COMMODITY FUTURES TRADING COMMISSION

AGRICULTURAL ADVISORY COMMITTEE MEETING

9:10 a.m. to 11:50 a.m. EST

Thursday, December 14, 2023

Three Lafayette Centre

1155 21st Street Northwest

Washington, D.C. 20581

PARTICIPANTS

ROSTIN BEHNAM, Chairman

CHRISTY GOLDSMITH ROMERO, Commissioner

SUMMER K. MERSINGER, Commissioner

SCOTT HERNDON

BUDDY ALLEN

JOE BARKER

CHRIS BETZ

LAYNE CARLSON

ROBERT CHESLER

GERALD CORCORAN

PATRICK COYLE

EDWARD ELFMANN

EDWARD GALLAGHER

H. THOMAS HAYDEN, JR.

JERED HOOKER

BRYAN HUMPHREYS

WILLIS KIDD

JEFF LLOYD

MICHELLE MAPES

ERIN MORRIS

1 PARTICIPANTS (continued)

2

3 CYNTHIA NICKERSON

4 EDWARD PROSSER

5 MICHAEL RICKS

6 TROY SANDER

7 LIAM SMITH

8 STEPHEN STRONG

9 CURT STRUBHAR

10 JUSTIN TUPPER

11 WES UHLMEYER

12 HAYDEN WANDS

13 RYAN WESTON

14 JASON WHEELER

15 SWATI SHAH

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1 P R O C E E D I N G S

2 MS. SHAH: Good morning, and welcome to

3 today's meeting of the CFTC's Agricultural Advisory

4 Committee. As the designated federal officer, I

5 hereby call this meeting to order.

6 I would like to extend a warm welcome to

7 Chairman Behnam, Commissioner Goldsmith Romero, and

8 Commissioner Mersinger and thank them for joining

9 today's meeting. Thank you to all the members of

10 the committee and the guest speakers for their time

11 today.

12 To begin the meeting, we are pleased to first

13 recognize Chairman Behnam for his opening remarks,

14 followed by the Commissioners.

15 Chairman Behnam?

16 CHAIRMAN BEHNAM: Thanks, Swati.

17 Good morning to everyone. Welcome to

18 Washington. Big week here. We were busy

19 yesterday, but I'm sure for everyone. We

20 appreciate you guys traveling to Washington. It

21 means a lot.

22 And I'll be very brief. We have a big

1 morning, and sort of reflecting on where we've been
2 for 2023, just talking to Scott and Swati, you
3 know, we had the meeting in April. I had another
4 meeting in July, and that was sort of my vision
5 probably about a year ago this time thinking about
6 what we would do for 2023, and I think we've
7 covered a lot of topics. We've tried to include as
8 much as possible in terms of what the committee has
9 wanted to address. I think we have a lot of work
10 to do, obviously today, but tomorrow as well.
11 And just, you know, important issues about
12 what we're seeing in our markets and how it affects
13 and impacts all of you, ag end users, commercials,
14 and sort of market infrastructure participants.
15 Obviously a lot going on in the world
16 geopolitically that is directly impacting
17 agricultural markets, so I think we have a serious
18 and big responsibility, I think, as market
19 regulators and our participants to think about
20 these issues so that, ultimately, we could keep the
21 ag economy and the ag value chain healthy, costs
22 low, and, you know, continuing to feed the world.

1 So a lot to do, I think a lot of uncertainty still
2 in the marketplace, but I really do appreciate all
3 of your engagement and working with us at the
4 Commission.
5 I was in Dallas a few weeks ago, gave a brief
6 speech about livestock and cattle markets, but also
7 we announced the K-State event which we're going to
8 have in April of next year, so that'll probably be
9 the next time we get together, I think, both as an
10 advisory committee meeting, but it'll be a broader
11 agricultural conference, which many of you know and
12 have attended in the past. This will be the third
13 one but the first since COVID, so very excited to
14 bring that back. We found that conference to be
15 really an exceptional opportunity for the
16 Commission to sort of go out into the field to get
17 to Kansas City, which, you know, we have an office
18 there, which means a lot for us and our staff in
19 that office as well, but really bringing people
20 together from all parts of the country, working
21 with K-State, which is a great partner to think
22 about ag markets and risk management. And we're

1 really thinking about a great day and a half or so
2 of discussions and panels and just being together
3 and catching up.
4 So we will get through the holidays, take a
5 little bit of a rest, but as we get into the new
6 year, certainly want any feedback from all of you
7 as we shape and curate that agenda over the next
8 couple of months because I think it's another good
9 opportunity for us to invite other policymakers,
10 obviously stakeholders like yourselves, but anyone
11 who's involved in the value chain so that we can
12 think about these issues and start to resolve some
13 of the issues.
14 So with that, looking forward to today. I do
15 want to thank Scott Herndon and Swati again. As
16 you guys all know, this is how the committee works
17 is these two individuals. Everyone at the
18 Commission who's helped us get to today, like I
19 said, we had a busy day yesterday, but constantly
20 turning over and looking forward to the discussion
21 this morning.
22 So, Swati, I'll turn it back to you. Thanks.

1 MS. SHAH: Thank you, Chairman Behnam.

2 Commissioner Goldsmith Romero?

3 COMMISSIONER GOLDSMITH ROMERO: Good morning.

4 I want to just echo the thanks for you coming here.

5 I really appreciate it, and thank you for your

6 service. Thank you, Chairman. Thank you, Swati

7 and Scott, for your service.

8 It has been a big week for the Commission. I

9 think we saved the best for last, which is pretty

10 nice.

11 I want to echo something the Chairman said.

12 So I really benefited from hearing directly from

13 you, directly from our ag sector, not just the

14 challenges that you face, but the pride you have in

15 what you make, what you deliver, and all of your

16 on-the-ground experiences has really helped. It's

17 one thing to hear about transportation or labor

18 issues, and it's another to like be there watching

19 that all of a sudden the train showed up super

20 late, and, you know, they're trying to pull people

21 in to fill it, and I was able to see that.

22 It's also, you know, a situation where when we

1 talked about input costs and labor costs, being on
2 the ground and being able to see it is really
3 helpful, but I also really appreciate that people
4 reach out, and we have these meetings in
5 Washington, too, and then also on Zoom because I do
6 listen. I do input that. I encourage you to reach
7 out to me. I don't want to start 2024 hearing from
8 everyone, particularly in the ag sector, about what
9 the issues are so we can plan for the next year,
10 and also not just the challenges, but the
11 excitement about what you're doing.
12 It's fascinating to me to go in there and
13 actually, you know, learn about sorting soybeans
14 for Japanese customers that want like uniform color
15 and actually sit there with them in my hand and
16 sort of understanding that. And I never knew there
17 was so much to learn about oils. I know a lot
18 more.
19 Importantly, you really drive the economy.
20 And I was at Treasury for 12 years, so I tend to
21 look at things through the lens of how it relates
22 to our economy. And so my highest priority has

1 always been that these derivatives markets are
2 working well, particularly for you. I think the
3 derivatives markets can play a critical role in the
4 economy, too. We need to stabilize prices. We've
5 got to deal with volatility, particularly as these
6 geopolitical issues come up.
7 So I think 2023, the derivatives markets have
8 worked really well under some significant stresses,
9 and so I really look forward to these presentations
10 about Ukraine and Russia and Ukraine and the other
11 geopolitical events.
12 We've been tracking -- and I look every day at
13 those wheat prices, and I really rely on our
14 economists who do a good job of bringing other data
15 in, whether it's from USDA or wherever, and we're
16 making analysis. That is something we do every
17 single day. I do not have a day where I do not do
18 that. That is the start of my day. It's usually
19 also in the afternoon, so it's twice a day for me,
20 every day that I've been in this job. I never lose
21 sight of that, and even when we have emerging
22 issues or technology, you might hear speeches, my

1 day-to-day work is monitoring those markets, and so
2 I'd love to hear from you.
3 Thank you for all of your service. I look
4 forward to the presentations today.
5 MS. SHAH: Thank you, Commissioner Goldsmith
6 Romero.
7 Commissioner Mersinger?
8 COMMISSIONER MERSINGER: Good morning. I'm
9 going to keep my remarks brief this morning because
10 we do have a pretty packed agenda but a really good
11 agenda, and I think a lot of presentations that are
12 going to be very helpful to the work we do here.
13 I'll just mention I was actually home in South
14 Dakota at the beginning of November and catching
15 the tail end of corn and sunflower harvest, and it
16 struck me, you know, when you're not home for a
17 while and you go back, the cost that goes into
18 production agriculture. When you see the number of
19 -- you know, a line of columbines trying to get
20 through these fields, I mean, I think my dad, he
21 cut down the last row of corn at 3:00 a.m. because
22 they've got to get it out of the ground, you know,

1 if there's weather coming, or whatever. I mean,
2 they will work through the night.
3 And, you know, it's the combines, it's the
4 semis moving the grain. There is so much cost
5 involved in production agriculture, and it's just a
6 good reminder that our agricultural markets truly
7 are used for hedging those costs and risks that are
8 involved in production agriculture, so they have to
9 work.
10 The other thing I will say is, you know,
11 people may worry that, you know, we spend more time
12 thinking about, you know, whether it's some of the
13 financial markets or crypto or whatever, but if you
14 need a reminder of what's truly important to this
15 agency, I was recently before the Senate
16 Agriculture Committee, and I would say 90 percent
17 of the questions I was asked had to do with
18 agriculture. So it is the most important thing
19 that we do here, and that's why meetings like this
20 are so important.
21 So I'm going to turn it back to Swati, and
22 thank you all for being here, and I'm looking

1 forward to the presentations.

2 MS. SHAH: Thank you, Commissioner Mersinger.

3 Before we begin today's presentations, I want

4 to remind all participants in today's meeting to be

5 mindful of when your microphone is muted and

6 unmuted. Please make sure to mute your microphone

7 when you are not speaking.

8 After each presentation today, there will be a

9 dialogue segment where members of the committee,

10 the Chairman, and Commissioners will have the

11 opportunity to provide comments or to ask

12 questions. If you would like to speak, please turn

13 your name hat to the right. If you're joining

14 virtually, please use the "raise hand" function in

15 Zoom. When called upon, please identify yourself

16 and the organization that you represent on the

17 committee.

18 Scott, I'm going to now turn it over to you.

19 MR. HERNDON: Thank you, Swati, and thank you,

20 Chairman Behnam, Commissioner Goldsmith Romero, and

21 Commissioner Mersinger. I look forward to

22 facilitating the discussion of members'

1 perspectives to the AAC and working with AAC
2 members to provide the Commission with feedback and
3 recommendations that assist the agency and its
4 oversight of our markets.
5 To ensure that today's discussion is
6 consistent with the AAC charter, no determination
7 of facts or policy shall be made by the AAC on
8 behalf of the Commission. Determinations of action
9 to be taken and policy to be expressed with respect
10 to the reports and/or recommendations of the AAC
11 shall be made solely by the Commission.
12 Before we begin our first panel, we would like
13 to do a roll call of the members and guest
14 panelists so we have your attendance on the record.
15 Swati will lead the roll call.
16 MS. SHAH: Thank you, Scott.
17 AAC members, after I say your name and
18 organization, please indicate that you are present.
19 If you are joining virtually, please make sure your
20 phone is not muted.
21 Buddy Allen, American Cotton Shippers
22 Association?

1 MR. ALLEN: Present.

2 MS. SHAH: Joe Barker, National Council of

3 Farmer Cooperatives?

4 MR. BARKER: Present.

5 MS. SHAH: Chris Betz, Michigan Agri-Business

6 Association?

7 MR. BETZ: Present.

8 MS. SHAH: Robbie Boone, Farm Credit Council?

9 [No response.]

10 MS. SHAH: Layne Carlson, Minneapolis Grain

11 Exchange?

12 MR. CARLSON: Present.

13 MS. SHAH: Robert Chesler, United Dairymen of

14 Arizona?

15 MR. CHESLER: Present.

16 MS. SHAH: Gerry Corcoran, Futures Industry

17 Association?

18 MR. CORCORAN: Present.

19 MS. SHAH: Patrick Coyle, National Grain and

20 Feed Association?

21 MR. COYLE: Present.

22 MS. SHAH: Edward Elfmann, American Bankers

1 Association?

2 MR. ELFMANN: Present.

3 MS. SHAH: Edward Gallagher, National Milk

4 Producers Federation?

5 MR. GALLAGHER: Present.

6 MS. SHAH: Harold Wolle, National Corn Growers

7 Association?

8 [No response.]

9 MS. SHAH: Thomas Hayden, Jr., Commodity

10 Markets Council?

11 MR. HAYDEN: Present.

12 MS. SHAH: Scott Herndon, Field to Market?

13 MR. HERNDON: Present.

14 MS. SHAH: Thomas Hogan, Cocoa Merchants

15 Association of America?

16 [No response.]

17 MS. SHAH: Jered Hooker, American Soybean

18 Association?

19 MR. HOOKER: Present.

20 MS. SHAH: Bryan Humphreys, National Pork

21 Producers Council?

22 [No response.]

1 MS. SHAH: Willis Kidd, Citadel?

2 MR. KIDD: Present.

3 MS. SHAH: Jeff Lloyd, Archer Daniels Midland?

4 MR. LLOYD: Present.

5 MS. SHAH: Michelle Mapes, Green Plains Inc.?

6 MS. MAPES: Present.

7 MS. SHAH: Mark McHargue, American Farm Bureau

8 Federation?

9 [No response.]

10 MS. SHAH: Erin Morris, USDA?

11 [No response.]

12 MS. SHAH: Dr. Cynthia Nickerson, USDA?

13 DR. NICKERSON: Present.

14 MS. SHAH: Edward Prosser, The Scoular

15 Company?

16 MR. PROSSER: Present.

17 MS. SHAH: Michael Ricks, Cargill?

18 MR. RICKS: Present.

19 MS. SHAH: Ella Rosenberg, International Swaps

20 and Derivatives Association?

21 [No response.]

22 MS. SHAH: Derek Sammann, CME Group?

1 [No response.]

2 MS. SHAH: Troy Sander, National Cattleman's

3 Beef Association?

4 MR. SANDER: Present.

5 MS. SHAH: Liam Smith, Futures Industry

6 Association, Principal Traders Group?

7 MR. SMITH: Present.

8 MS. SHAH: Stephen Strong, North American

9 Export Grain Association?

10 MR. STRONG: Present.

11 MS. SHAH: Curt Strubhar, Grain and Feed

12 Association of Illinois?

13 MR. STRUBHAR: Present.

14 MS. SHAH: Justin Tupper, U.S. Cattlemen's

15 Association?

16 MR. TUPPER: Present.

17 MS. SHAH: Wes Uhlmeyer, Greenfield Holdings?

18 MR. UHLMEYER: Present.

19 MS. SHAH: Hayden Wands, American Bakers

20 Association?

21 [No response.]

22 MS. SHAH: Ryan Weston, American Sugar

1 Alliance?

2 MR. WESTON: Present.

3 MS. SHAH: Jason Wheeler, USA Rice Federation?

4 MR. WHEELER: Present.

5 MS. SHAH: And last but not least, our guest

6 speakers, Suzanne Sprague, CME?

7 MS. SPRAGUE: Present.

8 MS. SHAH: Jeff Reardon, White Commercial

9 Corporation?

10 MR. REARDON: Present.

11 MS. SHAH: Calum Turvey, Cornell University?

12 [No response.]

13 MS. SHAH: Seth Meyer, USDA?

14 [No response.]

15 MS. SHAH: Thank you. I will now turn it over

16 to Scott.

17 MR. HERNDON: All right. Our first panel

18 today will provide a discussion on futures

19 margining and the impact it has on the agricultural

20 markets. We will hear from Suzanne Sprague with

21 CME, Jeff Reardon with White Commercial

22 Corporation, Joe Barker with the National Council

1 of Farmer Cooperatives.

2 Suzanne, please begin.

3 MS. SPRAGUE: Thank you very much. I'd like

4 to thank Chairman Behnam and the Commissioners for

5 having me here, so I'll try to keep it brief

6 knowing that you're probably tired from yesterday.

7 I thought I'd talk a little bit about our

8 approach to margin settings, as well as how we've

9 managed through periods of increased volatility

10 over the past few years for these markets. And

11 I'll also echo the comments made previously about

12 the importance of these markets to us and globally

13 as well. We take our role as a systemically

14 important clearinghouse very seriously, and we find

15 it very helpful to have discussions with market

16 participants and experts in different fields to be

17 able to ensure that we're taking all factors into

18 account when we set margins. So thank you for the

19 open discussion today and welcome any questions and

20 dialogue associated with the presentation.

21 Just to kick it off, I wanted to remind

22 everyone about the importance of a couple of

1 fundamental factors that we use to manage risk. So
2 on slide 2 -- or slide 6 here for the presentation
3 -- I just wanted to give a reminder of especially
4 two fundamental tools that we use to manage risk
5 everyday as a clearinghouse. That's daily mark-to-
6 market. So at least once a day, but for most
7 markets and futures and options especially, we do
8 mark-to-market twice a day, and that really allows
9 us to remove the obligations from the marketplace
10 on a twice-a-day basis and ensure that those
11 exposures are paid and collected between our
12 clearing members and then downstream their clients
13 every day to ensure there aren't losses building up
14 in the marketplace that could cause bigger issues
15 down the line.
16 Another fundamental risk management tool that
17 we use every day that's very important is what we
18 call performance bond or margins, and that is to
19 protect against losses that are not paid through
20 the mark-to-market process. And that's what I'll
21 focus most of the discussion on today is how we go
22 about setting margins.

1 So moving to the next slide, CME's margin
2 methodologies are data-driven and based on largely
3 historical information for the markets that we
4 clear and what's happened through different periods
5 of volatility in the past, as well as forward-
6 looking in a sense of taking into account
7 fundamentals or qualitative information that may
8 not be present in historical data.
9 We currently have two margin models that we
10 use for futures and options. We're in the process
11 of managing or migrating a new margin model. The
12 margin model that's been in place to date is called
13 SPAN, standard portfolio analysis of risk, and
14 we're in the process of migrating to an enhanced
15 version of that margin methodology. We call it
16 SPAN 2. So I will talk a little bit about the
17 benefits of the new margin model in subsequent
18 slides, but just wanted to highlight that that
19 transition is underway for us, and we have
20 currently migrated the energy asset class to SPAN
21 2. We are planning to migrate on an asset class
22 basis over the next couple of years.

1 So regardless of margin methodologies, for us,
2 those methodologies are designed to achieve at
3 least a 99 percent coverage standard at the
4 portfolio levels, ensuring that we have enough
5 funds collected in margin to cover our competence
6 intervals of 99 percent. And we do measure that
7 every day. We call that backtesting. So every
8 day, we look at market moves at both the product
9 level and the portfolio levels for the clearing
10 members that face us directly, and we evaluate what
11 the mark-to-market was on that product and that
12 portfolio compared to the margin that we had coming
13 into the day. And that's how we ensure every day
14 that we meet our coverage standard. So that
15 process, for example, over the 12 months ending
16 third quarter of this year showed that we actually
17 achieved a coverage standard of 99.97 percent for
18 those futures and options products.
19 We also employ tools to mitigate large changes
20 in margin, knowing that that can cause a liquidity
21 drain on market participants, so we ensure that we
22 have adequate coverage at the product and portfolio

1 level, but we also use a few mitigating factors to
2 make sure that when volatility is low, margins
3 don't drop artificially low such that in times of
4 volatility spikes, we would then cause a sudden
5 spike in margins.
6 And slide 7 outlines a few of the factors that
7 we use to smooth out that margin-setting process,
8 especially for agricultural products. There are
9 seasonality factors that we take into account. So
10 what has price volatility looked like in a previous
11 winter or a previous spring depending on the
12 product that we're talking about? We use
13 volatility floors to make sure we're looking over a
14 longer time frame how low volatility has dropped
15 and making sure that we don't go artificially low
16 in the margin-setting process, such that a spike in
17 volatility could then cause a sudden requirement
18 for increased liquidity or collateral to support
19 increased margins.
20 So I won't go into very much detail about all
21 of those specifics, but just keeping in mind that
22 the procyclical effect that we can have on the

1 marketplace is critical for us to consider. We
2 know that the actions that we take can impact the
3 broader marketplace, and so we are very cognizant
4 of making sure that we don't cause those sudden
5 liquidity drains on the market in times of
6 increased volatility.
7 I'll also just mention event risk is something
8 we take into account, so whether it's impending
9 weather events or impending geopolitical events,
10 that is information that we take into account in
11 the margin-setting process that, again, may not be
12 present in historical data. We're also looking at
13 implied volatility for those markets that have
14 active options traded to, to get a sense for where
15 the option market might be indicating volatility is
16 going.
17 So moving on to the next slide then, we are
18 focused for all of our margin methodologies and
19 being specific about those fundamentals and market-
20 unique conditions that need to be taken into
21 account when setting margins for various asset
22 classes. So this slide really is just meant to

1 further detail the way that the margin models
2 behave.
3 When we look at historical data for a given
4 asset class, we are looking at varying weighted
5 lookback periods, taking into account things like
6 seasonality, longer lookback periods, making sure
7 that we're aware of volatility events that may have
8 happened in the past that could happen again -- or
9 not forgetting the past is another way to think
10 about that -- while also keeping in mind that
11 volatility changes quite significantly and quickly
12 when different events pose risk to the systems. So
13 regardless of margin methodology for us, we are
14 considering those factors in both the SPAN and the
15 SPAN 2 model.
16 I'll also just mention, it's important to note
17 that the margins that we set are the clearinghouse-
18 level margins, and so those are the minimum
19 requirements that we charge of clearing members,
20 and those are the minimum requirements that
21 clearing members need to charge from their clients.
22 But they do have the ability to charge additional

margin, so that's something to keep in mind here, too, is clearing members can choose to set margin levels higher on different products or portfolios as they see fit.

So I have a few examples of recent volatility over the past few years and how that has played out in terms of margin coverage for us. So this chart, I know, is very busy. It's meant to really depict a few different factors. So the light blue lines that you see going up and down are the profit and loss every day for that corn futures contract in the front month, and then the darker blue line that you see sort of in the middle of the slide is the margin that we've set for that product. And so you can get a sense for our backtesting view of how our margin model performed for this particular contract through periods of increased volatility or increased profit and loss.

The green line is also important, so that's the absolute price of the futures contract for corn because we do see that as prices change significantly, margins need to change to

1 accommodate that as well. And so especially when
2 you think about the volatility changes and the
3 price changes that have happened through Russia's
4 invasion of Ukraine, we have seen for a lot of
5 commodity markets absolute prices go up in these
6 markets, and that also causes margins to increase.
7 So here are a couple periods for corn
8 standouts. Obviously, the periods around May and
9 July of 2021, you can see spikes that were
10 occurring on the price side and how we were
11 adjusting margins to account for that increased
12 volatility. There were not any breaches in that
13 period of time, but we did come close to the price
14 levels actually starting to increase above margin
15 coverage, and so you'll see that in that period of
16 time, margins remain high until the volatility
17 starts to come down, which is more around the
18 September of 2021 time frame. So that's really the
19 pattern that we're tracking in addition to margin
20 levels with respect to absolute price levels.
21 So it's a busy slide, but this is meant to
22 give you a picture of what we look at every day,

1 and it is common for market participants to look at
2 these factors as well. So many of our market
3 participants also track the price changes of these
4 markets every day and the absolute prices of these
5 commodities against margin coverage, and that's a
6 dialogue that we engage in on a regular basis with
7 the market.
8 I have just a few more examples I thought that
9 were worth showing in a similar manner, so futures
10 is another example of where we've seen significant
11 price swings over the last few years. The period
12 here of interest mainly is in March of 2022. So
13 you can see a breach actually happening where the
14 price move did move above the margin level for a
15 particular day, and so that causes us to evaluate
16 potential margin increases, in which case we did
17 make increases around that time period for this
18 contract.
19 I will note that a breach on its own doesn't
20 necessarily mean margins need to increase. The
21 coverage standard of 99 percent generally means you
22 should expect two or three breaches in a year based

1 on the number of trading days. So a breach is not
2 unexpected or a bad thing, but it does cause us to
3 evaluate if volatility will persist and if market
4 conditions have changed for that contract such that
5 we need to increase margins to ensure that we
6 continue achieving that coverage level of 99
7 percent.
8 And then the next example that we provide here
9 is rough rice. So again, the time periods are
10 somewhat different in terms of the volatility
11 spikes that we've seen in that contract, but this
12 is another example, especially in early to mid-2020
13 where we did see a significant change in profit and
14 loss on a daily basis or daily price changes for
15 the contract that caused us to increase
16 requirements around that time frame. And this is
17 an example of where hindsight is 20/20, so you will
18 see that those increased margin levels did persist
19 for a longer period of time due to the implied
20 volatility that we were seeing in the marketplace
21 and the number of significant price changes that we
22 saw day over day.

1 So hindsight is 20/20, and that looking at the
2 period of volatility that really starts from, let's
3 say, September of 2020, and then goes through 2021,
4 the levels were coming down slowly, and that's a
5 common theme for us as well. We tend to increase
6 margins quickly to make sure we achieve that
7 coverage standard. Again, we try not to make
8 increases in large amounts day over day. We
9 generally step those in over multiple days to make
10 sure we're not causing liquidity pressures or
11 funding pressures on the marketplace. But when we
12 bring them down, it does tend to happen somewhat
13 more slowly as volatility is persisting and
14 potentially decreasing on its lower level, too.
15 So this is just an example of where those
16 margin levels did remain higher than price changes
17 for a period of time due to the amount of
18 volatility that we saw in a short period and the
19 implied volatility of the options market.
20 So then the next slide is just -- the next few
21 slides actually are just meant to dive a little bit
22 deeper into the new margin methodology that we're

1 migrating to. SPAN 2 again is what we call it.
2 The process that we use today to set margins in
3 SPAN is data-driven, and we use a variety of value-
4 at-risk models to inform the levels that we set for
5 different products. It's a somewhat more manual
6 process for that reason where the data analysis
7 happens outside of the model, and we feed those
8 inputs into the model to be able to achieve the
9 portfolio effects in the margin methodology.
10 The benefit of SPAN 2, really one of the
11 primary benefits, is it's a more automated model so
12 the data is fed on an automated basis, taking that
13 manual nature out of the margin methodology-setting
14 process itself and allowing us to have fewer
15 components that we need to adjust manually if
16 factors are indicating that historical data is not
17 necessarily the only information that we need to be
18 accounting for in setting margins on a forward-
19 looking basis.
20 So the SPAN 2 margin methodology is more
21 automated, and for that reason, margins at the
22 product level change on a daily basis. It's not

1 necessarily unique to the overall portfolio effect,
2 though, because positions likely change on a daily
3 basis, too. So whether you're talking about SPAN
4 or SPAN 2, it is common to have daily changes at
5 the portfolio level to reflect either changes in
6 positions or changes in option value.
7 The SPAN 2 methodology, similar to SPAN, takes
8 into account historical scenarios, as well as what
9 we call stress risk or periods of scenarios where
10 there might be increased volatility, again, used to
11 smooth out the margin-setting process and be able
12 to have an anti-procyclical effect on daily
13 changes. So we are still very focused on making
14 sure there aren't sudden changes day over day even
15 with a more automated model.
16 And then, in addition to historical and stress
17 factors, we also take into account the liquidity
18 challenges or concentration factors that might be
19 present in a given product or portfolio to make
20 sure if we had to liquidate that clearing member's
21 portfolio, we would have enough funds to do so even
22 beyond any historical or stress price changes that

1 we've seen in the marketplace.

2 So this is more common where you see, let's

3 say, lower open interest in products. We need to

4 account for the fact that we may incur additional

5 costs if we have liquidation happening in a product

6 with lower open interest or a more concentrated

7 market participant base.

8 And then lastly, I'll just cover on this slide

9 the overall migration schedule. So as I mentioned,

10 we have already migrated most of our energy

11 products to SPAN 2 that completed over a few dates

12 in the August and September time frame of this

13 year. Our next asset class that we're migrating is

14 equities in the first half of next year. We'll

15 then cover interest rate and FX products next year,

16 and our last asset class will be the agricultural

17 products and any remaining products from the other

18 asset classes that did not migrate under the

19 previous timeline. So our goal is to be fully

20 migrated to this new margin model by the end of

21 2025.

22 It is important to note that we have active

1 discussions with market participants about the
2 migration process, and so we definitely welcome any
3 questions or feedback from this group. Every set
4 of market participants is important to that
5 migration schedule, and so for us, communication is
6 key. And making sure we're accounting for any
7 additional factors specific to those asset classes
8 is very important.
9 So, again, we take that migration process very
10 seriously and welcome engagement from you folks as
11 well as we think through migrating for that
12 process. It is very early days for the
13 agricultural markets, but it's never too early to
14 start thinking about what factors might need to be
15 considered, so we are starting to have those
16 discussions about our migration for the
17 agricultural products even though we're a few years
18 away from that.
19 The last slide I thought I'd talk through just
20 gives you a picture for one of our energy products
21 and how you can think about the difference between
22 SPAN and SPAN 2 margins. They're largely in line.

1 We do see small increases and decreases at
2 portfolio and overall clearing level for those
3 changes depending on the directionality of the
4 portfolio. But overall, the margins are meant to
5 be similar.
6 So this is an example that we show for the
7 crude contract. The light blue line towards the
8 top in the very bottom represents the SPAN 2 margin
9 model. The darker blue line represents the SPAN
10 margin model, and then the light blue line in the
11 middle is the daily price change for that product.
12 So here you can see that SPAN and SPAN 2 largely
13 track each other in terms of the coverage that's
14 provided by those margin models.
15 The last thing I'll mention is just the
16 importance of transparency, and so many of you may
17 be familiar that we post margin levels on our
18 website for the major products in the major asset
19 classes. We'll continue to do that for SPAN 2. We
20 are doing that currently for the energy products.
21 And then we do provide a variety of tools that
22 customers can use to be able to do margin analysis

1 themselves to ensure that for existing portfolios
2 or hypothetical portfolios, there's an
3 understanding of what the margin levels look like
4 for a given product or portfolio.
5 So happy to take any questions about margin-
6 setting generally or the migration process, and
7 I'll otherwise turn it over to my colleague. I
8 think you might be up next, right?
9 MR. REARDON: Yes, I am.
10 MS. SPRAGUE: Yes.
11 MR. REARDON: Thank you. Thank you very much.
12 Thank you, Commissioner Behnam, and the entire
13 Commission. Swati, you did a great job helping us,
14 and Scott as well. Thank you so much.
15 I work with a company called White Commercial,
16 and our role in the market is to work with
17 commercial hedgers. So that's all we work with is
18 the commercial hedgers, so when the farmers go and
19 deliver their grain, they're going to deliver it to
20 the commercial hedgers that we work with.
21 And specifically, our customer base is on the
22 smaller side of the agricultural industry, so what

1 you're going to find is our larger companies are
2 cooperatives, and so those are farmer-owned
3 organizations, and so their main concern in times
4 of stress -- and we're talking about initial margin
5 today -- is access to capital because they have to,
6 they must stay in their hedge positions. And every
7 bank that they work with and throughout the entire
8 industry, the most important thing to those bankers
9 is that we stay hedged.
10 So that's my role at White Commercial. I came
11 on board about 15 years ago when, if you remember
12 in 2008, the commodities markets were a little bit
13 volatile as well. And that that's when I came. I
14 transitioned from the banking industry into White
15 Commercial to help our customers with their banking
16 relationships. And I'm a CPA, so naturally, I was
17 helping with the mark-to-market that Suzanne was
18 talking with as well.
19 So that's my role is basically to train the
20 lenders, basically our customers, their lenders,
21 and their accounting partners on this mark-to-
22 market process and help them to access the capital

1 that they need.

2 So if you're talking about a large co-op, to

3 us, it's a small co-op in the marketplace, but the

4 initial margins -- if you'll put up the slide, the

5 initial margins -- and I'll talk to this -- and our

6 slides are exactly opposite from what you just saw,

7 so you're going to see the futures price on the

8 left side and the initial margin on the right.

9 But what our largest customers are, if you go

10 through a town and you see a farmer-owned

11 cooperative, most likely, the cooperative is going

12 to have the town name, okay? So, you know, that's

13 a sign that they may be working with White

14 Commercial. And the banks that they work with,

15 believe it or not, this is going to be a banking

16 syndication, so you're going to have Farm Credit is

17 most likely going to be one of the leaders there,

18 and there'll be multiple banks that work with them.

19 Now, those folks are going to understand,

20 deeply understand the need for the capital, so part

21 of that stress test is going to be this initial

22 margin requirement, which I'll talk to in a second.

1 Now, the second tranche of our customer base,
2 well, they're not going to have the town name most
3 likely on their elevator. What they're going to
4 have is their name, right, because it's an
5 independent, maybe multigenerational company that
6 it's, you know, Smith, or whoever their name is, is
7 going to be part of that organization.
8 Now with them, their banking relationship is
9 going to be a little bit different in that it's
10 probably going to be a regional bank. It may be
11 Farm Credit, but it may be a regional bank that
12 they work with. And, you know, for a situation
13 like we're looking at -- and I'll talk to -- is,
14 you know, by changing the initial margin
15 requirement -- and we're talking about rice now,
16 not corn, beans, and wheat -- but for rice, if
17 you're a rice farmer and you're in Arkansas, we
18 changed our initial margin from $750 basically on
19 the right side, all the way up to basically $3,700,
20 so it's a $3,000 change per contract.
21 So for them, you know, like I said, they've
22 got their name on the door, you know, they're

1 probably looking at about $1.5-2 million in initial
2 margin, you know, so this isn't a small amount, you
3 know, to them. And believe me, we need this
4 protection in the market. But you can see how
5 quickly that the protection was needed. So there's
6 a lot of money to anybody, but definitely to our
7 customer base.
8 And finally, the last tranche of our customer
9 is that smaller farmer, and all of them are trying
10 to protect against price risk. And when the market
11 gets volatile, you know, it could be $50,000 to
12 them or $100,000, which, once again, it's all
13 related to the balance sheet that you have. And in
14 that case, that may keep them out of the market,
15 right? They may have to go somewhere else other
16 than the futures market if it's going to be, you
17 know, $50-100,000 to get in.
18 But for our customer base, you know, this is a
19 big move, and like you said earlier, it was almost
20 unprecedented to see a move this big, but the
21 initial margins do affect us. It's money that we
22 have to put in. That's our skin in the game. And

1 so with our customer base as it is -- and one of my
2 associates, Jason Wheeler with the Rice Federation,
3 he asked me to come and talk to that because I'm
4 intimately involved in the financial structure, you
5 know, for that part of the agricultural community.
6 But that's why we're here is just to talk
7 about that. And, honestly, we had a great
8 conversation with the CME, and they're very open
9 with, you know, their process. And that's
10 something that I'd like to, you know, talk about
11 today in the Q&A, so I'm going to go ahead and pass
12 my time on to Mr. Barker at CHS.
13 MR. BARKER: Hello, can you hear me? Can you
14 hear me?
15 CHAIRMAN BEHNAM: We got you, Joe.
16 MS. SHAH: Yep.
17 MR. BARKER: All right. Great. Thank you for
18 having a panel on this important topic. I do have
19 a couple comments, and then we'll open up for
20 questions.
21 As many of you know, I'm on this committee as
22 a representative of the National Council of Farmer

1 Cooperatives. NCFC members are local, regional,
2 and national farmer cooperatives consisting of
3 nearly 2,000 farmer-owned cooperatives across the
4 country that represent the majority of America's
5 two million farmers and ranchers around the
6 country.
7 However, I feel it's important I should point
8 out that my main role in the industry is as the
9 director and principal of CHS Hedging, a
10 cooperative-owned FCM that is a clearing member of
11 CME Group and Minneapolis Grain Exchange, and we
12 utilize a partner FCM to access most exchanges
13 around the world to clear trades. I'll be wearing
14 both of these hats as I participate in this
15 discussion today.
16 Most agricultural firms, whether those are
17 producers, private businesses, or cooperatives, use
18 futures and options to hedge commodity price risk.
19 This requires them to post margin requirements to
20 their futures commission merchant. This margin
21 requirement is a performance bond on their
22 commitment to perform on their positions. For most

1 hedgers, this is simply considered a cost of doing
2 business, and it's very natural for all
3 participants to want to keep these costs as low as
4 possible. We should remember, however, the
5 important function that marking positions to market
6 and keeping an account properly funded plays in
7 maintaining the market integrity for all
8 participants.
9 In futures markets, margin is the amount of
10 money that you must deposit to keep on hand with
11 your broker or FCM when you open a futures
12 position. After the positions are established,
13 your positions are mark-to-market daily, and the
14 account must be kept above the minimum margin
15 requirement. So if the futures positions lose
16 money and the mark-to-market balance in the account
17 drops below the margin requirement, customers are
18 required to send more money back into their account
19 to bring back above this requirement. This is true
20 for both hedgers and speculators and ensures
21 integrity in our exchange-traded markets.
22 FCMs have an obligation to know their

1 customers and to collect this margin and post this
2 margin at the exchange on the customer's behalf.
3 The daily mark-to-market process, combined with
4 active risk management of having customers meet
5 these requirements on our exchange-traded markets
6 for both futures and options.
7 FCM risk departments deal with this day-to-day
8 risk, and they deal with customers who can't meet
9 this. We view this liquidity risk of whether
10 customers can meet their margins as our true
11 "canary in the coal mine." Most accounts are
12 opened based on financial statements that can be
13 months old, and so the easy way to know whether a
14 customer has liquidity to finance their positions
15 is whether or not they can perform on their margin
16 requirements.
17 It's important to note that if an FCM has an
18 issue collecting margin from a customer, we still
19 have an obligation at the exchange to maintain
20 these balances. In this way, FCM serves as a bit
21 of a shock absorber to the system.
22 It's also important to remember that FCMs have

1 capital requirements that ebb and flow with the
2 amount of customer funds we have on deposit. So
3 when margins go up, this causes the amount of
4 customer funds to increase. It also increases our
5 capital requirements.
6 For industry participants, there are
7 alternatives to using futures and options. They
8 come with their own set of risks and rewards.
9 There are plenty of reasons why market participants
10 may choose a tool other than using futures and
11 options directly. One of the most common, very
12 common is cash contracts. For agricultural
13 producers, it's very common for them to use cash
14 contracts as their main margining tool, and then
15 wherever they're going to deliver their products
16 has a futures and options account to manage that
17 price risk. This works out great for the grower
18 because they can lock in prices, but they are
19 setting a delivery location and time. The downside
20 of a cash contract is that you have less
21 flexibility than when you do your own hedging
22 yourself.

1 There are also lots of over-the-counter
2 products, everything from vanilla, futures
3 lookalike swap, to a structured product that can
4 blend the advantages of futures and options into
5 one product. Some of these OTC products can even
6 be embedded in cash contracts so that the
7 individual grower or whoever the participant is may
8 or may not have to post daily margin because of the
9 requirement of the cash contract for them to
10 actually physically deliver their products.
11 Of course, when you trade an over-the-counter
12 product, you are open to the risk of default of the
13 counterparty on the other side. Of course, the
14 CFTC has taken great steps since Dodd-Frank
15 especially to reduce that risk and utilize things
16 such as swap data reporting. But unfortunately,
17 there are examples from time to time.
18 What I want to point out is in the 175 years
19 since the Chicago Board of Trade was formed in
20 1848, the process of marking positions to market
21 and keeping all market participants' accounts
22 properly margined has been refined into the smooth

1 process that we have today. It is important for
2 both market participants, their FCMs, and the
3 clearinghouse to continue to refine this process so
4 that the system works for everyone in the future.
5 Thank you.
6 MR. HERNDON: Thank you to the panel members
7 for your presentations and remarks. We will now
8 open the floor to questions and comments from
9 members of the committee regarding your
10 presentation.
11 For members virtually in attendance as a
12 reminder, please use the "raise hand" feature to
13 ask a question or use the chat. Jason, sorry?
14 MR. WHEELER: Yeah, I wanted to thank the
15 Commission and everyone for hearing this. You kind
16 of told the rice story. I'm Jason Wheeler with the
17 USA Rice Federation, and we consists of farmers,
18 merchants, the commercial merchants, and also the
19 millers, the end users of rice. And our contract
20 is pretty thinly traded. We're constantly trying
21 to get better. The risk management that comes
22 along with the futures market is a huge benefit to

1 agriculture, and so we're always trying to get more
2 folks involved in it to manage risk.
3 And, like Joe was saying, a lot of small
4 farmers, the way they access the futures market is
5 not through having a futures account. It's selling
6 cash contracts to their local co-op like Jeff
7 talked about, and then that co-op uses the futures
8 markets.
9 And so what we saw in the rice -- which Jeff
10 kind of told that story and Suzanne -- is the
11 initial margins went way up. And so this was kind
12 of the genesis of the Rice Federation wanted to
13 discuss this. And so we really appreciate it.
14 But what happened is initial margin went way
15 up, which it has to. When nobody knew the market
16 was going to be going up, limit up several days,
17 you know, it was a summer shortage, and price went
18 up almost double, and the initial margin went up
19 five times. And, you know, it's not just a matter
20 of the price; it's a matter of how much limit
21 moves. And we have to protect all the
22 participants. It's a very good system that

1 protects everyone.

2 What we saw was -- the real issue that came

3 was later, as you can see in some of those charts.

4 The initial margins, very responsive on the upside,

5 which it has to be to protect the integrity of

6 everything, but on the downside, it became -- you

7 know, Jeff was talking about the amount of money

8 required for these commercials to continue to have

9 hedges, right? And so what happened was we got

10 through that summer. We grew a very big crop, and

11 the volatility was gone. You can see it for

12 several months because we grew a big crop, and now

13 the supply and demand situation was, you know,

14 somewhat solved.

15 And what happened was the initial margins took

16 a very long time to come back down, and it became a

17 problem for these commercials, which is the

18 farmers' access to the market, the commercials'

19 access to the market, and with a thin market like

20 we have, they exited. And farmers did not have

21 access. They couldn't sell their new crop because

22 the commercials were tapped out of how much money

1 they have on the credit lines and all that stuff.
2 So it became a problem.
3 And I will say the Rice Federation, we ended
4 up having a call with the CME Group later. I wish
5 we had done it sooner, right? They were glad to
6 talk with us, and we really appreciated that. And
7 we did have a good conversation of, you know, a lot
8 of stuff Suzanne said about how they calculate it
9 and why it was still high and everything. But it
10 is a bit of a sliding scale, and they consider
11 different things. They weight different things
12 differently at times of the year for good reasons.
13 So we brought some data to him, and maybe we
14 should weight it differently, and it ended up
15 coming down. But there was a several-month period
16 where folks in the rice business didn't have as
17 great an opportunity to manage their risk.
18 And so, like I said, the CME was extremely
19 responsive with us once we talked to them and
20 continued to bring it down. So anyway, so we're
21 appreciative of that and everything that has
22 happened. But we just wanted to tell kind of that

1 story. That's what the Rice Federation asked me to
2 do is tell that story to you guys of how it works
3 and everybody here -- and have the CME talk -- we
4 just want -- the Rice Federation wants the CME to
5 know how appreciative we are of how they managed
6 that and got us through it, but it took some time.
7 And so what we want to do is -- we know that
8 stuff is going to happen again one day. I mean,
9 that's -- you know, one day, the market is going to
10 go way up again. And we hope to have learned from
11 this. And I know we'll be making that call a lot
12 sooner, right? And they're glad to have it.
13 Sorry for grandstanding here. I hope it's not
14 too long. So it's question time, right? So my
15 question is the SPAN 2 that will come, in your
16 view, would that be a probably more responsive
17 algorithm for -- if a situation like that happened
18 again, would it have gone differently or do you
19 know? And that's the question.
20 MS. SPRAGUE: Yeah, good question. Thank you
21 for the dialogue. We, as I mentioned before, learn
22 a lot from talking to customers. It's a very

1 important part of our job every day. It's
2 something that you don't get on an automated basis,
3 and so I like to think about that's why we're all
4 here and not robots. It's very important to stay
5 in touch with different market participants and
6 make sure we're having open communication about
7 what we don't see as well. So we appreciate you
8 reaching out to do that and encourage everyone to
9 do that in the future as well.
10 SPAN 2 is meant to be a more automated model
11 that would be more sensitive to changes on a
12 quicker basis. We do use smoothing effects in that
13 model, too, so we, again, don't want to have sudden
14 spikes really in either direction that would be
15 premature to miss volatility that's still present
16 in the marketplace. But it is a more reactive
17 model based on the automated nature. So we would
18 anticipate in a circumstance such as this that it
19 would have been declining more steadily and perhaps
20 more quickly than the manual nature of how we
21 manage the SPAN model today.
22 MR. HERNDON: Great. And we had Troy Sander

1 raised his hand virtually. So Troy, are you ready
2 to ask your question?
3 MR. SANDER: Yes, Troy Sander with National
4 Cattlemen's Beef Association. My question is
5 probably for Ms. Sprague and also for the CFTC
6 folks as well. There's been much talk and
7 speculation about LRPs, livestock risk protection
8 policies, as a cause for increased volatility in
9 the feeder cattle and live cattle futures market.
10 Can you speak to the oversight by CME concerning
11 these products?
12 MS. SPRAGUE: So in terms of those cattle
13 products generally, the process would be similar in
14 terms of the information that we take into account
15 for margin setting. There were references to price
16 limits, and many of these products do have limits
17 in place that we are monitoring on a daily basis in
18 terms of how volatility might be reacting to
19 certain policy changes. We generally also take
20 into account for those markets where options are
21 active, that the options can indicate prices moving
22 beyond the limits, and so those can come into play

1 in having margins be higher than the absolute daily
2 limit.
3 But I must admit, I'm not intimately familiar
4 with the specific change that you referenced. I
5 don't know if anybody from the CFTC wanted to cover
6 that as well.
7 CHAIRMAN BEHNAM: I mean, no, not
8 specifically, but like we certainly are following
9 the policy changes certainly at USDA and otherwise,
10 to see what we would need to do. But really, this
11 is more of a commercial decision in changes that
12 would need to be made.
13 MS. SPRAGUE: Does that help or did you want
14 to have a further dialogue just with more
15 background information that I could help with?
16 MR. SANDER: No, thank you. I think that
17 helps. Thank you.
18 MS. SPRAGUE: Okay.
19 MR. HERNDON: All right. We had another
20 question from Ed Gallagher.
21 MR. GALLAGHER: Good morning. Ed Gallagher
22 with the National Milk Producers Federation and

1 Dairy Farmers of America.

2 Jeff, question for you, relative to your work

3 in helping the smaller cooperatives fund their

4 margin accounts and working with farmers, do you

5 see that as the CME migrates to SPAN 2 an easier

6 ability to fund more challenging or about the same?

7 MR. REARDON: It's hard for me to say. As you

8 move in that direction, from what I'm hearing, I

9 believe that it's going to be easier because what

10 we're looking for -- we need access to capital, as

11 you said, and it's talking to the banks. And if we

12 have a little more time to get the money to -- what

13 needs to be clear, I think, to everybody is that if

14 the money doesn't hit the account the day that this

15 changes, they're forced out of the position. So in

16 order -- and we must keep positions as hedgers. So

17 I do believe it's going to work better, but I

18 haven't seen it, so I don't know.

19 My job is to communicate and help educate the

20 bankers and CPAs on what we're actually doing to

21 access that capital. So it sounds like we're going

22 to have more transparency, so that will make my job

1 easier.

2 MR. GALLAGHER: Thank you.

3 MR. HERNDON: Gerry?

4 MR. CORCORAN: Hey, good morning, and thanks

5 to everybody. I really have more of just some

6 general comments than any questions to anyone, and

7 thanks for the presentations.

8 So I represent the Futures Industry

9 Association, but as most of you know, I'm also the

10 CEO of R.J. O'Brien & Associates, been around a lot

11 longer than I like to think, but it's the case that

12 I've been through incredible market swings over the

13 years and have experienced all of the things that

14 folks I've spoken about have been worried about

15 over the years.

16 I do endorse the FIA best practice paper that

17 related to exchange volatility and the control

18 mechanism, which is some part asks the exchanges to

19 keep a higher minimum exchange margin requirement

20 for customers to help offset potential spikes to

21 the upside.

22 Now, when it comes to agriculture, you know,

1 higher margins means higher cost to the farmer and
2 the producer because, in some part, their
3 operations are, you know, funded by debt, and of
4 course, higher margins means more debt and more
5 cost. So it increases the underlying cost of the
6 agricultural product in some ways.
7 However, it's hard to thread the needle on the
8 risk related to the stress events that occur. As
9 an FCM -- and Joe has already spoken to this -- you
10 know, we become the shock absorber between the
11 customer and the exchange. We meet that margin
12 when the exchange debits our account, and, you
13 know, it's up to us to make sure the customers meet
14 their margins. And overwhelmingly, the customers
15 do.
16 It's the difficult times for agricultural
17 producers, probably medium and smaller, smaller-
18 size ag producers, who I think in aggregate are
19 very important to the U.S. economy that gets
20 squeezed, that their bankers aren't prepared for
21 these types of up moves, and it takes them time to
22 get their lines extended and opened. And this is

1 when, you know, experienced FCMs like CHS, RJO,
2 others in the ag space understand this and can work
3 with bankers and provide some time.
4 So, you know, it's a very delicate balance in
5 this industry between, you know, having the higher
6 margins that protect the exchange, the system,
7 reduce liquidity crunch during high periods of
8 volatility, but don't hurt the U.S. farmer that has
9 to provide the food for the nation, and in some
10 cases, the world.
11 So those are just comments to absorb. I'm
12 happy to talk to anybody on the side. You know,
13 Jeff and White Commercial is one of the top firms
14 in the industry. They know their business, and
15 they do it well. And what I reinforce and what
16 Jeff has been saying is those hedges can't be blown
17 out. FCMs have a very responsible obligation to
18 work with their customers to protect those
19 positions in times when the bankers are making
20 decisions to extend the lines and provide more
21 liquidity to the farmers.
22 As far as SPAN 2 goes, I also have a lot of

1 experience with that. RJO as a clearing firm has
2 now implemented SPAN 2 in the energy segment. We
3 think it's a better product. I think, you know,
4 how it's going to perform in volatile periods of
5 time is -- you know, there's plenty of models that
6 say it's going to be fine, but we'd like to see
7 what happens with it.
8 One of the comments we're getting back on SPAN
9 2 is since it does have daily changes in margins,
10 customers are perplexed by this. I didn't change
11 my position overnight, but now I'm on a margin
12 call. And that is taking some adjustment for
13 customers to come to grips with that.
14 Now, Suzanne, you mentioned that it's not -- I
15 don't know -- I don't want to put words in your
16 mouth, but you referred to, you know, positions
17 change daily and things like that, and so customers
18 are used to daily changes in margins. Not always.
19 You know, a hedger has a position on -- might have
20 a position on for three months, but the margin
21 requirement is changing every day. So it's a
22 change of behavior for the customer and their bank

1 to become familiar with that.

2 Overall, and in time when everyone becomes

3 accustomed to it, I think it will make the market

4 safer. So it's not meant to be critical of SPAN 2,

5 but there's going to be adjustments that the farmer

6 and their bankers are going to have to become

7 accustomed to.

8 And those are my comments. I hope you find

9 them productive, and I'm happy to take any

10 questions as well.

11 MR. HERNDON: Are there any further questions

12 from committee members?

13 MR. WESTON: Thanks, Scott. Ryan Westen,

14 American Sugar Alliance. And I just want to note,

15 I really appreciate it. It's so important, the

16 integrity of the system. Our particular industry,

17 we do not have a lot of margin products on crop

18 insurance revenue side, so the raw sugar market is

19 very important to us.

20 And I just would say a lot of the prices, the

21 input prices we're dealing with have been much

22 stickier, I think, than most of us thought. The

1 fertilizers, the fuels, labor, these things are
2 staying really high. And so these future prices
3 that we're falling back on, if it's the cash price,
4 it's the cooperatives, they're about as important
5 as they've ever been.
6 And, you know, there has to be tweaks all
7 along the way, and, you know, our individual
8 farmers, they do have to work because we have to
9 turn the cane or the beets into sugar to have a
10 product. So the ability to hedge and for it to be
11 efficient is really important.
12 We're running into the problems, you know,
13 weather. There's a huge drought in Texas, and even
14 Louisiana was impacted. All of these things, as
15 you're looking at these markets, they're not huge
16 in the grand scheme of things, but they're very
17 huge to us. Mexico owes the United States 700,000
18 acre-feet of water in Texas. You know, that's a
19 State Department issue. It's nothing that the
20 Commission can deal with, but these are huge issues
21 for us, and these things need to be done because it
22 affects sugar, it affects cotton down there, a

1 little bit of rice, citrus, all these other things.
2 So I just want to say we appreciate -- we know
3 how hard the Commission works with all the
4 regulated entities, and we know how hard the
5 exchanges work. These things are vitally
6 important, that they're cost-efficient, you can
7 count on them. It's one of the only things we have
8 in our industry, and we have to use derivative of
9 the raw to figure out what to actually pay for our
10 refined because we don't have a refined market
11 contract in the United States.
12 So I just wanted to thank you all. I know
13 these conversations, they usually only happen when
14 things are going really badly and everybody's mad,
15 so I like that the conversation is happening right
16 now as we're looking at it. I appreciate it.
17 MR. HERNDON: Mr. Strubhar?
18 MR. STRUBHAR: Thank you. Thanks to the
19 Commission and the panelists. That's a valuable
20 topic.
21 A question I had is more oriented on timing of
22 margin. And, you know, our standard practice in

1 the commercial hedging industry is T plus one,
2 right, that this morning we were making margin
3 calls for yesterday's activity or sending excess
4 based on yesterday's. In volatile times, like the
5 March of 2022 instance that you brought up, you
6 know, the FCMs that we work with tend to have a
7 policy of an intraday margin call if a certain
8 level of margin is breached, be that $1 million, $5
9 million at the commercial hedging level. And that
10 intraday margin call could be the opposite
11 direction to a margin move that had already been
12 made T plus one for yesterday's activity, and it
13 can get a bit onerous.
14 And I guess my question, whether it's SPAN 2
15 or any other initiatives, it seems the ideal
16 scenario would be to get to a T-zero margining
17 policy as a general practice anyway, but there's a
18 challenge with a 1:15 market closed and a 3:00 p.m.
19 banking cut off for the same day. And I guess kind
20 of open-ended, can you speak at all towards any
21 initiative to get to a T-zero margining policy as a
22 regular practice?

1 MS. SPRAGUE: Yeah, it's a good question, and
2 there's a lot of talk in the industry about
3 enhancements to technology that provide real-time
4 capabilities, and we do look at those technologies
5 from a few different applications.
6 I think the thing to keep in mind, though, is
7 we like to think about on-demand capabilities more
8 than real-time capabilities because markets move,
9 you know, constantly. And so I don't think we need
10 to get to a place where wires are going back and
11 forth on a real-time basis. We all have our own
12 investment accounts. I can't imagine your 401(k)
13 account getting hit several hundred times a day
14 with wires because markets were moving throughout
15 the day.
16 So we are very thoughtful when we consider
17 enhancements that might benefit the industry, and
18 we want to take into account the chain reaction
19 that our actions or migration might have, and so I
20 think we've heard a lot of discussion here about
21 the complexities of the actual end users and
22 multiple players and their chains that provide very

1 important roles and functions, and in many ways,
2 those are funding functions. But that places
3 stress and then the drain on a different set of
4 market participants.
5 So it gets tricky to think about. We
6 certainly as a clearinghouse manage T-zero process
7 for the intraday cycle, and it's quite a tight
8 timeline, so the clearing members have about an
9 hour to meet the intraday cycle for us for both
10 mark-to-market and margin. And banks play a very
11 important role in that process, too. But we are
12 cognizant that the way that money moves throughout
13 the chain isn't necessarily set up to be a T-zero
14 process today.
15 And we do hear from different market
16 participants -- farmers, for example -- who are
17 harvesting during the day and not capable of
18 meeting real-time or more T-zero requirements. So
19 what that really would mean is more money put up in
20 advance, which can place a different level of
21 stress on the marketplace. If you have more
22 prefunding, somebody else just pays for it at some

1 point in time is the struggle.

2 So we are hopeful that technology advancements

3 can help the entire chain at some point in time,

4 but it gets tricky to think about the right

5 solution and all of the changes that would happen

6 as a result of that to who the funding requirement

7 shifts to and their ability to manage that.

8 So it's a great question and important to

9 think about. Having the dialogue with a group of

10 folks like this is part of the process and very

11 important to us, so we're always open to doing

12 things differently and better if you see an

13 opportunity.

14 And I'm aware that there are different types

15 of technology that different institutions are

16 considering using that may facilitate better

17 movement of value and faster movement of value, but

18 that money comes from somewhere, and so that

19 funding risk shifts accordingly. And, you know,

20 we're not agnostic to that because we understand

21 that that can place additional pressures on a

22 different part of the system.

1 MR. HERNDON: Mr. Barker, did you still want
2 to ask a question?
3 MR. BARKER: I was just going to comment on
4 that as far as market access goes. The larger
5 entities that we work with, whether those are
6 cooperatives or private businesses, can easily meet
7 an intraday margin call in almost every case.
8 But as we think about the individual grower
9 or, you know, individual market participants as a
10 whole, we need to be thoughtful if we were to
11 change to a T-plus-zero. Of course, they're
12 expected to but, like we said, the FCM serves as a
13 bit of a shock absorber, and so at times, we have
14 to meet margin calls by 11:00 a.m., for example.
15 Those wires may not come in till 3:00, and that's
16 what residual interest is used for on an FCM level.
17 And so I just think we should be thoughtful before
18 we would make some sort of change like that.
19 MR. HERNDON: Thank you.
20 Do we have any questions or comments from any
21 of the Commissioners?
22 COMMISSIONER MERSINGER: I had a quick

1 question, and this might be pretty basic, but going
2 back to the slide that Mr. Reardon had up, if you
3 were to overlay the slide that CME's margin calls,
4 I mean, does that exactly match up? And I guess my
5 question is, the initial margin that you showed in
6 that slide, is that all the margin model from the
7 clearinghouse, or is that also another layer of
8 initial margin that might be coming directly --
9 that might be part of what the FCM is requesting?
10 This is just a question I struggle with a lot
11 is, you know, when an end user is putting up
12 initial margin, who's setting that price? Because
13 I think there might be --sometimes there's maybe a
14 disconnect that it's not always what the
15 clearinghouse is charging. It might be a different
16 calculation based on, you know, the FCM, as Joe
17 explained, you know, being the shock absorber here.
18 So I'm just curious, when you look at that
19 slide, if that initial margin is based on CME's
20 initial margin in that contract or if it's adding
21 in additional calculations from the FCM.
22 MR. REARDON: Yeah, it's exactly what the CME

1 margin is, and it's just set up, you know --

2 COMMISSIONER MERSINGER: Yeah.

3 MR. REARDON: -- on a different side.

4 COMMISSIONER MERSINGER: Thank you. That's

5 helpful.

6 MR. REARDON: You're welcome. Thank you.

7 MR. HERNDON: All right. For our second

8 presentation today, we will now hear from Professor

9 Calum Turvey with Cornell University. And I'd like

10 to give a special thanks to Alan Martinez with

11 Cornell who is not on the agenda but was

12 instrumental in setting this up.

13 Professor Turvey, please begin.

14 DR. TURVEY: Thank you very much. Is my

15 slideshow going to be through your screen, or am I

16 going to just use my own sharing?

17 MR. HERNDON: We can advance for you.

18 DR. TURVEY: Okay. Okay, good. Good.

19 So this work, as you can see by the title,

20 from the academic side, I was teaching futures and

21 options. I teach the undergraduate futures and

22 options class at Cornell University. And the war

1 broke out in February of 2022, and I had to explain
2 to my students what was going on with wheat
3 markets. We then followed that through, and I put
4 a master's student on it, to really try to find out
5 what was going on in this due to war. There was no
6 literature on what the impact of war and conflict
7 is on futures prices.
8 And here we had a very unique situation where
9 we saw an immediate reaction with wheat futures
10 prices, but there are also two other contracts.
11 There's the Black Sea futures contract, which is
12 generally Russia-imported wheat, cash-settled, and
13 then there's a Ukrainian futures contract, which is
14 Ukrainian ports, cash-settled.
15 At the time of the war outbreak, I tried to
16 explain these markets. You know, is it going to be
17 a long war or a short war? Why has the market gone
18 up by, you know, 33 percent from $8 to around $11
19 prices of wheat and explaining that in such times
20 people have to guess. You know, were they going to
21 take Kyiv in three days or four days, or was it
22 going to be a prolonged war? The political risk,

1 the market risk, trade risk, financial risk,
2 currency risks, all of these things have forces
3 which are going to affect these futures contracts,
4 even though they are all in U.S. dollar
5 denominations.
6 Next slide, please.
7 So we started looking at this complex between
8 the CME futures prices, Ukrainian wheat futures
9 prices, and Black Sea wheat futures prices. We
10 have to recognize in order to understand what's
11 going on here that we just couldn't think about
12 this as an exogenous shock that's going to be
13 short-run and students, hedgers can trade on it on
14 a very simple basis.
15 The wheat markets are globally linked through
16 special trade relationships, as well as local
17 supply-and-demand conditions and shipping costs.
18 What was the relationships and the information flow
19 between the futures prices before the war? How are
20 these three markets cointegrated with each other?
21 How did they move together? What are the patterns
22 or the direction flows of influence between these

1 markets?

2 And what do I mean by that? Does the supply

3 conditions and demand conditions in Ukraine affect

4 the wheat prices in Chicago? Or are the wheat

5 prices in Chicago determining what the local prices

6 are at Ukrainian ports, and so on? And so we had

7 this sort of very complex structure where, as the

8 war broke out, there had to be readjustments in the

9 global wheat supply and the trading economy.

10 And the big question is how did these

11 relationships change as the result of the war? And

12 this question had come up with the trade war on

13 soybean prices with the Chinese blockade on that

14 period, and what we found then was, as the blockade

15 increased, there is a complete disconnect between

16 the Chicago price and the Dalian price of soybeans.

17 And we wanted to see whether or not we can make

18 some determination here also as to what this

19 particular conflict would have on these prices.

20 Next slide, please.

21 The only paper we really found on this was one

22 by Holbrook Working. And you might know Holbrook

1 Working, sort of the father of storage economics
2 when it comes to futures prices on that. And he
3 wrote in 1941 warning individuals and scholars who
4 might be looking at the impact of the war on prices
5 to sit back and you can't just look at what's
6 happening to the prices instantaneous and
7 contemporaneously with the news events of the day,
8 that you have to look at it in the context of what
9 was going on in global markets before the war and
10 then during the war.
11 For example, we're just coming out of COVID.
12 There were still supply chain problems, bringing
13 supplies into the United States. There was still
14 marketing problems and so on to do that. And so
15 there were changes in terms of the patterns of
16 demand and supply in importing countries. With the
17 high prices of wheat, countries that normally would
18 import would then use their own stocks and draw
19 down their own stocks rather than pay the higher
20 price, which was shifting the demand nature of
21 wheat from these countries as well.
22 There are also countries that have different

1 inelasticities. If you're looking at North Africa,
2 African countries that have no domestic supply of
3 wheat or very limited supplies of wheat, the
4 necessity of wheat would suggest that their demand
5 is going to be much more highly inelastic. So the
6 price shock in those countries would be much more
7 significant. So all of these things we thought
8 we'd better sort of take a look at in this very
9 rare circumstance of conflict.
10 Next slide, please.
11 So Ukrainian agriculture, it is a very large
12 wheat-growing area in in Europe, the breadbasket of
13 Europe some have called it before. Most of
14 Ukrainian land is arable, and agriculture provides
15 about 14 percent of Ukraine's population. And it's
16 also a very important exporter. Now, the global
17 exporters are not huge relative to, say, the United
18 States and Canada, but in the markets that it does
19 export to, it's a very significant player in the
20 world market.
21 Next, please.
22 Here is the study period. So this is from a

1 bar chart, and you can see the three prices. The
2 black is the Chicago, the orange is the Black Sea
3 wheat price, and the blue is the Ukrainian wheat
4 prices. And we're interested in these movements
5 before the war and then during the active war
6 period. And you can see there's two lines, the
7 study period and the prewar period. We ended at
8 the two-year anniversary of the war -- the one-year
9 anniversary in 2023.
10 But then there's an epilogue in the paper if
11 you want to take a look at that where, again,
12 things changed again with a different sort of
13 dynamic between these three futures prices from
14 that. So our study where we're looking at these
15 causalities and these relationships is really to
16 where the second vertical line is at. We did not
17 study beyond that, and beyond that, of course,
18 there were differences and changes in the field as
19 well.
20 Next slide, please.
21 These next few slides are just illustrating
22 sort of what the markets were thinking. Here's the

1 March 7 title, "wheat prices soar to trigger
2 trading halt for fifth straight day, surging nearly
3 50 percent" since that. From a teaching point of
4 view, of course, I was able to then illustrate what
5 a trading halt was. It's a rare thing. We don't
6 see that very often and don't often quote it.
7 Next slide, please.
8 Here is what the outlook is, so, again, this
9 is 2022. Everybody's trying to second-guess what's
10 going to happen on the ground. The beginning of
11 the war saw troop movements from Belarus and from
12 the Kharkiv area towards Kyiv, right? And then
13 that shifted to the south and the east, which
14 changed the dynamics of the war, heading right into
15 the higher wheat growing areas.
16 Next slide, please.
17 Also, throughout this time, we cannot forget
18 about what's happening in the Black Sea and the
19 blockade of the Black Sea. So these are two things
20 that become very, very important in terms of trying
21 to understand the prices. And now all we can
22 really look at in terms of causality is the event

1 analysis when these events took place and tried to
2 break it down into sort of discrete moments in time
3 where there were major events, not just small
4 battlefield events, but major trade events that
5 would do that.
6 But there's two things. One is the blockade
7 in the Black Sea and the flow of wheat from
8 Ukrainian ports to destinations, but the other one
9 came when insurers decided that they're not going
10 to insure any freight going through the Black Sea,
11 which is going to have a huge impact on the
12 transportation costs, particularly when the futures
13 contracts, the Ukrainian and Black Sea futures
14 contracts are cash-settled and shipments are free
15 on board. Then what happens to those costs and who
16 pays those costs starts affecting what that freight
17 market looks like and so on.
18 Next slide, please.
19 And here is the food security. Swati asked me
20 to sort of mention this a little bit, although it's
21 not too much, but there were some serious concerns
22 about importing countries, particularly North

1 Africa and Africa, which had strong dependency on
2 Ukrainian wheat, and also, as I said, perhaps a
3 higher or more inelastic demand so that the prices
4 were really quite severely affected there. But
5 even within the combat zone within Ukraine, the
6 seeded acres would be reduced, port elevators were
7 destroyed, rising costs of inputs such as nitrogen,
8 migration as people fled the battle zones, the
9 theft of agricultural equipment, destroyed source
10 facilities, and of course the blockade itself, all
11 of these things affecting agricultural productivity
12 into 2022, 2023, and perhaps 2024.
13 Next slide, please. Right.
14 So trying to understand the economics of war
15 is not just a very simple a war broke out, and the
16 prices of wheat went up and then the prices of
17 wheat went down. Commodities are global, and
18 markets tend to adjust to conflicts. And we saw
19 quite a bit of that. We saw Canada and the United
20 States beef up and start releasing supply.
21 President Biden said you can replace land in
22 conservation if you were to plant it to wheat,

1 right? The global markets moved in order to
2 increase the supply to Ukrainian export markets
3 that would be in short supply to try to stave off
4 some of the food security concerns that can do
5 that.
6 There's also multiple commodity effects, and
7 we only looked at the wheat complex, but of course,
8 naturally, natural gas, oil, and things like that
9 also were impacted, as well as other export crops
10 from Ukraine and Russia. And so we did have these
11 changes in global supply because of the blockades,
12 because of supply in the conflict zones, and of
13 course the trade effects of supply-and-demand
14 response.
15 Next slide, please.
16 So here's sort of a quick chronology of some
17 major events that we looked at or we were
18 considering as we were looking through these. So
19 the first period you can see -- and these are the
20 bases, so this the difference between the Chicago
21 price and the Ukrainian landed price all in common
22 units. From that, you can see that the prices

1 before the war, they were sort of moving together
2 from that. Then, as the war broke out, then we saw
3 huge basis changes between the three different
4 contracts or the two Black Sea contracts and
5 Commonwealth Exhibit, okay? We then had the
6 blockade, the period at which Turkey started
7 negotiating the Black Sea agreement. Then, we see
8 the Black Sea agreement at line C, and then the
9 renewal in November of 2022, the renewal in 2023,
10 and then July 17, which was after our study period,
11 you can see again the impacts when the Black Sea
12 agreement was canceled, which then again put risk
13 into the shipment of freight through the Black Sea
14 and Turkey.
15 Next slide, please.
16 Here is the Ukrainian wheat production. If
17 you look at the map -- I can't point it out because
18 I don't have control -- but the main battle zone
19 right now in Lugansk, Donetsk, down through Kherson
20 and Kharkiv area. So the battle moves from the
21 Kyiv area down to this heavily grown wheat area,
22 and that's where the battlelines are drawn just

1 along the border lines really up Donetsk, Kharkiv,
2 and so on.
3 Next slide, please.
4 Here are four slides, and I do apologize for
5 them being dark. This is provided by OneSoil,
6 which looks at satellite imagery on a field basis,
7 and they were kind enough to provide me these
8 graphs because I wanted to get an idea of what was
9 happening on the ground between 2020, 2021, 2022,
10 and 2023. And you can see the top two are 2020.
11 You're looking at the lighted areas there. Those
12 are the areas which are planted to wheat at the
13 field level.
14 In 2022 you don't see a lot of difference only
15 because it was mostly winter wheat, and so it was
16 still in the ground even as the battle goes.
17 And then in the bottom right you can see where
18 the effect is. You can see that that brightness
19 has now disappeared, and you can almost see on that
20 from the lower right through the Kherson area you
21 can see almost blacking out as farmers abandon
22 those fields or the fields were mined or the fields

1 were bombed and no longer arable for the wheat
2 production.
3 And you can just sort of see that black line
4 which goes along the border from Donetsk through
5 Kherson in the east and the south, which is where
6 the battlelines are drawn and where the battlelines
7 are to this date affecting and splitting the two
8 wheat markets. But even to the north of the
9 battlelines, you can see that quite a few of the
10 lands have been apparently abandoned to wheat. So
11 again, here's the impact of war on domestic supply.
12 Next slide, please.
13 So the effects of supply restrictions
14 increases price in trading countries, increases
15 domestic demand prices and decreased domestic
16 supply trade. All of these things have feedback
17 loops into the three futures contracts from that.
18 The effect of the Black Sea blockade from an
19 economic, it increases the prices of importing
20 countries reducing export demand, increases the
21 supply in Ukraine reducing Ukrainian prices, and
22 increases the domestic demand in Ukraine with lower

1 prices. So there are domestic and external
2 dampening effects.
3 Transportation costs, which I think are
4 probably the most important in terms of these
5 prices, that the transportation costs rise with the
6 risk and insurability, and once they remove the
7 insurance, then of course the risks have to be
8 borne by the shippers, and then that's going to
9 increase the cost. And seeing as there's no way to
10 transfer that into world markets and world prices,
11 then those prices and risks have to be borne by the
12 Ukrainian warehouses and shippers, putting lower
13 pressure on the FOB price in Ukraine. So all of
14 these things are affecting what the prices are
15 going to be.
16 Next slide, please.
17 What we did -- and I certainly can't go
18 through all of the regressions that we ran, but we
19 ran what we called vector autoregression or
20 cointegration analysis for multiple periods
21 throughout the war. We looked at it from a base
22 starting six weeks or March 2021, and then just

1 extended our analysis to see, as we added on six-
2 month periods, how did the price change as the war
3 hit in February 2022 and then throughout February
4 2023? So just elongating beginning that period and
5 seeing, on average, how did it change.
6 Then we also looked at how these price
7 relationships were in six-month increments,
8 starting in March to November of 2022, April to
9 December, and so on as we lead up to the war so we
10 can see what the more impactful or the more closer
11 to the war, how were prices affected. And what we
12 were looking for were the changes in the causal
13 relationships and the statistical relationships
14 between the three futures contracts.
15 Again, the paper has many, many regressions,
16 so I'm just going to provide a quick overview
17 because I just don't -- I'm probably running out of
18 time as it is.
19 Next slide, please.
20 So here's a picture of the correlations
21 between the prices. On the left are the level
22 prices, and you can see the correlation is about

1 84, 82, 95 between the three contracts when looked
2 at the levels prices, that is U.S. dollars per
3 bushel. You can see that in the war period,
4 February 24 to February 28, 2023, those prices sort
5 of move together.
6 The period -- the post-war study, which also
7 included the abandonment of the Black Sea
8 agreement, you can see then a huge breakdown in the
9 correlation in prices almost as if the Black Sea
10 and the Ukrainian futures prices were moving
11 independently of the CME prices.
12 The right-hand side are looking at the
13 percentage changes, so these are capturing these
14 local effects on that. And again, you can see what
15 the effect is, that there are things -- even though
16 the general price movements are there, there are
17 things that affect -- the prices change. So if
18 there's a price change in Ukraine and a price
19 change in Chicago or a price change in Russia, it
20 doesn't mean they're the same effect, right? The
21 general movements are there, but there's also other
22 things affecting those markets.

1 But look at the third one down in that post-
2 study area where the correlations in the price
3 relationships absolutely completely collapsed. So
4 in this period we just saw no relationship between
5 the three prices. And then it sort of returned
6 once there was stability brought back into the
7 Black Sea era.
8 Next slide, please.
9 So here's sort of what we found. We found
10 that, prewar, we saw that Black Sea wheat -- that
11 is wheat originating from Russian ports -- really
12 had a strong influence on Ukrainian wheat prices,
13 right? So Ukrainian wheat prices mostly followed
14 Black Sea wheat prices. Ukrainian wheat prices
15 also followed the Chicago wheat prices. But we
16 also saw that the Chicago wheat markets also
17 followed the Black Sea wheat prices, right? So in
18 terms of those markets and the global price in
19 Chicago, the Black Sea ports were more influential
20 than the Ukrainian ports.
21 At war, January 2022 leading up to the war,
22 Ukrainian wheat causally influenced. Now you can

1 see the direction of flow. Chicago traders got
2 really worried about what was happening in Ukraine.
3 And as Ukraine prices changed, these were strongly
4 influencing in that direction the Chicago markets.
5 Chicago wheat still influenced the Black Sea wheat
6 price.
7 Causality by July 2022 -- so we know that the
8 war is going to last a longer time. The causality
9 between the Black Sea wheat and Ukrainian wheat
10 fractured altogether. They were really two
11 different markets. Russian ports were obviously
12 not blockaded, but Ukrainian ports were blockaded.
13 So that signaling between those two markets
14 collapsed.
15 Then the Black Sea Green Deal Initiative in
16 July 2022, again, what was happening in wheat was
17 driving what was happening with the Russian wheat
18 at Russian ports. So people were focusing more on
19 supply effects and what was happening in Ukraine
20 than Russia. Chicago wheat also influenced the
21 Ukrainian wheat, and that's because of the global
22 markets as they adjusted expansion of supply, a

1 good bumper harvest in the Americas, and so on.
2 And the Ukrainian wheat causally influenced Chicago
3 wheat, so again, the Chicago markets really paying
4 attention to what was happening domestically and
5 with trade in Ukraine.
6 Now, our tables in the paper, of course, have
7 many more of these. I'm being very, very general
8 just to illustrate how these global effects affects
9 futures prices from a trading and a hedging
10 position.
11 Next slide, please.
12 So just some concluding thoughts on this.
13 Obviously, the Russians' invasion of Ukraine was a
14 major disruption on the world wheat futures market,
15 a very rare event, you know, the largest war in
16 Europe since the Second World War, to study it.
17 The presence of the CME Ukrainian wheat futures
18 price provide a rare opportunity to look at the
19 relationship between war and commodities.
20 The prewar causality pattern we just discussed
21 was Black Sea wheat. That was a strong influence
22 on the market. Ukrainian wheat was more of a

1 follower rather than a leader. But that reversed
2 as time went on.
3 And, of course, there are shifting dynamics
4 continually. The war today is not the same war it
5 was a month ago. It's not the same war it was a
6 year ago. And all of these things are going to
7 affect the prices depending on what's going on on
8 the ground. What our results show is that the
9 markets are paying attention to those things as
10 well. And yes, of course, exogenous shocks such as
11 these are going to have profound and global
12 effects.
13 And last slide, please.
14 So I hope you can be a little bit forgiving in
15 terms of the story I'm telling. We were not able
16 to find any papers that perhaps could guide us
17 perhaps better on our approach to doing this. Our
18 thought process was to look at it from the trade
19 models from importing countries. We set up a trade
20 model which had Ukraine being invaded by Ukraine
21 and then a third-party country, which was exporting
22 from Ukraine, and we used that to sort of guide our

1 thinking and then see how events happened according
2 to what the trade model predicted.
3 We have not put this paper through peer
4 review, and I don't think we will only because it
5 is so dynamically changing that by the time it gets
6 published, the story will be completely changed on
7 that. But it is available. I have sent it to
8 Swati, and it is available on SSRN if you are
9 interested in more details of what we've done.
10 If I've gone over my time, I apologize, but
11 I'll be happy to take any questions.
12 MR. HERNDON: Thank you, Professor Turvey, for
13 your presentation.
14 I'd now like to open the floor for questions
15 and discussion regarding your presentation. We
16 will begin with questions and comments from the
17 members of the committee.
18 Okay, so seeing none -- oh, sorry.
19 MR. ALLEN: Thank you, Scott. If I may just
20 take one moment and go off topic, I'm going to have
21 to pivot to virtual after the break, so I wanted to
22 thank you, Chairman, for your personal leadership

1 of this committee. There's a great network
2 occurring here of stakeholders, and to be back in
3 person here sharing our experiences in these
4 markets is really important, so thank you for that.
5 And I would be remiss not -- and by the way,
6 I'm Buddy Allen with American Cotton Shippers
7 Association. But I would be remiss not to flag
8 your recent guidance on voluntary carbon markets
9 and just applaud the Commission for the leadership
10 in that space. Many of the companies that I
11 represent are investing in products to add value to
12 agriculture and stakeholders through region
13 sustainability and all practices of the like. We
14 need definition and certainty in those markets and
15 those products so they can be authenticated and
16 that value can increase for agriculture
17 stakeholders.
18 You are at the tip of the spear, and I applaud
19 you for that. I hope the broader administration
20 and Congress will continue to focus on this
21 emerging market because it's critically important.
22 So I know that's off topic from Ukraine, but I

1 wanted to say it while I was here, and thank you
2 all.
3 MR. HERNDON: Okay. Seeing no more virtual
4 hands or tent cards, do we have any questions or
5 comments from the Chairman or any of the
6 Commissioners?
7 [No response.]
8 MR. HERNDON: Okay. So I turn back to you or
9 -- okay. Now turning back to Swati.
10 MS. SHAH: Thank you, Scott. At this time,
11 the AAC will take a 15-minute break. For
12 participants joining us virtually, please make sure
13 your Zoom is on mute and turn off your video during
14 the breaks to expedite our return. We will return
15 at 11:00 a.m. to begin our third panel. Thank you.
16 [Recess.]
17 MS. SHAH: I'd like to now call the AAC
18 meeting back to order and return the agenda to
19 Scott.
20 MR. HERNDON: All right, for our third
21 presentation today, we will now hear from Seth
22 Meyer with the USDA. Seth, if you're ready, please

1 go ahead.

2 MR. MEYER: All right. Thank you very much.

3 I am mentally shifting gears. I appreciate the

4 staff of CFTC giving me a room across the hall

5 where I was just running a seminar on global

6 oilseed markets.

7 So we'll try to cover a lot of ground here in

8 this because I think you have broad interest here

9 amongst different agricultural commodities, crops

10 and livestock, overall farm economy, so we'll try

11 and cover quite a bit of ground in the short amount

12 of time, but any questions, all questions welcome.

13 First slide.

14 I want to throw this up here. I don't expect

15 you to read the entire list, but the Office of the

16 Chief Economist does include the World Agricultural

17 Outlook Board that does global supply and demand

18 balances for crops, but we do a lot of other

19 things, some of which I have understood came up

20 earlier in the discussion today. I'm also the head

21 of the Federal Crop Insurance Corporation board of

22 directors, things like that. And all of these

1 things are of importance to us and things we deal
2 with in the Office of the Chief Economist, most of
3 which I'm not going to talk about today because I'm
4 going to talk about outlook.
5 All right. So let's go into the next slide.
6 I use this a lot if you have heard me talk
7 before because I remind folks that prices started
8 to increase all the way back in late 2000, a lot of
9 that being driven by improved trade in agriculture,
10 being also driven by corn and soybeans initially,
11 with wheat being dragged along until we have war in
12 the Black Sea, obviously wheat showing its strength
13 as a result, and we've seen prices moderate and
14 continue to moderate since the spike of the war.
15 So we still have prices elevated, but they've
16 certainly come down significantly from the highs we
17 experienced back in 2002.
18 Next slide.
19 But this is where I start to draw -- some of
20 your experts in the room may draw different
21 conclusions. You know, we saw a lot of -- this is
22 implied volatility. 2022 is implied -- and the

1 gray area is implied volatility ranges for the
2 previous 10 years, and then you have 2022 and 2023.
3 So what you can see across corn, wheat, and
4 soybeans, a tremendous amount of market volatility
5 in 2022 during the onset of the war. And there is
6 seasonality to these, and so the war was also a
7 very counter-seasonal increase in volatility a
8 shock, which is not a normal shock we see in
9 increases in volatility.
10 But when you turn forward into 2023, what you
11 notice is those volatility measures coming down
12 quite a bit. And I think one thing I would
13 contrast is when we start to separate out corn and
14 soybeans and maybe think about those as being
15 primarily feed from wheat and even rice, you get a
16 little bit of a different picture where soybeans
17 and corn volatility has declined. The market feels
18 more comfortable with those. It feels less
19 comfortable in markets like wheat and rice
20 globally.
21 Next slide.
22 And part of that reason here is where we think

1 about -- this is updated. Again, the folks at USDA
2 put out the WASDE report each month, and this is
3 the one produced last Friday, which starts to talk
4 about what do global carryout stocks -- what do we
5 have left over at the end of the next marketing
6 year? And it's that same kind of split where do
7 you see corn and soybeans, things more closely
8 associated with feed showing growing stocks where
9 we have rice and wheat showing perhaps tighter
10 global stocks. And I think it's just important for
11 us to talk about this from a global food security
12 standpoint, given what we've gone through in the
13 last three years, even as we dig into more market
14 specifics.
15 Next slide.
16 So I think when I describe this last crop
17 season, I think one of the things I do admit when
18 somebody asked me what surprised you about the last
19 crop year, I think part of what surprised me is
20 farmers' flexibility in deciding what they were
21 going to change acres into this past year. They
22 got a signal that says produce more corn, produce

1 more wheat, both crops that the Ukraine was
2 producing as well. They came in, they produced
3 those crops, forage conditions had been poor, they
4 produced more hay acreage. And, as a consequence,
5 they planted less soybean and cotton area as a
6 result.
7 So I show this because the farmer showed a
8 pretty good amount of flexibility this year in
9 terms of crop mix. You know, the signals were
10 there. The USDA asked them, what are you going to
11 plant? The market gets to respond, and then the
12 farmers get to change their minds a little bit
13 based upon what the market tells them. So there's
14 a signal early on that -- this is a process perhaps
15 unique in the United States. What are you going to
16 plant? USDA reports on what those farmers say. It
17 allows the opportunity for the market to signal
18 back and say, can't I convince you to plant a
19 little bit more of this crop so you can have market
20 reaction?
21 Next slide.
22 So another thing that you've probably heard a

1 lot about here and that I think does continue to
2 have some influence on our global market is that
3 we've gone from a three-year La Nina -- and here's
4 kind of typical patterns of La Nina -- and let's
5 move forward to the next one -- to an El Nino, to a
6 strong El Nino. And what you'll notice about this
7 is it is -- when I think about an El Nino, it isn't
8 so much that it has large effects on total crop
9 production that are certain. It changes where
10 those crops are good or bad for the most part, rice
11 being one of the ones that is a bit unique. And I
12 know we're not talking about things which are
13 heavily traded on our markets yet, we'll get there,
14 but one of the things is rice tends to be
15 concentrated more geographically, and so El Nino
16 can have an effect. But again, I think one can
17 identify El Nino effects going on in several
18 markets around the world.
19 Next slide.
20 And again, one of the other challenging
21 features as now we're going to jump in and start
22 talking about individual crops is it was a less-

1 than-ideal year across the United States when it
2 comes to growing conditions, okay? So it was very
3 hot at certain periods. Some folks got timely
4 rain, others didn't, but less-than-ideal conditions
5 in much of the corn and soybean and even wheat-
6 growing areas across the United States, and
7 including pasture and forage areas important to
8 livestock production.
9 Next slide.
10 And we had some really extreme temperatures
11 during critical development phases for the U.S.
12 crop this year. You know, when one thinks about
13 104 to 112 Fahrenheit, anything above 35 Celsius
14 while the corn is in pollination stage is not a
15 good thing if it's an extended period of time. So
16 when you look at this, you say, with those dry
17 conditions and with this heat, what kind of crop do
18 you expect?
19 Next slide.
20 And yet we had pretty darn good yields, not
21 again, below trend, but the other thing I find
22 surprising about the crop year -- we'll look at

1 soybeans and some other yields as well, too -- is
2 that the crops seemed to fare well, despite what is
3 maybe less-than-ideal weather conditions. Crops
4 seemed to fare fairly well. So you have here a
5 yield, which is slightly below trend, but because
6 of farmers' response in saying the market wants
7 corn, we're going to produce corn, you had large
8 corn area, even with that yield, we have record-
9 large U.S. corn production in the United States
10 this year, record-large.
11 Next slide.
12 As a result, we will be stocking it here in
13 the United States, and that softening prices -- you
14 know, we got corn stocks in exporting countries.
15 You see us as the red bar, low prices expect to
16 spur global demand. We hope we are the ones that
17 are carrying additional stocks into the end of the
18 year on our increases, so that's about a 50 percent
19 increase in our year-over-year carry out stocks.
20 Next slide.
21 Let's talk real quick about Brazilian soybean
22 production just because I came over from this

1 meeting just moments ago. Again, here, we made
2 some adjustments just this last month on the size
3 of our soybean crop in Brazil, pretty early for us
4 to do that normally, but it's been rather dry.
5 There are basically two zones, and I'm going to
6 talk a lot about Brazil because Brazil is
7 incredibly important now for how we think about --
8 and has been for how we think about global soybean
9 markets.
10 Next slide.
11 When you compare those two zones, you have an
12 area in the south which basically gets an even
13 amount of rain all year long, and you've got the
14 area up by Mato Grosso, which has a more seasonal
15 pattern of rain. You expect that rainfall to come
16 on. It's been less than average and hasn't really
17 come on strong within that region of Mato Grosso,
18 and, as a result -- go forward one slide -- we've
19 got areas of significant soybean production where
20 you talk about there up in Mato Grosso that are
21 having less favorable conditions for soybean
22 production. So we've already gone in at this point

1 and said that will temper our expectations about
2 soybean production in Mato Grosso, whereas in the
3 south rainfall is very good, and it looks like the
4 crop there, you know, you've got maybe too much
5 rain, but you got a lot of rain in the south and
6 where production looks good.
7 Now, normally here in an El Nino situation it
8 would be the northern edge of Mato Grosso and
9 north, which might be dry with an El Nino
10 condition. So it's not inconsistent with that, but
11 I'm not sure I'd lay it all on an El Nino condition
12 and the precipitation we're seeing now.
13 Next slide.
14 But it also has -- it isn't just that it has
15 been dry there, it has been exceptionally warm in
16 Mato Grosso as well, too. We didn't see great rain
17 last year in some of these regions either, but we
18 had much cooler temperatures. The combination is
19 we've got hot temperatures this year with that
20 less-than-ideal rainfall, which is at least at the
21 moment causing that crop to suffer.
22 Next slide.

1 But it's still going to be a big crop under
2 normal weather assumptions going forward, and so
3 you got Brazil area yield and production numbers.
4 That is still a lot of soybean production year over
5 year as the world looks forward as what are you
6 going to do with all those soybeans. You know, and
7 think about also a rebound in Argentina, a rebound
8 in Paraguay.
9 Again, will we see that rebound in Argentina,
10 et cetera? They suffered last year from one of
11 their worst conditions. They imported about --
12 they usually import some soybeans for their crush
13 system, but they imported about 10 million metric
14 tons last year. They just simply didn't have a
15 crop.
16 Next slide.
17 So again, we'll continue to watch that Mato
18 Grosso soybean production and the subsequent corn.
19 So as those beans are being harvested, right after
20 that comes the corn production on its tail, so that
21 will tell us what we will watch next. And again,
22 soybean production in Brazil fundamentally changed

1 how we view "carry" in the futures market in the
2 United States, and I think corn will increasingly
3 see that change in carry. The dynamic and timing
4 is a bit different, but, again, it's going to grow
5 that same way and change our market. It comes off
6 a few months before our own harvest.
7 Next slide.
8 So that's the kind of punchline when it comes
9 to overall soybean production at a global level.
10 This is what we expect in terms of South American
11 production, increases in South American production,
12 a falling U.S. share. So, you know, one of our
13 challenges is we're facing a lot of export
14 competition for our soybeans into the rest of the
15 market. China obviously being 60 percent of global
16 trade in soybean, a 60 percent share of global
17 soybean trade, you know, we will naturally see our
18 U.S. trade share fall. That's a natural, but we'll
19 have to look for what are some alternatives to
20 export demand.
21 Next slide.
22 So let's think about it again. I wanted to

1 show this one and say beans are much more flexible
2 than corn in terms of, you know, whether at
3 specific times of the growing period can have
4 negative effects on corn that corn can't rebound
5 from. Beans, a little bit more flexible, and yet
6 I'd say less-than-ideal growing conditions
7 throughout the entire year, but still, again,
8 yields not that much below trend despite
9 challenging production conditions.
10 Next slide.
11 But the difference -- you know, we talk about
12 what is going on in the U.S. market for soybeans
13 when you've got that big overhand in South America?
14 One of the things that has helped offset that has
15 been U.S. crush demand, U.S. crush demand being
16 driven by domestic and state-level policies on
17 biofuel production, specifically renewable diesel
18 in California.
19 And the RFS has significantly changed the oil
20 value of a bean. So you think about oil share of
21 the bean, the bean crushed makes two products.
22 Most of the weight is in meal, but now 40 percent

1 of the value is in the oil. And it's only less
2 than 20 percent of the overall physical volume, but
3 yet now it's 40 percent of the value, and it has
4 been elevated relative to history. Crush demand
5 has been strong. Oil demand has been strong. We
6 are importing things like used cooking oil. We are
7 importing things like canola oil from Canada, and
8 it's being driven by this demand for products. So
9 when you hear some biofuel policies about expanding
10 feedstocks, et cetera, this is part of what is
11 driving this. This market is being driven by
12 domestic policy for renewable diesel.
13 And again, I'm kind of throwing some teasers
14 out there. You all can ask any questions you want
15 either now or when we get to that point. But
16 again, it is nice to have domestic demand when
17 you're facing such large foreign competition in
18 this regard.
19 Okay. Next slide.
20 And this is that futures crush margin where
21 even though it's come down quite a bit, that crush
22 margin is basically what can I make by taking that

1 bean and crushing it and selling the oil in the
2 meal. And the crush margin is coming down. We
3 have been fortunate -- again, I remind you, we have
4 two products. We have meal, and we have oil. And
5 for meal, we were fortunate that the Argentines had
6 a bad crop and we could put our meal into the
7 global market. How long does that last if
8 Argentina rebounds, has a good campaign? They're
9 the world's largest meal exporters. If they want
10 to come into the market and export more meal, what
11 are we going to do with our meal, and how's that
12 going to affect our domestic crush margin when we
13 want the oil?
14 So again, I think there's a lot here at play.
15 Maybe I'm just trying to push my thesis of feed
16 volatility falling and food volatility rising.
17 Maybe I'm just trying to push my thesis, but I
18 think even within the bean maybe we see a little
19 bit of this split.
20 Next slide.
21 So I'm just going to reinforce my thesis again
22 here saying we've got, you know, global carry-out

1 stocks of corn and bean rising and rice and wheat
2 stocks contracting a little bit.
3 Next slide.
4 So let's talk a little bit about those
5 commodities as well, too, wheat. Again, this is
6 perhaps a different kind of outlook than I usually
7 give because I'm going all over the world talking
8 about specific things, happy to talk about U.S.
9 balance sheets at any point, but I think it's
10 important for us to talk about some of these global
11 drivers as well, too.
12 Ukraine, you know, we talk about the end of
13 the Black Sea Grain Initiative, but there we're
14 talking about and now an expectation of nearly 39
15 million metric tons of exports of primary
16 commodities out of Ukraine. This does not include
17 things like sunflower oil, which perhaps we've seen
18 some improvement in the exchange of sunflower oil
19 relative to seed itself, but that's about three and
20 a half million metric tons a month. That's not
21 bad, and I would have to admit that the solidarity
22 lanes overland have performed better than I would

1 have expected early on, okay? And yes, we do not
2 have a Black Sea Grain Initiative, and I think that
3 that, again, maybe I'm just pushing my hypothesis
4 again about food grains versus feed grains.
5 Well, let's go to the next slide.
6 When one thinks about this, I think part of
7 the reason we maintain volatility within the wheat
8 market around the world, despite the fact that
9 we've got big crops is where those big crops are
10 growing as well, too, or at least one of the places
11 where those big crops are growing, which is Russia
12 has had two very big crops in a row. And if you
13 listen to the chatter, has a third big crop on its
14 way. And when you look at this, I think the market
15 takes both concern and we see volatility when ports
16 in Ukraine get hit, but we also saw volatility when
17 a Russian oil ship got hit.
18 So I think this is a reminder that, you know,
19 the U.S. pushed very clearly that sanctions on
20 food, we don't have sanctions on food. Food is
21 different, and that's been, I think, a clear
22 message. And I think this reinforces it. We do in

1 fact need the Russian wheat in the global wheat
2 market, and that volatility remains at least in
3 part because of folks' concern about this. So the
4 Black Sea Grain Initiative served and would serve
5 the purpose of saying food is different.
6 Next slide.
7 And it just gives me an opportunity to talk
8 about rice as well, too, and some of the volatility
9 that we've seen in rice prices as well, too. This
10 is the only table I think in my whole presentation,
11 and I just show it because we cut Indian exports of
12 rice 6.5 million metric tons. Why does that
13 matter? This is a pretty thinly traded market.
14 And secondly, India supports its domestic
15 production of rice. And we can talk about, hey, in
16 a food-insecure country, do you want to support a
17 staple crop, right? We can talk about that, but
18 the other side of that is when they feel nervous,
19 they put export controls on, so you are both
20 pushing your excess supplies into the global market
21 on a regular basis, but then when the world might
22 be able to use those extra supplies, you put export

1 controls on.

2 So you're introducing -- this is a message

3 about being a reliable supplier, right? So you

4 can't push your surplus onto the global market, and

5 then when you feel a little nervous, cut the world

6 market off from your supplies because all you're

7 doing is pushing all that volatility on to the most

8 vulnerable consumers around the world.

9 So this has been a contributing factor. So

10 from why we saw rice prices start to rise, and you

11 have other countries which tend to react and have

12 reacted in the past. When we've seen really big

13 runs on global rice prices, it has been as a result

14 of other countries following suit in export

15 controls, and it just pushes all that volatility

16 into the global market. Again, noting who's

17 importing India's rice -- African countries. Some

18 of them have been able to continue to get it. It

19 hasn't been a complete ban, but again, this is a

20 bit of a story about where some of the volatility

21 coming from and being a reliable supplier.

22 Next slide.

1 Let's talk quickly about cattle markets. I
2 can talk about cattle markets a lot. I like to
3 talk about cattle markets. We're in a contraction
4 phase of the cattle market right now. This is part
5 of the reason, as we talk about this, why you've
6 seen beef prices rising, okay? We're in a
7 contraction phase. The herd is getting smaller.
8 We go through the cyclical periods, and part of
9 this is the biological lags, the price signals, and
10 the amount of time it takes to turn this market.
11 So we're in a contraction phase, and I know
12 you all know that we have seen recently record high
13 feeder and fed cattle prices. We've seen record
14 highs for both. We've come off of them pretty
15 significantly, but they're still elevated. And I
16 will tell you, I think there are fundamental
17 reasons for that. Even though we're in a
18 contraction phase, you say we're in a contraction
19 phase. Why are feeder cattle and fed cattle prices
20 falling?
21 And I would say we have a January cattle
22 report coming up from USDA, and the question will

1 be, do we have a few more calves than we thought,
2 or are we just taking this coasting plane on a
3 declining cattle herd and turning it sharply into
4 the ground? What do I mean by that? I mean, we've
5 got feeder cattle. Folks are trying to decide
6 whether they want to hold those calves, you know,
7 raise those heifers, breed them, and produce new
8 calves, or cash in now. Because of forage
9 conditions, because of other signals, because of
10 high prices, folks have decided they want to take
11 the money now.
12 And so what we've seen is placements, animals
13 on feed, kind of build up the supply of animals on
14 feed, and so that's the fundamental that is in the
15 short run pushing down those animal prices. But
16 what you're doing is you're taking away your
17 potential, and you're putting it into the
18 processing market, so you're forcing yourself at a
19 sharper downward trajectory in cattle prices.
20 So as we think about food price inflation, as
21 we think about beef prices, even if you made a
22 decision, which I don't necessarily expect, we see

1 a cattle turn in the spring, you still got a couple
2 years before those things become -- before that
3 makes a new steak. So you got a couple years left
4 of contracting beef supplies in the United States.
5 Okay. Next slide.
6 And again, a driver of this for the last
7 couple years has been poor forage conditions, and
8 here's like where the cattle are at and where the
9 drought conditions are at overlaid against each
10 other. We have seen the drought moving from the
11 High Plains, perhaps more towards Nebraska, but
12 it's still -- and hay production improved this year
13 over last year, but that's not saying a lot.
14 So folks with cow-calf operations west of the
15 Mississippi saying can I maintain those cow-calf
16 pairs with the forage conditions I got? Or should
17 I just cash in the money now and send that feeder
18 to the feedlot? And right now, they're saying send
19 it to the feedlot.
20 Next slide.
21 Alternatively, in swine here, when we think
22 about the health of the overall swine industry, I'm

1 going to talk to you a little bit about some
2 obscure details here that matter. Profitability in
3 the swine industry has been poor, and so the
4 natural reaction by producers is to say we will
5 pull back a little bit on supply. And that's a
6 reaction, right? We're not making money. Let's
7 pull back a little bit on the number of animals we
8 are breeding. And they have. The offset, perhaps
9 unexpected, at least by me, offset has been a sharp
10 increase in the number of pigs per litter, as a
11 matter of fact, such a sharp increase that it
12 completely offset the declines in farrowing. So
13 while they might have wanted to get less animals by
14 breeding less, the number of pigs per litter
15 increased sharply and completely offset any ideas
16 that they would like to contract the size of that
17 herd.
18 Next slide.
19 At least part of that has been lower pig
20 disease pressures seasonally than we observed in
21 the past. If I added the most recent data from
22 today on to that, we might see it coming back up a

1 little bit as it does in the wintertime, but we
2 have seen less than full disease pressure, and we
3 have also seen a mix of states improve their
4 overall pigs per litter that are maybe outside of
5 the I states, let's call them. So we've seen
6 improvements in pigs per litter. If that continues
7 and folks want to cut supply, they'll have to make
8 bigger farrowing changes year over a year than they
9 had previously.
10 So again, here we're looking at in terms of
11 pork production, we're talking about more than they
12 wanted to, perhaps less favorable overall
13 profitability conditions.
14 Next slide.
15 Let's talk just a little bit about trade. I'm
16 going to talk a little bit about trade and farm
17 income, and then we can discuss whatever you want
18 to talk about. This is the latest trade report
19 from USDA. I think there's about -- do you want to
20 be an optimist and read this slide? Do you want to
21 be a pessimist and read this slide? I think
22 there's numerous ways that you can look at this

1 slide. I can look at this slide and say, the last
2 four years have been the best for exports and
3 imports for U.S. agriculture in history, right?
4 Some folks might say, hey, you're developing a
5 pretty big gap there between exports and imports,
6 and in fact, that's true. We've got a trade
7 deficit for agricultural trade. As a kid that grew
8 up in Iowa, in the wintertime, what I could get at
9 Hy-Vee at the grocery store was pretty limited in
10 the wintertime, right? Maybe some sad-looking
11 lettuce. Now you can walk into Hy-Vee in Iowa, and
12 you can get whatever you want. Part of that is a
13 function of improved trade, so part of that is a
14 function of us importing products that we're not
15 producing at that particular time of the year.
16 Some of it's high-value products for consumers,
17 things like tequila, things like that. And
18 alternatively, in this point, some of it's
19 importing calves from Mexico because we don't have
20 enough calves ourselves.
21 So, again, trade does serve a useful purpose,
22 and when I look at this, I say, it doesn't have to

1 be -- you know, we don't always have to have a
2 surplus. I'd like a surplus, okay, but I don't
3 think it has to be that. I think we can look at
4 this and say, last four years have been good for
5 agricultural trade. And I will say on the export
6 side, those last four years are part of what's
7 contributed to what we'll talk about next, which is
8 farm income.
9 Next slide.
10 I'm not going to talk about farm income yet,
11 but I'll remind you, this is kind of more of that
12 story, which is China came into our market. That's
13 what boosted farm income early. China's demand
14 from us and the overall prices of the commodities
15 that China buys from us have been pushing their
16 share down, but we've had good, solid increases
17 that have maintained from Mexico and Canada to the
18 point where those three are awful close in trade,
19 Mexico, Canada, and China.
20 Next slide.
21 And I'm going to be a little bit self-serving
22 here a little bit and talk about just as a reminder

1 about outstanding sales, and this is a bit of a
2 selfish thing because I have an interest in talking
3 to you all at CFTC about this issue. We report
4 outstanding sales. When a sale occurs in the
5 market, when an exporter sells a product into the
6 global market, they have to report that to USDA.
7 And so when I think about this, this is on
8 volume terms. So, again, I think part of our trade
9 challenge this year is both volume and value for
10 some of our bulk commodities, and that's just what
11 I wanted to talk about from that slide.
12 Next slide.
13 So this, again, is one of the final slides
14 from the briefing that we give to the secretary at
15 the end of every WASDE report. And I think the
16 thing to notice from this is that every major
17 agricultural commodity price is lower year over
18 year. And I think we need to start thinking about
19 -- and I think this kind of raises the question of
20 where do you see them going next year, right? And
21 from a producer standpoint, you know, what does
22 that look like, you know?

1 Let's go to the next slide.

2 Because this is the other side of it, is not

3 just what I get for my receipts, it's what it cost

4 me to get there. So when one looks at the cost of

5 production, this is expended. This is one of our

6 measures. So this is expenditures on inputs. And

7 when you look through this, you can see some -- the

8 dashed line says things which were more expensive

9 this year, or things which were less expensive or

10 spending, aggregate spending above and below.

11 And so when you look at this, your eyes come

12 and say well, things like pesticides, fuel and oil,

13 and fertilizer are low, but those are still not

14 back to levels of three years ago. They're still

15 elevated, particularly, I would say, things like

16 fertilizer, so producers are seeing some pullback

17 in those components. But when you look at the rest

18 of the components, things like interest expenses,

19 et cetera, you can see those expenses rising. So

20 when you look at overall aggregate spending on

21 these expenses, actually up slightly year over

22 year, okay? So you got falling receipts and

1 increasing costs.

2 Next slide.

3 But overall farm income in the last three

4 years has been the highest three years in a row of

5 any time in my lifetime. And if one looks at the

6 net cash farm income line in here, it's the highest

7 three on record. So you got three really good

8 years of farm income that put the farm sector in a

9 very good position going forward. The question is,

10 is are costs sticky and are output prices coming

11 down? And does that cause some margin issues for

12 producers as we go forward?

13 Next slide.

14 This is my last slide, and I'm happy to answer

15 any and all questions.

16 We've got a lot of usual suspects here as

17 well, too, producers' concerns about the next crop.

18 You know, as soon as they go into the field,

19 they're thinking about the costs for the next crop.

20 Growing global competition, I was just on that

21 oilseed discussion. You got big crops of oilseeds

22 around the world, rebound in Argentina, China now

1 buying corn from Brazil, whereas they didn't
2 before, lots of those issues.
3 We've got other issues that seem to linger.
4 We got Mississippi River issues, Panama Canal,
5 which will only get worse in the short run. We've
6 got continued poor range land for cattle. Again,
7 are we going to see that turn, or are we not going
8 to see that turn? Currently reduced disease
9 pressure, some of the issues we saw in things like
10 egg prices, we didn't see HPAI the same year, which
11 gave us that pressure on eggs. At the moment,
12 we've seen reduced pressure on swine. Is that
13 something that stays around?
14 We've got other things we are working on that
15 could have influence in the market. We've got Prop
16 12, which is the animal welfare rule in California.
17 That comes into force on January 1. And if you
18 think about how long it takes you to -- and the
19 restriction is on the sow. If you think about how
20 long it takes, if the restriction is on the sow, to
21 make the bacon that's available January 1, that
22 decision was way back in April. So the supplies

1 that will be available in California on January 1
2 were determined back in April of this year. So
3 whatever we got that's Prop 12-compliant is what we
4 got on January 1. So these are others kinds of
5 things which come into play. And obviously ongoing
6 issues with the RFS sustainable aviation fuel and
7 biofuel policies.
8 I know there was a lot there, and I didn't go
9 into any particular piece in great detail, but I'm
10 happy to answer any questions that you all might
11 have.
12 MR. HERNDON: Thank you, Seth, for the
13 presentation.
14 I'd now like to open the floor for questions
15 and discussion regarding the presentation. We will
16 begin with questions and comments from the members
17 of the committee. I'm not seeing any in the room,
18 but are there any virtual hands raised or on the
19 telephone? Nope? Okay.
20 Do we have any questions from the Chairman or
21 Commissioner Mersinger?
22 CHAIRMAN BEHNAM: Seth, thanks for being here.

1 We value the partnership with USDA, and we know we
2 work a lot with you certainly on the econ side,
3 but, you know, whatever we can provide on the
4 market side, we hope it's valuable.
5 The farm income statistic was interesting in
6 like, how do you bridge the gap? And maybe I'm not
7 appreciating commodity prices as they relate to
8 sort of the farm income side of things, but given
9 the higher costs, how are we maintaining that level
10 of farm income despite sort of the externalities
11 that seem to suggest we would not necessarily be
12 hitting records?
13 MR. MEYER: Yeah, so I think you're probably
14 pointing to 2022 where we had record farm income,
15 despite all of the chatter about input prices. And
16 there aren't farmers in the room, I don't think.
17 Maybe we've got some farmers in the room here, but
18 I usually tell this story, and the farmers usually
19 laugh because they know it's true, which is usually
20 if you talk about inputs and you ask a farmer about
21 inputs, they'll say I can't get fertilizer. The
22 part they usually leave off is I can't get

1 fertilizer. The part they leave off is "at a price
2 I want to pay," right? That's the part they
3 usually are silent on, and they laugh about that.
4 In 2022, it was truly the case they were concerned
5 about ability to get it.
6 So I say that because I think 2022 turned out
7 to be a good year simply because commodity prices
8 were so strong, even relative to inputs, but it
9 wasn't without a lot of stress. So what I'm saying
10 is there was a lot of stress in it, a lot of
11 chatter. Yes, they paid more for inputs. Some of
12 it they had already secured before the war started
13 in 2022, right? They had already purchased some
14 ahead, and so they were able to smooth it out. But
15 on the end of commodity prices being so strong, it
16 did turn out to be a good farm income year. And
17 farm income at the national level does mask certain
18 things, right?
19 CHAIRMAN BEHNAM: And a second question if you
20 don't mind, on the Brazil front and sort of where
21 that market's going, what impact that has on our
22 producers and exports and sales to China. And then

1 maybe a little bit of a longer curve analysis on
2 where you see that going, and then maybe juxtaposed
3 against like biofuel consumption and where is that
4 heading, whether or not that's going to pick up the
5 slack and maybe lower sales of beans and corn to
6 China because of Brazil.
7 MR. MEYER: So I'll start. I'll answer the
8 easiest part of that question first is where do I
9 see Brazilian production going? Up, bigger,
10 larger, more. I think that one's pretty
11 straightforward. I think if one were to look back
12 and look at how the growth in Brazil affected U.S.
13 soybean production and the way we think about
14 carry.
15 I think there is a third pillar to that, which
16 is China. You got one destination in the world,
17 which is 60 percent of the market and buy is year-
18 round, okay? So I think that that fundamentally
19 changed the system of soybean supply where we've
20 got six months, it's just-in-time delivery, six
21 months for the United States, six months for
22 Brazil, six months in the United States, six months

1 in Brazil. Demand in China growing more than 4
2 percent a year annually, I'm not sure I see that
3 continuing going forward, right? But the
4 Brazilians don't have necessarily a reason to take
5 their foot off the gas at the same time.
6 And so I think if we're focusing on soybeans
7 first, we've got domestic demand, which is
8 fortunate that we have that domestic demand given
9 the global competition on the bean side for crush
10 demand in the United States that's serving the
11 renewable diesel program, serving the RFS program.
12 I think if we continue to expand crush,
13 though, when you crush the soybean, you don't just
14 get the oil, you get the meal, so we're going to
15 have to think increasingly about where that's going
16 to go. So I think we'll continue to see a need to
17 find markets from that.
18 So I think from that point on, it gets very
19 complicated. Brazil exports beans. Argentina
20 exports products. So we're facing competition from
21 Brazil for the beans side so we crush them
22 domestically for our oilseed program, and now we're

1 competing with the Argentinians on the meal side.
2 So we're going to continue to face competition from
3 South America.
4 On the corn side, I think we have some more
5 natural advantages perhaps, but here, too, the
6 Brazilians got a lot of land that they can plant
7 second crop corn on. They can plant corn right
8 behind beans. They can grow that area. The
9 Chinese looking to diversify where they're getting
10 their supplies from, increasingly have looked to
11 Brazil. They used to have phytosanitary controls
12 on imports from Brazil. They removed them, and so
13 now you've got a big competitor from Brazil into
14 the Chinese market.
15 CHAIRMAN BEHNAM: Thanks, Seth.
16 COMMISSIONER MERSINGER: Thank you. That was
17 a great presentation.
18 Just a quick question going back to the slide
19 on the trade and where we're starting to see this
20 deficit, just I want to make sure I was reading
21 that correctly, but that was all of our
22 agricultural commodity that we're trading?

1 MR. MEYER: And it's in value terms --

2 COMMISSIONER MERSINGER: Value.

3 MR. MEYER: -- right, because we're exporting

4 different things.

5 COMMISSIONER MERSINGER: Right.

6 MR. MEYER: It's not fair to a ton of this and

7 a ton of that.

8 COMMISSIONER MERSINGER: Right.

9 MR. MEYER: Yeah.

10 COMMISSIONER MERSINGER: Right, exactly. And

11 do you -- I mean, as you mentioned, the lettuce in

12 Hy-Vee, we didn't have Hy-Vees in South Dakota, but

13 yes, there was no fresh fruit and vegetables in the

14 grocery store in the winters when I grew up. It

15 was a lot of canned goods, and so I totally

16 understand what you're saying.

17 But to that point, is this just going to be

18 the trend going forward, that we're going to have a

19 growing trade deficit for agriculture commodities?

20 And how much of this is driven by, let's say, you

21 know, China deciding that they're going to, you

22 know, source a lot of soybeans out of Brazil and

1 kind of geopolitical factors that play into that as
2 well?
3 MR. MEYER: No, I think it's a great question
4 because, again, I think you look at that graph, and
5 it depends on how you want to view this. You can
6 view it many different ways. And I think if you
7 took a longer-term view, you would say, this cross
8 may have been coming, right? And so I think it is
9 a continuing challenge that we're going to have to
10 face in U.S. agriculture if we want to kind of get
11 back to something more -- or maintain something
12 more balanced.
13 I think having all -- the more you have your
14 trade concentrated in one destination, the more you
15 rely on continued demand from that destination.
16 The more you concentrate on specific products, you
17 know, the more you are sensitive to the demand of
18 those specific products. We always see much more
19 volatility in our export values than we do our
20 import values. Maybe that's the resiliency of the
21 U.S. consumer in terms of what they want to buy.
22 So I think as -- here's where I put my U.S. ag

1 enthusiast hat on. We need to convince other
2 countries of the value of our agricultural
3 commodities and that need to have that same
4 response to them, so I think we need to figure out
5 ways to gain access to markets and sell in the
6 commodities we're good at and figure out how to
7 expand that, because, otherwise, I think we do face
8 the real challenge that that becomes not only
9 permanent, but continues to widen if we don't
10 exploit that. What is that? Is it selling more
11 pork into Mexico, or is it new things?
12 I was just down in Mexico trying to -- and
13 somebody threw at -- what should we sell to
14 Mexicans? I don't know. Maybe we need to convince
15 them that they like apple pie as much as we like
16 guacamole at the Super Bowl, right? You got to
17 find some market high value to sell it to them, and
18 I think that there are -- we need to figure out how
19 we're going to do that. Otherwise, we'll be locked
20 in.
21 COMMISSIONER MERSINGER: Thank you. No,
22 that's a great explanation, and I really appreciate

1 that.

2 MR. HERNDON: All right. Before we move on,

3 I'd like to give members an opportunity to raise

4 any suggestions for discussion topics for the 2024

5 meetings.

6 Mr. Coyle?

7 MR. COYLE: Sure. I'm not sure if this is a

8 topic for our next meeting, but just a topic that

9 the National Grain and Feed is sensitive to and

10 wants to, you know, make the Commission aware of,

11 some of the banking proposals that have been

12 announced. You know, we talked about margining and

13 the cost and impact that is associated with that on

14 our hedgers and much of our industry and our

15 members are hedgers. You know, the FCM industry

16 has been one that's been consolidating. We're

17 seeing fewer and fewer options for those services.

18 You know, many of the major banks that are

19 still operating as FCMs, we see these proposals,

20 potentially significantly increasing their capital

21 requirements for activity related to futures

22 trading and these services they're providing as

1 FCMs. So there's some concern that this trend that
2 we've been seeing in terms of reduction in FCMs,
3 that we could see further reduction, which,
4 eventually, we could get to a point where there may
5 not be sufficient services or providers for those
6 and/or their costs may -- the cost for that
7 business, they may charge more and more, which, you
8 know, will affect all users, but may impact the
9 smaller users that are more sensitive to some of
10 those costs.
11 So, you know, hedging for farmers from their
12 production but also end users, the cost of their
13 inputs is important and a critical part of our
14 industry. So just something we want to share, make
15 sure, you know, that -- and I'm sure you are, but
16 it's a point to raise from the NGFA.
17 But otherwise, you know, very much appreciate
18 you hosting and bringing us all together. The
19 presentations so far today have been quite
20 informative and really appreciate being here.
21 MR. HERNDON: Thanks. Mr. Barker?
22 MR. BARKER: So I had two ideas. One was

1 brought up today, and I thought it was a good idea.
2 We could possibly discuss the intersection of how
3 these insurance products like the livestock revenue
4 coverage and farm programs intersect with our
5 agriculture exchange-traded markets, and I think
6 you have an ability to bring in speakers that can
7 speak very good on this. So I think that could be
8 a really good topic. It was brought up earlier
9 today.
10 And then I guess the other one I thought that
11 could be a great service to the industry would be
12 kind of a high-level update on sustainability
13 programs that the CFTC is working on in conjunction
14 with other committees that are actually happening,
15 some sort of update for how that's going to impact
16 our agriculture markets or some sort of high-level
17 update to be quite a service to the market
18 participants as a whole.
19 MR. HERNDON: All right. Any other thoughts?
20 Oh, sorry, Ed.
21 MR. PROSSER: Thanks, Scott.
22 I listened with great interest to Suzanne's

1 comments today around new technologies and
2 techniques, data manipulation that they're using
3 for market oversight. And I wondered, as I was
4 listening, if those technologies could also be used
5 for market transparency, the idea that, from an end
6 user's perspective, knowing who's buying, who's
7 selling, the quantities that those are happening at
8 and more real time than obviously the reports that
9 we get today. And having the exchange explain
10 maybe the opportunities to use those same tools
11 only not just for market reg, but for market
12 transparency, I think might be very interesting.
13 MR. HERNDON: All right. I'll turn it back
14 over to Swati.
15 MS. SHAH: Thanks, Scott.
16 We will now hear from Chairman Behnam, the AAC
17 sponsor, for his closing remarks.
18 CHAIRMAN BEHNAM: Swati, thank you. Scott,
19 thank you. Seth, thank you for presenting, and to
20 all the members for being here. Again, it means a
21 lot to us. I know the holidays are around the
22 corner, but making the trip out.

1 It's been a great year. We've had a lot of
2 great meetings. Ed, you mentioned the first panel.
3 I was very intentional in having that panel. I've
4 talked a lot about our markets -- you know, my
5 colleagues have, too -- being accessible, being
6 priced appropriately so end users can put on a
7 hedge and keep a hedge.
8 Obviously, a lot of volatility in the markets.
9 I think there's a lot of questions, a lot we learn
10 from CME, but these are going to be, you know,
11 issues and discussions I think we need to continue
12 having into 2024.
13 Ag con, Kansas City, Ed apparently is going to
14 get everyone to come, but we would all love to see
15 you there. It's going to be a great event. And I
16 think let's just use, again, after the holidays an
17 opportunity to think about what discussions and
18 topics we want to talk about.
19 We will hopefully make the advisory committee
20 a part of that two-day event, but the ag conference
21 itself is going to be unique and separate, and
22 we're going to try to get folks from USDA to come

1 down and other federal agencies to speak about a
2 variety of topics that are important. But it'll be
3 good, like I said at the beginning, to be out of
4 D.C. and getting together in that environment.
5 So I want to thank Commissioner Mersinger for
6 being here and adding her expertise and experience
7 and being a part of the morning. And again, thanks
8 to Swati and Scott and everyone who participated.
9 Wishing you all a very happy, safe holiday, safe
10 travels, and we'll see you in 2024. Thanks.
11 MS. SHAH: Thank you, Chairman Behnam.
12 Thank you to all the AAC members and the guest
13 panelists for your participation in today's
14 meeting. The meeting is now adjourned.
15 [Whereupon, at 11:50 a.m. EST, the meeting was
16 adjourned.]
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