

GAP tiptoe transition

From supply chains to demand challenges

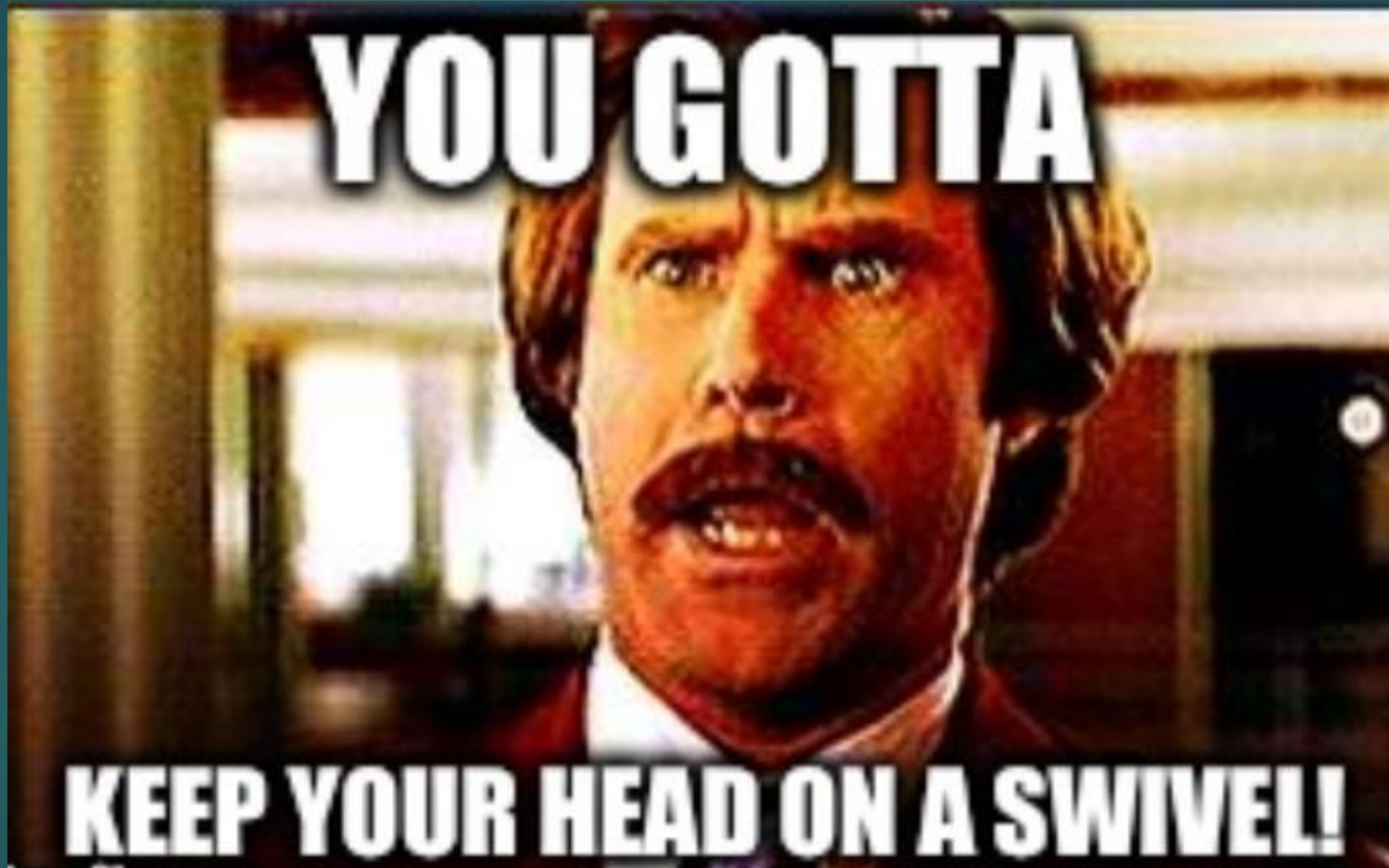
PAKISTAN OILSEED SUMMIT 2022

PRESENTED BY: EMILY S. FRENCH

DATE: 12 NOVEMBER 2022



Head on a swivel as headline and momentum trade dominates flows / price action



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A move away from globalization – shift to regional or nationalism

Government actions will cause “false” signals / shocks

Black Sea-UKR grain corridor.

Putin threats lack the “bite” as the corner gets smaller. Nuclear threat remains

What does a global recession look like – China terribly problematic

South America now the “next up” for world supply side

**U.S. economy looks very good – CPI declines larger than expected.
More discussion that equities are “good value” as U.S. expands manufacturing**

The 2022 macroeconomic risk map

The 2022 Macroeconomic Risk Map

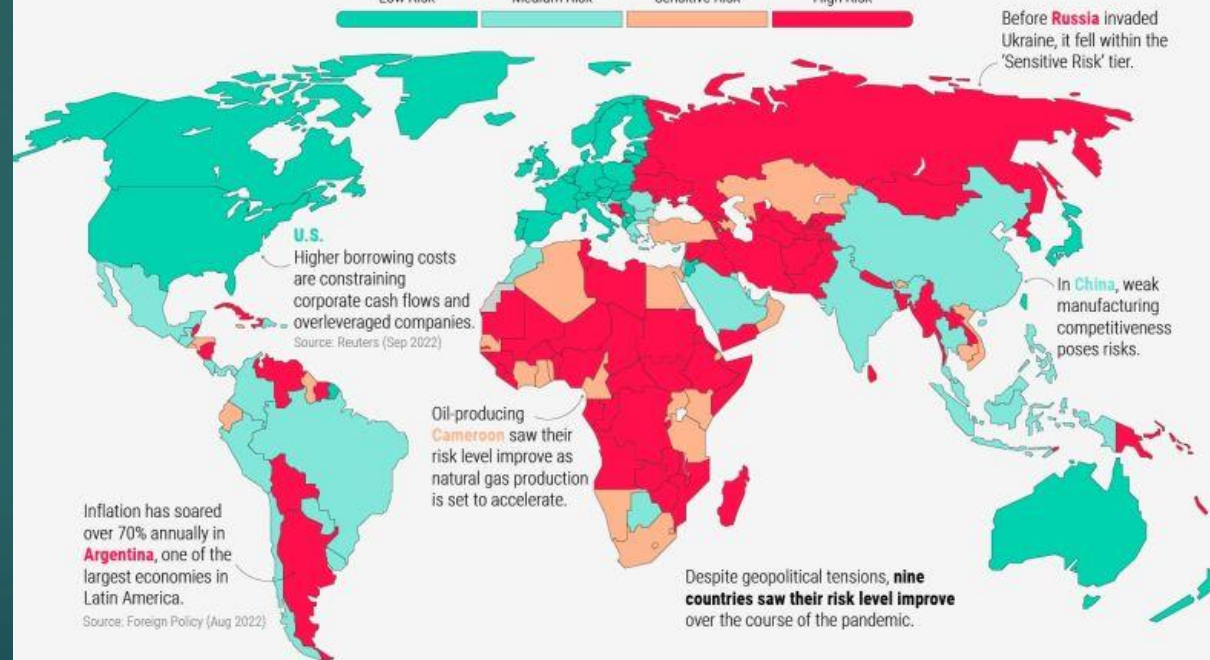


A fractured energy system, high inflation, and rising interest rates have increased macroeconomic risk in 2022.

Based on analysis from Allianz Trade, the following factors were measured to determine a country's macroeconomic risk*:

Economic Risk Indebtedness, monetary policy, economic structure	Political Risk Institutional independence, policy effectiveness, power concentration	Structural Business Environment Ease of doing business, regulatory framework	Commercial Risk Short-term demand disruption	Financing Risk Risk of short-term disruptions of accounts receivables

*Macroeconomic risk is based on the risk of companies not making debt payments within a given country.



Source: Allianz Trade, 'Q3 2022 Country Risk Ratings' report (Sep 2022). The country risk ratings determine the risk of non-payment of companies within a given country. Risk is evaluated on factors outside of a company's control.



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Market structure – growing importance to flat price direction & action

	Producer/Merchant		Swap Dealers		Managed Money			
	Net Position	Weekly Change	Net Position	Weekly Change	Net Position	Weekly Change	Record	
							Long	Short
GRAINS								
Corn	-490,638	-14,285	221,802	3,172	271,960	7,586	429,189	-322,215
Wheat	-38,241	-413	63,635	2,400	-37,149	-1,097	80,827	-162,327
Soybeans	-140,670	-27,316	75,856	1,919	101,329	25,918	253,889	-168,835
KC Wheat	-47,857	284	28,618	1,115	23,408	-1,218	73,111	-58,866
MN Wheat	-5,739	-336	1,176	167	3,814	331	19,867	-25,401
Soybean Oil	-193,309	-1,961	81,135	-3,835	100,118	4,957	126,543	-109,950
Soybean Meal	-221,230	-4,647	79,479	-904	93,417	7,387	133,549	-77,112
Canola	11,574	-6,871	-2,648	2,513	-5,625	2,308	70,001	-74,195

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Corn buying returns vs previous month = 272K (254.3K Oct, 226.5K Sept, 142K Aug, 151.2K July, 264.3K June 338.6K May, 362.3K 5 April) vs the record long = 429.2K

\$\$ long the entire soy complex – soy = 101.3K (66.9K Oct, 99.6K Sept, 101.5K Aug, 95.7K July, 158.9K June, 130.7 May, 163.7K Apr) (record = 253.9K). **COMMERICAL SHORT SMALLEST in 2 YEARS.** Soymeal = 93.4K (70.8K Oct, 81.6K Sept, 84.4K Aug, 68.3K July, 53.2K June 52.3K May, 100.5K April) (record = 133.5K). Soy oil = 100.1K (75K Oct, 44K Sept, 22.2K Aug 18.9K July, 68.8K June, 88.4K May, 76.8K Apr) (record = 126.5K)

\$\$ long in canola – remains short: -5.6K (-13K Oct, -22.1K Sept, -13.2K Aug, -3.8K July, +35.5K June 43.2K May, 47.6K April)

\$\$ now net short W and MW with minor long in KW: W = -37.1K (-22K Oct, -21.4K Sept, -20.3K Aug, -6.4K July, +12.7K June, 15.5K May, 14K April). KW +23.4K (26.3K Oct, +11.1K Sept, +8K Aug, +16.4K July, 37.5K June, 42.9K May, 45K April). MW +3.8K (3.8K Oct, -1K Sept, -1K Aug, 2.7K July, 13.9K June, +18.3K May, 18.3K April).

Managed money / funds long positions (market structure) – remains key driver as market tiptoe transitions

MIND THE GAP

S&P GSCI rebalance – reduction to agriculture exposure, increase to energy

Yearly Volume Comparison

- Volume increase for six commodities
- Cocoa with largest increase of 20.71%
- Volume decrease for other 18 commodities
- Largest decreases: Silver and Chicago Wheat

2023 YEARLY VOLUME COMPARISON				
Symbol	Commodity	2022 Volume	2023 Volume	% Change
W	Chicago Wheat	32,278,726	26,360,640	-18.33%
KW	Kansas Wheat	13,130,452	11,447,067	-12.82%
C	Corn	92,675,550	79,291,279	-14.44%
S	Soybeans	60,634,382	50,787,076	-16.24%
KC	Coffee	12,073,152	10,771,144	-10.78%
SB	Sugar	32,245,359	30,892,952	-4.19%
CC	Cocoa	10,320,791	12,458,531	20.71%
CT	Cotton	8,139,651	8,416,885	3.41%
LH	Lean Hogs	11,487,774	11,277,750	-1.83%
LC	Live Cattle	14,146,672	14,145,607	-0.01%
FC	Feeder Cattle	3,021,630	3,248,065	7.49%
CL	WTI Crude Oil	281,180,743	276,138,308	-1.79%
HO	Heating Oil	38,302,673	41,072,054	7.23%
RB	RBOB Gasoline	46,212,745	44,934,017	-2.77%
LCO	Brent Crude Oil	227,452,583	244,465,728	7.48%
LGO	Gas Oil	77,619,341	73,019,472	-5.93%
NG	Natural Gas	124,406,722	121,684,838	-2.19%
MAL	Aluminum	55,580,268	55,050,458	-0.95%
MCU	Copper	30,330,404	28,650,419	-5.54%
MNI	Nickel	16,118,987	14,970,108	-7.13%
MPB	Lead	10,295,481	10,270,597	-0.24%
MZN	Zinc	20,647,686	22,746,030	10.16%
GC	Gold	62,339,274	54,308,012	-12.88%
SI	Silver	22,103,439	16,615,349	-24.83%
Total Volume		1,302,744,485	1,263,022,386	-3.05%

S&P GSCI SECTOR WEIGHTS			
Sector	2022 Weight	2023 Weight	Difference (basis pts)
Energy	53.48%	61.47%	799
Agriculture	20.48%	17.98%	-250
Livestock	7.36%	5.86%	-151
Industrial Metals	12.71%	10.58%	-214
Precious Metals	5.97%	4.12%	-185

- Largest sector percentage increase: **Energy**
 - Attributed to percentage weight increases in **Brent Crude Oil** and **WTI Crude Oil**
- Largest percentage decrease: **Agriculture**
 - Attributed to percentage weight decrease in **Soybeans** and **Corn**

Investment Support Level: US\$ 310 billion - 34.78% increase from recommended level of US\$ 230 billion for 2022

- Large increase to Energy sector; decreases across all other sectors
- Largest percent weight increases: Brent Crude Oil, WTI Crude Oil and Natural Gas
- Largest weight percent decreases: Gold, Copper and Soybeans
- WTI Crude Oil will continue to hold the largest weight
- Largest World Production Average increase: Natural Gas (4.7%)
- Largest percentage volume increase: Cocoa (20.71%)
- Largest percentage volume decrease: Silver (-24.83%)

Baltic Dry Index – remains a data point / demand gauge for global export trade flows. Freight market “hopes” for China’s return



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USD – sold off sharply with U.S. CPI coming in at 7.7%. World importers tied to USD breathe a bit easier. One month ago – USD was +17-18% YTD – now roughly 12.5% and looks defensive into mid-month

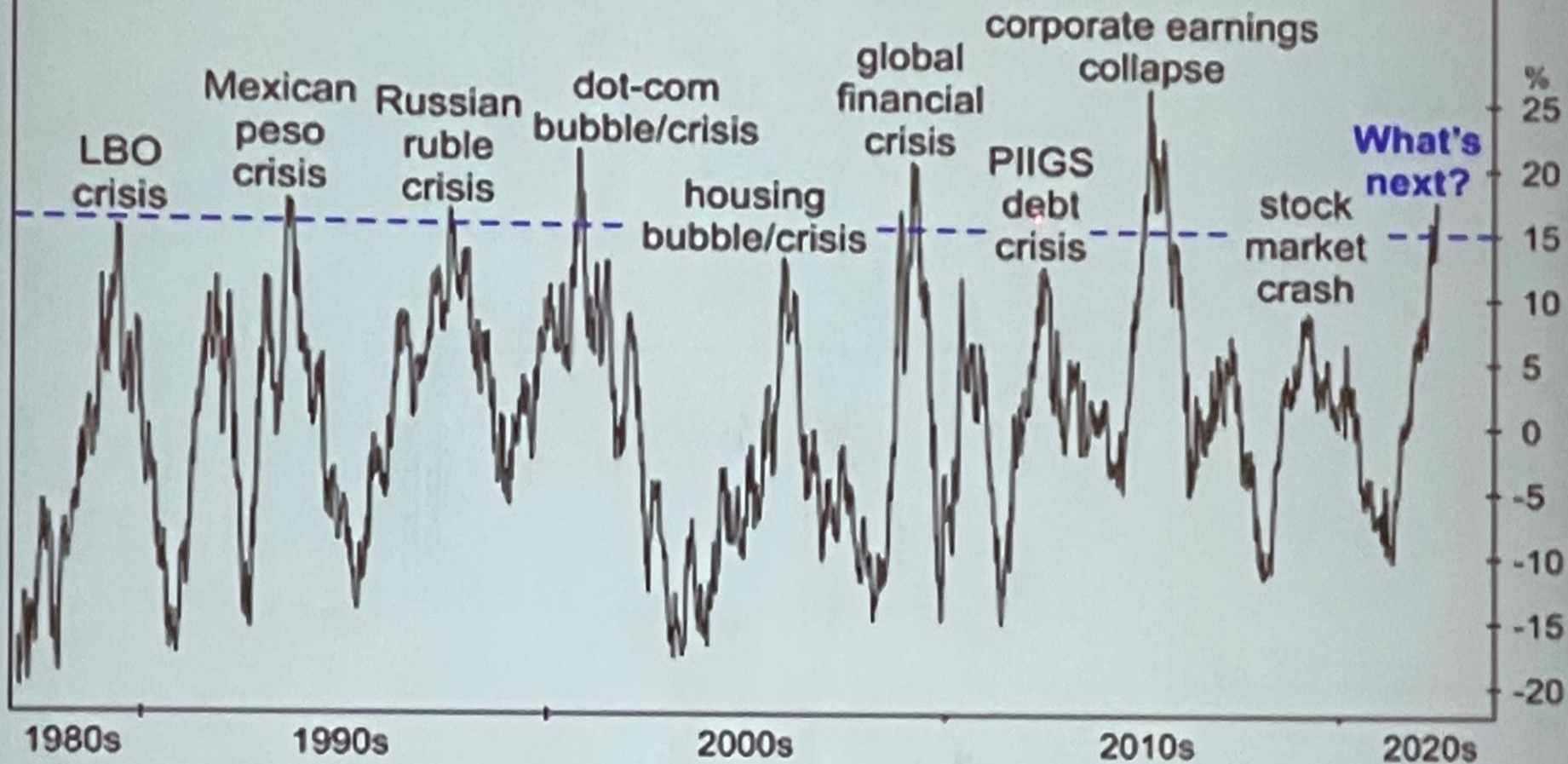


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WHEN THE DOLLAR BUCKS, WATCH OUT!

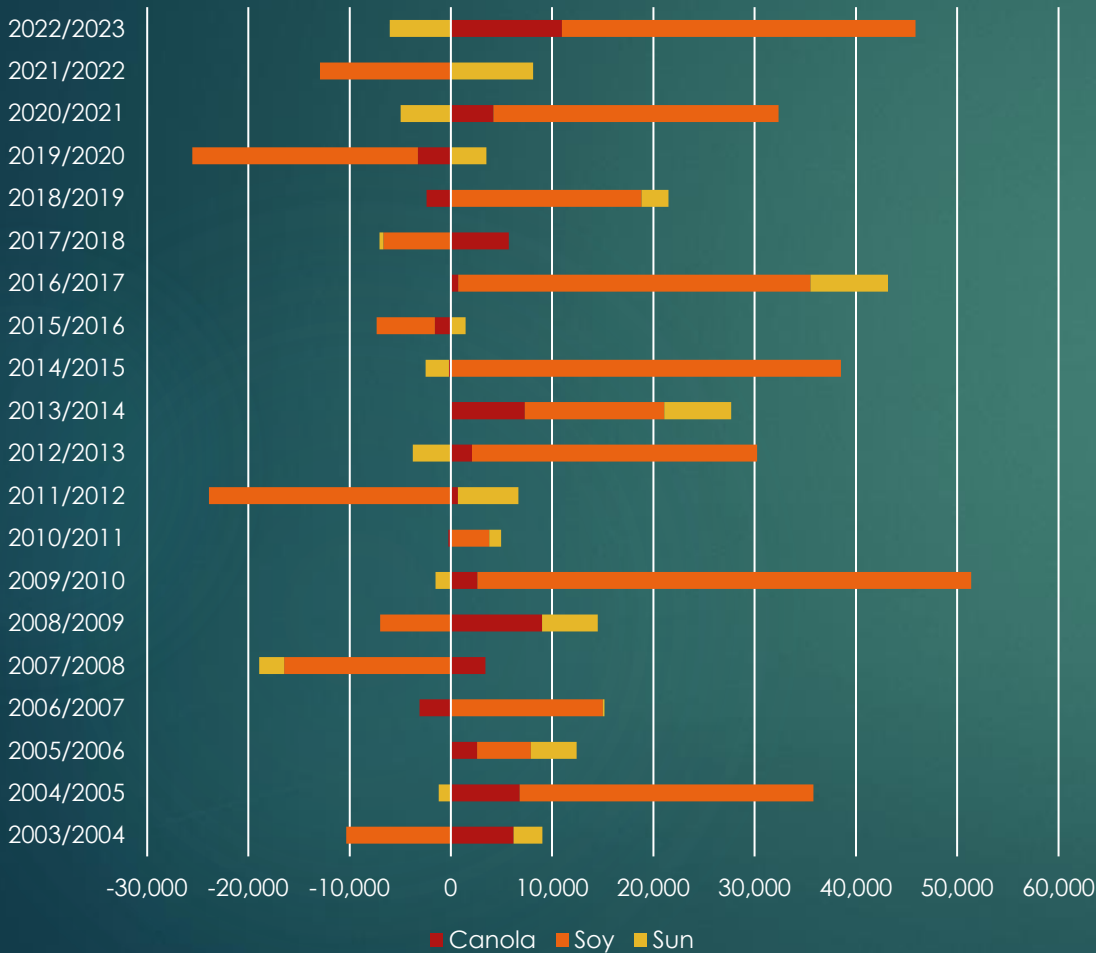
YoY% Change in the U.S. Dollar Index (DXY)



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World oilseed production: +39.9MMT vs LY vs consumption +23.4MMT (demand = 2nd largest on record (14/15 = 26.2MMT))

World oilseed production: canola recovers vs LY +11MMT. Soy +34.9MMT. Sun -6MMT



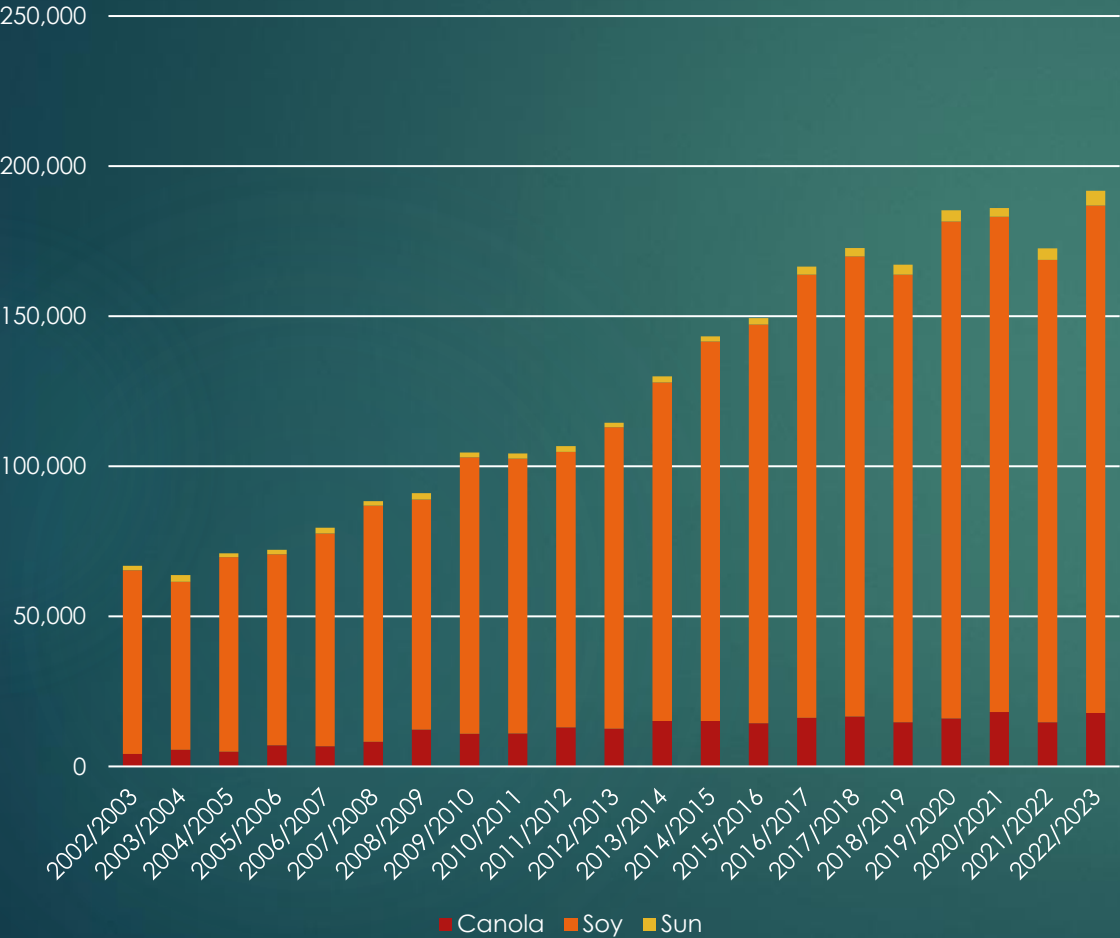
Global oilseed demand to increase for all 3: canola +5.5MMT. Soy +17MMT. Sun +931KMT



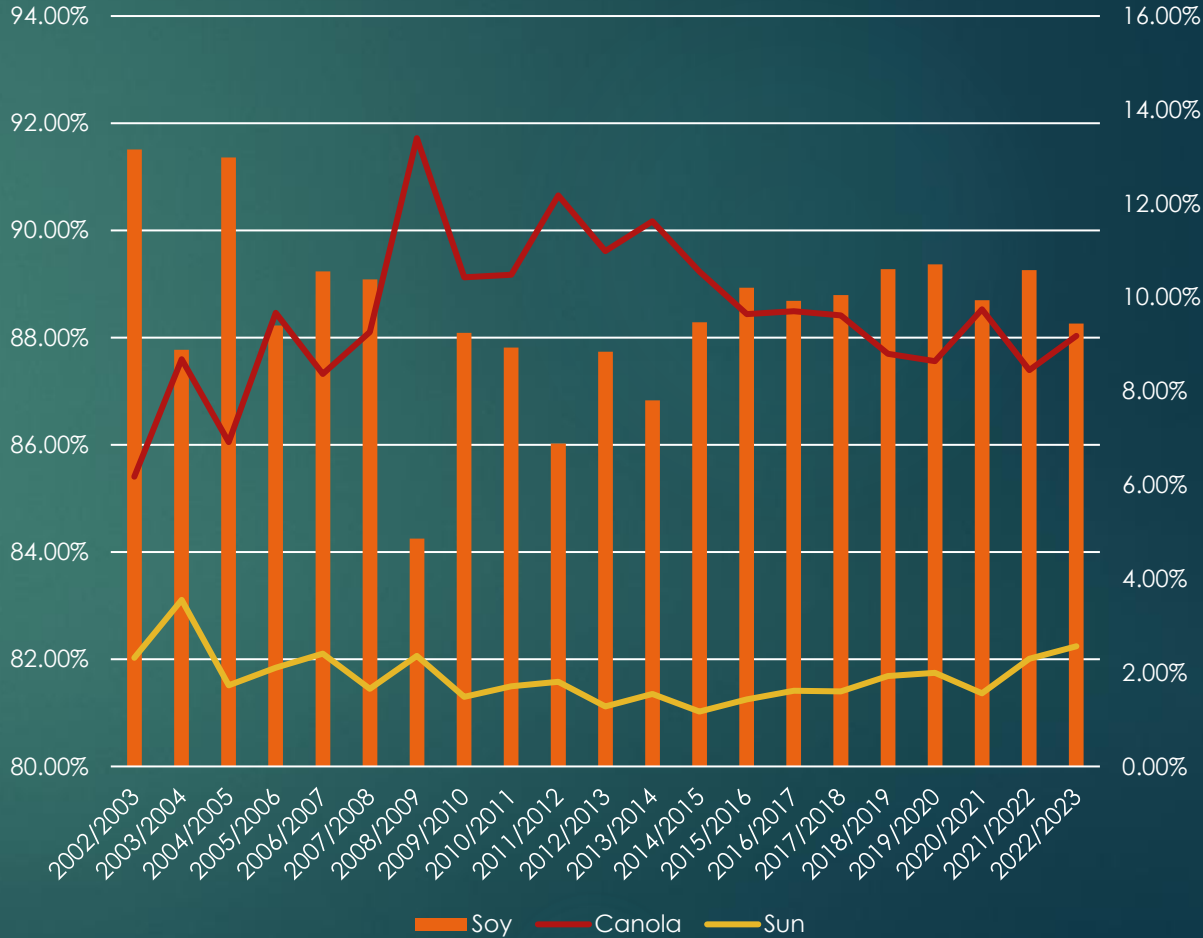
World oilseed export trade flows: record exports for all 3 forecast. Total = 191.7MMT (172.6MMT LY)



Global oilseed export trade: dominated by soy. Canola trade +3.1MMT. Soy +15.1MMT. Sun +957KMT. New records for all 3



World oilseed trade: soy dominates (88.2%). Canola (9.2%). Sunseed (2.5%)



World canola supply cushion recovers = 32.4 days (21.1 days) – thanks Canada. World sunseed supply cushion = 46 days (57 days) – record levels

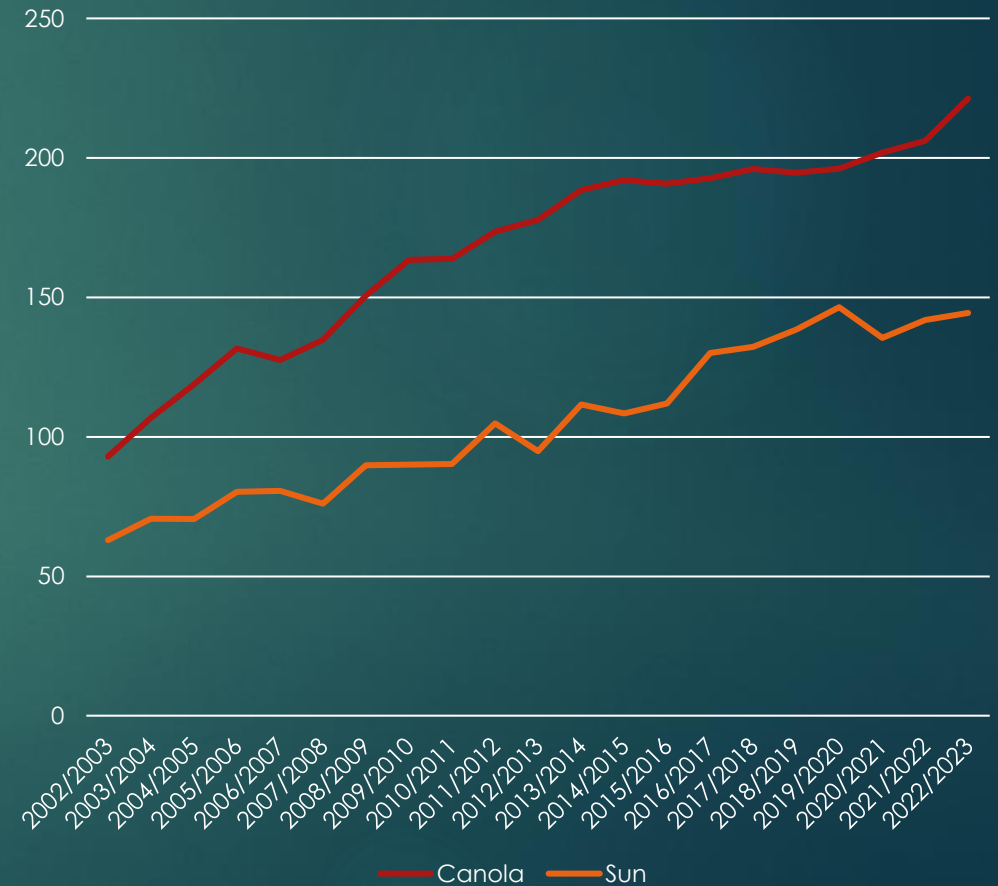
Global canola and sun supply cushion: 32.4 days (21.1 days LY, 31 2Y). Sun = 46 days (57 days LY, 19.4 days 2Y)



Ukraine went from 141KMT in ending stocks (5.7% of world sun stocks in 20/21) to 58% or 4.7MMT in 21/22 (world sun stocks rose 5.46MMT) and projected 2.75MMT or 41.4% in 22/23

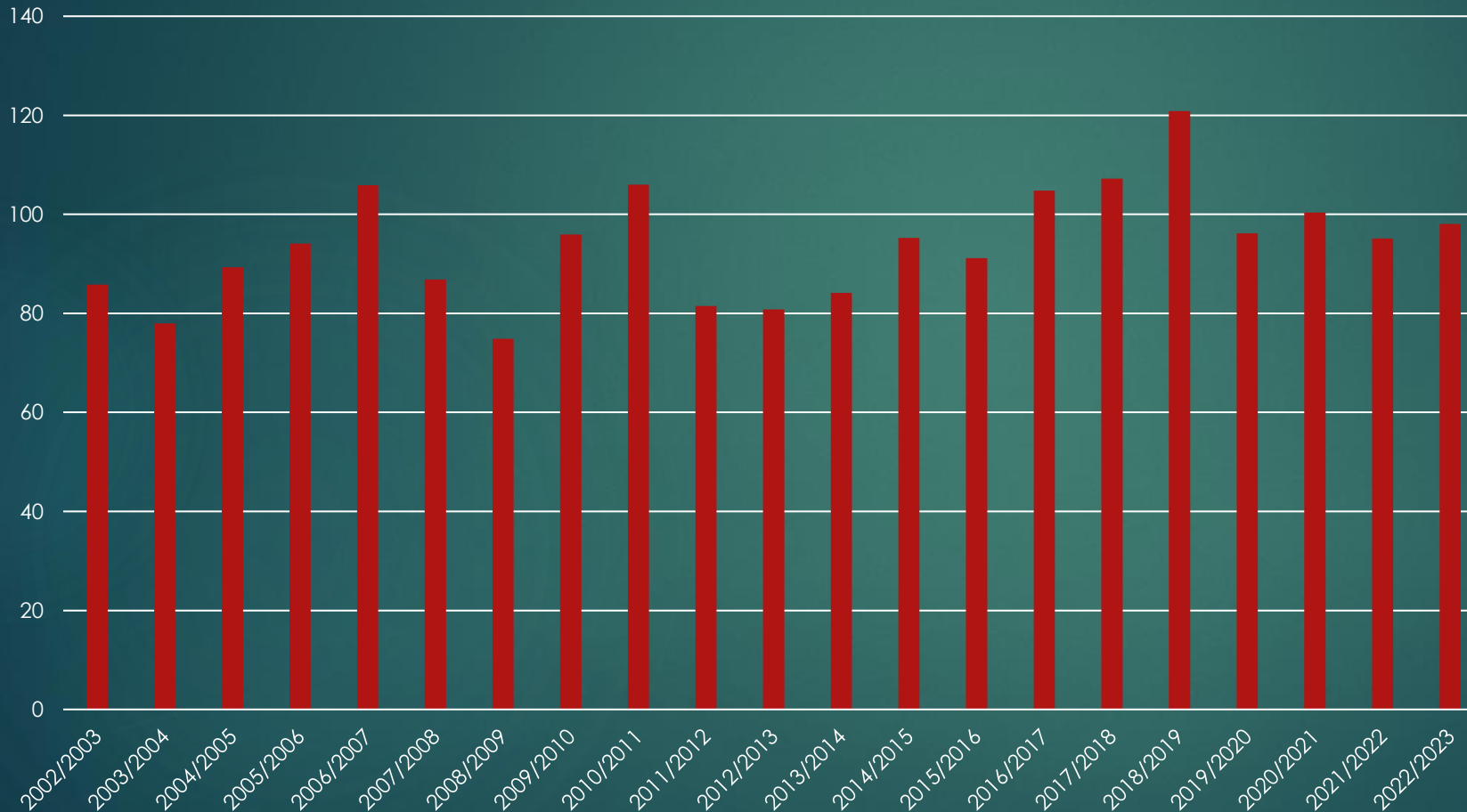
Canada recovers to 19.5MMT (+5.74MMT) in production vs LY – similar to 20/21 (19.49MMT)

Daily consumption: canola = 221.3KMT / day (206.2KMT LY)
Sun = 144.5KMT / day (141.9KMT LY)



World soy supply cushion = 98 days vs 95.2 days vs LY year with daily demand = 1.04MMT (995KMT / day LY, 996.6KMT 2Y)

Global soy supply cushion = 98 days (95.2 days LY) - peak = 120.8 days in 2018/19 (trade war + ASF)



If BR production verifies – it is v. likely the global supply cushion pushes past +100 days

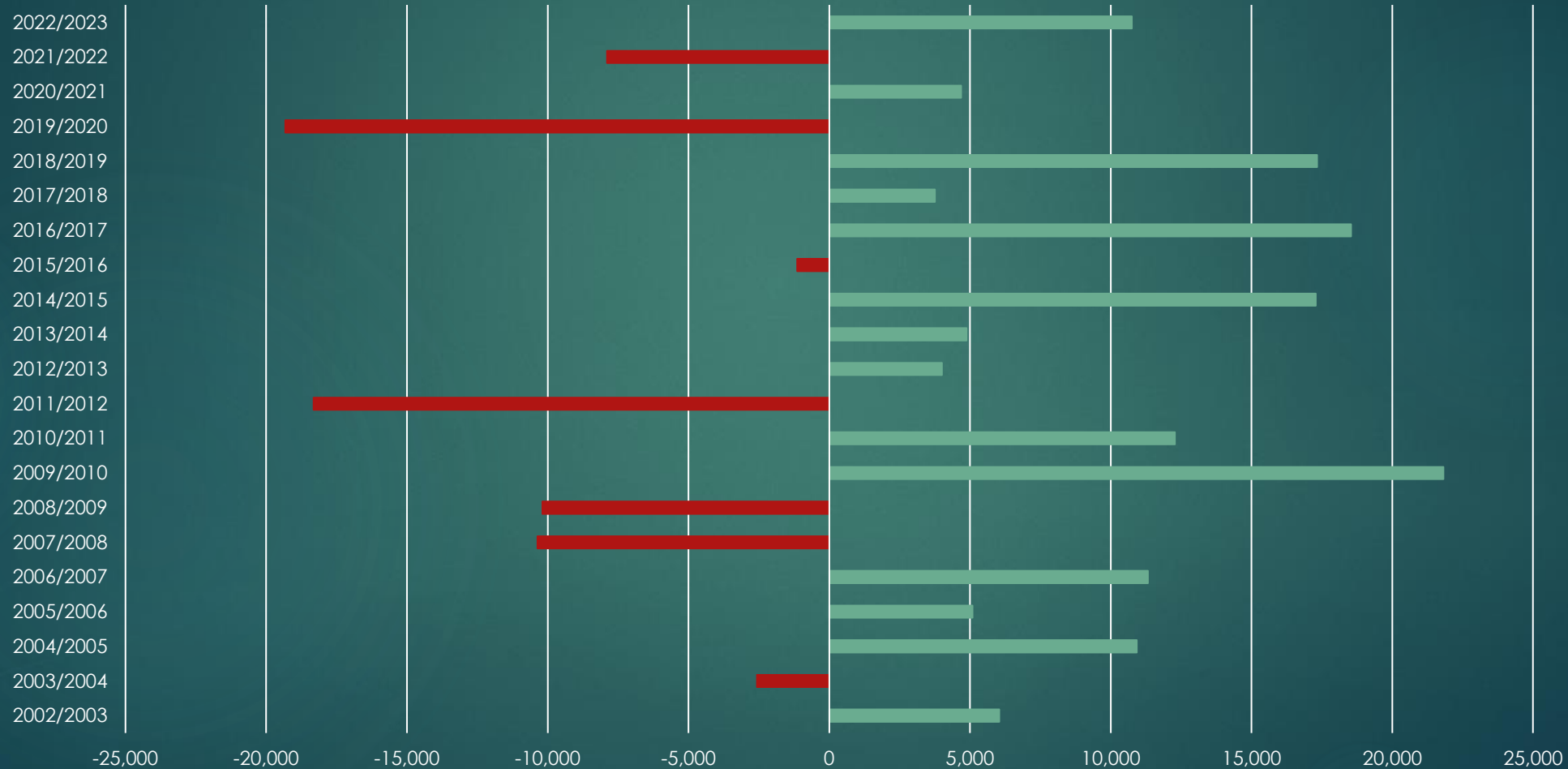
If BR verifies – world buyers will see a VERY long export tail – this as its ending stocks could rise at least 8MMT vs 21/22 (and BR still competitive for Nov-Dec 2022 biz)

USDA 10-year baseline forecasts U.S. 23/24 production to be +4.54MMT vs 22/23 (w/ plantings down 500K and yield = 52 bu / acre (50.2 bu / acre this year – the final will be issued January 2023 (and final revision in the 1 Sept stocks report)

World soy production vs consumption – stocks to build if BR verifies and Argentina is “even” average

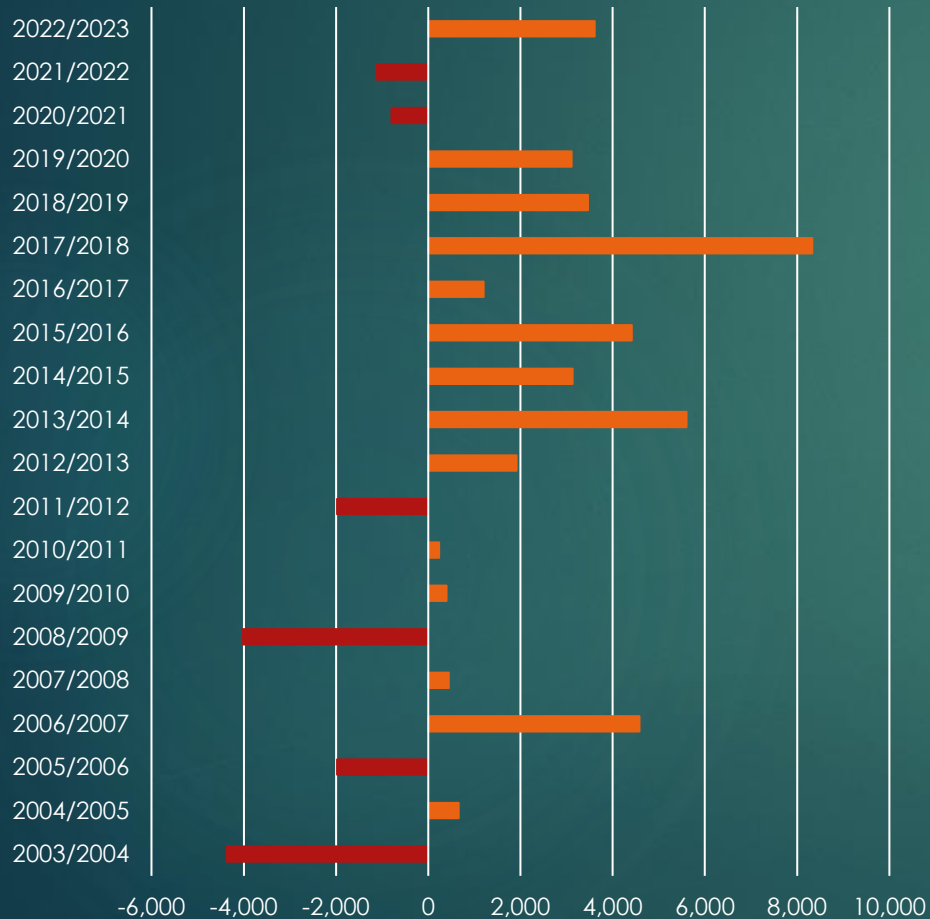
World soy production to exceed consumption by 10.36MMT vs last year when demand exceed production by 7.6MMT

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ROW soybean imports – projected at a record 68.3MMT – up 3.6MMT vs last year with Europe +700KMT – this is most problematic for the world’s 2nd largest soy importer

ROW soybean imports forecast = 68.3MMT - up 3.6MMT vs LY



21/22 ROW soy import trade contract 1.1MMT

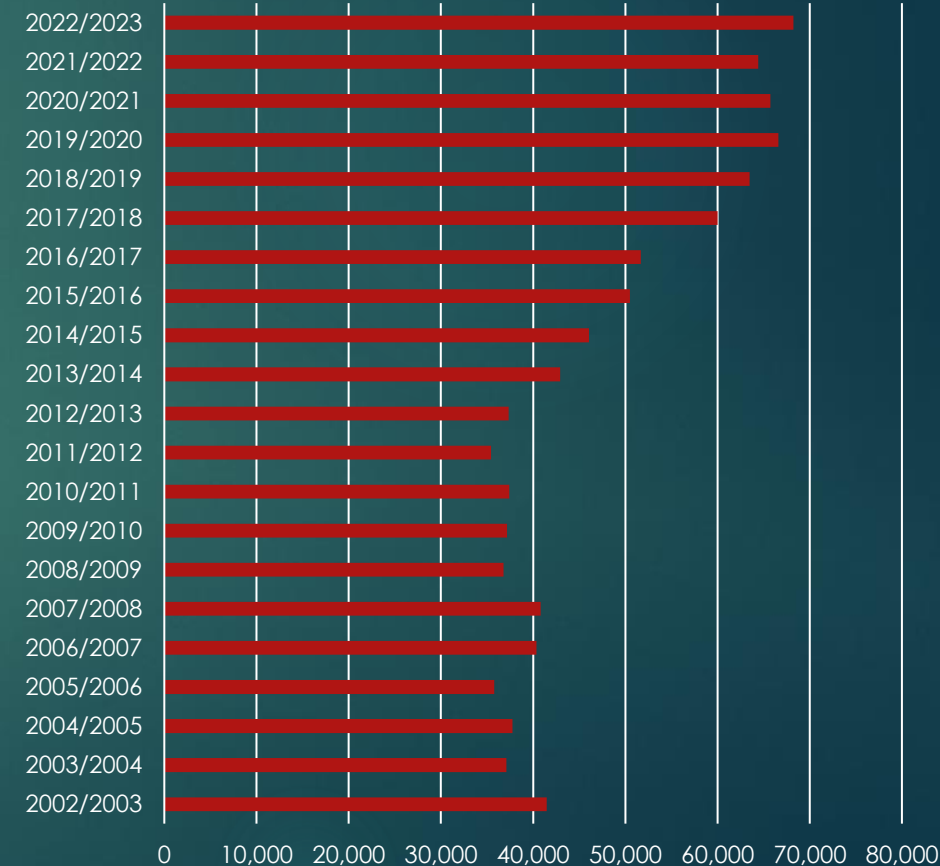
22/23 ROW soy import trade to increase 3.6MMT (3.8MMT Oct)

22/23 ROW soy import forecast at a record = 68.3MMT (previous = 66.6MMT in 19/20)

USDA has big growth / recovery dialed in for world soybean export trade. I'm not sold on this. There are simply too many unknowns:

- Cost of finance
- Credit limitations
- Strong USD
- China's "tailwinds"

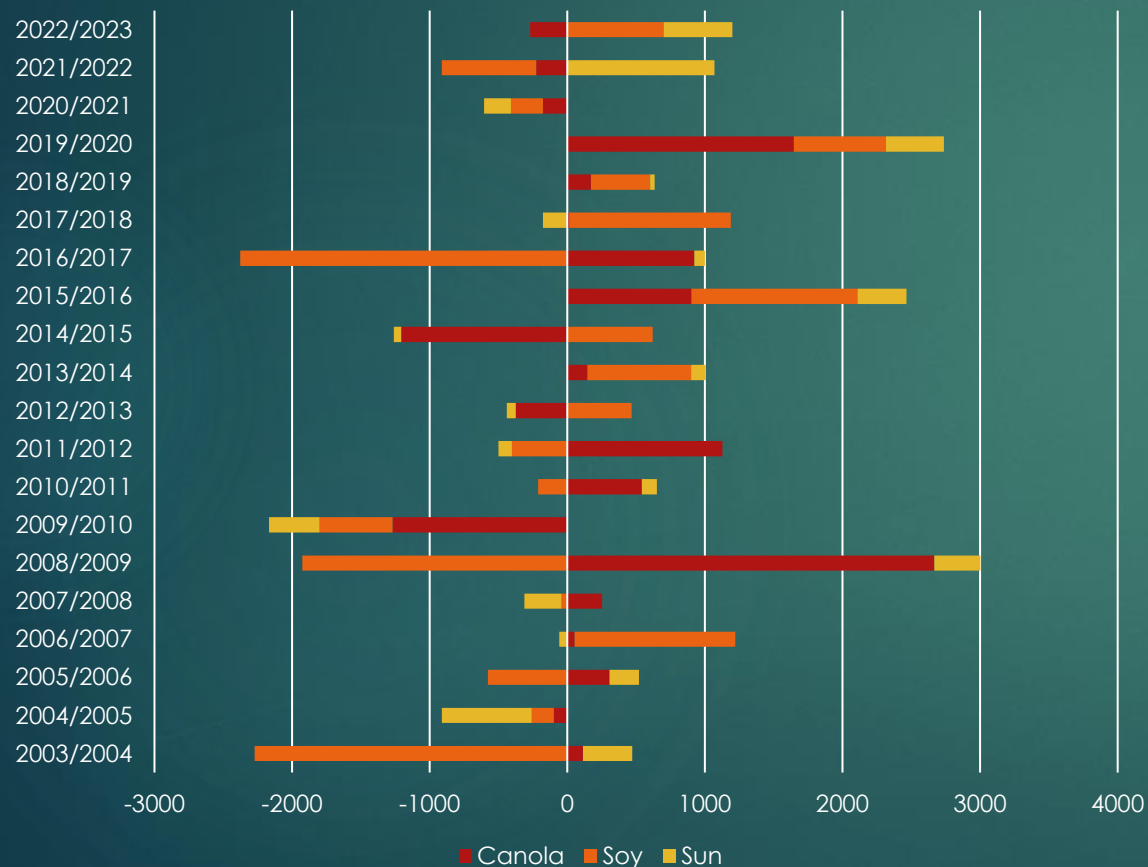
ROW soy import trade forecast = 68.3MMT - a new record for this segment (previous = 66.6MMT in 2019/20)



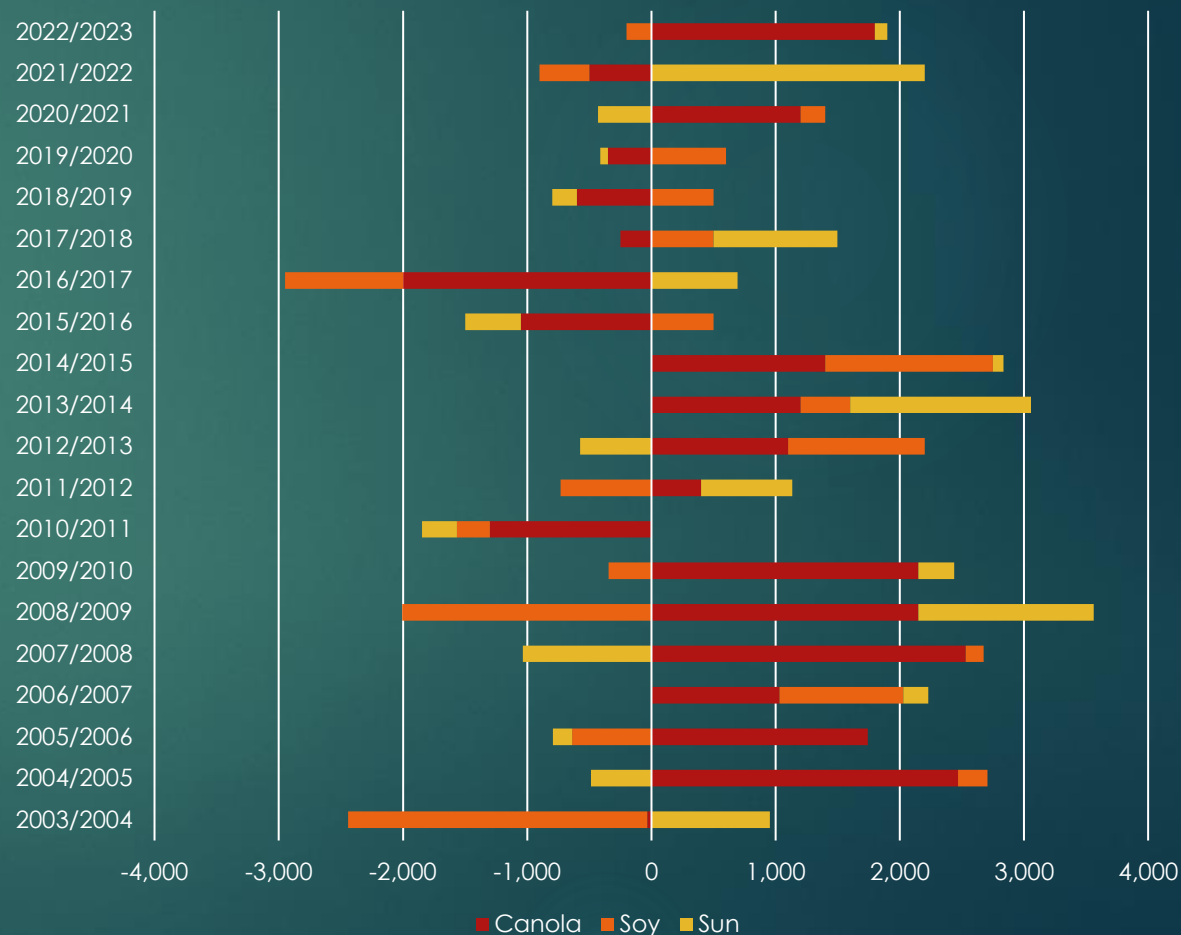
Europe crush outlook: cash margins will need to be watched closely given the cost of energy + livestock sector outlook... oilseed imports forecast record = 22.45MMT (21.52MMT LY). Crush forecast record = 49.3MMT (47.6MMT LY)

MYTD EU soy imports are down 9.4% vs +5% forecast

Europe oilseed imports: year vs year change: canola (-271KMT). soybeans +700KMT. sunseed (+500KMT)

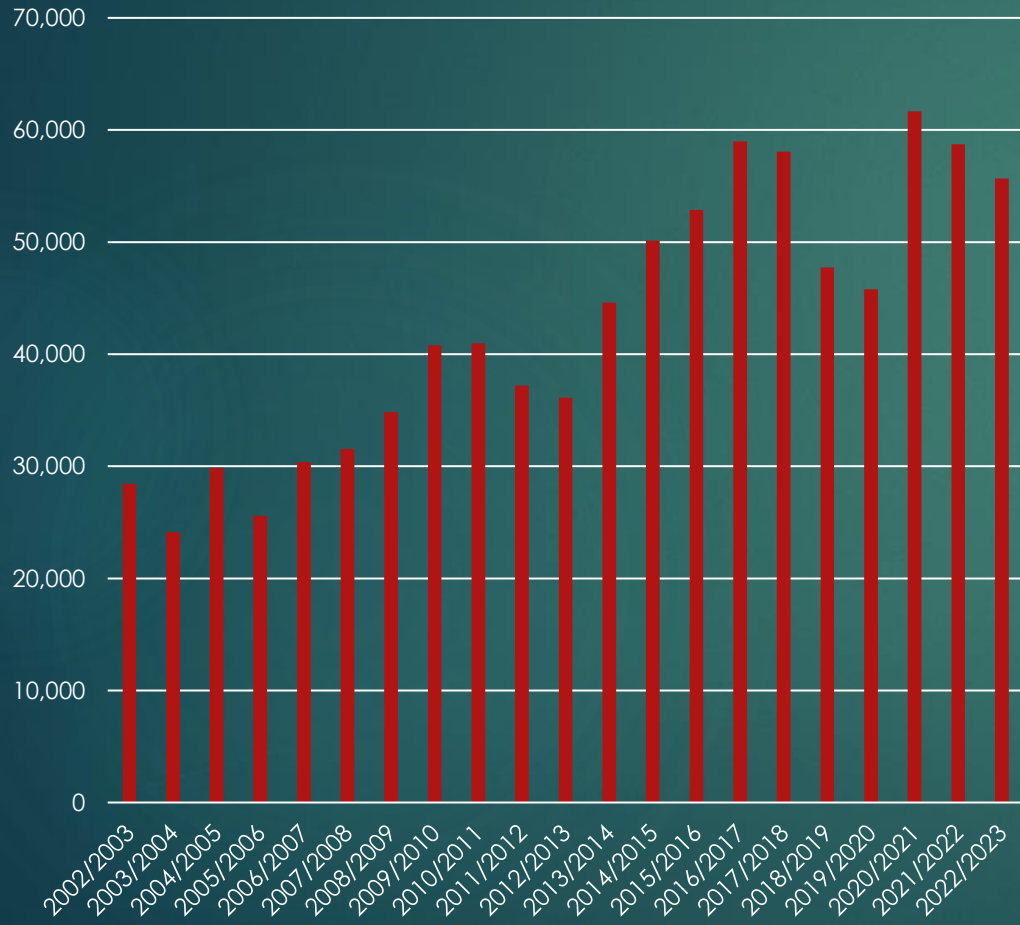


Europe oilseed crush demand year vs year change: canola +1800KMT. Soy (-200KMT). Sun (+100KMT)



U.S. exports are a major swing factor for this year's balance sheet if the BR crop is verified at a monster ++150MMT

U.S. exports = 55.66MMT (58.72MMT) - down 3MMT. Peak = 61.67MMT in 20/21 (Phase I)

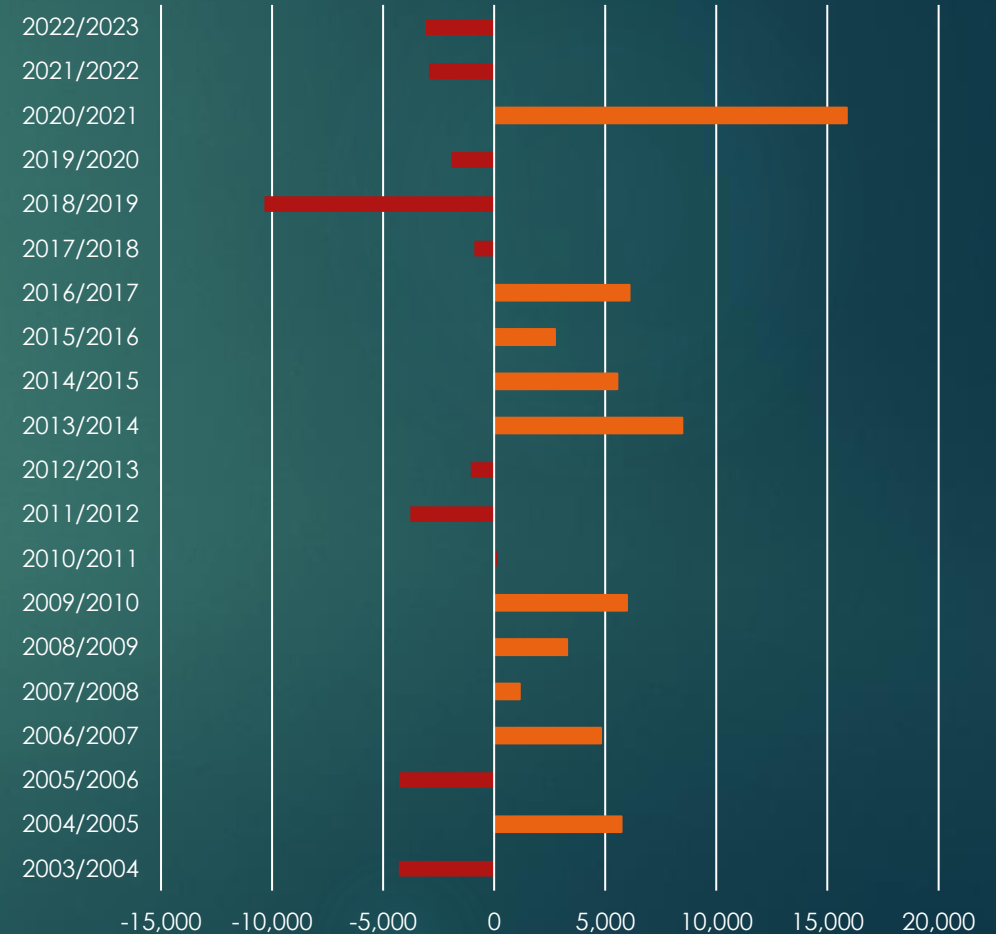


If USDA forecasts are bloated and if Brazil puts out this monster crop – would look for at least a 150 mil bu/ 4.1MMT cut to U.S. exports

Goes straight to ending stocks – currently 6MMT

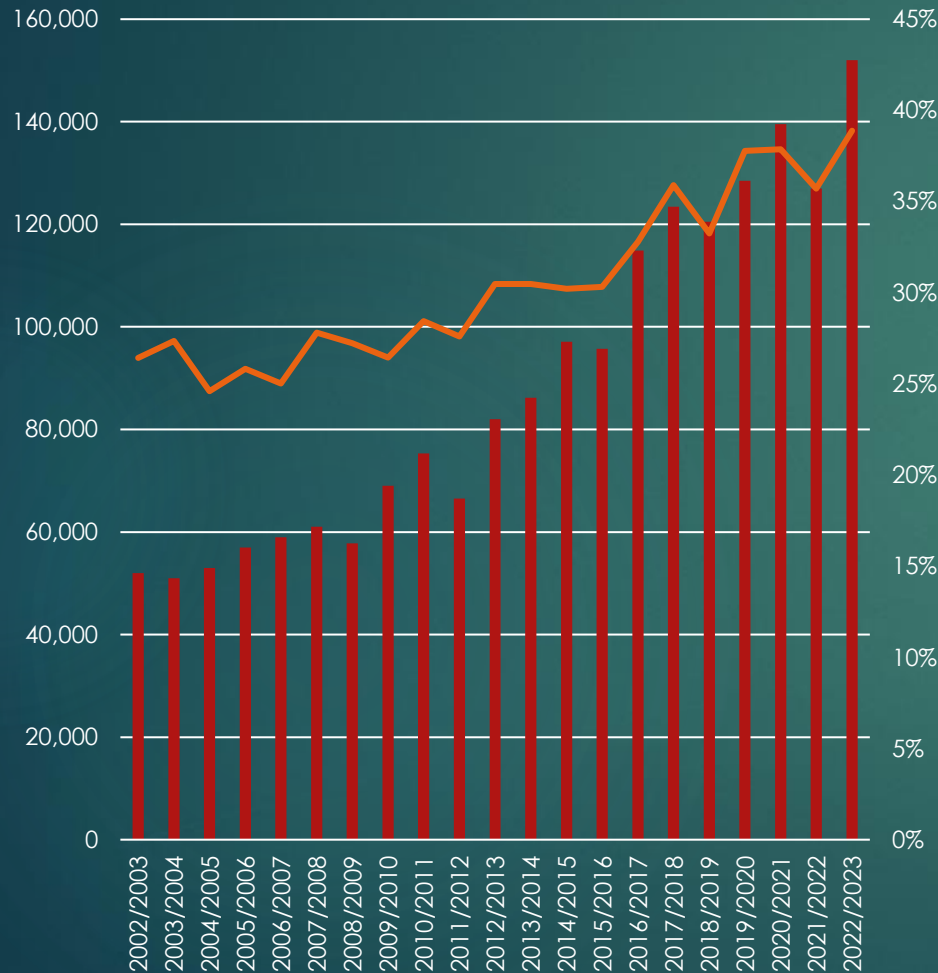
Reminder: despite a BR crop LY of “only” 126-127MMT – BR is still exporting soybeans

U.S. soy exports change vs previous year: forecast to contract at least 3MMT in 22/23 (-2.94MMT in 21/22)



BRAZIL: plantings at 60% by mid-November. CONAB = 153.5MMT. USDA at 152MMT. Private estimates range 149 – 157MMT. Farmer selling way behind at only 21-23%

Brazil soy production = 152MMT (+28MMT vs LY) or 39% of world trade with plantings up over 3% vs LY



BR plant campaign – looks v. good

Brazil Real-USD – remains heavily influential in CME soy future price action

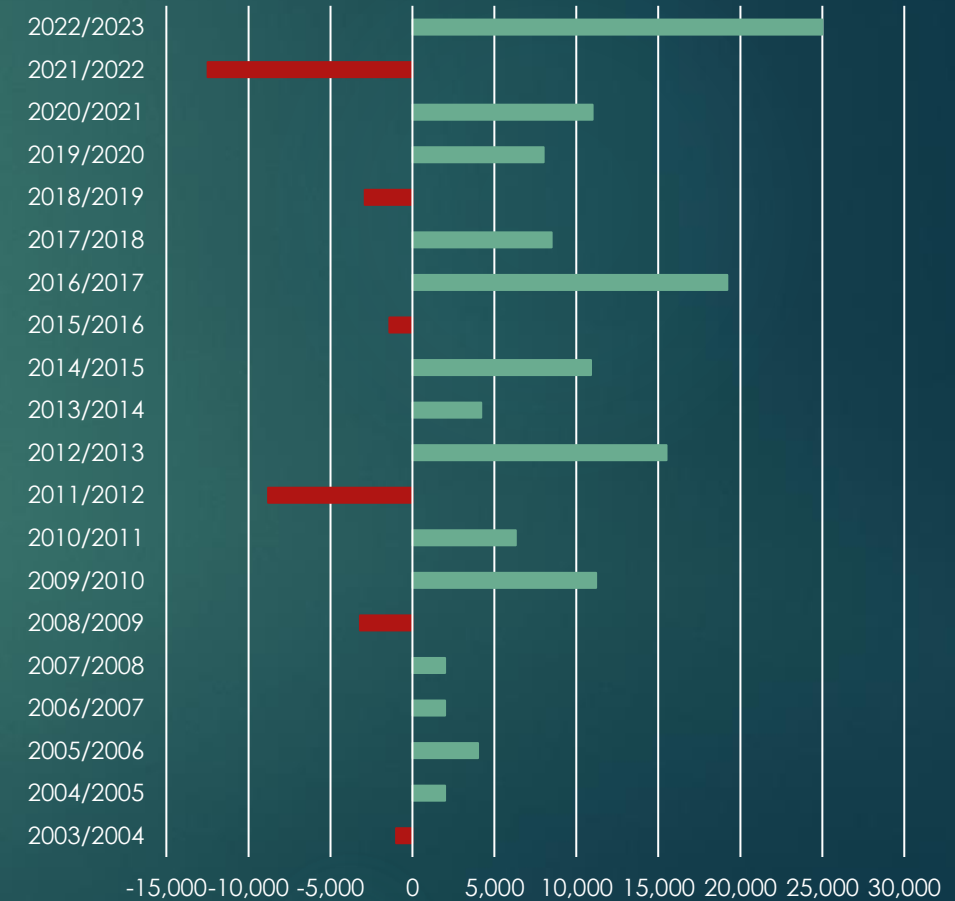
Brazil farmer – plenty more to sell for both 21/22 and 22/23

Fertilizer / input concerns – are no longer. Plenty of inputs waiting for the 22/23 production cycle

Domestic fuel prices – will add to logistic costs / truck freight

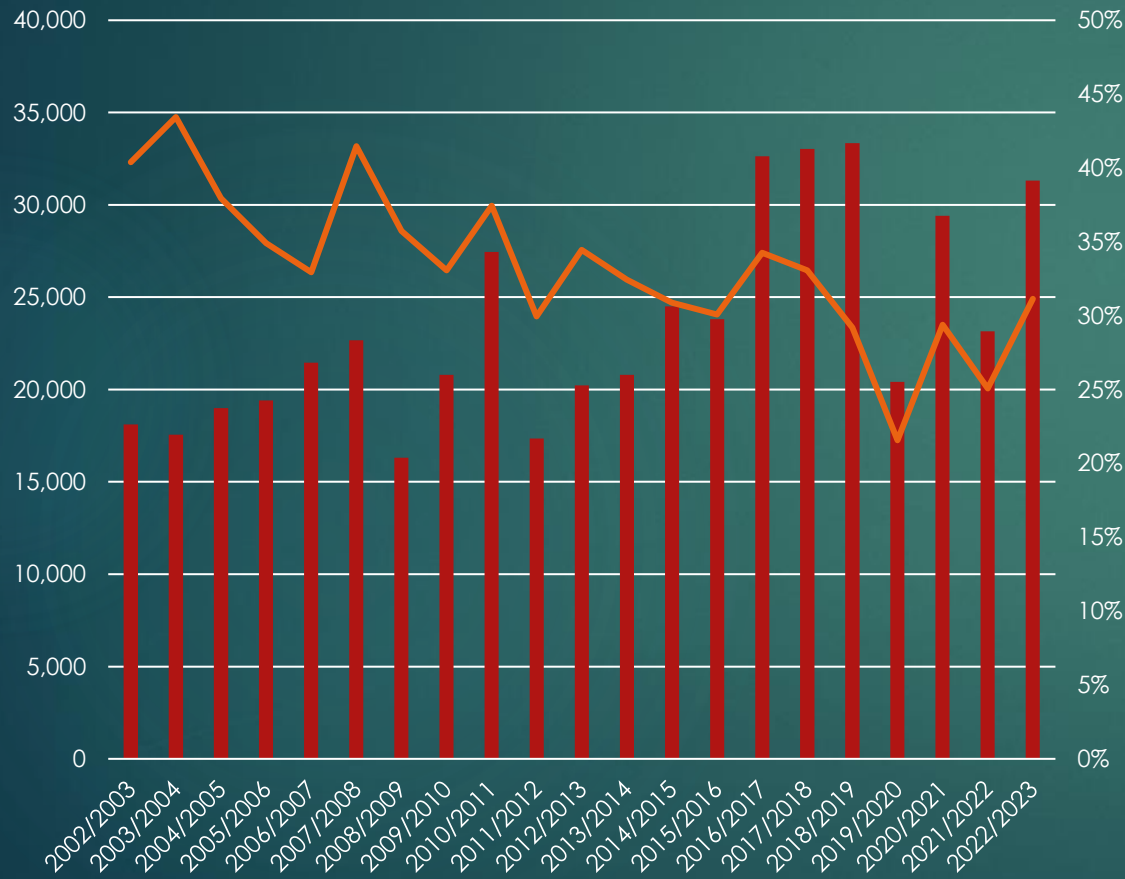
Brazil crush margins – have gone from negative in October to solidly positive for Nov-Dec and new crop at +20-30/MT

Brazil soy production: change vs previous year: 22/23 +25MMT vs LY (-12.5MMT in 21/22)



Brazil could possibly return as the world's largest storage tank for soybeans – not a terrible thing for world soy importers... and similar to 18/19

Brazil soy ending stocks = 31.24MMT or 30.6% of the world's soy stocks vs peak = 33.34MMT (2018/19) or 29% of world soy stocks

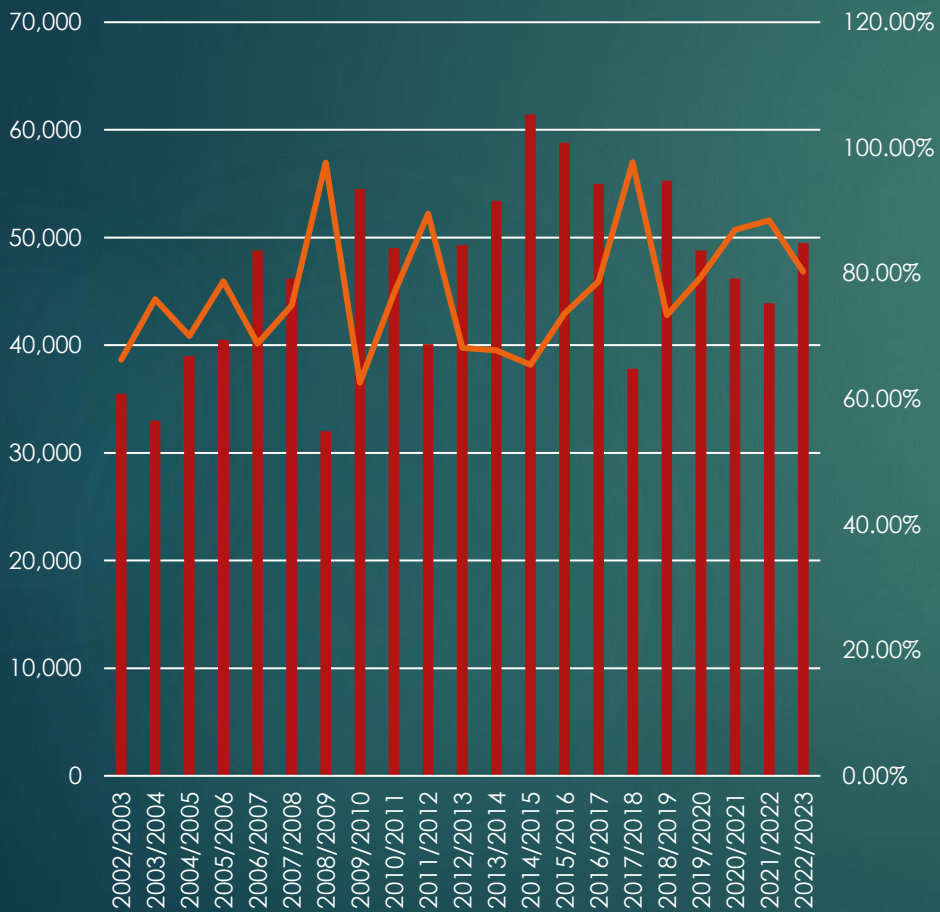


The below price chart is SX18 – that traded 925-825 from August through expiry and was in a similar price range in SX19



ARGENTINA: plantings at 8%. Lower production = 49.5MMT. Exports revised higher for both LY and 22/23. Another soy dollar program in December / January?

Argentina soy production = 49.5MMT (43.9MMT LY).
Crush = 39.75MMT (38.83MMT LY) or 80.3%
production (88.4% LY)



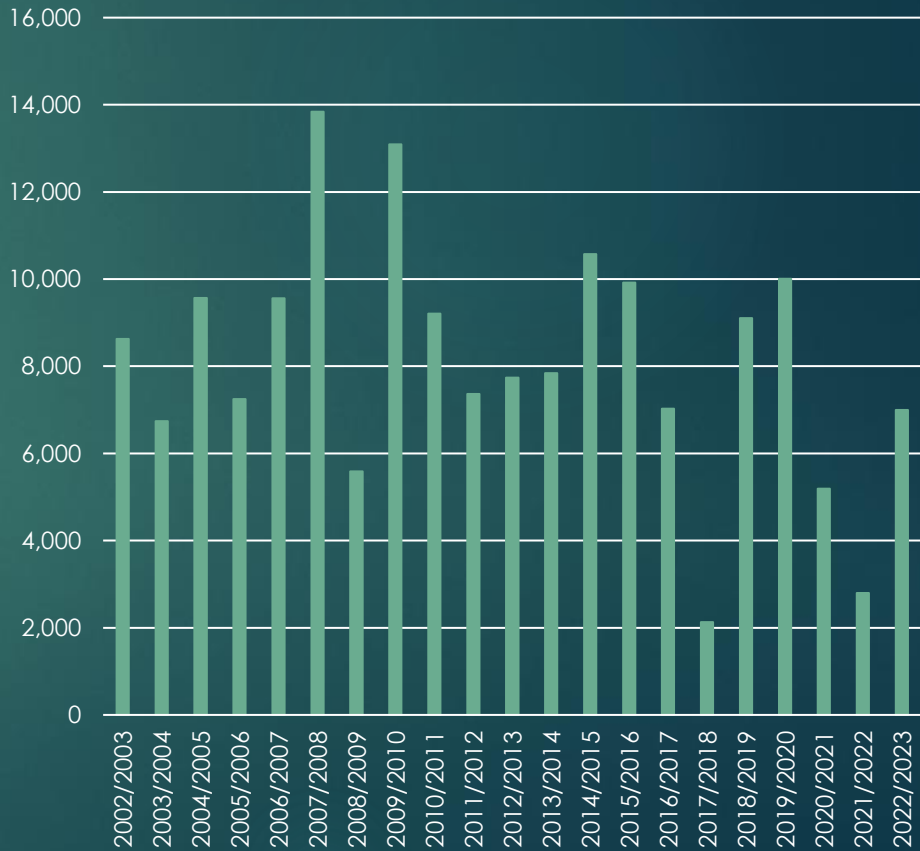
Crush margins solidly **negative** for Q4 and -\$10-20/MT for new crop (Apr-May)

Argentina dominates world soymeal and soy oil trade – but has struggled to find a deep bid for SM... and more competition from Brazil

Farmer selling – BOOM – with 5.3MMT registered for exports (China owns at least 4MMT of these)

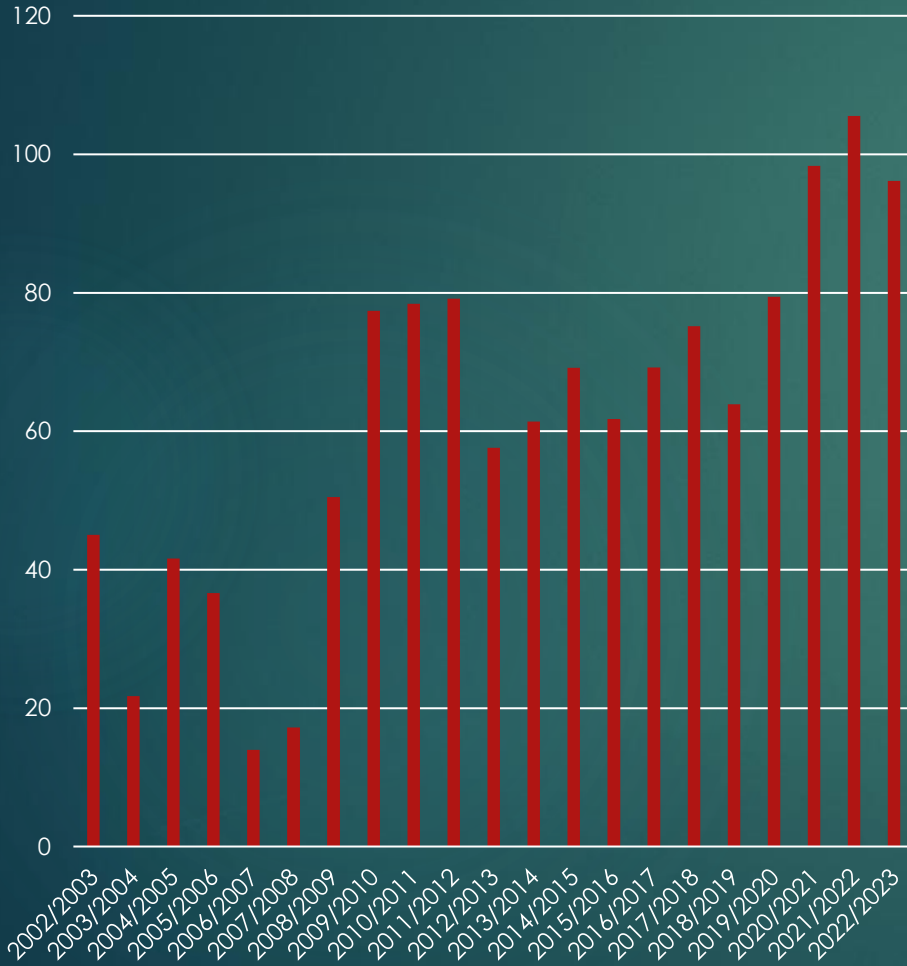
USDA revised soy exports higher as a result to 7.2MMT (7MMT Oct, 4.7MMT Sept) vs 2.86MMT in 21/22

Argentina soybean exports over the past two decades. If crush margins remain negative - would look for an expanded soybean export footprint in 22/23



China snapshot: its supply cushion is comfortable. Crush declined 5.5MMT in 21/22 and is forecast to increase 8.5MMT in 22/23. Imports are forecast to increase 8MMT

China soy supply cushion = 96.2 days (105.5 days on 31 August 2022)



China soybean imports = 98MMT vs 91.6MMT for this year (largest y-o-y gain = 16MMT in 19/20) vs decline of 8.2MMT this last year

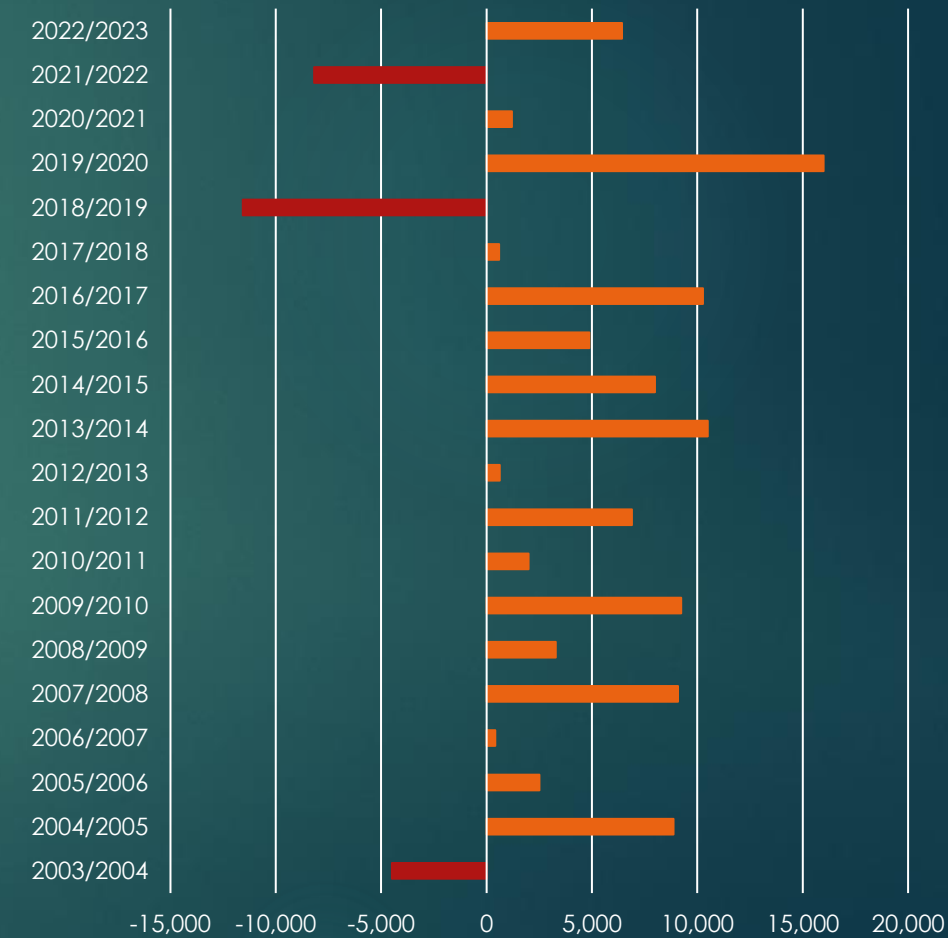
Weekly crush – below 45% of capacity. Crush margins have been negative since Feb 2022

Daily demand = 316.7KMT / day vs 292.4KMT this year

China's domestic supply cushion = 96.2 days vs 105.5 days for 21/22 (new high – 31 August 2022)

China holds 30.8% or 31.5MMT vs (33.6% LY) – ending stocks were revised higher in the November WASDE

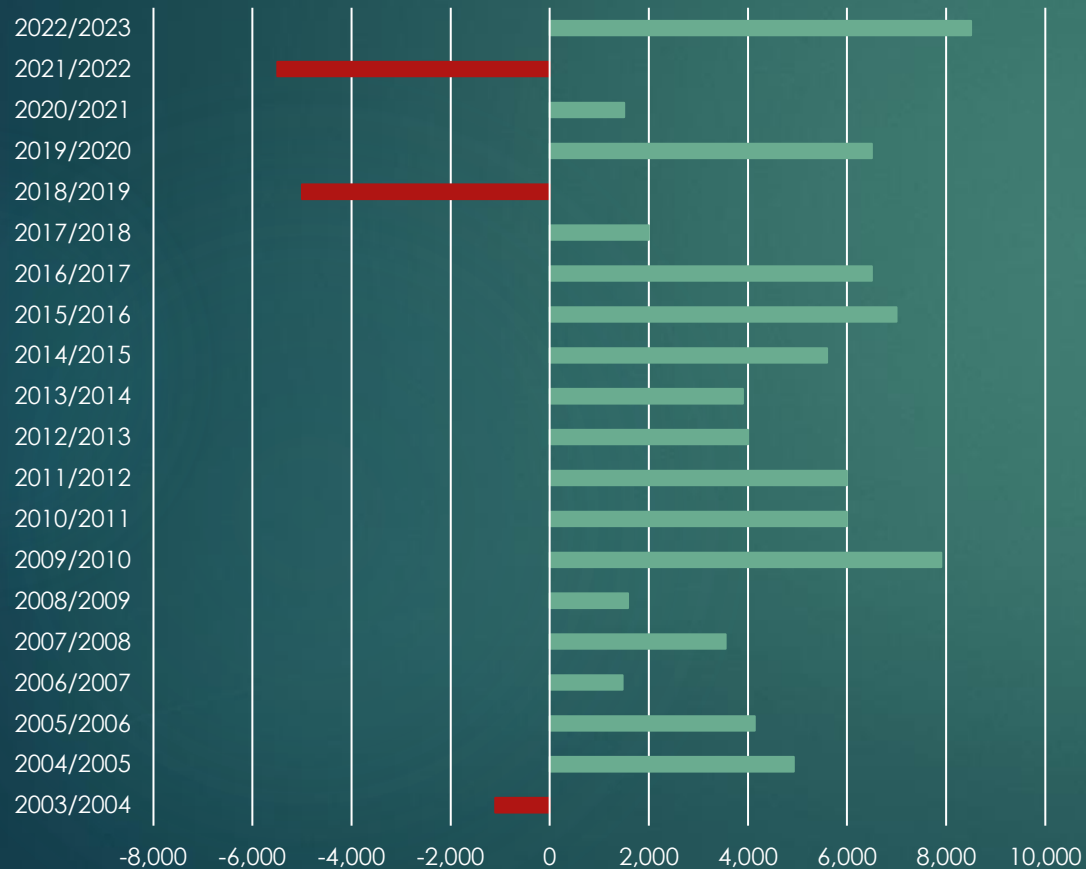
China soy imports = 98MMT (91.7MMT LY). Peak = 99.74MMT in 20/21



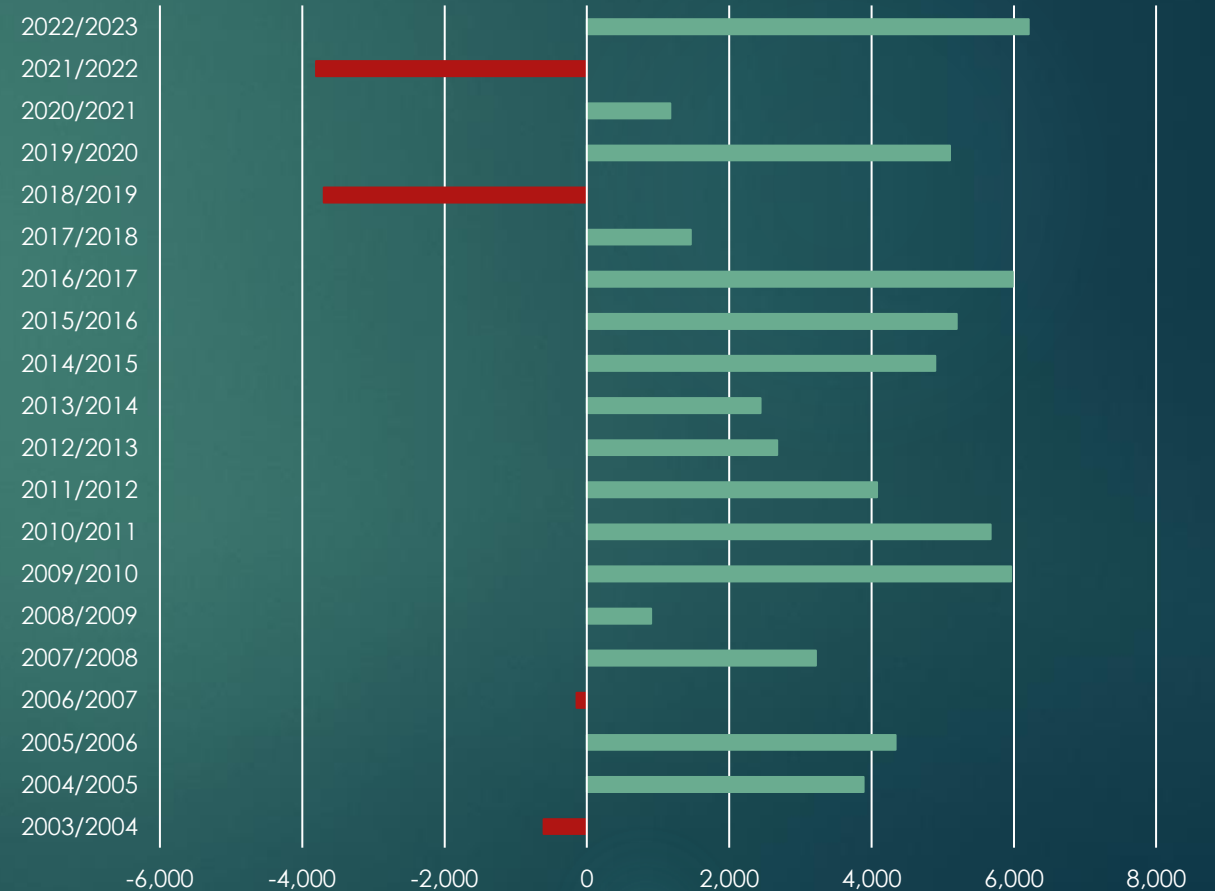
China has massive demand forecasts for both crush and soymeal demand. COVID lockdowns continue. Its economy is hugely problematic. Soymeal demand in 21/22 contracted larger vs 18/19 (and then recovered 5.1MMT) vs recovery = 6.2MMT this year



China soy crush demand = 96MMT (+8.5MMT vs LY). Last year crush = 87.5MMT (-5.5MMT)



China soymeal demand = 75.08MMT (68.9MMT LY) - up 6.21MMT. This compares to -3.81MMT loss in 21/22 (this exceeds the -3.7MMT in 18/19 - PEAK ASF)

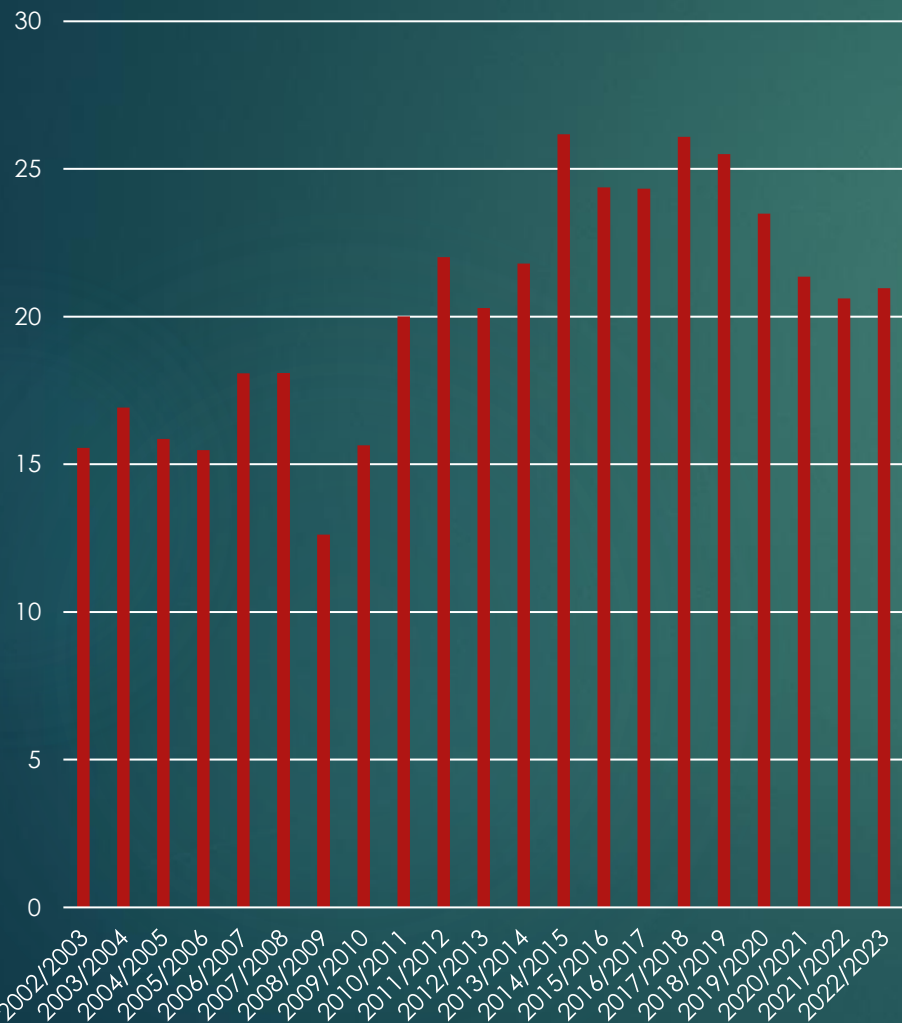


Weekly soy charts – funds / MM\$ still plenty long soybeans (+100K vs 77.5K Oct) with world soy demand questionable and growing confidence in BR



World soymeal supply cushion = 21 days vs 20.6 days this year

World soymeal supply cushion = 21 days (20.6 days LY)



World to consume 693KMT / day vs 667KMT for 21/22

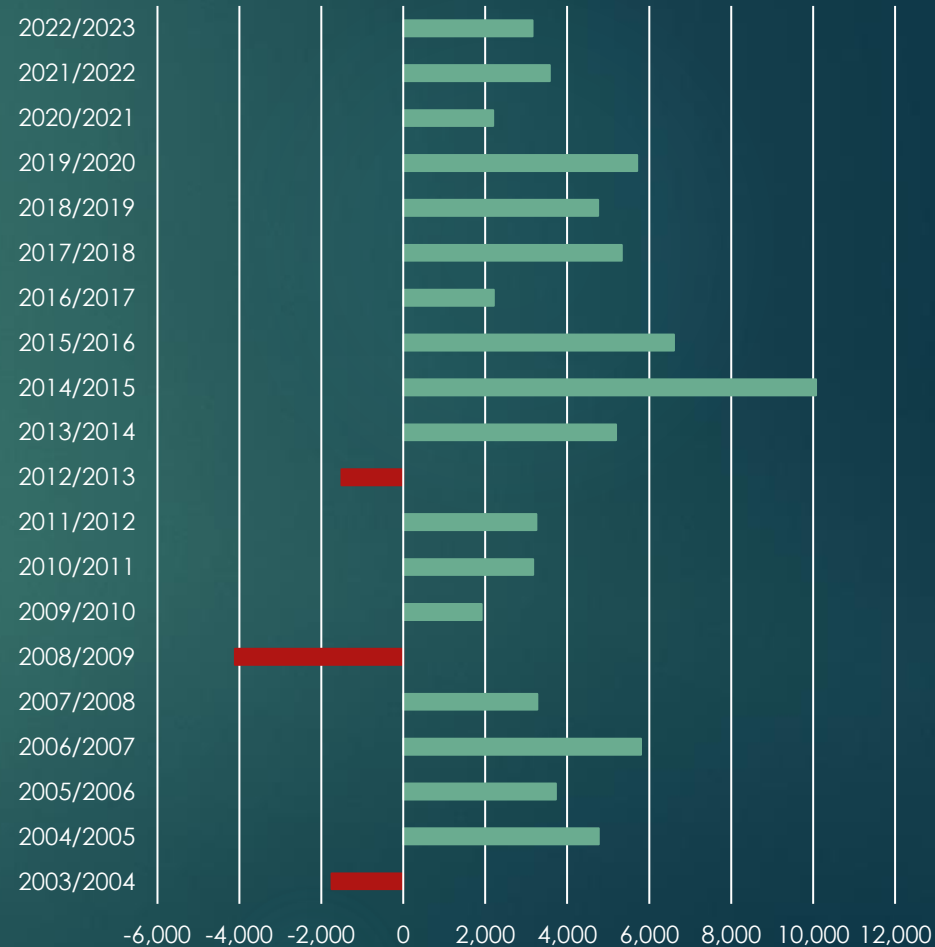
World soymeal supply cushion to build slightly = 21 days (20.6 days)

World demand is to recover and grow nearly 9.4MMT vs this year.. **In a global recession led by China? I have strong doubts**

China soymeal demand forecast to 6.2MMT (6.62MMT) or 66% of the increase

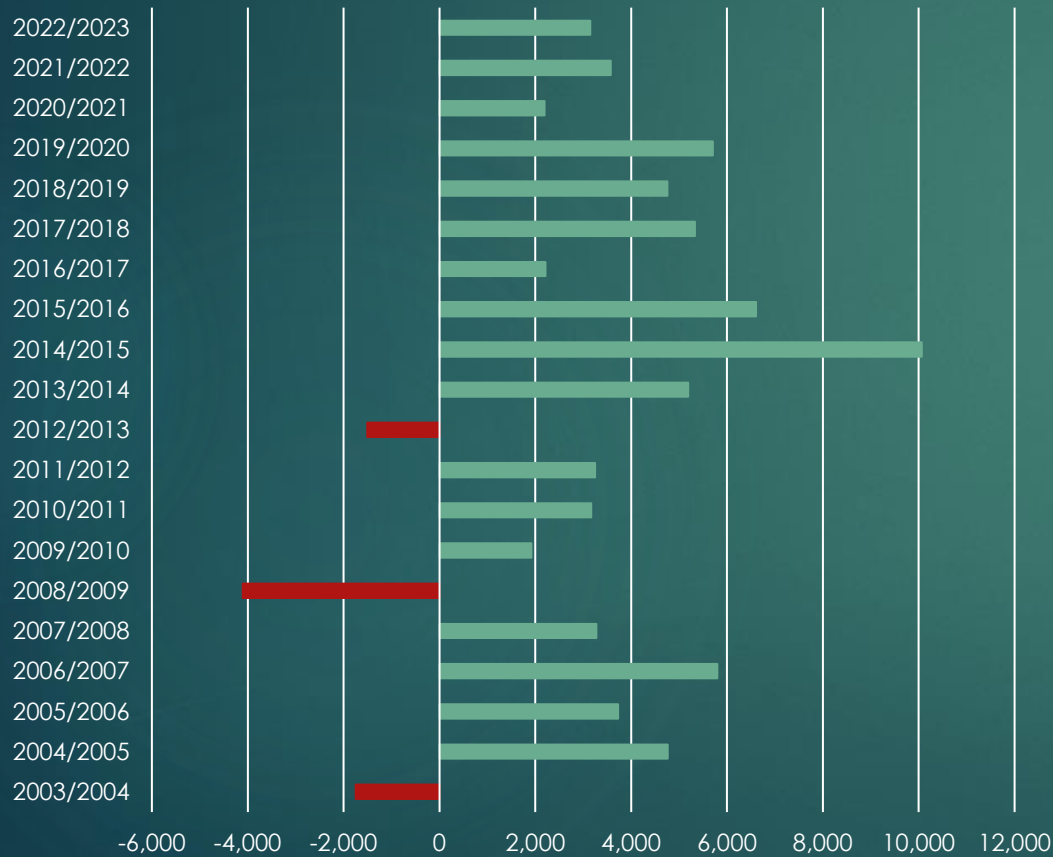
ROW soymeal demand forecast to increase 3.15MMT

ROW soymeal demand forecast = 177.7MMT (174.6MMT LY) - up 3.15MMT (+3.58MMT LY)

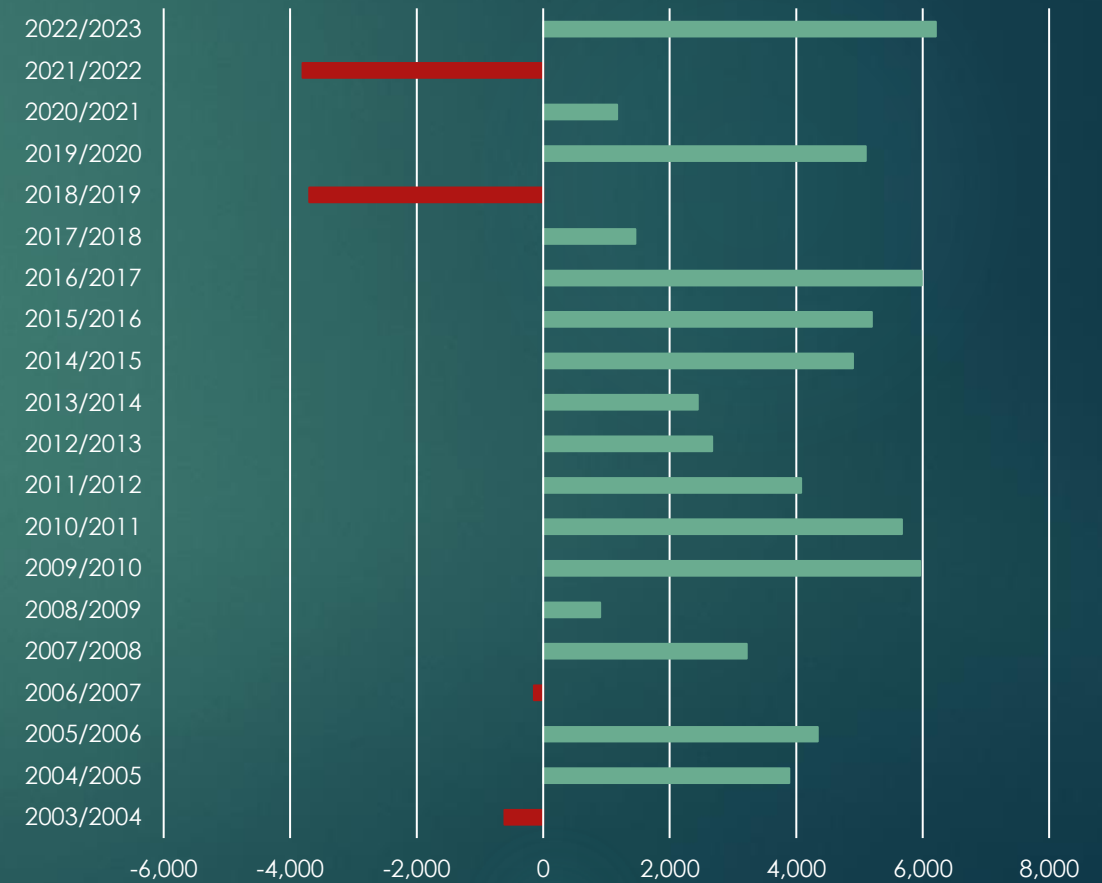


World soymeal demand growth forecast to recover, led by China as it is forecast to bounce back from the largest annual contraction (-4.2MMT) to a record demand increase +6.2MMT. ROW SM +3.15MMT vs ROW feed corn demand **down 16.6MMT** and ROW feed wheat demand **+470KMT**

ROW soymeal demand forecast = 177.7MMT (174.6MMT LY)
- up 3.15MMT (+3.58MMT LY)

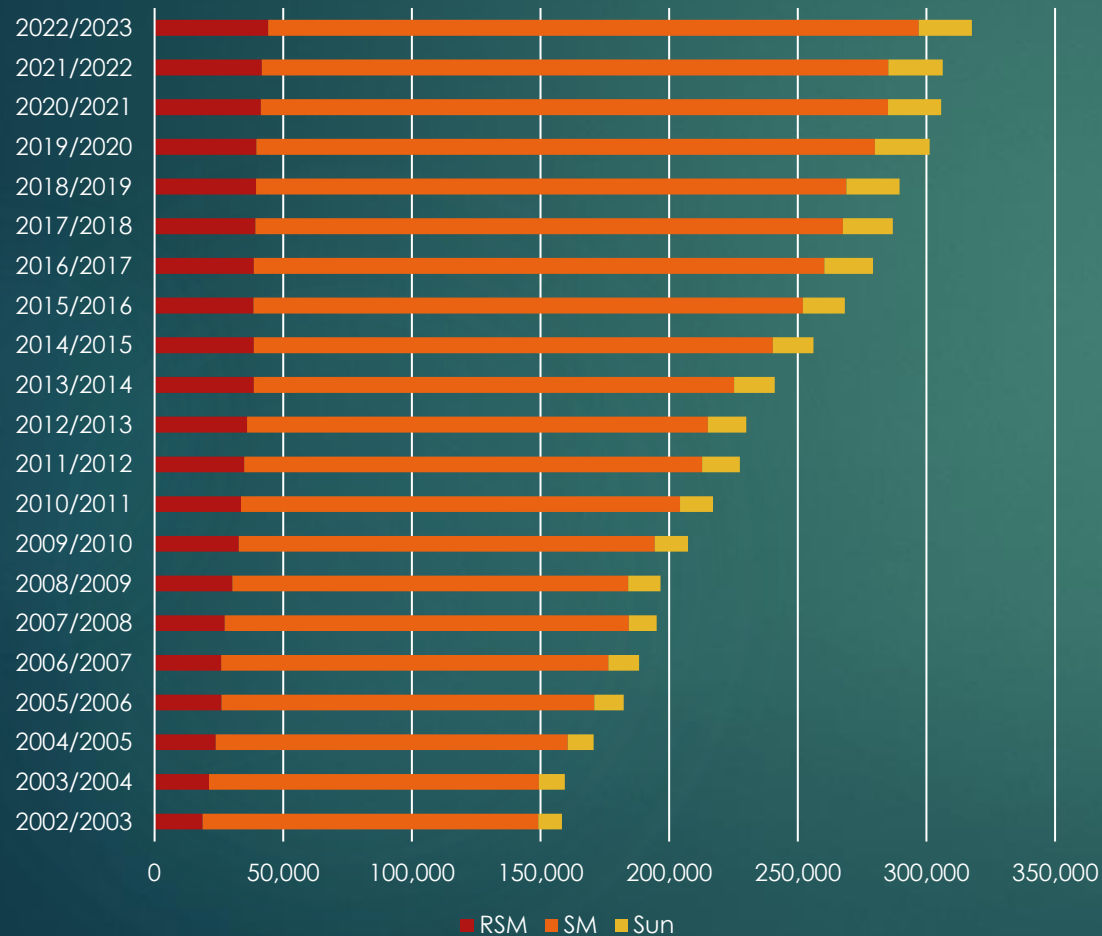


China soymeal demand = 75.1MMT (68.9MMT LY) - up
6.2MMT vs LY (-3.81MMT contraction in 21/22)

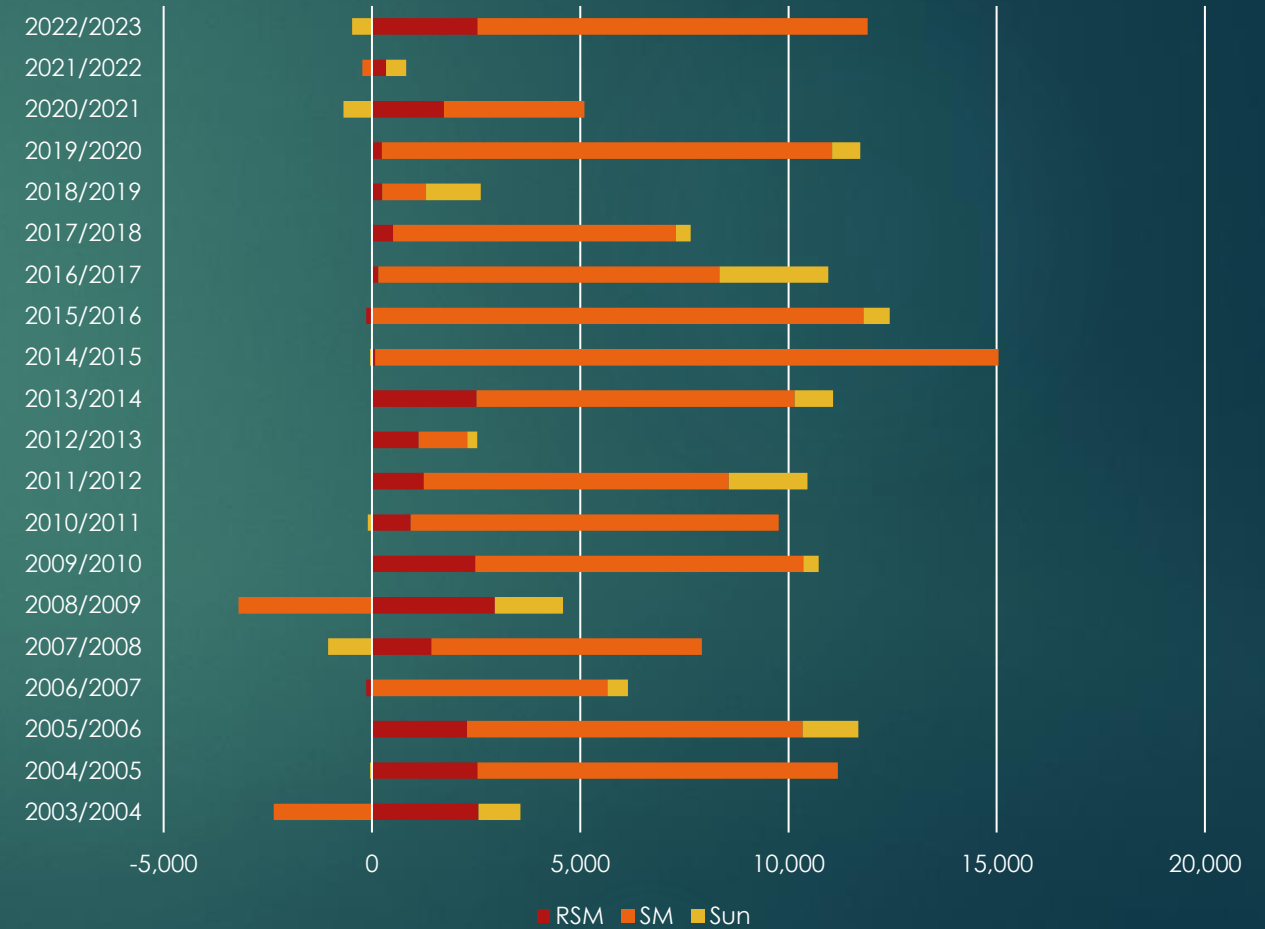


World protein meal demand – big demand increases dialed in. All estimates are at serious risk given the macro environment

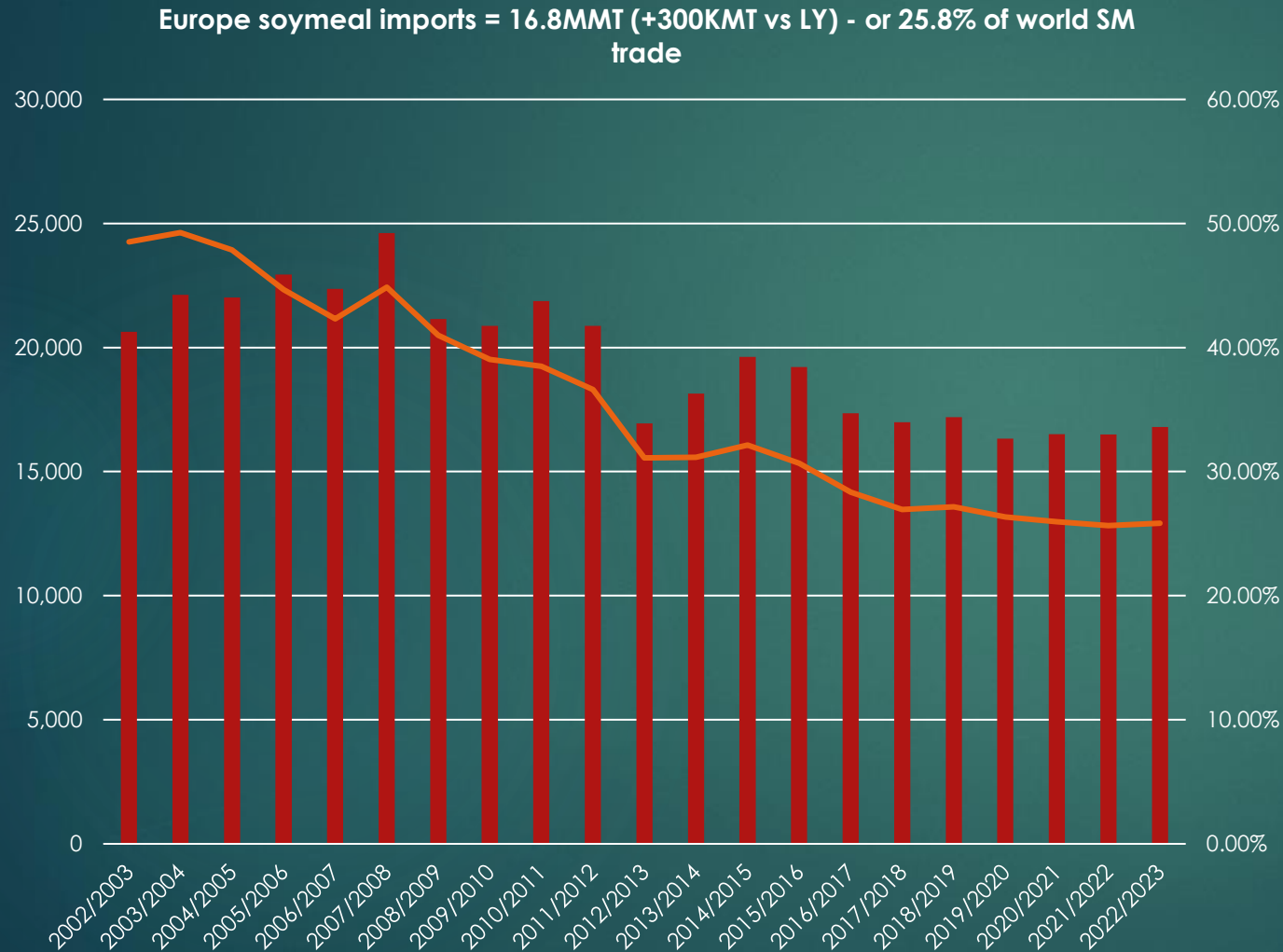
Protein meal demand = 317.7MMT (306.2MMT) - up 11.5MMT or 3.8% (soymeal demand +9.36MMT or 81.4%)



World protein meal demand - change vs previous year(s) = 11.43MMT (+591KMT LY)



Europe soymeal import demand for 22/23 – with grain demand (corn & wheat) forecast to contract (-6.3MMT) vs soymeal demand forecast -100KMT



MYTD Europe soymeal imports (1 July – 6 November) = 5.6MMT – >1% or 8.8KMT vs last year (33.3% complete vs USDA forecast)

Brazil = 3MMT (53.8%)

Argentina = 2041.3KMT (35.9%)

Paraguay = 153.8KMT (2.7%)

Ukraine = 96.6KMT (1.7%)

Russia = 73.7KMT (1.3%)

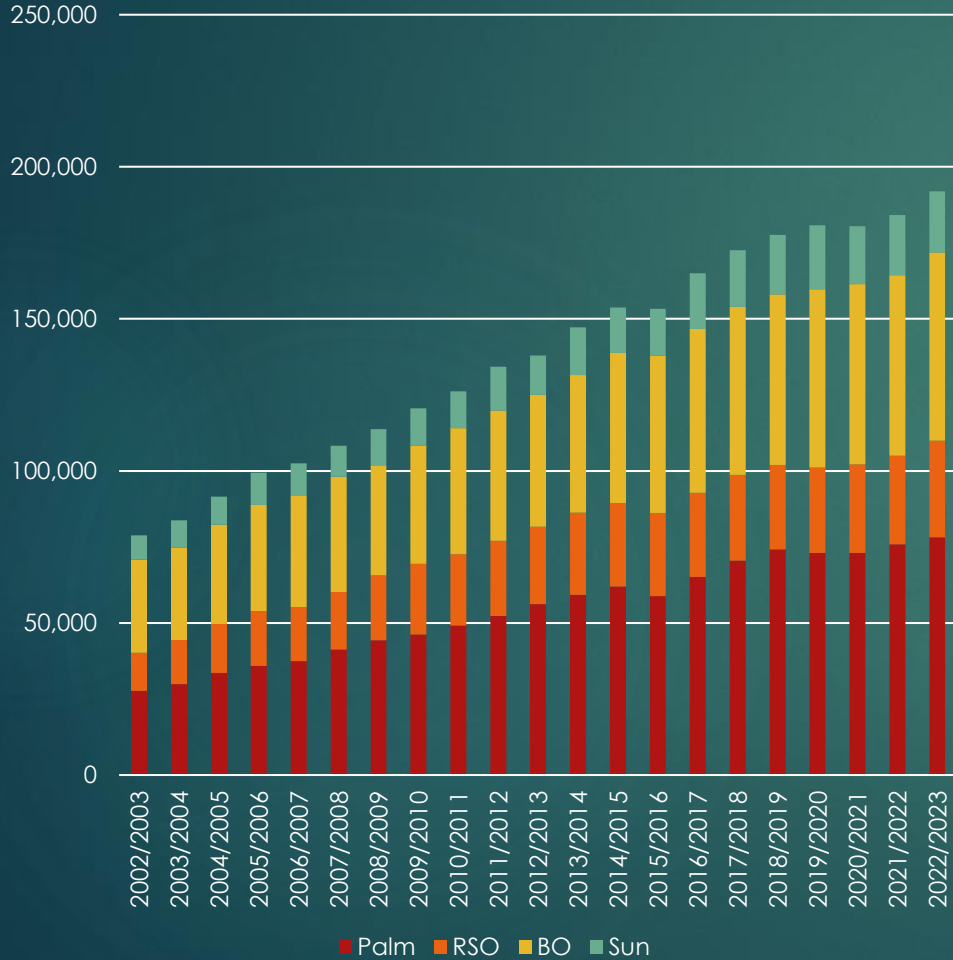
USDA forecasts a big cut to grain feed demand – but very little change in SM demand. It doesn't add up. Especially given the price of soymeal, (2) contracted pork import demand from China, (3) higher energy costs and (4) a livestock sector that is under severe pressure (avian flu, \$\$, credit, etc)

Weekly soymeal charts – soymeal futures rotate around soy oil. MM\$ ownership = 93.4K (79.7K Oct). World protein meal / soymeal bid remains thin. Argi crush margins negative. BR crush margins positive. U.S. has limited FOB capacity



World edible oil production (gains in each vs LY) vs world edible oil demand

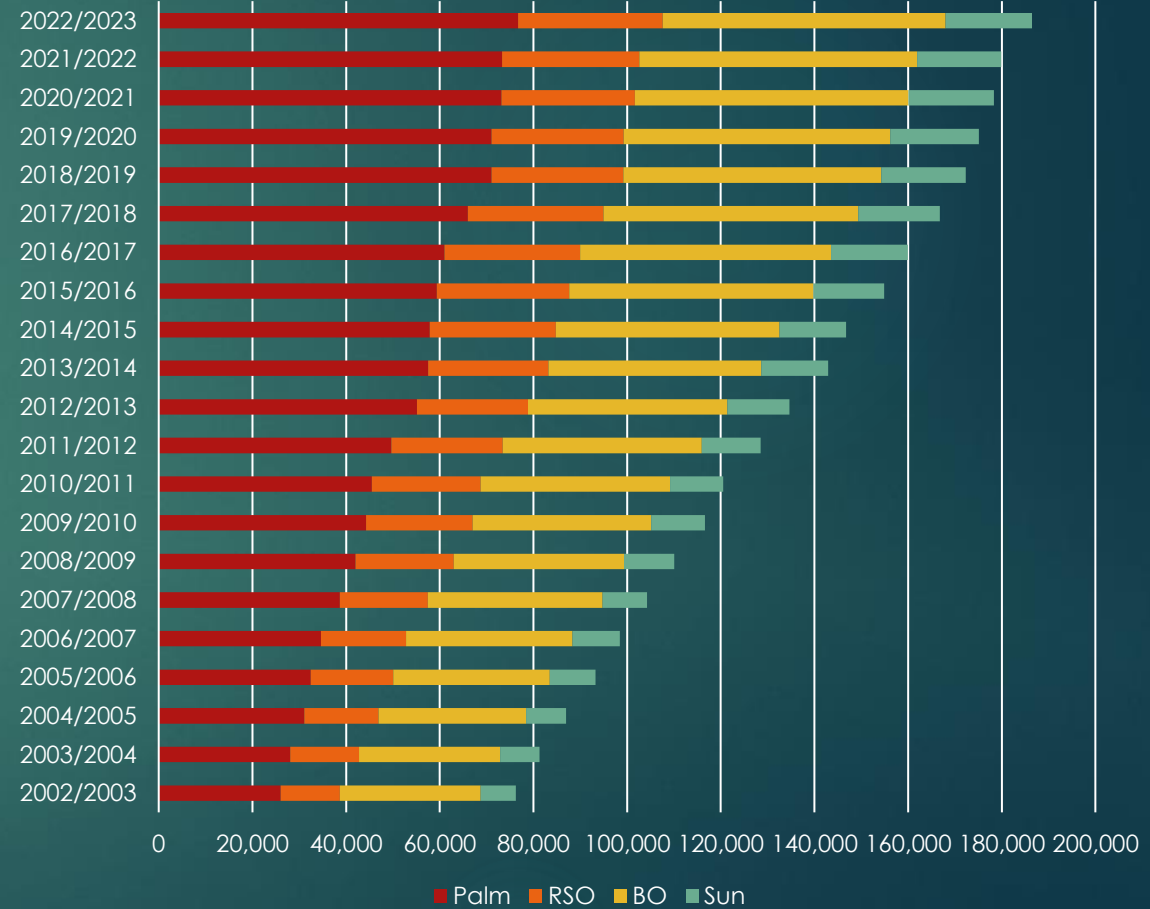
World edible production = 192MMT (184.2MMT) - up 7.8MMT or 4.2% year-on-year



World edible oil production to **increase 7.8MMT** vs 21/22 – with gains in each of the edible oil classes

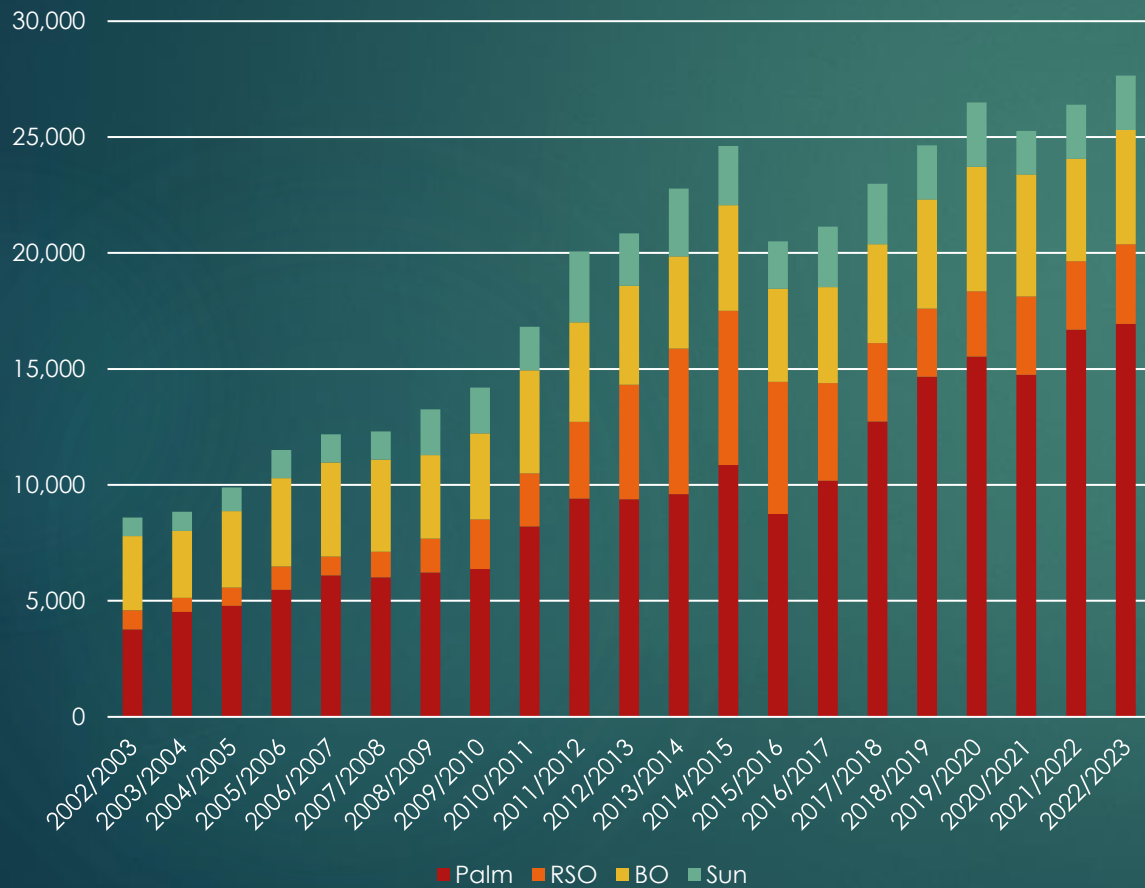
World edible oil demand is forecast at a record – and **up 6.6MMT** vs 21/22

Global edible oil demand = 186.5MMT (179.9MMT) - up 6.6MMT or 3.7%

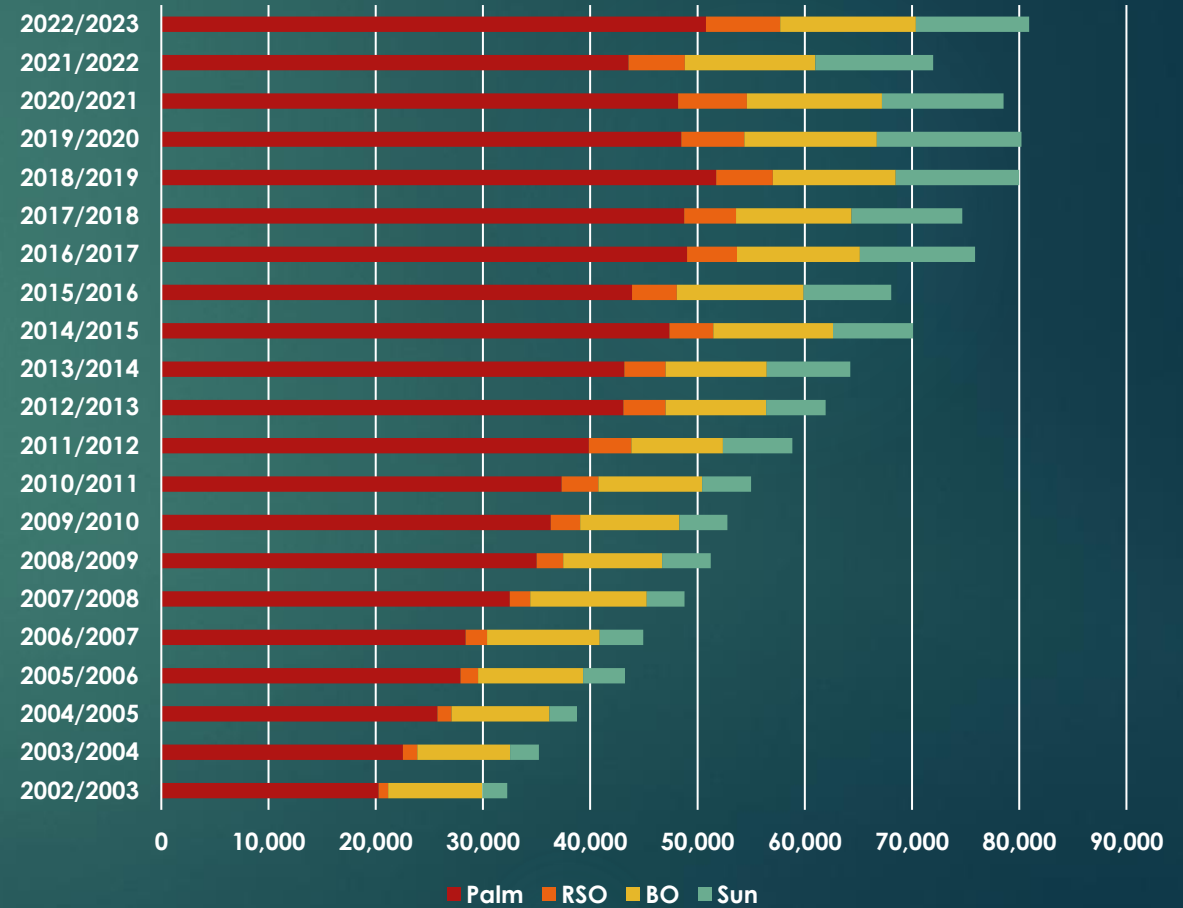


World edible oil stocks (+1.2MMT vs LY and new record) vs world edible oil export trade (+8.9MMT with palm oil +7.2MMT)

Global edible oil ending stocks to build again to record = 27.65MMT (26.4MMT LY). Palm = 255KMT. RSO = 477KMT. BO = 502KMT. Sun = 14KMT

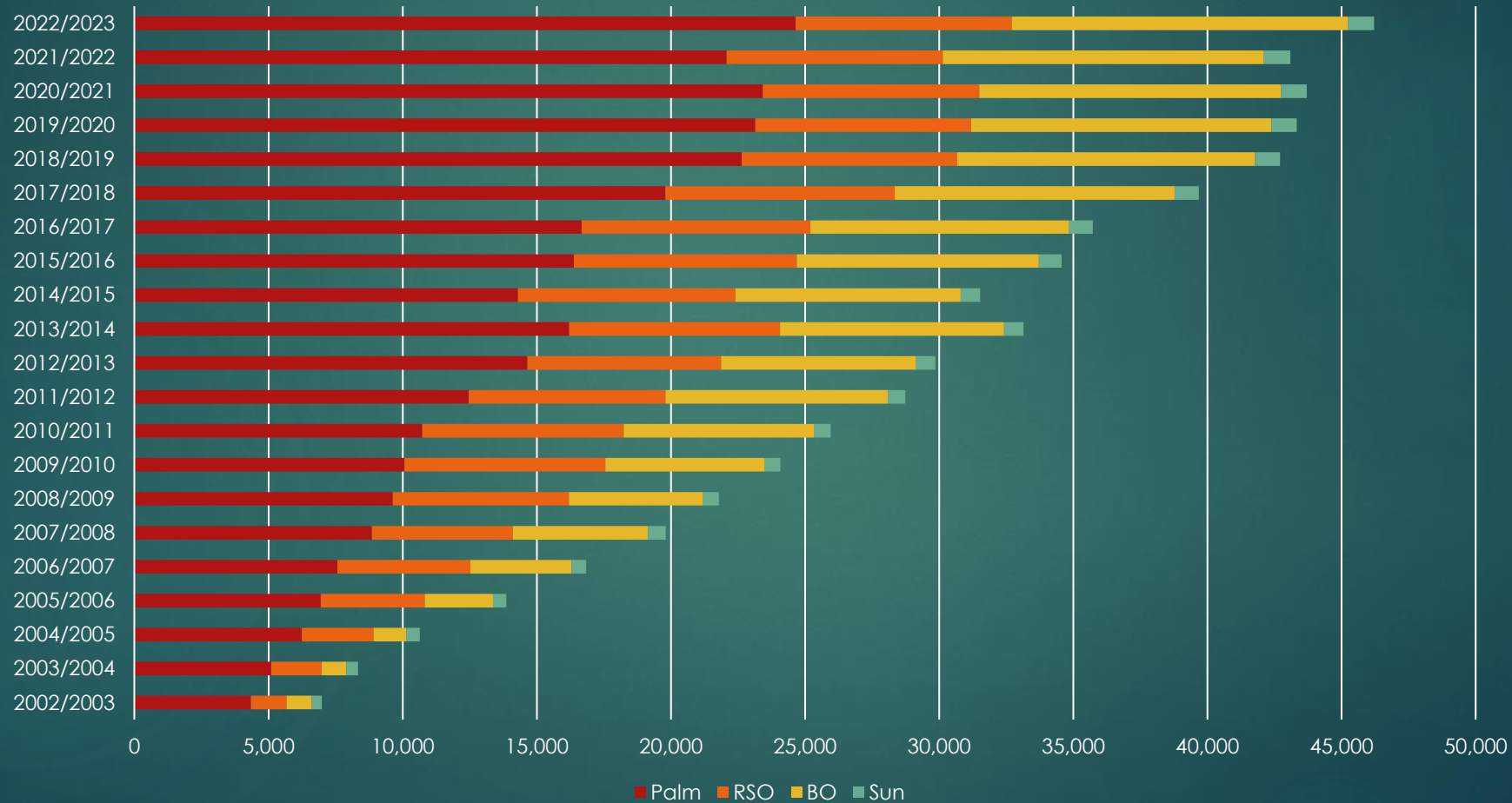


World edible oil export trade = 80.9MMT (72MMT) - up 8.9MMT with palm oil +7.2MMT (81% of the gain). Only sun oil declines 402KMT



It is very likely in the years ahead that the food vs fuel debate will grow louder – as such, here is a look at industrial demand for edible oils in the past 2 decades

Edible oil industrial demand = 46.2MMT (43.1MMT LY) vs 7MMT in 2002/03



Monthly soy oil chart – soy oil futures driven by U.S. biodiesel, oil share and what palm oil may or may not do. U.S. soy oil not competitive in export grid. SOAM BO at a big premium to both palm and sun



What can we expect in the future? Tick, tick, BOOM

1. Fragmented world: globalization is game over
2. Trade flow impact: price distortions influence supply reaction
3. Freight & shipping costs – “a whole lot” of boats coming online
4. Financial de-globalization – impact of sanctions and money flows / credit costs
5. Illiquidity: higher VAR, margin calls and market structure
6. Higher poverty rates
7. Demand and supply elasticities at work
8. World central banks – majority raise interest rates (not China...)
9. From inflation to stagflation
10. China's economy – as goes China.... Developing / neighbor economies impacted
11. How does the energy transition continue?