Agricultural Markets Weekly

Recession concerns confirmed

- **The historic hike in President Trump's Liberation Day tariffs came in above even the most hawkish of expectations, driving markets and ags alike to more meaningfully price in a US and possibly global recession. Our economists now place a 60% probability on a US recession through 2025 (from 40% previously), noting that the tariffs mark the largest US tax increase since 1968.**
- **In somewhat of a win for CBOT markets, USMCA compliant goods remain exempt from US import tariffs, which has alleviated risks of retaliation on US agri import demand, particularly from Mexico. However, the wider agri complex is now directly implicated in the US trade war. The BCOM Agri Index suffered a mild -1.6% WOW loss, paling into insignificance against the -11% collapse across Brent crude.**
- **China has subsequently added incremental retaliation, increasing the tariff rate for all US imports by 34% from April 10, in a tit-for-tat response, our economist outlines. This is unlikely to do any further short-term damage to US ag export flows which were already priced out, but raises additional risks for US exports in 2025/26 if an expedited trade deal is not agreed.**
- **As the dust settles on a monumental week, we look for sweeping negotiations and continued heightened volatility across markets. Agri price and demand side performance is typically resilient across grain sugar and palm oil markets through recessionary periods, and weak across discretionary products including cotton, cocoa and to an extent coffee.**
- **The UN FAO Food Price Index increased for the consecutive month in March to 127.1, up 0.24% MOM and 6.9% higher YOY. The continued monthly rise was led by broad-based increases across the sectors, with a 6.6% MOM increase in sugar prices, 4% MOM increase in dairy prices, 2% MOM increase in vegetable oil prices and 0.7% MOM increase cereal prices. Meat prices were the only sector to avoid a hike, holding steady at -0.7% MOM.**
- **Prospective Plantings and March QSR: The USDA March 31 reports largely delivered on market expectations – and avoided an extreme bear scenario for corn. Both spring and winter wheat planning expectations fell much below average trade and JPMC expectations, raising risks of a tighter US balance – or lower US corn/soybean acres ahead.**
- **ICE #11 Sugar, CBOT Wheat and MDEB Palm oil remain our highest conviction long calls through 2025.**

Global Commodities Research

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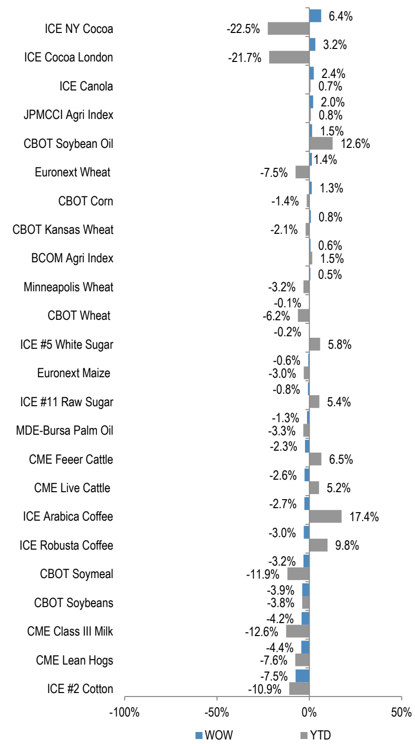
Agri commodity price movements – active contract
%



Source: Bloomberg Finance L.P., J.P. Morgan Commodities Research, 4 Apr. 2025 17:20 UK

See page 12 for analyst certification and important disclosures.

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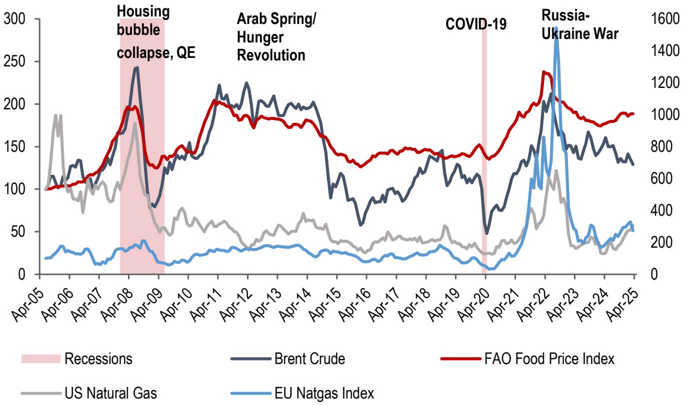
Figure 1: Agri price downside through recessionary periods has typically been more muted, relative to demand driven energy markets

Index



Source: Bloomberg Finance L.P., NBER, J.P. Morgan Commodities Research

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USMCA compliant goods remain exempt from US import tariffs in a win for CBOT, but import tariff exposure now extends across the complex and amid recession risks

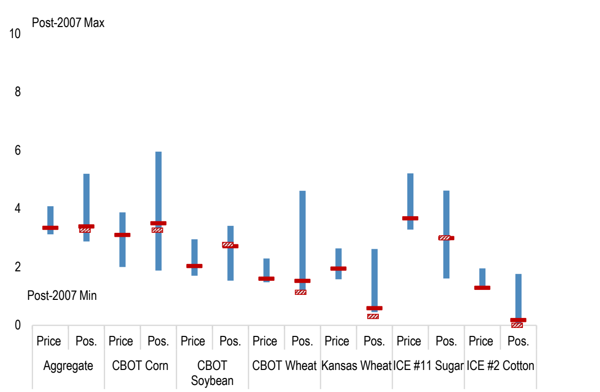
The historic hike in President Trump's Liberation Day tariffs came in above even the most hawkish of expectations, driving markets and ags alike to more meaningfully price in a US and possibly global recession. Our economists now place a 60% probability on a US recession through 2025 (from 40% previously), noting that the tariffs mark the largest US tax increase since 1968 *(There will be blood*, Kasman et al, 3 April). China has subsequently added incremental retaliation, increasing the tariff rate for all US imports by 34% from April 10, in a tit-for-tat response, our economist outlines. This is unlikely to do any further short-term damage to US ag export flows which were already priced out, but raises additional risks for US exports in 2025/26 if an expedited trade deal is not agreed. The retaliation also included adding US companies to the unreliable entity list, export control list, and imposing export controls on certain rare earths amongst other measures. Vietnam and other trade partners are in discussion with the US to reduce or eliminate tariff rates. As the dust settles on a monumental week, we look for sweeping negotiations and continued heightened volatility across markets. Agri price and demand side performance is typically resilient across grain sugar and palm oil markets through recessionary periods, and weak across discretionary products including cotton, cocoa and to an extent coffee.

In somewhat of a win for CBOT markets, USMCA compliant goods remain exempt from US import tariffs, which has alleviated risks of retaliation on US agri import demand, particularly from Mexico.However, the wider agri complex is now directly implicated in the US trade war. Amidst the market turmoil of recessionary pricing recession, corn looks to be finishing the week on a positive note. As discussed, we viewed the binary decision of USMCA tariffs as a bullish risk event for ag markets, based on our economist's expectations for continued exemption. That scenario has played out, and we see short covering risks across CBOT Corn and likely also CBOT Wheat over the weeks ahead, amid constructive fundamentals and low acreage expectations for US wheat plantings.

The UN FAO Food Price Index increased for the consecutive month in March to 127.1, up 0.24% MOM and 6.9% higher YOY. The continued monthly rise was led by broad-based increases across the sectors, with a 6.6% MOM increase in sugar prices, 4% MOM increase in dairy prices, 2% MOM increase in vegetable oil prices, and 0.7% MOM increase cereal prices. Meat prices were the only sector to avoid a hike, holding steady at -0.7% MOM.

Figure 2: Investor positioning across US traded agri markets was net short ahead of the Liberation Day tariff and growth risks, and has deteriorated subsequently

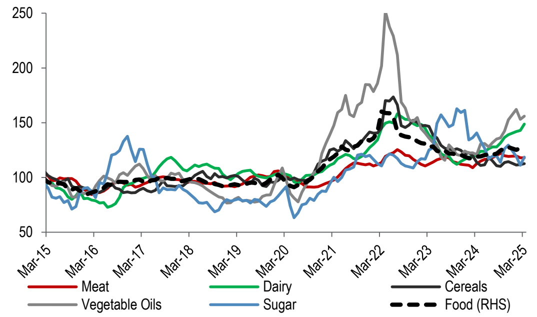
0-10 scale using levels since the start of 2008, 0= lowest price level/ shortest net futures positioning value in USD and 10 = highest price level/longest investment net futures positioning value in USD since start of 2008. Red bar = Latest level, red hatched bar = JPM GQDS projected level, blue bar = range in the last six months



Source: CFTC, J.P. Morgan Commodities Research, ICE, CME and CBOT commodities are aggregate of Managed Money and Other Reportable net futures positioning value, Forecasts supplied by JP Morgan GQDS Research (3 April relative to 25 Mar CFTC), see methodology here

Figure 3: The UN FAO Food Price Index continued to drift higher up 0.2% in Mar, led by sectoral increases across the board including sugar, dairy and vegetable oils

Index (2002-2004=100)



Source: Food and Agriculture Organization of the United Nations, J.P. Morgan Commodities Research

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Ags demand performance through recessionary periods - typically resillient across grains, sugar and palm oil

Across the typically supply-side driven agri complex, demand side responses have been highly variable through historical recessionary events (Table 1). Notably, often more moderate than that of the wider commodity complex. Discretionary ag products typically suffer the most through recessionary periods, whilst consumers also tend to shift to lower cost protein categories. World cotton demand has typically displayed the strongest decline in demand through recessionary periods, as consumers reduce discretionary spending, with cocoa and coffee consumption also displaying heightened sensitivity. Similarly, world soybean oil demand has been susceptible to growth contractions, due to a contraction in aggregate fuel demand. However, we see this as a lower probability risk in the short-term, amid an expected increase in US RVOs of renewable diesel and biodiesel from 2026. Wheat and sugar consumption have typically been stable to firmer through recessionary periods, so too palm oil and corn demand - despite the biofuel links, indicative of the firm demand side elasticity to price weakness.

In our 2025 Agri Outlook, we discussed a baseline of modest global growth which limited agri consumption growth outside of rising biofuel mandates. Subsequently, the growth outlook has soured, and the US is at risk of slipping into recession in 2025, with odds of 60%. Off our anemic consumption growth baseline through the remainder of 2024/25 and into the 2025/26 marketing years, cotton demand is most susceptible to a downside revision, followed by soybeans potentially. A reduction in our expectations for feed wheat demand through 2025/26 has weighed on the outlook and, off an already negative base and competitive prices, it is unlikely to see further deterioration.

Table 1: World agri consumption growth in historical recessionary environments, and current projections

%

Driver	Recession	Demand Segments	Corn	Wheat	Soybeans	Palm Oil	Soybean Oil	Cotton	Sugar
Tightening monetary policy	1969/70	Feed & Resid/ Seed & Resid/ Indust.	4.2%	14.3%	0.1%				
		Food, seed & industrial/ Crush	6.8%	4.3%	22.6%	2.9%	17.9%		
		Domestic Consumption	**5.1%**	**6.4%**	**16.8%**	**3.4%**	**17.5%**	**-0.9%**	**5.0%**
	1970/71	Feed & Resid/ Seed & Resid/ Indust.	-4.2%	12.4%	10.9%				
		Food, seed & industrial/ Crush	7.9%	1.1%	4.1%	14.8%	3.9%		
		Domestic Consumption	**-0.2%**	**3.6%**	**5.6%**	**13.7%**	**4.1%**	**2.3%**	**4.2%**
Oil price spike driving stagflation	1973/74	Feed & Resid/ Seed & Resid/ Indust.	3.9%	-16.7%	18.2%				
		Food, seed & industrial/ Crush	9.2%	4.9%	17.0%	-3.3%	17.3%		
		Domestic Consumption	**5.6%**	**-0.3%**	**17.3%**	**-3.3%**	**17.1%**	**1.6%**	**14.6%**
	1974/75	Feed & Resid/ Seed & Resid/ Indust.	-16.9%	4.0%	-9.1%				
		Food, seed & industrial/ Crush	1.0%	-0.4%	-9.8%	26.5%	-6.5%		
		Domestic Consumption	**-11.1%**	**0.5%**	**-9.6%**	**25.2%**	**-6.3%**	**-5.3%**	**-4.6%**
Iranian revolution, tightening monetary policy	1979/80	Feed & Resid/ Seed & Resid/ Indust.	12.2%	4.6%	-1.3%				
		Food, seed & industrial/ Crush	1.2%	6.1%	9.6%	10.9%	6.7%		
		Domestic Consumption	**8.4%**	**5.8%**	**7.7%**	**11.2%**	**6.5%**	**4.4%**	**0.8%**
Tightening monetary policy	1981/82	Feed & Resid/ Seed & Resid/ Indust.	2.6%	-0.1%	7.0%				
		Food, seed & industrial/ Crush	1.9%	-0.4%	3.4%	9.9%	4.4%		
		Domestic Consumption	**2.4%**	**-0.3%**	**4.0%**	**11.4%**	**3.9%**	**-2.2%**	**1.2%**
	1982/83	Feed & Resid/ Seed & Resid/ Indust.	2.6%	2.5%	-1.4%				
		Food, seed & industrial/ Crush	-3.2%	1.0%	5.4%	6.9%	1.3%		
		Domestic Consumption	**0.7%**	**1.3%**	**4.2%**	**8.9%**	**1.8%**	**5.9%**	**2.4%**
Iraq invaded Kuwait	1990/91	Feed & Resid/ Seed & Resid/ Indust.	-1.9%	25.9%	4.3%				
		Food, seed & industrial/ Crush	2.8%	-1.0%	-0.3%	6.6%	-1.2%		
		Domestic Consumption	**-0.4%**	**4.4%**	**0.5%**	**6.9%**	**-1.2%**	**-1.6%**	**3.0%**
Dotcom bubble collapse, 9/11 attacks	2000/01	Feed & Resid/ Seed & Resid/ Indust.	1.2%	5.0%	4.1%				
		Food, seed & industrial/ Crush	2.1%	-0.5%	8.3%	12.9%	8.4%		
		Domestic Consumption	**1.5%**	**0.5%**	**7.7%**	**13.6%**	**8.6%**	**0.5%**	**2.2%**
Housing bubble collapse, QE	2007/08	Feed & Resid/ Seed & Resid/ Indust.	5.3%	-7.1%	-6.2%				
		Food, seed & industrial/ Crush	11.7%	0.7%	3.3%	11.5%	5.3%		
		Domestic Consumption	**7.4%**	**-0.8%**	**2.1%**	**11.5%**	**5.3%**	**-0.4%**	**-0.1%**
	2008/09	Feed & Resid/ Seed & Resid/ Indust.	-2.4%	18.0%	2.2%				
		Food, seed & industrial/ Crush	9.2%	0.7%	-3.8%	8.7%	-2.8%		
		Domestic Consumption	**1.7%**	**3.6%**	**-3.1%**	**8.8%**	**-2.8%**	**-10.4%**	**2.1%**
COVID-19	2019/20	Feed & Resid/ Seed & Resid/ Indust.	1.5%	0.2%	2.2%				
		Food, seed & industrial/ Crush	-2.2%	1.3%	4.4%	0.4%	2.9%		
		Domestic Consumption	**0.1%**	**1.1%**	**4.1%**	**0.4%**	**2.9%**	**-11.7%**	**-0.1%**
Forward growth projections									
	USDA 2024/25f	Feed & Resid/ Seed & Resid/ Indust.	0.9%	-2.8%	6.0%	7.6%	10.6%		
		Food, seed & industrial/ Crush	0.8%	1.1%	6.5%	2.0%	9.2%		N/A
		Domestic Consumption	**0.8%**	**0.3%**	**6.4%**	**3.9%**	**9.5%**	**1.5%**	
	JPMC 2024/25f	Feed & Resid/ Seed & Resid/ Indust.	1.0%	-2.8%	5.6%	7.6%			
		Food, seed & industrial/ Crush	0.6%	1.1%	6.4%	2.0%			
		Domestic Consumption	**0.8%**	**0.3%**	**6.3%**	**3.9%**	N/A	**1.5%**	**0.7%**
	JPMC 2025/26f	Feed & Resid/ Seed & Resid/ Indust.	1.7%	-1.5%	5.4%	5.0%			
		Food, seed & industrial/ Crush	1.7%	-1.5%	3.0%	2.3%			
		Domestic Consumption	**1.7%**	**-1.5%**	**3.4%**	**3.3%**		**3.0%**	**1.2%**

Financial recession | Non-financial recession

Source: USDA, J.P. Morgan Commodities Research

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Softs join the wider ags under direct trade war influence

CBOT arguably received a reprieve this week as USMCA compliant lines remained at a 0% import tariff rate, buffered from extreme and broad-based Liberation Day tariffs. While there was no timeline set for the 0% rate, it looks likely to remain so under the life of the agreement (which is being re-negotiated). The same cannot be said for the wider complex, namely the softs, which now face US import tariffs of various rates (Table 2, Table 3). Unlike bullion, energy, and certain mineral imports, agri commodities did not receive exemption from tariffs, not even in cases of complete import dependence, a risk we have discussed.

The US is import dependent in cocoa and coffee imports, amongst other products. ICE NY Cocoa has led the upside across ag markets this week, up 12% WOW on Thursday before paring gains to some 6% WOW as a recessionary outlook is being priced in. Cocoa prices have also found some support this week alongside confirmation of rising farmgate prices in Cote d'Ivoire, now at $3,620/tonne for this season's small mid-crop, up 13% from the main crop, although still below 40% of the spot price. Notably, Cote d'Ivoire supplied 40% of US cocoa imports in 2024 - typically closer to >50% in a normal production year, and imports to the US now face a 21% tariff. Flows of Ecuadorian cocoa to the US have been strong over recent months - given rising availability and the current preferential tariff rate of 10%, we anticipate continued growth in this trade flow. Brazil was arguably a winner, securing the lowest possible reciprocal US import tariff rate of 10%, and is well placed to continue growing coffee export share to the US, particularly in conilons. Notably, Vietnam appears to be in discussions to negotiate down its tariff rate of 46%.

Table 2: US cocoa, green coffee and sugar agri commodity imports

Thousand tonnes

	US Reciprocal Tariff adjusted, 2 April	2019	2020	2021	2022	2023	2024	% total 2024
US cocoa beans imports								
Cote d'Ivoire	21%	208	193	277	171	133	81	41%
Ecuador	10%	47	71	78	70	54	53	27%
Ghana	10%	71	51	48	52	53	31	16%
Dominican Republic	10%	26	21	17	19	13	19	9%
Total imports to US		376	377	471	343	269	198	100%
% US consumption		94%	99%	121%	90%	77%	58%	
US green coffee imports								
Brazil	10%	46	449	463	473	343	453	34%
Colombia	10%	344	289	290	294	248	262	19%
Vietnam	46%	170	157	143	141	142	96	7%
Honduras	10%	88	73	102	69	96	86	6%
Guatemala	10%	84	71	89	88	76	79	6%
Peru	10%	63	57	40	63	54	71	5%
Total imports to US		1,593	1,428	1,469	1,513	1,276	1,348	100%
% US consumption		104%	88%	94%	97%	80%	91%	
US sugar imports								
Brazil	10%	186	397	303	162	554	1037	36%
Mexico	0%	777	736	759	990	725	321	11%
Dominican Republic	10%	178	212	205	236	180	179	6%
Canada	0%	0	0	0	0	0	213	7%
El Salvador	10%	113	75	51	132	102	140	5%
Guatemala	10%	193	121	150	178	98	144	5%
Total imports to US		2,310	2,368	2,158	2,378	2,193	2,895	100%
% US consumption		20%	21%	19%	20%	19%	18%	

Source: USDA GATS historicals, J.P. Morgan Commodities Research

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Table 3: Other leading US agri product imports

	US Reciprocal Tariff adjusted, 2 April	2019	2020	2021	2022	2023	24 (till Nov)	% 11M24
US vegetable oils imports (million tonnes)								
China	(34%) 54%*	2.0	1.9	2.2	2.3	3.2	3.2	48%
Mexico	0%	1.4	1.3	1.9	1.9	2.0	1.8	26%
Germany	20%	0.3	0.3	0.3	0.3	0.3	0.4	6%
Japan	24%	0.7	0.6	0.3	0.3	0.2	0.2	3%
Indonesia	32%	0.1	0.1	0.1	0.1	0.2	0.2	3%
Total imports to US		5.1	5.0	5.6	6.0	6.8	6.8	100%
US rice imports (1,000 tonnes)								
Thailand	37%	583	656	555	764	766	766	58%
India	27%	194	267	206	277	295	285	22%
China	(34%) 54%*	66	66	65	86	86	86	6%
Total imports to US		988	1,217	983	1,322	1,365	1,324	100%
% US consumption		22%	27%	20%	28%	30%	27%	
US fresh vegetable imports (million tonnes)								
Mexico	0%	5.9	6.1	6.6	6.7	6.7	6.0	89%
Japan	0%	1.3	1.4	1.4	1.6	1.7	1.5	23%
Total imports to US		5.1	5.0	5.6	6.0	6.8	6.8	100%
US live animals imports (million heads)								
Canada	0%	18.5	17.5	20.1	21.6	21.0	19.7	90%
Mexico	0%	1.4	1.5	1.1	0.9	1.3	1.3	6%
Total imports to US		21.1	20.4	22.9	23.8	23.4	22.0	100%
US wheat imports (million tonnes)								
Canada	0%	1.8	1.8	1.5	1.7	2.1	1.9	90%
Total imports to US		1.8	1.9	1.5	1.7	2.5	2.1	100%
% US consumption		6%	6%	5%	6%	8%	7%	

Source: USDA GATS historicals, J.P. Morgan Commodities Research

USDA's 31 March reports - wheat acreage intentions surprise to the downside

Prospective Plantings: The USDA March 31 reports largely delivered on market expectations – and avoided an extreme bear scenario for corn. According to the farmer survey based Prospective Plantings report, US farmers intend to plant corn 95.3 million ac (+4.7 million ac YOY and vs. JPMCf 94.5 million ac), soybeans 83.5 million ac (-3.6 million ac YOY and vs. JPMCf 83.5 million ac), spring wheat 10 million ac (-0.6 million ac YOY and vs. JPMCf 10.8 million ac), and cotton 9.9 million ac (-1.3 million ac YOY and vs. JPMCf 10.2 million ac). **The March Quarterly Grain** stocks report was in line with trade expectations, with 8.15 billion bu of corn (-2.4% YOY), 1.91 billion bu of soybeans (3.5% YOY) and 1.24 billion bu of wheat (13.6% YOY).

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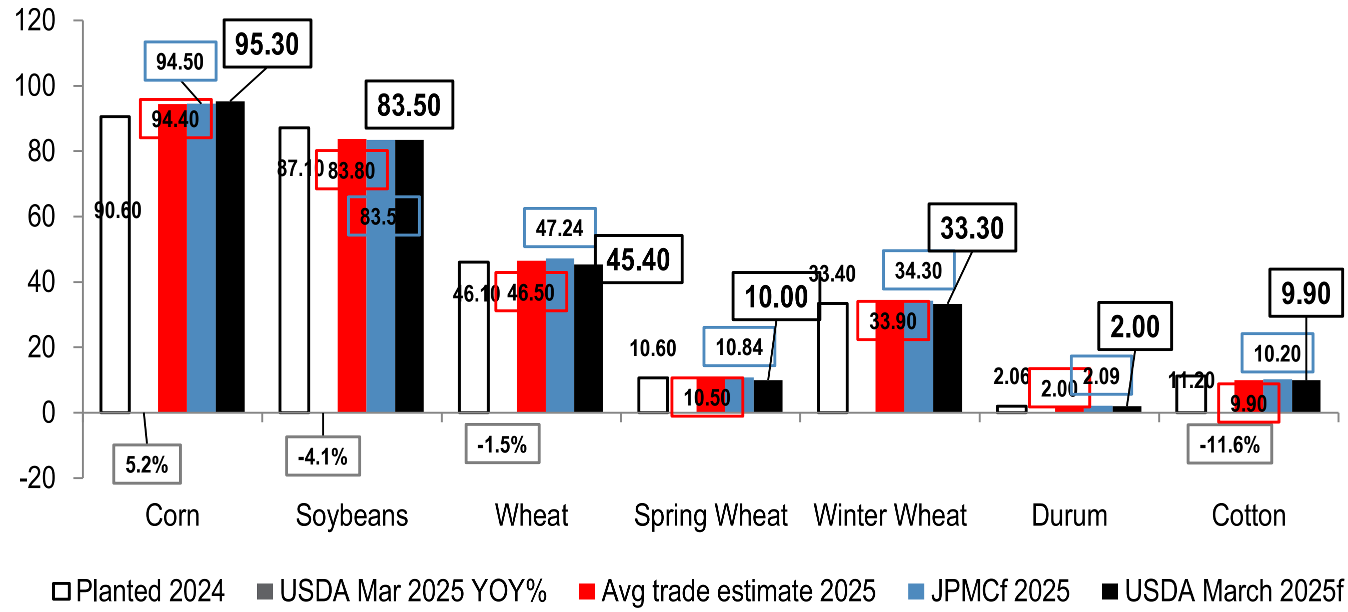
Figure 4: US farmers planting expectations generally delivered on market expectations, surprised to the downside for wheat

Million ac



Source: USDA, Bloomberg, J.P. Morgan Commodities Research

Table 4: Both spring and winter wheat planning expectations fell much below average trade and JPMC expectations raising risks of a tighter US balance - or lower US corn/soybean acres ahead

Million ac

	March 2025f	USDA Outlook Feb 2025f	Planted 2024	Mar 2024 intentions	JPMC 2025f	Trade estimates Avg.	Low	High	USDA Mar 2025 YOY%	USDA Mar 2025 v avg trade exp %
Corn	95.30	94.00	90.60	90.00	94.50	94.40	92.50	96.60	5.2%	1.0%
Soybeans	83.50	84.00	87.10	86.50	83.50	83.80	82.50	85.50	-4.1%	-0.4%
Wheat	45.40	47.00	46.10	47.50	47.24	46.50	45.40	47.10	-1.5%	-2.4%
Spring	10.00	n/a	10.60	11.34	10.84	10.50	10.00	11.40	-5.7%	-4.8%
Winter	33.30	n/a	33.40	34.14	34.30	33.90	32.80	34.30	-0.3%	-1.8%
Durum	2.00	n/a	2.06	2.03	2.09	2.00	1.70	2.30	-2.9%	0.0%
Cotton	9.90	10.00	11.20	10.70	10.20	9.90	8.80	10.50	-11.6%	0.0%

Source: USDA, Bloomberg, J.P. Morgan Commodities Research

Table 5: USDA March 2025 Quarterly Grain Stocks were largely inline with expectations

Million bu

	USDA Mar 2025	USDA Mar 2024	Trade estimates Avg.	Low	High	Mar Qr YOY % change	Av trade est. vs Mar 2025 %
Corn	8,151	8,352	8,154	8,060	8,311	-2.4%	0.0%
Soybeans	1,910	1,845	1,905	1,823	2,015	3.5%	-0.3%
Wheat	1,237	1,089	1,221	1,169	1,260	13.6%	-1.3%

Source: USDA, Bloomberg, J.P. Morgan Commodities Research

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Relevant research:

Oil Markets Weekly: A user's guide to $50 oil … or below, Kaneva, 4 April

There will be blood, Kasman et al, 3 April

I never promised you a rose garden: How tariffs became thorny for USD, Chandan et al, 3 April

Global Commodities: Market-based green shoots for manufacturing or a false dawn?, Hunter et al, 1 April

Commodity Market Positioning Flows: Global commodity open interest value at a three-year high ahead of 'Liberation Day' tariff risks, Allen et al, 1 April

Oil Markets Weekly: Offsetting dynamics: demand and price elasticities at work, Kaneva et al, 28 Mar

Agricultural Markets Weekly: Balancing tariff risks and planting intentions, Allen, 28 Mar

CFTC Commitments of Traders - aggregated across US agri commodities, Allen, 28 Mar

Agricultural Commodities Fundamentals Update Presentation: March 2025 Fundamental Projections, Allen, 21 Mar

Agri Markets Outlook 2025/26: Fundamentals trump uncertainty, bullish price risk bias off a low base, Allen et al, 27 Nov 2024

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Appendix

Table 6: JP Morgan Commodities Research Agri Commodity price forecasts - quarterly average spot

Agri Commodities		1Q24	2Q24	3Q24	4Q24	*2024f*	1Q25	*2Q25f*	*3Q25f*	*4Q25f*	*2025f*	*1Q26f*	*2Q26f*	*3Q26f*	*4Q26f*	*2026f*
CBOT Wheat USc/bu	***Base case (Nov 24)***	576	607	546	560	***573***	555	***620***	***620***	***650***	***611***	***650***	***630***	***630***	***650***	***640***
	Change from Sep 24 (%)							*-9%*	*-7%*	*-3%*	*-9%*					
	Base case (Sep 24)							***680***	***670***	***670***	***673***					
CBOT Corn USc/bu	***Base case (Nov 24)***	435	443	392	426	***424***	472	***450***	***440***	***450***	***453***	***440***	***440***	***430***	***450***	***440***
	Change from Sep 24 (%)							*0%*	*-2%*	*0%*	*1%*					
	Base case (Sep 24)							***450***	***450***	***450***	***450***					
CBOT Soybeans USc/bu	***Base case (Nov 24)***	1,194	1,185	1,039	994	***1,103***	1,024	***1,020***	***1,000***	***980***	***1,006***	***980***	***980***	***980***	***1,000***	***985***
	Change from Sep 24 (%)							*-18%*	*-20%*	*-22%*	*-20%*					
	Base case (Sep 24)							***1,250***	***1,250***	***1,250***	***1,250***					
ICE #11 Sugar USc/lb	***Base case (Nov 24)***	22.6	19.6	19.4	21.5	***20.8***	19.4	***21.5***	***21.5***	***22.0***	***21.1***	***22.0***	***22.0***	***22.0***	***22.0***	***22.0***
	Change from Jul 24 (%)							*-17%*	*-17%*	*-15%*	*-19%*					
	Base case (Jul 24)							***26***	***26***	***26***	***26***					
ICE #2 Cotton USc/lb	***Base case (Nov 24)***	90	78	69	71	***77***	66	***73***	***75***	***75***	***72***	***73***	***73***	***74***	***75***	***74***
	Change from Sep 24 (%)							*0%*	*0%*	*0%*	*-3%*					
	Base case (Sep 24)							***73***	***75***	***75***	***74***					
MDE-Bursa Palm Oil MYR/t	***Base case (Nov 24)***	3,998	4,031	3,989	4,826	***4,211***	4,674	***4,800***	***5,100***	***5,200***	***4,943***	***5,200***	***5,200***	***5,200***	***5,500***	***5,275***
	Change from Apr 24 (%)							*9%*	*21%*	*18%*	*14%*					
	Base case (Apr 24))							***4,400***	***4,200***	***4,400***	***4,333***					

Source: CBOT, ICE, Bloomberg Finance L.P., J.P. Morgan Commodities Research. Note: All Forecasts are period averages, as of 27 November 2024.

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Figure 5: Price momentum across commodities

z-score (if z-score is -ve, trading signal = -1, if z score +ve, trading signal = +1, if score is > max or min momentum = trading signal is 0, neutral)

Market	Lookback duration	Lookback sessions	z-score 03/04/25	Extreme threshold	Current signal	z-score 27/03/25	Sessions since last signal switch	Information ratio	% change of return index from its MA
ICE Brent	Long	504	-0.17	+/-2	-1	-0.02	0	0.52	-4.9%
	Short	84	-0.36		-1	0.03	0	0.44	-4.3%
NYMEX WTI	Long	462	-0.19	+/-2	-1	-0.04	0	0.48	-5%
	Short	21	-0.26		-1	0.53	0	0.48	-1.6%
NYMEX Gasoline	Long	483	-0.35	+/-1.5	-1	-0.20	36	0.21	-9.2%
	Short	105	-0.27		-1	0.03	0	0.21	-3.6%
ICE Gasoil	Long	378	-0.32	+/-1.5	-1	-0.18	29	0.56	-9%
	Short	63	-0.55		-1	-0.15	0	0.56	-5.6%
NYMEX Nat Gas	Long	315	1.14	+/-1.5	1	0.88	16	0.57	31.2%
	Short	105	1.28		1	1.07	10	0.57	22.0%
TTF Nat gas	Long	294	-0.05	+/-1.5	0	0.08	0	1.38	-2.2%
	Short	21	-0.58		-1	-0.20	1	1.38	-5.5%
ICE EUA	Long	483	-0.31	+/-1.5	-1	-0.24	32	0.42	-12.9%
	Short	42	-0.97		-1	-0.84	32	0.42	-9.6%
COMEX Gold	Long	483	2.35	+/-1.5	0	2.28	47	0.43	27%
	Short	21	0.94		1	1.17	0	0.43	2.5%
COMEX Silver	Long	462	0.50	+/-1.5	1	1.02	220	0.32	10.6%
	Short	10	-1.79		0	0.73	0	0.32	-6.2%
NYMEX Palladium	Long	273	-0.36	+/-1.5	-1	-0.12	1	0.83	-8%
	Short	42	-0.62		-1	0.02	0	0.83	-4.8%
NYMEX Platinum	Long	273	-0.38	+/-1.5	-1	-0.05	1	0.53	-5.1%
	Short	105	-0.37		-1	0.12	0	0.53	-3.2%
LME Copper	Long	399	-0.02	+/-1.5	0	0.21	0	0.52	0%
	Short	147	-0.07		-1	0.35	0	0.52	-0.9%
LME Aluminium	Long	357	-0.24	+/-1.5	-1	0.09	2	0.36	-3.5%
	Short	105	-0.83		-1	-0.27	7	0.36	-6.6%
LME Lead	Long	357	-0.46	+/-1.5	-1	-0.28	185	0.35	-10%
	Short	126	-0.31		-1	0.03	3	0.35	-3.8%
LME Nickel	Long	336	-0.37	+/-1.5	-1	-0.26	220	0.58	-9.9%
	Short	42	-0.18		-1	0.25	0	0.58	-1.6%
LME Zinc	Long	399	-0.23	+/-1.5	-1	0.04	2	0.50	-5%
	Short	126	-0.76		-1	-0.29	65	0.50	-9.0%
CBOT Corn	Long	399	-0.38	+/-2.5	-1	-0.47	28	0.40	-7.3%
	Short	63	-0.65		-1	-0.86	24	0.31	-5.2%
CBOT Wheat	Long	294	-0.79	+/-1.5	-1	-0.85	215	0.15	-12.8%
	Short	168	-0.59		-1	-0.67	26	0.16	-7.5%
Kansas Wheat	Long	483	-0.75	+/-3	-1	-0.78	441	0.25	-16.2%
	Short	147	-0.23		-1	-0.29	8	0.38	-2.9%
CBOT Soybeans	Long	231	-0.38	+/-2.5	-1	-0.38	337	0.35	-5%
	Short	42	-0.37		-1	-0.37	1	0.30	-2.0%
ICE Cotton	Long	483	-0.89	+/-1.5	-1	-0.78	260	0.15	-21.6%
	Short	168	-0.63		-1	-0.41	259	0.16	-8.6%
ICE Sugar	Long	252	0.13	+/-3	1	0.12	15	0.40	2.3%
	Short	63	0.37		1	0.41	19	0.47	3.3%
ICE Coffee	Long	273	2.30	+/-1.5	0	2.28	101	0.16	42.6%
	Short	63	0.43		1	0.41	20	0.42	3.6%
ICE NY Cocoa*	n/a	10	3.74	+/-3	0	-0.06	1	0.15	13.2%

* ICE NY Cocoa uses only short-term momentum

Source: J.P. Morgan Commodities Research, *ICE NY Cocoa uses only short-term momentum

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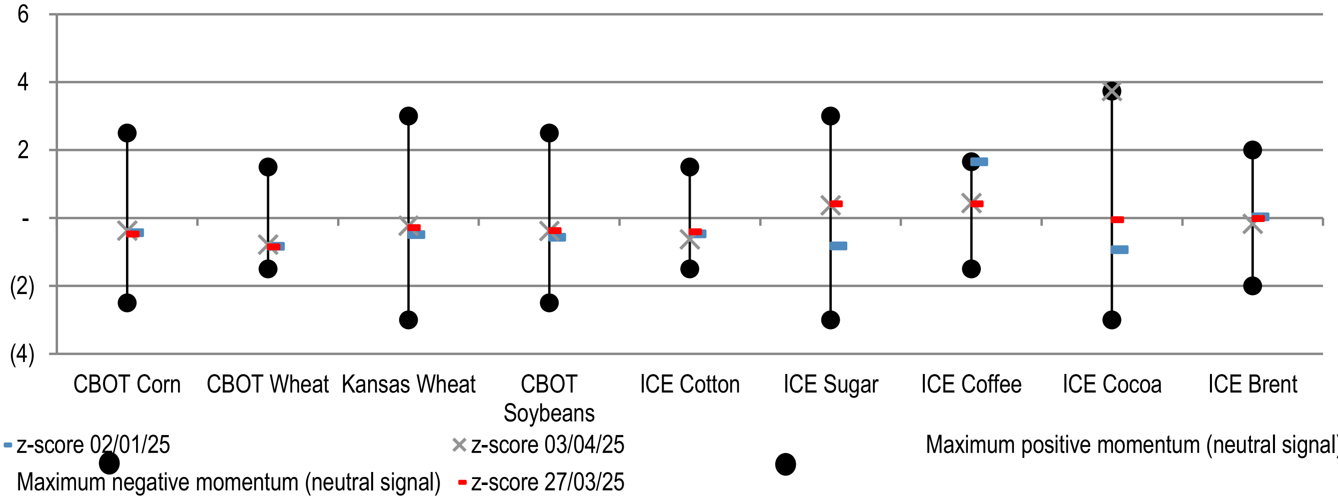
Figure 6: Price momentum (z-scores) across agri commodities and trading signals

z-score (if z-score is -ve, trading signal = -1, if z score +ve, trading signal = +1, if score is > max or min momentum = trading signal is 0, neutral)



Source: J.P. Morgan Commodities Research

- When the z-score (indicator of momentum) reaches 0, known as a switch point, it often triggers a change in signal from buy-to-sell, or sell-to-buy received by stochastic price/trend following trading models.
- This can drive heightened price volatility in the underlying commodity price when there is a large presence of CTA/trend-following trading models.
- When momentum reaches extreme levels either maximum positive or maximum negative, a neutral signal is often sent, to stop or slow the buying or selling. This often drives profit taking or an exit of positions.

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