MINUTES OF THE DECEMBER 14, 2023 MEETING OF THE

U.S. COMMODITY FUTURES TRADING COMMISSION'S AGRICULTURAL ADVISORY COMMITTEE

The Agricultural Advisory Committee ("AAC") convened for a public meeting, with options for virtual access, on Thursday, December 14, 2023, at 9:10 a.m. at the U.S. Commodity Futures Trading Commission's ("CFTC" or "Commission") Headquarters Conference Center, located at Three Lafayette Centre, 1155 21st St., NW, Washington, DC. The meeting consisted of a panel, two presentations, and a discussion on future AAC meeting topics. The panel addressed futures margining and the agricultural markets. The first presentation discussed the impact of Russian-Ukrainian War on wheat futures prices. The second presentation discussed global events impacting the U.S. futures markets.

AAC Members in Attendance

Scott Herndon, Field to Market, AAC Chair

Buddy Allen, American Cotton Shippers Association

Joe Barker, National Council of Farmer Cooperatives

Chris Betz, Michigan Agri-Businesses Association

Layne Carlson, Minneapolis Grain Exchange

Robert Chesler, United Dairymen of Arizona

Gerald Corcoran, Futures Industry Association

Patrick Coyle, National Grain and Feed Association

Edward Elfmann, American Bankers Association

Edward Gallagher, National Milk Producers Federation

H. Thomas Hayden, Jr., Commodity Markets Council

Thomas Hogan, Cocoa Merchants Association of America

Jered Hooker, American Soybean Association

Bryan Humphreys, National Pork Producers Council

Willis Kidd, Citadel

Jeff Lloyd, Archer Daniels Midland

Michelle Mapes, Green Plains Inc.

Cynthia Nickerson, U.S. Department of Agriculture

Edward Prosser, The Scoular Company

Michael Ricks, Cargill

Troy Sander, National Cattleman's Beef Association

Liam Smith, Futures Industry Association, Principal Traders Group

Stephen Strong, North American Export Grain Association

Curt Strubhar, Grain and Feed Association of Illinois

Justin Tupper, US Cattlemen's Association

Wes Uhlmeyer, Demeter Logistics

Hayden Wands, American Bankers Association

Ryan Weston, American Sugar Alliance

Jason Wheeler, USA Rice Federation

CFTC Commissioners and Staff in Attendance

Rostin Behnam, Chairman and AAC Sponsor Christy Goldsmith Romero, Commissioner Summer K. Mersinger, Commissioner Swati Shah, Associate Director, Division of Market Oversight, and AAC Designated Federal Officer ("DFO")

Speakers in Attendance

Suzanne Sprague, CME Jeff Reardon, White Commercial Corporation Joe Barker, National Council of Farmer Cooperatives Calum Turvey, Agricultural Finance Professor, Cornell University Seth Meyer, Chief Economist, USDA

I. Opening Remarks

Ms. Shah called the meeting to order, welcoming Chairman Behnam, Commissioners Goldsmith Romero and Mersinger. She also thanked all Committee members and guest speakers for their attendance.

In his opening remarks, Chairman Behnam thanked Ms. Shah and Chair Herndon. He then reflected on the Committee's work during 2023, acknowledging the current global situation and its volatility effects on the markets, and emphasizing the CFTC's responsibility in maintaining a healthy economy. Looking ahead, the Chairman mentioned an upcoming April 2024 conference at Kansas State University (K-State), indicating it would be the first major in-person event since COVID to provide a valuable opportunity for the Commission to connect with stakeholders to discuss critical agricultural market and risk management issues. The Chairman concluded by thanking the Committee members and staff for their work.

Next, Commissioner Goldsmith Romero thanked all attendees for their service and acknowledged the importance of their role in the agricultural sector. She emphasized the value of firsthand experience from stakeholders, highlighting how on-site visits helped her understand challenges like transportation delays and labor issues. She also recognized the importance of well-functioning derivatives markets, particularly in relation to price stabilization and volatility management due to geopolitical events such as the war in Ukraine. In conclusion, Commissioner Romero reiterated her daily monitoring of key agricultural markets like wheat and highlighted the importance of this data analysis in her work.

Commissioner Mersinger followed by sharing a personal anecdote about witnessing the high costs of labor and fuel expended in production agriculture during a recent visit home to South Dakota. This experience reinforced in her the importance of well-functioning agricultural markets for hedging costs and risks related to production agriculture. Commissioner Mersinger reassured all attendees that the CFTC still considers agriculture issues its top priority, despite showing a strong interest in other financial markets such as

cryptocurrency. She mentioned her participation at a recent Senate Agriculture Committee hearing, where 90% of the questions asked were agriculture-related. Commissioner Mersinger concluded by thanking all attendees and expressing her enthusiasm for the upcoming presentations.

Ms. Shah then turned the meeting over to AAC Chair Herndon, who proceeded with the roll call. He then introduced Ms. Sprague, Mr. Reardon, and Mr. Baker as speakers for the panel on futures margining and its impact on the agricultural markets.

II. Panel: Futures Margining and the Agricultural Markets

Ms. Sprague discusses CME's approach in setting margins for agricultural and other futures and options contracts, emphasizing its adaptability for risk management. Specifically, CME uses data-driven margin methodologies to closely track the impact of margin changes on market liquidity, using "smoothing effects" to avoid sudden spikes in margin requirements, and to prevent liquidity issues during periods of high volatility. The goal is a 99% coverage standard at the portfolio level, achieved through daily mark-to-market and performance bonds. Factors considered when setting margins include: (1) historical data with varying weighted lookback periods, such as seasonality and past volatility events; (2) forward-looking elements like impending weather or geopolitical events; (3) implied volatility of options markets; and (4) liquidity and concentration in a product or portfolio.

Secondly, Ms. Sprague indicated that CME currently uses SPAN (Standard Portfolio Analysis of Risk) for margin setting but is transitioning to an enhanced version called SPAN 2, considered more automated in reducing manual intervention and allowing for more frequent margin adjustments based on daily data. With energy products already migrated, and equities, interest, and FX products slated for 2024, the migration of agricultural products--considered as its last asset class—is scheduled for 2025.

In conclusion, Ms. Sprague highlighted CME's transparency policy: its website publishes margin levels for major products in major asset classes, and also offers a variety of tools so customers can analyze margins for specific portfolios.

The next speaker, Mr. Reardon, expressed concern for the economic impact of initial margin requirements on his customer base, which consists of the three following tiers:

- Large cooperatives: These cooperatives understand the need for margins but large increases can still cause stress, especially when dealing with bank syndicates that require them to stay hedged;
- **Independent grain elevators:** These mid-sized businesses may have regional bank relationships. A recent increase in rice margins from \$750 to \$3700 per contract translates to a significant sum (around \$1.5-2 million) which can limit their ability to hedge.

• **Smaller farmers:** These farmers are most vulnerable to margin increases. A \$50,000-\$100,000 margin requirement could push them out of the futures market altogether.

While acknowledging the importance of market protection, Mr. Reardon emphasized the burden of margin requirements on smaller commercial hedgers in the agricultural markets. He commended the CME's transparency approach and hoped to explore this further during Q&A.

Mr. Barker was the last speaker, who acknowledged that margin requirements are a necessary cost of hedging with futures and options to ensure market integrity. Daily mark-to-market keeps accounts funded and also reflects current positions. He also highlighted the FCM's buffering role, and discussed cash contracts and OTC products as alternatives to futures and options that have their own set of risks such as less flexibility (cash contracts) and counterparty default risk (OTC products). In conclusion, he advocated for continual improvement of the 175-year-old margin system, to better reflect the needs of all market participants.

Mr. Herndon then opened the floor to member questions and comments. Mr. Wheeler, who represents the USA Rice Federation, discussed the challenges faced by rice industry participants due to initial margin requirements on the rice futures contract. Since the rice futures market is relatively thin compared to other agricultural products, a surge in rice prices may lead to a significant increase in initial margin requirements, which could remain high even after rice prices stabilize, creating a financial burden for commercial hedgers. This accordingly would limit access to the futures market for both farmers and commercial participants. He however acknowledged a positive outcome after engaging in a dialogue with CME officials, who reviewed the situation and eventually lowered the margin requirements. But while expressing his appreciation for the exchange's responsiveness, Mr. Wheeler emphasized the need for a faster adjustment process in the future, thus was hopeful that the upcoming SPAN 2 system will be more responsive to such situations.

Mr. Gallagher from the National Milk Producers Federation then asked Mr. Reardon whether CME's transition to SPAN 2 will make it easier, about the same, or more challenging for small cooperatives to fund their margin accounts. In replying, Mr. Reardon acknowledged that while the impact is still unknown, he believed SPAN 2 might offer more time to secure funding from banks, which is crucial for hedgers who need to maintain their positions. In addition, greater transparency provided by SPAN 2 would also facilitate his job of educating bankers and CPAs on how these cooperatives manage risk.

Mr. Corcoran, representing the Futures Industry Association (FIA), acknowledged the challenge of balancing the need for higher margins to protect the system during volatile periods with the increased costs imposed on agricultural producers, who rely on debt financing. He highlighted the role of FCMs as shock absorbers in bearing the initial jolt of margin increases for customers, thereby giving them time to secure additional funding. This is especially helpful for smaller and medium-sized producers whose banks may not be prepared for sudden margin hikes. While believing SPAN 2 is a better product, he predicted the potential challenges of daily margin adjustments, which can be confusing for customers accustomed to a more static margin

requirement. Overall, Mr. Corcoran advocated for a transitional approach that balances market stability with the varying needs of agricultural producers.

Mr. Weston from the American Sugar Alliance expressed his appreciation for the Committee's focus on maintaining market integrity in the futures industry. Due to the lack of a refined sugar futures contract in the U.S, hedging through the raw sugar market is essential for the industry. Emphasizing the importance of efficient and cost-effective hedging mechanisms, he nevertheless acknowledged the challenges faced by individual farmers due to high input costs and the need to balance hedging with the physical production of sugar. In addition, external factors such as weather events (drought) and international water disputes can significantly impact the sugar market, despite its relatively smaller size. Overall, he commended the Committee for proactively addressing these issues before they escalate into major problems.

Mr. Strubhar, representing the Grain and Feed Association of Illinois, then raised a question about the timing of margin calls in the context of hedging activities. The standard practice involves T+1 margin calls, where margin calls for the previous day's activities are made the next day. During volatile periods, FCMs may have a policy of intraday margin calls if certain thresholds are breached, which can add an extra layer of complexity. Accordingly, Mr. Strubhar expressed a preference for a T-0 margin system, where margins are called on the same day. While conceding the challenges related to market closure times and bank cutoffs, he asked the panelists if there might be any initiative to adopt a T-0 margining system.

In reply, Ms. Sprague acknowledged that there are technological options for real-time capabilities but noted the industry's preference for "on-demand" solutions, since this would avoid overwhelming market participants with constant margin updates. In addition, the interdependent nature of the financial system could shift the T-0 margin burdens to different players, particularly with regard to funding issues. For example, a T-0 margin system might require more upfront capital from farmers, who might not have immediate access to funds during harvest. Banks also play a crucial role in the current system, and their capabilities would also need to adapt to a T-0 environment. Overall, Ms. Sprague expressed a skepticism to T-0 margin calls, opting instead for a nuanced approach that considers the entire financial ecosystem.

Lastly, Commissioner Mersinger asked Mr. Reardon to clarify the initial margin requirements for end-users, referring to a slide presented by Mr. Reardon that showed an initial margin amount. She was wondering if the amount shown on the slide reflected the exact margin required by the clearinghouse (CME) or if it also included buffering calculations from an FCM. In response, Mr. Reardon confirmed that the slide only reflected the CME margin.

After the Q&A period concluded, Mr. Herndon introduced Dr. Calum Turvey of Cornell University, who gave the first presentation.

III. Presentation 1: Impact of Russian-Ukrainian War on Wheat Futures Prices

Dr. Turvey's presentation illustrated how the war in Ukraine has presented a unique opportunity to study the impact of conflict on commodity prices, as no prior research exists on this specific topic. His study focused on three futures contracts: Chicago wheat, Ukrainian wheat,

and Black Sea wheat from Russian ports. The analysis used co-integration analysis to examine causal relationships between prices before the war, during, and after the cancellation of the Black Sea Grain Deal Initiative (which he called the "post-war" period). A trade model was also developed to simulate the war's impact on importing countries.

Before the war, Black Sea wheat prices heavily influenced both Ukrainian and Chicago wheat prices. This suggests Black Sea ports played a more significant role in the global market compared to Ukrainian ports. As the war unfolded, the relationships began to change. During the early phase of the conflict, Ukrainian wheat price fluctuations significantly impacted Chicago wheat prices, reflecting global concern about disrupted Ukrainian supplies. During the mid-war phase, the blockade of Ukrainian ports severed the link between Black Sea and Ukrainian wheat prices, creating two distinct markets. However, The Black Sea Grain Deal Initiative entered in July 20222 (allowing Ukrainian wheat exports), shifted the focus back to Ukrainian supply and its impact on global markets. After the Black Sea Agreement's cancellation in 2023, correlations between prices collapsed, suggesting a complete disconnect between the three markets. Overall, Dr. Turvey's presentation illustrated the complex interplay between war, international trade, and commodity futures markets. The war in Ukraine caused significant disruptions, and these disruptions were reflected in the constantly evolving relationships between different wheat future contracts. In conclusion, Dr. Turvey acknowledged that his study has not been submitted for peer-review due to rapidly changing conditions. He indicated however that the full paper, with detailed findings, is available upon request.

There was no member discussion following Dr. Turvey's presentation. Ms. Shah then called for a 15-minute break.

III. Presentation 2: Global Events Impacting the U.S. Futures Markets

After the break, Mr. Meyer, USDA Chief Economist, gave a comprehensive report on several global and U.S. agricultural markets.

With respect to the grain markets, prices of corn and soybeans have stabilized since their highs in 2022 due to the Ukraine War. Global stockpiles of corn and soybeans are expected to rise, while wheat and rice stockpiles are expected to tighten. El Nino weather conditions are expected to bring changes in global crop production.

Farmers responded to high prices in 2022 by planting more corn and soybeans, and less cotton and hay. Despite some unfavorable weather conditions, overall crop yields were good, with record-high corn production in the United States.

There are concerns about lower soybean production in Mato Grosso, Brazil, due to dry and hot weather conditions. A rebound in soybean production is expected in Argentina and Paraguay. The U.S. crush demand for soybeans is being driven by domestic biofuel production policies, particularly the demand for renewable diesel.

Global wheat prices remain volatile despite large crops due to concerns about export disruptions from the Black Sea region. Recent export controls by India have contributed to rice price volatility.

Regarding the livestock markets, Mr. Meyer indicated that the U.S. cattle herd is in a contraction phase, leading to higher beef prices. Pork production is also expected to decline due to lower profitability in the swine industry.

With respect to trade and farm income, Mr. Meyer indicated that the past four years have been the best on record for U.S. agricultural exports and imports. Strong demand from China has boosted farm income in recent years, although this trend is slowing down. Producers are facing potential margin issues due to falling output prices and high production costs. Other challenges include growing global competition, ongoing issues with the Mississippi River and Panama Canal, and animal welfare regulations in California.

There were no comments from Committee members on Mr. Meyer's presentation. Mr. Herndon then asked Chairman Behnam and Commissioner Mersinger if they had any questions.

Chairman Behnam thanked Mr. Meyer for the valuable partnership, expressing his hope that the CFTC's market-based data has been useful to USDA research initiatives. He then asked Mr. Meyer for clarification on the "record high" statistic on farm income, as he found such statistic surprising, given the high production costs and other negative market factors that farmers have experienced.

In response, Mr. Meyer reiterated that 2022 was indeed a year of record farm income, despite concerns about input prices like fertilizer. Specifically, he indicated that farmers were more focused on the availability of fertilizer, and less on its price increase. These farmers might have secured some supplies beforehand, allowing them to benefit from strong commodity prices despite higher input costs overall. He nevertheless admitted that national farm income figures might not reflect every individual situation.

Chairman Behnam then asked how Brazil's agricultural market would affect U.S. producers and their exports. Specifically, the Chairman was wondering if increased domestic biofuel consumption might decrease U.S. corn and soybean sales to China, potentially filling the gap created by Brazil's market influence.

In replying, Mr. Meyer expected Brazil's agricultural production to continue growing significantly. This growth, particularly in soybeans, has already impacted how the US thinks about its own production and storage. As for China's position, the country's massive and consistent demand for soybeans (around 60% of the market) has fundamentally changed the soybean supply system. Previously, the US and Brazil alternated in supplying China with soybeans every six months. Now, with China's demand not growing as explosively, Brazil still might not slow down production. The US however has an advantage with domestic demand for soybeans, which helps with competition for crushing soybeans to meet renewable fuel program needs, although increased crushing would create soybean meal as a byproduct, requiring the U.S. to find new markets for it.

Commissioner Mersinger then raised the issue of a trade deficit, identifying the deficit in terms of value, not volume. For example, the U.S. might be importing more expensive goods (like finished products) while exporting cheaper ones (like bulk commodities). She also asked Mr. Meyer if the trade deficit is a growing trend.

Mr. Meyer agreed such trade deficit might be a long-term challenge for U.S. agriculture due to concentration risks, i.e., concentrating trade in one destination (China) and one specific product (soybeans). This makes the U.S. more vulnerable to changes in demand. As a solution, he proposed raising the value of U.S. agricultural products to other countries, gaining access to new markets and expanding sales of strong commodities, at the same time identifying new high-value products for export, e.g., convincing Mexico to consume apple pie, for example.

IV. Member Discussion: 2024 AAC Agenda

Before adjournment, Mr. Herndon asked Committee members if they would like to submit any discussion topics for the 2024 agenda. Mr. Coyle, representing the National Grain and Feed Association, raised concerns about the impact of proposed banking regulations on FCMs, which he feared could lead to further consolidation of the FCMs and increase margin requirements for hedgers, leaving the small players with limited choice and even higher costs.

Mr. Barker suggested two potential topics for a future AAC meeting: (1) the interaction between livestock insurance products and farm programs with agricultural exchange-traded markets; and (2) a high-level update on the sustainability programs that the CFTC is developing with other advisory committees.

Mr. Prosser expressed interest in leveraging data technology on market oversight to improve market transparency for end users. Specifically, he wished to explore whether the same technology employed for market oversight could be applied to provide real-time updates on who is buying and selling, and/or trading quantities.

V. Closing Remarks

Chair Herndon thanked all participants. Ms. Shah recognized Chairman Behnam, who gave brief closing remarks that echoed his opening statement.

Ms. Shah adjourned the meeting at 11:50 a.m.

SW	4/20/2024
Scott Herndon	Date
AAC Chair	