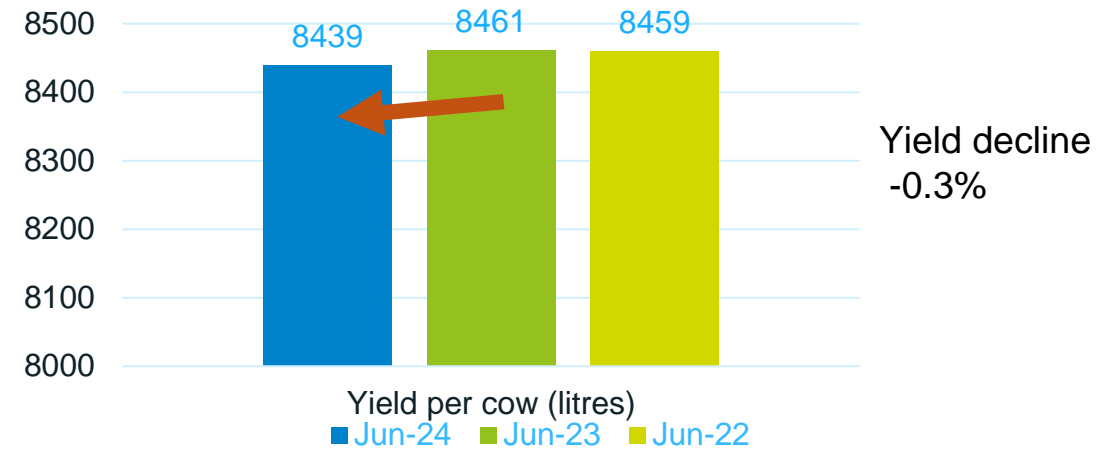
Model can no longer assume consistent pattern in yield growth

Milk yield/cow/day

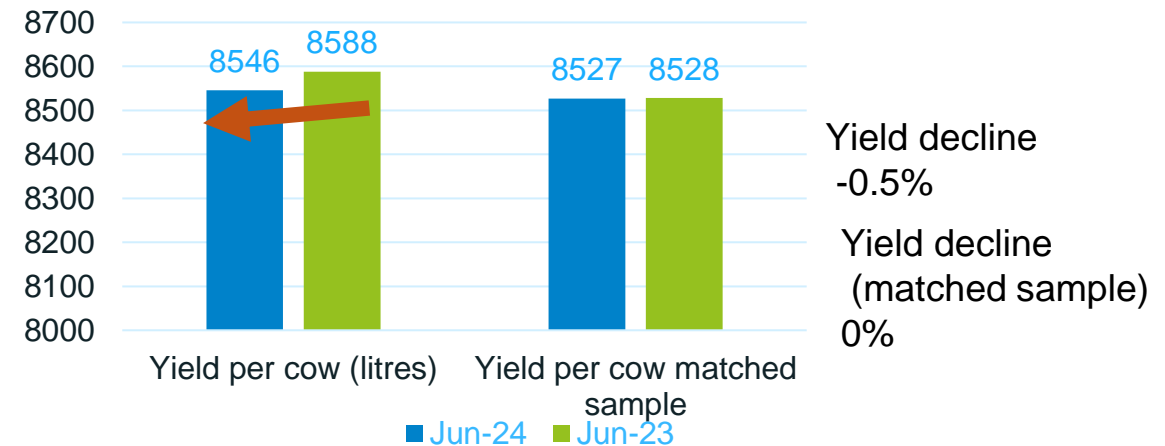


Source: Kingshay

National annual yield - Kingshay



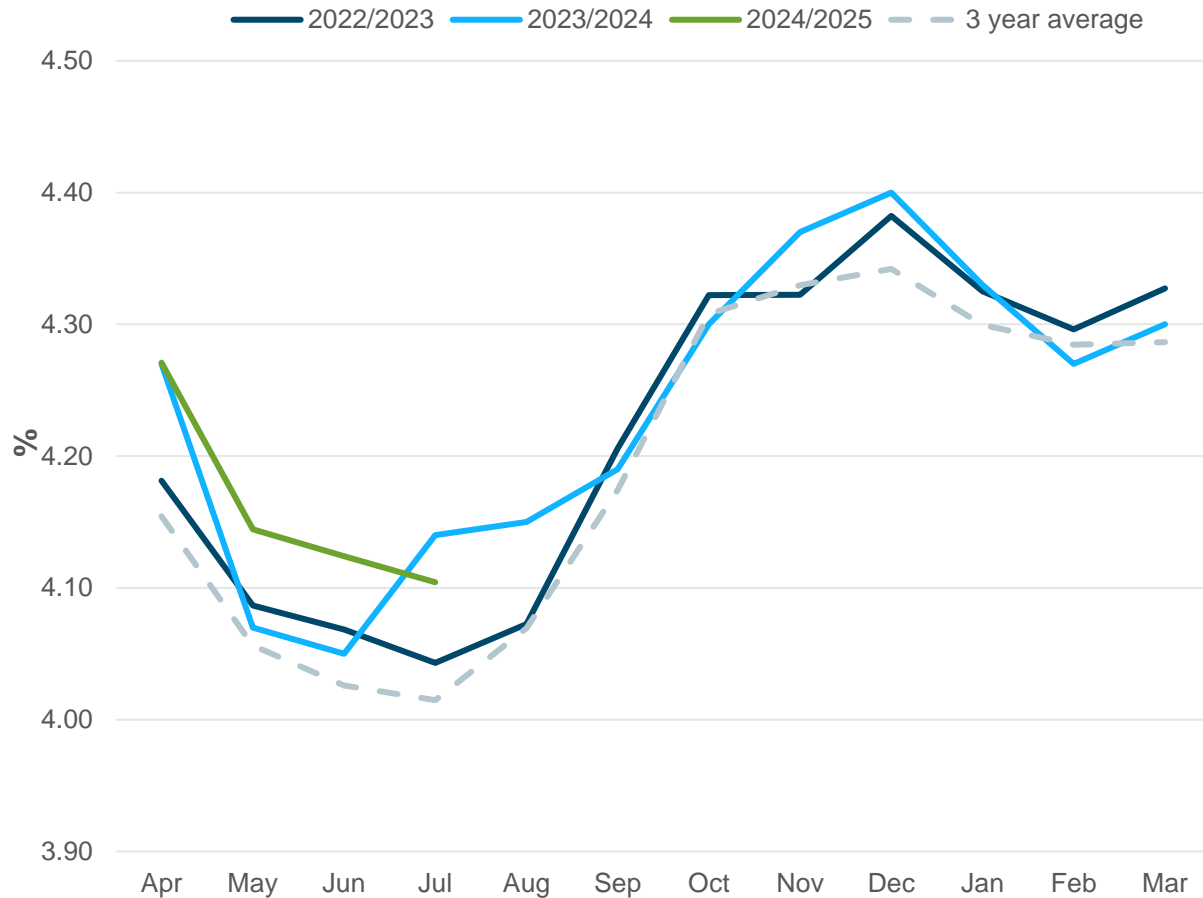
National annual yield - Promar



Milk composition: both fat and protein running well above the 3 year average

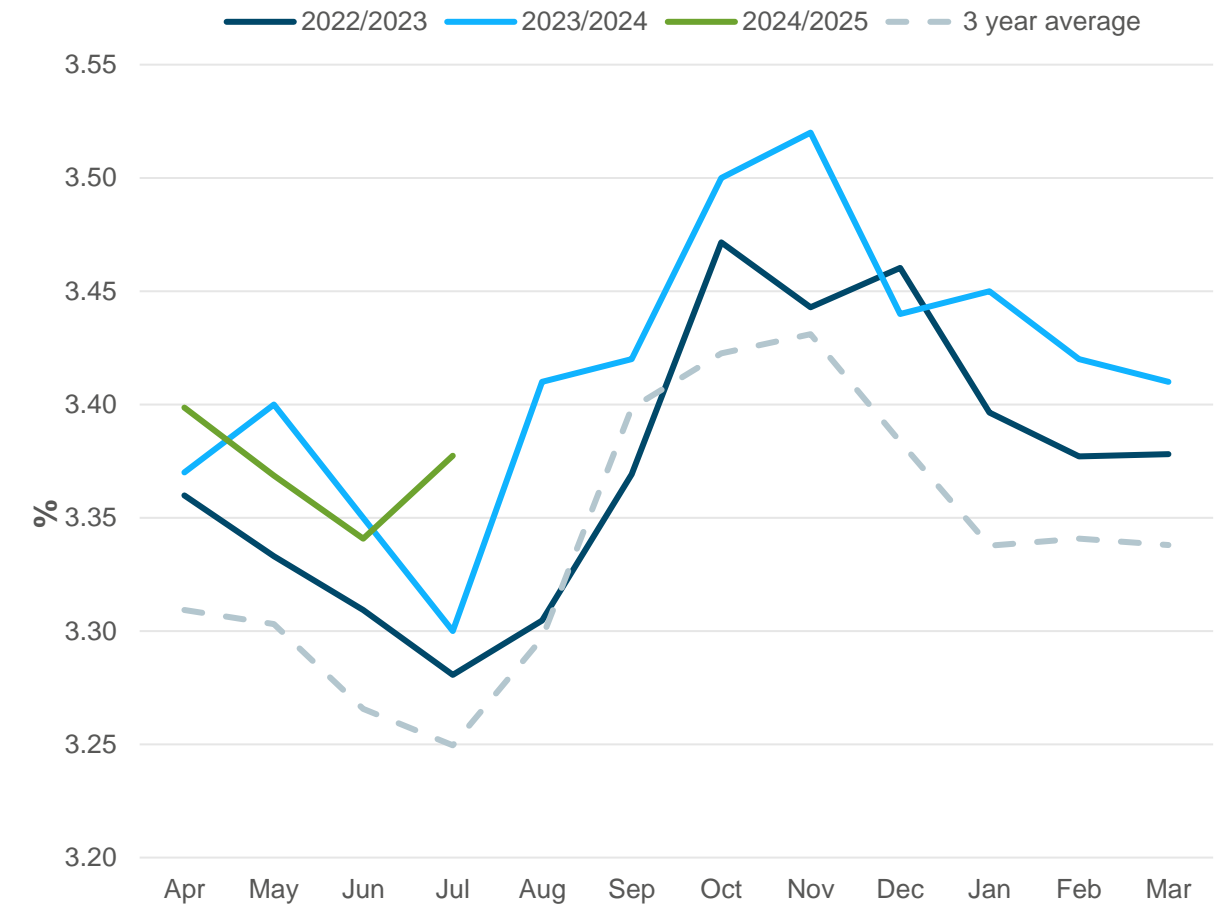


Average UK butterfat content



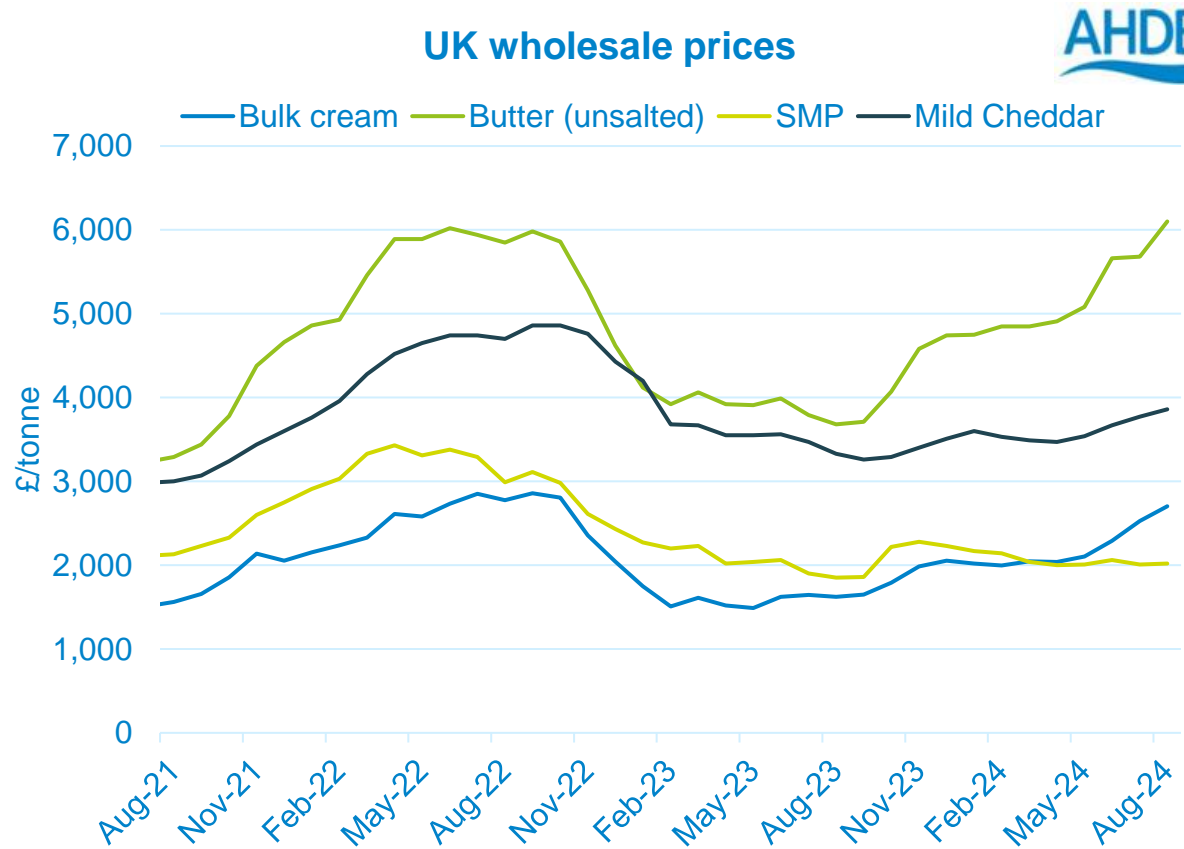
Source: Defra

Average UK protein content



Source: Defra

Fats are continuing to punch above their weight in price



Source: AHDB

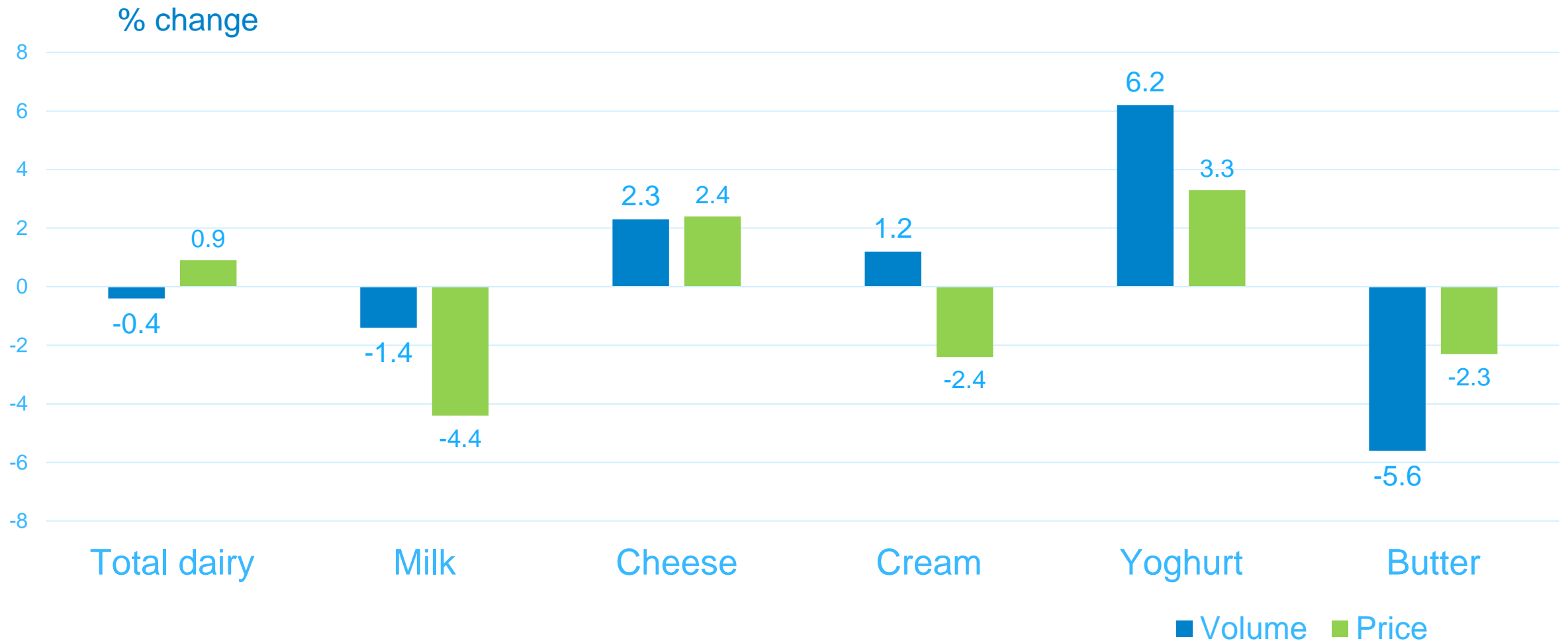
UK wholesale prices (ex-store)

£/tonne	Aug-24		Jul-24		Aug-23	
	Average	Range	Average	% change	Average	% change
Bulk cream	2,703	n.a.	2,528	7%	1,623	67%
Butter	6,100	650	5,680	7%	3,680	66%
SMP	2,020	200	2,010	0%	1,850	9%
Mild Cheddar	3,860	150	3,770	2%	3,330	16%

Source: AHDB

(prices refer to spot deals agreed between 22 July and 18 Aug 2024)

Mixed performance for dairy in retail – although dairy inflation behind total inflation - return of price inflation could dampen demand

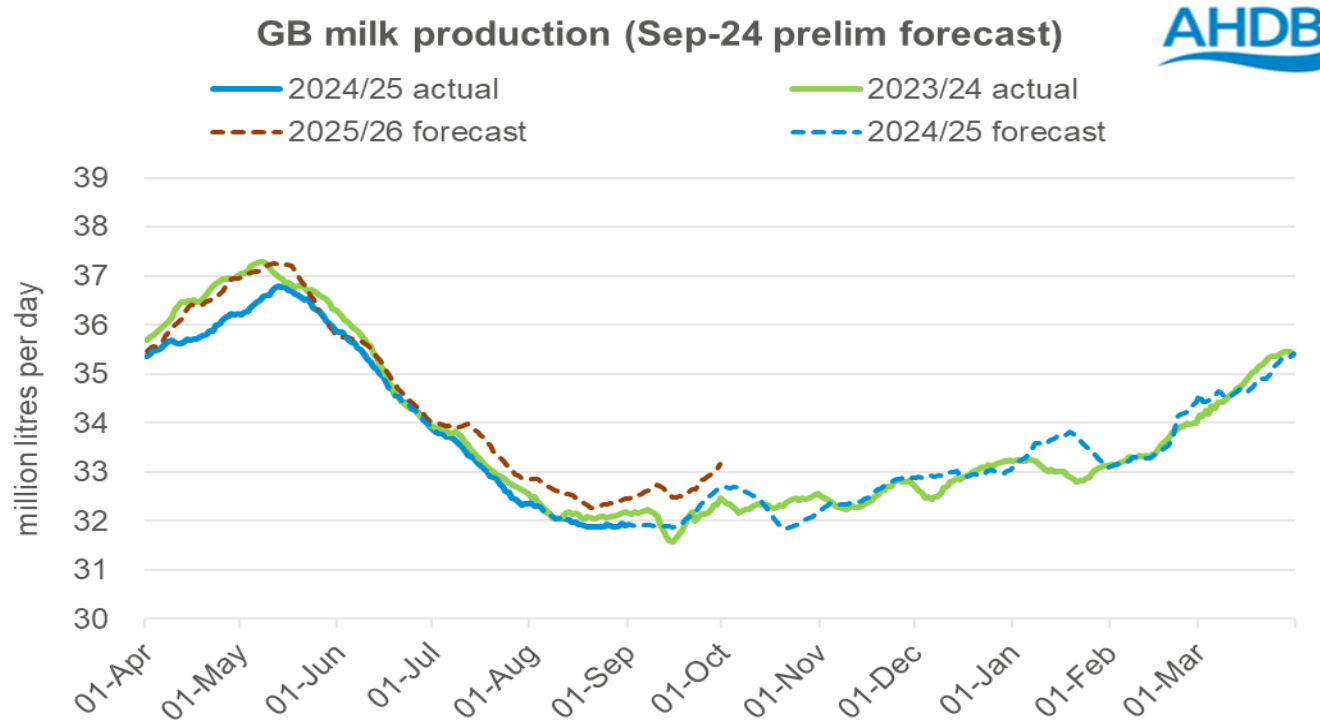


Costs & yields discussion

- Are prices covering the cost of production? How much are input costs continuing to impact on production decisions? Interest rates?
- Will demand further support price increases?
- What impact will this have on yields going through into 2025?
- Milk solids vs. volume?
- Impacts of BTV?

Latest milk forecast

GB milk production – September forecast 2024/25



- 2024/25 estimate **12,288m litres**, down -0.2% on 23/24
- 2025/26 forecast H1 **6,300m litres (Apr –Sep)**, up 1.2% on 24/25
- Yields likely to increase later in the year in response to higher prices

Source: AHDB

Contributors' forecasts

All contributors

year on year change	Q4 2024	Q1 2025	Q2 2025	Q3 2025
up more than 4%				
up 3-4%				
up 2-3%			1	
up 1-2%	1	3	4	2
up 0-1%	3	2	1	2
unchanged	1			2
down 0-1%	2	1	2	2
down 1-2%	1	2		
down 2-3%				
AHDB forecast	0.03%	0.5%	1.1%	1.2%

Processor contributors

year on year change	Q4 2024	Q1 2025	Q2 2025	Q3 2025
up more than 4%				
up 3-4%				
up 2-3%				
up 1-2%		1	2	1
up 0-1%	2	1		1
unchanged				
down 0-1%				
down 1-2%				
down 2-3%				
AHDB forecast	0.03%	0.5%	1.1%	1.2%

Preliminary September 2024 forecast

GB milk production forecast - Sep 2024

m litres	2023/24	2024/25	2024/25	2024/25	2025/26	2025/26
	Actuals	Actuals	Forecast	Yr-on-yr	Forecast	Yr-on-yr
Apr	1,097	1,076		-2.0%	1,090	1.3%
May	1,141	1,128		-1.1%	1,140	1.0%
Jun	1,045	1,041		-0.3%	1,050	0.8%
Jul	1,027	1,022		-0.5%	1,035	1.3%
Aug	996	991		-0.5%	1,005	1.4%
Sep	962		965	0.3%	980	1.6%
Oct	1,003		1,000	-0.3%		
Nov	975		980	0.5%		
Dec	1,020		1,020	0.0%		
Jan	1,024		1,040	1.5%		
Feb	941		945	0.4%		
Mar	1,085		1,080	-0.5%		
Year	12,317		12,288	-0.2%	6,300	1.2%

Source: AHDB

Notes: Figures in red are forecasts. A 28-day equivalent is used for Feb-24

- Preliminary forecast update puts production at **12.28bn** litres for 2024/25, **-0.2%** down on 2023/24
- Higher than March forecast (43m litres)
- Official forecast to be published later this month

Milk forecast discussion

- General thoughts on the provisional forecast
- How will farmers react to increasing prices? Are margins high enough to stimulate growth?
- Are there any long-term issues hiding behind the short-term challenges?
- Impacts from diseases?

18 September 2024

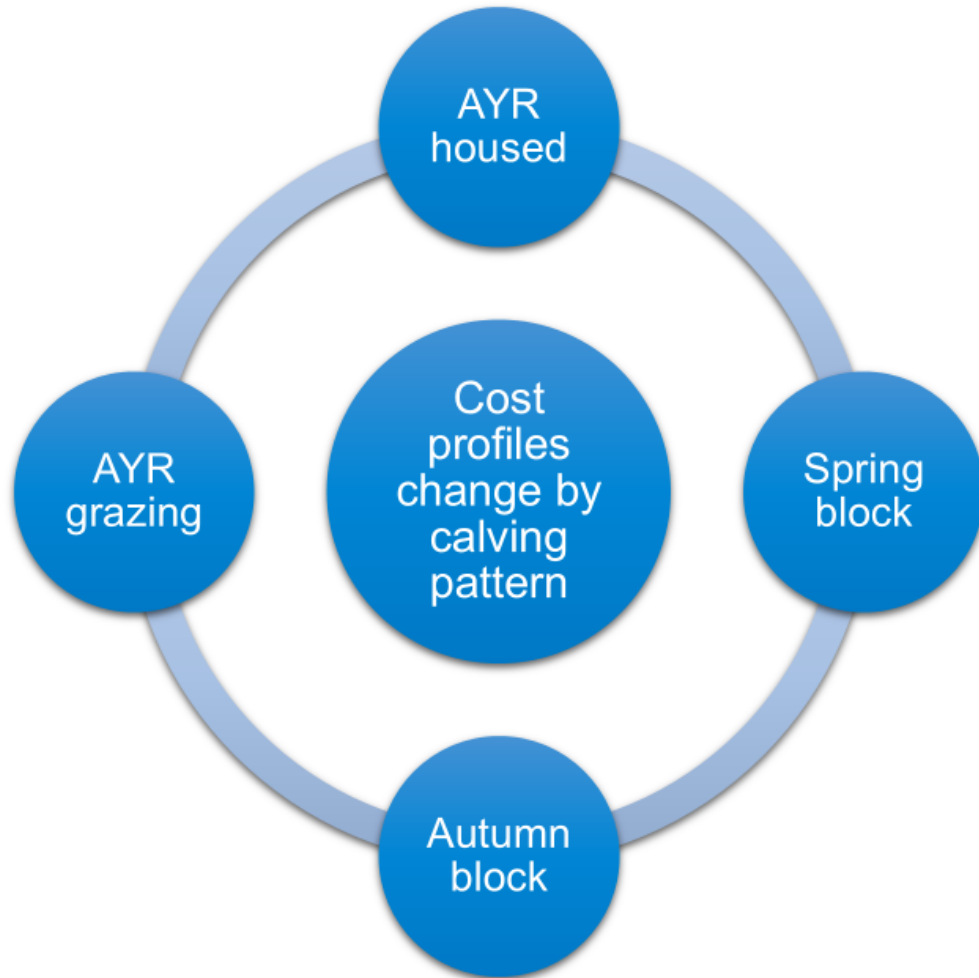
AHDB's new dairy cost of production model

Objectives, insights and timelines

Meg Hesketh – Interim Lead Data Analyst



Insights need to recognise sector nuances



Full economic CoP

Actual total CoP

Cash CoP



Objectives of this work: timely and nuanced

Timely & independent analysis by cost level*

- Incorporate physical aggregated on-farm data with 'live' cost data
- Proactive to identify sector distress, e.g., prices below CoP

Stress test potential

- E.g., entering land into SFI, cost spikes, or capital investment to meet new regulations (for example clean air strategy)

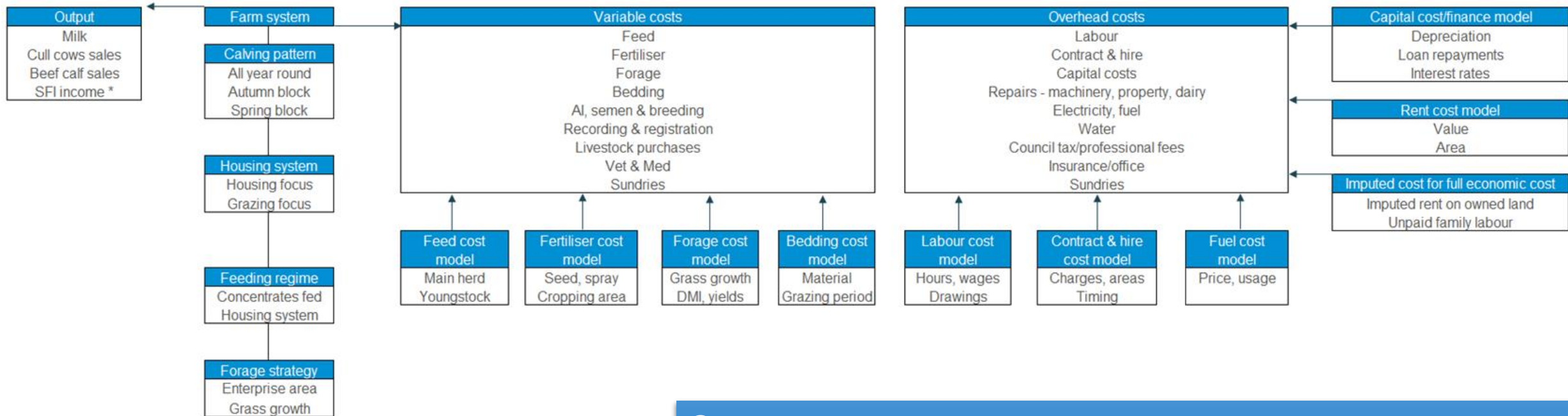
Understand milk production over time

- Identify economic signals for behaviour change
- Support AHDB milk forecasting and market messaging

Compare dairy economics by system

- Benchmark costs
- Anticipate changes to sector structure over time

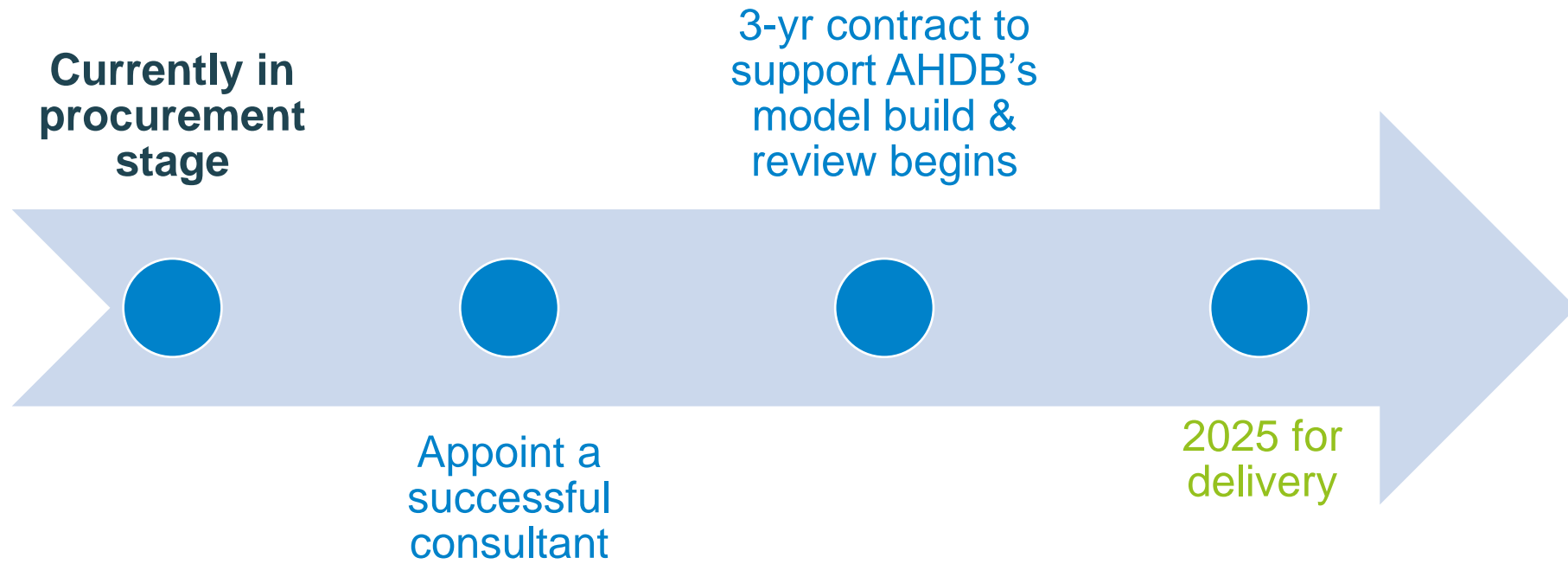
Model will use live cost data to proactively look forward



Outputs

- 12-month rolling average CoP and 3-month forecast potential
- Breakeven milk prices
- Retained profit (ppl, per cow, per hectare)
- Net cashflow
- Debt per cow

Next steps



Next steps

- Publish the background information from the meeting
- Review feedback
- Forecasts:
 - Baseline
 - Scenarios
- Analysis and feedback:
 - Track costs/milk price balance
 - Yields are largest uncertainty

Where to find AHDB market information

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The website has a wealth of resources available from our [markets homepage](#) including a [daily update on grain markets](#). The [supply and demand section](#) is a key resource for the market whilst the latest surveys detail [planting and variety](#) trends.



The [Dairy markets homepage](#) will signpost you to the industry data, analysis and insights from the dairy sector to help inform your business decisions. Our industry experts will guide you through the [market movements](#) and provide a clear, impartial view on what it all means.



The [latest pig prices](#), and industry essential [trade data](#), are the cornerstones of the Pork market website pages. There is also the [latest analysis and insight](#) to provide you with a clear and impartial view.



Our [trade and policy](#) resources focus on the future changes in domestic policy and trading relationships to help farmers and growers explore how these will affect their business. There is also a dedicated [Consumer and Retail Insight](#) team who look at the needs of the modern consumer as well as their attitudes towards cooking, buying and eating food.

A vibrant landscape of a green field at sunset. The sun is low on the horizon, casting a warm glow over the scene. The sky is filled with soft, colorful clouds in shades of orange, yellow, and blue. A path of tall green grass leads from the foreground towards the horizon. In the distance, there are rolling hills and a few buildings. The overall mood is peaceful and inspiring.

**‘Inspiring our farmers, growers
and industry to succeed in a
rapidly changing world’**