

Global Perspectives on Dairy: Where Does the U.S. Industry Fit-In Post Pandemic?



By Matt Gould
Dairy & Food Market Analyst, Inc

Agenda for today.

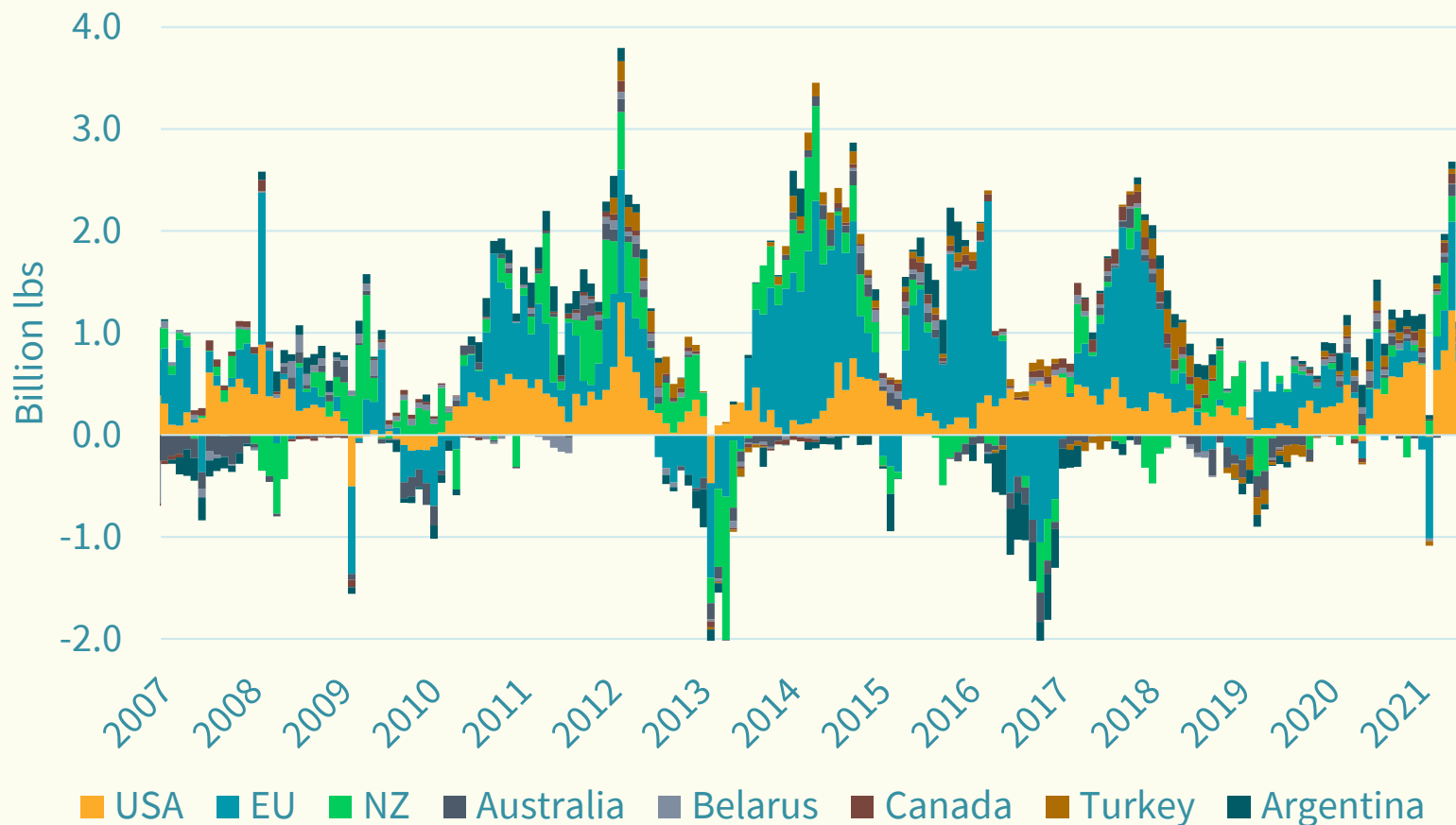
- Competitive landscape in global dairy.
- Changes in the competitive landscape of milk supplies in the USA.
- Following our customers.
- Inflation.

Goal is to convince you that there is an exciting future ahead of us.

OUR COMPETITION IS GETTING
'STUCK'

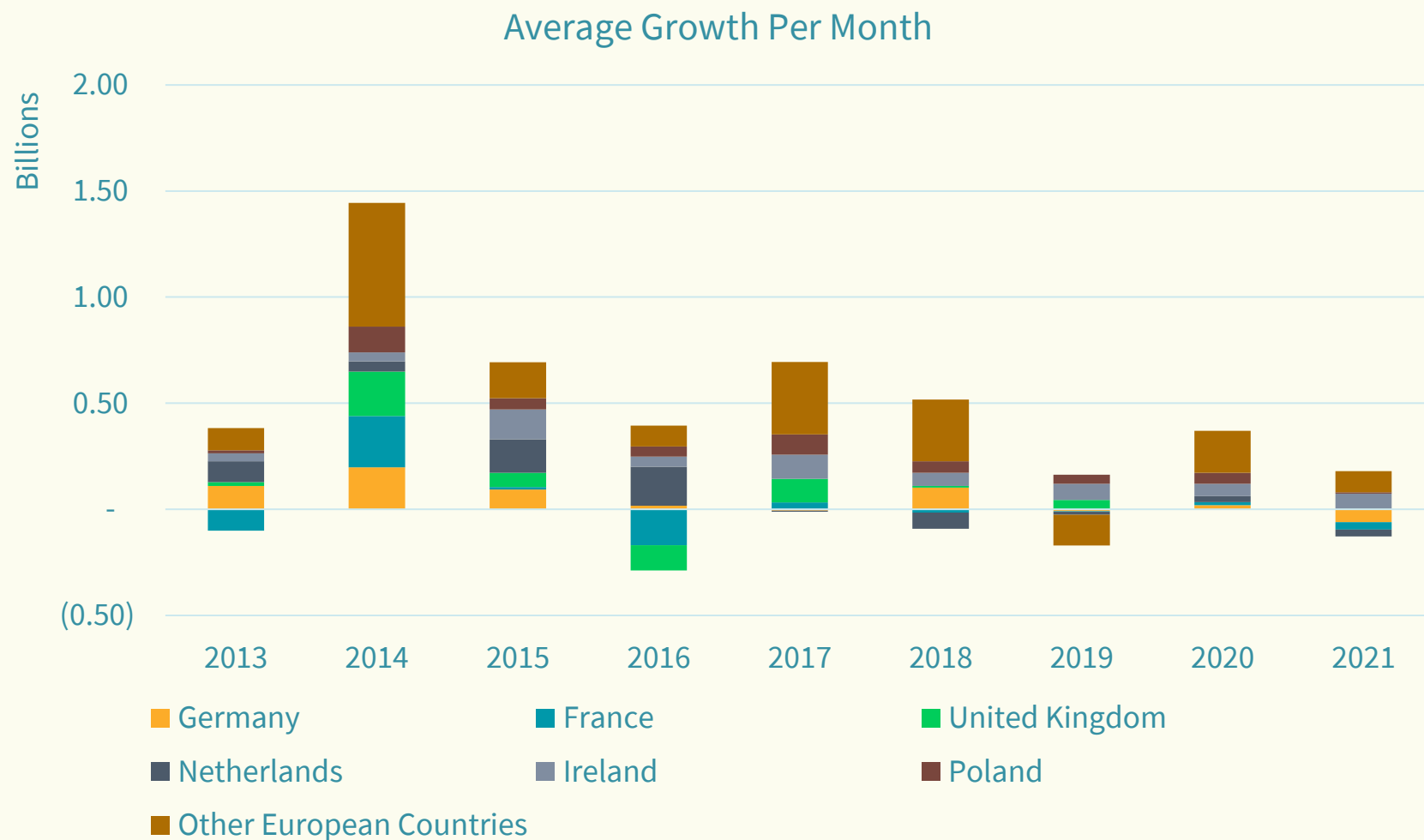
Europe is no longer dominating the driver of growth. The USA is now in pole position and will be for the foreseeable future.

Growth in Milk Production By Region



Source: Dairy & Food Market Analyst, Inc

Why have European Growth Rates Slowed?

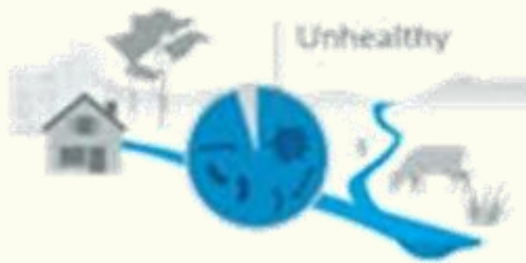


Farm To Fork Strategy & Other Environmental Initiatives

“Europe used to have quote based on quantity of milk. Now it’s based on number of animals”

- 50% reduction in the **use and risk of pesticides**.
- 20% reduction of the **use of fertilizers** – including animal manure.
- 50% reduction in **sales of antimicrobials** used for farmed animals and aquaculture.
- 25% of agricultural land **under organic farming**, of which the current level is 8%.

New Zealand facing growing environmental pressure. Has already maxed out available land base for dairying (and then some).



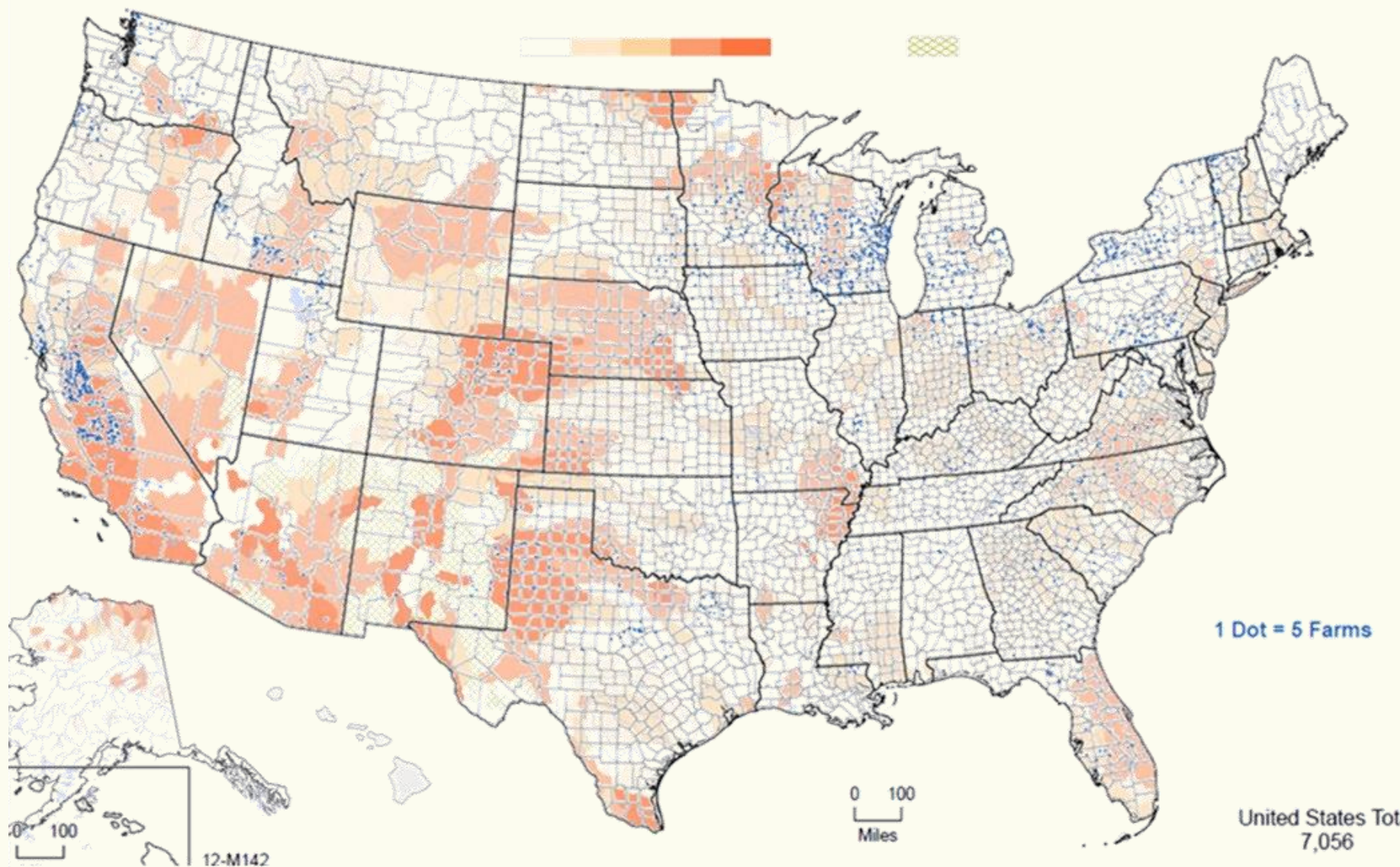
95-99%
Of river length in urban,
pastoral, and exotic
areas exceeds water
quality guidelines



67-72%
of lakes in urban,
pastoral, and forestry
areas are in poor
ecological health

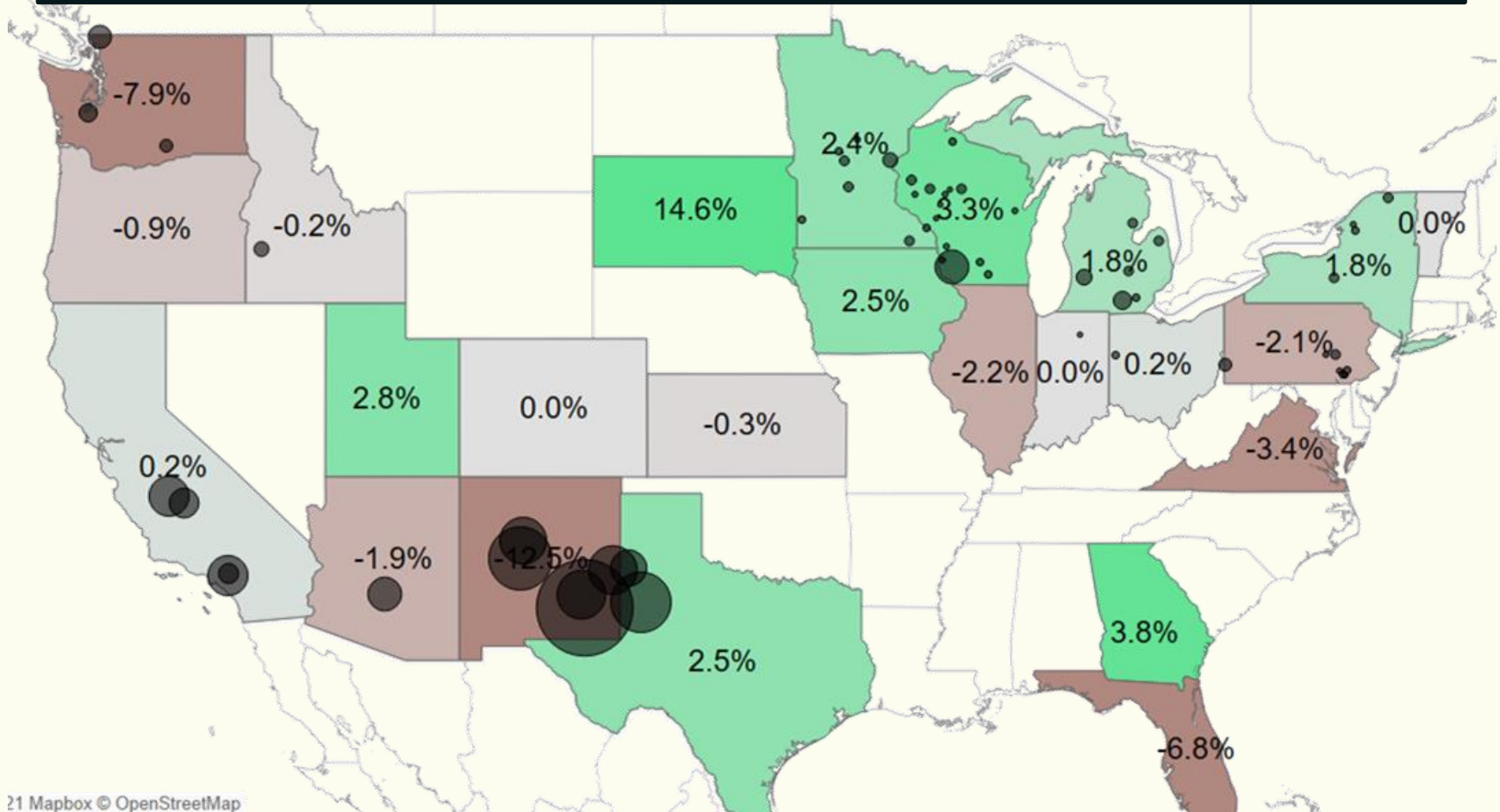
**IN THE USA, BEING BIGGER IS NO
LONGER ENOUGH. DAIRIES TO MIGRATE
TOWARD AREAS WITH MORE WATER.**

Water Scarcity Risk & Dairy Farm Locations in the USA



Dispersals of large dairy farms in the West are limiting production growth in the Southwest

Announced Herd Dispersals June thru November At Major Auction Companies

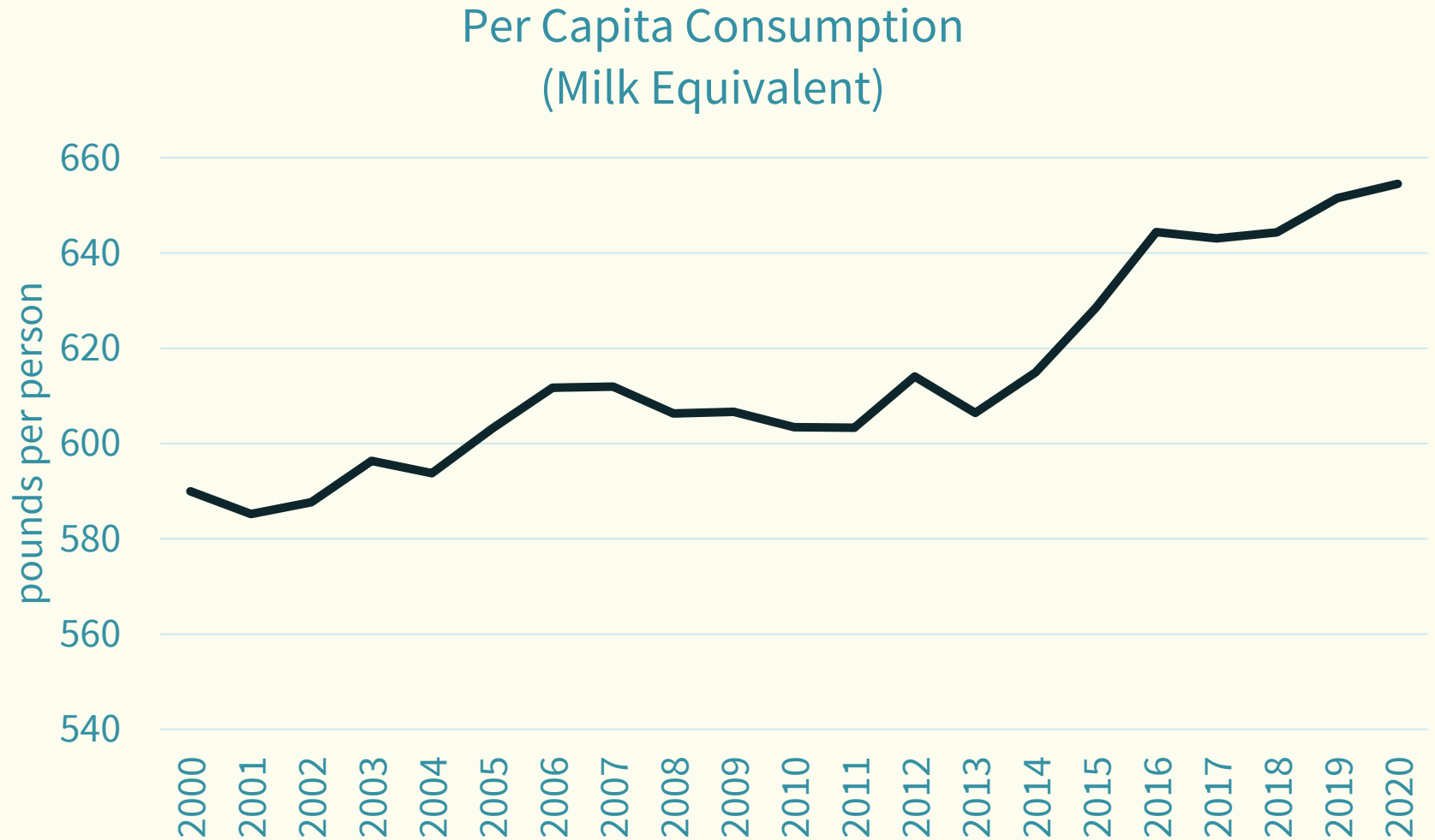


21 Mapbox © OpenStreetMap

Sources: Kreeger Dairy Auctions, Overland Stockyard, Premier Livestock, Tim Weaver Auctions, Mid American Auctions, Oberholtzer auctions, Tonpenich Livestock, Ravenna Auction, Delarm & Treadway, Kiko auctions, USDA Milk Production (Aug)

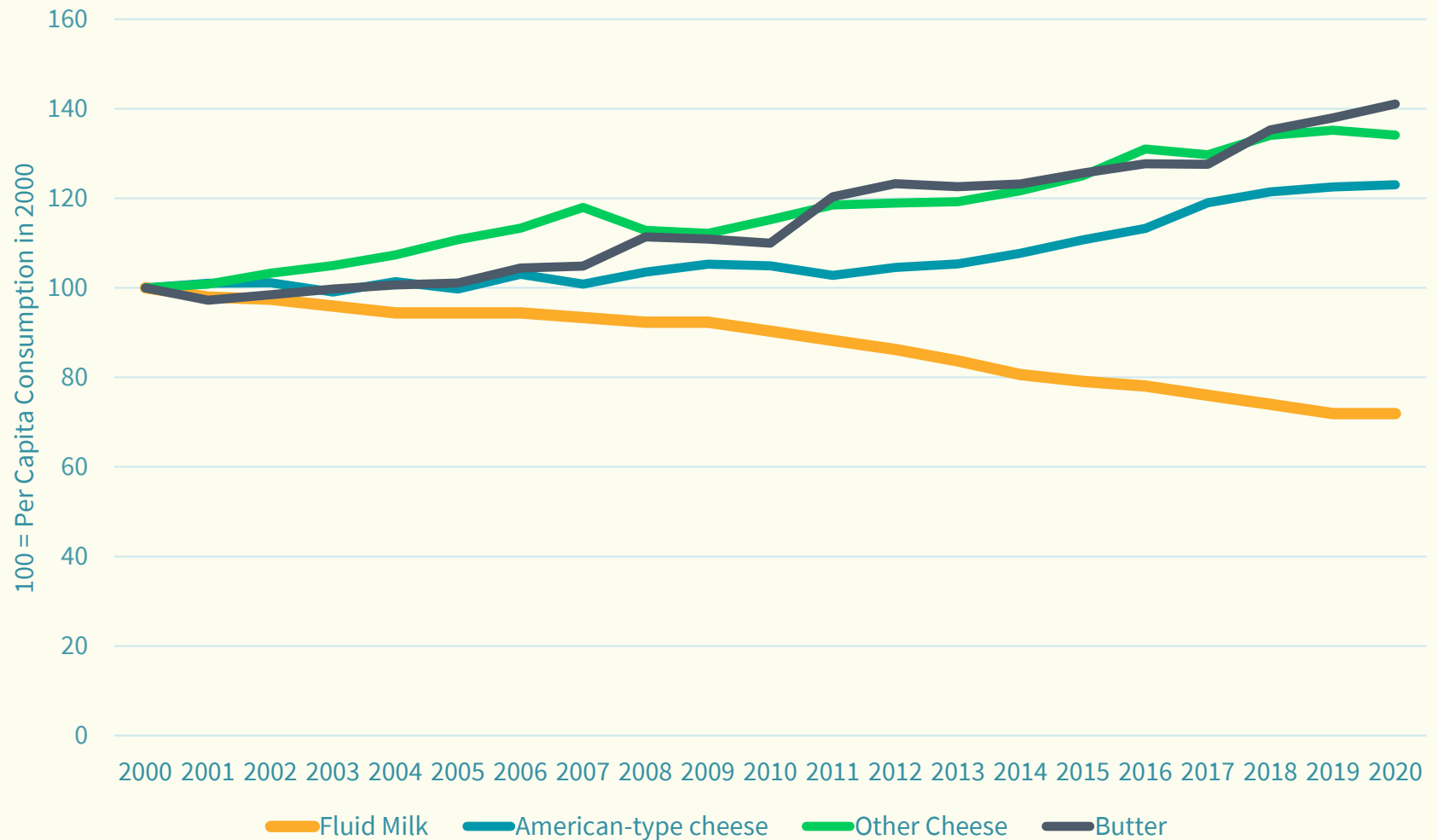
**AND AMERICANS ARE STILL
HEATING MORE DAIRY**

Consumption of Dairy Continues To Grow



Source: Dairy & Food Market Analyst, Inc, USDA

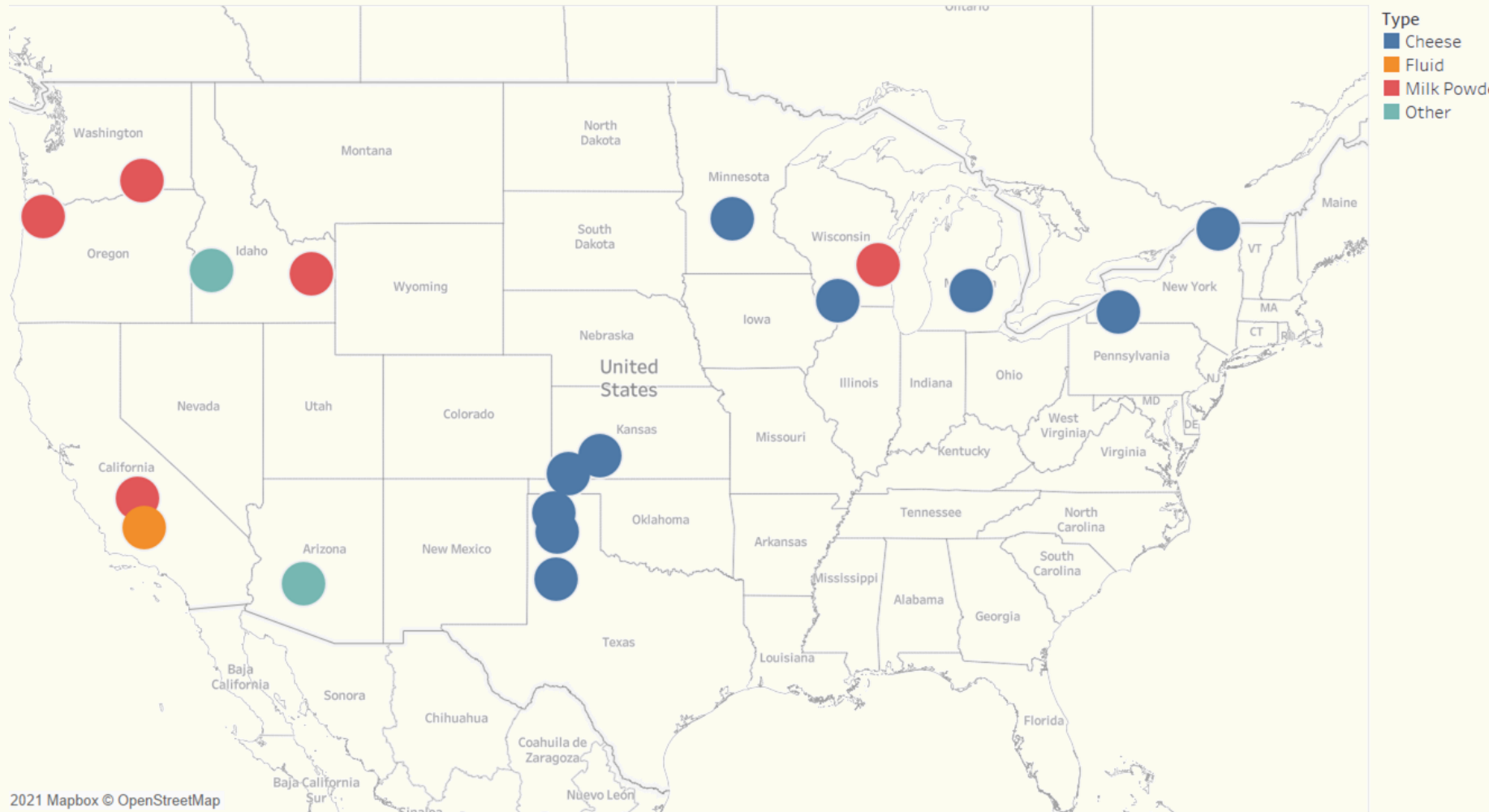
Consumers are eating more cheese & butter, less fluid milk.



Source: Dairy & Food Market Analyst, Inc, USDA

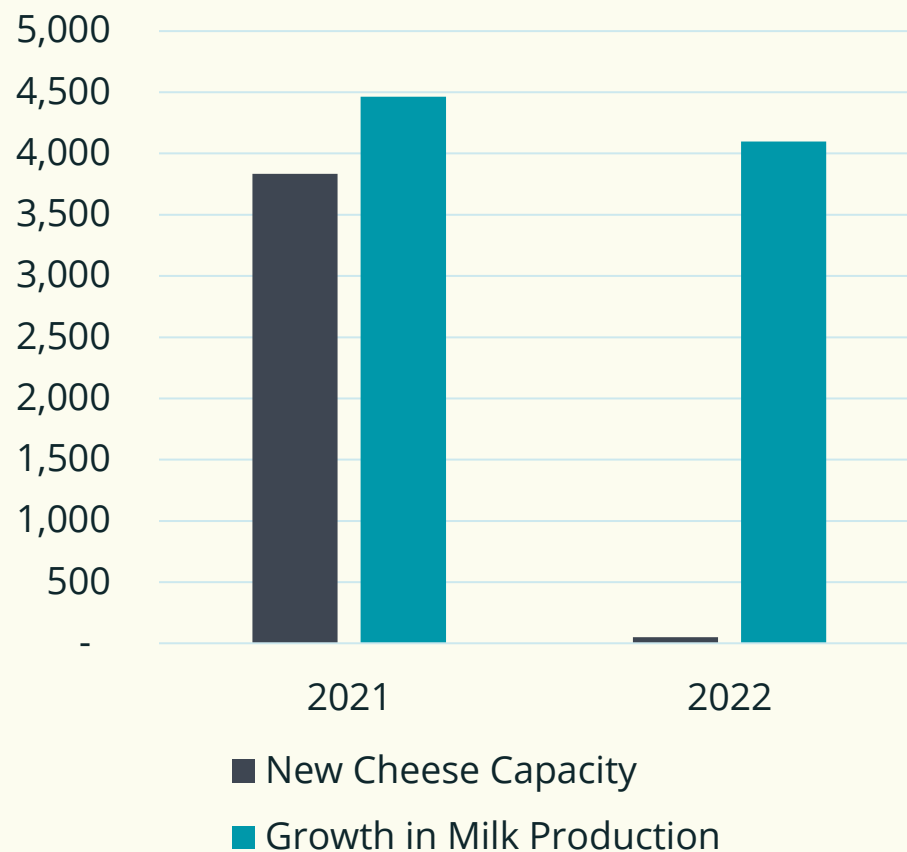
WHERE IS THE INDUSTRY INVESTING?

MAP of USA Milk Growth and New Plants 2021-2023

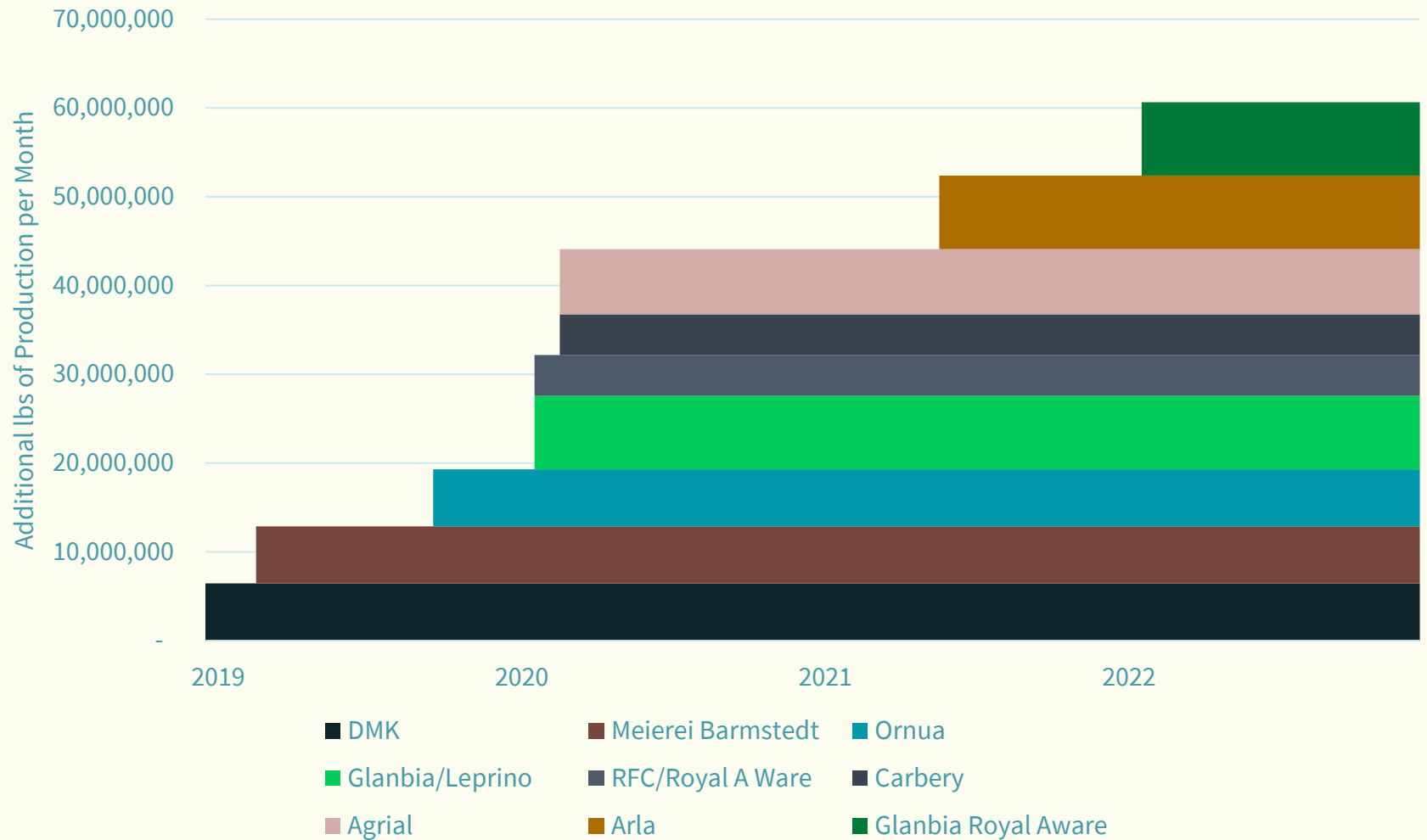


In the USA, there isn't significant cheese manufacturing investment in 2022.

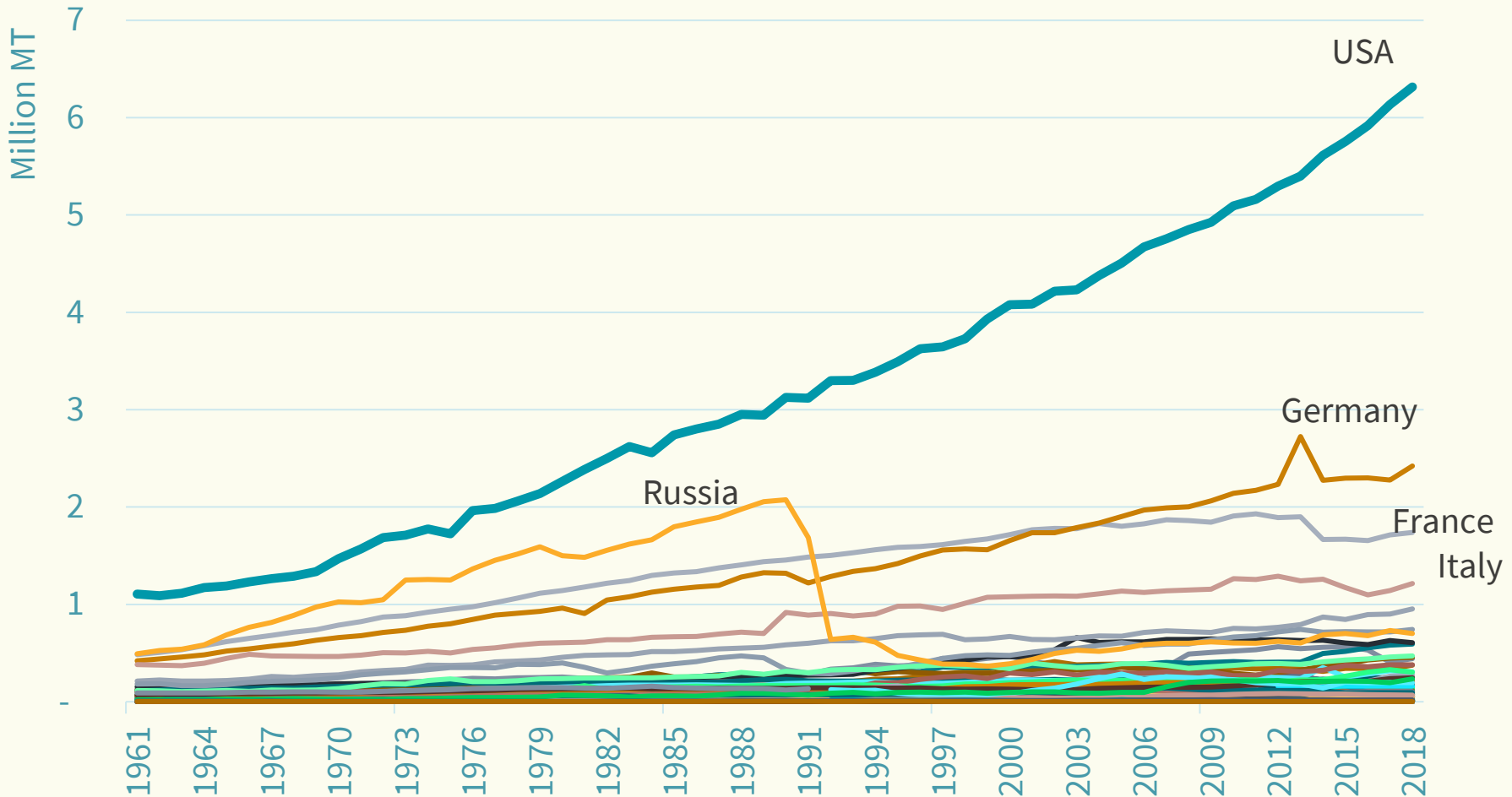
New Annual Manufacturing Capacity Million lbs of Milk				
	Fluid	Cheese	Powder	Milk
2023	?	7,665	?	4,092*
2022	?	-	-	4,098*
2021	1,278	3,833	365	4,464*
2020	(183)	93	(1,095)	4,779
2019	910	2,993	1,643	873
2018	(1,594)	1,051	1,127	2,041



New Mozzarella-type Cheese Capacity in Europe

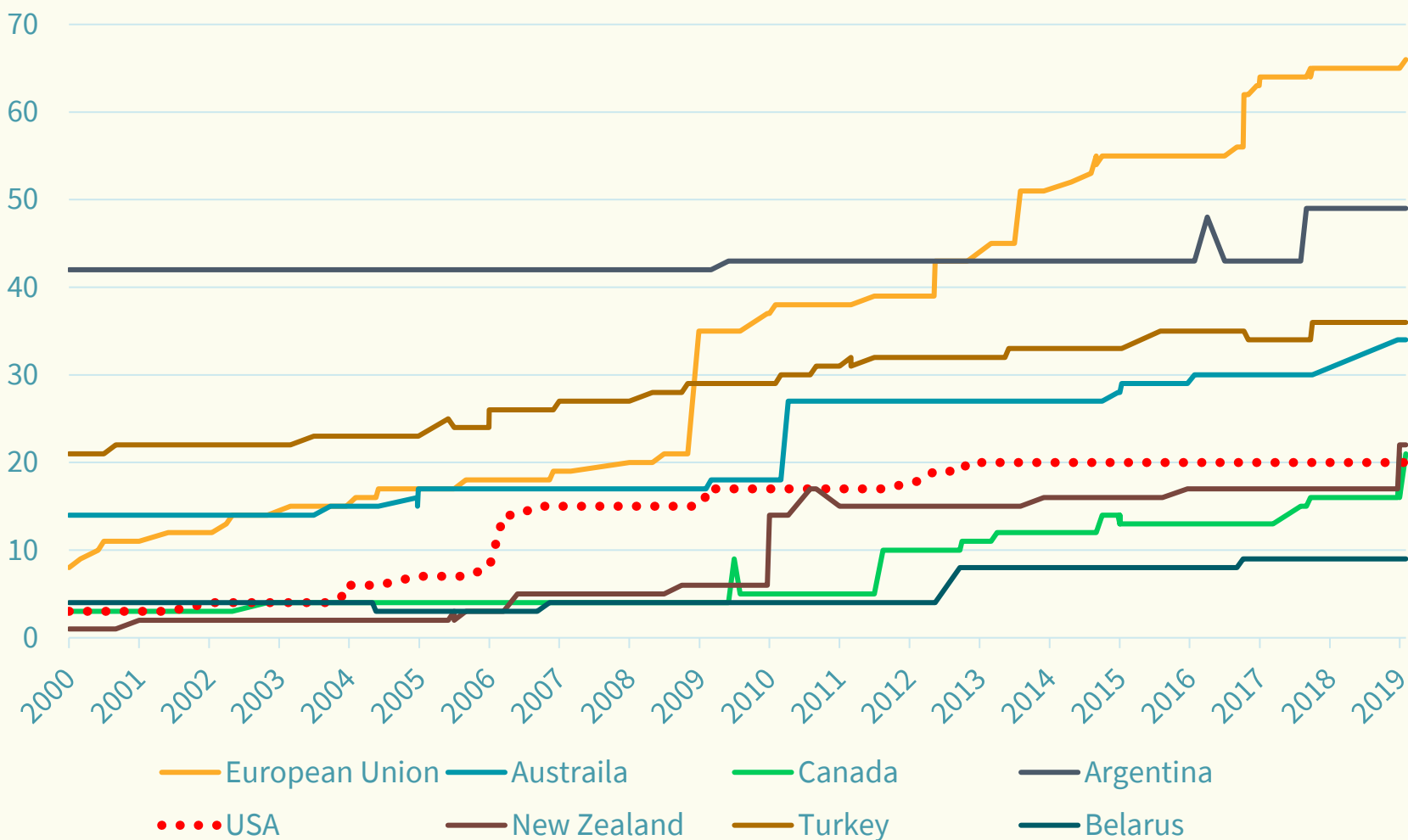


The USA and Europe continue to dominate the cheese industry.



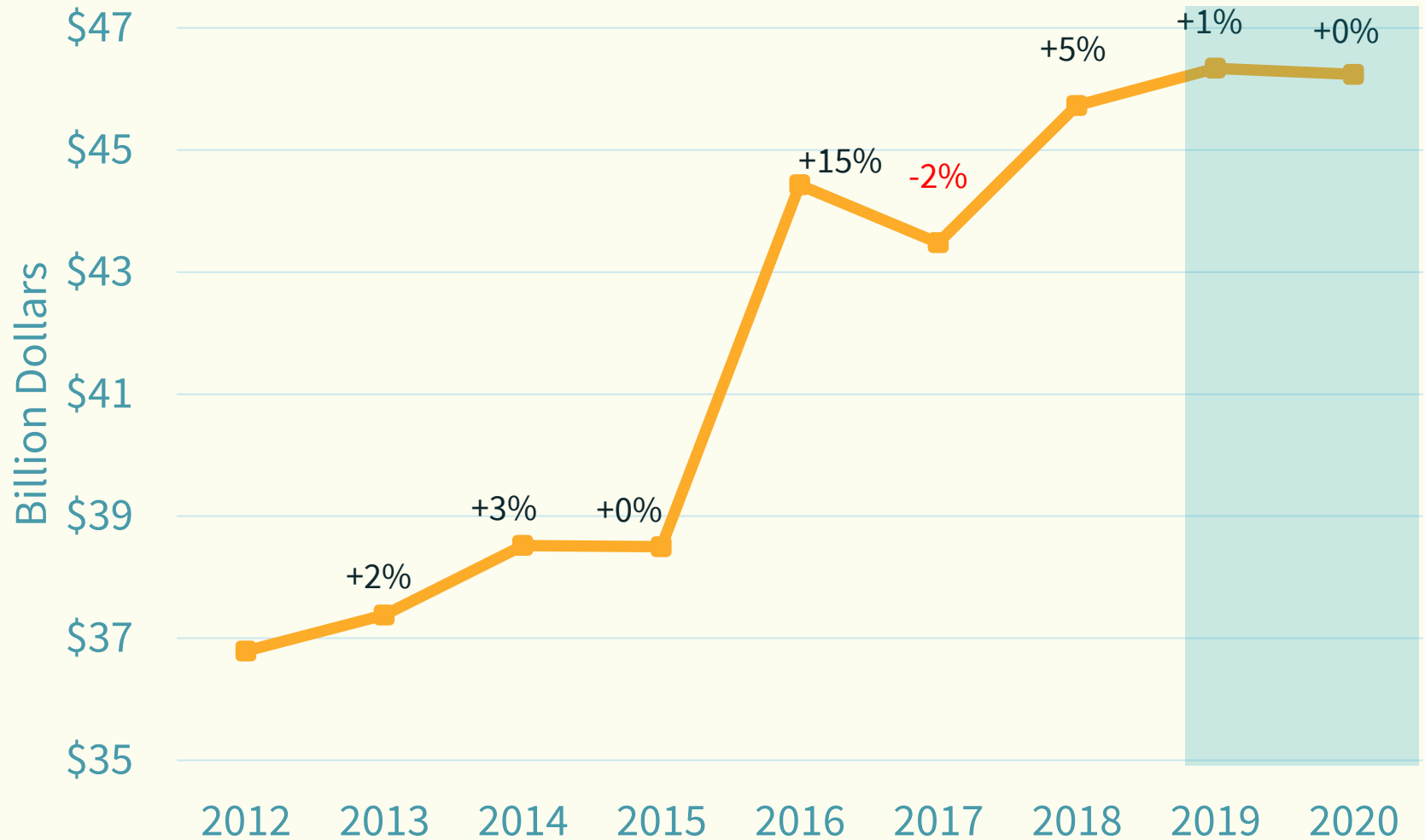
Source: Dairy & Food Market Analyst Inc, USDA

Attitudes toward trade agreements and market access will be the deciding factor.

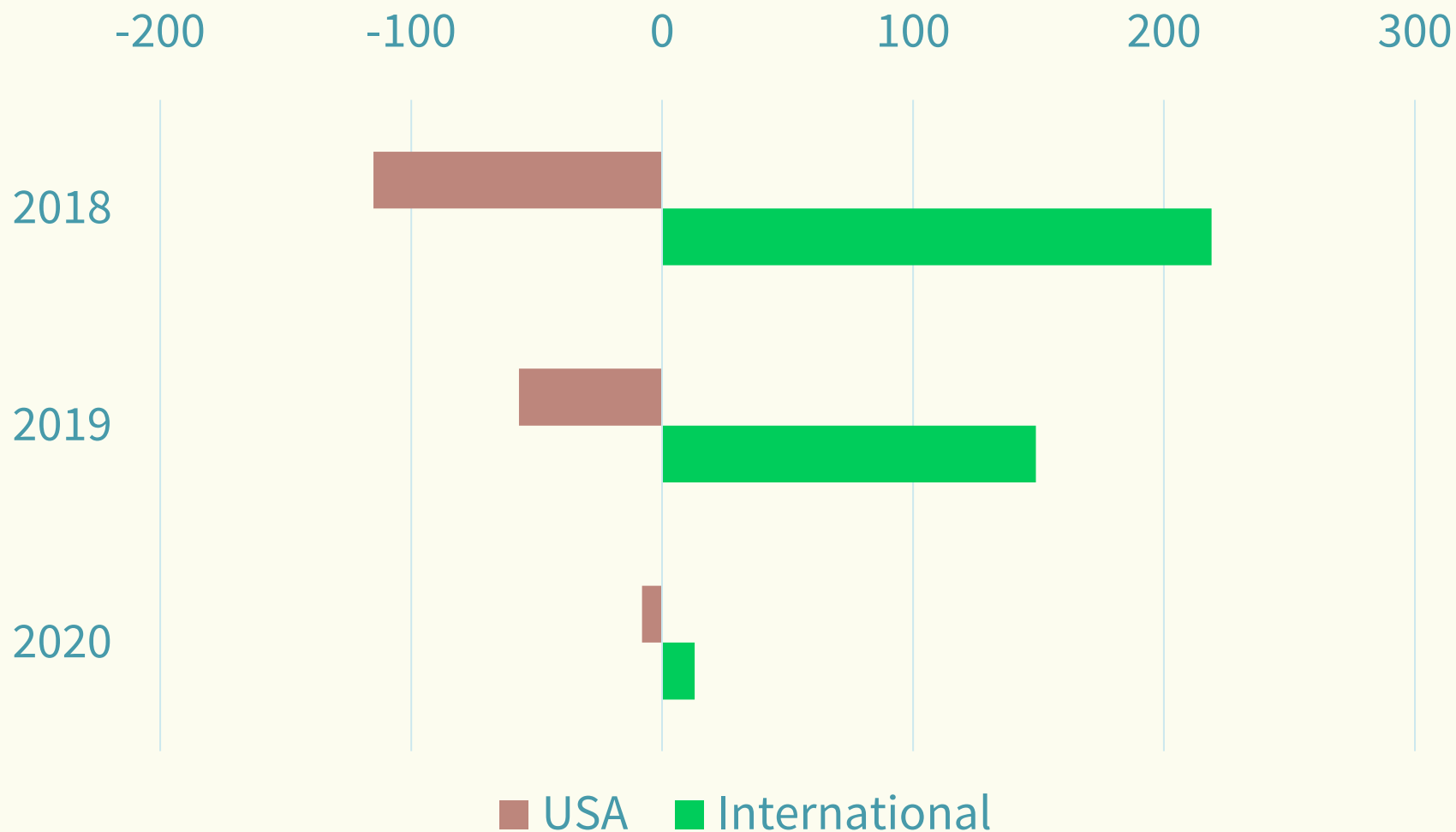


WHERE ARE OUR CUSTOMERS INVESTING

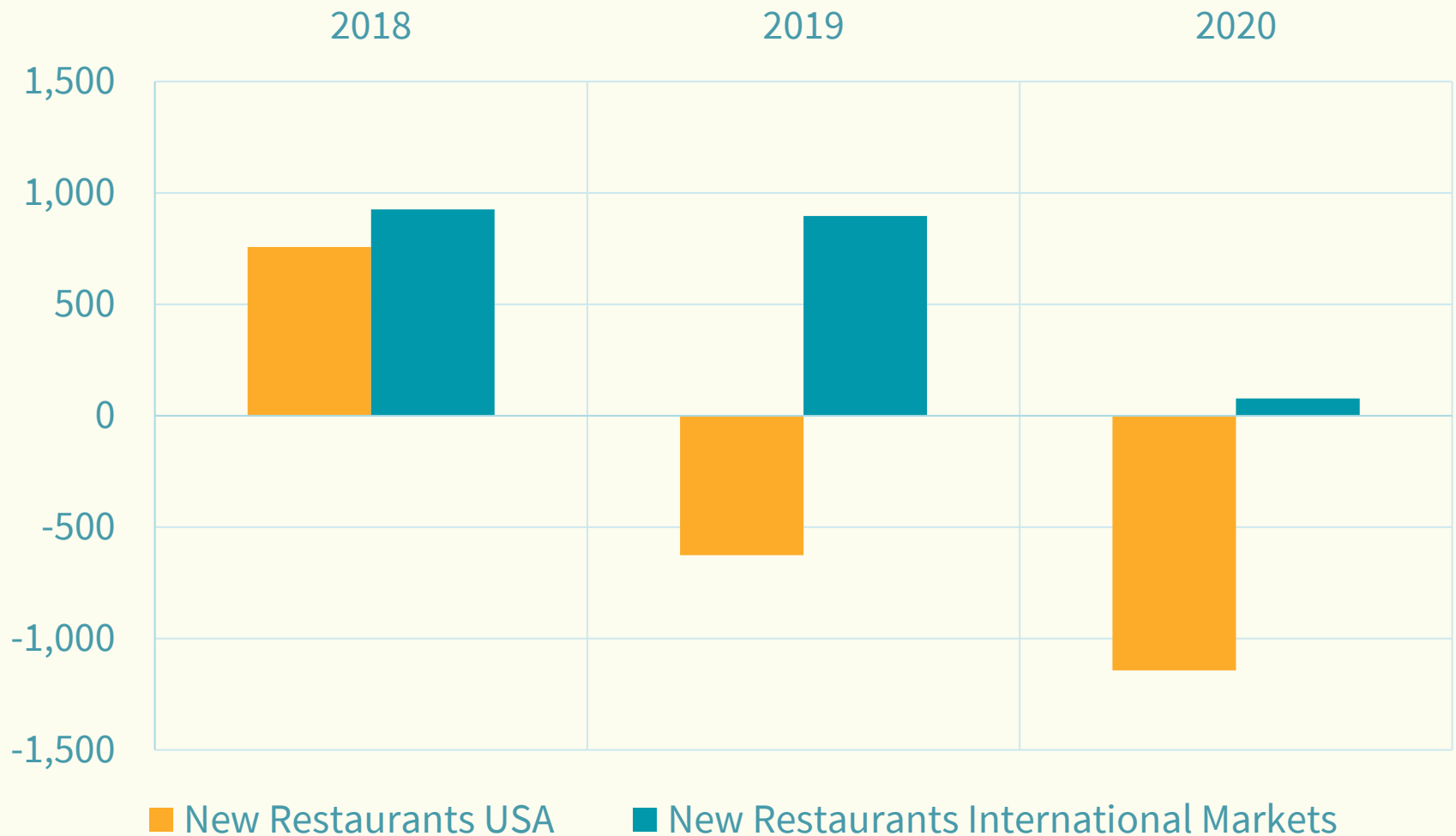
Current Trend in Pizza Consumption in the USA



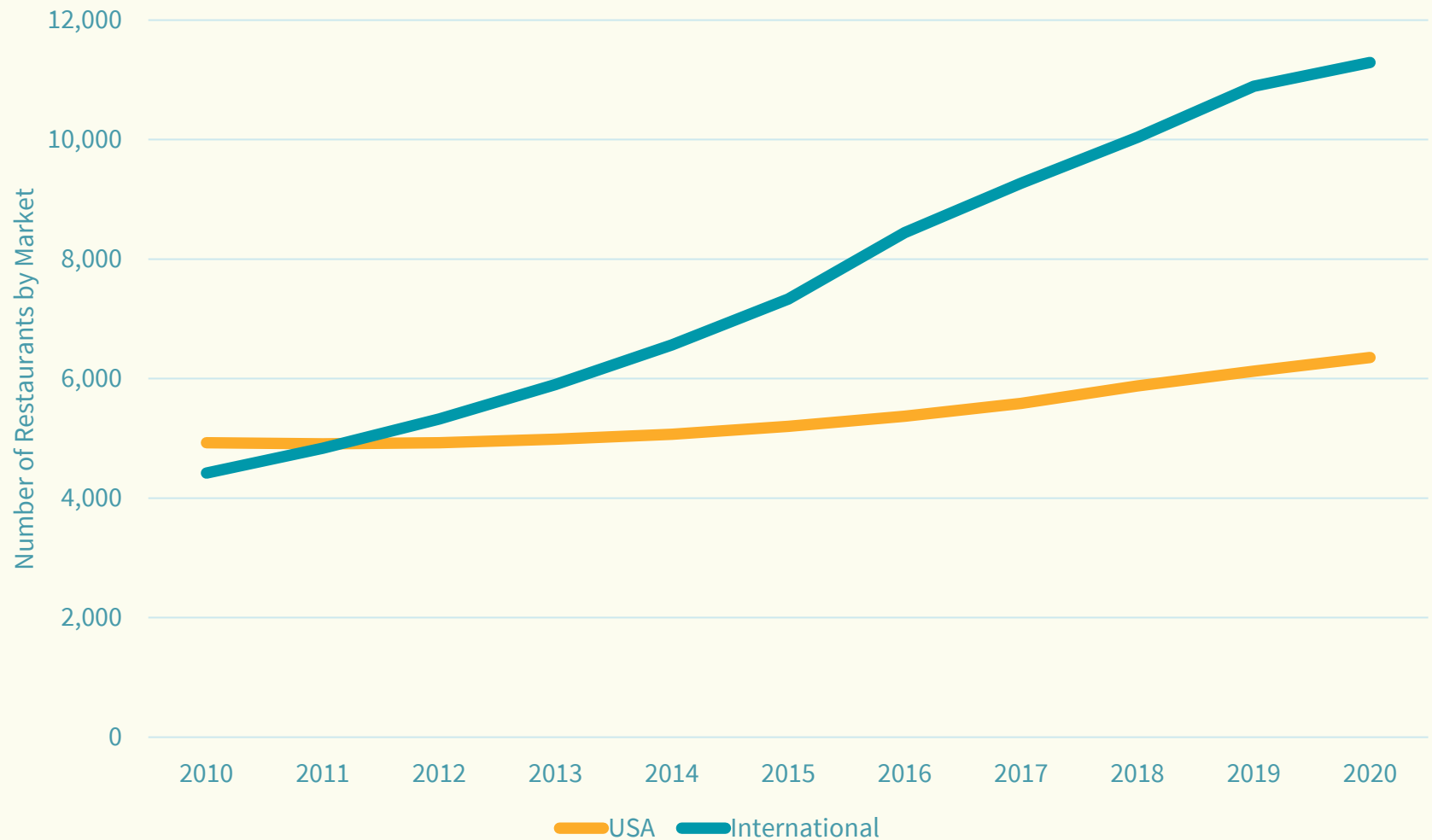
Papa John's Has Been Closing Restaurants in the USA While it Opens Them Elsewhere.



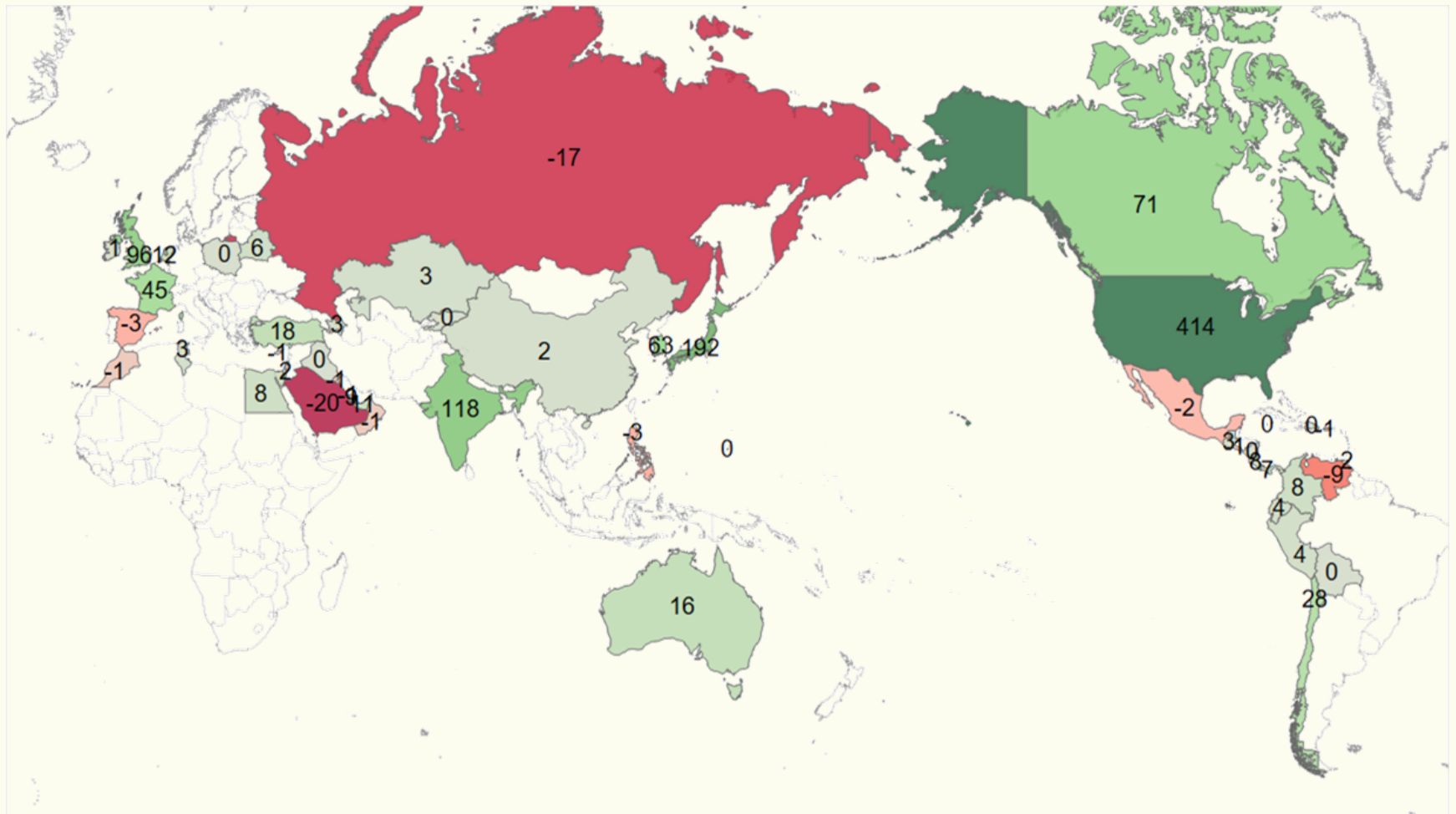
Pizza Hut Has Also Been Closing USA Restaurants While it Grows Outside of the USA.



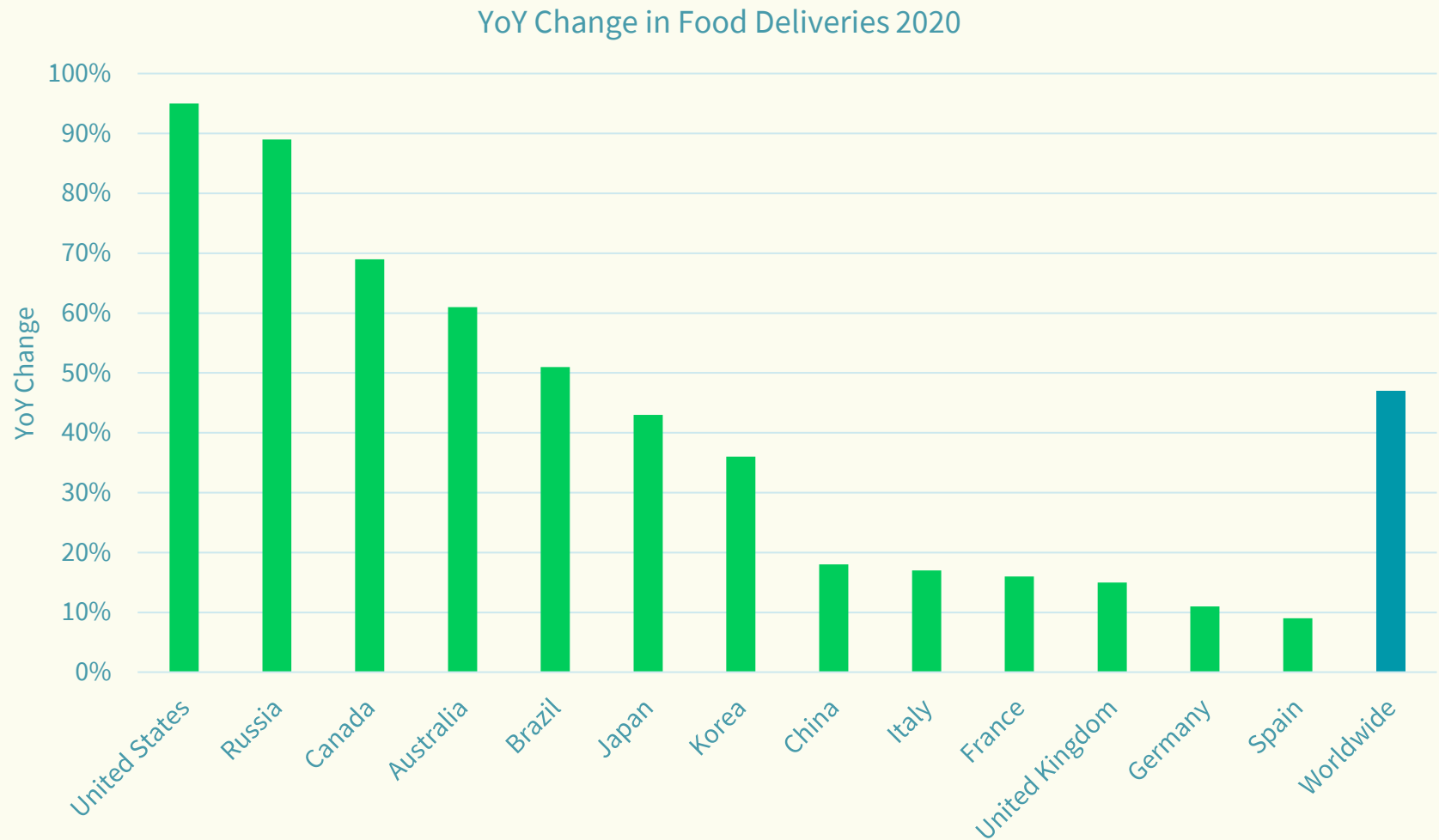
Domino's International Restaurants Surpassed its numbers in the USA in 2011.



Map of New Pizza Restaurants: Domino's and Papa John's



More 'convenience' options:



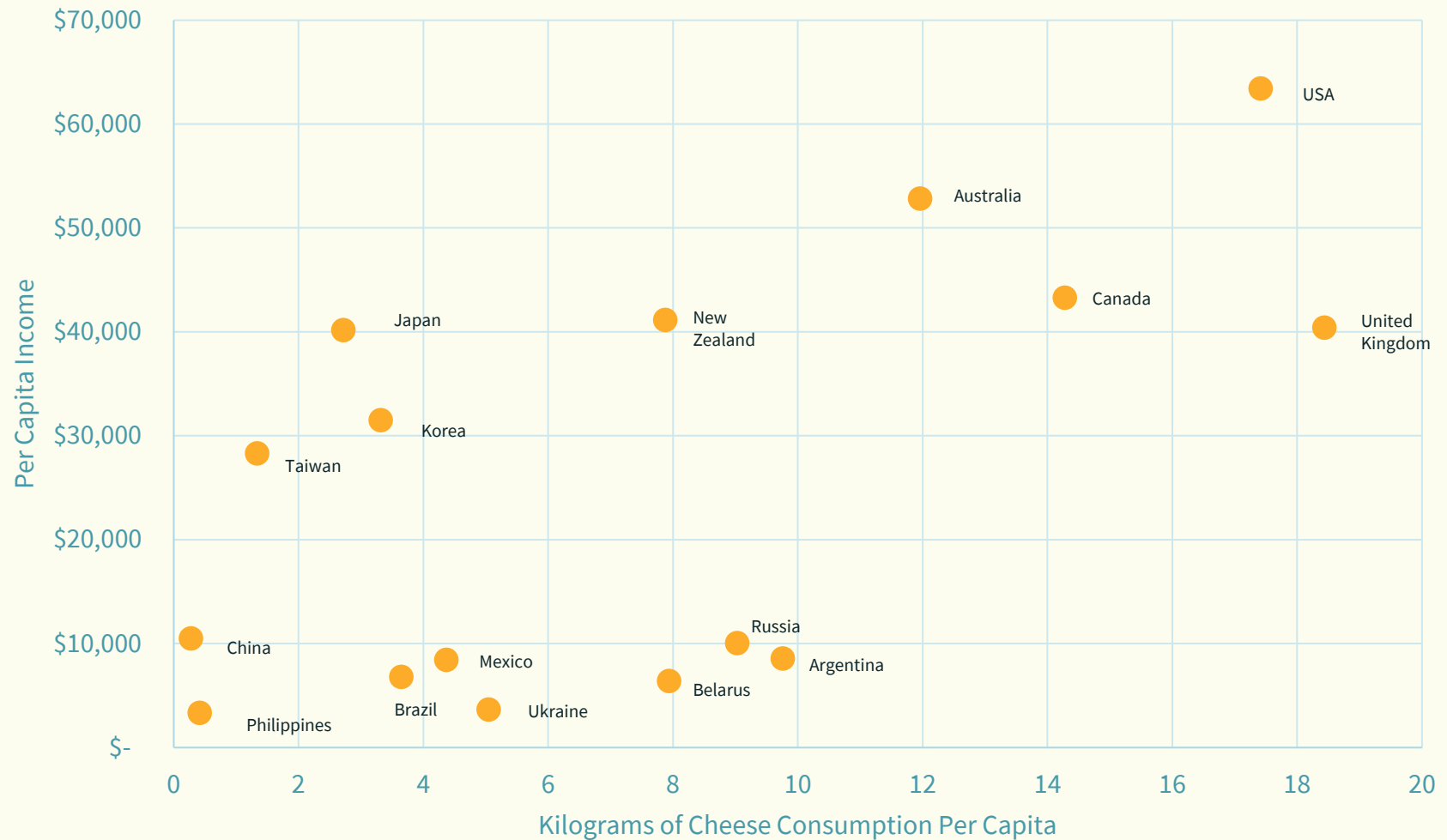
WHY IS THE GROWTH OVERSEAS?

Why is the growth overseas?

It's not because of population growth, at least not in the Western world.

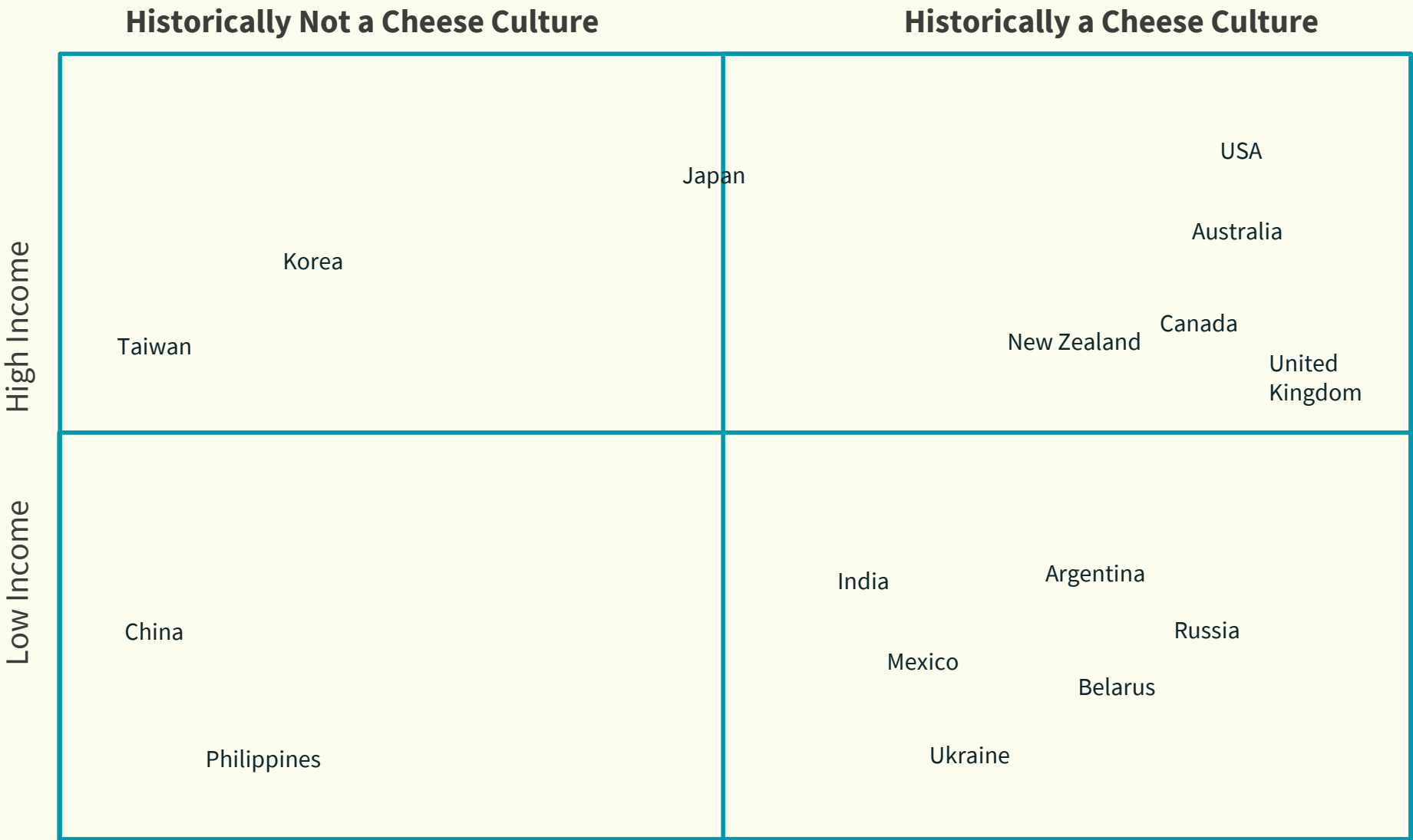
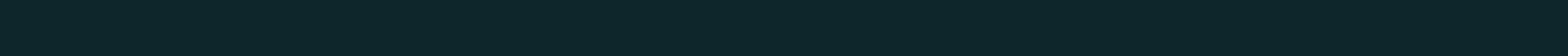


Why is the growth overseas?
It's primarily because of more income.



Sources: OECD, International Dairy Federation, Analyst Estimates

**WHERE IS THE GROWTH OCCURRING?
WHICH AREAS HAVE THE MOST
POTENTIAL?**



Growth in Cheese Demand by 2025

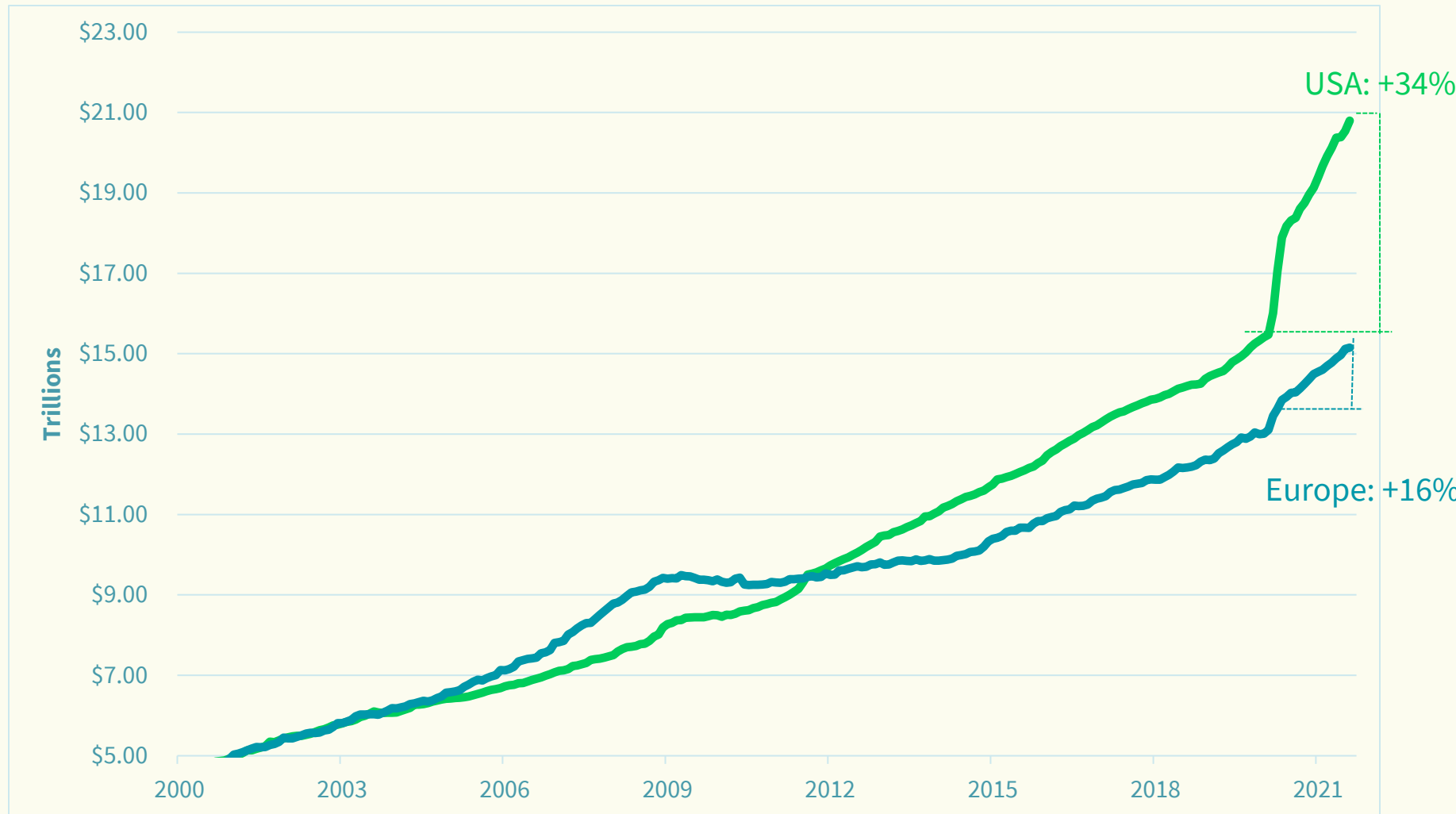
Country	Estimated Increase in Cheese Demand (Additional Cows Needed by 2025 (Thousand)		Projected Annual Increase in Income per Capita (Percent)
United States	1,680,355	1,242	1.92
China	732,248	541	5.26
India	611,772	452	6.70
United Kingdom	261,775	193	2.36
Canada	152,507	113	2.24
Russia	133,907	99	2.26
Brazil	128,201	95	2.14
Mexico	100,886	75	2.22
Taiwan	66,950	49	2.38
Australia	49,966	37	2.46
Japan	47,236	35	1.08
South Korea	36,297	27	2.48
Argentina	30,364	22	1.88
Ukraine	25,388	19	3.72
Philippines	23,358	17	6.50
New Zealand	22,650	17	2.64
Belarus	3,448	3	1.40

**THE TREND THAT IS ALL OVER THE
NEWS: INFLATION.**



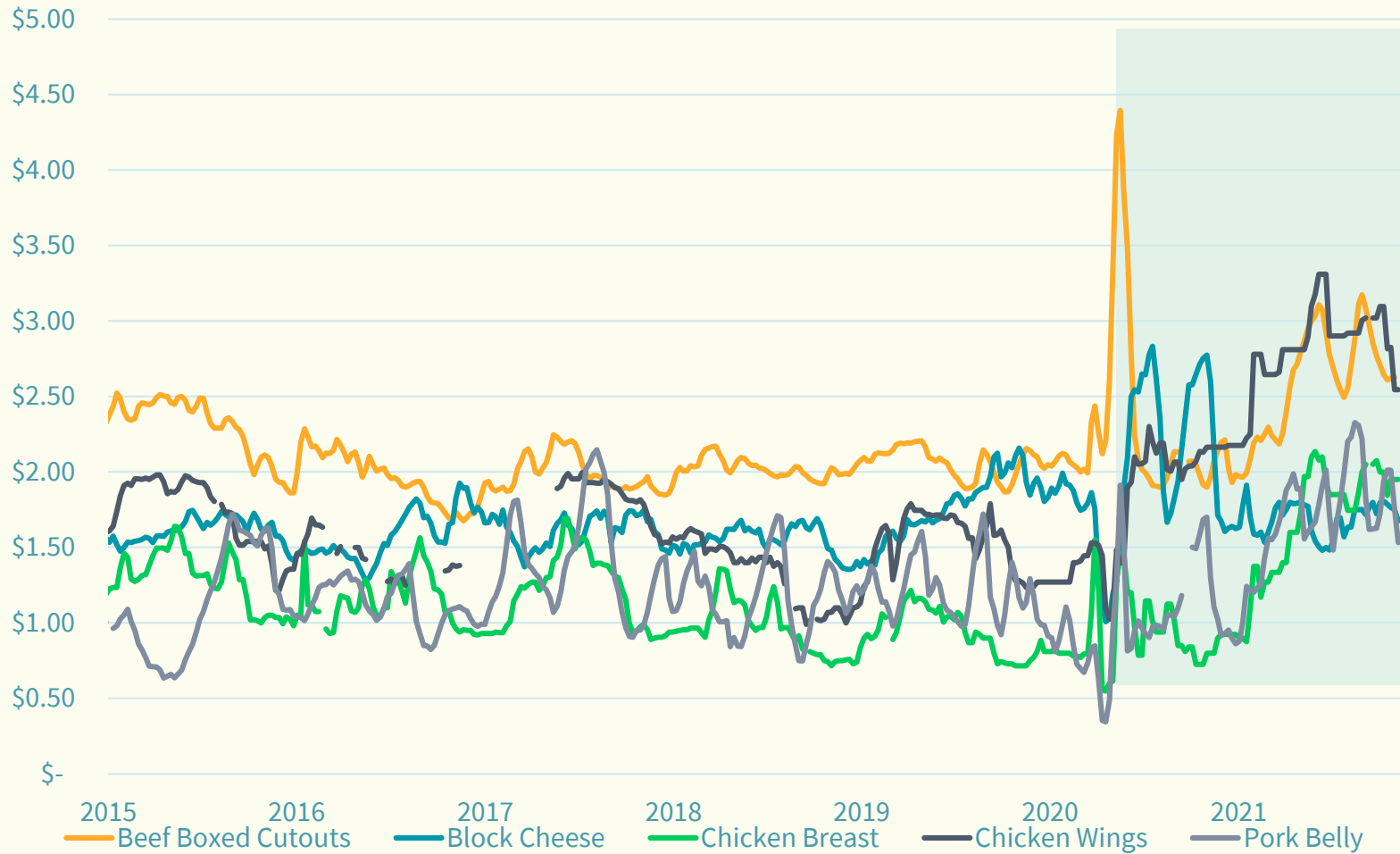


Global Money Supply



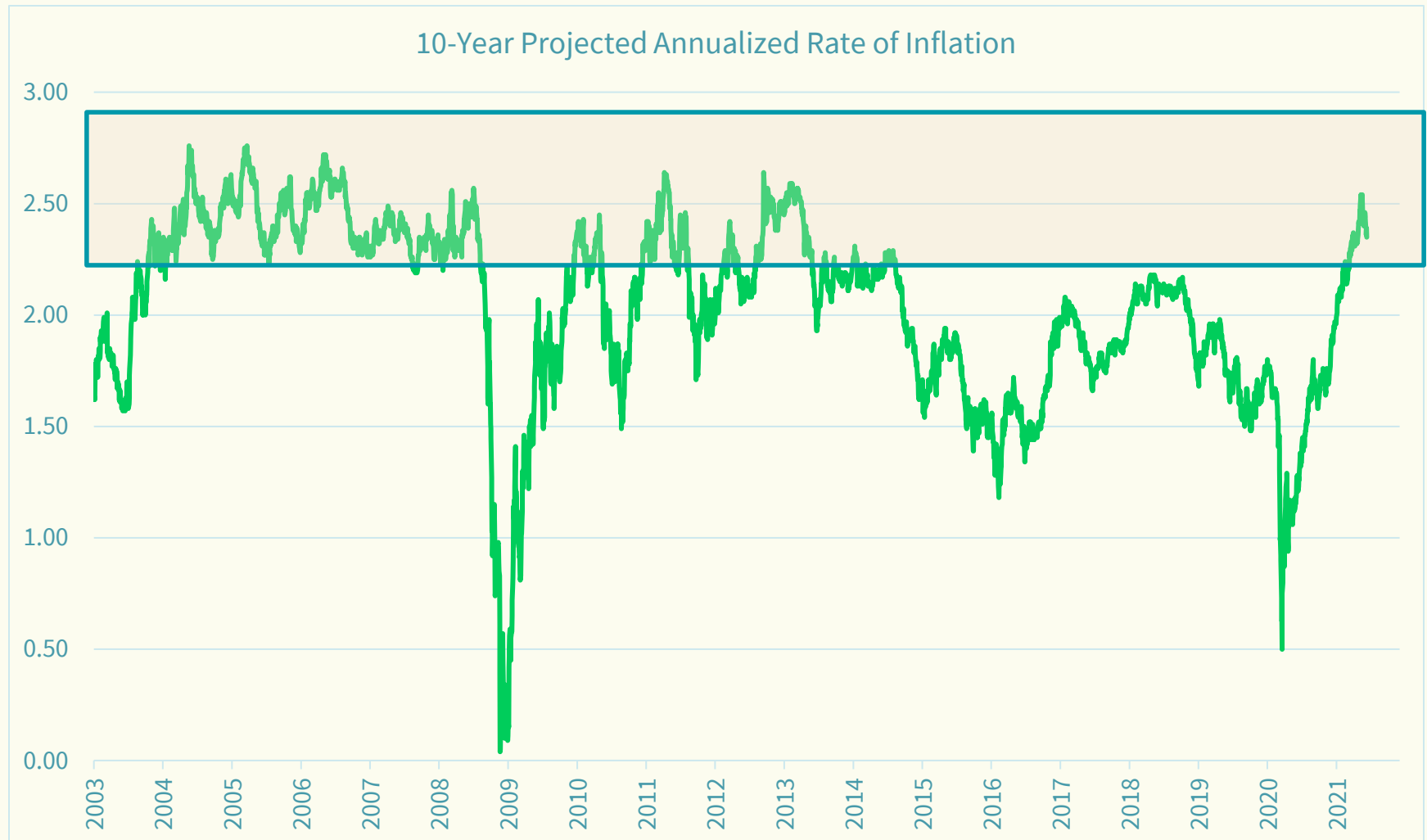
Source: Federal Reserve M3 Money Supply. Eurostat M3 Supply

Restaurant Inputs Have Soared



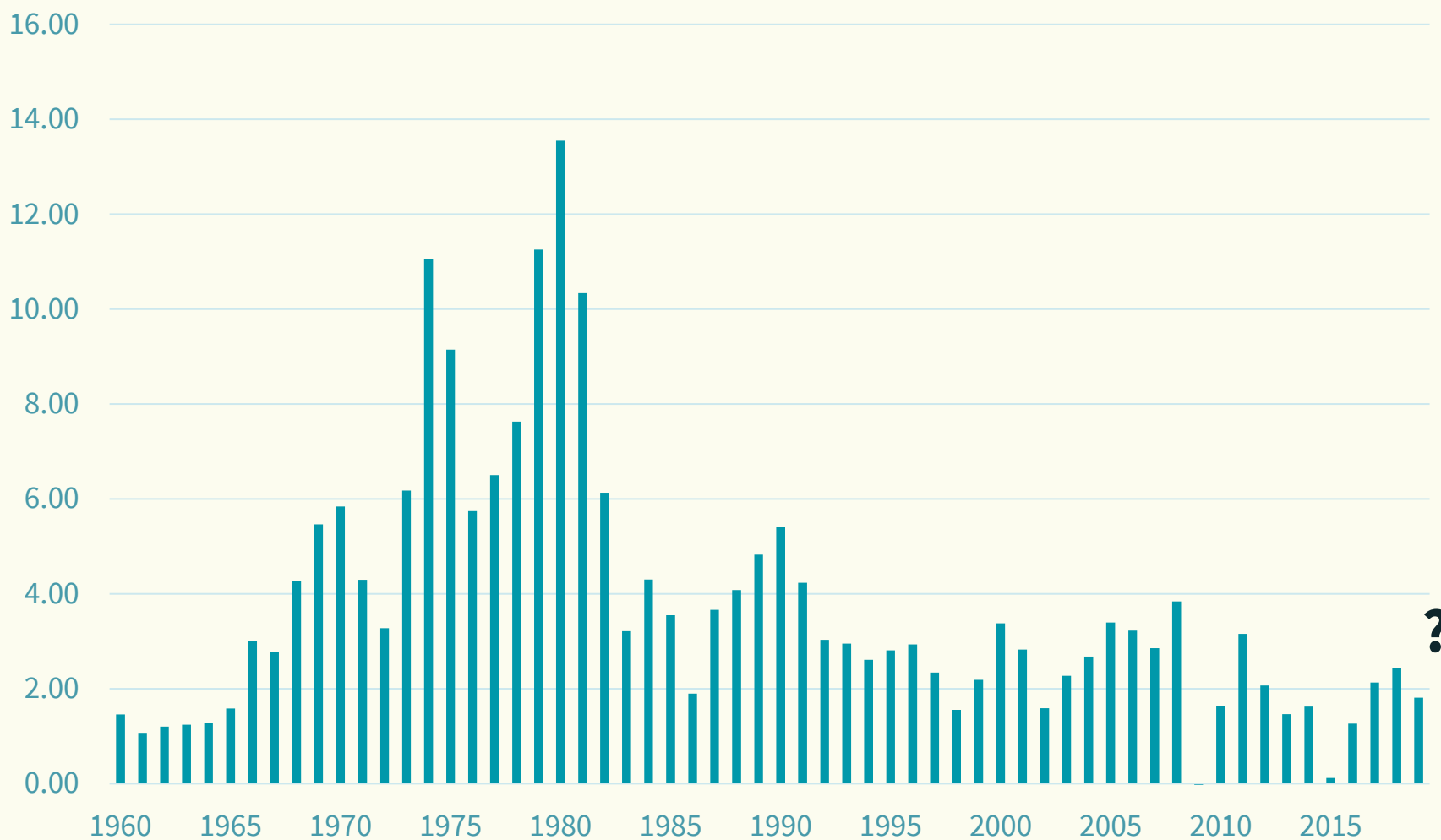
IT'S CLEAR. INFLATION IS HERE. BUT
FOR HOW LONG?

We've also been here many times before.



Source: Federal Reserve 10-Year breakeven rate: Difference Between Inflation Protected Treasuries and Typical Treasuries

Inflation Levels Appear Comparable to the Early 2000s or late 1980s? Or....



Source: Federal Reserve

THANK YOU!
