



Global Dairy Market Outlook

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Rabobank

Rabobank is committed to the dairy sector

17/20

17 of the **Top 20** Global Dairy players are Rabobank clients

87%

87% of the Dutch dairy farmers financed by Rabobank



>20%

of Rabobank's total loan portfolio is committed to the Dairy sector

\$USD 25 billion

outstanding in Dairy (rural & wholesale)

The RaboResearch dairy team spans the globe



Key Themes



Rabobank

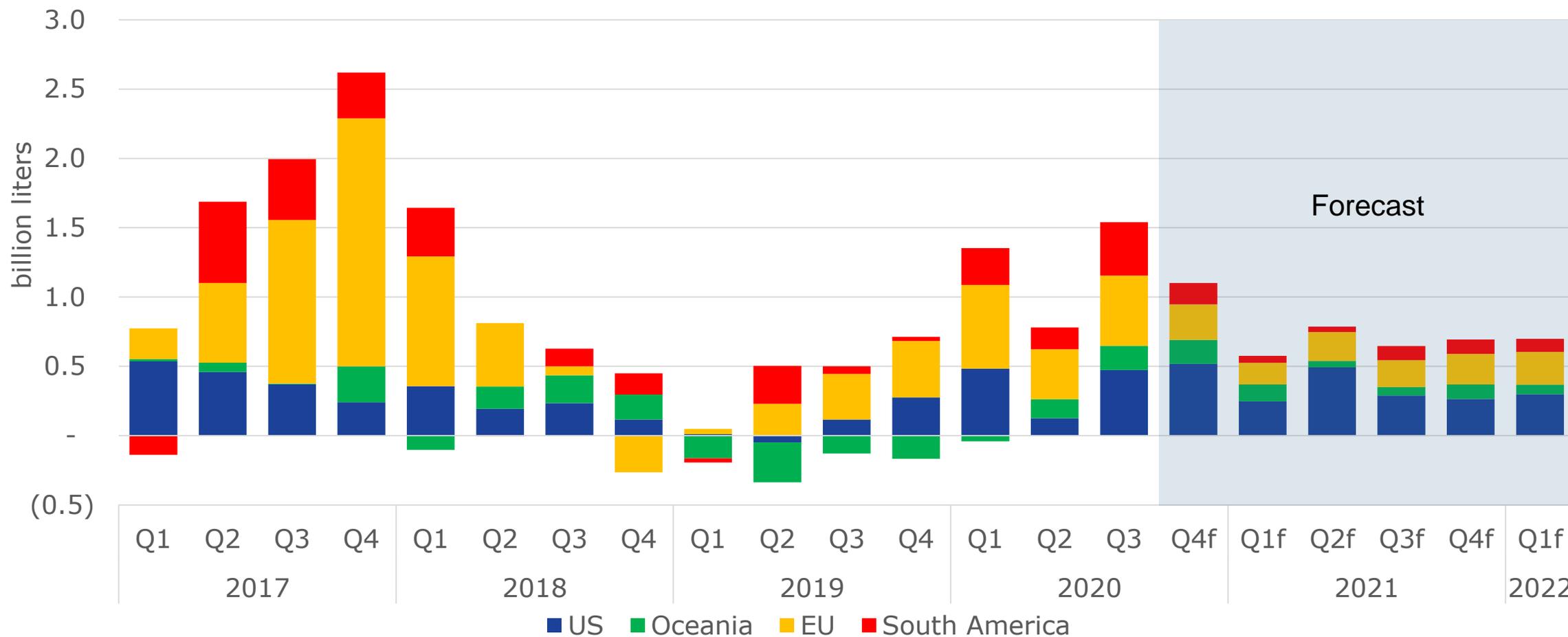
Global milk production outlook

Federal Order Pricing: Negative PPD's

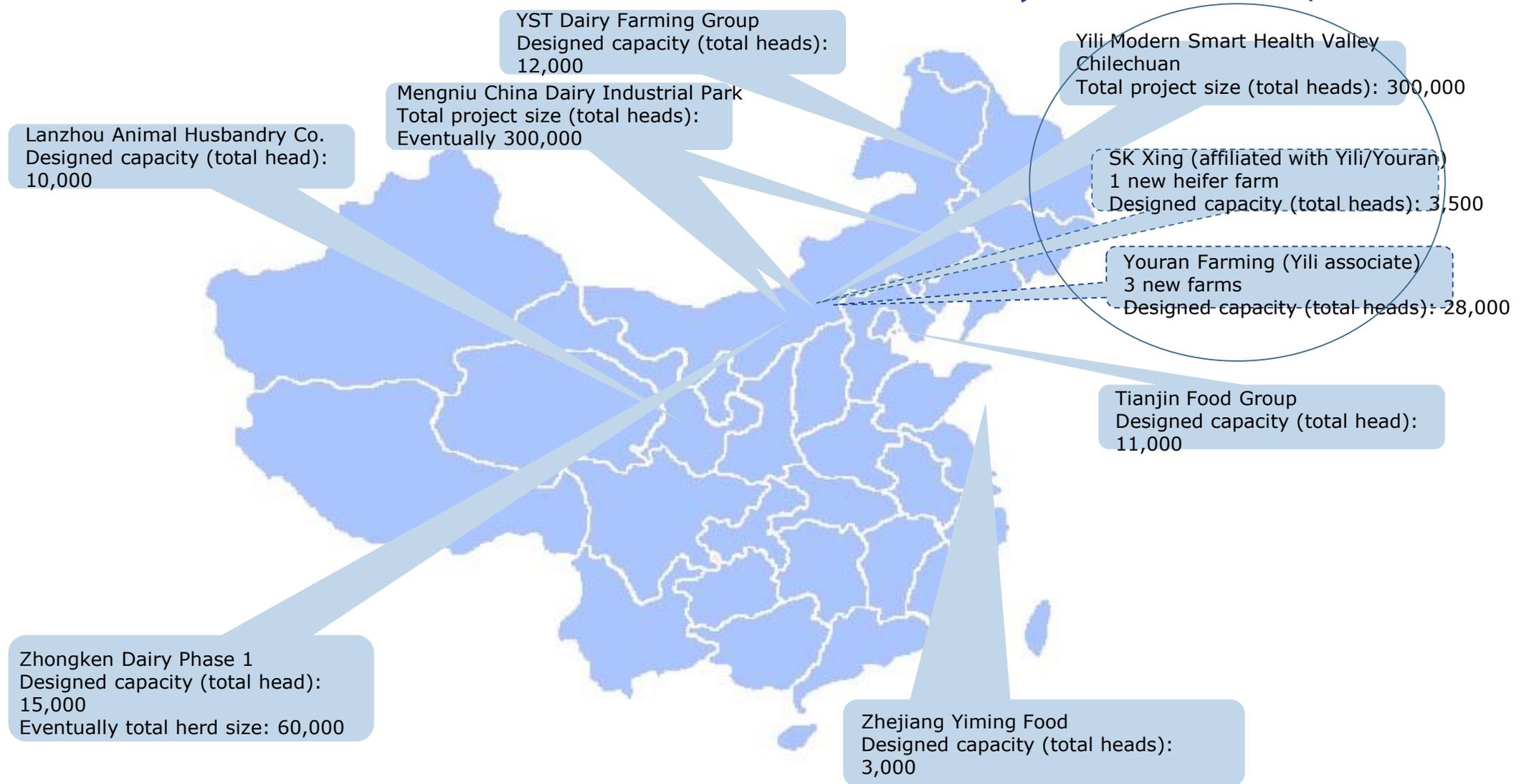
Global dairy demand outlook



Global milk supply growth modest but rising



Renewed enthusiasm in farm investments may reduce imports





What are the drivers and implications?

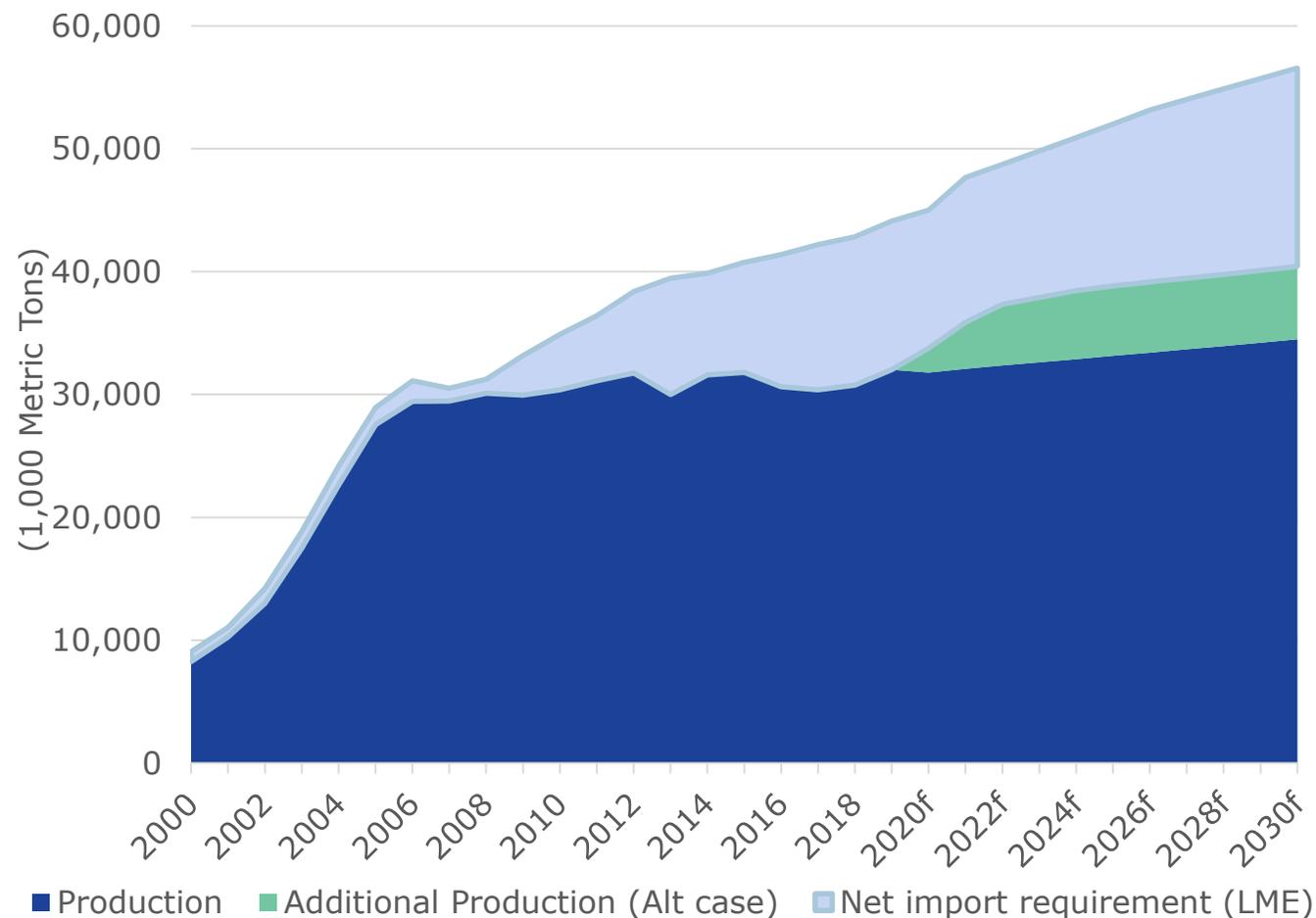
China dairy demand and gap into 2030: the alternative optimistic supply case

KEY DRIVERS

- Improved dairy farm profitability
- The government's self-sufficiency drive to hedge supply risks due to geopolitical uncertainty

IMPLICATIONS

- Gap between domestic supply and demand might narrow initially (if all goes well) but will widen again in the longer run as supply growth is hindered by resource constraints
- There are risks to the optimistic supply case: price cyclicalities vs cost of production, pace of consumption growth, availability of breeding cattle





Global milk production summary

YOY Growth is expected from all key dairy exporters

Weather is always a factor to consider

The road to self-sufficiency may be rocky

Key Themes



Global milk production outlook

Federal Order Pricing: Negative PPD's

Global dairy demand outlook



Federal Orders 101

- Federal milk marketing orders were set up in 1937 to establish:
 1. to provide orderly marketing conditions for inter-state commerce,
 2. to provide income parity for farmers, and
 3. to increase bargaining power of farmers

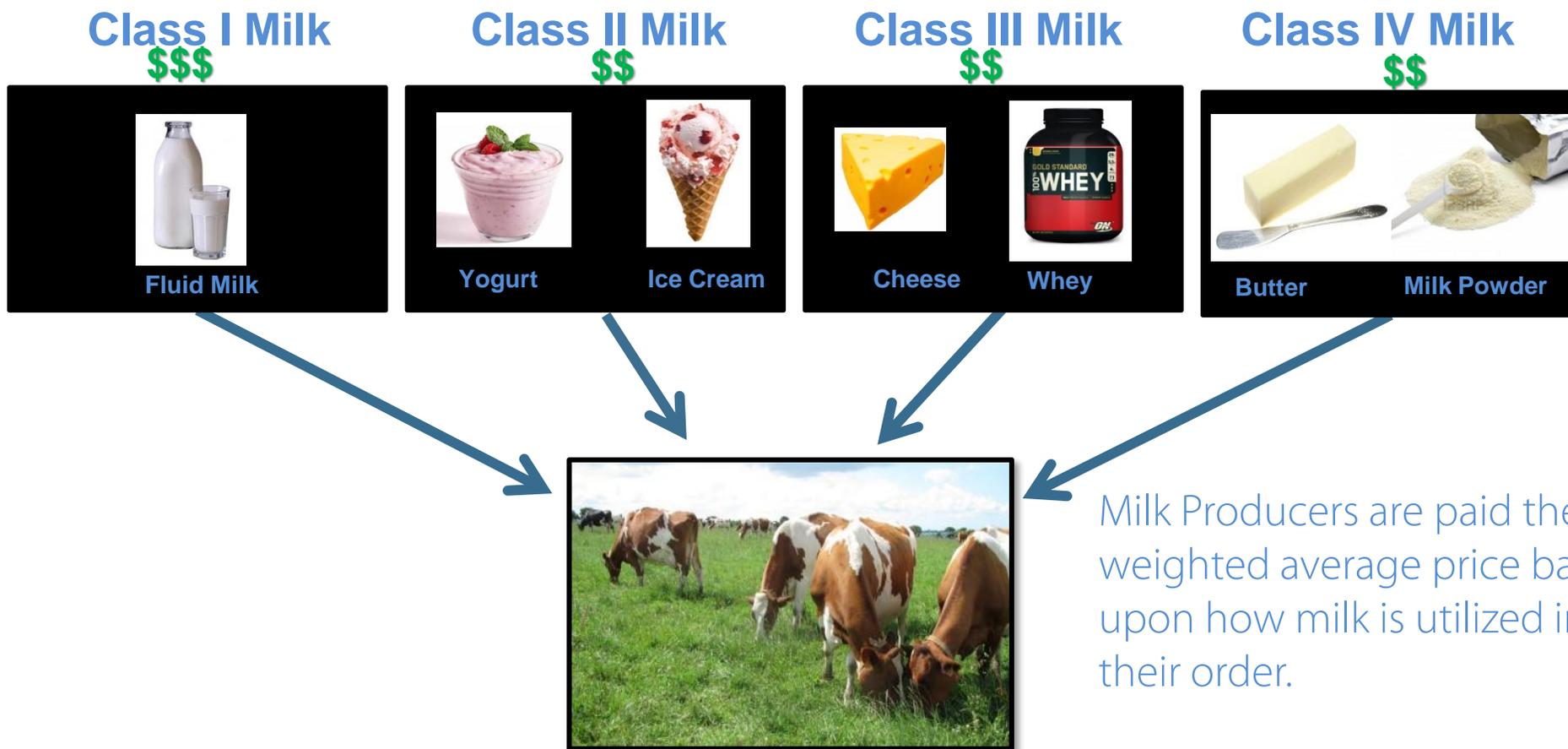
- Three key functions of the Federal milk marketing orders include:
 1. Classification of milk value based upon use
 2. Calculation of the order's weighted average milk price or Statistical Uniform Price, also known as the "Blend Price"
 3. Audit processors to assure that producers are paid the Blend Price
(Note: Cooperatives are not required to pay the Blend Price)



Federal Order Classified Pricing

Processors pay for milk based upon use/classification

Federal Class Prices



Timing matters: Class price announcements

- The October Class I price announced September 23 (\$/cwt)
 - Adv. Class III price = \$16.18
 - Adv. Class IV Price = \$12.75
 - Adv. Base Class I Price $(\$16.18 + \$12.75)/2$ PLUS \$0.74 or \$15.20
 - Chicago Class I Differential = \$1.80
 - Chicago Class I milk price at 3.5% butterfat = \$17.00
- The October Class II, III and IV prices announced on November 4
 - Class II price \$13.63
 - Class III price \$21.61
 - Class IV price \$13.47

Two examples: FMMO 30 Blend Price calculations

May 2020	Million lbs.	Pool %	Class Price
Class I	220	7.9%	\$14.75
Class II	80	2.9%	\$12.30
Class III	2,332	83.9%	\$12.14
Class IV	146	5.3%	\$10.67
Blend			\$12.31
PPD at Chicago		Chicago	\$0.17

October 2020	Million lbs.	Pool %	Class Price
Class I	226	24.4%	\$17.00
Class II	193	20.9%	\$13.63
Class III	384	41.5%	\$21.61
Class IV	123	13.2%	\$13.47
Blend			\$17.18
PPD at Chicago			\$-4.43

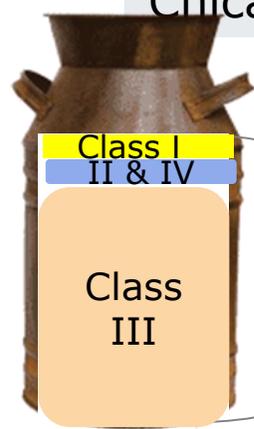
The difference between the Blend price and the Class III price is the Producer Price Differential or PPD

2.78 billion lbs.
Of milk in the
May 2020 pool

67% less milk in the pool

926 million lbs.
Of milk in the
October 2020 pool

Source: USDA, Rabobank

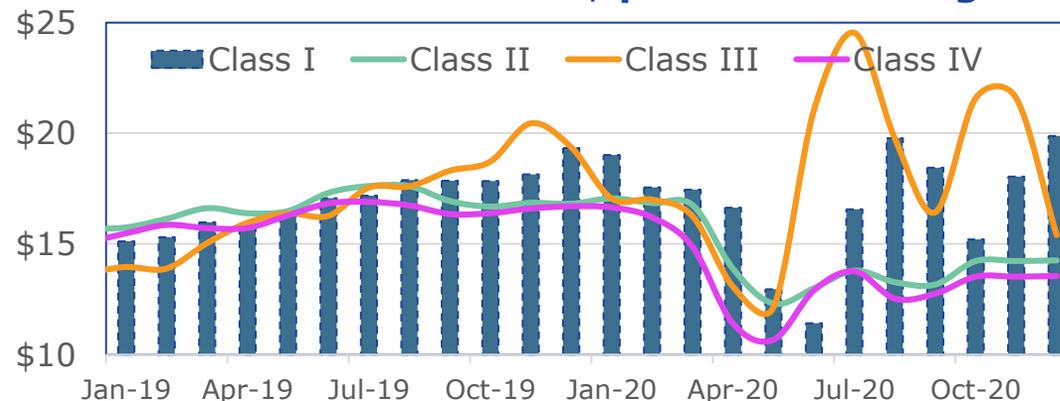




Summary: Contributing factors to negative PPDs

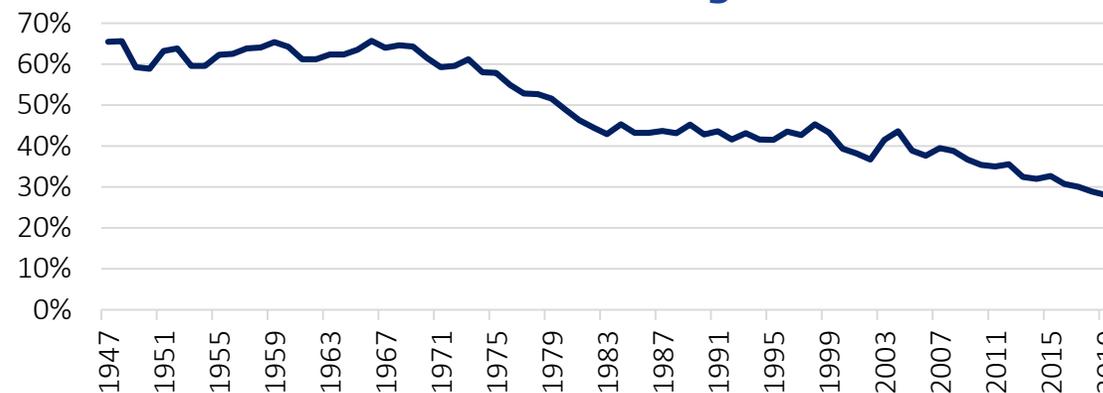
1. Volatility in commodity prices
2. Magnitude of difference in Class III and IV prices
3. Timing of Class I price announcement vs. Class II, III and IV prices – basically six weeks difference in commodity prices
4. New Class I milk price formula based on the “average of Class III and IV plus \$0.74” being significantly less than the “higher of” Class III or IV prices
5. Variation in volume of milk pooled due to liberal pooling rules in some FMMOs
6. Long-term trend of lower fluid milk utilization as US milk production increases

FMMO: Class Prices in US\$ per Hundredweight



Source: USDA

FMMO: Class I Utilization Percentage of Producer Milk



Source: USDA

Key Themes



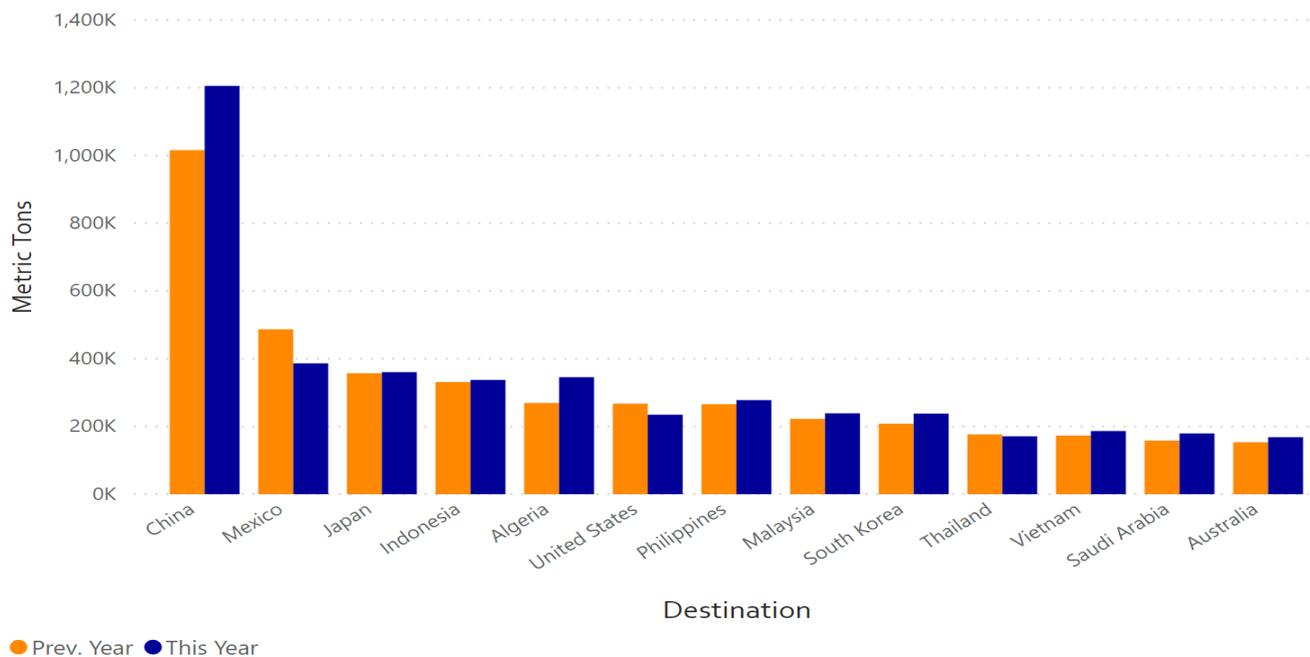
Global milk production outlook

Federal Order Pricing: Negative PPD's

Global dairy demand outlook

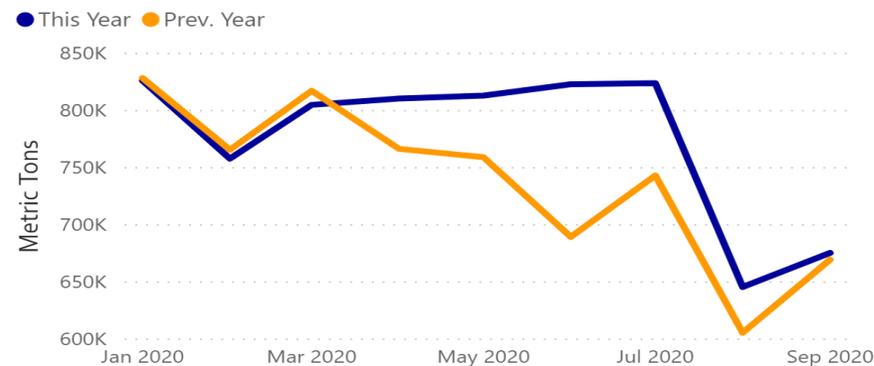


Global dairy trade shows signs of headwinds

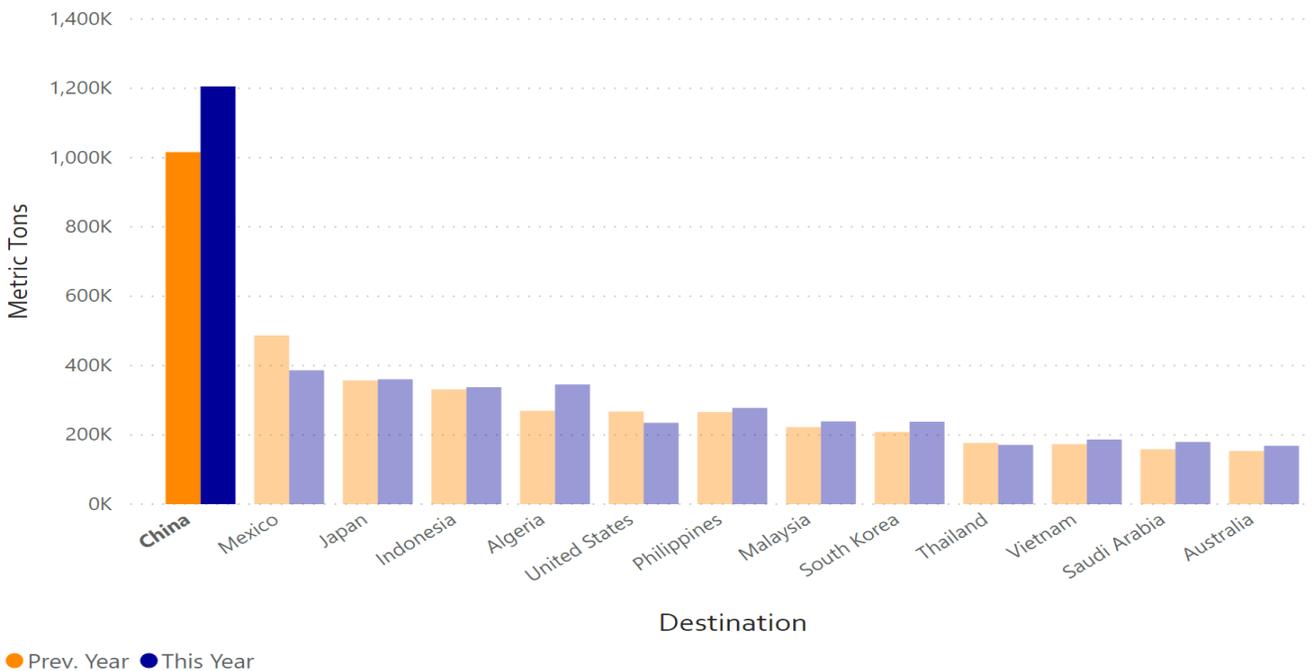


1/1/2020 10/1/2020

Product Group	Qty	YOY % Change
Butter and Fat	568,782	4%
Cheese	1,479,751	1%
WMP	1,523,752	5%
SMP	1,669,182	0%
Whey	1,739,839	14%
Total	6,981,305	5%

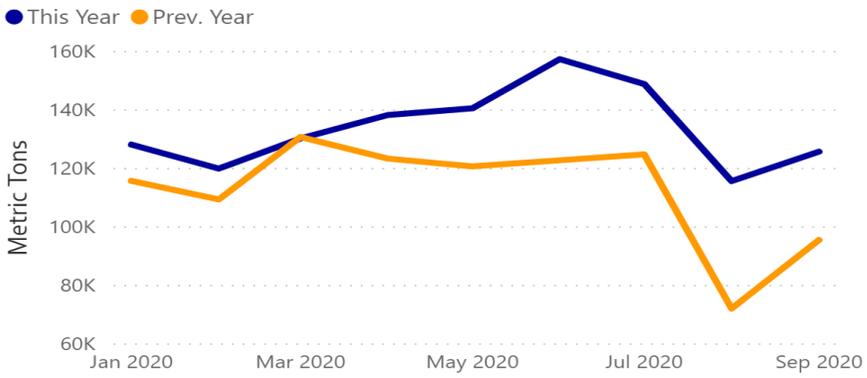


Trade to China – driven by whey exports



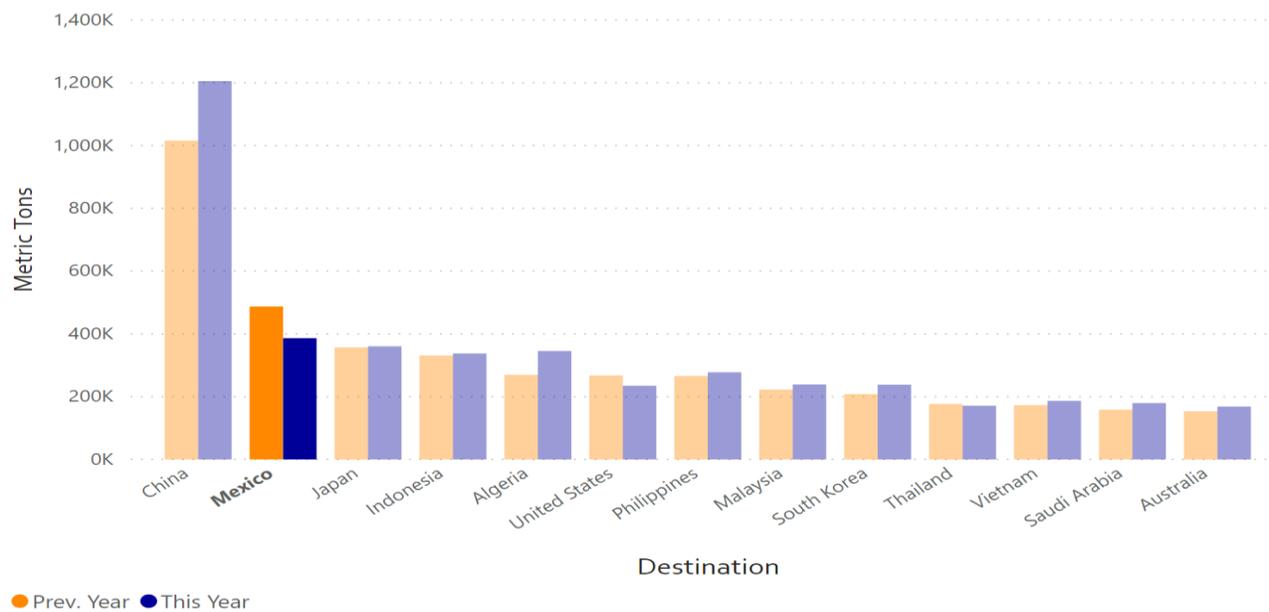
1/1/2020 10/1/2020

Product Group	Qty	YOY % Change
Butter and Fat	71,104	31%
Cheese	87,352	9%
SMP	213,881	0%
WMP	375,082	5%
Whey	457,971	46%
Total	1,205,390	19%

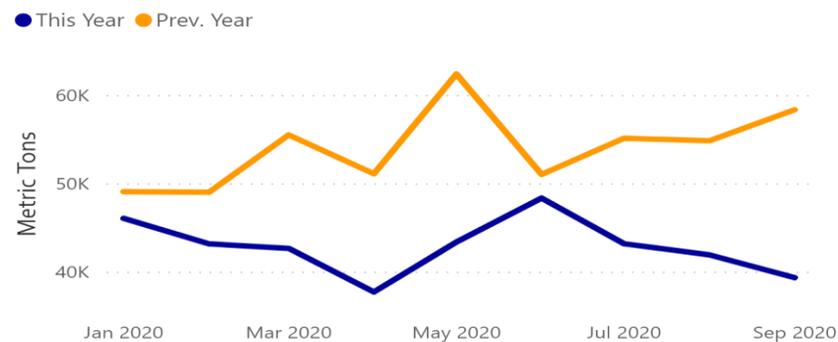




Trade to Mexico – less robust

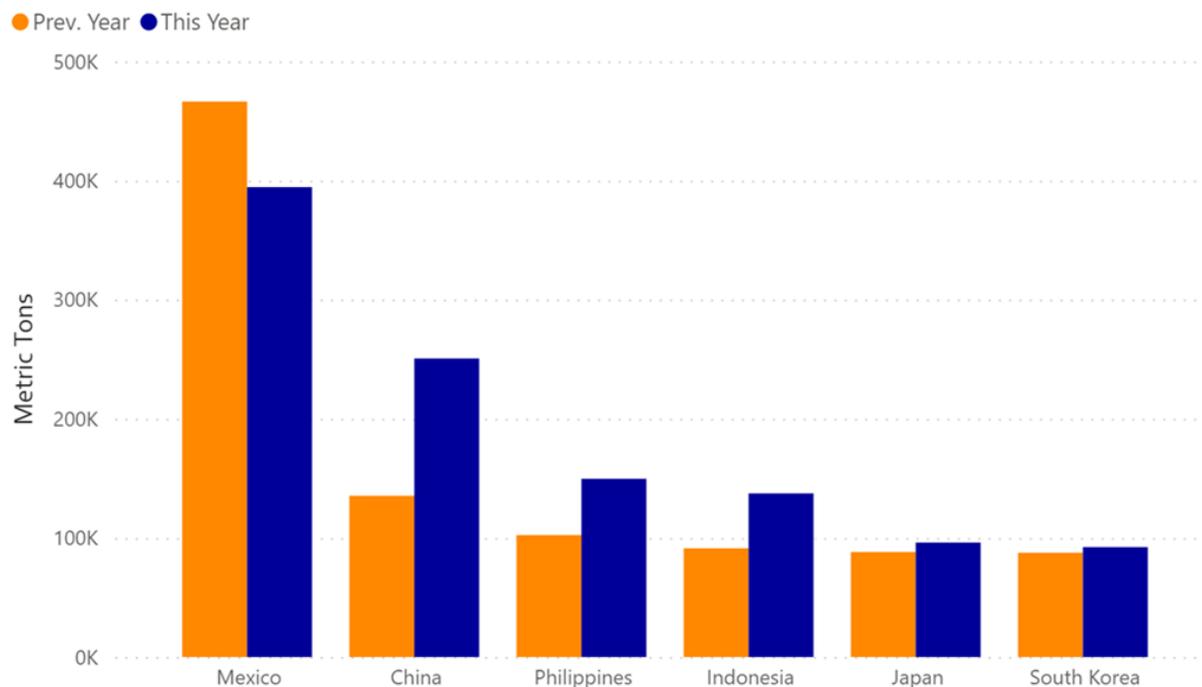


Product Group	Qty	YOY % Change
WMP	3,341	-3%
Butter and Fat	17,278	-21%
Whey	62,957	-31%
Cheese	88,793	5%
SMP	213,947	-25%
Total	386,316	-21%

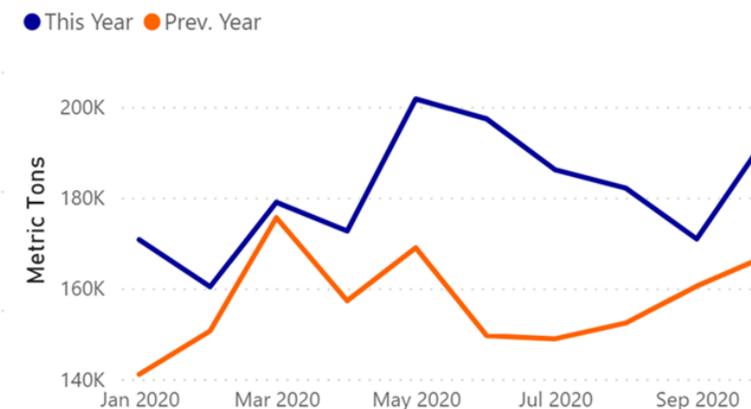




US dairy exports up 15% YTD October

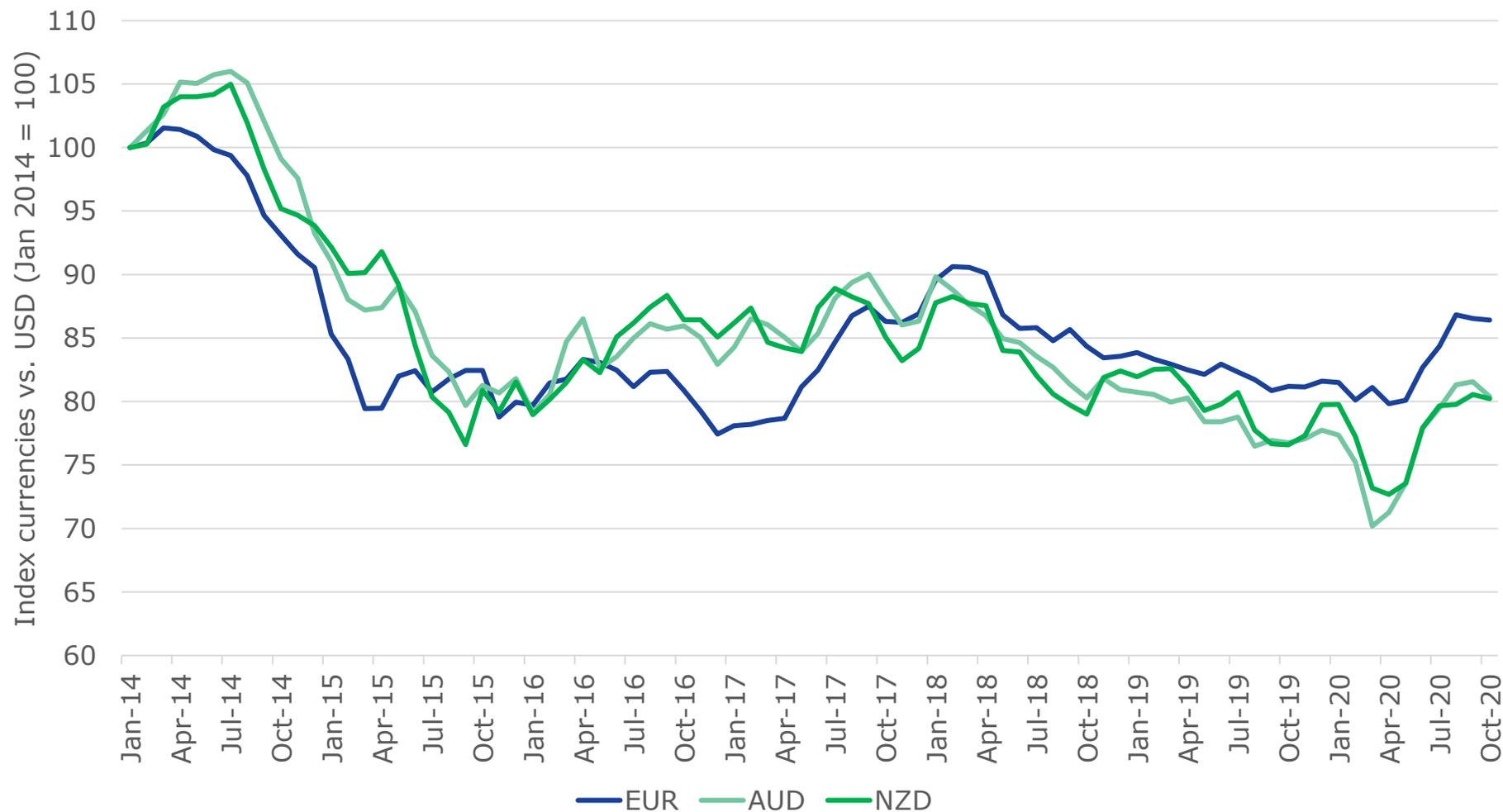


Product Group	Qty	YOY % Change
Whey	755,165	17%
SMP	696,323	23%
Cheese	308,359	1%
WMP	30,826	11%
Butter and Fat	23,179	-17%
Total	1,813,853	15%





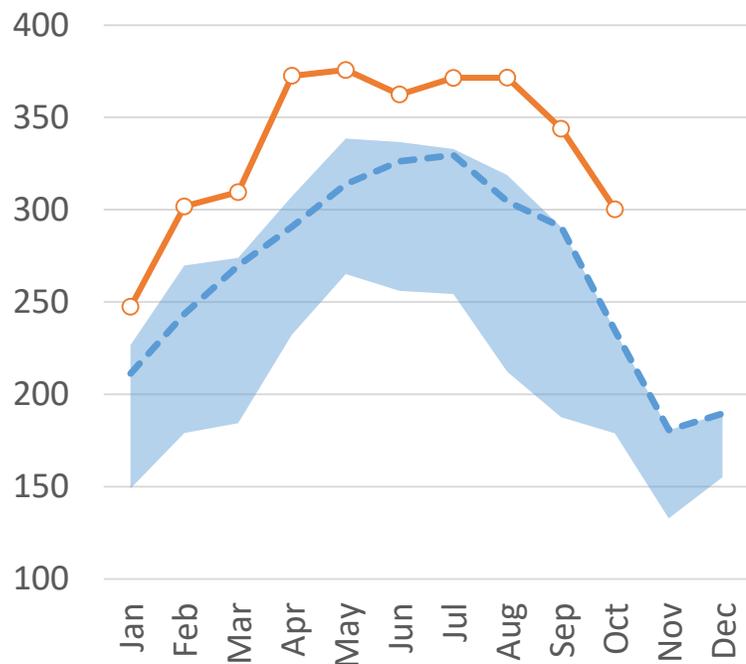
Exchange rates USD vs. exporters, 2014-2020





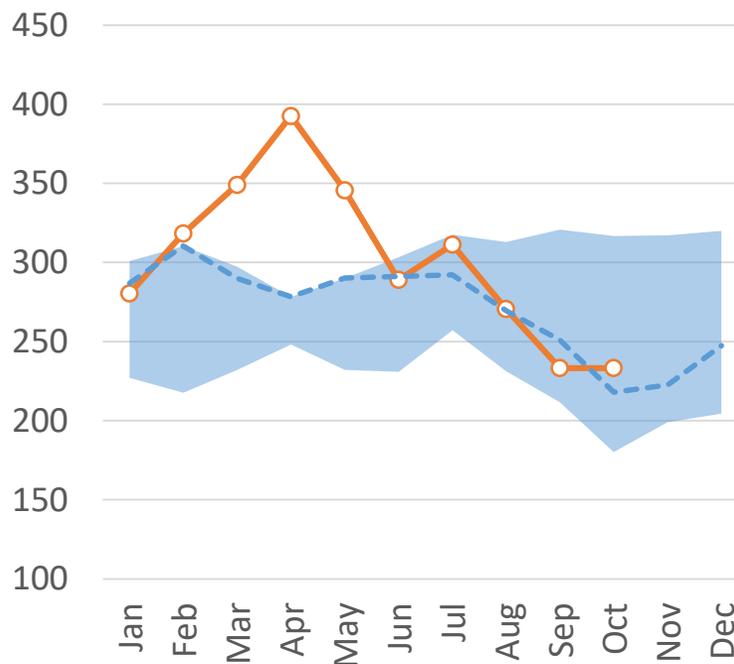
Current stock levels are manageable

US Butter Stocks (Million lbs.)



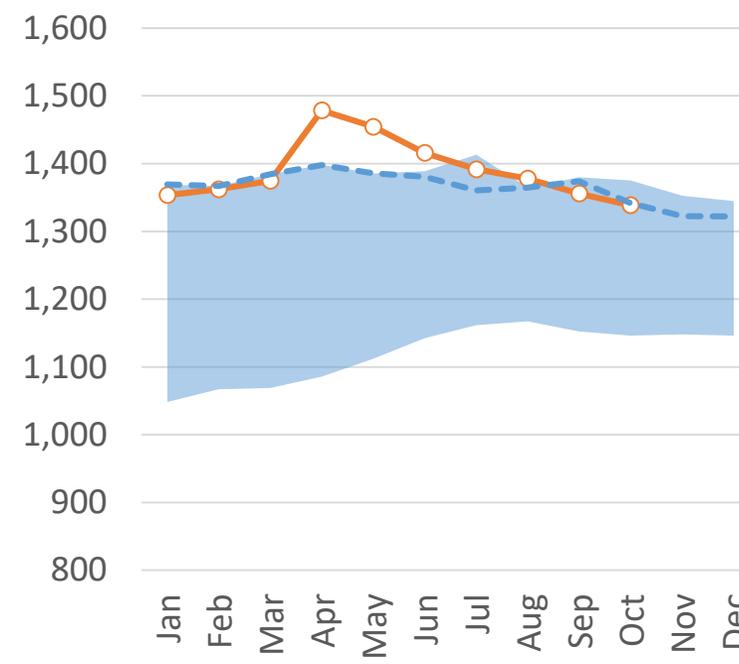
5yr Range 2020 2019

NDM/SMP Stocks (Million Lbs.)



5yr Range 2020 2019

Natural Cheese Stocks (Million Lbs.)



5yr Range 2020 2019



Global dairy demand summary

Government support provided relief through the crisis, but is less certain beyond Q4, elevating risk of lower prices

US \$ weakness against competitors expected to spur US exports

Oceania is past its flush and US stocks are manageable

Economic recovery and vaccines could be likely to boost consumer confidence, supporting dairy demand – especially in foodservice

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