MINUTES OF THE APRIL 11, 2024 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, April 11, 2024, at 9:30 a.m. at the Sheraton Overland Park Hotel, located at 6100 College Boulevard, Overland Park, Kansas. The meeting consisted of one panel and one presentation. The panel addressed agricultural lending. The presentation discussed options growth in the agricultural 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

Robbie Boone, Farm Credit Council

Layne Carlson, Minneapolis Grain Exchange

Robert Chesler, United Dairymen of Arizona

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

Willis Kidd, Citadel

Jeff Lloyd, Archer Daniels Midland

Michelle Mapes, Green Plains Inc.

Mark McHargue, American Farm Bureau Federation

Cynthia Nickerson, U.S. Department of Agriculture

Edward Prosser, The Scoular Company

Michael Ricks, Cargill

Derek Sammann, CME Group

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, Greenfield Holdings

Ryan Weston, American Sugar Alliance

Jason Wheeler, USA Rice Federation

Harold Wolle, National Corn Growers Association

CFTC Commissioners and Staff in Attendance

Rostin Behnam, Chairman and AAC Sponsor

Kristin N. Johnson, Commissioner

Christy Goldsmith Romero, Commissioner

Summer K. Mersinger, Commissioner

Caroline D. Pham, Commissioner Swati Shah, Associate Director, Division of Market Oversight, and AAC Designated Federal Officer ("DFO")

Invited Speakers in Attendance

Scott Donnelly, Farm Credit Association Joe Koenigsman, FDIC Ty Kreitman, Federal Reserve Bank of Kansas City Derek Sammann, CME Group

I. Opening Remarks

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

In his opening remarks, Chairman Behnam welcomed all attendees, noting that the meeting marked the third time the Committee convened in Kansas, given the COVID hiatus. Acknowledging the current challenges faced by U.S. agriculture, including geopolitical issues, climate, and economic uncertainties, he emphasized the importance of maintaining fair and accessible risk management tools for producers. The Chairman also highlighted the meeting agenda on markets and credit, then concluded by thanking Ms. Shah, Chair Herndon, Committee members, and staff for their work.

Next, Commissioner Johnson expressed her appreciation for the Committee and highlighted her personal connection to agriculture via friends and acquaintances owning or running small farms. She identified access to credit, capital, and risk management tools as key challenges for small and medium-sized farms, and echoed the Chairman's view regarding the impact of weather events, geopolitical events, and shipping disruptions on agricultural markets. Commissioner Johnson then mentioned precision agriculture as a potential area of focus for the Committee, acknowledging both its benefits and challenges.

Commissioner Goldsmith Romero followed by thanking all attendees for their service and also extending a special welcome to the Kansas Fed, the FDIC, and the Farm Credit Administration. She expressed her excitement in learning more about agricultural lending and options for farmers, highlighting her previous work experience at Treasury on lending issues and her interest in understanding the unique challenges of agricultural lending. While looking forward to the presentation on options for farmers, Commissioner Goldsmith Romero expressed some reservation based on her time working on options regulations at the SEC.

Commissioner Mersinger used her personal history to highlight the importance of agricultural lending, describing her first visit to Kansas City for a teenage scholarship pageant while her dad, a farmer, was busy planting. While noting that her father would miss many events during her youth due to farming work, she also recalled going with him to the bank to apply for a

loan. This experience made her realize how crucial agricultural loans are for farmers. Commissioner Mersinger concluded by expressing her excitement for the upcoming discussions and specifically praised speaker Mr. Sammann's wide-ranging knowledge.

Lastly, Commissioner Pham began by thanking Chairman Behnam, Ms. Shah, and the CFTC staff for organizing the meeting. She then mentioned her experience growing up in Central California's agricultural community where her family owned orchards, acknowledging the challenges faced by American farmers due to the shifting geopolitical landscape that has impacted production and the entire value chain. In conclusion, Commissioner Pham highlighted the CFTC's critical role in promoting access, fairness, and stability to the markets, which includes deterring price manipulation and establishing new tools to keep pace with innovation.

Ms. Shah briefly discussed Q&A protocols and proceeded with the roll call. She then turned the meeting over to AAC Chair Herndon, who introduced Mr. Kreitman, Mr.Koenigsman, and Mr. Donnelly as speakers for the panel on agricultural lending.

II. Panel: Agricultural Lending

Mr. Kreitman, an economist at the Kansas Fed, started the panel by discussing the U.S. economy from 2000 to 2024, and highlighting the current outlook for agriculture finances. He indicated there has been a "softening" or decrease in farm income over the past year due to lower commodity prices and higher production costs. This trend is expected to continue throughout 2024. In addition, there has been a weaker export market, as the strong demand for U.S. agricultural exports seen in 2021 and 2022 has softened, plus global economic conditions and geopolitical factors have also influenced export levels, posing a risk for farm income in 2024. Thirdly, rising financing costs due to increased interest rates, coupled with lower commodity prices, lead to thinner profit margins--which could pose a challenge for borrowers with high debt levels. Nevertheless, delinquency rates on farm loans are still low, and farmland values remain resilient. Overall, according to Mr. Kreitman, the U.S. agricultural economy is experiencing a period of moderation after a period of exceptional strength. Thus, despite some "headwinds," such as lower farm income and higher costs, he concluded that the financial cushion achieved in recent years is expected to provide some support for farm finances in 2024.

The next panelist was Mr. Koenigsman, a bank examiner at the FDIC, who discussed agricultural lending from a community bank perspective. He echoed Mr. Kreitman's view that despite some headwinds, farm banks are in the strongest financial condition that he has seen in his 34-year career. This is due to low delinquency rates and historically strong asset quality. He however expressed concerns about rising interest rates, which will make it more expensive for farmers to borrow, especially those who manage large operations with significant debt. This is in turn compounded by increasing input costs like machinery. He also observed that there has been an increase demand for operating loans, rather than land and equipment loans, since community banks typically don't finance land and equipment. Regarding the lenders, Mr. Koenigsman noted that there has been a shift in funding sources that may put pressure on net interest margins in the future, as banks need to rely on more expensive funding sources like the Federal Home Loan Bank and other venues to meet loan demand as core deposits decline. Lastly, since farmland values have continued to rise, Mr. Koenigsman is hesitant to predict a decline, but nevertheless

opined that there might be some impact on values in the future as capitalized cropland value starts to diverge from actual land value. Overall, Mr. Koenigsman acknowledged potential challenges due to rising interest costs and a shifting lending environment, but emphasized the current strength of the agricultural lending sector.

The last speaker was Mr. Donnelly, Director of the Association Examination Division at the FCA. He discussed the Farm Credit System portfolio and risk management practices in agricultural lending, explaining that the FCA provides credit to farmers, ranchers, and aquatic producers through bonds associated with regional Farm Credit banks. At the end of 2023, the Farm Credit System portfolio was valued at close to \$400 billion, with the majority (60%) in agricultural real estate and fixed rate loans. According to Mr. Donnelly, while debt credit risk is at an all-time low (0.45% nonperforming loan from the total balance), it is expected to rise due to declining net farm income. Thus, risk management is key for both lenders and borrowers. For lenders, this involves concentration parameters, portfolio stress testing, and borrower analysis. For borrowers, this involves knowing their production costs and using various risk management tools. Mr. Donnelly listed key risks going forward as including interest rates, income volatility, climate change, diseases, geopolitical pressures, and the U.S. political landscape.

Mr. Herndon then opened the floor for member questions and comments. The discussion pertaining to Mr. McHargue and Mr. Allen's comments focused on rising interest rates and its disparate impact on borrowers and lenders. While farmers with fixed-rate loans won't be affected for a while, others with variable-rate loans will be affected immediately. This also creates competitiveness concerns for banks as they may not be able to raise their loan rates to offset higher payouts on deposit rates. In this scenario, farmers with strong finances can withstand the pressure, whereas banks may struggle to reprice loans for farmers with different needs and/or lower creditworthiness. The ACRE Act, a safety net program for farmers, was mentioned during the discussion but its future is unclear. Overall, the panelists agreed that the future of interest rates and commodity prices seems uncertain which makes it difficult to predict their long-term impact.

Next, Mr. Elfmann raised a concern about inflationary impact, indicating that that the rising cost of living and borrowers' preference for non-farm luxury products will strain farm budgets once farm income decreases. The panelists agreed that while a recent government stimulus program has helped many farmers improve their cash flow positions, farmers may need to cut back on lifestyle expenses, and/or explore the viability of off-farm income, to stay financially stable through uncertain times.

In response to Mr. Strong's query about data on wholly-owned versus mortgaged farmland, Mr. Kreitman indicated that farm debt is relatively low compared to farm assets, at around 13% debt-to-asset ratio in 2024 for the entire U.S. farm sector. Most farm debt is real estate debt, with interest expense on that debt being about 5-6% of total farm expenses. Mr. Koenigsman added that interest rates on operating loans are more variable than real estate loans and have recently increased significantly. Mr. Donnelly observed that as interest rates rise, it will become more expensive for the next generation of farmers to buy land. Lastly, Mr. Kreitman and Mr. Koenigsman agreed with Mr. Betz that there is a need for more farmers to use risk management strategies in the futures markets to hedge against volatile prices.

Chair Herndon thanked Committee members for their comments and asked if the Commissioners had any questions. In response to Commissioner Mersinger's question regarding data on smaller farmers who actually use the derivatives markets, Mr. Donnelly said there is only a tiny percentage of small farmers using the derivatives markets to manage risk, possibly due to lack of knowledge or thinking they are not big enough to benefit.

Commissioner Goldsmith Romero then wondered if there are mechanisms to mitigate the impact of loan repricing due to high interest rates. Mr. Kreitman replied that strong working capital or cash reserves to reduce the debt level would be the best way. Another option might be for banks to extend the loan terms (e.g., from 7 years to 9 years for farm equipment) to lower the borrower's annual payments, but this option would cause other problems if becoming a trend. Mr. Donnelly added that the best approach is for lenders to communicate with borrowers well in advance of the loan maturity date so they can be prepared for the impact of higher interest rates and explore mitigation options accordingly.

In response to Commissioner Pham's question on whether there has been an increase in non-bank sources of credit, Mr. Kreitman indicated there is indeed a rising trend toward non-traditional lenders like the Farmers Business Network. Thus, farmers are no longer restricted to geographical locations for loans and can shop around for better rates, especially since these new lenders may not be subject to the same regulations as traditional banks. Mr. Kreitman added that while he also considers private equity firms and hedge funds as nonbank lending sources, these entities are more involved in farm real estate through investment trusts. To sum up, he acknowledged that traditional lenders like the Farm Credit and commercial banks still remain the primary source of farm loans. Mr. Koenigsman then reiterated that since community banks typically don't finance equipment, companies like John Deere and Case IH, which offer farm equipment, represent another primary lending source.

Commissioner Mersinger then commented on the transition cost borne by the agricultural markets due to climate change, geopolitical issues, and shifting product demand. She mentioned increased electrification--which may strain rural power grids and raise costs for farmers--and the recent cancellation of grain contracts by China which has created uncertainty in the agricultural export market. The panelists agreed that market uncertainty caused by a large trading partner such as China can definitely pose a risk. Similarly, as Mr. Coyle observed, increased competition from other countries, like those in South America, is driving down export prices for American agricultural products. Accordingly, mitigating measures were suggested, such as diversifying the export partner pool, lowering export demand (currently at 20% of U.S. production), and streamlining production costs.

After the Q&A period concluded, Mr. Herndon introduced Mr. Sammann, who gave the presentation on options growth in the agricultural markets.

III. Presentation: Options Growth in Agricultural Markets

Mr. Sammann's slide presentation illustrated that CME Group's agricultural options market has seen significant growth in recent years. Overall options volume has grown steadily over the past five years, reaching a record high in the first quarter of 2024. This growth is not

limited to the US market, but also showing rising European participation. All product categories within the agricultural options market have seen growth, with grains and oilseeds leading the way. Notably, commercial end users such as farmers are a major driver of this growth, with their participation increasing at a faster rate than the overall market. As a result, CME Group is committed to supporting this growth by providing educational resources and tools to all market participants.

Mr. Sammann then compared agricultural options trading with the equity markets. Generally, agricultural options are used for managing risk over a longer horizon, as opposed to equity options which tend to be concentrated around short-term expirations (i.e., one day or zero days). Even though there has been an increase in shorter-dated options trading in agricultural markets (up to one month), it remains a small fraction (around 10%) of the total volume, since agricultural options are mainly used by commercial end users (farmers) to manage risks associated with their crops--which are seasonal and have longer cycles than stocks. Nevertheless, CME Group offers a variety of short-dated options (i.e., weekly expirations, short-dated new crop options linked to a future contract for a later harvest, and calendar spread options) to cater to these users' needs for managing risks around specific events (e.g., the USDA reports).

Mr. Sammann also explained that options are increasingly traded in spreads rather than buying calls or puts outright, as spreads can be used to finance the cost of options or create specific risk profiles. For example, spread trading is more common in grains and oilseeds than in livestock. Accordingly, CME Group offers a variety of electronic tools and educational resources to help users understand options trading and available market data, such as open interest heat maps that visualize changes in open holdings (calls and puts) across different strike prices and maturities, and the CME Volatility Indices (CVOL) which provide insights beyond just at-themoney volatility, including indicators for upside and downside volatility, risk reversals (difference between call and put prices), and convexity (how much the wings of the volatility curve are priced).

Mr. Herndon then opened the floor for Q&A. Mr. Prosser commented on the emerging role of renewable fuels and asked whether the influx of new players from traditional energy backgrounds will disrupt the existing price discovery mechanisms and liquidity in the agricultural markets. Mr. Sammann acknowledged the increasing participation of energy companies and highlighted the popularity of the BO-HO spread (Bean Oil Heating Oil) as an example of this convergence. Viewing this as an overall positive development since more participants would lead to increased liquidity, Mr. Sammann emphasized the importance of maintaining market integrity through regulatory compliance and the dissemination of tools and resources to educate new comers to the agricultural markets.

Regarding Mr. Smith's query on the impact of block trading on the growth of agricultural products and livestock, Mr. Sammann responded that block trading is a relatively new feature (introduced by CME Group in 2018 for the agricultural markets), which currently represents less than 2% of CME total trading volume. He further clarified that block trading is more widely used in other markets due to its longer history in those markets. Currently CME Group offers block trading in various agricultural products such as oats and rough rice, but they have consistently shown lower trading volume. Mr. Sammann emphasized that while CME Group can't artificially

inflate trading volume for these products, it would provide the necessary tools and infrastructure to allow for their organic growth based on customer demand.

Expanding on the discussion of block trades for low volume markets, Mr. Barker inquired about the recent CME launch of fertilizer options, specifically if there has been any effort in bringing greater transparency to this market. In response, Mr. Sammann confirmed that CME Group plans to transition fertilizer options to an electronic platform, i.e., a central limit order book on Globex, that will allow all market participants to see buy and sell orders at different price points, thereby facilitating price discovery and attracting more participants. Mr. Sammann however cautioned that the transition to Globex may take time, citing the natural gas options market as an example, since that market had taken six years to transition from mostly block trades to 65% electronic trading.

IV. Closing Remarks

Chair Herndon thanked all participants for their participation. Ms. Shah then recognized Chairman Behnam, who gave brief closing remarks. The Chairman praised Mr. Sammann's presentation on agricultural options as especially informative, in particular the comparison to the equity side. Observing that the short-dated options trend may require further consideration, the Chairman acknowledged the perennial challenges posed by the intersection of prudential regulations and market access. In closing, he announced that the next AAC meeting will be held in the fall of 2024 – subject to member feedback on available date(s) and subject matter.

Ms. Shah adjourned the meeting at 11:33 a.m.

Swati Shah	7/24/2024	
Swati Shah	Date	
DFO		