

CERTIFIED  
TRANSCRIPT

NATIONAL FEDERAL MILK MARKETING ORDER  
PRICING FORMULA HEARING

DOCKET NO.: 23-J-0067; AMS-DA-23-0031

Before the Honorable Jill Clifton, Judge

---o0o---

Carmel, Indiana

October 2, 2023

---o0o---

Reported by:

MYRA A. PISH, RPR, C.S.R.  
Certificate No. 11613

1 A P P E A R A N C E S:

2 FOR THE USDA ORDER FORMULATION AND ENFORCEMENT DIVISION,  
3 USDA-AMS DAIRY PROGRAM:

4 Erin Taylor  
5 Todd Wilson  
6 Brian Hill

7 FOR THE AMERICAN FARM BUREAU FEDERATION:

8 Roger Cryan

9 FOR THE MILK INNOVATION GROUP:

10 Ashley Vulin, (Remotely)  
11 Charles "Chip" English  
12 Grace Bulger

13 FOR THE NATIONAL MILK PRODUCERS FEDERATION:

14 Nicole Hancock  
15 Brad Prowant

16 FOR SELECT MILK PRODUCERS, INC.:

17 Ryan Miltner

18 FOR EDGE DAIRY COOPERATIVES:

19 Lucas Sjostrom  
20 Dr. Marin Bozic

21 FOR INTERNATIONAL DAIRY FOODS ASSOCIATION:

22 Steve Rosenbaum

23 ---o0o---

24 (Please note: Appearances for all parties are subject to  
25 change daily, and may not be reported or listed on  
26 subsequent days' transcripts.)

27 ---o0o---

28



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

M A S T E R I N D E X

SESSIONS

MONDAY, OCTOBER 2, 2023

PAGE

MORNING SESSION

6301

AFTERNOON SESSION

6431

---o0o---



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

M A S T E R I N D E X

WITNESSES IN CHRONOLOGICAL ORDER

WITNESSES:	PAGE
Mike Brown:	
Cross-Examination by Mr. Miltner	6307
Cross-Examination by Mr. Sjostrom	6324
Cross-Examination by Dr. Bozic	6325
Cross-Examination by Ms. Taylor	6326
Redirect Examination by Mr. Rosenbaum	6351
Recross-Examination by Ms. Hancock	6373
David Pool:	
Direct Examination by Ms. Hancock	6378
Cross-Examination by Mr. Sjostrom	6387
Cross-Examination by Ms. Taylor	6388
Redirect Examination by Ms. Hancock	6392
Dr. Marin Bozic:	
Direct Examination by Mr. Sjostrom	6397
Cross-Examination by Mr. English	6461
Cross-Examination by Ms. Hancock	6502

---o0o---



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

M A S T E R I N D E X

INDEX OF EXHIBITS

IN CHRONOLOGICAL ORDER:

NO.	DESCRIPTION	I.D.	EVD.
286	Corrected Pages 20 & 23		6303
287	Updated Tables Tab		6303
288	Testimony of David Pool	6378	6393
289	Edge-6	6396	
290	Edge-15	6396	
291	Document titled Dairy Markets & Policy Information Letters Series	6480	

---o0o---



1 MONDAY, OCTOBER 2, 2023 - - MORNING SESSION

2 THE COURT: Please come to order.

3 Let's go back on record.

4 We're back on record. It's October 2, 2023, a new  
5 fiscal year for this proceeding, and it's approximately  
6 8:04 in the morning.

7 And I have in front of me the Exhibits 275, 276,  
8 and 277.

9 Mr. Rosenbaum?

10 MR. ROSENBAUM: Good morning, Your Honor. Steve  
11 Rosenbaum for the International Dairy Foods Association.

12 Your Honor, you will remember that on Friday as we  
13 went through Exhibit 276 we found a couple of pages with  
14 errors, and we corrected them on the record, but I  
15 committed to providing corrected pages. And if I could  
16 approach Your Honor, I have copies of that.

17 THE COURT: Thank you.

18 MR. ROSENBAUM: I have distributed copies to --  
19 copies to USDA, as well as all the participants here.

20 And if I could explain. One document is titled  
21 "Corrected Pages 20 and 23 of Hearing Exhibit 276," which  
22 is also IDFA Exhibit 49. So those are simply the  
23 corrected copies of the two pages that we discussed on  
24 Friday.

25 The other document, Your Honor, which is one page,  
26 is called the "Updated 'Tables' Tab (Page 1) of Hearing  
27 Exhibit 277," which also is IDFA Exhibit 49A.

28 Your Honor, as we prepared the corrections to



1 exhibits -- to pages 20 and 23, we realized that the error  
2 that appeared on page 20 of Exhibit 276 also appeared on  
3 the tab of Exhibit 277. It's the identical table. So we  
4 went ahead and corrected it there, too. In -- in all  
5 cases it simply is changing the word from "greater" to  
6 "lower" as it appears in the first three boxes that appear  
7 on the updated table of Hearing Exhibit 277.

8 So, Your Honor, we would ask that both of these  
9 corrected documents be admitted into evidence.

10 THE COURT: Which one would you like to have the  
11 first exhibit number?

12 MR. ROSENBAUM: I think that would be the  
13 "Corrected Pages 20 and 23 of Hearing Exhibit 276."

14 THE COURT: All right. And just to make sure that  
15 I'm doing this correctly, what exhibit number would that  
16 be?

17 MR. ROSENBAUM: I believe that would be 278, Your  
18 Honor. No?

19 I stand corrected.

20 THE COURT: So 286 is this one?

21 USDA REPRESENTATIVE: This is a new one?

22 THE COURT: Yeah, we're about to do a new one. So  
23 are you telling me we already have 286?

24 USDA REPRESENTATIVE: No, that would be the next  
25 one.

26 THE COURT: That's the next one. Excellent. All  
27 right.

28 So the "Corrected Pages 20 and 23" are



1 Exhibit 286, and the "Updated (Tables) Tab" is  
2 Exhibit 287.

3 Is there any objection to these documents being  
4 admitted?

5 There is none. Exhibit 287 is admitted into  
6 evidence -- excuse me -- Exhibit 286 is admitted into  
7 evidence. Exhibit 287 is admitted into evidence.

8 (Exhibit Numbers 286 and 287 were received  
9 into evidence.)

10 MR. ROSENBAUM: And, Your Honor, you may recall  
11 that Exhibit 287 is actually in its original format, an  
12 Excel spreadsheet, and this is the PDF version of it. So  
13 we have posted to the -- on Saturday we posted to the USDA  
14 website, not only what's now been marked as Hearing  
15 Exhibit 287, the PDF document, but we also posted the  
16 corrected Excel spreadsheet counterpart to this. And so  
17 we would just ask if Your Honor could also deem that Excel  
18 spreadsheet version of what is now Hearing Exhibit 287  
19 also be admitted into evidence.

20 THE COURT: You know, I have a problem admitting  
21 into evidence things that can be changed, that's why I  
22 like PDFs. So I appreciate you did exactly what needs to  
23 be done, and I think your having made a record of it is  
24 adequate. But I'm not -- I'm not going to -- I just have  
25 a real problem admitting into evidence something that I  
26 cannot prove conclusively what condition it was in when it  
27 was admitted because it can change.

28 MR. ROSENBAUM: Understood, Your Honor. I will





1 point out, it's in USDA's possession, of course, at this  
2 point. I don't have any access to change it. But in any  
3 event, I'll just --

4 MS. TAYLOR: And, Your Honor, we -- we did ask for  
5 Excel sheets to be submitted electronically. We did ask  
6 everyone to protect them, password protect them so they  
7 can't be changed.

8 But one of the reasons is Excel sheets are up on  
9 the web is because they are 508 compliant, and PDFs are  
10 very difficult to make compliant, and we can't -- so I  
11 just -- you didn't know that but --

12 THE COURT: I did not.

13 MS. TAYLOR: -- at the beginning, so I wanted to  
14 let you know that.

15 THE COURT: That's good.

16 Well, has it been the practice before I got here  
17 to admit those into evidence?

18 MS. TAYLOR: Yeah. So the paper copies are what  
19 goes to the Hearing Clerk's office, as well as an  
20 electronic copy. They have asked for both versions. It's  
21 still the paper copy makes the official hearing record,  
22 and the exhibits we've posted online are a courtesy in  
23 advance.

24 We've never -- this is the first time we have ever  
25 done this, so that people can have access to all these  
26 documents, and we tried to save a forest by not printing  
27 so many copies. So it's kind of new practice this time  
28 around.



1 THE COURT: You know, it's excellent that the  
2 Hearing Clerk asked for both, because so often the Hearing  
3 Clerk, if -- if there were to be a judicial proceeding  
4 following whatever happens administratively, the Hearing  
5 Clerk, when it's asked to submit the record or pieces of  
6 the record that are selected, it always wants the  
7 electronic version.

8 MS. TAYLOR: And they will have both this time.

9 THE COURT: That's great. Good. Thank you.

10 So -- yes. I admit into evidence the electronic  
11 versions as well.

12 MR. ROSENBAUM: Thank you, Your Honor.

13 THE COURT: Thank you.

14 MR. ROSENBAUM: And Mr. Brown has retaken the  
15 stand. He was being cross-examined when we broke, and  
16 he's available for that to continue.

17 THE COURT: Thank you.

18 Before I have you identify yourself, Mr. Brown --  
19 Mr. English.

20 MR. ENGLISH: Yes. Chip English for the Milk  
21 Innovation Group. I thought maybe we could start with  
22 actually a few procedural things, possibly. We left  
23 Friday under uncertain circumstances, and I know we have  
24 reconvened, but I think it would be useful maybe to know a  
25 few things.

26 For instance, whether we are going to stop at 3:00  
27 on Friday, whether we are going to do remote dairy farmers  
28 on Friday, and what our anticipation is, if we know, after



1 October 11th. I just thought maybe we could start with  
2 that today to understand the parameters of the week.

3 THE COURT: That's good. We might not be able to  
4 fully respond, but it's good you are thinking about these  
5 things.

6 MR. ENGLISH: Thank you. I understand we can't  
7 fully respond, but the sooner the participants and  
8 everybody knows, I think the better for everybody.

9 THE COURT: Right. Good. I would like  
10 Agricultural Marketing Service to respond as best you can  
11 to Mr. English's query.

12 MS. TAYLOR: So this week we will meet through  
13 Friday. We will end at 3:00 on Friday. We will not do  
14 dairy farmer testimony this week, as it was not previously  
15 scheduled, so we will do -- it won't happen this week.

16 Next week we will meet. The hearing -- we will  
17 meet on Monday. It's a federal holiday, but in trying to  
18 get this hearing completed, we do plan to hold a hearing  
19 on Monday, Tuesday, and Wednesday, all three days until  
20 5:00 p.m., and there will be no dairy farmer testimony  
21 next week.

22 I don't anticipate us finishing by then, and I  
23 will have more kind of maybe at the close of today as to  
24 what we're going to do after that. But that's at least  
25 for the next week and a half.

26 THE COURT: Very helpful. Good.

27 Would the person in the witness stand identify  
28 himself, please?



1 THE WITNESS: Mike Brown with IDFA.

2 THE COURT: And you remain sworn.

3 THE WITNESS: Thank you.

4 MIKE BROWN,

5 Having been previously sworn, was examined  
6 and testified as follows:

7 THE COURT: And the person that was examining  
8 didn't finish, right?

9 CROSS-EXAMINATION

10 BY MR. MILTNER:

11 Q. Good morning, Mr. Brown.

12 A. Good morning. Welcome back.

13 Q. Yes, to you as well.

14 Ryan Miltner representing Select Milk Producers.

15 MR. MILTNER: And one quick clarification with AMS  
16 for folks that might be listening. When Ms. Taylor said  
17 that there would be no dairy farmer testimony this week or  
18 next, any dairy farmer that shows up here, of course, will  
19 get priority to testify, and that's just for -- for the  
20 Zoom portion, correct?

21 MS. TAYLOR: That's correct.

22 MR. MILTNER: Great.

23 BY MR. MILTNER:

24 Q. Well, Mr. Brown, I would like to start with your  
25 exhibit, your spreadsheets, 277.

26 A. Okay. Yes, sir.

27 Q. So I was trying to think about how folks could use  
28 this to evaluate the different mover options, and I was --



1 it occurred to me that if the record had sufficient data  
2 presented by the various proponents to calculate what a  
3 farmer would receive over, say, a five-year period under  
4 each of the various alternatives, we could evaluate what  
5 would happen to a farmer that might enter or exit. We  
6 could look at that average window and figure that.

7 Are you following my --

8 A. Yes.

9 Q. -- logic there?

10 A. Yes.

11 Q. Okay. So from your spreadsheet, do you think that  
12 that could be accomplished, at least as to IDFA's  
13 proposal?

14 A. With the example given, yes. It doesn't -- I  
15 mean, there's other USDA exhibits that show the pounds of  
16 components in milk in each class, and of course every  
17 order has different differentials. So this is just a very  
18 simple example, just at the lowest, just to kind of  
19 outline things.

20 We actually thought about that and, quite  
21 honestly, didn't have time to put something that  
22 complicated together. But the information's on -- USDA's  
23 provided what they need to do that, because frankly,  
24 we've -- that's where we got all of our base information.  
25 So it's there, but we did not do it.

26 Q. Okay. And if one wanted to determine which of  
27 your columns were input data and which were calculated,  
28 the actual Excel file that was submitted, we'd be able to



1 see that --

2 A. Yes. The references are on there, yes.

3 Q. Great.

4 THE COURT: You will have to slow yourself down.

5 THE WITNESS: Okay. It's a new week.

6 BY MR. MILTNER:

7 Q. All right. If that's the case, I don't have any  
8 more questions on the spreadsheet, and I would like to ask  
9 now about some of the slides in your presentation. And I  
10 think I'd like to start with slide 19.

11 So this is the slide that begins with, "NMPF  
12 contention, using the higher-of Class III and IV reduced  
13 the incentive for depooling."

14 The next line reads, "Reality, IDFA's data  
15 analysis establishes otherwise."

16 THE COURT: And for those who are wondering which  
17 exhibit they are in, it's Exhibit 276.

18 MR. MILTNER: Thank you, Your Honor.

19 THE WITNESS: You're on slide 19.

20 BY MR. MILTNER:

21 Q. Correct.

22 A. That's the one that's got the chart on it.

23 Q. This one?

24 A. No. I mean -- okay. Please give me just a  
25 second --

26 Q. Sure.

27 A. -- I'll pull it up.

28 Okay. Thank you.



1 Q. Okay. So why does your data establish otherwise?

2 A. It's established otherwise, again, part of that  
3 period of time over the long run, IDFA's proposal is  
4 slightly higher. And the reason why is because we recover  
5 those dollars over time, and since there's a floor and  
6 there were several years that were below the \$0.74, those  
7 are years IDFA's can be slightly or significantly higher,  
8 depending on the difference between higher-of and the  
9 50/50 plus \$0.74.

10 The last five years we are still below, and that's  
11 because we have had so much volatility. It will catch up,  
12 but I have to recognize the last five years that is a  
13 negative number on average.

14 Q. I'm sorry, I just want to make sure we're looking  
15 at the same --

16 A. Yes, I think we are. Of course I guess I'm  
17 talking about --

18 THE COURT: Stop.

19 THE WITNESS: I'm sorry, yes.

20 THE COURT: Okay. First of all, I love your  
21 testimony. I hope it all gets in the record. If you  
22 could speak abnormally slow for you, that would be useful.

23 THE WITNESS: Thank you, ma'am. That's a very  
24 good description. Those who know me know that's a very  
25 good description.

26 So, I'm sorry, Ryan, could you repeat your  
27 question?

28 ///



1 BY MR. MILTNER:

2 Q. Yeah. I think our question and answer were  
3 addressing two separate points.

4 MR. HILL: For the record, could you please state  
5 what page you are on so we know?

6 MR. MILTNER: Yes. So I'm looking at Exhibit 276,  
7 which is IDFA Exhibit 49, and I'm looking at what is  
8 printed, has a very faint "19" in the bottom right.

9 THE WITNESS: Okay. Yes.

10 BY MR. MILTNER:

11 Q. Do you have that?

12 A. Yes.

13 Q. Okay. So I'm just trying to crystalize for the  
14 record, and also for my mind, what in your analysis  
15 establishes that the higher-of -- I'm sorry -- that IDFA's  
16 proposal would lead to less depooling than the higher-of?

17 A. Well, in our admittedly fairly simple direct  
18 analysis we looked at the times that Class I was below the  
19 other classes of milk, and although they're remarkably  
20 close, overall, ours is slightly less times where the  
21 mover is below the other classes than would be the case  
22 with National Milk's proposal.

23 Q. Okay. So -- and am I correct that then that is  
24 the data on the following page expressed as a percentage  
25 of occurrences?

26 A. Yes. That is correct.

27 Q. Okay.

28 THE COURT: Now, just so we all know, that next





1 page, page 20, has been replaced with a corrected page, so  
2 we wanted to look at how it looks now. It's in  
3 Exhibit 286.

4 MR. MILTNER: And I'm correct -- I think I'm  
5 correct that the only changes on there were the -- were  
6 the words "greater" changed to "lower," the numbers did  
7 not change, correct?

8 THE WITNESS: Yes.

9 BY MR. MILTNER:

10 Q. All right. So if I look at those data boxes on  
11 page 20, you have, in the final column, "percent lower  
12 than the weighted average." And so explain, if you would,  
13 why you want to compare the base price with the weighted  
14 average.

15 A. Because you can have class depooling due to either  
16 III or IV. And so for a simple -- and of course Class II  
17 is part of Class IV, not all Class II plants can depool.  
18 As long as they are not part of a Class I plant, they  
19 generally can. So we -- we put all three in for that  
20 reason, that is why. Because as we have learned the last  
21 few years, either Class III or Class IV can cause  
22 depooling being high.

23 Q. So in your experience, any of the occurrences in  
24 any of those four columns could result in depooling,  
25 depending on the order you are dealing with?

26 A. I would say the opportunity is there. I cannot  
27 say, you know, for -- for example, I cannot say in full,  
28 full certainty, because you would need to run every order,



1 every pool to know the exact numbers. This was just one  
2 way to try to come up with some kind of indicator on the  
3 differences.

4 Q. Okay. And am I correct that there is a tab in  
5 your spreadsheet where you have compared two cells, and  
6 that's given you an indicator, a count indicator, and --

7 A. Yes.

8 Q. -- a count you used to develop that?

9 A. Yes. Pretty primitive Excel work. But, yes. I  
10 assigned 1s and 0s, and then the total of the 1s gives you  
11 the percentage. Yes.

12 Q. I don't know if it's primitive or not, but it made  
13 sense to me, so thank you.

14 A. Oh, you're welcome. It's the only way I could  
15 figure out to do it, so I'm glad it worked for you.

16 Q. I'm curious -- because depooling decisions are  
17 made order by order. I'm just curious about whether  
18 looking at things in this macro sense really gives us the  
19 right view as to whether depooling is incentivized or  
20 deincentivized.

21 A. Like I just said, it really depends on order by  
22 order. We did the best we could to come up with a way to  
23 estimate what a general relationship would be between  
24 prices.

25 As was brought up by a witness last -- I think it  
26 was last Thursday, the III/IV spread makes a big  
27 difference. And if you are in a III/IV spread that's wide  
28 in a Federal Order that has a very low amount of Class I,



1 it's -- it's -- there's more likelihood of depooling, not  
2 even necessarily to Class I. But we just thought this was  
3 one way to take kind of a centralized look around -- bad  
4 choice of words -- I think the reutilization is about the  
5 same as Central, but that's why we did it the way we did.

6 Q. If you could turn to slide 25 on the same -- same  
7 exhibit, please.

8 A. Yes.

9 Q. Now, you're -- you're addressing a different  
10 contention of National Milk, but you do cite this average  
11 utilization across here. And I think the record -- your  
12 statement is clear as to where it was derived. But --  
13 although it kind of mirrors the Central Order, individual  
14 orders, of course, could be very different.

15 A. Absolutely.

16 Q. And -- and so where you're addressing whether the  
17 higher-of more accurately reflects the value of milk,  
18 again, I'm -- I'm struggling making that broad assumption  
19 with a -- with a national average when you've got  
20 80% utilization in Florida, and 12% in the Upper Midwest,  
21 or whatnot.

22 So have you looked at the individual orders?

23 A. I have not. But the point of this isn't what the  
24 pool looks like. The point is, is that Class I -- the  
25 supply and demand for milk is not based on the senior  
26 higher-of class, it's based on the mix of manufacturing  
27 demand for milk, which is why having them both -- and we  
28 can argue on the proportions -- but having them both as



1 part of the price reflects the broader market.

2 Again, 2020 was probably one of the best examples.  
3 We already had the butter powder price, unfortunately,  
4 well below the cheese whey price. And needless to say,  
5 that created some discrepancies as far as values.

6 Q. And, I mean, in a -- in a broader context, 2020  
7 was a extraordinarily anomalous year on every front,  
8 correct?

9 A. Certainly. It certainly was.

10 Q. Okay. But I'm just trying to think back through  
11 other anomalous events that have kind of shocked any part  
12 of the market, and I'm thinking of things like melamine  
13 scares that shocked powder markets, or a BST plant losing  
14 certification when that was much more -- a much more  
15 common, you know, management tool for producers.

16 A. Yes.

17 Q. And so do you think that ignoring 2020 really  
18 makes sense or should we look at it and try to use that as  
19 an example about what will happen when the next unexpected  
20 market shock comes?

21 A. Well, my -- my view on 2020 is there was lessons  
22 learned. I mean, quite honestly, even the second round of  
23 Food Box cheese purchases, for example, they broadened the  
24 amount of types of cheese that could be included. I think  
25 it's difficult to include 2020 because it was so  
26 different. Everything was very seat-of-the-pants, and it  
27 was, again, a combination of things. We saw a lot of  
28 cheese committed to export in April and May of that year



1 because of concern on market. And then once the cheese --  
2 the cheese box program started, that, needless to say,  
3 tightened up that supply of cheddar.

4 And so in my mind it is an anomaly. I am -- and I  
5 think -- I think we have to keep that in mind, because it  
6 is just so out of -- if you do, like, an Olympic average,  
7 that would probably be thrown out of a lot of Olympic  
8 averages because it's so extreme compared to any other  
9 year.

10 Q. Of course you can't throw out the loss on the  
11 check, can you?

12 A. But is it a loss? Did it really -- it was a loss  
13 if it was higher-of, but did higher-of really reflect the  
14 value of the milk?

15 Q. Did higher-of reflect the value of the milk for  
16 18 years before we changed it?

17 A. Yes. Does that make it correct? I believe it did  
18 not.

19 Q. Well, if it reflected the value of milk, how can  
20 it not be correct?

21 A. We decided it reflected the value of milk. It  
22 didn't, in the world of economics, reflect the value of  
23 milk when you have supply/demand for different commodity  
24 prices that are different. We can decide we want to use  
25 the tightest market to -- to determine that value, but to  
26 say that reflects the entire market, it doesn't.

27 Even -- as we know, even between orders there's a  
28 lot of difference in utilization which causes -- which



1 causes problems with discrepancies between markets.

2 We have become a very volatile world-dependent  
3 industry, and it's completely changed price relationships  
4 over time. And it's made it more difficult, I think we  
5 all would recognize that.

6 Q. On page 23 you are addressing a National Milk  
7 contention that using the higher-of Class III or IV to set  
8 the Class I price sends an important price signal to  
9 farmers. You argue otherwise. And you state, I think  
10 correctly, that the price signal to farmers is the blend  
11 price, not the Class I price.

12 And I think that there's been testimony -- or at  
13 least, I suppose it would be testimony -- from folks that  
14 have suggested that the higher-of sends a better price  
15 signal because it transmits to producers an indication  
16 that there's a strong demand for milk in whatever class is  
17 driving the mover.

18 I wondered if you had comments on that. Because I  
19 don't think that was directly addressed by your slide.

20 A. I think that a high market price does express a  
21 demand, whether it's short-term or long-term, you are  
22 correct. But it doesn't reflect aggregate demand. It  
23 reflects demand for whatever commodity happens to have the  
24 price -- price spike or the price increase at the time.  
25 And I think those are -- I think those are actually very  
26 different ways to measure as far as the -- as far as,  
27 again, looking at the aggregate market.

28 And let's take, for example, if you are an order



1 like the Pacific Northwest, which is extremely high in  
2 class -- when everything is pooled, Class IV is very high.  
3 So does higher-of on cheese really reflect their market if  
4 their milk is 60% plus into -- into Class IV? I mean,  
5 that's -- that's -- and again, that's one of the dilemmas  
6 we have, different markets send different signals. And  
7 maybe that's okay.

8 The other thing just I would -- I would like to  
9 mention is when you look at the fact that most parts of  
10 our -- most Federal Orders now, except for the Southeast,  
11 have some kind of supply limitations, some kind of  
12 base/excess program voluntarily put together by either  
13 plants or cooperatives. That tells me that the price  
14 signal hasn't been too strong -- or hasn't been too weak  
15 because we have more interest in producing milk than we  
16 actually have ways to process it.

17 Q. One more question on your depooling count, I  
18 suppose.

19 A. That's as good a description as any.

20 Q. Your -- the way you have done this, it does not  
21 take into account whether milk that is depooled in one  
22 month is able to immediately reassociate with the pool,  
23 does it?

24 A. No, we did not make any of those adjustments.  
25 Again, that would be an order-by-order thing you would  
26 need to look at. And that is part of the decision.

27 We see in the Northeast there has been much less  
28 depooling, partly because it's much more onerous to rejoin



1 the pool if you decide to.

2 Q. And getting rid of advanced pricing would all but  
3 eliminate that opportunistic depooling as a result of  
4 price inversions, wouldn't it?

5 A. Certainly not in low utilization orders, because  
6 in those orders the III/IV spread, when you are 10% or 15%  
7 or 20% Class I, that III/IV spread has -- can have a lot  
8 bigger effect on pool value. And California's probably  
9 the best example because they are roughly the same. III  
10 and IV have a much bigger impact on pool value than a  
11 Class I ever can, just because its contribution is so  
12 small to the total value.

13 Would it -- would it eliminate it some? Again, I  
14 haven't done the numbers. I would say that it probably --  
15 just common sense tells you that it would. As far as how  
16 that manages marketing for those products I think is  
17 another question. And certainly, if you are going to get  
18 rid of advanced pricing and not have a predictable price  
19 that you can risk manage, then higher-of current market, I  
20 think, is very difficult to -- to depend -- because you  
21 won't know the cost of your milk until consumers have  
22 basically drank all of it.

23 Q. Were you here when Mr. Doelman testified from  
24 Fairlife?

25 A. Yes.

26 Q. I think his conclusion was that getting rid of  
27 advanced pricing and using some sort of average for the  
28 higher-of would solve a lot of these various issues





1 between processor hedging, producer hedging, and  
2 curtailing depooling.

3 Would you agree with that?

4 A. I would agree if you are in the market he is in.  
5 I mean, the overall concept, absolutely. How it affects  
6 your marketing, whether you are an ESL or an aseptic  
7 producer like Fairlife is, versus how it would affect a  
8 classic HTST fluid plant are quite different.

9 This one other thing, too, if you -- if you want  
10 to honor -- offer a forward price, you certainly can do  
11 that, but with higher-of, if you offer that price, if you  
12 are a proprietary, which means two things: A, you have to  
13 pay minimum, and B, you are in the pool if you're  
14 Class I -- I mean, that's the whole idea -- you have no --  
15 you have no way with the reblend or anything else to work  
16 your way out of that. Again, over time, it should kind of  
17 average out, but that -- that is the case, at least in my  
18 mind.

19 The difficulty with it is that you can't -- you  
20 don't have a lot of options with current pricing if you  
21 are using higher-of. If you are using current pricing  
22 with a known weight of markets, it can be a little  
23 different. But, again, I think it's an issue of what's  
24 been standard practice for years and what can work for  
25 both supermarkets and for -- and processors and whoever  
26 else buys milk.

27 That's -- that's my observation.

28 Q. So in your observation, does -- does the HTST



1 market not need hedging?

2 A. Oh, it does, particularly from the buyer side.  
3 Most of your HTST, from my experience, is end users of  
4 products do it themselves rather than do it through a  
5 contract with their supplier. And it's -- again, it's  
6 mostly foodservice. Pretty much all foodservice, quite  
7 honestly on those products.

8 So, yes, they could. And they do. And they could  
9 do it without advanced pricing, but that's the foodservice  
10 sector.

11 Q. And ESL, we have had manufacturers testify that  
12 they do hedge in the ESL market?

13 A. Yes.

14 Q. I assume -- or is it fair to assume that some ESL  
15 manufacturers don't hedge?

16 A. Oh, I think that's probably true. I can't speak  
17 to that. I know any time, in my experience, when you ask,  
18 since we have had 50/50, again, working with retail brands  
19 at Kroger, they are willing to come up with a way to do it  
20 because it's less risky with the current -- with the  
21 current formula. I can't say that they all do it because  
22 I just simply don't know. I just know national brands  
23 seem to be willing to offer that. And my guess is, and in  
24 the case of the witness from Schreiber, foodservice  
25 obviously has an interest as well.

26 Q. So if -- here's maybe the biggest question in my  
27 mind right now. How do we craft something that perhaps  
28 could afford Class I handlers the ability to hedge their



1 risk, and at the same time, allow producers to adequately  
2 hedge all of their risk, or as much as we can, without  
3 exposing the producer side to an enhanced risk of  
4 depooling, unless we get rid of advanced pricing and adopt  
5 some sort of average mover?

6 A. It's more difficult. I won't -- it would be  
7 dishonest to say otherwise. I mean, obviously you can --  
8 the relationship between the two-week price and -- and the  
9 previous month price -- oh, yeah -- the four-week price  
10 for that month, the correlations are very high, Chris  
11 Herlache kind of walked through some of that, and that can  
12 work. If you want a perfect hedge, you need a risk  
13 management instrument that's using the same time basis.  
14 That is true.

15 Is it -- is it -- in an industry where we're  
16 dealing with continuing reduced demand, and certainly on  
17 the HTST side, is making that change worthwhile?

18 The other thing is, is that I know from my  
19 experience that when you add risk or volatility to a price  
20 that isn't manageable, you raise retail cost because they  
21 are going to cover that. And is that something we want to  
22 see happen either? That's -- I think would be a  
23 consequence of not being able to do that. I have seen  
24 that many times. It happens all over the grocery store,  
25 certainly in dairy, and beyond fluid milk. You want to  
26 make sure you cover your risk. We saw that in 2020 when  
27 cheese jumped to three bucks, or close to \$3. And -- and  
28 supermarkets raised their white tags, their base retails,



1 particularly on store brand products, and they have never  
2 come down even though the market's never been close to  
3 that again. They're a little spooked.

4 So, in my mind, Ryan, is that, yes, ESL obviously  
5 is using it. ESL, in any -- I think part of the trade  
6 works. I think advanced is tougher because of the way  
7 it's classically been done.

8 And, again, we have members that have different  
9 views. As I think you well know, Fairlife is a member of  
10 IDFA as well as MIG. But we also have a lot of members  
11 whose core business remains HTST. And particularly, if we  
12 weren't to have -- if we don't have a hedgeable price, it  
13 would be very difficult to -- to move to a -- to a current  
14 price away from the advanced price.

15 Q. And either IDFA's proposal or MIG's proposal on  
16 the mover would give them that hedgeable price, correct?

17 A. Yes.

18 Q. There might be testimony about, that argues that  
19 the HTST market and the ESL markets are -- are really two  
20 separate classes of milk.

21 Do you have any thoughts about the complexity of  
22 adding an additional class of milk and whether that would  
23 be advisable?

24 A. Well, since one product has a greater life than  
25 most Class II products, versus HTST, I think it's worthy  
26 of a discussion.

27 MR. MILTNER: Okay. Thank you.

28 THE WITNESS: Thank you.



1 THE COURT: That was a brilliant answer. Do you  
2 have an opinion? It's worthy of discussion. Good job.

3 CROSS-EXAMINATION

4 BY MR. SJOSTROM:

5 Q. Lucas Sjostrom for Edge Dairy Farmer Cooperative.  
6 Good morning, Mr. Brown.

7 A. Good morning.

8 Q. I think Mr. Miltner has covered these, but I'm  
9 just going to ask them directly, so apologize for any  
10 duplication.

11 But does your proposal eliminate advanced pricing  
12 risk for your members?

13 A. No. But it becomes very, very manageable. You  
14 have got --

15 (Court Reporter clarification.)

16 MR. SJOSTROM: I think he said milk.

17 THE WITNESS: I said -- no. You asked -- again,  
18 you asked does it eliminate it. And the answer is no, but  
19 it makes it very manageable because the amount of  
20 relation- -- the difference in relationship is generally  
21 quite small compared to higher-of.

22 BY MR. SJOSTROM:

23 Q. Thank you.

24 And is the risk the exact same for dairy farmers?

25 A. They share the same modest basis risk as the  
26 processor would with Class I.

27 MR. SJOSTROM: That's all. Thank you.

28 DR. BOZIC: Marin Bozic for Edge Dairy Farmer



1 Cooperative.

2 Your Honor, maybe you can instruct me how to do  
3 this. My colleague and friend, Dr. Roger Cryan, is stuck  
4 in travel. He will be here this afternoon. Mr. Brown  
5 will be off the stand by then. Dr. Cryan asked me if I  
6 can ask two questions on his behalf. I don't know what's  
7 admissible.

8 THE COURT: There are two ways we can do this.  
9 Certainly you may ask these questions. But also, if this  
10 witness is still here, he can be recalled when Dr. Cryan  
11 arrives. Or you can do both.

12 THE WITNESS: I'm not going anywhere other than  
13 maybe back to the hotel for a little while, so I'll be  
14 here if you want to do that.

15 DR. BOZIC: They are quick questions, and you do  
16 deserve some rest, Mike, as well, so if there are no  
17 objections, I'll just ask them.

18 CROSS-EXAMINATION

19 BY DR. BOZIC:

20 Q. The questions -- and I'm reading -- the questions  
21 are: Why didn't you analyze -- why didn't you analyze the  
22 impact of price inversions/depooling of Proposals 17 and  
23 18?

24 A. Because we were looking directly at higher-of  
25 versus our proposal. That's why. That was the comparison  
26 that was made.

27 Q. Thank you.

28 The second question is: Would a liquid Class I



1 futures and options market address the risk management  
2 concerns of Class I handlers?

3 A. No. And the reason I say that is I have serious  
4 doubts on the liquidity of that market.

5 Q. If you grant the assumption of liquidity, would  
6 your answer change?

7 A. Yeah. But I can't grant that.

8 Q. Fair enough.

9 DR. BOZIC: Thank you very much.

10 THE COURT: I hope somebody recalls him this  
11 afternoon.

12 THE WITNESS: I thought you were nicer than that.

13 THE COURT: What other cross-examination is there?

14 Oh, okay. I -- I thought I saved them for last,  
15 so if you have cross of him.

16 MS. TAYLOR: He's direct.

17 MR. ROSENBAUM: I'll be redirect, so I'll let --

18 THE COURT: Thank you. I know it's only been a  
19 day, but --

20 MR. BROWN: Well, we all thought it was going to  
21 be a day of rest, and it hasn't become one.

22 THE COURT: I'd like now for the Agricultural  
23 Marketing Service to ask any questions it has of  
24 Mr. Brown.

25 CROSS-EXAMINATION

26 BY MS. TAYLOR:

27 Q. Good morning.

28 A. Good morning.



1 Q. I'll try not to be repetitive. I did want to turn  
2 to page 20 of your slides. And you talked a little about  
3 this slide with Mr. Miltner.

4 A. Yes.

5 Q. So the slide is your analysis on which one would  
6 do a better job of preventing depooling.

7 A. It is a proxy for that. Again, you'd have to run  
8 pools -- but, yeah, it's just at what point do the price  
9 relationships for Class I go below the manufacturing class  
10 prices. That's what it does.

11 Q. I'm curious why you chose the \$1.60 differential,  
12 though, when there really aren't any fluid plants?

13 A. Because it's the lowest and you have the most apt  
14 to have a negative relationship. We wanted to err on the  
15 side of caution. Yes, you are correct about the 1.60  
16 plants, but that's why we picked it.

17 Q. Okay. And I think you talked with Mr. Miltner  
18 that it's not just the relationship of the Class I price  
19 to a manufacturing price that determines the pooling  
20 decision.

21 A. That is very true.

22 Q. And so I -- I believe in your previous experience,  
23 have you been involved in making pooling decisions?

24 A. Just from the standpoint of trying to forecast a  
25 market, but not making the actual decision, no.

26 And full disclosure, the only place I had the  
27 opportunity to be in these conversations was when I was  
28 with Darigold, because Glanbia's plants, of course they





1 didn't have Class I, so they were -- and they were a lot  
2 more regulated, so it wasn't a matter of discussion.

3 Q. Okay.

4 A. So I haven't personally ever had to make that  
5 decision.

6 Q. Okay. On the next page, slide 21, I will -- I  
7 missed your direct when you went over this slide.

8 Can you just repeat how to interpret these numbers  
9 on this slide so I can make sure we understand it  
10 correctly?

11 A. Yes. This is a slide of averages, and I used  
12 ten-year periods for this slide. And we all know averages  
13 hide a lot of things, so we put in some other statistics  
14 as well.

15 This is the average difference of that Class I  
16 mover price with the \$1.60 differential versus the  
17 other -- other manufacturing classes. So the top row for  
18 that ten-year period shows you what the difference was on  
19 average between that Class I plus 1.60 versus the other  
20 classes.

21 The next line is the maximum variation.

22 Q. So if I can just interrupt for a second --

23 A. Oh, of course.

24 Q. -- to make sure I understand.

25 When I look at this 205, that's telling me that on  
26 average during that time period, the Class I price -- the  
27 base class price plus 1.60 was \$2.05 higher than the  
28 Class II price, the average Class II price during that



1 time period?

2 A. That is correct.

3 Q. Okay. And so the max is that -- that was the  
4 highest month difference?

5 A. Right.

6 Q. And the min, lowest.

7 And this -- can you just -- the standard deviation  
8 would of \$1.42, how do we interpret that number?

9 A. That means that basically it's one standard  
10 deviation. So basically 67% of the time, the price is  
11 going to be the average plus or minus that deviation.

12 Q. Okay. And then what about the weighted average  
13 column?

14 A. Okay. Weighted average, again, just to put all  
15 three together -- again, we can argue how valuable it is.  
16 I was, frankly, kind of curious what it was going to look  
17 like.

18 The weighted average II, III, and IV is simply  
19 based on utilization of those three classes out of the  
20 total. So for example, we're talking -- and there's a  
21 slide on -- in this presentation that discusses what those  
22 numbers are. But it's -- it's -- together they total  
23 100%. So I think it's like 50-some percent on Class III  
24 and -- I can't remember now exactly, but they are in the  
25 testimony, and they are in the spreadsheet. That's what  
26 that is. So it's -- so it's simply a weighted average of  
27 II, III, and IV utilization.

28 Q. So what's the two to- -- can you -- I feel like --



1 can you use 2.27 in a sentence to explain how to interpret  
2 that number?

3 A. Yeah. 2.27 is the average --

4 THE COURT: Stop. Just so people can follow this,  
5 if they are only looking at the transcript.

6 THE WITNESS: Okay.

7 THE COURT: \$2.27 --

8 THE WITNESS: \$2.27 is the average deviation, or  
9 difference, between the Class I and \$1.60 mover versus the  
10 weighted average or the proportional share of Class II,  
11 III, and IV, of the total manufacturing portion of the  
12 price.

13 So, in other words, it's just -- it's just that  
14 price difference versus those three weighted -- maybe it's  
15 just my -- probably done more of my own curiosity than any  
16 deep science behind it, full disclosure.

17 BY MS. TAYLOR:

18 Q. Okay. And then on the next slide, 22, the top  
19 portion is the comparison of the Class I price in the  
20 month plus \$1.60 versus the Class III price of the month.  
21 And --

22 A. That is -- I'm sorry.

23 Q. Go ahead, if you --

24 A. That is correct.

25 Q. Okay. And so I want -- why did you pick  
26 Class III?

27 A. Because it's the highest utilization of the three  
28 manufacturing classes.



1 Q. Okay. And then at the bottom graph, that weighted  
2 average, that's that weighted average column in the, from  
3 the previous slide?

4 A. Correct.

5 Q. Okay. I'm going to turn to your testimony next.

6 A. Okay.

7 Q. So Proposal 14, your adjuster is calculated using  
8 the August through July time period. And we had some  
9 testimony last week about how school contracts run on a  
10 different schedule -- well, you have August through July  
11 be implemented in the January. We had testimony about the  
12 school contract issue. Those contracts don't run January  
13 to December.

14 So I was just curious if you had any thoughts on  
15 how to -- if that should be somehow accounted for in  
16 whatever change is made?

17 A. If you were to want to account for that and say  
18 for example, school contracts are negotiated in May, which  
19 appears to be fairly common, you would -- you would want  
20 to look at a June through May or May through April period,  
21 which would allow for that. Certainly there's a -- I  
22 think everyone knows, a lot of interest in fixed pricing  
23 on -- for schools on Class I so they can budget.

24 Q. So taking that a step further, then. Why IDFA  
25 proposed a certain time table, you are not necessarily  
26 opposed to that being adjusted to account for school  
27 contracts, so long as it's --

28 A. We would -- we would be --



1 (Court Reporter clarification.)

2 BY MS. TAYLOR:

3 Q. -- so long as it fits in that general timeframe  
4 that you kind of structure your statement?

5 A. Yeah. We -- we -- we expected we would hear  
6 comments on that. And -- and if there's better reasons to  
7 do a different time period, we would be supportive of  
8 that.

9 Q. Okay. On page 7 you list, under the -- under B,  
10 first paragraph, you list that your proposal incorporates,  
11 well, kind of the three good reasons. One is it preserves  
12 the purposes of why the change was made in the first  
13 place, so hedging. And the second one is to encourage  
14 increased sales of Class I products.

15 And I know this was even mentioned last week with  
16 another witness, and I'm -- I'm curious because it's been  
17 brought up. I can't say I have seen in testimony on the  
18 record, or frankly even remember from when that change was  
19 made, that that was a reason for making the change, to  
20 encourage Class I sales?

21 A. It -- it wouldn't have been, but it is a reason  
22 just because volatility raises store-level prices. It  
23 just -- it's insurance risk, basically. It is margin  
24 risk. And so the more even you can make that price, the  
25 less -- less opportunity you have for those spikes in  
26 price that can significantly change. We always called it  
27 white tag, your everyday retail price, versus -- versus  
28 what it would have been before. And again, cheese is the



1 one example we have all lived through, in supermarkets  
2 anyway.

3 As far as -- and so that's -- that's really, I  
4 think, one of the main things, is how do we keep that  
5 price more consistent? Even without hedging, the  
6 higher-of, as we know, takes averages over time, very  
7 similar, but it -- it moderates both the peaks and the  
8 troughs in that price. And that's why we -- that's why we  
9 believe it would do that.

10 And it's just been my experience. Again, I wasn't  
11 a merchandiser at Kroger, but I got lectured enough on  
12 volatility, that I guess I'm a big believer. And it  
13 just -- if you think about it, it just makes business  
14 sense. But if you have less volatility in a price, you  
15 are worried about protecting shelf margin, you don't have  
16 to keep the price so much higher to protect that margin.  
17 And I have certainly seen that lots of places.

18 Q. So then it would be your contention that counter  
19 to other testimony we have heard weeks ago at this point,  
20 that fluid milk sales are more elastic or less inelastic?

21 A. Yeah. We will have a presentation on that later  
22 in this hearing that will state exactly that. And we  
23 recognize that retail is, what, roughly 70% of total milk  
24 sales. But if you look at that elasticity on that part,  
25 and again, basically look at, we thought, you will find it  
26 is more elastic than people may generally think. And if  
27 you were to talk to supermarket folks, they would tell you  
28 the same thing, because they see it -- I'll give you a



1 good example. If you are running a sale on almond milk,  
2 it affects milk sales. It certainly affects organic  
3 sales. It affects lactose-free as well. Those  
4 relationships are fairly strong.

5 And we'll have -- we're having a professor who has  
6 done some analysis for us to explain that later on. I  
7 don't want to tell you what his numbers show because I  
8 don't have them memorized, but you will see more  
9 significant elasticity.

10 Q. Okay. If we could turn to page 13.

11 And on the top paragraph there you are talking  
12 about when we had the higher-of mover, some processors,  
13 retailers, and restaurant chains did attempt to cover to  
14 use over-the-counter instruments to hedge Class I market  
15 purchases -- excuse me -- but that didn't work.

16 And I'm just curious if you could expand on that a  
17 little bit. I'm not sure if that's something you were at  
18 Kroger at the time and you did personally or --

19 A. Interestingly enough, I did that when I was at  
20 Jersey. We had a cooperative and a customer who were  
21 interested in coming up with a way to manage price risk on  
22 Class I, and so we worked to -- to put that together. I  
23 don't know if it ever happened again because I left  
24 Jersey. And I know -- once they had a relationship, I  
25 assume they took care of that themselves, because I wasn't  
26 asked again to assist.

27 But what I did find is that later on, I think --  
28 most of the ESL folks try to figure out a way to forward



1 buy that would be price -- where you had more worry about  
2 basis risk than you did about price risk, and in that kind  
3 of a case, it simply wasn't attractive. And that's why --  
4 like you have heard from several witnesses, why it  
5 became -- when it became popular in 2019 and started to  
6 happen, because -- and they were all anticipating that,  
7 too. Some of the bigger ones had already put together  
8 their risk management plans anticipating the change.  
9 Others, once they realized what they could do, started to  
10 as well.

11 But in my mind, the big -- the big thing with --  
12 and why ESL was so interested, it's just the length of  
13 shelf life of the product. You have very different costs  
14 on the same shelf. Depending on when the product was  
15 manufactured, it allows you to level it out.

16 Q. And when you did that for Jersey, that was for ESL  
17 or HTST?

18 A. HTST. Foodservice.

19 Q. Down below on that page you have a chart, and I  
20 think it came from some presentation, and I'm just curious  
21 if you could explain to me what this chart is trying to  
22 tell me.

23 A. What this chart is trying to tell you is how  
24 effective the hedge is based on either higher-of or  
25 average. And when you look at this chart, you can see  
26 both, they're really quite strong through '18. And we all  
27 know, not necessarily in a good way, because prices were  
28 relatively lower to cost, but farmer prices between '19 --





1 2015 and 2019 were fairly similar prices. So -- so they  
2 were flatter, you didn't have the big up and downs.

3 Starting in '19 we started to see those variations  
4 get wider. And this is -- and this is the challenge you  
5 have. You have -- you have R-squared to get below what is  
6 acceptable for accounting principles, and so it would make  
7 it basically impossible to hedge using higher-of.

8 And another thing, before '19, as you might  
9 imagine, I discovered that the toughest customers I had at  
10 Kroger were the accountants. They are -- they are -- and  
11 they have to be, I get that. And that's a publicly-traded  
12 company, so they have to be very responsible to what the  
13 rules are.

14 Well, the rules are you can't go below 80. The  
15 reality is, people don't like to go below 90 because it  
16 could make a big, big shift. And when you do something  
17 like this, you do a stress test. You do the "what if."  
18 Well, what if the spread got this wide? What if the  
19 spread got that wide? And that's along with, obviously,  
20 reality the last few years, is one of the reasons why  
21 people haven't -- didn't forward buy until that point in  
22 time.

23 I think the other thing to remember, too, is our  
24 markets futures have all matured and all grown. I mean,  
25 the last few years it's been a little flatter, but -- and  
26 it was -- it was that as well. And the early adopters  
27 were certainly the ESL companies, as well as foodservice,  
28 made some attempts and found the same kind of problems



1 with the basis risk.

2 Q. I want to turn to page 20. And this is -- part of  
3 this is from the previous page going through -- what you  
4 capture, in your opinion, are National Milk's criticism of  
5 IDFA's proposal and why they are not valid.

6 And so the third one is listed as, "the higher-of  
7 formula does not help address class price inversions and  
8 depooling."

9 And we did talk -- you know, we already talked  
10 about your slide where you did that analysis. But you  
11 have a sentence in here, and it says, "Negative PPDs are  
12 the leading cause of depooling."

13 I guess I highlighted that sentence because -- do  
14 you mean negative PPDs there or -- you know, pooling  
15 decisions happen before you know what a PPD is.

16 A. Yes. You have to forecast it. You're right.

17 Q. But when you make a pooling decision -- I know you  
18 talked about you didn't have to do that -- do handlers  
19 look at what they think is a PPD or do they look at what  
20 their class price is compared to the blend price?

21 A. They're going to look at, yeah, III and IV  
22 relative to blend, depending what manufacturing class that  
23 they are in. That's what they are going to look at. And  
24 so they predict -- basically predict the PPD the best they  
25 can.

26 And with advanced pricing in Class I, they have  
27 one known for sure, and they generally, from my  
28 experience, use futures markets, or if you have your own



1 internal forecast, determine what you think prices will  
2 be, and then you make the decision from what information.

3 Q. So would you say negative PPDs are a cause of  
4 depooling or a symptom of depooling?

5 A. I think, perhaps -- I mean, they are obviously  
6 intertwined. They are -- they are certainly a symptom.  
7 They aren't directly the cause. The III/IV price versus  
8 the Class I price are the things that I think people look  
9 at most. And I think Dr. Bozic and Dr. Wolf's paper goes  
10 through some of those reasons, and that's again, what they  
11 found, too. The III/IV spread is obviously behind a whole  
12 lot of the depooling issues. It's the biggest -- it's the  
13 biggest factor --

14 Q. Uh-huh.

15 A. -- both directly and indirectly.

16 Q. I wrote some notes on my page, so this must have  
17 come from your testimony from last week.

18 A. Okay.

19 Q. And you said, you think -- this is what I believe  
20 you said last week. You thought more HTST hedging is done  
21 by the end user, not the processor?

22 A. That is correct.

23 Q. And that you think the hedging on HTST sales is  
24 more in the foodservice sector?

25 A. That is also correct. From my personal  
26 experience, that's where I have seen it most heavily used.

27 Q. So just so we understand, since we're not, in  
28 Dairy Program, involved in the hedging business, can you



1 just explain how that works? If it's not the processor  
2 that's doing it, is it the -- I mean, how does the  
3 foodservice -- you know, just kind of explain the  
4 mechanics of how that works.

5 A. Absolutely. First of all, if you are a national  
6 company and you use HTST milk, you probably have multiple  
7 vendors that you are dealing with across the country. So  
8 if you were to do it through your vendor, and it could be  
9 done that way under the current system, you are dealing  
10 with lots of separate contracts, lots of separate vendors.  
11 Because if you are -- again, most milk supply is obviously  
12 local for HTST, and it may or may not be owned by the same  
13 folks. So it's just -- it's a bookkeeping kind of  
14 challenge, plus there's a concern in some cases with  
15 performance risk of an agreement working directly with  
16 your processor.

17 So if you are foodservice and you buy lots of 2%,  
18 whole, and skim milk, it's easier to do that to just  
19 either go to the exchange, as Tim described on Thursday,  
20 from -- from Fairlife, go to the exchange, and you  
21 basically hedge directly with an unknown other side of the  
22 business, and so your risk is down, or you go to a -- a  
23 desk. Some of the large brokerage firms, for example,  
24 Cargill, has a Class I hedging program, and you -- and  
25 they take care of all the back work for you, lining up the  
26 contracts. But it's much simpler.

27 The real determining factor on whether you want to  
28 go through -- from my experience again -- whether you want



1 to go through directly through your seller versus going to  
2 the futures market, there's two things you think about.

3 First, do you have accountants that are nervous  
4 with using direct derivatives that are comfortable with a  
5 fixed price sale? And certainly at Kroger that was the  
6 case. In the case of Kroger, if you negotiate a fixed  
7 price on butter, cheese, whatever the product is, your  
8 supplier does the back office work. They take care of the  
9 buy-side of that hedge, so that they can offer you that  
10 price.

11 If you -- what the other side of that is, is  
12 performance risk. And if -- if you want to be sure  
13 that -- if you think there's a chance of that contract not  
14 being kept, if you do it through the futures markets, you  
15 have that enforcement of the CME, which is -- and you also  
16 broaden your amount of sellers, because you have got  
17 anybody who is in that sell market for those products who  
18 is willing to participate, can -- can set that price, can  
19 work with you on setting up your price.

20 You know, we call them market makers. Some people  
21 call them speculators. But they are a very important part  
22 of risk management because they are basically the  
23 insurance brokers. They are the ones that look at the  
24 risks and say, this is what I can do, this is what it will  
25 cost you, and -- and so that's why they do that. It's  
26 basically -- it's arm's length with your supplier. But if  
27 your one supplier, something happens to them and you go to  
28 another supplier, your hedge is still workable.



1 Q. Uh-huh. So in that case, they go out and they do  
2 it on their own?

3 A. Yes.

4 Q. How does the contract work between the foodservice  
5 company and the seller, the processor?

6 A. It doesn't change. It's whatever the formula they  
7 use --

8 Q. On a monthly basis.

9 A. Yeah. As I think most of my experience, pretty  
10 much in every case with HTST, certainly large volumes,  
11 it's an index, it's a price that adjusts with most often  
12 three things: Price of milk, price of bottle resin, the  
13 plastic, and the price of transportation. Those are the  
14 adjustments you normally will see. And of course, milk is  
15 generally the most volatile because it's the highest share  
16 of the cost.

17 So they -- but since the Class I base is the same  
18 in every market, the difference is the differential, they  
19 can -- they can use the hedge across the market. And they  
20 recognize the differential, you know, for example, in  
21 Florida, it's going to be far different than what it will  
22 be in Madison, Wisconsin.

23 Q. So what -- what's keeping HTST from doing more of  
24 this hedging?

25 A. I think a couple things. I know in the last  
26 basically year or -- there's concern now with risk, will  
27 it remain, and so that's causing some concern.

28 Q. Will what remain?



1           A.     Will the higher-of change as we have been having  
2     discussions on Federal Order reform, because that  
3     discussion has been going on, you know, for quite a while,  
4     long before we got a hearing announcement. That's one.

5                     Supermarkets are less apt to use risk management,  
6     particularly until they get kicked in the shins a few  
7     times, a lot of volatility. They are more apt to go with  
8     price than foodservice is, because supermarkets, it's --  
9     it's a pain in the neck to change your price on the shelf,  
10    but it's easier than it would be for restaurants with  
11    fixed price menus who simply want to try to keep their  
12    costs consistent. We all saw what happened with inflation  
13    in the last few years, and that's raised some havoc on  
14    that for everyone.

15                    I think that's -- that's the main reasons. I  
16    think we'll see more of it moving forward once people are  
17    comfortable it's here to stay. I really -- I truly do.  
18    Because people like me who are now working at companies  
19    like Kroger will be more aggressive about it.

20                    It's interesting, this discussion has brought up a  
21    lot of discussions on how would this work, how could I use  
22    it, because it's had a lot of exposure. So people are now  
23    talking about it more than they probably were in 2019 when  
24    it was initiated.

25            Q.     Which is one of the questions I had, and someone  
26    said you'd answer it, so -- from last week.

27                    Is when the change was made back in 2019, you  
28    know, what efforts did -- did the -- I guess IDFA on the



1 behalf of fluid processors, since it was IDFA negotiating  
2 on agreement, you know, what did they do to try to educate  
3 fluid processors to do this? I mean, you've got this  
4 compromise and this ability to hedge, but yet it seems  
5 like no one's really capitalized on that. And at what  
6 point do you say, well, you have had the time to do it, at  
7 least start looking into it? You know, how much time do  
8 we need to give for the ability for that to happen?

9 A. We have -- we are very -- for example, in a  
10 seven-hour webinar, we're very, very careful to give  
11 advice, and very, very careful to give specific outlook.

12 Y'all that know me know I have opinions, and they  
13 are, of course, not always right, but I have them. We --  
14 we don't think in the standpoint of legally that we can be  
15 giving advice to our members on what they can do. We have  
16 many members of the -- of IDFA that are also brokers:  
17 Ever.Ag, basically you name them, Wells Fargo, Cargill.  
18 And they all offer those services. And we refer our  
19 people, we give them a list when they say, I'm interested.  
20 And we do do outlook sessions, and we have a broad  
21 representation of these companies that participate in that  
22 session.

23 We don't ever give advice, but we may say, this is  
24 the market outlook, and then, these are the people you can  
25 contact if you have questions.

26 It's not unlike Mark's survey, we need to keep  
27 ourself away from it because it's: A, we don't want to be  
28 sued if I have the wrong idea on the market; and B, it's





1 just -- it's inappropriate as a trade association with  
2 privately-owned companies, in particular, to do that.

3 Q. Right. And I wasn't indicating telling them what  
4 to do, but at least telling them they have the ability  
5 to --

6 A. Oh, yes --

7 Q. -- look into that --

8 A. -- yeah, they --

9 Q. -- as something for their business --

10 THE COURT: Whoa.

11 MS. TAYLOR: Thank you, Your Honor.

12 THE WITNESS: Thank you.

13 BY MS. TAYLOR:

14 Q. Okay. I'm going to repeat my question.

15 A. Okay.

16 Q. I want to just make sure it's clear.

17 I wasn't indicating IDFA giving them advice on  
18 what to do, more along the lines of saying, now that we  
19 have this average-of, you know, you might be able to hedge  
20 better, that's something you might look into doing on your  
21 own, for example, to know that there's been a change that  
22 would make that more attractive?

23 A. Yeah. That simple message, yes, we shared with  
24 our members. And we have had a couple of sessions. I'm  
25 not sure -- they covered, I'm sure, summit forum, when we  
26 do outlook, the outlook session. But we have had some  
27 special webinars on outlook that weren't just because our  
28 membership is much broader than just fluid milk, general



1 outlook on markets.

2 But since the mover was changed, they have also  
3 discussed Class I outlook based on the current formula.  
4 And then -- and those people are the same people that will  
5 help them put together a hedging program. And we -- you  
6 know, our job is to be kind of matchmaker, but we don't  
7 really want to tell them who to work with. So here's  
8 people that know -- who you are comfortable with? And we  
9 find most of our members, whether they are fluid or  
10 otherwise, big or small, work with one or more of them,  
11 it's quite amazing, of the dairy brokers. That's a huge  
12 change in 20 years.

13 Q. A couple of technical questions on your proposal.

14 You're proposing a 24-month average. Why  
15 24 months? Why is that the golden number?

16 A. I don't think it's necessarily golden. It was the  
17 most popular. It was a consensus pick. It could be  
18 longer; it could be shorter. The most important thing is  
19 that we retain the ability to hedge. So if a 12-month  
20 mover was deemed more appropriate, we would be supportive  
21 of that.

22 Q. The 12-month implementation lag is deemed a more  
23 important piece to allow for hedging --

24 A. Yes.

25 Q. -- than the -- necessarily the 24-month average  
26 complication?

27 A. That's right. We need to have time for people to  
28 engage in their hedges, that's correct.



1 Q. Okay.

2 A. And our view is that both proposals would do that,  
3 and -- and you are going to hear about Edge's proposal.  
4 Class III could also work the same way.

5 Q. Okay. We had another witness suggest that hedging  
6 can occur with the higher-of, that -- that you can hedge,  
7 and I would just kind of want to get your thoughts on  
8 that.

9 A. You have heard more that say you can't. And I'll  
10 be perfectly honest with you, I don't -- I don't agree  
11 with that assumption at all. I -- I don't understand the  
12 logic behind it. Because when you look at the -- when you  
13 start to put together a hedge plan under higher-of, it  
14 falls apart in a hurry because of basis risk.

15 So I was very surprised to have that individual  
16 claim that you can hedge. And if III and IV stayed in the  
17 same price range, you could. But the reality is that they  
18 don't, and they become for more volatile, so it would not  
19 work.

20 Q. Okay. And I can't remember what you said. Did  
21 you -- when you were at Kroger, did you -- did Kroger  
22 hedge at that time?

23 A. Not Class I. Again, we were HTST mostly. We --  
24 we had -- on national brands, we did do some fixed price  
25 buys. Again, Kroger doesn't hedge, Kroger works on an  
26 arrangement with their supplier. And that's how we do  
27 with Sarbanes -- Sarbanes-Oxley in reporting. And if you  
28 want to get a -- you want to get an accountant to give you



1 facial contortions, tell them that you want to execute a  
2 hedge. They don't like it.

3 Q. I hope to never say those words in my life.

4 A. Yeah. And the other thing is with fluid milk, for  
5 Class I milk, because Class I fixed pricing is prohibited  
6 through the Federal Order, we don't have an easy way to do  
7 that.

8 Q. Okay. I was curious if -- if -- but it doesn't  
9 matter. I was just curious if you had seen a change in  
10 sales due to implementing a hedging program, but you're  
11 not able to --

12 A. We have, but not in fluid.

13 Q. In other products?

14 A. Yes, in other products.

15 Q. Okay. So you -- you have a floor, \$0.74 floor in  
16 your proposal.

17 A. Yes.

18 Q. I think, you know, throughout your testimony, and  
19 maybe this is kind of throughout the hearing, talk about  
20 importance of sending correct price signals, generally.

21 So with that in mind, why is a price floor  
22 appropriate? Wouldn't that be muting some price signals?

23 A. It would. It would. Our -- our consensus within  
24 IDFA was, is that it provides some assurance on the low  
25 end. And once you are at \$0.74 -- for example, this year  
26 if we had our program, we would have been \$1.52. 2021, we  
27 would have been \$0.70. Is it crucial? No. Do we think  
28 it helps make sure that that price stays closer to



1 higher-of? We think it helps with that, and that's why we  
2 support it.

3 I won't -- I can't tell you there's a deep  
4 economic analysis behind it. It was kind of, what's fair,  
5 and that was the discussion.

6 Q. What's fair is look -- when you say "what's fair,"  
7 that's kind of looking at the producer perspective in that  
8 point?

9 A. Yes.

10 Q. Okay.

11 A. Yes. Again, one of those things that we would  
12 certainly flex on, but we put that in on purpose because  
13 we felt the floor would be helpful.

14 Q. Okay. And you also talk in your testimony about  
15 how, in your opinion, IDFA's proposal would make farmers  
16 whole.

17 A. Yes, we do.

18 Q. And I was curious if you -- I know you looked  
19 at -- let me think of this question.

20 If you did a deep analysis to determine if that  
21 was, in fact, true, or what in your testimony points to  
22 that? And I know you had some numbers in there, and you  
23 were looking at the difference between the higher -- I'm  
24 just trying to get my head wrapped around what you used to  
25 make -- draw that conclusion.

26 A. What you use to draw that conclusion is you look  
27 at the -- again, that two-year period and what it does to  
28 price, independently of what the new price is, because



1 those relationships continue to change. And if you look  
2 at what that price does over time, it ranges from -- I  
3 think the highest month was \$1.74 a year, that would have  
4 been 2022, and the lowest was in the 60s, as far as the  
5 current -- I mean, in our formula it would have been in  
6 the 60s if we didn't have the floor. We just hoped the  
7 floor helped buffer that difference.

8 We picked it -- and we're confident it will be  
9 higher-of because it can never -- because there is a  
10 floor, we will never -- the average over time will never  
11 be below what the higher-of would be because we put the  
12 floor on. So because it's always -- there is a cutoff on  
13 that, over time it will average out.

14 Now, in 2020, we all know that cheese was  
15 extremely high. We all know in 2022 it was a great year  
16 for butter powder. This year is turning out to be more  
17 that way as well. So you have to look at what happens  
18 this year, but what happens the next year, that can change  
19 that relationship. But again, that spread will be built  
20 into the price coming -- following year.

21 I wish it was simpler, but that's how it kind of  
22 works.

23 Q. Okay. My last question is a philosophical one.

24 You know, the Act doesn't say risk management.  
25 The Act talks about other things. And so I understand  
26 the -- and when the mover was put in, Congress did that,  
27 not the Department through a rulemaking.

28 But given that, and the Secretary has to make this



1 determination this time around, you know, how should  
2 Federal Orders prioritize facilitating price risk  
3 management versus the other things that is laid out in the  
4 Act that Federal Order should accomplish?

5 A. Well, it's my understanding that the 2018 Farm  
6 Bill language actually does change the Ag Adjustment Act.  
7 And I may be wrong. I'm no attorney.

8 Q. It did, but I'm talking about the policy objective  
9 portion.

10 A. Okay. I don't think it's illegal, put it that  
11 way.

12 Q. Sure.

13 A. I think among the policy objectives are stable  
14 price, and this can help contribute to a more stable price  
15 over time. And I think that's -- that's one of the true  
16 benefits I see. And so that's it. And also to promote  
17 and grow sales.

18 I do strongly believe, even without risk  
19 management, because with higher-of you make Class I the  
20 most volatile of any price. Without -- with -- even  
21 without risk management, you have a smoothing of those  
22 differences in price, which, again, from the standpoint of  
23 merchandising, in my experience means you generally can  
24 offer a lower shelf price because you are less worried  
25 about no margin.

26 So those would be my two observations.

27 Q. Okay.

28 MS. TAYLOR: That's it from AMS. Thank you.



1 THE WITNESS: Thank you.

2 THE COURT: Mr. Rosenbaum, would this be a good  
3 time for a ten-minute break?

4 MR. ROSENBAUM: It would.

5 THE COURT: Good. So please be back and ready to  
6 go at 9:35. We go off record at 9:24.

7 (Whereupon, a break was taken.)

8 THE COURT: Let's go back on record.

9 We're back on record. It is 9:39.

10 Mr. Rosenbaum.

11 REDIRECT EXAMINATION

12 BY MR. ROSENBAUM:

13 Q. Yes. Steve Rosenbaum for the International Dairy  
14 Foods Association.

15 Mr. Brown, you were asked some questions regarding  
16 the purposes behind hedging. And if we look at Hearing  
17 Exhibit 276, which contains, on page 6, the advantages  
18 that were explained to Congress by IDFA and National Milk  
19 as reasons to support the switch from higher-of to  
20 average-of, the fifth bullet point reads, "Help processors  
21 to manage price risk for dairy beverage ingredients as  
22 they currently can for non-dairy ingredients."

23 Do you see that?

24 A. Yes.

25 Q. All right. So let me try to pick up on another  
26 example you gave in your testimony, which is cheese. Of  
27 course, cheese is a dairy ingredient, but I think the  
28 point is similar.





1 I think you explained that when you were at  
2 Kroger, you actually expected your supplier to provide you  
3 with product on a fixed price basis, correct?

4 A. It was part of consideration when selecting a  
5 supplier, yes.

6 Q. Okay. And in essence, they had to then,  
7 themselves, do the hedging to protect themselves from  
8 having offered you a flat price, correct?

9 A. That's correct.

10 Q. And of course, cheese being Class III is  
11 relatively easy to hedge because there's a very vibrant  
12 Class III futures market, correct?

13 A. That is true.

14 Q. Okay. And we don't get into the higher-of issues  
15 with that, correct?

16 A. No, we don't.

17 Q. Okay. So -- so was Kroger, in fact, able to buy  
18 products like cheese or cream cheese on a -- on a flat  
19 price basis?

20 A. Yes. Yes, we were. And cream cheese is a great  
21 example because it's a very seasonal product. You sell a  
22 lot of it, as you might imagine, from October through New  
23 Year's, and you tend to promote it heavily.

24 Q. And what does that mean, promote it?

25 A. That means you run specials. You may run, you  
26 know, four for \$5 for eight ounces -- not anymore with the  
27 price of fat -- but you would run -- it would allow you to  
28 plan those. Because aggressive -- Kroger is what they



1 call a high-level grocery store, which means their  
2 everyday prices aren't as low as some of the big  
3 discounters, but they run wicked good sales.

4 And wicked's okay, isn't it? I didn't say evil or  
5 whatever the other word was.

6 And they run wicked good sales. And what that  
7 allows you to do, and a lot of that does take place for  
8 fourth quarter. But frankly, over half of cream cheese  
9 sales for the year are fourth quarter, although it's  
10 become more popular year-round.

11 What that would allow them to do, if you knew your  
12 price ahead of time, you knew what your sale strategy  
13 would be, and you knew if you wanted to -- but the other  
14 thing Kroger would do would go to a seasonal low price,  
15 just everyday, and it would let you know where you were  
16 price-wise so that you wouldn't get -- you wouldn't go to  
17 negative margins.

18 That was particularly important with -- with cream  
19 cheese, because it's priced off of the Class III market  
20 and fat, and -- which, of course, is butter. And butter  
21 can be very volatile fourth quarter. So it allowed you to  
22 plan a sale in early December between the two holidays and  
23 know what your price was in September so that you --  
24 months ahead, so that you can plan, which just really  
25 helps volume. Those promotions are a big part of volume  
26 for a store chain like Kroger.

27 Q. You -- I think you threw in sort of my ultimate  
28 question, which was does the stability that hedging allows



1 result in increased sale of product?

2 A. I don't think there's any question, because you  
3 can plan ahead.

4 If -- I'll give you an example. So say the butter  
5 market decided the end of -- middle of November, okay, I'm  
6 done, I'm going to go down. And a lot of those products  
7 are priced weekly or monthly depending on the product.  
8 You don't have time to plan for sales. So if you can  
9 forward buy ahead, you do.

10 And in the fall, butter at some point, will  
11 generally come down. But it's different every year. As I  
12 have told many people, if I could forecast the market that  
13 good, I would be retired by now, and I can't, so we  
14 require these tools.

15 And again, we have an excellent vendor on our  
16 cream cheese at Kroger, and they put together a risk  
17 management program for us, a forward buy we call it,  
18 program, and it's used every year. Again, different  
19 amounts depending on price relationships, but it's a  
20 strategic part of the buy for cream cheese. It's  
21 probably -- as a share of sales, it's the biggest risk  
22 management program that Kroger has in dairy.

23 Q. Okay. And do you feel like the average-of under  
24 which we have operated since -- since May 2019 provides  
25 the same opportunities for Class I products?

26 A. It does. And, again, we're already seeing it in  
27 national brands. We expect that will grow. It will get  
28 broader. Even with some Kroger brands, we compete with



1 national brands, and so it makes sense to us to build the  
2 same kind of price strategy moving forward.

3 Q. Okay. And give us an example of the kind of  
4 national brands you are talking about.

5 A. Oh, well, on -- in fluid, it's almost anything  
6 that's ESL, and anything that's -- so it's -- you know,  
7 the Fairlife kind of products. It's the Nestle, your  
8 flavored beverage kind of products. And then the third  
9 group, which is kind of fixed on its own, is organic, of  
10 course.

11 And when we look at those relationships, we are  
12 looking at what we can view to be competitive beverages  
13 with some of those products, particularly Fairlife, which  
14 is some of the -- the plant-based beverages which offer  
15 fixed pricing, so it lets us build a sales strategy with  
16 comfort of what margin will be, or at least within a  
17 range, so we know we're not going to get kicked in the  
18 shins because of a big price bump.

19 Q. Okay.

20 A. That's important.

21 Q. So for a company like Kroger, they have to decide  
22 whether to carry, and if to carry, how much shelf space to  
23 give to a product like Fairlife, correct?

24 A. Right.

25 Q. And they are being offered a ton of plant-based  
26 competitive products, correct?

27 A. They certainly are.

28 Q. And I take it, if you are making oat milk, you can



1 probably get a stable price for oats some time in advance,  
2 correct?

3 A. Honestly, it got a little crazy with the oat milk  
4 craze. But, yes, you can. You can get that longer-term  
5 price.

6 Q. How long will it --

7 A. One to two years. You may see an adjustment on  
8 transportation. But generally on those plant beverages,  
9 you can get a one- to two-year contract. A lot of it's  
10 two-year.

11 Q. So that's how long a manufacturer of oat milk, or  
12 almond milk, or whatever else is the latest craze, that's  
13 how far in -- that's how long in time they are willing to  
14 commit a flat price to Kroger subject perhaps to a -- to a  
15 adjuster based on transportation?

16 A. Yeah. A lot of times you will have three- or  
17 six-month transportation adjusters built in, but the bulk  
18 of the cost, of course, is the milk itself, or the  
19 beverage itself.

20 So what -- what they -- what they will -- they  
21 will do is they have suppliers -- of course, they are not  
22 regulated monthly on price if you are making almonds or  
23 growing oats -- and so they find a supplier willing to  
24 give them that same kind of two-year fixed contract, not  
25 necessarily using futures markets, but just a two-year  
26 fixed contract -- there's no futures for almonds, for  
27 example -- and so they can pass that on to folks like us.

28 Q. Okay.



1 A. And so you are hoping that farmer also can ensure  
2 a more even margin.

3 Q. Okay. And so anybody who is making a dairy-based  
4 product trying to compete with the likes of almond milk,  
5 or oat milk, or other variants like that, they have got to  
6 convince a Kroger that they are going to offer a price  
7 that is -- has enough stability in it that it makes sense  
8 for Kroger to carry that competitive product, correct?

9 A. Exactly. And it's kind of like with cream cheese  
10 or fall promotions, you can build a promotion strategy if  
11 you know the everyday cost of your product.

12 Q. Okay. So let's just talk about reality a bit  
13 under higher-of, if that were readopted. And as has been  
14 talked about at great length, but just to orient  
15 ourselves, under the higher-of, the price will -- the  
16 Class I mover will switch, potentially, anytime there's a  
17 switch in any given month as to whether --

18 A. Yes.

19 Q. -- the Advanced Class III price is higher or lower  
20 than the Class IV price, correct?

21 A. That is correct.

22 Q. Whichever is higher, that becomes the mover,  
23 correct?

24 A. That is correct.

25 Q. And obviously, if you are trying to -- well, let  
26 me restart that question.

27 Have you taken a look at how often, how many times  
28 which of those was the higher-of switched between



1 Class III and Class IV, simply during the period since  
2 January 2020?

3 A. Yeah. I believe it's seven times it's moved back  
4 and forth between the two prices.

5 Q. Okay. So that's in less than --

6 A. Well, basically it's about three years, three and  
7 a half years. Yeah.

8 Q. And given that rapidity of switching between III  
9 and IV, is there any realistic opportunity to hedge under  
10 the higher-of approach?

11 A. No. And particularly because not only do they  
12 switch back and forth, the volatility between them was  
13 also very high.

14 Q. I mean, if they switched back and forth but they  
15 are only a nickel apart, I suppose it wouldn't make a  
16 difference?

17 A. No. That's right. You can manage that. That's a  
18 basis you can manage.

19 Q. But the reality is that the gap has been  
20 substantial and more volatile under recent times, correct?

21 A. That is correct.

22 Q. Okay. So you have talked a bit and gotten a few  
23 questions about who actually is engaged in hedging.  
24 Obviously, we have heard from Nestle, Fairlife, Schreiber,  
25 and I think there's been an allusion to the fact that some  
26 of the hedging is not actually done by the -- by the dairy  
27 manufacturer, but by the dairy manufacturer's ultimate  
28 customer, correct?



1 A. That is correct.

2 Q. When the hedging is done by the customer, is the  
3 need to be using average-of versus higher-of the same as  
4 when -- as when the hedging is being done by the Class I  
5 processor?

6 A. I'm nodding my head. I was going to talk.

7 Yes, it is. You have the same volatility risk as  
8 the processor would have.

9 Q. Okay. And so if I -- for example, if I were to  
10 refer to a very large company whose name would probably be  
11 known to most, that sells coffee, and do companies like  
12 that engage in hedging?

13 A. They do. It's all -- it's all, from my  
14 understanding, it isn't with their vendors, it's through  
15 using the -- using the futures and using the markets. And  
16 they are -- they are big, and they have gotten a lot  
17 bigger since 2019 because now it's a safe -- you don't  
18 have the basis risk in the hedge. So they have become --  
19 they tried before without a lot of success, and now it's  
20 made it so they can use that to promote.

21 And those kind of markets, just like a grocery  
22 store, they can sell almond milk. They can sell, you  
23 know, oat, whatever you want to put in your coffee. And  
24 again, they have that same fixed price advantage, if we  
25 can offer what we do. So, again, restaurants are really  
26 key on unit margin, and it allows them to keep that  
27 stable.

28 Q. Okay. And so -- and just to sort of close out the





1 example, and I think you were explaining this already, but  
2 just to link it more directly. If you are -- if you are  
3 that coffee retailer with a bunch of shops across the  
4 United States, it's not very -- not necessarily convenient  
5 to try to enter into an arrangement where each of your  
6 Class I milk suppliers across the whole country are  
7 engaged in that hedging activity, correct?

8 A. Yeah, that is correct. Because HTST, which is  
9 most of the milk that they use, is local, so they could  
10 have 10, 15 different vendors across the country easily.  
11 I don't know that, but they certainly could.

12 Q. Okay. And it's easier for them just to do it  
13 themselves, correct?

14 A. Yes.

15 Q. And are -- are there other Class I handlers you  
16 are aware of that are engaged in hedging?

17 A. There are. I'm sure there are, that I have worked  
18 directly with, that's -- those are the ones I'm most aware  
19 of, and they are all big users.

20 And, again, I think particularly in the  
21 foodservice side, it's difficult to know how much is going  
22 on, because it isn't through the processors or the futures  
23 market. I'm quite confident there's more than one big one  
24 that's using it, but that's the only one I'm personally  
25 aware of.

26 Q. Okay. Okay. So let's -- let's look at -- at  
27 slide 23, if we could, which is one of the slides you  
28 corrected.



1 MR. ROSENBAUM: So for those of us who are using  
2 the paper copy, we'll use -- we'll use what's now --

3 THE COURT: Exhibit 286.

4 MR. ROSENBAUM: Thank you, Your Honor. Hearing  
5 Exhibit 286.

6 BY MR. ROSENBAUM:

7 Q. So if you would turn to the -- to page 23. I want  
8 to make sure that the record is clear as to what you are  
9 trying to demonstrate here.

10 This is -- this is the one where you are  
11 addressing the question whether use of the higher-of sends  
12 an important price signal to farmers, correct?

13 A. Yes.

14 Q. Okay. And -- and the -- the first point you have  
15 made is that the price signal to farmers is the blend  
16 price, not the Class I price, correct?

17 A. That is correct.

18 Q. Okay. And so as I understand it, you are doing  
19 two different things in this slide. I mean, one is that  
20 you are just sort of assessing, sort of in absolute terms,  
21 how much a difference the -- the choice between the two  
22 Class I movers makes, correct?

23 A. That is correct.

24 Q. And you are also addressing, simply, if you will,  
25 the question of how big a deal this is at all, correct?

26 A. That's also true, yes.

27 Q. So what you have demonstrated, correct me if I'm  
28 wrong, is that the choice between the IDFA proposal and



1 the National Milk proposal to go back to higher-of, they  
2 represent almost identical percentages of the blend price,  
3 correct?

4 A. Yeah. Which you would expect, because over time  
5 those prices are very, very close to each other.

6 Q. Okay. So that in terms of a choice between one  
7 versus the other, you can't really see much of a  
8 difference in a price signal one versus the other,  
9 correct?

10 A. Not over time.

11 Q. But even as sort of in absolute terms, if you  
12 will, it's not that big a component of the blend price  
13 period, correct?

14 A. Yeah. The -- if you look at, again you -- when  
15 you look at the adjuster as we're proposing it, or look  
16 at, in the case of National Milk, the higher-of, and you  
17 count that higher-of versus the 50/50 as the adjuster, per  
18 se, so you can compare apples to apples, they are  
19 remarkably close. And so their share of the price is also  
20 remarkably low. Because if you look at what that adjuster  
21 is relative to the whole Class I price, it's a pretty  
22 small percentage.

23 Q. And that's partly because Class I is only 30% of  
24 all milk, correct?

25 A. All regulated milk is actually less of all milk.

26 Q. Okay. And then plus, obviously the adjuster is  
27 only one piece of the Class I price, correct?

28 A. Yeah. It's a piece of that pie, that's right.



1 Q. I mean, all right, the differential itself is a  
2 fixed number that varies from order to order, correct?

3 A. Yes.

4 Q. And the -- and obviously, the Class III and  
5 Class IV prices themselves are part of the formula under  
6 any circumstance, correct?

7 A. That's also correct.

8 Q. Okay. And so those are all much bigger  
9 contributors to the ultimate blend price than this fight  
10 over the mover; is that fair?

11 A. That's also true.

12 Q. Okay. So let's then go to and just make sure the  
13 record is clear.

14 If we look at slide 20, which is also one of the  
15 corrected sides, so I'll ask you to look at Exhibit 286.  
16 You -- you base, this was an example, actually, let me  
17 start that question again.

18 If we -- because page 20 is the math that carries  
19 out the inquiry, if you will, that you identified on page  
20 19, correct? Which we have to go to HE -- Hearing  
21 Exhibit 276 to look at.

22 A. Page 20 is the tables.

23 Q. Is the tables, right.

24 And page 19 --

25 A. Is the description.

26 Q. -- is the description of what it is that the  
27 tables relate to, if you will, correct?

28 A. That is correct.



1 Q. Okay. So you were trying to look at the question  
2 of whether or not the higher-of Class III and IV reduces  
3 the incentive for pooling, correct? That was the inquiry.

4 A. Yes. The higher-of versus the other classes --  
5 versus our proposal in the other classes, yes.

6 Q. Okay. And in -- and the way you did that is you  
7 used the national utilization rates for Class II, III, and  
8 IV, correct?

9 A. Yes.

10 Q. And you referred to this in your testimony, but I  
11 just want to be clear.

12 When you, on page 20, have numbers that are based  
13 upon the weighted average of the manufacturing class  
14 prices, those averages appear on page 19 with the verbiage  
15 share of combined II, III, and IV; is that correct?

16 A. That is correct.

17 Q. So that you were treating Class II as 17.5%,  
18 Class III as 54.2%, and Class IV is 28.3%, correct?

19 A. Yes.

20 Q. Okay. And obviously, those are the percentages  
21 adding up to 100% when you have excluded Class I?

22 A. That is also correct.

23 Q. Because that's the comparison you are trying to  
24 make?

25 A. Yes.

26 Q. Okay. Now, in terms of your having -- in this  
27 assump- -- in this analysis -- and now I'm back to  
28 page 20 -- assumed a Class I price plus \$1.60



1 differential, correct?

2 A. Yes.

3 Q. The \$1.60 Class I differential is the lowest  
4 differential that exists, correct?

5 A. That is correct.

6 Q. So by using the lowest differential that exists  
7 anywhere, did that tend to exaggerate the impact of the --  
8 of the analysis?

9 A. From -- from the point of this study, yes, it did.

10 Q. Okay. And so does that, if you will, suggest that  
11 the percentages listed on page 20, those are the highest  
12 percentages you would get? They would actually be lower  
13 if you used higher differentials as exist in other orders?

14 A. Yeah. Any time you increase that differential,  
15 you are going to lower the number of times that the event  
16 is below the manufacturing classes.

17 Q. Okay. But as it -- but nonetheless, does this  
18 remain, on page 20, a valid comparison between the impact  
19 of the IDFA proposal versus the National Milk proposal?

20 A. Yes. We did it the way we did it because it is  
21 actually the worst results you can get. We wanted to be  
22 conservative, and so that's why we picked the base  
23 differential.

24 Q. And by -- and the bottom line conclusion was that  
25 there was very little difference, and to the extent that  
26 there was a difference, actually the IDFA proposal would  
27 tend to be less likely to cause depooling than the  
28 National Milk proposal?



1 A. Slightly, yes, less -- slightly less, yes.

2 Q. They are close, but it's --

3 A. Yes.

4 Q. -- slightly less?

5 A. Yes.

6 Q. Okay. Okay. During questioning by National Milk  
7 there was reference to some of your -- let me start that  
8 again.

9 In your PowerPoint here in Exhibit 276, you have a  
10 series of slides that says National Milk argues this,  
11 here's why we think they are wrong. I'm paraphrasing.

12 But you know those pages, correct?

13 A. Oh, yes.

14 Q. And during questioning by National Milk they  
15 pointed out that -- let me start that question again.

16 Were all of those, in fact, observations or  
17 criticisms that National Milk did in fact make, either in  
18 their written testimony or oral testimony in this hearing?

19 A. Yes.

20 Q. And National Milk noted in cross-examination that  
21 some of those had been observations made by USDA back in  
22 1999 as part of order reform, correct?

23 A. They did, yes.

24 Q. Now, when USDA was making those observations, they  
25 were -- they were not, obviously, dealing with IDFA's  
26 proposal, correct?

27 A. That's correct.

28 Q. In other words, they were not dealing with an



1 average-of that adds \$0.74 and has a lookback that will  
2 increase the \$0.74 to the extent that over time farmers  
3 would have gotten paid more under higher-of, correct?

4 A. No. It was the simple average only.

5 Q. So just to be clear, USDA was not looking even at  
6 the current system that uses the average plus \$0.74,  
7 correct?

8 A. No. It didn't exist then.

9 Q. And I do not mean that as a criticism of USDA.  
10 That proposal was not before them at the time, correct?

11 A. That is correct.

12 Q. Okay. But your analysis, in essence, to the  
13 extent that these are observations that were made by USDA  
14 at the time, is addressing the extent to which those  
15 observations remain valid as applied to IDFA's current  
16 proposal, correct?

17 A. You confused me a bit on that one. If you repeat  
18 that, please.

19 Q. Okay. When your testimony -- start that again.  
20 Your testimony is designed to address whether or  
21 not those observations apply with respect to IDFA's  
22 specific proposal?

23 A. That is correct.

24 Q. Now, if we turn to page 25 -- and actually, before  
25 I get to that.

26 When you say that -- when you say you know farmers  
27 will be made whole over time, okay? I mean, is that  
28 because that is what simply is the necessary results of





1 the design of the formula?

2 A. Yeah. If you snub the floor, and the system  
3 recognizes every price, and it makes that adjuster  
4 every -- every year, if you snub the floor, over time it  
5 will be -- it will be higher. If you didn't snub the  
6 floor, it should average the same over time. Again, it  
7 depends on the year, it depends what's happening in the  
8 current year that you are in. But, yes, that is the --  
9 that is correct.

10 Q. And by "the same," you mean that farmers, over  
11 time, will be paid slightly more under the IDFA proposal  
12 than they would under return to higher-of, correct?

13 A. That is correct.

14 Q. And that's not because of the historical lookback,  
15 correct?

16 A. No. It's -- it's basically algebra. And we --  
17 and we -- as you might imagine, we stress test this a lot  
18 of ways, what would happen, what would do. And sadly,  
19 since 2020, we have all had plenty of stress reality to  
20 use as an example. But that is -- that is why. Because  
21 it's, you know, amazing. Of course, 74 was an average,  
22 and it was freakish, if you look at three, five, ten, or  
23 the whole period when we were talking about this  
24 originally, how that \$0.73, \$0.74 area worked.

25 But what we -- so what we did is -- so that means  
26 about half the time the weighted average is below the  
27 74 -- I mean, the -- yeah, the adjuster is below the \$0.74  
28 in reality. So by snubbing it at \$0.74 and not letting it



1 go lower, over time, that average will be slightly higher.

2 Q. Okay. But you snub it at 74, but to the extent  
3 that farmers would have gotten more under higher-of, you  
4 can calculate that every year to figure out if that was  
5 the case?

6 A. Yes.

7 Q. And then you pay -- you pay the farmers extra  
8 money if they would have been paid more, correct?

9 A. That is correct.

10 Q. And that's just built into the formula.

11 A. It is.

12 Q. All right. Just returning for a minute to the --  
13 your explanation of how, for example, you can sell more  
14 cream cheese when you have a flat price, etcetera. I  
15 mean, obviously that's a benefit to processors, a benefit  
16 to retailers.

17 Is it a benefit to farmers, too?

18 A. Well, since the prices are regulated, it -- and  
19 they are going to get the same price over time, anytime  
20 you increase value in Class I, which still will remain the  
21 highest price over time, it is a benefit to farmers.

22 Q. And when -- and to the extent that handlers are  
23 going to be able to themselves hedge, or have someone --  
24 if you are a retailer, someone hedge for them, and that  
25 allows you to do this marketing, etcetera, to increase  
26 sales, doesn't that ultimately rebound to the benefit of  
27 farmers? Because if there's more dairy products sold,  
28 they have more outlets for their milk.



1 A. If the price is the same over time and you sell  
2 more units, that's more revenue.

3 Q. If we could turn to page 26 of your -- if we could  
4 turn to page 25 of your PowerPoint, which -- yes, please,  
5 which is --

6 THE COURT: Again, we're in Exhibit 276.

7 MR. ROSENBAUM: 276.

8 BY MR. ROSENBAUM:

9 Q. On the -- this addresses the question of whether  
10 using the higher-of more accurately reflects the value of  
11 milk.

12 Do you see that?

13 A. Yes.

14 Q. Okay. And so I think you're making two points  
15 here, but tell me if I'm right.

16 One is that --

17 MS. HANCOCK: Your Honor, if I can just interject.

18 THE COURT: Step aside, please, Mr. Rosenbaum.

19 Ms. Hancock.

20 MS. HANCOCK: I'm really trying not to interrupt  
21 the process at all, but we're having, at this point, that  
22 counsel is testifying as opposed to the witness. And I  
23 really think that it is important that our record has the  
24 witness testifying. And especially when somebody is on  
25 direct like this, I think we really need to get it  
26 tightened up.

27 THE COURT: Thank you, Ms. Hancock.

28 I miss the colorfulness of Mr. Brown's testimony.



1 So I appreciate what you are doing, Mr. Rosenbaum, is very  
2 efficient, and we were urged to move more quickly, and I  
3 like the precision with which you move us. But I don't  
4 like Mr. Brown saying, "That's correct, that's correct,  
5 that's correct," because he has a wealth of information.

6 And so I agree with Ms. Hancock. So we just need  
7 a balance.

8 MR. ROSENBAUM: I'm happy to accommodate.

9 Your Honor, let me just ask a different question,  
10 then.

11 BY MR. ROSENBAUM:

12 Q. So what effect, if any, does the choice between  
13 the higher-of versus average-of have on the Class II, III,  
14 or IV price?

15 A. It has no effect.

16 Q. Okay. And what effect does it have under the --  
17 on the Class I price in light of the lookback and make  
18 whole provision?

19 A. It's essentially the same, slightly higher over  
20 time, under IDFA's proposal.

21 Q. All right. So you were asked, as have been some  
22 other witnesses, questions by USDA about hedging and the  
23 purposes of the AMAA.

24 Do you know what I'm talking about?

25 A. Yes.

26 Q. Okay. Now -- and you answered this a bit in  
27 earlier questioning, but I would like to just expand on  
28 that a little bit.



1           So in 2017 -- sorry, in 2018, Congress adopted a  
2 provision that substituted the average-of plus \$0.74 for  
3 the higher-of, correct?

4           A.    They did.

5           Q.    And what is your understanding of the purpose for  
6 which that had been sought?

7           A.    It was twofold. One is to keep the Class I price  
8 with the new formula consistent with the mover over time,  
9 and the second is to allow, frankly, easier hedging for  
10 producers, processors, as well as end users.

11          Q.    And what is your understanding as to whether that  
12 legislation actually took the form of an amendment to the  
13 AMAA itself?

14          A.    From what I understand, it is amended. And -- and  
15 they don't amend that very often, but it was amended  
16 because it needed to be to accommodate the -- the  
17 hedgeable price formula.

18          Q.    I mean, are you -- and are you aware that USDA  
19 itself, when it made the -- when it changed the  
20 regulations to conform with the statute, itself set forth  
21 its understanding of the purpose of the amendment?

22          A.    Yes, they did. And they were -- they were  
23 directed to make the change. And when they made the  
24 change, they explained the why behind it and discussed  
25 that.

26          Q.    And was that consistent with what you, yourself,  
27 have explained as the why behind it?

28          A.    Yes.



1 Q. Okay. And so when we look at the question of what  
2 serves the purpose of the AMAA, I recognize you are not a  
3 lawyer, but is -- what is your sense as to whether that  
4 purpose includes --

5 A. Well --

6 Q. -- the purpose -- these purposes?

7 A. Yeah. A couple things. Stability of price in  
8 growing markets indirectly, which are part of the AMMA --  
9 A -- my voice is going again, I apologize -- the AMAA --  
10 were -- were already -- were criteria that we -- we felt  
11 was going to be met with this change. The language from  
12 Congress made it very specific that they were allowed to  
13 do -- make the change in the formula that they made.

14 So I think both in spirit as well as in technical  
15 language, that Congress's change, along with the original  
16 AMAA, is met by this proposal.

17 MR. ROSENBAUM: That's all I have, Your Honor.

18 THE COURT: I would invite re-cross.

19 RE-CROSS-EXAMINATION

20 BY MS. HANCOCK:

21 Q. I just have a couple of questions, Mr. Brown.

22 Do you know what percentage of the Class I fluid  
23 milk market sales go to the supermarkets?

24 A. Well, all retail sales, 70, 75%, somewhere in  
25 there.

26 Q. As opposed to the foodservice segment?

27 A. Yeah, foodservice of any sort. Yes, that's  
28 correct.



1 Q. Okay. So 70, 75% to retail, non-foodservice?

2 A. Right.

3 Q. Okay. And then when you were talking -- strike  
4 that. Let me ask a better question.

5 Well, you were just talking about the \$0.74 floor  
6 that's included in IDFA's proposal?

7 A. Yes.

8 Q. And that's the \$0.74 floor that you and  
9 Dr. Vitaliano had calculated based on the historical  
10 differences between III and IV from 2000 to 2018?

11 A. 2017, yes.

12 Q. Okay. So from 2000 to 2017?

13 A. Yes.

14 Q. And so for purposes of today's numbers, there's no  
15 magic attached to just that time period, is there?

16 A. Oh, obviously there wasn't. Yes. There's not.

17 Q. If you use the average that has happened from 2000  
18 to 2023, for example, what would the number be?

19 A. I don't know, but I expect it's higher.

20 Q. Okay. And would that be more reflective than --  
21 than just 2000 to 2017?

22 A. It would make the price higher relative to  
23 history, and -- and it would make that base higher than  
24 the higher-of to a greater degree. Again, that's --  
25 that's -- that's not my wisdom to impart. But, yeah, any  
26 time you have a higher base, it would, of course, raise  
27 the price over time.

28 Q. And along this process when you were coming up



1 with IDFA's proposal, did you do that calculation?

2 A. We did not.

3 Q. Okay. And then back in the Federal Order reform  
4 when the higher-of was originally established, it's true  
5 that the -- that the intent at the time was to decouple  
6 Class I from Class III and IV; is that right?

7 A. If it wasn't, it's what it did.

8 Q. Okay. And everybody knew at the time that that's  
9 what it was doing; is that right?

10 A. I believe so, yes.

11 Q. And that's why, when we were talking about what  
12 questions and how it was being analyzed using the criteria  
13 that National Milk had applied, they weren't looking at  
14 the average-of because average-of does not decouple it  
15 from manufacturing classes; is that right?

16 A. Neither does.

17 Q. Well, higher-of does, doesn't it?

18 A. No, it doesn't. It just -- whether it's coupled  
19 to III or IV, depending on the month, it's still coupled.

20 Q. It allows it to be priced separate and above both  
21 the classes -- both the manufacturing classes; is that  
22 right?

23 A. Unless they are the same, it would, yes.

24 Q. Okay. And that's the decoupling I'm talking  
25 about.

26 A. Okay. Then from that definition, you are correct.

27 Q. Okay. And -- and so -- and just so our record is  
28 clear, when you say I'm correct, it's correct that the





1 average-of does not decouple it from the manufacturing  
2 classes because, by design, an average-of would allow one  
3 of the manufacturing classes to be higher than the Class I  
4 price?

5 A. I would disagree because you are leaving out  
6 either, you know, 40 or 60% of the manufacturing market,  
7 depending on the product, by -- by that weight. So I  
8 don't -- I don't agree. It decouples from one or the  
9 other every month, so --

10 Q. Okay.

11 A. -- that's how I look it.

12 Q. It would decouple from one of the manufacturing  
13 classes, but not necessarily both?

14 A. That is correct.

15 Q. Okay.

16 MS. HANCOCK: That's all I have. Thank you.

17 THE WITNESS: Thank you.

18 THE COURT: Are there additional questions for  
19 Mr. Brown from anyone before I see if the Agricultural  
20 Marketing Service has further questions?

21 I turn now to the Agricultural Marketing Service.

22 No further questions from them.

23 Mr. Brown, thank you, and I look forward to you  
24 being in the room this afternoon in case someone thinks of  
25 something.

26 THE WITNESS: Now, I'm working on limited sleep,  
27 so I am going to take a little break, but I'll be back.

28 THE COURT: Thank you.



1 THE WITNESS: You're welcome.

2 THE COURT: You may step down.

3 MS. HANCOCK: Your Honor, we did not talk about  
4 witness order today, so I'm just interrupting if I can.

5 We have David Pool, who is a dairy producer, here  
6 in person. If everybody's in agreement, we would like him  
7 to be able to go on the stand next.

8 THE COURT: Everyone's nodding yes.

9 Spell his last name for me.

10 MS. HANCOCK: Pool, P like Paul, O-O-L, like where  
11 I thought I would be this week.

12 MR. SJOSTROM: Your Honor, Lucas Sjostrom, Edge  
13 Dairy Farmer Cooperative.

14 Following Mr. Pool, we would like to propose that  
15 we're able to give our testimony on Proposals 16 and 17,  
16 and we think, especially due to Dr. Cryan's flights, we  
17 could give our rebuttal right after, if that was not  
18 objected by anyone. And it might make more sense  
19 questioning by having that as a package all in Section 4,  
20 if no one opposes after Mr. Pool.

21 THE COURT: All right. I will ask them their  
22 thoughts after Mr. Pool has testified.

23 MR. SJOSTROM: Sounds great.

24 THE COURT: Let's go off record while copies are  
25 distributed of Exhibit NMPF-84. We'll go off record for a  
26 moment at 10:19.

27 (An off-the-record discussion took place.)

28 THE COURT: Let's go back on record.



1 We're back on record at 10:20.

2 I have marked the latest exhibit as Exhibit 288.

3 It shows at the top Exhibit NMPF-84.

4 (Exhibit Number 288 was marked for  
5 identification.)

6 THE COURT: Ms. Hancock.

7 MS. HANCOCK: Thank you.

8 DIRECT EXAMINATION

9 BY MS. HANCOCK:

10 Q. Good morning, Mr. Pool.

11 A. Good morning.

12 Q. Would you mind stating and spelling your name for  
13 the record.

14 A. David Pool, D-A-V-I-D, P-O-O-L.

15 Q. And if you just want to scoot your microphone  
16 over, make sure everybody can hear you online.

17 A. It that better?

18 Q. Yeah, that's better. You can move it up, too,  
19 you're tall.

20 A. How's that?

21 Q. Great.

22 THE COURT: I do need to ask him.

23 Have you previously testified in this proceeding?

24 THE WITNESS: No, I haven't.

25 THE COURT: I'd like to swear you in.

26 DAVID POOL,

27 Being first duly sworn, was examined and

28 testified as follows:



1 THE COURT: Ms. Hancock.

2 BY MS. HANCOCK:

3 Q. Thank you.

4 Would you mind stating your business address for  
5 the record as well?

6 A. 13921 Park Center Road, Herndon, Virginia, 20171.

7 Q. Thank you.

8 And did you prepare Exhibit NMPF-84 in support of  
9 your testimony today?

10 A. Yes, ma'am.

11 Q. And we have marked that as Exhibit 288 already for  
12 the record. If you can proceed with your testimony. If  
13 you don't mind reading it at a moderate pace so that our  
14 court reporter can capture it.

15 A. Okay. Thank you.

16 Good morning. My name is David Pool and I, along  
17 with my wife Martha and two daughters, Caitlyn and Taylor,  
18 operate Fantasyland Farm, LLC, located in Robesonia,  
19 Pennsylvania, which is in County of Berks. Currently, we  
20 milk about 190 cows, raise about 200 replacement heifers,  
21 and farm approximately 425 acres of ground where we  
22 predominantly grow corn, soybeans, and small grains. Our  
23 farm markets its milk through Maryland & Virginia Milk  
24 Producers Cooperative Association, Inc. In addition to  
25 farming, I currently serve as first vice-president of our  
26 cooperative's Board of Directors.

27 I will share a little of my backstory to provide  
28 some context of how my interest and involvement in dairy



1 marketing and policy was developed. Having grown up on a  
2 family dairy farm in New Jersey, at the age of 17, I  
3 decided to go work for a larger neighboring dairy farmer  
4 where I eventually became the herdsman. There I was able  
5 to acquire ownership of about 30 cows of my own.

6 In 1988, I moved from New Jersey to Pennsylvania,  
7 where I rented a dairy, a barn, and grew my herd to 50  
8 cows. In 1992, the opportunity became available to rent  
9 the current farm where we still farm today. So I took my  
10 50 cows and added 60 more to milk, to a total of 110. My  
11 wife and I purchased the farm in 1995.

12 And then in 1999, we committed to a major  
13 investment where we built a brand new freestall barn and  
14 parlor capable of housing and milking up to 250 cows. By  
15 the year 2000, I had become one of the larger farms in my  
16 area. Up until that point, farming was all about the  
17 cows.

18 While that largely remains true today, taking  
19 care -- taking on the kind of life-changing debt forced me  
20 to approach my farm more as a business and not just as a  
21 way of life. With so much at stake, I decided that I had  
22 better take an interest in how my milk is priced, what  
23 factors affect that price, and how policies, good or bad,  
24 affect those factors. Perhaps, coincidentally, my  
25 interest in all of this began in the first year of  
26 implementation of the latest major reform in Federal  
27 Orders.

28 I'm here to testify today in support of the



1 National Milk Producers Federation proposal to update the  
2 Class I differential pricing surface throughout the United  
3 States. With 22-plus years of living and learning within  
4 the current policy, I have been able to see some things  
5 that worked, and others that don't. I have observed  
6 several changes in the milk markets, more specifically in  
7 Federal Order 1, which the milk from my farm services.

8 In 2000, there were an average of 17,279 farms  
9 pooled on the order, compared to an average of 8,317 farms  
10 in 2022. That is a decrease of more than 50%. In 2000,  
11 there were nearly 24 billion pounds of milk associated  
12 with the order, compared to nearly 27 billion pounds in  
13 2022, an increase of 12%. Conclusion: There's more milk  
14 coming from fewer farms.

15 Demand for Class I milk has also decreased  
16 substantially. In 2000, nearly 44% of the milk associated  
17 with Federal Order 1 was utilized as Class I milk. That  
18 number has dipped below 30% in 2022. Coupled with less  
19 demand, there are fewer pooled distributing plants. In  
20 2000, there were 60 pool distributing plants in Federal  
21 Order 1 compared to 48 in 2022, which is a reduction of 12  
22 fewer pool distributing plants. With these closures,  
23 farmers in Federal Order 1 marketing area, as well as many  
24 other parts of our country, have seen the distant -- their  
25 distance to the next closest pool distributing plant  
26 increase substantially.

27 While I am one of the fortunate few farmers that  
28 hasn't seen quite as many plant closures in the area where



1 my farm is located, even though the distance to the market  
2 hasn't changed substantially from my farm, the cost to  
3 deliver to the market sure have.

4 Since 2000, I have seen a nearly threefold  
5 increase in my farm's milk hauling cost. Then we were  
6 paying nearly \$0.60 a hundredweight to get our farm's milk  
7 to the market. Today, we are paying closer to \$1.70 a  
8 hundredweight.

9 While logic might suggest that since the cost of  
10 supplying the Class I market has increased and location  
11 differentials which were implemented, at least in part to  
12 help offset those costs have remained stagnant through the  
13 period since order reform in 2000, voluntary order  
14 premiums -- voluntary over-order premiums would have to  
15 improve to offset those differences.

16 Unfortunately, the opposite has happened.  
17 Processors are digging in just to maintain, let alone grow  
18 their share of dwindling fluid sales.

19 The attached chart shows the levels of the  
20 Pennsylvania Milk Marketing Board mandated Class I  
21 over-order premium. These over-order premiums are also  
22 adjusted to include mandated fuel surcharges. I  
23 understand that this is a Federal Order hearing and not a  
24 hearing that is state-specific. However, I believe this  
25 is a good index to show how over-order premiums have  
26 changed in the region of the country where I ship my milk.  
27 Inherently, these mandated over-order premiums cannot be  
28 substantially higher than the prevailing premiums in



1 surrounding areas or it would be detrimental to the  
2 marketplace inside the regulated area.

3 In the early years after Federal Order reform,  
4 fluid milk processors gradually increased Class I premiums  
5 to a level north of \$2.50 a hundredweight in the years  
6 2009 to 2013. Since then, premiums have trended downward  
7 to settle closer to \$1.00 a hundredweight since 2017.  
8 Clearly, this shows that Class I processors are less  
9 willing to increase over-order prices, leaving us dairy  
10 farmers holding the bag.

11 Your Honor, I have a correction in the next  
12 paragraph. The date from the 2009 to two thousand -- it  
13 should be '13, not '23.

14 THE COURT: All right. So we're on page 3 of  
15 Exhibit 288, the last paragraph, and that phrase says  
16 "2009 to 2023," and it should be "2009 to 2013."

17 THE WITNESS: Yes, ma'am.

18 THE COURT: So I'm going to ask that we mark this  
19 exhibit right now with the change, and we're going to  
20 strike "2023" and write in instead "2013."

21 And that is done. Thank you. You may read the  
22 paragraph.

23 THE WITNESS: Thank you, Your Honor.

24 To put this into perspective, in the peak years of  
25 2009 to 2013, let's just say over-order premiums were  
26 \$2.50 hundredweight. At the same time, my hauling rate  
27 was nearly \$0.90 per hundredweight. The net difference  
28 between the two was a positive \$1.60. More recently,





1 over-order premiums have declined to nearly \$1.00  
2 hundredweight. As I said previously, my hauling rate now  
3 is \$1.70 hundredweight. The net difference between the  
4 two leaves me with minus \$0.70.

5 So between the early 2010s and today, premiums and  
6 hauling have effectively -- have affected my net of the  
7 two from plus \$1.60 to minus \$0.70, a total net difference  
8 of minus \$2.30. Compare this to the net effect of  
9 National Milk Producers Federation recommended Class I  
10 differential change which yields a difference of plus  
11 \$1.76 in the Northeast marketing area, I believe my  
12 figures demonstrate that not all losses will be recovered  
13 by this proposed change and that -- and should suggest  
14 that this change will not create disruptive or disorderly  
15 conditions in our marketplace.

16 It is for these reasons I urge the USDA to  
17 consider updating the outdated Class I price surface map  
18 and location differentials as proposed by the National  
19 Milk Producers Federation to help offset the increased  
20 costs of servicing and supplying Class I milk to the  
21 processors. Thank you.

22 BY MS. HANCOCK:

23 Q. Thank you for reading your testimony. I just have  
24 a couple of questions I want to make sure we're clear on.

25 On your second page of your testimony, you are  
26 talking about how the increase in milk supply in your area  
27 comes from fewer farms.

28 A. Yes.



1 Q. And I'm just curious, in your experience and with  
2 your observations of your market, does that mean that it's  
3 the smaller farms that have tended to exit dairy  
4 producing?

5 A. Yes.

6 Q. Has it been a consolidation of farms?

7 A. Yes. The consolidation in our marketing area,  
8 Southeastern Pennsylvania, Northern Maryland, Virginia, it  
9 has come at the expense of the smaller dairy.

10 Q. Okay. It's just more difficult for the smaller  
11 dairies to absorb the losses?

12 A. Yeah.

13 Q. Okay. And then on your last page here of your  
14 testimony, you said a total net difference of minus \$2.30.  
15 And I just want to maybe flip that around and make sure  
16 I'm understanding what that is.

17 Is that \$2.30 the decrease to the Class I price  
18 that you have received over that period of time?

19 A. Yes. That would be before I was \$1.60 above, and  
20 now I am \$0.70 below. So the difference from \$1.60 above  
21 to 70 below is 2.30.

22 Q. And that's at the same time that you have  
23 experienced the nearly threefold increase in your milk  
24 hauling cost?

25 A. Yes, ma'am.

26 Q. And so -- okay. Then I want to take a look at  
27 that last chart, just make sure I understand what we're  
28 looking at there.



1           What does the dotted line represent there that is  
2 trending downward?

3           A.    I'm not certain what the dotted line represents.

4           Q.    Okay.  Is that the reduction in your milk price?

5           A.    Can I ask for help?

6           THE WITNESS:  Mike?

7           THE COURT:  Could you come to the podium?  I would  
8 like you to provide this help, but I need you to identify  
9 yourself, and we all need to be able to hear you.

10          THE WITNESS:  Mike John with Maryland & Virginia  
11 Milk Producers.

12          THE COURT:  Thank you.

13          And you have been invited to help us understand  
14 the chart that's on the bottom of page 4 of Exhibit 288.

15          What can you tell us about this chart, including  
16 the bottom -- dotted line?

17          THE WITNESS:  So the chart shows the average  
18 over-order premium in the state of Pennsylvania, that's --  
19 that is developed by the -- and calculated by the  
20 Pennsylvania Milk Marketing Board.  So the blue lines show  
21 the total premium per hundredweight each year, and the  
22 dotted line is to show the trend line of what's happened  
23 to those premiums over -- over that set of years.  So it's  
24 actually gone down over the that period of time.

25          THE COURT:  And your last name is spelled how?

26          THE WITNESS:  J-O-H-N.  Pretty easy.

27          THE COURT:  Very good.

28          And have you been sworn as a witness?



1 THE WITNESS: Yes, ma'am.

2 THE COURT: All right. And you can provide this  
3 testimony as the truth?

4 THE WITNESS: Yes.

5 THE COURT: Thank you. Very good.

6 BY MS. HANCOCK:

7 Q. And just so our record is clear, do you agree with  
8 Mr. John as well?

9 A. Yes, ma'am.

10 Q. Okay. Thanks.

11 MS. HANCOCK: Your Honor, at this time we would  
12 make him available for cross-examination.

13 THE COURT: Mr. Pool, I congratulate you on this  
14 document. It's very full of impact, very clear, and I  
15 appreciate very much your testimony.

16 We'll now have anyone in the room ask questions of  
17 you.

18 CROSS-EXAMINATION

19 BY MR. SJOSTROM:

20 Q. Lucas Sjostrom, Edge Dairy Farmer Cooperative.

21 Good morning, Mr. Pool. How are you?

22 A. Good morning.

23 Q. Just questions on advanced pricing.

24 As you plan out your dairy business, do you see  
25 advanced pricing impact either your milk price or if you  
26 would hedge or contract your hedging or contract scheme?

27 A. Yes.

28 Q. And is it -- can you tell me about how it -- how



1 do you manage differently due to advanced pricing?

2 A. Well, I -- I routinely hedge both inputs and my  
3 milk as an insurance policy against the volatility in our  
4 market.

5 Q. And so would you say advanced pricing makes that  
6 more difficult?

7 A. Advanced pricing? No. It does not make it more  
8 difficult, I don't think.

9 MR. SJOSTROM: Thank you very much.

10 THE COURT: Additional questions for Mr. Pool?

11 I'll invite questions from the Agricultural  
12 Marketing Service.

13 CROSS-EXAMINATION

14 BY MS. TAYLOR:

15 Q. Good morning.

16 A. Good morning.

17 Q. Thank you for coming to testify today.

18 A. You're welcome.

19 Q. I wanted to -- I have some general questions, but  
20 I did want to turn to your last page of your statement.

21 And we had some discussion last week on the  
22 Pennsylvania Milk Marketing Board. And I am just curious,  
23 I looked up Berks County. That seems to be over east of  
24 Lancaster, between Lancaster and Philadelphia; is that  
25 correct?

26 A. Actually, it's north of Lancaster.

27 Q. Okay. But on the east side of the state?

28 A. Yes, ma'am.



1 Q. Okay. Are the premiums the same statewide or are  
2 they regional for --

3 A. The PMMB premiums?

4 Q. Yes.

5 A. I believe they are statewide. Yes.

6 Q. Statewide. Okay.

7 And you might not be able to answer this question,  
8 which is fine, but you -- I'm curious, if I look at your  
9 chart, seems to be a big drop in premiums between 2013 and  
10 2014, and again between 2017 and 2018.

11 Just curious if you remember back as maybe why  
12 they did that?

13 A. I cannot remember back as to why.

14 Q. Okay. A little bit about your farm.

15 You say you milk 190 cows?

16 A. Yes.

17 Q. The Small Business Administration classifies a  
18 dairy farm as a small business if they make less than  
19 \$3.75 million in gross receipts annually on a whole-farm  
20 basis.

21 Would your farm meet that definition?

22 A. Yes.

23 Q. Can you speak on the record about, you know, how  
24 is your milk used? Where does it go? How far do you have  
25 to ship it, etcetera?

26 A. It varies from pickup to pickup, but most of my  
27 milk is processed within a hundred-mile radius of my farm.  
28 And I'd say probably three days a week it goes into a



1 fluid plant and the rest of the week it goes into an  
2 ingredients plant.

3 Q. And you spoke about how your transportation costs  
4 have increased, I think you said three times over since  
5 2000. And I would hazard to guess the same could be said  
6 of any of the farmers in your area.

7 A. I think that's universal.

8 Q. And since you're in a co-op, I was wondering if  
9 you could speak to how the cooperative has had to deal  
10 with, you know, some of that due -- do you pay for the  
11 haul for a hundred miles? Does the co-op help with that?  
12 Are there other transportation factors that kind of go  
13 into your milk check? Things like that.

14 A. I believe that our hauling rates are determined  
15 upon zones, and, you know, basically all costs trickle  
16 down to the dairy farmer. Doesn't matter what -- how you  
17 put it on a check or -- you know, the dairy farmer ends up  
18 paying it because the market doesn't pay for  
19 transportation, you know. We're the only business, I  
20 believe, that pays freight both ways. So, you know, the  
21 cost, directly or indirectly, comes back to us.

22 Q. Uh-huh. Can you talk about other input costs,  
23 changes on your farm? You talked about transportation,  
24 but that's just a piece of it. So I was wondering if you  
25 could talk about that over maybe, say, the past five or  
26 ten years.

27 A. All input costs have -- have skyrocketed. I mean,  
28 I was just doing my fertilizer bill this year, and



1 actually, the cost of liquid nitrogen last year was three  
2 times what it was this year, and my milk wasn't three  
3 times what it was the year before. So, you know, the  
4 direct impact is, you know, it's margins and managing the  
5 margins.

6 It -- like I said, we, the farmers, end up at the  
7 bottom of the barrel. We have to absorb the costs.  
8 Doesn't matter whether you are -- you sell to an  
9 independent dairy or whether you sell to a co-op. The  
10 dairy farmers own the co-op, so all -- all expenses get  
11 trickled down.

12 Q. You talked about how you do hedge to manage your  
13 risk. So could you talk a little bit more how you do that  
14 and what programs you use?

15 A. Well, the DMC for a dairy my size is critical. I  
16 think it's a very, very good program. It's utilized by a  
17 lot of dairy farmers in my area because our average farm,  
18 I think, is 125 cows in our geographical area, so the DMC  
19 is spot on for them. I also use Class I mover hedging,  
20 and monitor the DRP very closely.

21 Q. You say "monitor." Do you use that program?

22 A. I have not used it at this point. I have been  
23 pretty fortunate using the Class I. But with the way the  
24 markets are trending now with III dropping, I think I'm  
25 going to move into the DRP.

26 Q. Okay. And you've mentioned the Class I mover  
27 hedging. I'm not sure I have had any producer speak on  
28 that yet.





1 So can you explain how you do that?

2 A. I call my broker, and they offer a Class I price,  
3 which expenses are built into, and that puts a floor under  
4 my -- my pay price, and my components are above that. So  
5 if -- let's just say if the board was offering a \$20  
6 Class I mover today, then I would be -- that would be my  
7 base for the amount of milk that I contract.

8 Q. Okay. Okay. Thank you.

9 MS. TAYLOR: I think that's it from AMS. I  
10 appreciate your time.

11 THE WITNESS: Thank you.

12 THE COURT: Did you say that the current cost of  
13 your liquid nitrogen is less than it was last year?

14 THE WITNESS: Yes.

15 THE COURT: How did that happen?

16 THE WITNESS: Got to ask the petroleum people.

17 THE COURT: Okay. I'm -- that's the first ray of  
18 sunshine I have heard.

19 MS. HANCOCK: Or it indicates that last year was  
20 exceptionally bad.

21 THE WITNESS: Okay, yes. It's back where it was  
22 historically.

23 THE COURT: Okay. Thank you.

24 Ms. Hancock, you may continue with redirect.

25 MS. HANCOCK: Thank you.

26 REDIRECT EXAMINATION

27 BY MS. HANCOCK:

28 Q. Mr. Pool, you have -- in your testimony here,



1 you're -- this is in support of, I guess, the  
2 differentials proposal that National Milk has put on.

3 But I'm curious to know if you are supportive of  
4 National Milk's other four proposals that its put forth in  
5 this hearing as well?

6 A. Yes, ma'am.

7 MS. HANCOCK: That's all I have.

8 Your Honor, we would move for admission of  
9 Exhibit 288.

10 THE COURT: Mr. Pool, is there anything else you  
11 want to say to follow up with regard to the questions you  
12 have been asked?

13 THE WITNESS: I would hope that the system works  
14 and we all get a fair outcome.

15 THE COURT: Thank you.

16 THE WITNESS: Thank you.

17 THE COURT: Is there any objection to the  
18 admission into evidence of Exhibit 288?

19 There is none. Exhibit 288 is admitted into  
20 evidence.

21 (Exhibit Number 288 was received into  
22 evidence.)

23 MS. TAYLOR: Your Honor, might I suggest before we  
24 take the next witness, a ten-minute break? It's 10:45.

25 THE COURT: And --

26 MR. HILL: Yes. One question before that, just  
27 administratively. I'm not sure if 286 and 287 were  
28 admitted. I know that they were marked. I just wanted to



1 double check. If I missed that, I'm sorry.

2 THE COURT: They were admitted into evidence, yes.

3 MR. HILL: Okay. Thank you.

4 THE COURT: Thank you. And I do appreciate the  
5 follow-up.

6 All right. Let's -- in a minute we're going to  
7 take a ten-minute break. But when we come back, I want to  
8 debate with you all about how you want to proceed, who  
9 would be the next witness and the witness after that. I  
10 had thought we were going to go right into Dr. Bozic's  
11 testimony.

12 Is that also still the plan?

13 MS. TAYLOR: Yes.

14 DR. BOZIC: Marin Bozic, Edge Dairy Farmer  
15 Cooperative.

16 Your Honor, we would propose that we do first the  
17 exposition, our Edge-6, which is the Class III Plus, as  
18 well as the rebuttal testimony, so get everything out  
19 first, and then have a unified cross-exam probably after  
20 lunch. Otherwise, I will have to defer -- wait until  
21 lunch, wait until lunch, for that question, that question.  
22 It's just not efficient.

23 MS. TAYLOR: I would agree that probably makes  
24 sense.

25 THE COURT: Mr. English?

26 MR. ENGLISH: I just wanted to say, Your Honor may  
27 recall back in California we did something like this with  
28 sort of a unified cross-examination kind of issues, and so



1 I think -- and we have also, I think, done something like  
2 this more recently in this hearing. So I think that makes  
3 a lot of sense.

4 THE COURT: Good. So we'll take a vote when we  
5 come back from our ten-minute break, but that gives you an  
6 idea of what it is you are thinking about.

7 All right. It's about 10:48. Please be back and  
8 ready to go at 10:58. 10:58. Thank you. We'll go off  
9 record.

10 (Whereupon, a break was taken.)

11 THE COURT: Let's go back on record.

12 We're back on the record at 10:59.

13 How do you propose we proceed? What are the  
14 categories of testimony?

15 MR. SJOSTROM: Yes. First, Your Honor, we have  
16 passed out Proposal 16, Edge's Class III Plus proposal,  
17 that is labeled as updated Edge-6, so we would like that  
18 one marked.

19 And second, we have passed out a rebuttal to this  
20 entire section. That one is labeled Edge-15, and we would  
21 also like that marked.

22 And so how we would proceed is have Dr. Bozic  
23 provide testimony on both parts so that it makes the  
24 cross-examination more fluid, and we would step down at  
25 that point, if that's okay with you, Your Honor.

26 THE COURT: And tell me again, which is the first  
27 one? Is it the 6?

28 MR. SJOSTROM: Yes.



1 THE COURT: All right. So the updated Edge-6  
2 exhibit will receive our next number, which I believe is  
3 289. I'm certain that it is, 289.

4 (Exhibit Number 289 was marked for  
5 identification.)

6 THE COURT: And the Edge-15, that's 1-5, will be  
7 290.

8 (Exhibit Number 290 was marked for  
9 identification.)

10 THE COURT: Is there any objection to handling  
11 both of these exhibits during Dr. Bozic's next testimony?  
12 There's no objection.

13 Dr. Bozic, would you state your name for us,  
14 please?

15 DR. BOZIC: Marin, M-A-R-I-N, last name Bozic,  
16 B-O-Z-I-C.

17 THE COURT: Have you previously testified in this  
18 proceeding?

19 DR. BOZIC: Yes, I have, Your Honor.

20 THE COURT: Thank you. You remain sworn.

21 DR. BOZIC: Thank you.

22 MARIN BOZIC,  
23 Having been previously sworn, was examined  
24 and testified as follows:

25 THE COURT: And direct examination, again, state  
26 your name and spell it for us.

27 MR. SJOSTROM: Yes. Lucas Sjostrom, Edge Dairy  
28 Farmer Cooperative. L-U-C-A-S, S-J-O-S-T-R-O-M.



1 THE COURT: Thank you.

2 You may proceed.

3 MR. SJOSTROM: Yes.

4 And, Your Honor, just to get a little other  
5 housekeeping out of the way, I asked exhibit staff if they  
6 would supply -- it's already been admitted -- Edge-2,  
7 which is Exhibit 76 in this hearing. The witness would  
8 just love to have it as reference, and I believe he  
9 already does have it.

10 Also, we do have one outlying exhibit that was  
11 paused for admission, Exhibit 244, which is known as  
12 Edge-244. We can move that at the end also, but it was  
13 hanging in limbo until Dr. Bozic came back on the stand.

14 THE COURT: Excellent. Thank you.

15 MR. SJOSTROM: All right.

16 DIRECT EXAMINATION

17 BY MR. SJOSTROM:

18 Q. Dr. Bozic, good morning.

19 A. Good morning.

20 Q. I understand that you wrote the testimony which is  
21 labeled Updated Edge-6; is that correct?

22 A. That is correct.

23 Q. And I understand that that was updated last  
24 Monday, so anyone accessing it in the last week saw all  
25 these updates.

26 Is that correct, to your knowledge?

27 A. Yeah.

28 MR. SJOSTROM: Your Honor, I can go through the



1 legal black line, but we would -- the changes were more  
2 clarifying than substantive, no numbers changed, no  
3 anything, so just adding words on to sentences. So I will  
4 forego that unless someone in the room wants to -- there's  
5 about four minor changes, but you have the updated copy  
6 here.

7 THE COURT: Excellent. Very good.

8 BY MR. SJOSTROM:

9 Q. I think we'll just start, Dr. Bozic.

10 Why don't you provide a summary of your testimony  
11 in support of Proposals 16 and 17, which I believe  
12 Proposal 17 is, in practice, identical to Proposal 18. So  
13 I think we'll start there, if that's all right with you.

14 THE WITNESS: And, Your Honor, just as a heads-up.  
15 While I'm reading through this, at some times -- at  
16 certain points I will interject with more plain spoken  
17 interpretation of the same. It does not contradict  
18 anything that's written, it just augments it for ease of  
19 communication.

20 THE COURT: Excellent. Thank you.

21 THE WITNESS: I will skip the first two paragraphs  
22 as there are no changes to Edge or to myself.

23 So we stated it previously, but it bears  
24 repeating, that Edge believes that risk management is  
25 critical for the success of our nation's dairy farmers --  
26 and particularly relevant for this topic -- innovators in  
27 the fluid milk sector.

28 MS. TAYLOR: Dr. Bozic, I'm going to have to ask



1 you to slow -- abnormally slow down. Is that what we said  
2 this morning to Mr. Brown? Thank you.

3 THE WITNESS: Okay.

4 THE COURT: However, I appreciate the dynamic  
5 tone. It's excellent.

6 THE WITNESS: You will also notice Edge has put  
7 forward two proposals that are mutually exclusive.  
8 Adopting Proposal 16 would preclude Proposal 17 from being  
9 implemented, and vice versa. Our strong preference is for  
10 Proposal 16 for the reasons I will elaborate in this  
11 testimony.

12 First, let's briefly view how we got here. And  
13 many witnesses have covered this, so I will not -- I will  
14 try not to belabor the point.

15 For many decades, per capita consumption of fluid  
16 milk was in decline, offset only by population growth,  
17 which made for overall fluid milk sales to be stable.  
18 However, since 2010, total fluid milk sales have been  
19 steadily declining. Difficulties under hedging -- with  
20 hedging under the previous higher-of system are indeed  
21 well-documented in academic literature.

22 Newton and Thraen, 2012 paper, concluded that "the  
23 basis exposure prevents Class III and Class IV milk  
24 futures contracts from directly managing the milk price  
25 and limits potential risk reduction and revenue stability  
26 for fluid milk participants. Removing these roadblocks to  
27 risk management would provide avenues for farm, processor,  
28 and retailer profitability in an increasingly volatile





1 market."

2 In response to declining fluid milk sales and  
3 hurdles with Class I risk management, National Milk  
4 Producers Federation and International Dairy Foods  
5 Association reached a consensus in 2018 to update a  
6 formula for base Class I skim milk price to facilitate  
7 easier hedging of milk costs for value-added fluid milk  
8 processors. That is my interpretation of their agreement.  
9 Congress agreed and this proposal was passed into law.

10 So it's easy now to Monday-morning quarterback and  
11 criticize that 2018 agreement. It is important to  
12 remember that it was a good faith negotiation. At the  
13 time when the arrangement was introduced, to my  
14 recollection, there were no widespread negative reaction  
15 by dairy producers, dairy press, or academic researchers.

16 Jordan Clark, today a very well-respected dairy  
17 economist, President of the Dairy Institute of California,  
18 and chair of the IDFA Economic Policy Committee, was, at  
19 that time, a master's student at the University of  
20 Minnesota. I was his thesis supervisor.

21 In his 2019 thesis, Jordan concludes, quote, "This  
22 study quantifies the impact the newly-reformed pricing  
23 formula would have on milk producer pay prices between  
24 year 2000 and 2017, the period that informed the design of  
25 the new pricing formula. This is the first study to  
26 quantify how the change in the pricing formula would have  
27 affected producer pay prices in different regions, and the  
28 first to identify optimal hedging ratios of the reformed



1 pricing formula.

2 "We find that between January 2000 and  
3 December 2017, average uniform prices for each Federal  
4 Milk Marketing Order would have differed by less than  
5 \$0.01 per hundredweight when comparing the previous and  
6 current Class I pricing formulas.

7 "We also find that uniform prices are more  
8 volatile in Federal Milk Marketing Orders with the highest  
9 Class I utilizations, and had the new reform pricing  
10 formula been in place, would have reduced volatility in  
11 all Federal Orders between year 2000 and 2017.

12 "We also find that the basis risk of varying  
13 hedging strategies is significantly reduced under the  
14 reform formula as compared to the previous formula."

15 We were all very proud of his thesis, and we  
16 completely missed the football on asymmetric risk, as  
17 everybody else, back in 2019.

18 So no one in the dairy industry had the foresight  
19 to anticipate the pandemic that would hit the dairy market  
20 just a year after the new Class I skim milk price formula  
21 was introduced, and the impact that the Farmers to  
22 Families Food Box Program would have on the spread between  
23 Advanced Class III milk price and Advanced Class IV skim  
24 milk price.

25 By 2021, it was clear something needed to be  
26 changed. National Milk Producers Federation contemplated  
27 a change that would modify the adjuster from the fixed  
28 \$0.74 to a moving average, but never formally requested a



1 hearing to modify the 2019 formula.

2 By 2023, the sentiment in the producer community  
3 had soured even further, and I believe that explains why  
4 the National Milk proposal seeks to abandon the 2018  
5 reform in totality. In other words, they came back to  
6 IDFA two years after the proposal was introduced, said,  
7 guys, there are some issues here, we need to work together  
8 to fix it. They couldn't find a consensus, and now  
9 two years later they are sour about it. And if -- if a  
10 consensus is not a way to go, then a hearing is the  
11 remaining channel.

12 So I fully understand it. I'm very empathic to  
13 that -- to that reasoning and how it may induce quite  
14 emotional charge about the topic. It's no wonder. I'm  
15 not surprised that dairy producers around the country  
16 today are most unified specifically on this issue and the  
17 return to higher-of.

18 In retrospect, it's easy to see the official  
19 problem with the 2018 Class I reform was the fixed  
20 adjuster. Had the Agriculture Improvement Act of 2018,  
21 which is the 2018 Farm Bill, had it included the mechanism  
22 to expedite convergence of the average-of method to  
23 revenue neutrality versus higher-of, even after large  
24 shocks such as COVID-19, it is much less likely, in my  
25 opinion, that the Topic 4 would be included in today's  
26 hearing.

27 Edge agrees there are problems we need to address,  
28 but we should not throw out the proverbial baby with the



1 bath water.

2 The next section is titled "Towards a New Policy  
3 Design."

4 So what facts, including learnings of the  
5 previous -- of the past four years, should drive policy  
6 design going forward?

7 I would suggest there are six points:

8 First, if the federal government should ever try  
9 to buy "excess" nonfat dry milk powder, it would  
10 essentially try to lift the world price for milk powder,  
11 not just the U.S. price. In the absence of the Dairy  
12 Product Price Support Program, and due to the high  
13 importance of international trade, ad hoc federal  
14 government intervention in dairy markets in the face of a  
15 major crisis, such as pandemics, is likely to focus on  
16 perishable dairy products, such as fresh cheese and fluid  
17 milk. The Farmers to Families Food Box Program may very  
18 well reemerge in the future if another pandemic depresses  
19 domestic foodservice sales. So it follows that in an  
20 extreme demand shock situation, Class III price is, again,  
21 likely to exceed Class IV price. Point number one.

22 Point number two: Per pound of milk processed,  
23 milk-drying plants are cheaper to build than cheese  
24 plants. Cheese is a perishable product -- for the most  
25 part -- while milk powder can be stored for up to two  
26 years. No manufacturer will intentionally build a new or  
27 expand an existing cheese plant to serve as a balancing  
28 plant. For this reason, when there is an unexpected



1 increase in milk production, so a supply shock, a  
2 reasonable expectation is that an excess milk supply will  
3 be directed towards drying plants, putting downward  
4 pressure on Class I prices, increasing the spread in favor  
5 of Class III milk prices.

6 Point number three: Class III milk futures are  
7 much more liquid than Class IV milk futures contracts.  
8 For example, over the first eight months of this year,  
9 January through August 2023, there have been 255,352  
10 Class III milk futures contracts traded at the Chicago  
11 Mercantile Exchange, or CME, while only 9,601 Class IV  
12 milk futures contracts traded over the same time period.  
13 And both Class III and Class IV milk futures are vastly  
14 more liquid than 20 years ago.

15 In 2002, the total annual Class III trading volume  
16 was only 102,504 contracts, so about two and a half times  
17 less than just in the first eight months of this year.  
18 And the total Class IV traded volume was 4,708 contracts,  
19 so about half then in the first eight months of this year.  
20 By 2022, the annual volume increased to 341,437 contracts  
21 for Class III futures, and 28,877 contracts for Class IV  
22 Futures.

23 So these -- these markets have evolved quite  
24 dramatically since the early days of after the Federal  
25 Order reform of late '90s, early 2000s.

26 Point number four: Class III milk price is  
27 typically higher than Class IV milk price. Since the year  
28 2000, Class III milk price has exceeded Class IV milk



1 price in 166 contracts, or 58.4% of the time.

2 And this is even more important, since January  
3 2000, the average-of Class III and IV prices in months  
4 where -- or when Class IV price was higher than Class III  
5 price was 15.93 per hundredweight.

6 THE COURT: And, Dr. Bozic, express that in  
7 dollars and cents, please.

8 THE WITNESS: \$15.93 per hundredweight.

9 Thank you, Your Honor.

10 In contrast, the average of Class III and IV  
11 prices in months where Class III price was higher than  
12 Class IV price was only \$15.02 per hundredweight.

13 Therefore, the inversion -- by inversion, I mean,  
14 Class IV price being higher than Class III price -- tends  
15 to occur when dairy product supply is tight and prices are  
16 higher than average. Think about year 2014 or 2022,  
17 exports were booming. There was a lot of demand for our  
18 products. Profitability was really high on dairy farmers.  
19 Those were the years when one would expect the Class IV  
20 price to be higher than Class III price. It's not  
21 certainty, just the tendency.

22 Point number five: While AMS Dairy Programs  
23 relies only on backward-looking information, such as  
24 National Dairy Product Sales Report (NDPSR) to set prices,  
25 the sister agency within USDA, risk management agency,  
26 regularly relies on futures and options markets directly  
27 for the crop insurance programs they supervise.

28 This afternoon, while I will probably be



1 cross-examined, new offers for Dairy Revenue Protections  
2 will come out with -- offering producers the ability to  
3 buy coverage all the way through January to March 2025.  
4 They will be based on the futures prices observed around  
5 1 o'clock today. Nothing on backward looking, so -- and  
6 that's a USDA program as well.

7 And finally, the use of advanced pricing makes the  
8 risk management for dairy farmers less effective. Sudden  
9 rallies in the market after the advanced prices have been  
10 released can induce insurance indemnities -- excuse me --  
11 can reduce insurance indemnities or induce hedging losses,  
12 for example, if a farmer sold a Class III or Class IV milk  
13 futures contract, while their milk check may not increase  
14 correspondingly due to negative producer price  
15 differentials. So advanced pricing means basis risk for  
16 dairy producers.

17 Edge considered all of these facts in the design  
18 of our contribution to the discussion on base Class I skim  
19 milk price.

20 Notice what I haven't said in these six points. I  
21 haven't said, "I live in Minnesota, so I would like to  
22 have something based on cheese." I haven't said, "Well,  
23 Class III was really high in 2020, so I think that's why  
24 we should do this." Like, all of these six points are  
25 based on sound theory and sound observations of long-term  
26 patterns, not trying to triangulate based on recent  
27 experience.

28 The next section is titled "Proposal 16, Class III



1 Plus." We are -- we are calling it -- the nickname is  
2 Class III Plus. That's how we informally refer to  
3 Proposal 16.

4 THE COURT: Dr. Boze (sic), I would like you to go  
5 back just before you start the new section and read into  
6 the record your last sentence just before that.

7 THE WITNESS: Before -- okay.

8 Edge considered all of these facts in the design  
9 of our contribution to the discussion of base Class I skim  
10 milk price. We believe the solution that best balances  
11 the interests of dairy farmers, fluid milk manufacturers,  
12 and consumers of dairy products is Proposal 16.

13 Is that the sentence you wanted me to read?

14 Also, Your Honor, my full last name is "Bozic,"  
15 not just "Boze."

16 THE COURT: I thought I said that?

17 THE WITNESS: Oh, okay. Well, maybe I didn't hear  
18 the last thing.

19 THE COURT: Well, I -- you know, all of us are  
20 guilty of letting our voices trail off at the end of what  
21 we are saying.

22 THE WITNESS: Sure.

23 THE COURT: And I'm so glad I don't have to  
24 testify.

25 Thank you, though. I will be more mindful.

26 THE WITNESS: Yeah. I have heard various  
27 pronunciations, like Marvin, Marlin, Martin, Mark.  
28 Starbucks always makes for a very interesting experience





1 when you have my name.

2 Okay. The next section, Proposal 16.

3 Under the Class III Plus proposal:

4 Number one: If there is a demand shock such as  
5 COVID-19, and the spread between Class III milk and  
6 Class IV milk becomes strong and positive, the base  
7 Class I skim milk price would be at least as high as under  
8 the higher-of proposal.

9 Number two: If there is an inversion, which means  
10 the Class IV milk price is higher than the Class III milk  
11 price, dairy farmers will be held harmless as the revenue  
12 shortfall would be distributed back to them over the next  
13 three years, collectively as a group, not individually, as  
14 the annually recalculated adjuster becomes higher than  
15 average. Since Class IV is likely to be higher than  
16 Class III in years of high profitability, such as 2014 or  
17 2022, transferring some revenue forward may also have tax  
18 benefits for dairy farmers.

19 Point number three: Fluid milk innovators are  
20 fully supported in their pursuits to reinvigorate the  
21 fluid milk market. Risk management under Class III Plus  
22 is easy to implement, execution of orders is cheap due to  
23 high liquidity of Class III milk futures, and budgets for  
24 the forthcoming year can be made predictable, putting  
25 dairy on the same footing as plant-based beverages.

26 And just to add there on this, in the context of  
27 budget for the next year. Edge did come to this hearing  
28 to genuinely learn from others, not just to punch back and



1 do "got you" questions.

2 Having heard testimony from Mr. Doelman and other  
3 witnesses from MIG, if it really does matter for fluid  
4 milk manufacturers to have the rolling adjuster instead of  
5 this annual one-time-a-year adjuster, that would in no way  
6 be in conflict with the principles under which the  
7 Class III Plus proposal has been designed. We would be  
8 happy to -- to make that adjustment, if that's what it  
9 takes to get us close to the finish line.

10 As with any good "middle-of-the-road solution,"  
11 Class III Plus has also something that each stakeholder  
12 group does not like. Dairy producers may prefer higher-of  
13 without advanced pricing, such as Proposals 17 and 18, as  
14 their top choice, as it increases the odds of realtime  
15 maximal income from Class I sales. Class III Plus does  
16 not offer that, instead balancing producer needs with the  
17 needs of dairy consumers and dairy processors.

18 On the other hand, dairy processors, as evidenced  
19 by the proposals brought forward by MIG and IDFA, would  
20 prefer not to abandon the outdated and unnecessary -- in  
21 our opinion -- unnecessary mechanism of advanced pricing.  
22 Class III Plus is firm in the stance that advanced prices  
23 belong in a museum, not in regulation.

24 Edge strives to see the world through the  
25 standpoint of our partners in the processing community.  
26 It's our hope that the processing community can also  
27 recognize that it is only legitimate to ask that high  
28 priority be placed on the risk management needs of fluid



1 milk innovators, if processors are likewise willing to  
2 concede that advanced prices complicate risk management  
3 for producers, and that other tools can be used to achieve  
4 the same.

5           So let's dig into advanced prices a little bit  
6 more. Advanced prices are both antiquated and  
7 anti-competitive. Fluid bottlers may point out that in  
8 the absence of advanced prices, they would need to provide  
9 a price to their buyer without knowing precisely their  
10 input costs. Any dairy farmer in the country, and most  
11 dairy exporters, can only reply, well, welcome to my  
12 world.

13           Dairy farmers must secure elastic feed, fuel, and  
14 other supplies, make employment offers, invest in capital  
15 improvements to their operation, all without knowing with  
16 certainty what milk price they will receive. Dairy  
17 exporters regularly need to provide pricing offers for  
18 three to six months into the future. It's not a  
19 coincidence that beverage milk manufacturing, the sector  
20 most shielded from the risk due to advanced pricing, is  
21 also the one with the lowest profit margins.

22           And I would refer to the study I've conducted with  
23 a company I was with at the time called Blimling and  
24 Associates, now part of Ever.Ag. That study is available  
25 on the internet at the URL that is listed at the bottom of  
26 page 5.

27           Don't think it would be practical for me to read  
28 the whole URL, Your Honor, into the record, since this



1 exhibit is part of the record. I'm not sure it's  
2 necessary.

3 Fluid milk handlers have input costs that are  
4 fully transparent to their buyers. It is not that hard to  
5 use economic engineering to infer the cost of bottling  
6 milk. It's comforting to know your competition must pay  
7 the same price for raw milk as you, but the price paid for  
8 that comfort is that negotiations with your buyer  
9 (retailers) leave little scope to build a competitive  
10 advantage.

11 If there is any need for "coordination mechanism,"  
12 that can be easily solved by a new report that AMS Dairy  
13 Programs can introduce without any substantial costs. For  
14 example, AMS can observe the daily settlement futures  
15 prices for the forthcoming month during the two-week  
16 period that is currently used for setting advanced prices,  
17 and can then publish an indicative Class I skim milk price  
18 based on a simple average of those futures prices.

19 For illustration, for the Advanced Class III skim  
20 for October, what you would observe is the October futures  
21 contract prices during the two weeks in the middle of  
22 September. You would observe butter. You would observe  
23 Class III milk futures, both for the October contract  
24 month, and then figure out what's the average during those  
25 two weeks for October based on futures.

26 Such an indicative price would not impact  
27 handlers' obligations to the pool, and as such, it's not a  
28 formal price of our proposal for modifying regulations.



1 But this would be a useful third-party provided reference  
2 point, reference price, serving as the starting point in  
3 negotiations between Class I manufacturers and retailers.  
4 Once the indicated Class I price is accepted as a price by  
5 their buyer, a Class I handler can either passively build  
6 a rolling hedge by buying Class III milk futures during  
7 the two-week window -- so in the example I listed, they  
8 would start buying October Class III milk futures on the  
9 first day of that two-week window, and they would buy it  
10 every day a little bit, a little bit, until the end of the  
11 two-week window -- or try to beat that benchmark through  
12 more assertive risk management that starts earlier. Less  
13 transparency to fluid milk retail buyers regarding Class I  
14 handlers' actual cost net of hedging could stimulate  
15 Class I profit margins which can lead to reinvestments and  
16 product innovation.

17 This morning we heard Mike Brown talk about how  
18 when he speaks on behalf of IDFA on their group calls, he  
19 can never offer his outlook, he can never offer any  
20 reference points. Why? Because they would be concerned  
21 that such prices would become -- could create  
22 anti-competitive tendencies, collusions, etcetera. So a  
23 person of authority putting forward indicated prices truly  
24 can set -- resolve that question of, well, how do we know  
25 what to price?

26 There is a report, AMS publishes it. It's an  
27 indicative Class I price. You don't have to use it. My  
28 gut is that everybody would rush to that as a useful



1 substitute for what is currently the publication of  
2 advanced prices and pricing factors.

3 Okay. Going forward. The impact of advanced  
4 prices on producer price differentials is explored in  
5 Bozic and Wolf (2022). That is also Exhibit 76, and on  
6 the web it can be found under exhibit titled Edge-2.  
7 Figure 2 from that paper is reprinted below and  
8 illustrates the impact on the Southwest Federal Milk  
9 Marketing Order.

10 When the announced or final prices exceed advanced  
11 pricing, PPDs are reduced and may become negative. The  
12 Upper Midwest Federal Order experienced 33 months of  
13 negative PPDs from January 2000 through May 2019,  
14 restricting to -- the analysis to the period before the  
15 Class I reform. In 29 of those 33 months with negative  
16 PPDs, the maximum higher-of of announced prices was  
17 greater than the maximum higher-of of advanced prices.

18 I'm pretty sure that one of the maximum words in  
19 that sentence is redundant.

20 Negative PPDs do induce depooling. When privately  
21 held processors depool, they are not obliged by any  
22 regulation to pay producers according to minimum Federal  
23 Order prices, and producers need not even know if they are  
24 pooled or depooled. And they may be misled to believe the  
25 Federal Order negative PPDs, which may be printed on their  
26 milk check, reflects the actual cost of their milk buyer.

27 In other words, a private processor depools, PPDs,  
28 let's say a negative \$5. The producer still gets paid



1 uniform price rather than the value of cheese in the  
2 market. And the producer finds out maybe only a year  
3 later that their processor, that their plant to which they  
4 ship, was indeed depooled that month. It's double  
5 dipping.

6 As Class I -- and that's one of the core reasons  
7 why Edge got involved in this Class I issue a few years  
8 back. Our members were very frustrated by behavior of  
9 some processors. I don't want to say that it was a  
10 majority, or all, but some processors definitely betrayed  
11 their trust in the early days of pandemic.

12 As Class I utilization rates fall, the magnitude  
13 of the rally in announced prices needed to induce  
14 depooling will also be reduced. With the current trend of  
15 declining Class I sales, I expect the continued use of  
16 advanced prices to create disorderly marketing  
17 conditions -- in this case, by that I mean opportunistic  
18 depooling and misleading milk check statements furnished  
19 to producers -- at an increasing frequency. To prevent  
20 this, advanced prices should no longer be used in  
21 regulation.

22 On Proposal 17.

23 We would be remiss if we did not acknowledge that  
24 other major stakeholders representing dairy farmer  
25 interests are strongly in favor of the higher-of  
26 proposal -- or higher-of approach, excuse me. National  
27 Milk's Proposal 13 reversed regulation to the pre-2018  
28 language. Farm Bureau's Proposal 18 eliminates the



1 advanced prices, but continues to use the higher-of  
2 Class III skim milk price and Class IV skim milk price.  
3 And as we understand it, for all practical purposes,  
4 Proposal 17 and 18 are identical. There could be some  
5 drafting differences. There was no difference in intent,  
6 as far as I understand.

7           It is understandable that dairy producers would be  
8 hesitant to, again, try out something regarding the  
9 Class I mover when the previous higher-of system in the  
10 minds of many worked so well for producers. And to that  
11 end, the intent of Edge's Proposal 17 is to illustrate the  
12 conditions under which higher-of principle can still be  
13 used without the complications for producer risk  
14 management -- excuse me -- without the complications for  
15 risk management by fluid milk innovators.

16           In our opinion, the CME Group hesitated over years  
17 to create a Class I futures contract, as there would be no  
18 clear arbitrage relationship between Class I on one side  
19 and either Class III or IV futures contracts on the other  
20 side. However, if advanced prices are abolished and final  
21 Class III and IV milk prices are used for settling the  
22 base Class I price, then the no arbitrage relationship  
23 would hold between Class I futures and Class III and IV  
24 futures.

25           As I illustrate in the formula on the next page,  
26 Class I milk futures price would then be equal to the max  
27 of the Class III milk futures price and Class IV milk  
28 futures price, at least in theory.





1           Market makers would have minimal risk in providing  
2   liquidity to Class I hedgers by taking a spread position  
3   between Class I on one side and whichever class has the  
4   higher price at that point in time. Under such  
5   conditions, the CME Group's concerns about splintering  
6   hedging interests among too many contracts would be lower,  
7   and CME Group might -- I underscore -- might be willing to  
8   finally create a Class I contract. Nobody can force them  
9   to do that. Needless to say, Edge cannot guarantee that  
10   that would indeed happen. Even if it does happen, there  
11   are likely to be hedging execution costs that would be  
12   higher than would be the case under Proposal 16.

13           We believe Proposals 17 and 18 are superior to  
14   Proposal 13, but the solution that best balances the  
15   interest of all parties is Proposal 16, Class III Plus.

16           In conclusion, Edge recommends that USDA adopt  
17   Proposal 16 as the proposal best suited to balance the  
18   interests of dairy producers, dairy processors, and  
19   consumers of dairy products.

20           I will add, Lucas will testify most likely  
21   tomorrow, maybe Wednesday, on our response to what we have  
22   heard in this hearing over the previous two, two and a  
23   half weeks by that time. Again, we came to this hearing  
24   to learn, to try to find common ground, to see the world  
25   from the other side's perspective, whoever may be the  
26   other side at that point in time, not just counter-punch  
27   and have intellectually cunning cross-examination.

28           So we'll follow up on that after everybody has had



1 a chance to offer their proposals and rebuttals.

2 That's all I have on this exhibit, Your Honor.

3 BY MR. SJOSTROM:

4 Q. Thank you, Dr. Bozic.

5 I would like to direct you on some questions  
6 related to this proposal.

7 A. Are we going to leave that for the unified  
8 cross-exam?

9 Q. I'll do direct on this --

10 A. Okay.

11 Q. -- and then I'll head into your other exhibits  
12 because we need to note 15A and 15B as well as we do that.

13 A. Okay.

14 Q. Dr. Bozic, I understand that Class III Plus was  
15 created in April 2021.

16 Could you tell me how it came about and why it  
17 came about as well as you can recall?

18 A. So I was approached at some point in year either  
19 2020 or 2021, I honestly forget now, by Edge Dairy Farmer  
20 Cooperative to coordinate a task force spanning Wisconsin,  
21 Minnesota, Iowa, South Dakota, and Nebraska dairy  
22 producers to contemplate a long-term evolution of Federal  
23 Milk Marketing Orders.

24 That was a long process. The first fruits of that  
25 process was the Class III Plus proposal. At that time, in  
26 early 2021, the debate was regarding immediate changes to  
27 the Class I pricing, including potentially holding an  
28 emergency hearing, and the task force thought we might



1 wish to contribute to that discussion by offering the  
2 Class III Plus.

3 The task force continued working after Class III  
4 Plus was created to address deeper issues of Federal  
5 Orders, and the result of that is Edge's legislative  
6 proposal which is outside the scope of this hearing. So  
7 talk to me over beer or wine tonight if you'd like.

8 Q. Thank you, Dr. Bozic. We most certainly will.

9 According to a press release, it was supported,  
10 Class III Plus at that time, by the Nebraska State Dairy  
11 Association, the Minnesota Milk Producers Association,  
12 South Dakota Dairy Producers, The Dairy Business  
13 Association of Wisconsin, as well as Edge; is that  
14 correct, to your recollection?

15 A. That's how I recollect it, yes.

16 Q. And why do you think those organizations  
17 ultimately came around to support it? What were the  
18 reasons that they saw?

19 A. There was a lot of frustration with depooling in  
20 the Upper Midwest, just like any other part of the  
21 country. We understood that advanced prices are a factor  
22 contributing to higher depooling. We were looking to  
23 contribute to a debate by pointing out that advanced  
24 prices are no longer needed, there is a better way.

25 Also, at that point in time, the alternative that  
26 was being proposed by National Milk, that was being  
27 contemplated but ultimately not proposed by National Milk,  
28 was to remain with the average-of and just do a moving



1 adjuster on that. And we thought that tying Class I to  
2 Class III would have a better chance long-term to mimic  
3 higher-of than the average-of.

4 Q. Thank you. Changing subjects quite a bit, but  
5 within your testimony.

6 Would it make sense that a reasonable person who  
7 knows about the dairy industry, listening to this hearing,  
8 imagines that Federal Order 30, the Upper Midwest, has  
9 almost no Class I milk, especially when you look at  
10 percentages? And I was curious on a volume basis, if you  
11 could reflect on how much Class I milk there is compared  
12 to Orders 6 and 7. That's the Southeast and Florida  
13 orders.

14 A. Thank you, Lucas.

15 So when we were -- seems like ages ago, but only a  
16 few weeks ago when we were on, I believe, Topic 1,  
17 standard milk composition, the debate I was having with  
18 other dairy economists and consultants was, you know,  
19 regarding the relative weight that should be given to MCP,  
20 or multiple-component orders, versus the skim fat orders.

21 So I started looking at statistics that I don't  
22 normally look at. And I then learned that Upper Midwest,  
23 indeed, at the month that I was looking at at that time,  
24 probably somewhere midsummer, had more Class I milk pounds  
25 than the Florida order, and that three-quarters of all  
26 Class I milk pooled on the Federal Order system nationwide  
27 is pooled within multiple component orders.

28 Once we analyze deeper, not to revisit that



1 Topic 1, but once we analyzed deeper, the amount or the  
2 magnitude of directing more, quote/unquote, water and milk  
3 to plants within the two Class I plants within MCP orders,  
4 we realized that the -- all evidence suggests that we  
5 should support Topic 1. And that's where Edge decided to  
6 testify on that topic and -- and offer our slight  
7 modification that also accounted for the butterfat.

8 Q. Thank you.

9 And for the record, that's the updating of  
10 butterfat percentages --

11 A. Yes.

12 Q. -- with protein?

13 A. Yes. That's correct.

14 Q. Thank you.

15 Next question, Dr. Bozic, is on advanced pricing  
16 specifically. We have heard from many industry experts in  
17 testimony, including yourself, talking about advanced  
18 pricing making marketing hedging riskier. We have also  
19 heard from many dairy farmers in testimony, not really  
20 mention advanced pricing at all, or even say that it adds  
21 no complications to their risk management strategy.

22 Why would you say those two -- two answers are  
23 different, in your opinion?

24 A. Well, and to be honest, also the answers sometimes  
25 differ even within the processor community and the  
26 producer community as well.

27 From the processors' perspective, we really have  
28 these two worlds, the ESL and institutional sales world,



1 which either offers products with longer shelf life, or on  
2 a longer contract, not just a one-month sale and the fixed  
3 price. And then we have the traditional grocery sales,  
4 HTST, with prices to retailers, wholesale prices to  
5 retailers, changing month to month.

6 And for the HTST segment, abandoning of advanced  
7 prices just means more homework. And it's, you know, the  
8 devil you know versus the devil you don't. Right? They  
9 understand that their sector is in a pickle right now.  
10 They understand they are in a long-term declining trend.  
11 But at least they can be comfortable that, you know, that  
12 they know how month to month prices would work.

13 Change is hard. Doing things differently is hard.  
14 Innovation is difficult. If it was easy, everybody would  
15 be innovating every Saturday and Sunday in their free  
16 time. We don't -- we tend to watch Netflix. I don't, but  
17 there are good shows there. So -- so from their  
18 perspective, I fully understand the resistance to change.

19 On the producer side, there are also  
20 some geographic differences, and -- and, you know, they  
21 have -- the impact of advanced prices is different, for  
22 example, in Georgia and Florida versus Northeast or  
23 Pacific Northwest, depending on utilization in the order  
24 there.

25 But it's also difficult for producers to fully  
26 comprehend and disentangle and quantify relative  
27 contribution of each aspect of milk pricing to how easy or  
28 difficult their risk management is.



1 Q. Dr. Bozic, do you know how long we have had  
2 advanced pricing in the order areas?

3 A. So I must admit, I was born into the dairy world  
4 in 2007. I did not live in this country prior to 2006.  
5 And I -- I am very grateful for mentors in the dairy  
6 industry, and when they are willing to talk with me about  
7 how the industry operated prior to the Federal Order  
8 Reform. So I don't have good understanding of the world  
9 before year 2000. But since 2000, we did have advanced  
10 pricing.

11 Q. And would you then be fair to say that most --  
12 many farmers managing dairy farms today have only lived in  
13 a world of advanced pricing? And as we're here debating  
14 higher-of and average-of, and -- and many people recalling  
15 back to times when we did not have the average-of, is --  
16 is there a time that maybe many dairy farmers would not  
17 even know, managing farms today, a time before advanced  
18 pricing?

19 A. I think that there is often the very human  
20 instinct is to try to solve the most proximate cause of  
21 pain, and then come back and see, well, is anything else  
22 hurting us.

23 The producers tend to believe that reversal to  
24 higher-of with advanced pricing or without would resolve  
25 most of the depooling problems. I wish that was the case.  
26 It's not. We have to go deeper to solve that problem.  
27 That's why Edge is working on the legislative proposal.

28 But, you know, I understand that the approach of



1 let's not fix what wasn't broken prior to 2019, by going  
2 to some new innovation. And also the depooling  
3 experiences of last few years correlate, they happened at  
4 the same time as the average-of. So it's very, you know,  
5 much in human nature to say, well, if it happened at the  
6 same time, it must have been caused by the change. But --  
7 whereas, there are other factors causing it, and we'll  
8 talk about it either before or after lunch in my second  
9 exhibits here.

10 Q. Yes, sir. I have got three more questions on  
11 PPDs, and then we can change subjects, so to speak.

12 On page 6, the paragraph under the chart, you  
13 wrote, "Producers need not even know if they are pooled or  
14 depooled, and may be misled to believe the Federal Order  
15 negative PPD printed on their milk check reflects the  
16 actual costs to their milk buyer."

17 Have you seen examples of that?

18 A. Have I seen examples of PPDs in the milk checks  
19 being something different than what the market order  
20 administrator has published?

21 Q. Yes.

22 A. Unfortunately I have.

23 Q. And do you know of situations where PPDs had no  
24 correlation to the local Federal Order that were printed  
25 on checks, but the milk was -- but it was removed from the  
26 milk check, not deposited?

27 A. So correlation is a -- I'm a recovering academic,  
28 so I tend to be perhaps more pedantic than need be. But





1 correlation is only something you can calculate if you  
2 have a long enough sample over time.

3 But I think that it would be fair to say that in  
4 some cases that I have seen, in some cases of some milk  
5 checks that I have seen, there was no resemblance or  
6 obvious relationship, at least in that month, between the  
7 market order PPD and the milk check.

8 You see a correlation would be, well, Order 30  
9 printed \$0.25 positive, and they -- and the check had  
10 \$0.15 positive, and maybe it's a zone difference. Or  
11 \$0.10 positive, maybe they had to pay for the pool access.

12 But if an order publishes positive \$0.20, and the  
13 milk check states negative \$0.70, that is not a number  
14 that can in any way be rationalized by the order  
15 regulation. It just speaks to the unfortunate freedoms  
16 that some in the processing community have taken with that  
17 line item in the milk check, as a sort of cesspool where  
18 to put anything that they may otherwise hesitate to  
19 communicate to their patrons.

20 Q. Thank you. And last question.

21 And -- and for -- just mostly for the record  
22 purposes if you have this.

23 Has this been only private processors, only  
24 cooperatives, or both, to your knowledge?

25 A. The practices vary, and that's a little bit  
26 outside of the scope of this hearing, and so I don't want  
27 to take too much time on belaboring this point.

28 Oftentimes the cooperative milk checks that I have



1 seen would not even have a PPD listed, or it would be  
2 zeroed out and then the changes would be done through  
3 component pricing. So the component -- the price for  
4 protein or other solids would differ than the Federal  
5 Order published prices.

6 I think that in general my comment there is that  
7 there's a huge problem for Federal Orders when we start  
8 destigmatizing regular opportunistic depooling, because we  
9 are missing the opportunity to instill in the minds of  
10 dairy consumers the idea that pooled milk is a fairly  
11 priced milk. We have a label "fair price" for coffee, for  
12 example. So we don't have anything like that for milk in  
13 the United States.

14 And Federal Orders is our best instrument that we  
15 have in our disposal to try to achieve that long-term.  
16 And as -- as fluid milk sales decline, that's our best way  
17 to give a new sense of purpose and mission to Federal  
18 Orders.

19 But that, again, goes beyond the scope of this  
20 hearing.

21 Q. Thank you.

22 MR. SJOSTROM: Well, Your Honor, if it's all right  
23 with you, timing-wise we would like to move on to the  
24 rebuttal section?

25 THE COURT: We may, but just let me ask. As I  
26 look at updated Edge-6, I have double copies of it.

27 MR. SJOSTROM: Yeah. We did not pay for them, but  
28 they are for you to bring home and show your kids and



1 grandchildren. So you're welcome.

2 THE WITNESS: We understand this material is a  
3 little bit dense, we wanted everybody to read it twice.

4 MR. SJOSTROM: Forgot to mention that at the  
5 beginning.

6 THE COURT: All right. So there are no  
7 differences in my second set of this exhibit?

8 MR. SJOSTROM: That's correct.

9 THE COURT: All right. Great.

10 MR. ENGLISH: Your Honor?

11 THE COURT: Mr. English.

12 MR. ENGLISH: Well, maybe before we did this, we  
13 should have asked about this. So there's a rule in this  
14 proceeding that speakers can speak for 60 minutes on  
15 direct.

16 Dr. Bozic has offered to basically put two  
17 statements on and do one combined cross. I guess my view  
18 is, that would mean 60 more minutes, but I don't know what  
19 AMS's position is.

20 MS. TAYLOR: That's not our view. It's  
21 60 minutes.

22 MR. ENGLISH: Well, then, I guess in another  
23 11 minutes we'll ask --

24 THE WITNESS: And, Ms. Taylor, if we were to  
25 separate rebuttal testimony from the proponent testimony,  
26 would that be additional 60 minutes?

27 MR. ENGLISH: He's not going to get this done in  
28 11 minutes.



1 MS. TAYLOR: Well, he just has appendixes. It's  
2 just three pages of testimony.

3 The goal -- the intent, right, is to be efficient.  
4 So I can't advocate trying to find the loophole to extend  
5 it longer than it needs to be, to be honest.

6 So if we want to -- if you -- if you take a few  
7 minutes longer, then that's fine. I mean, we want you to  
8 get your testimony on. It is written. It was prepared in  
9 advance.

10 This is not the first time everyone's had access  
11 to this testimony, Judge Clifton -- well, maybe the  
12 rebuttal testimony. I could be wrong about that piece.  
13 I'm not sure when that went online.

14 THE WITNESS: So, Ms. Taylor, if I can ask for  
15 clarification. If we were to do this separately, I come  
16 back tomorrow for rebuttal testimony, what would be the  
17 time allotted for rebuttal testimony in that case?

18 MS. TAYLOR: I guess technically you would be  
19 allotted 60 minutes, but that was not the purpose of the  
20 rules.

21 MR. SJOSTROM: Your Honor --

22 THE WITNESS: We won't be able to get done most of  
23 this unless we dedicate 60 minutes to it.

24 MS. TAYLOR: I'm not in charge. It's Judge  
25 Clifton's call.

26 THE COURT: Well, I didn't know about the rule, so  
27 I'm glad I know about the rule.

28 MS. TAYLOR: That's fair, Your Honor. I'll just



1 elaborate, just to keep you -- get you up to date.

2 In the Hearing Notice -- we knew this would be a  
3 very long hearing. To try to make things as efficient as  
4 possible, in the Hearing Notice, it outlined rules, which  
5 said each witness would get 60 minutes for -- to put on  
6 their exhibits and testify in direct examination. And  
7 so -- but cross-examination would be unlimited. There is  
8 no time limit on that. The intent was, once the person  
9 got up there, they got 60 minutes.

10 I -- I see that he has two statements, and  
11 normally they would go at other times. So it's up to your  
12 call, of course, about what we're going to do about that.  
13 But we, you know, put these rules in place to try to be  
14 efficient.

15 THE WITNESS: Your Honor, if I can just add a  
16 statement here.

17 Unlike other large trade associations, we don't  
18 have a very long bench of experts that we can draw upon.  
19 So just because it's the same immigrant on the stand, I'm  
20 not sure that it -- it would follow that, for the sake of  
21 efficiency, we should sacrifice quality.

22 THE COURT: Now, you had to throw in that word  
23 "immigrant" as if there's some sort of discriminatory  
24 practice going on here.

25 THE WITNESS: No, I tend to make fun of my accent.  
26 That's all.

27 MR. SJOSTROM: Your Honor, if I may interject  
28 here.



1           We also -- we also do have two proposals, and we  
2 did combine them together. I would suspect based on the  
3 rules that would be -- had we separated those, that would  
4 have been an hour for each. We want brevity and an  
5 expedient hearing here as much as anyone. But this was a  
6 surprise to us as well.

7           MR. HILL: So how long do you think that your  
8 direct would take, Dr. Bozic?

9           THE WITNESS: Oh, certainly would be done by  
10 Thursday. No.

11          MR. HILL: This week or next week?

12          THE WITNESS: I honestly think that we can get the  
13 Exhibit Edge-15 done in 60 minutes before cross. I -- I  
14 will try to talk as fast as Ms. Taylor will allow me.

15          MS. TAYLOR: I'm not advocating that.

16          THE WITNESS: Yeah. It is very important  
17 material.

18          MS. TAYLOR: Then we should take a lunch break.

19          THE COURT: All right. I -- I have occasionally,  
20 in trials, hearings, to try to keep things even, I have  
21 actually kept track of each parties' amount of time used,  
22 and I kept a watch, and if they were using too much, they  
23 had to stop. But I don't know if as much truth shakes out  
24 in that kind of an artificial constraint.

25                 Dr. Bozic was very efficient. He's got a lot of  
26 valuable information here, and I do not want any  
27 artificial constraints on his direct testimony. That's  
28 just me. I could ask for a consensus to see if other



1 people feel the same way, but we can talk about it after  
2 lunch.

3 So it's 11:55. Let's break for lunch now. Please  
4 be back and ready to go at 1:00 p.m.

5 We go off record at 11:55.

6 (Whereupon, a luncheon break was taken.)

7 ---o0o---

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28



1 MONDAY, OCTOBER 2, 2023 - - AFTERNOON SESSION

2 THE COURT: Let's go back on record.

3 We're back on record. It's 1:00 p.m.

4 How would you like to proceed?

5 MR. SJOSTROM: Well, Your Honor, Lucas Sjostrom,  
6 Edge Dairy Farmer Cooperative. We would like a ruling on  
7 whether we're going to restart the hour or not. I think  
8 this would help us.

9 THE COURT: We had a consensus that it might be  
10 useful if Dr. Bozic testified on both Exhibit 289 and 290  
11 before cross-examination began.

12 Was there also a consensus that that would alter  
13 the amount of time under the rules he would have for  
14 direct presentation?

15 MR. SJOSTROM: I don't believe that was discussed,  
16 but that was our understanding at least. But we never  
17 asked the question.

18 THE COURT: Okay. If you hadn't suggested that  
19 this might be more expedient, and everyone seemed to  
20 agree, then your normal procedure would have been to take  
21 your hour on Exhibit 289.

22 MR. SJOSTROM: Yes. And -- and, again, we do have  
23 the next proposer who is not here yet due to travel, so  
24 that is another reason we're making this more expedient.  
25 So we would have had the natural break in between the two  
26 also.

27 THE COURT: All right. I'd like to hear from some  
28 of your colleagues as to how you would prefer I handle





1 this. I want to treat everybody the way everyone's been  
2 treated before I got here. But we might not be able to do  
3 what the consensus said.

4 So let me hear your ideas.

5 MR. MILTNER: So, Your Honor, this is Ryan Miltner  
6 representing Select Milk Producers.

7 We had three proposals, and we put on multiple  
8 witnesses for each proposal. As I understood, each  
9 witness as a proponent was limited to one hour. I don't  
10 think we hit those numbers when we presented, but that's  
11 not really the point.

12 The point is that I think each witness, as a  
13 proponent, and that same witness speaking to other  
14 proposals, those would be separate times. And I think  
15 that's how we have handled witnesses like Mr. Brown, who's  
16 testified both in favor and in opposition to proposals. I  
17 think there's been some National Milk witnesses that --  
18 Mr. Vandeneuvel I think spoke both to and against  
19 proposals in separate times at the witness stand.

20 The fact that we're kind of lumping these together  
21 for -- for the Edge witnesses, to me, seems that we  
22 could -- we could afford them the time as if they had  
23 taken the stand twice, once in favor of their proposals  
24 and once opposed to them. At least that's how I would  
25 have understood things to work.

26 And I know time is important, so I don't want to  
27 belabor that anymore, but that's Select's position. Thank  
28 you.



1 MR. HILL: So as to not spend too much time, Your  
2 Honor -- this is Brian Hill -- I will just say we will  
3 concede that there have been several witnesses here, such  
4 as Mike Brown and others who have been -- poor Mike Brown,  
5 who has been here time and time and time again, and so we  
6 will allow this to pass this time and just allow this  
7 hearing to move on. We're not going to contest this.

8 THE COURT: I think the purpose of the rule was  
9 for us to do as much as we could in as short time as  
10 possible, and I think this actually does promote that  
11 goal.

12 MR. HILL: It does. But as we -- as was just  
13 mentioned, other witnesses have come back several times.  
14 This is an argument for the next hearing. But we would  
15 like people to continue to adhere to the one hour when we  
16 get up here, because I think this hearing would be a lot  
17 longer but for that. And I don't want to do that to our  
18 court reporter.

19 THE COURT: Now, if we were to stick with that,  
20 would there have to be another witness in between  
21 Dr. Bozic's Exhibit 289 and Dr. Bozic's 290?

22 MR. HILL: Again, in this case, I guess if he's  
23 going to be testifying to the same thing both times, you  
24 know, this is different testimony to a degree. It's not  
25 the same proposal. It has been unclear, I guess there has  
26 been some uncertainty or unclarity about what this  
27 entails. So again, we'll just allow this to pass this  
28 time and continue on.



1 THE COURT: All right. Does anyone else want to  
2 be heard?

3 MS. HANCOCK: I will just offer, for practical  
4 purposes, that we have a rule at our firm when you are  
5 talking about something that you don't just pile on and  
6 say more of the same thing.

7 And I think that if we proceed with that  
8 understanding, that it's new information and we're not  
9 reploting something that the witness has already said  
10 before, I think that then we at least make it as practical  
11 as possible.

12 THE COURT: Excellent. All right. You may  
13 proceed, and you are not limited by the "one-hour rule"  
14 rule.

15 MS. TAYLOR: You get a new hour.

16 MR. HILL: A new hour.

17 MR. SJOSTROM: Yes. We will see this as a new  
18 proposal, and we will adhere to our clock, Your Honor.  
19 Thank you.

20 Your Honor, we would like to now move on to what  
21 we have disbursed already as Edge-15.

22 And, Dr. Bozic, welcome back to the stand.

23 Also, it is online, but for the sake of very ugly  
24 printing, we did not print 15A. We have it online, I  
25 believe both as a spreadsheet and -- and a PDF. But we  
26 thought it was much outlined in 15B, which is the back  
27 half of the Exhibit 15 as printed.

28 And so my question is, Dr. Bozic, did you prepare



1 all of these?

2 THE WITNESS: Yes, I have.

3 MR. SJOSTROM: And, Your Honor, if you want them  
4 as separate exhibits, 15A and 15B, which, again, are  
5 already online, 15B being the second half of this  
6 document, you have the PowerPoint-type document, I believe  
7 they would be Exhibits 291 and 292.

8 THE COURT: All right. I'd rather not. So let me  
9 make sure I understand.

10 So Exhibit 290 is comprised of Edge-15, Edge-15A,  
11 and Edge-15B, all of which are online?

12 MR. SJOSTROM: Yes.

13 THE COURT: That works for me.

14 MR. SJOSTROM: Wonderful.

15 MARIN BOZIC,

16 Having been previously sworn, was examined  
17 and testified as follows:

18 DIRECT EXAMINATION

19 BY MR. SJOSTROM:

20 Q. Dr. Bozic, I will turn it over to you for your  
21 testimony.

22 A. Thank you very much, Lucas.

23 Can we have the PowerPoint up, please?

24 So over the previous two weeks several assertions  
25 have been recurringly invoked in support of Proposal 13 or  
26 in opposition to other proposals on the topic base Class I  
27 skim milk price. These assertions, paraphrased as I  
28 understood them to mean, are the following:



1           1. "Average-of" pricing regime is not necessary  
2 to facilitate hedging because Class I can be hedged under  
3 "higher-of" pricing approach using swaps or OTC;

4           2. U.S. Generally Accepted Accounting Principles  
5 (GAAP) require correlation coefficient to be between .8  
6 and 1.25 for risk management activities to be recognized  
7 as hedging for accounting purposes;

8           3. "Higher-of" pricing regime would not "detract"  
9 from risk management versus the "average-of" pricing  
10 regime;

11           4. "Average-of" pricing regime caused depooling  
12 in recent years.

13           In this rebuttal testimony I'm presenting my  
14 preliminary analysis of these arguments. Further and more  
15 thorough analysis will be included in Edge's post-hearing  
16 brief, and I'll try to include in the post-hearing brief  
17 thorough answers to any questions that may come up in  
18 cross-examination.

19           Okay. So the first thing I want to address is the  
20 assertion, number one, that we don't really need  
21 average-of because we can -- to hedge because we can hedge  
22 using OTC contracts under the higher-of.

23           It was stated by a National Milk Producers  
24 Federation expert witness that over-the-counter contracts  
25 would suffice for hedging if base Class I skim milk price  
26 were to be set to the higher-of Advanced Class III and  
27 Class IV skim milk price.

28           Since I have heard that over -- and then over the



1 next few days after that, or the last few days until  
2 today, I reached out to OTC providers and brokers with  
3 deep understanding of the OTC market. I asked them to  
4 give me a quote, assuming that we are back in the  
5 higher-of pricing regime, and the cost they quoted me was  
6 \$0.30 per hundredweight. Let's illustrate what that  
7 means.

8 If, for example, we imagine a Class I handler  
9 wanting to lock in a Class I skim milk price, and further  
10 assume that Class III skim milk price and Class IV skim  
11 milk price as implied by milk and butter futures prices  
12 are respectively \$14 and \$13 each per hundredweight, then  
13 an OTC provider may offer a swap at \$14.30 per  
14 hundredweight, which would be the higher-of these two  
15 futures prices, or prices implied from futures contracts,  
16 plus \$0.30 per hundredweight. That is akin to buying a  
17 futures contract that settles on the higher-of Advanced  
18 Class III and Class IV skim milk prices, except that the  
19 buyer does not need to post margin calls if prices move  
20 against them if they decline.

21 The difference between the higher-of the two  
22 expected prices and the swap price is the cost of hedging  
23 that must be absorbed by Class I handler. In other words,  
24 expected profit margin is reduced by the cost of hedging  
25 which is \$0.30 per hundredweight, based on the quote I  
26 got.

27 If the Class I handler has a profit margin that is  
28 small relative to the swap premium, that would simply



1 not -- they would simply not be able to hedge. Even if  
2 hedging instruments are technically available, it would  
3 just not be economically feasible.

4 Under the average-of approach, Class I handler  
5 does not need to go to a swap dealer. They can hedge  
6 using the CME futures directly. Brokerage commissions  
7 vary from \$5 to \$30 per contract per transaction.  
8 Contract size is 200,000 pounds or 2,000 hundredweights.  
9 If the handler needs two contracts to create an average-of  
10 hedge, and even if they close the futures position rather  
11 than waiting for those contracts to expire, the cost at  
12 the high end would be two times \$60 per 400,000 pounds of  
13 milk. That translates to \$0.03 per hundredweight.

14 That cost -- and this is the punch line -- that  
15 cost is ten times lower than what OTC cost would be under  
16 the higher-of pricing regime. That is not a small  
17 difference. That's a world of difference.

18 Occasionally Class I handlers may still want to  
19 buy a swap rather than taking a futures position, and  
20 that -- as that helps avoid the margin calls in case of  
21 large price swings. But the cost of these swaps under the  
22 current average-of regime may go up to \$0.10 per  
23 hundredweight, which is still three times cheaper than the  
24 swap cost under higher-of regime.

25 So when we say that hedging under higher-of is  
26 available through OTC, we should understand that, at best,  
27 that's going to be between three and ten times more  
28 expensive, and it's not even clear how much volume would



1 be hedgeable in that way. There is a reason why almost no  
2 witness in this hearing said that it was their regular  
3 practice prior to 2019.

4 Assertion number 2: The correlation coefficient.  
5 So the assertion number 2 is that the U.S. accounting  
6 principles require the correlation coefficient to be  
7 between .8 and 1.25 for risk management activities.

8 Some of you may recall my cross-examination of  
9 Ms. Dorland, I asked whether she believes that correlation  
10 coefficient needs to be between .8 and 1.25. She said it  
11 wasn't her, it's the GAAP that requires it.

12 So let's dig just a little bit into correlation  
13 coefficient. And I know that most people find this  
14 riveting, so I'll try to be fast.

15 Correlation coefficient is defined mathematically  
16 as the ratio of the co-variance between two stochastic  
17 variables to the product of their standard deviations.  
18 That's the formula that we see on the screen, and that's  
19 the formula at the bottom of page 2 of the Exhibit 290.

20 If those two prices tend to "move" together, then  
21 co-variance between them will be positive and high and  
22 correlation coefficient will be positive and high.

23 But how high can it get? In the extreme case, if  
24 X and Y, if those two prices are actually the same price  
25 in all periods, in all times, then the co-variance turns  
26 out to be the variance of the -- of the variable X. In  
27 that case, the correlation coefficient collapses to number  
28 one. That's also seen on this slide, on the page 3 of the





1 Edge-15B, as well as the top formula on page of -- page 3  
2 of Exhibit 290.

3 So it is not mathematically possible for a  
4 correlation coefficient to be higher than 1 or to be lower  
5 than negative 1. And that's just basic statistics. Any  
6 introductory course in statistics, even if -- you know,  
7 you don't have to be an econ major. Even if you are in  
8 business school, everybody covers that.

9 As for GAAP accounting principles, the number  
10 cited, 80% to 125%, they do not refer to the correlation  
11 coefficient. Accounting standards are focused on the  
12 extent to which changes in the cash flows of the hedging  
13 instrument offset changes in the cash flows of the hedged  
14 item.

15 So, for example, if Class I skim milk price is  
16 projected to be \$18 per hundredweight based on current  
17 futures prices, and the actual value turns out to be \$21  
18 per hundredweight, then the change in the hedged item --  
19 unexpected change in the hedged item is \$3 per  
20 hundredweight.

21 And using the a method that's called a dollar  
22 offset method, an evaluation would then be made to assess  
23 whether the hedging instrument, which is a position in the  
24 futures Class III or Class IV futures, or something else  
25 that may be used, whether the -- the -- if the hedging  
26 instrument would result in hedging gains equal to 80 to  
27 125% of that \$3 per hundredweight, which was the  
28 unexpected change. That's the 80 to 120 that people talk



1 about.

2 So if, in this case, if we assume that the change  
3 in the hedged item is \$3 per hundredweight, if the hedge  
4 resulted in the hedging gains of between \$2.40 and \$3.75  
5 per hundredweight, then we would say that it fell within  
6 the 80 to 125% range.

7 Now, it is true that the closer correlation  
8 coefficient is to 1, the more likely it is that the  
9 hedging gains will fall within the 80 to 125% range of the  
10 changed in the hedged item. But those are not the same.

11 Okay. And I had that here as well.

12 So assertion number 3: Higher-of pricing regime  
13 would not detract from risk management versus the  
14 average-of pricing regime.

15 So I think it's going to help us if we are  
16 specific about why hedging may fail, why it may not  
17 perfectly offset the unexpected changes in the hedged  
18 item, which is the base Class I price or the skim price.  
19 There are three reasons why hedging may not result in  
20 hedging gains that perfectly offset unexpected increases  
21 in Class I milk price.

22 Reason number one: I'm going to call it the mover  
23 risk, "mover." If hedging with Class III or Class IV  
24 futures, if we are hedging with Class III, Class IV  
25 futures, and if the Class I and the base Class I skim milk  
26 price is based on the higher-of Class III and Class IV  
27 skim milk prices, this is true whether we use advanced  
28 prices or not, then there is a mover risk. That is the



1 risk that the hedge will be based on the wrong contract.

2 For example, we hedge with Class III futures  
3 because we thought that Class III is going to be higher  
4 than Class IV because the futures price was higher at the  
5 time when we initiated the hedge. But then in the end,  
6 when the actual prices are out, it turns out that Class IV  
7 was indeed higher and was the mover. So mover risk is the  
8 risk that we will be hedging with the wrong instrument.

9 Second reason why hedging may not be perfect is  
10 the advanced prices risk. If Class I milk price is based  
11 on advanced prices, calculated using surveys of commodity  
12 prices during the middle two weeks of the prior month,  
13 then it is likely that the full month of -- full month  
14 average of skim milk prices -- or rather skim milk prices  
15 based on the full month average of commodity prices, will  
16 not be equal to the two-week average prices.

17 And the third cause or reason why the hedging may  
18 not be perfect is something I'm going to call bid-ask  
19 spread or risk premium. So even if advanced prices are  
20 not used in pricing, and even if base Class I milk futures  
21 contract is indeed introduced by the Chicago Mercantile  
22 Exchange, it is still possible that the futures prices may  
23 contain upward bias, in other words, that the Class I milk  
24 futures price will not be an unbiased expectation of AMS  
25 published base Class I milk price.

26 Why could that happen? If the arbitrage between  
27 base Class I milk futures and the Class III and IV milk  
28 futures is costly, then arbitragers and market makers will



1 impose a wide spread between the price at which they are  
2 willing to sell such base Class I milk futures and the  
3 price at which they are willing to buy it. The transacted  
4 price will be higher than the expected price, hedging  
5 gains will be lower than the unexpected change to the base  
6 Class I milk price, thus reducing hedge effectiveness.

7 If you recall my exchange with Mr. Brown this  
8 morning when I asked him to grant me the assumption of  
9 high liquidity in that counterfactual base Class I milk  
10 futures, he said he cannot do that because that is a very  
11 tall order assumption, something that is, in his opinion,  
12 not very likely. That would convert to this third reason  
13 for imperfect hedging that I'm calling risk premium.

14 Okay. So now that we understand the reasons why  
15 hedging may not work as perfectly as we all hope, let's  
16 evaluate all proposals accordingly.

17 Most proposals notice from this hearing -- noticed  
18 for this hearing suffer from at least one of these three  
19 sources of hedging ineffectiveness. Summaries are  
20 provided in the table that I'm showing currently on the  
21 screen, and it's the top table on page 4 of the  
22 Exhibit 290, provided for the record.

23 In the order in which they were noticed,  
24 Proposal 13 by National Milk does not eliminate mover  
25 risk, does not eliminate the advanced prices risk, but it  
26 does eliminate -- or, rather, does not suffer from the  
27 potential bias or risk premium risk.

28 Proposal Number 14 by IDFA does eliminate mover



1 risk. That's the average-of. There's no possibility of  
2 using a wrong contract there. However, it does still  
3 suffer from the advanced prices risk, but does not suffer  
4 from the risk premium or bias that may be due to low  
5 liquidity such as the Class I contract.

6 Proposal 15 by MIG has the same pattern of  
7 strengths and weaknesses as Proposal 14 by MIG.

8 Proposal 16 by Edge does eliminate mover risk  
9 because it's only one class that is concerned. It does  
10 eliminate the advanced prices risk because only announced  
11 prices are used. And does avoid the bias and risk premium  
12 risk because we are not asking CME to introduce any new  
13 contract, and the Class III milk futures are the most  
14 liquid instrument in the dairy complex in CME.

15 Proposals 17 and 18 by Edge and Farm Bureau,  
16 respectively, whether they remove mover risk or not really  
17 depends on whether CME will choose to introduce a Class I  
18 milk contract or not, and nobody can guarantee that they  
19 will. And even if they do introduce it, both Proposals 17  
20 and 18 could potentially suffer from the problems with  
21 liquidity in such new contract, which could then translate  
22 to the problems with bias and risk premiums. That's why  
23 the third column is printed dark or red in the PowerPoint  
24 included and submitted for the record.

25 So due to its design and the fact that -- so that  
26 completes that discussion.

27 Now, moving on to how would we quantitatively  
28 evaluate hedge effectiveness of each of these proposals.



1           Due to its design and the fact that futures  
2 contracts are cash settled, Proposals 16 and 17 will fully  
3 eliminate basis risk, and quantitative analysis is  
4 redundant. I'm -- I must have misread that. I apologize.

5           Proposal 16 will fully eliminate basis risk and  
6 quantitative analysis is redundant. If there will be any  
7 request during cross-exam, we're happy to provide it in  
8 the post-hearing brief. That's a simple arithmetic.  
9 That's not a statistical analysis.

10           Thank you, Lucas.

11           Proposals 17 and 18 cannot be quantitatively  
12 analyzed using historical data as information on bid-ask  
13 spread on Class I futures contract is simply unknown. We  
14 don't have such a contract today.

15           As for Proposals 14 and 15, as long as the hedging  
16 horizon is shorter than the lag at which the adjuster is  
17 recalibrated, then hedging effectiveness from the Class I  
18 handler perspective will equal to hedging effectiveness of  
19 the current pricing regime, which is the average-of plus  
20 \$0.74.

21           So the claim from the -- from Ms. Dorland that we  
22 cannot properly evaluate them because of the moving  
23 average adjuster is -- does not correspond to facts.

24           So in this testimony, for the reasons I have just  
25 listed, it is sufficient to compare hedging effectiveness  
26 under higher-of -- excuse me -- under higher-of and under  
27 the current pricing regime, which is the average-of and  
28 \$0.74.



1           To assess the relative effectiveness of hedging  
2 under these two pricing regimes, higher-of versus  
3 average-of, I built a hedging program under each regime,  
4 with the methodology that is described in the Appendix 1,  
5 starting on page 13 of the Exhibit 290.

6           I will just move on to the conclusions and then  
7 happy to go through assumptions and steps in  
8 cross-examination as desired. Full Excel sheet is also  
9 included for full transparency.

10           So the conclusions are the following:

11           Residual basis risk (measured as a standard  
12 deviation of the sum of unexpected changes in base Class I  
13 milk price and hedging gains), that residual basis risk  
14 under the higher-of is \$0.75 per hundredweight. Under the  
15 average-of, it is only \$0.27 per hundredweight. In other  
16 words, the basis risk is nearly three times as large under  
17 the higher-of than under the average-of regime.

18           Second conclusion: The mover risk is substantial  
19 under the higher-of regime. From January 2011 to  
20 June 2023, over 150 months, the actual mover class was  
21 different than the expected mover class in 49 months, or  
22 32.6% of the time. Hedging horizon was about 120 calendar  
23 days, so about four months out, which is not unreasonable  
24 I would -- I would stipulate.

25           To illustrate the mover effect, consider the  
26 scattergrams that relate the unexpected changes to base  
27 Class I milk price to hedging gains under a program  
28 designed to offset such unexpected changes. Those are the



1 scattergrams on page 5 of the Exhibit 290. The -- I will  
2 briefly describe them for the record.

3 So the upper diagram --

4 Q. Dr. Bozic, move your slide forward one.

5 A. Thank you, Lucas.

6 So the scattergram currently shown on the screen  
7 refers to the -- same as scattergram on the top of the  
8 page 5 of the Exhibit 290. On the horizontal axis are the  
9 unexpected changes to base Class I milk price. For  
10 example, if we think that Class I milk price is going to  
11 land at \$15 per hundredweight and it really translates  
12 to -- and really is published at \$20 per hundredweight,  
13 that would be -- that would correspond to the value 5 on  
14 horizontal axis. The actual price was \$5 higher per  
15 hundredweight than the expected price.

16 On the vertical axis we have hedging gains.  
17 That's the difference in the price at which we sold the  
18 contract, futures contract, at the end of the hedge period  
19 versus the price at which we bought that futures contract  
20 at the hedge initiation.

21 If the hedge -- and now I'm reading the bottom of  
22 the page -- if the hedging program eliminates fully,  
23 perfectly, the basis risk, then all of the dots would fall  
24 perfectly on the 45 degree line. However, much are the  
25 losses on the exposure to the Class I price, the hedging  
26 gains would be just as large, so we can use the extra  
27 money from the margin account on the -- from the hedging  
28 account to pay for the extra expense to the pool and our





1 patron's combined.

2 In the higher-of regime, close to a third of the  
3 dots are substantially removed from the 45-degree line.  
4 In most of these cases, the unexpected changes in the base  
5 Class I milk price were accompanied by the unexpected  
6 changes in the mover class.

7 In the average-of regime, which is presented as a  
8 bottom scattergram on page 5, and on the slide currently  
9 shown on the screen, in the average-of regime, the dots  
10 are much closer to the 45-degree line. The relationship  
11 is still not perfect. And the reason it's not perfect is  
12 the advanced price risk.

13 Conclusion number three: Hedging under the  
14 average-of method would clearly meet effectiveness  
15 standards required for hedge accounting status. A hedging  
16 program with futures contracts under higher-of pricing  
17 regime would have major difficulties achieving such  
18 status.

19 Conclusion number four: Advanced prices remain  
20 substantial, even on -- advanced prices, excuse me --  
21 advanced prices risk remain substantial even under the  
22 average-of regime.

23 In the number of months in which hedging gains do  
24 not fall in the 80 to 125% of changes in the Class I milk  
25 price is reduced by 25% under the average-of regime versus  
26 the higher-of regime due to the elimination of the mover  
27 effect, or mover risk.

28 Nevertheless, it is still the case that in 42 out



1 of 150 months the hedging gains under the average-of  
2 method still fall outside of the range.

3 It is important to note, however, that the dollar  
4 offset method that's used here to count the months and  
5 the -- to define the 80 to 125%, that the dollar offset  
6 method produces uninformative measurements when the change  
7 in the hedged item is very small.

8 To build intuition around it, that's a ratio. And  
9 if you have in the denominator something that is very  
10 close to zero, then that number starts to flail around  
11 violently, and it can go from .5, to 25, to 250, without  
12 really meaning much, because nothing has -- truly, nothing  
13 meaningful has changed with the base Class I price,  
14 expected versus actual.

15 So if we were to restrict the sample to months in  
16 which the change, either positive or negative, to the base  
17 Class I price was higher than \$0.375 per hundredweight,  
18 which is half of the daily price limit move, then under  
19 the average-of regime, hedges fall in the 80 to 125% range  
20 in 102 out of 123 months, or 83% of the time.

21 The conclusions listed above decisively disprove  
22 the assertion that higher-of would not "detract" from  
23 hedging Class I milk input costs.

24 And then finally, assertion -- okay -- number  
25 four: That the average-of pricing caused depooling in  
26 recent years. Professor Christopher Wolf and I developed  
27 a methodology for decomposing producer price  
28 differentials, and we have published that manuscript in



1 the Journal of Dairy Sciences. In this hearing, online,  
2 you can find it under exhibit named Edge-2. For the  
3 record, it has been enumerated as Exhibit 76.

4 In that paper we developed the methodology -- we  
5 illustrated the methodology in the paper on page 436 of  
6 Exhibit 76. That is the Figure 4 on page 436.

7 We illustrated it for one month, and I believe  
8 this was the Central Order for August 2020. But I thought  
9 it might be useful, and certainly more colorful, if we go  
10 through the months of 2020 from March through December and  
11 see, according to this methodology, how much was relative  
12 contribution of each factor to negative PPD and -- in the  
13 order -- in the Order 33, in the Mideast.

14 Now, please don't take this as a holy book. This  
15 is just a model. Keep in mind, academics also gave us the  
16 recommendation to eat margarine instead of butter at some  
17 point ago, so everybody's fallible.

18 But to the best of our abilities, Dr. Wolf and I  
19 presented this methodology. It has been reviewed by two  
20 anonymous peer reviewers, expert reviewers, by the editor  
21 of Journal of Dairy Science before it was published. So  
22 this was heavily scrutinized before it went live.

23 And the file that generated these numbers was last  
24 modified on, I believe, March 31st, 2021, so well before  
25 we had any knowledge that this hearing will take place.

26 Okay. So I'm going to now talk about March 2020,  
27 how we got to the actual producer price differential (PPD)  
28 for Mideast Order of \$0.72 positive.



1           If we had -- I'm going to start with what's called  
2 a baseline PPD of \$1.65. So if we had utilization by  
3 class, as we had back in 2010, if the component tests  
4 were -- as they were back in 2010 -- if all of the prices  
5 were at their average level of the decade-long period  
6 between 2010 and 2019, then the PPD would have been \$1.65.

7           But then over the last ten years things have  
8 changed. We tend to have less fluid. We tend to have  
9 higher component tests for which Class I is not paying to  
10 the pool because they only pay based on the skim, 3-1,  
11 5-9 -- 3-1 protein, 5-9 other solids.

12           So the trends themselves, the change in  
13 utilization and increasing component tests, the trends  
14 themselves depress that PPD by \$0.58 to just over \$1.00.

15           The spread in March 2020 between Class III and  
16 Class IV, Class III price was 16.25, Class IV price was  
17 14.87, so let's see what that difference is. So that's a  
18 difference -- that's a \$1.38. That spread itself brings  
19 the PPD down another \$0.54 to just below \$0.60 per  
20 hundredweight. We are still in positive territory.

21           Then, in March, prices have fallen between  
22 February and March. So Class III price, for example, in  
23 February was \$17, went down \$0.75 to 16.25.

24           I will not be as detailed for all eight months, I  
25 just want to set the stage and then we'll be able to speed  
26 up.

27           For Class IV the price fell even more dramatically  
28 from \$16.20 in February to \$14.87 per hundredweight in



1 March.

2 Whenever we have a drop in prices, advanced  
3 pricing tends to help lift the producer price  
4 differentials higher.

5 Then we finally had the impact on Class I reform,  
6 because the advanced prices in February for March,  
7 measured in February for March, were fairly close, or  
8 relatively close to each other. The Class I reform  
9 actually added more money to the pool than the higher-of  
10 would have. And all things considered, we have just under  
11 \$1.00 in PPD by that point. This is a wonderful chart.  
12 It's tracking, you know, cumulatively where we are by that  
13 point.

14 And then depooling -- it's called depooling. It's  
15 really a subtotal of all of the things that we don't  
16 understand about what happened there. There could be some  
17 changes in utilization trends that defy the linear trends  
18 we have assumed in step 2. There could be other things,  
19 but it's mostly depooling. And so depooling and other  
20 factors contributed \$0.20 negative to PPD, and we landed  
21 it at \$0.72. So that's March.

22 March 15, things fall apart, the country starts  
23 going into lockdown.

24 By April here's what happens. Now, between March  
25 and April, Class III drops from 16.25 to 13.07 per  
26 hundredweight. Class IV drops from \$14.87 to 11.40 per  
27 hundredweight. The spread between III and IV increases  
28 from \$1.38 in March to \$1.67 in April.



1           You can see that the contribution of the spread to  
2 PPD is now even more negative. It used to be \$0.54  
3 negative; now it's \$0.60 negative. I do apologize for the  
4 font size.

5           Advanced prices again help reduce the impact on  
6 the uniform prices because we had a huge drop, so they  
7 contributed \$0.91 positive to PPD. Class I reform, again,  
8 because prices are low but fairly close, Class I reform  
9 still keeps it -- still keeps the PPD yet even higher  
10 rather than detract. Final PPD, \$1.15 positive.

11           We head into May, prices continue to fall.  
12 Between April and May, Class III price drops from 13.07 to  
13 \$12.14 per hundred, plus IV price goes from 11.40 in March  
14 to 10.67 in May -- excuse me -- 11.40 in April to 10.67 in  
15 May.

16           The spread between III and IV actually shrinks  
17 down to \$1.47. Remember, this is before the  
18 administration announces the Farmers to Families Food Box  
19 Program. Class I reform contributes negatively because  
20 the spread between advanced prices is higher than \$1.48,  
21 but only \$0.06 negative. Even after depooling, we still  
22 have \$0.59 positive PPD -- depooling and other factors.

23           And now comes June. There is an announcement that  
24 the federal government will start buying a lot of cheese  
25 for Farmers to Families Food Box Program, and the things  
26 just explode.

27           And this is the result. You now have the  
28 Class III/IV spread widened from \$1.47 in May to \$8.14 in



1 June. The contribution of the spread between Classes III  
2 and IV grows from negative \$0.48 in May to \$3.09 negative  
3 for June. Prices actually rise, which means that the  
4 advanced prices work against the PPD. Advanced prices  
5 reduce the PPD further by \$2.88. We are already in the  
6 minus 4 to minus \$5 per hundredweight category.

7 How did the Class I reform impact the PPD? It  
8 actually helped lift it up by \$0.12. Because in May, when  
9 they -- when they were measuring the Advanced Class III  
10 and Class IV skim, those two prices were down in the  
11 basement, but very close to each other. They were very  
12 low, but not far apart.

13 So in that period in time, Class I reform did not  
14 further -- did not make the PPD further negative, and you  
15 can see the depooling -- and at this point it really is  
16 depooling -- contribute further \$2.39 negative to a  
17 negative PPD of \$7.05.

18 It's June. I'm getting calls that people are out  
19 of their indemnity for Dairy Revenue Protection for the  
20 second quarter, and they are not going to get that in  
21 their milk check. There's a lot of frustration in the  
22 air, and not enough cheese to go around.

23 Now comes July. By July -- by the way, by June,  
24 Class III price went from \$12.14 to \$21.04. By July,  
25 Class III went from \$21.04 in June to \$24.54, which will  
26 turn out to be a record for 2020. Class IV price in the  
27 meantime, barely recovered. In June it was \$12.90; in  
28 July it's \$13.76.



1           The spread reaches the record for the year -- the  
2           spread between III and IV -- of \$10.78 per hundredweight.  
3           The contribution of the spread to negative PPD is \$3.95.  
4           The contribution of advanced prices is \$1.75 negative.  
5           Those two factors alone, so before depooling, before  
6           Class I reform, you are already more than negative \$4. At  
7           that point, even if you didn't have the Class I reform,  
8           you are going to have depooling. If you don't believe me,  
9           just look at back at what happened in June. We didn't  
10          need Class I reform to contribute to further negative PPD,  
11          and we had a lot of depooling.

12           In -- by the way, from May till -- through to June  
13          in the Order 33, total Class III pounds pooled, in May  
14          they were 591 million and change, in June they dropped to  
15          126 million and change. So that's, what, 70% decline? A  
16          lot of depooling May to June. And then from June to July,  
17          again a drop from 126 million to 72 million. I'm ignoring  
18          all pounds lower than a million, just to keep it simpler.

19           So now we are in June -- now we are in July. Now,  
20          at this point the spread between Advanced Class III and  
21          Class IV skim is indeed higher than \$1.48. Reform does  
22          indeed make PPD more negative. The big question is, does  
23          it make the depooling more prevalent?

24           And if you look at what's happening already in  
25          June with depooling, and now again in July, it's hardly --  
26          it is very hard to imagine that it would have any  
27          substantial incremental effect of depooling. In other  
28          words, people will depool anyway.





1           Before the June is over, my colleagues Mark  
2           Stephenson and Andy Novakovic, publish a paper by the  
3           Dairy Markets and Policy Group header, saying, folks,  
4           there's a big spread coming in June, expect a lot of  
5           depooling.

6           They are -- and on that page when they talk about  
7           the spread and the impact on depooling, they barely  
8           mention the reform. Reform is mentioned in that working  
9           paper. Maybe somebody will bring it up. But that was the  
10          main big headline there, look out, trouble is coming.

11          Now we are in July. So by July, Class III  
12          prices -- excuse me, August. By August, Class III prices  
13          start to decline from \$20.54 in June to \$19.77 in --  
14          from -- I apologize, been on the stand for a long time.  
15          My brain is running dry.

16          So Class III price drops from \$24.54 in July to  
17          \$19.77 in August. Class IV drops as well by -- from  
18          \$13.76 per hundredweight in July to \$12.53 in August. The  
19          spread shrinks from 10.78 in July to 7.24 in August. You  
20          can see that the contribution of the spread is now "only"  
21          negative \$2.61. Because prices fell, advanced prices,  
22          again, have a positive impact on PPD.

23          Now, if you just sum up the cumulative effect of  
24          the first four columns here, so ignore Class I reform  
25          depooling, you are just about zero. And then comes in the  
26          reform and drops the PPD negative to -- to below negative  
27          \$1.

28          So you can say, aha, now, this is a period of time



1 where the Class I reform switched the sign of PPD,  
2 according to Bozic, from positive to negative. What did  
3 it do to depooling?

4 Well, the funny thing is that milk pooled in  
5 August actually went up relative to milk pooled in July.

6 So the milk -- the Class II milk pooled went up  
7 from 318 million to 416 million, plus IV pooled went from  
8 72 million to 140 million. It's only the Class IV milk  
9 that actually went 50 million pounds lower. Total milk  
10 pooled went up in August versus July, despite what you can  
11 say negative contribution of Class I reform. Certainly  
12 big more negative contribution Class I reform in August  
13 versus July.

14 Come September we have a further drop of Class III  
15 prices. Remember, this is -- there's a lot of uncertainty  
16 whether President Trump will extend the Class I -- the  
17 Farmers to Families Food Box Program or not, and Class III  
18 prices drop from 19.77 in August to 16.43 in September.  
19 Class IV prices barely move. They go up by some \$0.20 or  
20 so. The spread between III and IV shrinks again to \$3.68.  
21 So the contribution of the spread is now "only" negative  
22 \$1.37.

23 So at this point the advanced prices make a big  
24 positive contribution to PPD. Even after the Class I  
25 reform, you are still in the positive territory, but the  
26 pooling still -- continued pooling or other factors still  
27 continues, and we have a total negative PPD of \$0.27, so  
28 barely negative in September.



1           Come October, we realize that the elections are in  
2 November. We restart the Farmers to Families Food Box  
3 Program. The Class III price goes up from 16.43 to  
4 \$21.61. There was actually a dairy farmer who was a guest  
5 speaker at the Republican National Convention, but that  
6 goes beyond the scope of this hearing. What I'm trying to  
7 say, these things are political as well as economical.

8           And the spread again widens to \$8.14 per  
9 hundredweight. You can see the contribution.

10           Now we have, again, a massive, historically high  
11 negative -- or historically low negative PPD of negative  
12 \$6.87. Total contribution of Class I reform is only \$0.36  
13 negative. And that's only the --

14           (Court Reporter clarification.)

15           THE WITNESS: \$0.36 negative. I appreciate your  
16 interest. Riveting.

17           So -- but even without the Class I reform, we  
18 would already be at \$4 negative, and the depooling would  
19 still happen.

20           November, same situation. Don't want to belabor  
21 the point.

22           And then December, again, we have a huge drop in  
23 Class III prices from \$23.34 in November to 15.72 in  
24 December. Class IV again barely moves. Advanced prices  
25 save the day. Yes, Class I reform contributes to lowering  
26 of PPD, but the PPD ends up being positive. Class III  
27 makes a massive move to repool. In November, the pooling  
28 of Class III pounds was 93 million and change; in



1 December, it was 260 million and change.

2 Looking at all of these diagrams, for the life of  
3 me I cannot find a decisive convincing evidence that  
4 Class I reform caused depooling. Did it cause slightly  
5 negative PPD that would have been negative already in some  
6 months? Yes.

7 Did it cause depooling? Draw your own  
8 conclusions. I -- I would have a hard time agreeing with  
9 that statement. So --

10 THE COURT: That was heavy. We either need five  
11 minutes or ten minutes. What would you like?

12 MR. SJOSTROM: Your Honor, five minutes I think  
13 is -- I'll have -- well, you may want to continue. I have  
14 one question, and then we can break for cross if that's  
15 what -- you would be fine.

16 THE COURT: So, yes, let's hear your question.

17 MR. SJOSTROM: Sure.

18 BY MR. SJOSTROM:

19 Q. Dr. Bozic, that was heavy, groovy I think is  
20 another way to say it. Thank you very much.

21 My single question before we break is: Why do  
22 people care to have a hedge accounting status? Why -- why  
23 have you come back to that, and why is that important in  
24 the beginning of your discussion?

25 A. Thank you for your question, Lucas.

26 If you are a publicly-traded company, you have to  
27 report your financial statements quarterly. Every time  
28 you have a hedge position, you have to do what's call mark



1 to market -- not hedge position -- if you have a market  
2 position on -- in some derivatives, you have to mark to  
3 market that position.

4 So let's say that you took a position on June 1 to  
5 protect your -- not 2020, just in general -- you took a  
6 position on June 1 of some year to protect your -- against  
7 the increases in Class I milk price in December, and then  
8 Class I prices started going down.

9 By the end of September, you will have to publish  
10 your Q3 results, your third quarter results, and you will  
11 have to mark to market your derivatives used for -- that  
12 you used for hedging Class I price. Those hedges, those  
13 positions will show negative income at that point in time.

14 If you don't have a hedge accounting status, you  
15 have to report that negative income in your income  
16 statement, so it increases volatility of your earnings.

17 If you do have a hedge accounting status, you do  
18 not have to report the negative income from those hedges  
19 on the income statement. You keep them out of the income  
20 statement, and you reconcile them with your Class I cash  
21 flow expenditures in December, and it turns -- and because  
22 they are recognized in the same time period, they  
23 stabilize the earnings in December.

24 So without hedge accounting, the volatility of  
25 quarterly financial statements is artificially inflated,  
26 which doesn't look good on the CFO or the CEO, and it may  
27 prompt a lower stock price.

28 MR. SJOSTROM: Thank you, Your Honor.



1           The witness is available for cross-examination  
2 after the break.

3           THE COURT: Did you describe what he had done  
4 previously as groovy?

5           MR. SJOSTROM: I thought -- yeah. I think so.

6           THE COURT: That was groovy.

7           MR. SJOSTROM: Wonderful.

8           THE COURT: Okay. Ten minutes, and then we'll  
9 have cross. Please be back and ready to go at 2:05 p.m.  
10 We go off record at 1:54.

11                   (Whereupon, a break was taken.)

12           THE COURT: Let's go back on record.

13           We're back on record at 2:06 p.m.

14           THE COURT: This begins cross-examination.

15           MR. ENGLISH: Good afternoon, Your Honor.

16                   CROSS-EXAMINATION

17 BY MR. ENGLISH:

18           Q. Good afternoon, Dr. Bozic. My name is Chip  
19 English for the Milk Innovation Group.

20           A. Good afternoon, Mr. English.

21           Q. And I have a sign for myself and for you --

22           A. It says "slow," for the record.

23           Q. Which may also categorize where I think I am in  
24 all of this.

25           THE COURT: Now, a good place for that, would you  
26 affix it to the front of the podium facing the witness?

27           MR. ENGLISH: I think I need it as much as he  
28 needs it. You want me to put it on the edge, so to speak?



1 THE COURT: No, no, I mean the edge that's facing  
2 me.

3 THE WITNESS: Your Honor, it's better that  
4 Mr. English raises it when I step forward.

5 MR. ENGLISH: But the risk is the two of us  
6 together, so I -- I decided to come up first just to  
7 humiliate myself first.

8 Last week we had my colleague who said that -- you  
9 know, consider her a super smart sophomore, and she got  
10 whatever grade she got. I am afraid that I am not up to  
11 her level, but let me do the best I can.

12 BY MR. ENGLISH:

13 Q. So I want to start with a couple of things in your  
14 statement and then ask some questions more about the  
15 presentation.

16 So the statement that is Exhibit 289, page 6, if I  
17 could start with that. And in particular, on page 2, your  
18 very first statement of how we got here.

19 A. Uh-huh. Yes.

20 Q. For many decades, per capita consumption of fluid  
21 milk was in decline, offset by population growth.

22 So even though the per capita was going down, the  
23 population growth either kept us above the line or going  
24 up a little bit, correct?

25 A. That is the intent, yes.

26 Q. But then since 2010, total fluid milk sales has  
27 steadily declined, correct?

28 A. That is correct.



1 Q. So per capita has gone down, and the population  
2 growth hasn't, you know, made up for that, correct?

3 A. That's correct.

4 Q. And I think we have heard already from a couple  
5 of -- number of witnesses but -- but I think, you know,  
6 one of the things we were talking about with respect to  
7 this issue and the ability to hedge is the fact that you  
8 would agree that we're losing milk sales to non-milk  
9 beverages who claim to be dairy products, correct?

10 A. That is one of the reasons why the sales are  
11 declining, yes.

12 Q. And if we were able to hedge since those products  
13 are giving stable prices, that might actually do something  
14 in this area, correct?

15 A. If you allow me a minute to respond.

16 Q. Sure.

17 A. So the statement has been made frequently that  
18 it's not the price that drives the reduction in sales,  
19 it's the other factors, consumer preferences, incomes,  
20 age, etcetera. Well, ubiquitousness of availability is  
21 one of those other factors.

22 If I can turn left, I can turn right, 30 steps in  
23 either direction, I'm going to find either a Coke or  
24 Pepsi. I will have to walk much longer to find milk.

25 If we make it easier for companies such as  
26 Fairlife to hedge, then their parent company, Coca-Cola,  
27 is going to be much more inclined in invest in the next  
28 plant, then the companies like Nestle will be more





1 inclined to double down on this category as well. Over  
2 time, such investments will increase the availability of  
3 dairy-based products in more locations, in more vending  
4 machines, etcetera, and that can make it easier for the  
5 consumer to find their way to milk.

6 So it doesn't have to work through price  
7 stability, it works through the incentive of sellers in  
8 the Class I space to invest in the category in order to  
9 grow their sales.

10 And if they can control their input costs better  
11 then their incentive, their desire to put their bets, if  
12 you will, in dairy category versus somewhere else, will be  
13 higher.

14 Q. Well, but that's also true in the mirror-image,  
15 isn't it? That the buyers may be more willing to put the  
16 products there if they can know that their input costs are  
17 going to be there compared to the other products that they  
18 are competing with on the shelf, correct?

19 A. That is absolutely correct. If you have a grocer  
20 that's using cow milk as a loss leader, and if they cannot  
21 control the input cost on top of that, yes, you want the  
22 milk to be cheap enough for the folks to come into the  
23 store. But once they are in the store, you don't really  
24 want them to buy a lot of milk. But if could you make  
25 more money or lose less money on the dairy, then perhaps  
26 the incentive to sell more units on categories that are  
27 traditionally loss leaders would also be higher, which  
28 would then, through various activities, make milk more



1 prominent, more easy, more on top of the shopper's mind,  
2 which would drive sales.

3 Q. So also on that same page of 289, you cite to  
4 Newton and Thraen, and you say, "The basis exposure  
5 prevents Class III and IV milk futures contracts from  
6 directly managing the milk price and limits potential risk  
7 reduction and revenue stability for fluid milk  
8 participants."

9 Who are Newton and Thraen?

10 A. Dr. Cameron Thraen, at that time, was a professor  
11 at Ohio State University. He has since retired.

12 Dr. John Newton wasn't a doctor at that time, he  
13 was a -- that's what happens when you mention Dr. Newton  
14 in a bad light -- so Mr. Newton at that time was a  
15 doctoral candidate being advised by Professor Thraen.  
16 Dr. Newton has since changed several jobs, and his current  
17 job is not pertinent to this discussion, so I would rather  
18 not elaborate further.

19 Q. So turning for a moment to your statement on  
20 page 6, and you were asked additional questions back  
21 before lunch by Lucas, and this is the part about  
22 producers need to know whether their milk is pooled or  
23 depooled and may be misled to believe the Federal Order  
24 negative PPD printed on their milk check reflects the  
25 actual cost to the milk buyer.

26 THE COURT: Your voice dropped off. The mic  
27 seemed to fail you. Say that again.

28 MR. ENGLISH: It's unusual for my voice to drop



1 off, so we will fix that in some way. Thank you, Your  
2 Honor.

3 BY MR. ENGLISH:

4 Q. So this is the statement and discussion you had  
5 with Edge about the issue about pooled milk versus  
6 depooled milk and the risk, and, in fact, you said you had  
7 seen some things with -- misleading about the level of  
8 negative PPD.

9 Of course, Class I operations are the ones who may  
10 never depool, correct?

11 A. That is correct.

12 Q. Okay. And of course, since they never can depool,  
13 their paychecks are completely audited by the Federal Milk  
14 Market Administrator, correct?

15 A. That's correct. They are not the culprits that  
16 I'm referring to in this paragraph.

17 Q. Thank you for answering my next question.

18 So a moment ago I quoted from Newton and Thraen,  
19 and now I'm turning to Exhibit 290, but I'm combining the  
20 two for a second, because there's the phrase, the basis  
21 exposure.

22 So we have heard a lot about basis risk and how it  
23 impacts hedging. And I think we have had different people  
24 explain what they think basis risk is. And since you're  
25 on the stand, and since I'm not an economist -- although  
26 over these last 30 some years I have pretended to be  
27 one -- I want to make sure I'm understanding it.

28 Please let me know if this is an accurate



1 description, in your view, that basis is the correlation  
2 between your product, or what you are trying to manage  
3 risk for, and the product used to hedge?

4 A. Well, the basis risk is going to be lower the  
5 higher the correlation is between the product you are  
6 using to hedge and the product that you are trying to  
7 hedge. It's -- the basis is not the correlation itself,  
8 but they are related. The higher the correlation, the  
9 lower the basis risk.

10 Q. So I think my next question may get me more close  
11 there, which is that reducing the basis risk means you are  
12 more closely aligning that thing you sell and the product  
13 subject to the hedge?

14 A. Yes.

15 Q. And -- and that matters, this business of reducing  
16 basis risk, because you need that offset in order to have  
17 the requisite certainty that your hedge is going to work?

18 A. That's correct, yes.

19 Q. And -- and the hedge working is important to  
20 hedging because, otherwise, there's no point in doing it,  
21 correct?

22 A. Well, there are two reasons why hedge working is  
23 important. First, if it's not working, you will not  
24 stabilize your revenue. Second, if it's not working, you  
25 will not be able to have hedge accounting status. So not  
26 only have you not stabilized your revenue, but your  
27 quarterly financial reports look even more volatile than  
28 maybe they need to.



1 Q. And basis risk can come for different people in  
2 different forms, right? That is to say, between different  
3 products?

4 A. One example of basis risk being cross-product risk  
5 is -- is a mover risk, where you hedge with Class III, and  
6 it turns out that it was Class IV that was moving the base  
7 Class I skim price.

8 Q. So, you know, even more basic than that for a  
9 moment -- but I thank you for that answer -- if I'm a  
10 Class I milk processor and I want to manage the risk for  
11 the cost of my milk, and I decide to purchase a futures  
12 contract say for hops, that's -- that's going to really be  
13 very high basis risk, correct?

14 A. That is going to be the kind of basis risk that --  
15 that doesn't reduce your riskiness at all, maybe even adds  
16 to it. Don't do it.

17 Q. And so if the correlation is less than 1, you  
18 talked a little bit in your testimony about the  
19 correlation can't be higher than 1 --

20 A. Right.

21 Q. -- but it's less than 1, that means the hedger is  
22 facing some basis risk?

23 A. That's correct.

24 Q. Okay. And the farther away from 1 it gets, the  
25 more the hedging risk?

26 A. Basis risk, yes.

27 Q. Basis risk, sorry.

28 And if I understand it correctly, there are other



1 types of risk, like time and place, but that -- but the  
2 main issue with the higher-of is the high product basis  
3 risk, correct?

4 A. So there are two factors, the one is the mover  
5 risk, which is what I believe you are calling the product  
6 risk.

7 Q. Yes.

8 A. The second is the advanced price risk, which it  
9 could be related to what you are saying, the time risk.

10 Q. And I understand that, but for a moment, I --  
11 listen, I understand what your testimony is, and you know,  
12 we may talk about advanced pricing a little later. But  
13 for the purposes of for a moment looking at Proposals 13,  
14 14, and 15, I was referring to the mover risk --

15 A. Sure.

16 Q. -- correct?

17 A. Okay. We can -- yes.

18 Q. And that's because if you think about the  
19 higher-of, the risk of the thing you are hedging, Class I  
20 milk, and the product subject to your hedge, for instance,  
21 Class III futures, could end up having no correlation if  
22 Class IV ends up being the higher-of for that time period,  
23 correct?

24 A. Correlation, again, I apologize for being perhaps  
25 overly --

26 Q. No, please. Please correct me. I told you, you  
27 know -- yes, please do correct me.

28 A. I'm a little bit, you know, OCD about these



1 things. Very precise.

2 So the correlation implies something over time so  
3 that you have multiple observation points so you can  
4 actually establish correlation coefficient between them.

5 If you have hedged using Class III futures, and it  
6 turns out that Class IV has been moving, the Class I --  
7 doesn't mean that there is no correlation there, it just  
8 means that that correlation is -- because Class III and IV  
9 themselves are correlated, it just means that your -- the  
10 Class I, the base Class I skim milk price and the  
11 Class III are not as highly correlated as they would be  
12 under the average-of method.

13 Q. And not being as highly correlated means there's  
14 more basis risk?

15 A. That's correct. Yes.

16 Q. So I want to get even more basic for a moment, and  
17 think about some of the things we have heard and some of  
18 the things that people have done.

19 So we have heard about futures markets and  
20 over-the-counter markets for hedging, and I want to  
21 provide a little more clarity.

22 Will all futures hedging for Class III and IV  
23 happen on the Chicago Mercantile Exchange?

24 A. In the context of U.S. dairy products, that is  
25 true. There are other exchanges in other parts of the  
26 world, for example, Singapore Exchange trades the New  
27 Zealand contracts, in Europe there's an exchange for  
28 European dairy contracts. But in the United States, for



1 anything related to Federal Orders or the survey  
2 commodities, that's under the Chicago Mercantile Exchange.

3 Q. Okay. So if I -- pretend for a moment that I'm a  
4 fluid milk processor. If I want to participate in buying  
5 futures on the Chicago Mercantile Exchange, how do I do  
6 that?

7 A. Well, you have to open an account with one of the  
8 futures commission merchants, for example, ADMIS. You  
9 could typically go through an introducing broker. There  
10 are several of them that are highly respectable and used  
11 by many dairy participants such as Ever.Ag, HighGround  
12 Dairy, StoneX, for example, to list just three. There are  
13 more of them.

14 And then your introducing broker would be the  
15 person that you would say, "Hey, Chip on the phone here.  
16 Today I want to hedge my December 2023 Class I milk  
17 exposure. Can you please put in an order for that?"

18 They would -- they would explain to you what the  
19 current market offers are. Once you have confirmed you  
20 want to execute, they would -- they would enter a market  
21 order. It would be executed in a -- probably in a short  
22 period after that, and your broker would let you know that  
23 you now have a position in the Class III and Class IV milk  
24 futures for December 2023.

25 Q. And if instead I were going to use the  
26 over-the-counter markets, who facilitates or handles those  
27 kinds of transactions?

28 A. Oh, sure. So you -- there are two ways you can do





1 that. You can either call the OTC providers directly.  
2 Some of them would be, for example, Cargill or Wells  
3 Fargo, or you can again go through your introducing broker  
4 and then say, you know, "Today I don't want to do the CME,  
5 I would rather want to do a swap," and then they would  
6 help to connect with the OTC providers.

7 Q. How, if at all, is a bank involved in that market?

8 A. So if you are hedging on CME, you -- the CME  
9 market is designed to make perfect strangers trust each  
10 other for 24 hours. So what that means is that you have  
11 to have think of it as an escrow account. It's called  
12 margin account.

13 That margin account has to hold just enough money  
14 so that if the price moves against you -- so in your case  
15 if you are hedging Class I milk exposure, you would enter  
16 into a long position on Class III and Class IV futures.  
17 Say if the price goes down, then you would have losses on  
18 your margin account. If your losses are substantial  
19 enough, you would get a call from your broker stating that  
20 you need to deposit more money into your margin account so  
21 that you can continue to hold your position for the next  
22 trading day.

23 Sometimes for the purpose, for the -- for -- to  
24 make the process more efficient, you would have a hedge  
25 line of credit with your bank so your broker doesn't need  
26 to call you directly. They would call your bank and say,  
27 please wire us, you know, so many millions of dollars more  
28 because we now have a margin call on this position for



1 Mr. English.

2 Q. So is an OTC futures or hedge contract a custom  
3 contract for the buyer and the seller?

4 A. So the OTC contract is more customized than the  
5 futures contract, yes.

6 Q. And what is the price comparison between buying a  
7 futures on the Chicago Mercantile Exchange or getting a  
8 custom OTC futures?

9 A. So that goes back to the page 2 of the Exhibit 290  
10 where I list those costs. And the short answer is that  
11 the OTC -- excuse me, Mr. English, are you referring to  
12 the OTC cost under the average-of system or OTC under the  
13 higher-of system?

14 Q. Well, why don't you tell me both. Make it clear  
15 which one you are speaking to. So let's start with the  
16 average-of.

17 A. Sure. Yes. So the OTC contracts under the  
18 average-of system would maybe run \$0.10 a hundredweight,  
19 and the reason there is a higher cost for OTC versus  
20 futures, one, is customization; second, is that you do not  
21 have to put up more money every time the price moves  
22 against you sufficiently within one day. So the OTC  
23 provider bears that liquidity risk, and they will charge a  
24 premium for that. So that's why you are going to pay a  
25 little more for the OTC contract.

26 However, it is important to understand that OTC  
27 providers are not insurance companies. They do not wish  
28 to offer you some risk protection and then warehouse that



1 risk on their books, as an insurance company would.

2 Rather, what OTC providers do is they are  
3 matchmakers. They are online dating site, if you will.  
4 Not that I use one, but that's a metaphor in case my wife  
5 is watching.

6 So the OTC provider has you, Mr. English, on one  
7 side. You want to buy a Class I milk swap. So now on the  
8 other side they need to find someone who wants to sell  
9 either Class III or Class IV milk futures. And if they  
10 don't find anyone, then they are going to directly enter  
11 into a position on Chicago Mercantile Exchange.

12 If they are able to make a match relatively easy,  
13 so which means that they bear the risk for a short period  
14 of time until that match is complete, then the OTC  
15 transaction is going to be cheaper for you.

16 If they will have a hard time finding the  
17 counterparty with a risk profile that is similar to yours  
18 but opposite in sign, then they have to bear more risk and  
19 they will pass that on to you in the form of a higher  
20 markup, if you will, higher bid-ask spread.

21 And that's where we run into issues with the  
22 higher-of regime. Who is going to be the natural other  
23 side of your desire to buy OTC? If you are buying the  
24 higher-of III and IV, who is going to be willing to sell  
25 the higher-of III and IV? There's no such person.

26 So -- so then the OTC providers have liquidity  
27 crunch on the other side. They have to measure their  
28 exposure potentially, go to CME, and then switch it every



1 time that the futures price that is higher switches  
2 between III and IV, and then, you know, you are going to  
3 pay through the nose for that service.

4 And that's -- that's how we end up with a cost of  
5 OTC under higher-of that could be ten times as large as  
6 the cost of executing your hedges under the average-of  
7 system going through CME.

8 Q. So the expert witness for National Milk who  
9 appeared initially two weeks ago and then last week  
10 testified for National Milk that there are financially  
11 viable hedges that you can make under the higher-of.

12 I believe you don't agree with that; is that  
13 correct?

14 A. The most benevolent explanation of what  
15 Ms. Dorland has stated is that if there's only one player  
16 in the market that wants a very small contract and  
17 otherwise does a lot of business with that same OTC  
18 provider on something that they can more easily hedge,  
19 then the OTC provider may do them a favor and say, sure,  
20 let's take care of your needs.

21 But that doesn't scale in any way. Like, it's a  
22 difference if you are -- if a large client of yours -- so,  
23 for example, if -- if you have a large client in your  
24 legal company and they always do business on dairy, and  
25 then one day one of them calls you and say, well, can you  
26 help me with this tax issue? Well, you can say, well,  
27 sure. We don't typically do that, but I have a colleague  
28 here who's a tax chair, and he's going to help with you



1 that advice, right? That's different than changing the  
2 nature of your law company completely to move from  
3 regulation to tax advisory.

4 In the same way what Ms. Dorland is saying she was  
5 able to lock in some OTC contracts for one of their  
6 clients, maybe that one client was able to do it for  
7 reasons that are quite idiosyncratic. That does not  
8 translate to a conclusion that it's an industrywide  
9 solution that we can easily hedge 10 or 20 or 30 billion  
10 pounds of milk in that way. We just simply -- so in that  
11 respect, I do strongly disagree. Strongly, you know,  
12 contest her statement.

13 Q. So if I understand it correctly, you know, the  
14 issue of cost in hedging has at least two elements to it.

15 First, under the OTC market, hedging is more  
16 expensive than the CME by a significant amount, correct?

17 A. That's correct.

18 Q. And second, the cost of hedging cannot be higher  
19 that the processor's profit margin for the hedge to make  
20 financial sense?

21 A. That's correct. In fact, it cannot even be a  
22 significant fraction of the profit margin. If I am -- if  
23 my profit margin is reduced by even 25%, let alone half or  
24 75%, I am not going to do hedging, or I might not even be  
25 in that business if that's what is required for me to have  
26 any sense of stability.

27 Q. And given that fraction of the cost and the high  
28 cost of hedging on the OTC market, that's a real risk



1 based upon your understanding of the markets, correct?

2 A. That's correct. There's a very strong reason why  
3 no single witness who comes from the industry as a  
4 processor has come forward here and said that they had a  
5 well-established, comprehensive hedging program for a  
6 Class I price exposure prior to 2019.

7 Q. And indeed, as you have just stated, you've heard  
8 the testimony of Class I processors regarding this subject  
9 over the last couple of weeks, correct?

10 A. That is correct, yes.

11 Q. So for an average company like that, how long do  
12 you think it would take to develop a hedging program?

13 A. Well, I think that there's a high range in that  
14 category. If it's a highly functional company and highly  
15 motivated, and they have all the ducks in a row, yes,  
16 maybe three to six months will be sufficient for them.

17 Q. Like Nestle.

18 A. Yes, for example.

19 Q. Yes.

20 A. Yes. But even they have a lot of controls that  
21 they have to go through. We have heard the witness from  
22 Nestle saying that every month they have to check in, make  
23 sure it is still working, etcetera.

24 For a company that has never done any hedging and  
25 is still contemplating going into that, the level of  
26 learning that's necessary before they feel comfortable,  
27 it's not just a -- a matter of paperwork, take this to  
28 your accountant, take this to our auditor, next Thursday



1 at 2:00 you will be done.

2 It's like, what are you really doing? How is that  
3 going to work? Who is my broker? Who is my advisor? Can  
4 I trust them? Like, you know, will my auditor be okay  
5 with this? Like, you know, what are particulars of my  
6 business?

7 It can easily take a year or -- or, you know, even  
8 two years, like if you are really starting from zero.

9 Q. Do you think that this hearing itself has been an  
10 industry education on the importance of hedging and how it  
11 is done?

12 A. I would hope so. I mean, I guess we will have to  
13 see the recommended decision.

14 Q. So I'm going to now change topics to the issue  
15 of -- more general issue of PPDs, depooling, and what I  
16 saw was really most of what 290 is about, correct?

17 A. Sure.

18 Q. So --

19 THE COURT: I'm sorry, your response?

20 THE WITNESS: Yes.

21 THE COURT: Thank you.

22 BY MR. ENGLISH:

23 Q. So in Exhibit 76, what has been admitted into the  
24 record, and indeed, you expressly, I think, referenced the  
25 study with respect to when you were looking at the June  
26 data, Dr. Stephenson and Dr. Novakovic. I'm looking at  
27 Exhibit 76 for a moment, on page 425.

28 You referenced their study from 2020 in that



1 Exhibit 76, correct?

2 A. Yes. I listed -- I stated there, "Stephenson and  
3 Novakovic 2020, explored how the COVID-19 pandemic  
4 affected milk prices and suggested that PPD and farm milk  
5 checks may reflect milk price reductions unrelated to FMMO  
6 regulations."

7 Perhaps I should have been more precise and said  
8 that deductions on farm milk checks may be unrelated to  
9 Federal Order regulation. But that was very a timely  
10 paper by two very important dairy economists.

11 MR. ENGLISH: So I am going to ask for a document  
12 to be marked, Your Honor, and then show it to the witness  
13 and -- at least mark it for identification purposes and  
14 see where we go.

15 THE COURT: Let's go off the record while you do  
16 that.

17 (An off-the-record discussion took place.)

18 THE COURT: Let's go back on record.

19 You may proceed.

20 We're back on record at 2:37.

21 MR. ENGLISH: Thank you, Your Honor.

22 So we have provided to Your Honor and the witness,  
23 USDA, and the participants, a document titled "Dairy  
24 Markets and Policy Information Letters Series," written by  
25 Mark Stephenson and Andy Novakovic, and I would like to  
26 have that marked for identification purposes.

27 THE COURT: Thank you, Mr. English. I believe  
28 that will be 291.





1 MR. ENGLISH: Thank you.

2 (Exhibit Number 291 was marked for  
3 identification.)

4 BY MR. ENGLISH:

5 Q. So, Dr. Bozic, do you recognize this document?

6 A. Yes.

7 Q. Is this the document we were just referring to a  
8 moment ago that is mentioned on page 2 of Exhibit 76?

9 A. Yes, it is.

10 Q. And so did you rely in part on this particular  
11 document for your conclusions in Exhibit 76?

12 A. Yes. There -- the word "rely" can mean multiple  
13 things, so maybe we can just uncover that a little bit.

14 This paper was published in June 2020. Dr. Wolf  
15 and I didn't start working on our paper until I think  
16 about January 2021 -- December of -- January of 2021. So  
17 Novakovic and Stephenson paper would be one of the sources  
18 that we would have been aware of before we even started,  
19 that sort of helped us understand in which direction to  
20 look for for answers.

21 And then, certainly, both Dr. Stephenson and  
22 Novakovic are -- you know, call them my mentors. They are  
23 certainly the seniors in our small dairy economist club,  
24 and very well-respected. So if I were ever to publish an  
25 article that runs contrary to their conclusions, I would  
26 probably examine my spreadsheets three or four times  
27 before I go public with that. So in that sense, it was a  
28 relief that we find similar conclusions.



1 Q. Thank you.

2 And, for instance, in addition to the statement  
3 that the materials that you discussed or connected to  
4 that, if you look at the bottom of page 8 and the top of  
5 page 9, with respect to the heading called "Reblending and  
6 Base/Excess Pricing."

7 A. Yes, sir.

8 Q. What do you understand "base/excess pricing" to  
9 mean in this context?

10 A. Yes. So we -- we spent a lot of time over the  
11 last few weeks talking about market signals. The most  
12 powerful signal that you can send to anyone to affect  
13 their behavior are the signals at the margin. For one --  
14 you know, if you are a parent, you do that, "One more  
15 thing and you are going to a time-out," right? It's at  
16 the margin, the last activity that gets you into a  
17 doghouse.

18 So in the same way here, when pandemic started and  
19 we did not need as much milk anymore for a short period of  
20 time, the question was, how do we communicate that to  
21 dairy producers in the most effective way? In the way  
22 that changes behavior, that incentivizes them to reduce  
23 milk production? And the base/excess pricing is a way to  
24 do that.

25 Well, basically what you do is you tell every  
26 dairy producer on -- I'm going to simplify it for the  
27 record, and I can't use my hands because the court  
28 reporter cannot capture my hand waving here -- so for the



1 first nine -- for the first hundred units that you are  
2 going to ship to me, we're going to pay you whatever the  
3 uniform price is. But for any amount of milk you ship to  
4 us beyond hundred units, we are going to price at a heavy  
5 discount relative to uniform price.

6 And that way, you incentivize the producer to ship  
7 only 100 units without telling them how to go about  
8 achieving that, whether they will sell the cows, or change  
9 the feed ration, or something else, it's up to them to  
10 figure out the most efficient way to adjust their  
11 production and shipments to the current needs of their  
12 milk buyer.

13 Does that answer your question?

14 Q. I think it does. I think what -- you got to the  
15 first half of it, which is that then of course we had the  
16 cheese box program, and we sort of have a screaming for  
17 milk for --

18 A. Right.

19 Q. -- cheese, correct?

20 A. Yes. Yes. Uh-huh.

21 Q. And, you know, good policies within anybody, you  
22 know, whether it's co-ops or anywhere else, suddenly those  
23 base/excess plans were causing even additional differences  
24 in these prices that you discuss in your statement,  
25 correct?

26 A. Yeah. We went from, you know, cold and dark to  
27 hot and light, like within a span of just a few weeks. Of  
28 course, one does not completely negate the others because



1 the amount of cheese we can produce depends on the cheese  
2 production capacity. So you can have the overall demand  
3 for other product categories still be on the decline, and  
4 even though the cheese prices are really high, just lining  
5 up milk trucks in front of the cheese plant doesn't really  
6 help if the vats are full.

7 MR. ENGLISH: So I'm going to move on, Your Honor.  
8 But at this time because this is an expert witness and he  
9 has discussed this report, both in his own documents and  
10 here, I move the admission of Exhibit 291.

11 THE COURT: How do we make people who are not in  
12 the room --

13 MR. ENGLISH: We will be posting it, like typical  
14 with cross-examination, Your Honor, documents have not  
15 been posted prior to the examination, but we will have it  
16 posted momentarily.

17 MR. HILL: I'm going to object to the introduction  
18 of admission of 291. The witness -- obviously  
19 Mr. Novakovic is not going to be testifying. Mark  
20 Stephenson was here before, but he did not testify to  
21 this. And this witness, expert and all, it doesn't  
22 matter, because the witness -- the people who wrote this  
23 document are not here. If Mr. Stephenson wants to return  
24 and discuss his own document and be cross-examined on it,  
25 he can do so.

26 THE COURT: Now, the nice thing about Rules of  
27 Evidence -- let me check to see if that would work here --  
28 is that the record includes exhibits that are admitted



1 into evidence and exhibits that are rejected. So this  
2 would give the background that would a curious person want  
3 to know more about why you esteem what you found, they'd  
4 have this.

5 MR. HILL: Correct.

6 THE COURT: And yet, the decision-makers would not  
7 be bound to utilize it.

8 MR. HILL: That is correct, Your Honor.

9 THE COURT: All right.

10 MR. ENGLISH: Your Honor, under the Federal Rules  
11 of Evidence, which frankly are more stringent than these  
12 proceedings, the purpose of designating somebody as an  
13 expert -- and Dr. Bozic was so designated to be at the  
14 beginning of this hearing, along with so many others -- is  
15 that they are permitted to rely on other experts and  
16 reports.

17 We have had countless examples of that already in  
18 this proceeding, from Mr. Covington relying on DHIA.  
19 Frankly, we had an expert on yield factors who included an  
20 e-mail from Tetra Pak and a marketing piece. And this  
21 objection has not been raised in the past. And besides  
22 which the whole point, the real reason you get someone  
23 designated as an expert is that they can opine, make  
24 opinions, and they base their opinions on the work of  
25 others.

26 You can -- if you want to question the work of  
27 Dr. Stephenson and Dr. Novakovic, you know, then we can  
28 have a different conversation. But whether it's



1 Dr. Newton and Dr. Thraen, which I think is Exhibit 244,  
2 or this document, the Federal Rules of Evidence are very  
3 clear that this is an exception to the hearsay, which is  
4 what the counsel for OGC is raising, is that this is  
5 hearsay.

6 This is an absolute exception to the rule of  
7 hearsay, and -- and -- and it -- it should be admitted.  
8 And, frankly, raising that objection for this document,  
9 when that objection has not been raised in the past  
10 throughout this whole hearing, puts me at a disadvantage.

11 THE COURT: All right. I'm not going to rule, but  
12 I am glad you are going to make this available, and I'll  
13 listen to everything else that comes in.

14 My only concern about it, since this expert finds  
15 these authors so esteemed, is that the document is  
16 somewhat aged, given how much has happened since the --  
17 since the 2020 publication.

18 MR. ENGLISH: Well, that could be said about all  
19 sorts of other documents in this record, Your Honor.

20 THE COURT: I understand.

21 MR. ENGLISH: I mean, I'm not going to belabor the  
22 point. It's not a secret because you can go to the  
23 website and see Dr. Stephenson's going to come back. You  
24 know, we can, to the extent necessary, fix it then.

25 But I really -- I believe that it is unfair to  
26 apply this rule here, which has not been applied in the  
27 past and runs afoul of the Federal Rules of Evidence. And  
28 I'd welcome to have counsel for OGC tell me why the Rules



1 of Federal Evidence that allow experts to rely on  
2 materials cannot make an -- in a federal court.

3 THE COURT: We're not there yet.

4 MR. ENGLISH: That's fine. But I -- I -- in that  
5 case, Your Honor, I move to reconsider all statements made  
6 by others that are relying on those kinds of reports,  
7 whether they are e-mails, whether they are marketing  
8 pieces, or whatever.

9 MR. HILL: I think a clear mistake is being made  
10 here. He can certainly opine on them. He can't introduce  
11 other people's evidence. That's the difference here.

12 And there has been an objection to 244 as well.  
13 The reason why it's not on the record already admitted  
14 into evidence is because Judge Strother already determined  
15 that he saw some deficiencies in that prior document  
16 coming in, that's why it's not admitted into evidence  
17 right now and why we're waiting for them to introduce it,  
18 or try to have it admitted into evidence. Because we are  
19 going to, again, lodge an objection to that document for  
20 the same reasons.

21 THE COURT: Understood.

22 I don't want the tail to wag the dog. When you  
23 first spoke, Mr. English, you said, provisionally mark  
24 this as an exhibit. This is good. I would like you to  
25 submit it, and then people who are not in the room with us  
26 can see what it is. And I'm reserving my ruling.

27 MR. ENGLISH: Well, I understand, but I think  
28 we're going to hear from Mr. Miltner in a moment.



1 I want to add that my understanding of what  
2 happened with Exhibit 244 was that the witness on the  
3 stand was not Dr. Bozic at that time, but was instead the  
4 National Milk Producers expert, and she could not  
5 authenticate it. That's -- now, if I'm wrong, that's  
6 fine, but that was my understanding.

7 The difference here is that this witness has  
8 authenticated 244, he has authenticated 291.

9 And I am now going to have Mr. Miltner weigh in.

10 MR. MILTNER: Thank you. Your Honor, I will try  
11 to be brief.

12 7 CFR 900.8(d) is our governing regulation here.  
13 It's titled "Evidence." (d)(4) refers specifically to  
14 exhibits, and it states that, "All written statements  
15 charts, tabulations, or similar data offered in evidence  
16 at the hearing, shall, after identification by the  
17 proponent and upon satisfactory showing of the  
18 authenticity, relevancy, and materiality of the contents  
19 thereof, shall be numbered as exhibits and received in  
20 evidence and made part of the record."

21 That section continues: "If the testimony of a  
22 witness refers to a statute or to a report or document,  
23 the Judge, after inquiry relating to the identification of  
24 such statute, report, or document, shall determine whether  
25 the same shall be produced at the hearing and physically  
26 be made part of the evidence as an exhibit or whether it  
27 shall be incorporated into evidence by reference."

28 And so the rules specifically contemplate an





1 expert like Dr. Bozic referring to or authenticating a  
2 report like this, that he might rely upon in rendering his  
3 opinions, and not only is it properly offered into  
4 evidence and accepted into evidence, but the Judge has the  
5 discretion to incorporate it by reference without formal  
6 numbering. At least that's how I read that -- that  
7 section of the CFR.

8 And as someone who's put on a witness that did  
9 refer to materials that Mr. English had objected to, I  
10 would direct your attention to that regulation. So thank  
11 you.

12 THE COURT: Thank you, Mr. Miltner.

13 Mr. English, you may continue your  
14 cross-examination.

15 MR. ENGLISH: Your Honor, I -- first of all, I  
16 respectfully disagree that it can be reserved. We have a  
17 right for a ruling that it be admitted.

18 I want to note that when I was referencing for  
19 Mr. Miltner's, I didn't stand up and object because I  
20 recognize these rules.

21 I don't know what to do because you are telling me  
22 you are going to reserve it. I really need to have -- you  
23 know, because either way, I'm going to take exception. If  
24 you are not going to admit it -- and by the way, this  
25 means we're going to have fights for the rest of the  
26 hearing, because this is what expert witnesses are for,  
27 opining and relying on other people's materials.

28 I am prepared not to belabor it because



1 Dr. Stephenson is going to be here, but I take exception  
2 to the differential treatment of this document from  
3 everything that's gone before. And -- and -- and --

4 THE COURT: Let's take the time right now then to  
5 examine this document in full so that I can determine how  
6 to rule.

7 Do you have any other questions of the expert  
8 witness with regard to it?

9 MR. ENGLISH: I do. I do.

10 THE COURT: Now, do you care that the people who  
11 are observing this hearing online don't have a copy yet?

12 MR. ENGLISH: Well, they -- they are not going to  
13 be objecting. They are not going to be able to weigh in  
14 on whether or not it should be admitted. You know, we  
15 will post it as promptly as we can, but, you know --

16 THE COURT: Well, I'm not going to give you a  
17 ruling until you have at least submitted it.

18 MR. ENGLISH: Okay. All right. I will accept  
19 that distinction, Your Honor.

20 THE WITNESS: Okay. Maybe I can help resolve the  
21 impasse there.

22 So the Exhibit 76 is public already. Exhibit 76  
23 cites this paper, and the bibliography does provide the  
24 URL. So for listeners at home, if they would refer to  
25 page 440 in the Exhibit 76, which is also marked as  
26 Edge-2, they will find the reference to  
27 [dairymarkets.org/PubPod/Pubs/IL20-03.pdf](http://dairymarkets.org/PubPod/Pubs/IL20-03.pdf). It's easier  
28 once they actually open that PDF, they'll see it there.



1           So true reference that all viewers are already  
2           able to identify the Internet location of the document  
3           that Mr. Chip -- Mr. English just introduced.

4           THE COURT: Thank you. That is very helpful.  
5           Do you have any other questions, Mr. English?

6           MR. ENGLISH: Absolutely, Your Honor.

7           THE COURT: All right.

8           MR. ENGLISH: I'm -- but -- I -- I accept your  
9           caveat, and it will be posted, and I'll return again once  
10          it is. I did not anticipate that the Federal Rules of  
11          Evidence would not be treated with what I believe would be  
12          the respect they deserve in this proceeding. I don't have  
13          them with me right this second, but I will have them and I  
14          will cite them.

15          I frankly think that Mr. Miltner has cited what  
16          needs to be cited. This is why, you know, I was being a  
17          little facetious in commenting about others, but that's  
18          because we didn't object to others because we have always  
19          understood in this proceeding and others that these  
20          materials can come in.

21          That -- that Mr. Covington had every right to rely  
22          on the DHI material. That whether or not an e-mail is the  
23          same thing as an expert report, I did not object. Nor did  
24          counsel for OGC, to the fact that a Tetra Pack e-mail was  
25          admitted. That's because witnesses, like the expert that  
26          Select brought, are entitled to rely on materials outside  
27          the record. The questions are authentication and then  
28          reliability.



1 THE COURT: I like that reliability issue.

2 MR. ENGLISH: But that's the point of an expert.  
3 An expert can rely on them.

4 I think a lay witness -- not that I would ever be  
5 on the witness stand -- but if I'm on the witness stand,  
6 I'm not able to do that. I cannot say that Exhibit 244  
7 can be relied on, because I'm not an economist. It has to  
8 be the same kind of -- so I will move on, we will post it,  
9 and I will return on this issue.

10 MR. HILL: For the record, I did, in fact, object  
11 to the e-mail. They brought somebody else who had seen  
12 the e-mail, who received the e-mail to identify the  
13 e-mail, who was a person who received that e-mail. So  
14 that's not true.

15 MS. HANCOCK: I'd like to weigh in, actually.

16 MR. ENGLISH: This is the Tetra Pak.

17 THE COURT: I still think we have got the tail  
18 wagging the dog here.

19 But Ms. Hancock.

20 MS. HANCOCK: You know, Your Honor, I'm not  
21 objecting just because I do believe that we have taken a  
22 different path in this hearing already, but I just want to  
23 make clear for the record that under the Federal Rules of  
24 Evidence there is not a chance in the world this document  
25 would come in.

26 You can have an expert rely on a document, and the  
27 expert can be cross-examined on that document. But that  
28 underlying document does not get admitted into the record



1 as evidence. It is only referenced for impeachment  
2 purposes only, for purposes of cross-examining a witness.  
3 There is no evidentiary rule in the Federal Rules of  
4 Evidence that would allow the underlying documents to be  
5 admitted into evidence.

6 I recognize that in this proceeding there is a  
7 different standard, and Mr. Miltner cited that standard,  
8 and for that reason we're not objecting. But I don't  
9 believe that you are applying a different standard than  
10 what we have already considered in this case.

11 They already have Dr. Stephenson coming back to  
12 testify. We are burning out the clock for something that  
13 doesn't matter at all.

14 THE COURT: Thank you, Ms. Hancock.

15 MR. ENGLISH: I'll just move on, Your Honor. I --  
16 I -- I do need to correct one thing.

17 I believe Mr. Hill is referencing an e-mail  
18 between IDFA and another lay witness, and it was two lay  
19 witnesses, and then it got authenticated. I think that is  
20 different from the e-mail I'm referring to that was from  
21 Tetra Pak's expert.

22 I will now move on.

23 THE COURT: Thank you.

24 BY MR. ENGLISH:

25 Q. I'd like to understand more about the factors that  
26 drive the negative PPDs on page 6 of Exhibit 290. I'd  
27 like to know a little more about, for instance, what  
28 constitutes the trends bucket.



1 A. Sure. So, thank you, Mr. English.

2 The -- the full methodology is described in the  
3 Exhibit 76, which is the manuscript published in the  
4 Journal of Dairy Science, co-authored by me and Dr. Wolf  
5 there. So if you ever run out of melatonin, you can read  
6 that one.

7 But summary, which will not be as precise as  
8 reading the full manuscript, would be that the trends  
9 comprised of changes in utilization rates between classes.  
10 So, for example, if Class I sales decline over time, then  
11 Class I will comprise a smaller percent of the total  
12 pooled milk. That would be one of the factors driving PPD  
13 lower.

14 If we have an increase in the protein test, then  
15 because the Class I handlers pay to the pool based on the  
16 standard protein test, and they drop money from the pool  
17 based on the actual protein test, that could drive the PPD  
18 down as well. The same with -- with other solids. The --  
19 yeah, those would be the primary factors that are bundled  
20 in the trends column.

21 Q. And then I may have missed it, but when you -- in  
22 the second bucket, which is the Class III/IV spread, and  
23 pick any month you want to pick, I heard you describe two  
24 different things, the difference between the Class III and  
25 the Class IV, and then what is the spread, and the two  
26 appear to be different.

27 So how did you get from, say, if a Class III was  
28 \$12 and the Class -- sorry -- the Class III was \$24 and



1 the Class III was \$12, how did you get from there to the  
2 spread?

3 A. So the spread is defined as the difference between  
4 the Class III price and the Class IV price. So for the  
5 purpose here of this -- of this third bar in the waterfall  
6 chart, it is only the difference between prices that  
7 matters. Whether the difference is 18 versus 15, or 21  
8 versus 18, that would not impact the PPD on its own. It's  
9 just a relative difference between prices that matters.

10 Q. You mean, the relative difference from month to  
11 month or --

12 A. Within the same month.

13 Q. Within the same month?

14 A. Within the same month.

15 But the Class III and the Class IV price for the  
16 same month. In this case, on page 6 of the Exhibit 290,  
17 those would be the announced Class III price for  
18 March 2020 and announced Class IV price for March 2020.

19 And if I can add, Mr. English, on the page 438 of  
20 Exhibit 76, the JDS article, we tried to quantify the  
21 relative importance of fact -- of various factors to  
22 variation around baseline producer price differentials.  
23 In other words, what makes PPDs volatile, differ from one  
24 month to the next.

25 And the step 3 in the legend of the chart, which  
26 is the actual announced prices, that really is the spread.  
27 You know, so you can see in the Figure 5 of the JDS  
28 article -- again, on page 438 -- that the spread is by far



1 the biggest contributor to the variability of producer  
2 price differentials from one month to the next, no matter  
3 which order you look at. And we analyzed, at that time,  
4 six MCP orders.

5 Q. Thank you.

6 THE COURT: Are you looking at a particular page?

7 THE WITNESS: 438, Your Honor.

8 THE COURT: Thank you.

9 MR. ENGLISH: Of Exhibit 76.

10 THE COURT: Thank you.

11 BY MR. ENGLISH:

12 Q. So is there any proposal at this hearing that  
13 could reduce the spread between the Class III and IV  
14 prices?

15 A. Not directly, no.

16 Q. Even if they could, should USDA interfere with the  
17 market signals that create the spread between Class III  
18 and IV?

19 A. We should be -- yeah. Measure twice, cut once as  
20 they say. Like, any time we wish to interfere with the  
21 market signals, we should be very, very, very careful  
22 about undesired collateral damages.

23 Just think about 2020 and the Food Box Program,  
24 well-intended, relatively efficiently executed, with  
25 rather unanticipated and massive consequences for Federal  
26 Order pricing.

27 Q. And -- and going back to the spread issue. The  
28 whole reason we have depooling is because Class III and





1 Class IV are not required to participate in the pool,  
2 correct?

3 A. That is correct.

4 Q. And I think from your conclusions, neither the  
5 higher-of nor the average will prevent depooling  
6 completely, correct?

7 A. That is correct.

8 Q. Did -- did -- did Mr. Brown's depooling analysis  
9 surprise you from the testimony that was provided?

10 A. I wasn't surprised.

11 Q. Were his results counterintuitive?

12 A. For many people I assume they were. For me, I did  
13 not find them counterintuitive.

14 Q. What would you expect to find if you reviewed what  
15 the frequency of depooling over the last four years, if  
16 the higher-of had been in place instead of the average-of?

17 A. I will try to do that for the post-hearing brief.  
18 The analysis is quite complex. If there is any effect, I  
19 would anticipate it to be a third order effect. I would  
20 anticipate that the two dominant effects would be that  
21 Class III/IV spread and then the advanced pricing.

22 Q. One last subject, and this is the issue of dairy  
23 producers and hedging.

24 The National Milk Producers Federation expert said  
25 that depooling can impact the producers' ability to hedge.  
26 Do you agree?

27 A. That is correct.

28 Q. And then she explained that dairies should



1 undertake Class I hedging to the degree it impacts their  
2 milk price. Meaning, if Class I utilization is 30% of the  
3 uniform price, as that is the basis of payment for the  
4 dairy, it should avoid hedging more than 30%, otherwise  
5 risk may be created.

6 Do you remember her saying that?

7 A. I do remember her speaking about that topic, yes.

8 Q. Shouldn't the farmer hedge the utilization by its  
9 handler rather than the order?

10 A. If the handler has the ability to depool, then  
11 that is the case. If the handler does not have the  
12 ability to pool, for example, if you are a direct shipper  
13 to a Class I handler, that really isn't a good solution.

14 I got an e-mail from an insurance agent trying to  
15 sell insurance to one such producer, was it, three years  
16 ago, and I haven't stopped thinking about it since. There  
17 is no good way for that producer to substantially reduce  
18 their basis risk, precisely because the relative  
19 utilization by class in the pool may change due to  
20 depooling, and that person will always get the worst of  
21 it.

22 And the only way we solve that, the only way we  
23 solve that, the ability for a direct shipper to a Class I  
24 handler, is by having a legislative change that allows us  
25 to have hearings such as this with a broader scope than  
26 what we are allowed to do under the current legislative  
27 framework.

28 Q. So how is the farmer's ability to hedge under



1 these kind of circumstances related to that farmer's  
2 handler's pool or depool decision?

3 A. So if -- if -- I'm not sure that I fully  
4 understand the question, but let me try, and please tell  
5 me if I missed it.

6 If I'm a dairy producer and my buyer is a cheese  
7 plant, and they have the ability to depool, then what I  
8 should do as hedging, I should put almost all, if not all,  
9 the emphasis on Class III, even if I am in the order where  
10 Class III is maybe only half of the pooled milk.

11 And the reason is that if my handler is ever asked  
12 to pay money to the pool, my buyer, then they will depool.  
13 And if I have a fair and transparent relationship with  
14 them, they will pay me the commodity value of my milk  
15 based on their product mix, which means that the Class III  
16 hedge would work rather well for me.

17 So for the answer is that, you know, if your buyer  
18 can depool, you should follow your buyer and hedge  
19 whatever it is that they are making. If they are making  
20 cheese, hedge with Class IV -- III. If they are making  
21 powder, hedge with Class IV.

22 Q. Okay. So in that light, let me talk about  
23 advanced pricing very briefly.

24 A. Uh-huh.

25 Q. And I want to, on the one hand, thank you for  
26 being very thoughtful about this. And we understand --  
27 you understand we represent -- MIG has members who have  
28 HTST, and they are, I think you would acknowledge,



1 naturally concerned about moving away from advanced  
2 pricing, correct?

3 A. I understand that, yes.

4 Q. Okay. Because based upon decades of the way milk  
5 has been sold, they would have to provide price to their  
6 buyer without knowing the price of their inputs, correct?

7 A. That is correct, yes.

8 Q. And you have responded that farmers actually --

9 A. Mr. English, if I can just --

10 Q. Of course.

11 A. -- correct my statement. That is correct in  
12 summary of their understanding of that issue, not my  
13 understanding of the issue. Yeah.

14 Q. Well, but they are the ones who are trying to sell  
15 the milk, correct?

16 A. Yes, yes. But, you know, with -- with the -- with  
17 the hedging instruments, like, they can know the -- if we  
18 can eliminate basis risk, then through the hedging program  
19 they can know the cost of their inputs before the start of  
20 the month during which they will be selling milk.

21 We don't have to agree that that's the way we  
22 should do it, but on that statement of whether they would  
23 know their cost.

24 Q. I guess, you know, one -- going back to sort of  
25 the very beginning of your testimony and my examination of  
26 289 and the issues of the fact that we have, you know,  
27 been in a decline of Class I sales, and given that serious  
28 decline, if advanced pricing is the accepted tool of the



1 Class I HTST processor says it needs for business, don't  
2 you think we need to give that significant weight in this  
3 analysis?

4 A. We should certainly give it serious consideration.  
5 We should certainly give it serious consideration. In  
6 fact, my colleague, Mr. Sjostrom, will testify probably  
7 tomorrow or Wednesday with some ideas of how the  
8 consideration could be given.

9 However, that said, I still believe that if people  
10 are forced to change their ways, some will suffer, others  
11 will thrive, and industry as a whole will benefit.

12 I cannot guarantee you, Mr. English, that every  
13 one of your clients will be among the thriving ones. But  
14 as an industry, we will have a healthier fluid sector if  
15 the transparency in the input costs to your clients is  
16 somewhat made more opaque from their buyers, grocers.

17 Q. Thank you, Dr. Bozic. Appreciate your time.

18 MR. ENGLISH: Your Honor, I apologize if I tried  
19 your patience.

20 THE COURT: Mr. English, I have the greatest  
21 respect for you, and I enjoy crossing swords with you now  
22 and then.

23 MR. ENGLISH: Thank you, Your Honor. I am done.

24 THE WITNESS: Could we take five before the  
25 next --

26 THE COURT: Ms. Hancock, would it be all right if  
27 we take a ten-minute break?

28 MS. HANCOCK: Great for me, yep.



1 THE COURT: All right. It's 3:10. Please be back  
2 and ready to go at 3:20. We go off record at 3:10.

3 (Whereupon, a break was taken.)

4 THE COURT: Let's go back on record.

5 We're back on record at 3:21.

6 Ms. Hancock.

7 MS. HANCOCK: Thank you, Your Honor. I'd first  
8 just procedurally like to lodge my own objection. Just so  
9 the record is clear.

10 Mr. Bozic -- or Dr. Bozic -- I think so far I have  
11 counted three times where you have said, "I'll brief this  
12 issue later." And so we're just formally making our  
13 objection for the record that I don't believe that under  
14 the rules you are entitled to add something new into your  
15 brief that we haven't talked about in evidence.

16 So I just want to make sure that we have that on  
17 the record.

18 THE WITNESS: Okay.

19 MS. HANCOCK: And to have you on notice that I  
20 hope you put it into the record as opposed to waiting for  
21 your brief.

22 THE COURT: I'd like to add to that.

23 I always counsel people that briefs are argument;  
24 cases are decided on evidence. Evidence is sworn  
25 testimony and the exhibits that come in through the  
26 presenters.

27 So I don't know if the timing is possible for you  
28 to submit evidence, but it is so much more meaningful than



1 argument.

2 THE WITNESS: I will concede that I know more  
3 about hedging than the rules of federal Hearing. I did  
4 not mean to avoid discussion on any evidence, just, you  
5 know, at some point you still need to sleep, even if it's  
6 just four hours a night. So thank you for your comment.

7 MS. HANCOCK: Okay. And then just as a heads-up  
8 for the USDA, I am potentially going to need Exhibit 275  
9 for the witness. But not quite yet, but soon I'm sure.

10 CROSS-EXAMINATION

11 BY MS. HANCOCK:

12 Q. Okay. Maybe we could start off, we were looking  
13 at Exhibit 291, and that was the famous discussion of  
14 Dr. Stephenson and Dr. Novakovic. And because -- I don't  
15 know if this is hard to see or not, so I'm sorry if I'm  
16 mispronouncing it.

17 THE COURT: Oh, does anyone know how to pronounce  
18 "Novakovic" or "Novakovich"?

19 THE WITNESS: It's "Novakovich."

20 THE COURT: Thank you.

21 THE WITNESS: And Professor "Novakovich" would  
22 like me to be "Bozich" but I go by "Bozic," and he doesn't  
23 like it very much.

24 THE COURT: And is the "V" pronounced like a "W"?

25 THE WITNESS: You are asking the wrong Slav on  
26 that.

27 THE COURT: That's great. I love it. Thank you.

28 All right.



1 MS. HANCOCK: I'm curious to know how that's going  
2 to read on the record. Just so that we're clear, it was a  
3 little bit tongue-in-cheek, so -- okay.

4 BY MS. HANCOCK:

5 Q. Okay. So in Exhibit 291 that we were looking at,  
6 and I'm not substantively talking about it, I just note  
7 that it's titled "Dairy Markets and Policy."

8 Is that the name of an entity or an organization?

9 A. It is an informal association of dairy economists  
10 who are in academia. So it -- there is no LLC or an NGO  
11 or some sort of public legal entity that is called Dairy  
12 Market and Policy.

13 Q. Okay. So as an informal association of  
14 economists, do you know who makes up or comprises that  
15 association?

16 A. Sure. So that would be Dr. Stephenson,  
17 Dr. Novakovic, Dr. Nicholson, who I saw briefly before  
18 here in the room. For a few more months, I'm also  
19 eligible to be there. I'm leaving the University of  
20 Minnesota in January. To preserve the credibility as an  
21 impartial commentator on dairy economy and evaluator of  
22 various theories, they do not allow people that are  
23 outside academia to be members of this.

24 So, for example, Dr. Newton, when he left  
25 University of Illinois, he was no longer part of the DMAP  
26 team, even though we all hold him in extremely high  
27 regard. And Dr. Wolf would be a member as well. We can  
28 look up on the website if you need a full list.





1 Q. What about Bob Cropp?

2 A. Give me just a second. Yes, Dr. Cropp would be.

3 Q. Okay. So I think you said you belong to that  
4 group as well right now, but you are going to be leaving  
5 at some point in the future?

6 A. That's correct.

7 Q. Is that because you are going into the private  
8 sector and they don't want to associate with a  
9 commercialized, revenue-generating, maybe capitalist part  
10 of society?

11 A. Yeah. They are all socialists.

12 Q. Again, joking.

13 A. That was a joke, for the record.

14 It has simply been the way -- the way the group is  
15 organized, that it comprises only for -- of economists who  
16 are paid by the public money to do the work in the  
17 interest of general public. So I don't think that there  
18 is any implication or statement or judgment on economists  
19 in the private sector.

20 I certainly have a very high regard for  
21 Dr. Vitaliano, even though he hasn't been in academia for  
22 decades.

23 Q. How long have you been a member or part of the  
24 association of Dairy Markets and Policy?

25 A. Just over a decade.

26 Q. Okay. So at the time they wrote the article in  
27 Exhibit 291, you were part of that association?

28 A. Yes. If you could call it a group rather than



1 association.

2 Q. Okay. And I was just using your word, because you  
3 said it was an informal association.

4 A. Yes. Yes. Yes. I understand. Group would be --  
5 association -- we have International Dairy Foods  
6 Association and Dairy Business Association. It implies a  
7 stricter legal entity than an informal group of  
8 economists. So maybe group would be better.

9 Q. Okay. So you have been a part of that group for  
10 more than a decade?

11 A. Yes.

12 Q. And throughout the time that you have been part of  
13 that group, Dr. Stephenson and Dr. Novakovic have both  
14 been part of that group as well?

15 A. They would be members of that group long before I  
16 ever even became an academic economist.

17 Q. Okay. And where are you going in January that  
18 makes it so you are not going to be part of the group any  
19 longer?

20 A. Well, it -- wherever I would be going, as long as  
21 I'm not part of a public university, I would not be  
22 eligible to be part of that member -- of that group. So  
23 it's not where am I going, it's what am I leaving that  
24 determines the status.

25 Q. Okay. So you -- by the end of this year, you are  
26 leaving academia?

27 A. Yes, that's correct.

28 Q. Where are you going?



1           A.     Back to my wife as soon as I finish testifying  
2 here. I -- I run a company. We have about 20 employees  
3 at this point. Federal government entrusts us with the  
4 programs that carry millions of dollars of taxpayer money  
5 and billions of dollars in liability. It's a huge  
6 responsibility off my back to get that done right. So --  
7 so that -- and that's just a small part of what we do. So  
8 there's plenty of things to do.

9           So it's Bozic, LLC, very creatively known --

10          Q.     And what's the --

11          A.     -- called company.

12          Q.     What was the last thing that you said?

13          A.     Bozic, LLC, is the name of the company that I own.

14          THE COURT:   Bozic what?

15          THE WITNESS:   LLC.

16          THE COURT:   Oh, LLC, thank you.

17 BY MS. HANCOCK:

18          Q.     And what's the name of the government program that  
19 you run?

20          A.     Several of them. Dairy Revenue Protection,  
21 Livestock Gross Margin, Livestock Risk Protection are  
22 three insurance programs which have been approved and are  
23 subsidized and reinsured by the Federal Crop Insurance  
24 Corporation.

25          Q.     And those are all revenue-generating programs that  
26 you run for your business?

27          A.     They -- those are public-private partnerships. I  
28 do not sell insurance; that's done by the licensed crop



1 insurance agents. I do not bear the risk; that's done by  
2 the authorized insurance providers. I do not set the  
3 policy rules; that's done by the Federal Crop Insurance  
4 Corporation.

5 I can propose the change in rules, and I'm  
6 responsible for daily maintenance of the program. So I am  
7 sort of like an expert-in-residence there, rather than a  
8 money-making entrepreneur. I do not set my own prices;  
9 that's also done -- the maintenance fees are done by the  
10 Federal Crop Insurance Corporation.

11 Q. So is Bozic, LLC, paid through the maintenance  
12 fees?

13 A. Yes.

14 Q. Are there other ways in which Bozic, LLC, receives  
15 revenue from running these programs or administering these  
16 programs?

17 A. That's confidential information. In general, we  
18 are not a public entity. We have close to a hundred  
19 clients on four continents. We do a variety of services.  
20 And almost everything we do is under one form or another  
21 of non-disclosure agreements.

22 Q. Okay. And I'm not asking you for how much you  
23 charge or who your contracts are with. I'm just -- you  
24 can appreciate that you're here --

25 A. Sure.

26 Q. -- testifying supporting risk management tools and  
27 incorporating various tools and setting pricing policies  
28 in order to further effectuate those tools, and I think



1 it's fair that the record reflects where you're generating  
2 revenue.

3 A. Yes. Yes. No, I understand where you are coming  
4 from.

5 So if you allow me a little bit latitude to answer  
6 that concern. The way user fees are set through the  
7 Federal Crop Insurance Corporation, I would not see -- my  
8 company would not receive any higher revenue from higher  
9 sales of Dairy Revenue Protection or Livestock Risk  
10 Margin.

11 I could potentially see more revenue from sales of  
12 these programs to other arrangements that I have with  
13 other entities in the private sector. So that, you know,  
14 could potentially be a conflict of interest.

15 But directly through the government, that would  
16 not be the case because of the ways that the user fees are  
17 set.

18 Q. Because of the way the users fees are set?

19 A. That's correct, yes.

20 Q. Your voice just fell off a little bit. I wanted  
21 to make sure they could hear.

22 A. That usually happens when I talk about my  
23 finances.

24 Q. I understand it's very uncomfortable. Okay.

25 So you have different private sector arrangements  
26 that could present conflicts, but that's outside of Bozic,  
27 LLC?

28 A. I will also add that I have been talking about



1 Dairy Risk Management since 2011, which would be years and  
2 years before any one of these three -- years before Dairy  
3 Revenue Protection was even conceived by Dr. Newton and  
4 years before I was involved in other programs or  
5 revenue-generating activities.

6 Q. Yeah, I didn't think you just learned this.

7 I just want to make sure I'm clear. You have a  
8 separate entity where you do private contract  
9 relationships. What's that entity?

10 A. Well, it's the same entity. But I do have several  
11 entities, but that same entity also does the other style  
12 of contracts.

13 Q. Okay. How many different entities do you have  
14 that derive revenue from risk management tools in any way?

15 A. Ms. Hancock, with all due respect, I think that we  
16 can agree that there is a potential of conflict of  
17 interest without divulging details of my business  
18 strategy.

19 Q. Okay. Is it multiple entities, though?

20 A. So, for example, not to -- you know, don't take my  
21 answer as opening the doors for the next two hours on my  
22 tax forms, but, you know, one of the things that we do is  
23 build software. So in order to minimize my costs, I hire  
24 developers overseas. In order to effectively do that, I  
25 own a company that's headquartered in Croatia, again,  
26 creatively called Bozic Europe. You know, so that's a  
27 second entity there. And I'll stop there.

28 Q. Okay. I see.



1           And so you have both maintenance fees that you  
2 receive under the different government program tools for  
3 risk management that -- that you administer, that's one  
4 bucket?

5           A.    Yes.

6           Q.    And then another bucket is private services that  
7 you offer as well?

8           A.    We have about a half dozen or more product lines,  
9 some of which are related to livestock insurance, some of  
10 which have nothing to do with livestock insurance, some  
11 have to do with crop insurance. So we do a variety of  
12 things. As anybody who has positive risk management, I  
13 try to diversify my sources of income.

14          Q.    And do you also offer private contracts with  
15 respect to the dairy industry? Or administer -- or  
16 facilitating private contracts with respect to the dairy  
17 industry?

18          A.    I typically don't sell my time. I consult rarely.  
19 By consulting, I mean selling my time, charging something  
20 hourly. I try to do that when there's a bigger cause that  
21 I believe in, that I think is important for our industry.

22                So some examples of consulting contracts would be  
23 on -- on quota in California, I believe it was 2019.  
24 IDFA, milk pricing modernization, I think it was 2020 or  
25 2021. I worked with Edge since 2021. They, you know, we  
26 agree on the direction of our industry. I strongly  
27 support their ethos and the way they approach these  
28 matters, you know, so we are kindred souls, if you will,



1 on these matters. And that's why it's easy for me to --  
2 to engage in a consulting agreement with them without  
3 having to compromise my values.

4 Q. Okay. And then do you have other work that you do  
5 in facilitating the sale or purchase of risk management  
6 tools that derive revenue for you and your entities?

7 A. Yes.

8 (Court Reporter clarification.)

9 BY MS. HANCOCK:

10 Q. So three main buckets: You have a government  
11 projects -- the government contracts or programs; you have  
12 hourly services that you have advice and counseling on;  
13 and then also through the sale of your own facilitation of  
14 risk management tools?

15 A. That would be a sufficiently accurate  
16 simplification for the purpose of this cross-examination.

17 Q. Other than those three buckets, are there any  
18 other ways in which you derive revenue from the  
19 facilitation, advice, or utilization of risk management  
20 tools?

21 A. Let's see. Sometimes people like me to speak at  
22 conferences because my name is known, so maybe that's a  
23 way. But, you know, again, I try not to do too many of  
24 those events.

25 Q. Okay. Speaking engagements might be an option as  
26 well. Anything else?

27 A. I think we covered it. If I think of anything  
28 else, I can follow up.





1 Q. It's fair you are entrepreneurial.

2 A. I try to be.

3 Q. Okay. Do you -- you mentioned creating  
4 proprietary software programs.

5 Do you develop your own software program from  
6 which you derive any kind of licensing or revenue sources?

7 A. Yes.

8 Q. Okay. So that would be another bucket as well.

9 A. Well, I thought that was the facilitation bucket.  
10 You know, because we separated time-based income and  
11 non-time-based income. So that's why I said that for the  
12 purpose of cross-examination seems like an accurate enough  
13 specification.

14 Q. Okay. So then licensing and the sale of  
15 subscription to those software programs?

16 A. Ms. Hancock, take a look at my eye bags. I work a  
17 lot.

18 Q. Okay. All right. Is that a "yes"?

19 A. Yes. That was a yes.

20 Q. I just want to make sure our record is clear.

21 Okay. So is it fair to say that you compete with  
22 Ms. Dorland in some of these buckets?

23 A. No.

24 Q. You don't?

25 A. No. I don't even know what she does, actually.  
26 But, you know, I'm not familiar with her work. I didn't  
27 mean that in any -- I'm not familiar in detail with her  
28 work. I believe that she does retainer-style advisory



1 services with dairy producers. I don't do those. I  
2 believe that she does retainer-style advisory services  
3 with participants in the dairy supply chain, like  
4 processors. Again, I try to reserve charging for my time  
5 only for "God and country" causes. You know, and so I  
6 don't see her as competitor.

7 One area where I understand we might have been  
8 competitors is that she was providing some data services  
9 to people where she would manually collect data from  
10 multiple sources, and from what I understood from some of  
11 my clients, they used to use her services for getting, for  
12 lack of the better word, everything they need in one Excel  
13 spreadsheet. And then one of the earliest product lines  
14 that I created was to automate all of that, so --

15 Q. That's part of licensing and software services  
16 that you provide?

17 A. Yes. That preceded Dairy Revenue Protection.

18 Q. Okay. And so in that regard you did complete with  
19 Ms. Dorland?

20 A. From what I understand from my clients, but I  
21 never really considered her my competition.

22 Q. Okay. And on behalf of the group, the dairy  
23 markets and policy group that you belong to, did you  
24 attend a conference in Portland in 2015 and present at  
25 the -- an overview of the dairy swaps market?

26 A. What did I say there? From your question, I would  
27 infer that I have. But I -- it's been a long time. So  
28 maybe we can look it up.



1 Dairy Margin Risk Management, the Black Swan  
2 Approach. I was there.

3 Q. You will have to speak into the microphone.

4 A. I did present -- the title of my presentation was  
5 "Dairy Margin Risk Management, the Black Swan Approach."

6 Q. Okay. Is that at a conference in Portland in  
7 2015?

8 A. The biggest laugh I ever got was for a joke that I  
9 presented there. Like, if the technology people can put  
10 my laptop back on for a second.

11 Q. I did make a promise I would finish under an hour,  
12 but you are really making it rough.

13 A. Well, you know, quiz me about my finances, I can  
14 do a cheesy joke at least.

15 Q. That's fair.

16 A. Yes. This is the joke I did at Portland. You all  
17 heard about TED, Technology Entertainment and Design, I  
18 believe. We were at a dairy meeting so I thought that the  
19 appropriate abbreviation could be Dairy Economic Analysis  
20 Discussions or -- dairy economists are not known for a  
21 great sense of humor.

22 Q. Do you remember presenting on a panel with  
23 Ms. Dorland at that conference?

24 A. I honestly don't. It's been a long time. I will  
25 not contest that information.

26 Q. Do you remember presenting on a panel with  
27 Ms. Dorland, ever?

28 A. Ms. Hancock, the way I work, I only retain



1 short-term memory about things I need to do. Everything  
2 else I file somewhere. So I -- that also helps me forget  
3 transgressions against me, so it's a better way to  
4 function. So I don't mean to prevaricate, but I do see  
5 from the agenda there that I was either on the panel or  
6 maybe have helped moderate a panel in which Ms. Sara  
7 Dorland -- which Ms. Dorland was a participant.

8 Q. And then it looks like Mr. Paul Peterson from the  
9 University of Illinois presented at that conference as  
10 well.

11 Do you recall his presentation?

12 A. Yes, I do.

13 Q. And -- I'm sorry?

14 A. I do. Yes.

15 Q. Okay. And let's see how best to get through this.  
16 Why don't we -- can somebody grab 275? Thank you.

17 THE COURT: I promise to give this back. I'm  
18 looking at a copy of it.

19 BY MS. HANCOCK:

20 Q. And Mr. Peterson -- or, I'm sorry, I'm going to go  
21 to -- Mike Brown had his Exhibit 275, and attached as  
22 Exhibit B to his testimony is an article that you wrote  
23 with Mr. Gould.

24 Do you recall this -- Mr. Brown discussing this  
25 article that you wrote called "Fluid Milk: A Better  
26 Hedge"?

27 A. So can we go from point A to point D?

28 I think what you were going with this is that



1 Mr. Peterson presented there are about 4 billion pounds in  
2 Class I swaps in 2015 when he presented this, and either I  
3 have cited him or I have referred that some people have  
4 used swaps.

5 Ms. Hancock, we ship 400plus billion pounds of  
6 Class I milk annually here. So even if it's 4 billion  
7 pounds -- and I might have looked -- that's still 10% of  
8 Class I milk. You know, so that's -- you know, that is  
9 a -- you know, would suggest that something was happening  
10 there, but the amount is not large at all, you know.

11 Q. You might be going somewhere where I haven't even  
12 gone yet, so can we back up?

13 A. Sure.

14 Q. Because you know this so well that it's easy for  
15 you to kind of get all the way from A to Z, and maybe even  
16 farther than where I was going. So help me understand  
17 what you just said.

18 A. Sure. So from your line of inquiry, I inferred  
19 that you were about to make a point that there's evidence  
20 that I have relied upon previously in my professional life  
21 that would confirm the statement made by your expert  
22 witness that there was an active OTC market for Class I  
23 prior to the change in the Class I reform in 2019.

24 Would that be a fair summary?

25 Q. I mean, would that be your testimony?

26 A. Well done. Having seen this evidence now, I would  
27 not contest that.

28 Q. Okay. And so what you are talking about is the



1 2015 presentation that you went to in which Mr. Peterson  
2 presented on swaps that were happening at that time  
3 period?

4 A. So I cannot vouch for Mr. Peterson's numbers. I  
5 can only confirm that I have seen his presentation.

6 Q. Okay. So is that a "yes"?

7 A. A "yes" to which question?

8 Q. Yeah, I'm just trying to make sure I understand  
9 what you were saying.

10 You are talking about when you said that you had  
11 seen some data that was presented about some swaps that  
12 had occurred at that presentation, you are talking about  
13 the presentation that Mr. Peterson provided at that same  
14 conference?

15 A. Yes.

16 Q. And that was the conference that you attended?

17 A. Helped co-organize, yes.

18 Q. Okay. So you helped co-organize that conference  
19 as part of your role in the group with dairy markets and  
20 policy?

21 A. Yes.

22 Q. And so you helped coordinate Mr. Peterson to  
23 present at that conference?

24 A. I'm not sure if I was in charge of Mr. Peterson's  
25 presentation, but certainly would be involved overall in  
26 the organization of the conference.

27 Q. And where you thought I was going was that  
28 Mr. Peterson presented some testimony that showed that



1 there actually was an active Class I market at the time;  
2 is that right?

3 A. Yes.

4 MR. ENGLISH: Objection. Characterization of  
5 testimony.

6 THE COURT: Well --

7 MR. ENGLISH: The National Milk counsel just  
8 called it testimony. I object to the characterization  
9 calling a statement at a presentation testimony as opposed  
10 to what this is.

11 THE COURT: Well, this witness testified as to  
12 what tiny amount of Class I milk was being discussed.

13 THE WITNESS: Yep. Maybe I can clear it up.

14 So in his presentation, Mr. Peterson, Mr. Paul  
15 Peterson, at the 2015 -- not 2019 -- 2015 workshop in  
16 Portland, Oregon, did present a table that attempted to  
17 classify various swaps or OTC contracts, and one of the  
18 categories that he included was Class I milk swaps. I  
19 have no reason to assume that Mr. Peterson was reckless  
20 with collecting that data or classifying that, but from  
21 his presentation, it would not follow that that solution  
22 is sufficiently robust to cover a majority of the Class I  
23 sector in the United States.

24 BY MS. HANCOCK:

25 Q. Fair enough. I'm not even -- I'm just trying to  
26 first understand where you thought I was going. Isn't  
27 that where this started? Because you were jumping ahead  
28 to where you thought I was going, and I just want to make



1 sure I understand it --

2 A. Sure. Yeah.

3 Q. -- because you might be giving me more credit than  
4 what I deserve on this.

5 So from Mr. Peterson's testimony --

6 THE COURT: Was it testimony?

7 MS. HANCOCK: I'm sorry. Thank you.

8 BY MS. HANCOCK:

9 Q. From Mr. Peterson's presentation, you said -- you  
10 derived from that that there were Class I swaps that were  
11 happening.

12 And are you looking at his presentation online  
13 right now?

14 A. Yes, I am.

15 Q. Okay. And so if you were looking at his  
16 presentation, that shows you that there were Class I swaps  
17 that were happening at that time; is that right?

18 A. Yes. 45 Class I milk swaps.

19 Q. And that represents 38 million plus hundredweight  
20 of the Class I milk; is that right?

21 A. There you go. So I did guess correctly where you  
22 were going to go.

23 Q. Is that a "yes"?

24 A. Yes. That was a yes.

25 Q. And then it looks like there was only 12.8 million  
26 worth -- sorry.

27 It looks like there were only 12.8 million  
28 hundredweight worth of Class II swaps that occurred in





1 that same time period; is that right?

2 A. That would be what Mr. Peterson has presented  
3 there.

4 Q. So more than three times the Class I milk at the  
5 time was being exchanged in swaps.

6 A. So that is correct. But we should be careful what  
7 conclusions we draw from there. Because there is  
8 presumably less of a need for Class II swap if it is  
9 corresponding closer to a market-traded contract. So --  
10 so, yes.

11 But the numbers are 12 million and change  
12 hundredweights for Class II and 38 million for Class I.

13 Q. And it's 48 million for Class III; is that right?

14 A. Yes.

15 Q. So Class I and Class III are trading in swaps  
16 almost about the same here, pretty close?

17 A. The numbers are similar.

18 Q. Okay. If you go ahead on his presentation two  
19 more slides then.

20 What are the average number of days that those  
21 swaps are open under Mr. Peterson's testimony?

22 A. Ms. Hancock, is this appropriate? I don't think  
23 that anybody else has this material in front of them other  
24 than you and I.

25 Q. Yeah, I'm just asking -- you attended. I'm asking  
26 what -- if this is information that you were aware of.

27 You pulled it up on your computer, right?

28 A. But this is not coming from my memory. I'm only



1 able to respond to your questions because I'm reading it  
2 online.

3 Q. That's okay. I'm going to ask you about what you  
4 know, but I got to first lay the foundation of what  
5 information we're looking at.

6 MR. ROSENBAUM: Your Honor?

7 THE COURT: Mr. Rosenbaum.

8 MR. ROSENBAUM: I think we -- as -- I think we  
9 need to have a copy of what it is she's using. I mean,  
10 we, as other counsel, need to be seeing -- I have never  
11 been in a trial where a witness was cross-examined about a  
12 document and other counsel didn't have a copy of the  
13 document at the same time.

14 THE COURT: You know what astounds me is that he  
15 can go into his computer and locate such a thing, and she  
16 has got a copy, and it goes back to 2015. And I don't  
17 know how much time we want to spend on it, but --

18 MR. ENGLISH: I don't either, Your Honor. But  
19 also, this is -- this is reminiscent or different from  
20 what the discussion we had earlier. It's almost as if  
21 Mr. Peterson, who is not here, is being asked to provide  
22 his information for the record. And as Dr. Bozic has  
23 said, he doesn't know whether Mr. Peterson was right or  
24 not. So we're now talking about data that doesn't have a  
25 foundation other than the attorney and the witness are  
26 talking about it as if it does.

27 So I -- I object to further examination on this.

28 MS. HANCOCK: Well, Your Honor, if I can respond,



1 I can make it simple. This is their expert who has said  
2 that there is no -- or Edge's own expert that is being  
3 proffered here that has said that there's no Class I  
4 market under the higher-of, and he is a co-organizer of an  
5 event in which there was real data that was put in front  
6 of him, that is still so accessible to him he has it  
7 available on his computer, and it's clearly showing that  
8 there was an active market in Class I. That they don't  
9 like the evidence doesn't make it objectionable.

10 THE COURT: Mr. Rosenbaum.

11 MR. ROSENBAUM: I mean, I'll let Mr. English speak  
12 to his own objection.

13 But my objection is -- is different. It is that  
14 he's not my witness, number one. Dr. Bozic does not -- is  
15 not here testifying for my client. And in this entire  
16 proceeding, every time there's an exhibit being used to  
17 examine a witness, copies are given to everyone in the  
18 audience, and that's so we can all ask our own questions.

19 THE COURT: Let me interject there. I find that  
20 cross-examination very often does not involve having a  
21 copy of the document used to impeach the witness available  
22 for distribution. Now, it can be made available. But I  
23 think very often if you are either inviting his  
24 recollection or suggesting that perhaps he misstated what  
25 was happening earlier, either way, those questions are  
26 proper, I think.

27 MR. ROSENBAUM: Your Honor, he's certainly  
28 entitled to be asked questions about things he remembers,



1 things that he did. But I've never been in a proceeding,  
2 trial or otherwise, where a witness -- that I can think  
3 of, where a witness has been presented with a document and  
4 asked questions about it, where that document was not  
5 available to the other counsel participating in that  
6 proceeding.

7 And I do object. I mean, I do object to that  
8 being done here. If this is going to be -- I mean, I  
9 have -- during this hearing, I have a number of times  
10 confronted witnesses with documents that had not  
11 previously been made available, but I handed out copies to  
12 everyone simultaneously. And I think that's the proper  
13 procedure here for everybody else as well.

14 THE COURT: Thank you.

15 MR. ENGLISH: Your Honor, I -- I join in  
16 Mr. Rosenbaum's objection, but I think that there's a more  
17 basic problem.

18 Even if the document were available, what  
19 Ms. Hancock says is that because Mr. Bozic was a  
20 co-organizer of a program, sort of like USDA hosting a  
21 hearing, and a person showed up to say X, that somehow  
22 USDA should be charged with information, or Dr. Bozic.

23 But Dr. Bozic was not the speaker. If the  
24 questions were, weren't you at this conference? Yes. And  
25 didn't you say at this conference, Y? That is different.

26 What the questions are, did you co-organize a  
27 program? Yes. Did a witness -- did somebody who is not a  
28 witness -- I'm sorry -- did a presenter say Y? That is



1 not relevant. There's no foundation. There's no way of  
2 cross-examining Mr. Peterson to find out whether it was  
3 true or not. The numbers, for all we know, he had a  
4 decimal place wrong and we don't know.

5 So I think that the problem with the examination  
6 is that Mr. Bozic wasn't the one who said it. Ultimate  
7 hearsay. Whatever Mr. Peterson said in 2015 is hearsay  
8 and it should not be admissible, and I object to the line  
9 of questioning.

10 MR. SJOSTROM: Yeah. And, Your Honor, we went  
11 down this road. I think Dr. Bozic was intending to be  
12 nice. I might advise him to just shut his laptop and  
13 answer the questions. I think that would solve a lot of  
14 issues here.

15 And I -- you know, if we hadn't had the earlier  
16 discussion, I think we might have found a different  
17 answer, but the earlier discussion was pretty clear that  
18 this is hearsay and not admissible.

19 So he can ask what he's remembered, but not  
20 necessarily go back and read a document that could have  
21 been placed there after the conference, before the  
22 conference, during the conference. We don't know when it  
23 was presented. Thank you.

24 THE COURT: So there's a lot of controversy here  
25 on whether risk management strategies are available,  
26 effective, and being used for things like Class I milk or  
27 other types of commodities. And my understanding is that  
28 Dr. Bozic has a different view of that than --



1 Ms. Dorland is it? Do I have your name correctly?

2 MS. HANCOCK: She's not here. This is another  
3 lady. But it is Ms. Dorland.

4 THE COURT: She was sitting over there, right?

5 MS. HANCOCK: She was sitting there, Your Honor.

6 THE COURT: Yeah. And it's Dorland?

7 MS. HANCOCK: Dorland.

8 THE COURT: So I think this examination is  
9 entirely proper.

10 But I agree with Mr. Rosenbaum that it would be  
11 nice if there are copies available for others. But I also  
12 agree that Dr. Bozic, although he can call it up on his  
13 computer, he may not be totally familiar with it. Now  
14 he's reading it.

15 So close your laptop about that. I mean, just --  
16 I don't mean you can't look at your laptop. But go out of  
17 that.

18 And you may continue to examine him on his  
19 awareness of that kind of information back in 2015.

20 MS. HANCOCK: And just so we're clear, I mean,  
21 this is an expert that's been qualified in risk management  
22 and knowledge of the industry as a whole I think has  
23 already been put at issue. But not only that, he's a  
24 co-organizer of the event and attended the event. And so  
25 that he has it available to him on his computer, I do  
26 think is relevant, and I do think he should be entitled to  
27 look at it.

28 I don't believe that we have to put every document



1 into the record. I -- I have already lodged my objections  
2 or my summary about them. I don't think the underlying  
3 documents themselves are what we're admitting here. I  
4 think the purpose here is just Dr. Bozic's knowledge and  
5 experience with there being a risk management tool or OTC  
6 market available for Class I when he's testified that  
7 there isn't.

8 THE WITNESS: If I can just correct the last  
9 statement?

10 THE COURT: You -- you may. Having heard that  
11 statement, you may now state --

12 THE WITNESS: My -- my -- I believe I was more  
13 careful with words when I was presenting earlier today. I  
14 believe my -- or the intent of my words was that to the  
15 extent that the market may have existed or to the extent  
16 that Ms. Dorland did successfully place some hedges  
17 through an OTC market for some of his clients, that  
18 experience would not be generalizable sufficiently to  
19 provide a robust solution for the entire Class I sector  
20 who does want to hedge.

21 BY MS. HANCOCK:

22 Q. Yeah. And we were going to get to that part of  
23 the conversation. I don't need you to admit the  
24 underlying evidence. I just want to know what you  
25 understand and what you know about the market.

26 A. So what I will add about the swaps data is that  
27 even though Dodd-Frank increased the reporting  
28 obligations. The repositories that contain that data are



1 not clean enough that I ever wanted to use them in my  
2 analysis. The data is -- doesn't have clear  
3 categorizations. It -- it is just -- it was never clear  
4 to me that the data possesses sufficient legitimacy that I  
5 would draw broad policy conclusions from, or analysis.

6 Now, that said, you know, I would personally love  
7 to hear from Mr. Peterson himself. You know, he did  
8 prefer that -- he did produce that data, not me.

9 Q. Okay. And the data that he presented also said  
10 that on average those Class I swaps were less than four  
11 months; is that right?

12 A. My laptop is closed. I do not recall.

13 Q. Okay. Does that sound about right for swaps based  
14 on your experience with hedging?

15 A. I would need to look into it. I'm sorry that I  
16 have to clam up, but I don't have my laptop anymore.

17 Q. That's okay.

18 You don't -- would having your laptop available to  
19 you be of assistance?

20 A. Potentially, yes.

21 MS. HANCOCK: Okay. I would ask that he be able  
22 to use his laptop as other witnesses have been able to use  
23 them.

24 THE COURT: Understanding that you are not the  
25 author of what you are going to look at, go ahead and look  
26 at it.

27 THE WITNESS: Ms. Hancock, would you kindly repeat  
28 the question?





1 BY MS. HANCOCK:

2 Q. Sure. On average, Class I swaps extend for less  
3 than four months?

4 A. So what I can report is that Mr. Peterson in one  
5 of his, unfortunately, unnumbered slides, listed that what  
6 he denoted as Class I swaps have an average tenure or  
7 duration of 116 days, which would roughly correspond to  
8 four months.

9 Q. Okay. Just under four months?

10 A. Yes.

11 Q. And you just had mentioned Dodd-Frank Act and its  
12 enactment and having an effect on the use of risk  
13 management tools.

14 I'm wondering if you could just give us a quick  
15 understanding of why that affected the use of risk  
16 management tools or how it affected it.

17 A. I don't think that I have sufficient expertise  
18 to -- to, you know, have my opinion be treated as an  
19 expert witness on that particular issue and the specific  
20 impact on -- of regulation on the risk management  
21 practices.

22 Q. Is it fair to say that Dodd-Frank elevated the  
23 reporting tools with which people who utilize risk  
24 management tools had to report?

25 A. Yes, that is fair to say.

26 Q. And it created more of a legal structure and lens  
27 through which those risk management tools were evaluated?

28 A. I would not contest that.



1 Q. Okay. And in Mr. Brown's Exhibit 275 attached B  
2 there, the article that you wrote, you were talking about  
3 the hedging programs for Class I; is that right?

4 A. Yes. That's correct.

5 Q. And earlier you had told me, when you were kind of  
6 forecasting where you believed I was going, I think you  
7 mentioned something about 40 billion pounds of milk.

8 Do you remember that?

9 A. Yes.

10 Q. How did that play into where you believed I was  
11 going in my line of questions?

12 A. Well, why don't you just pursue your line of  
13 inquiry here so that I'm not the one designing your  
14 strategy.

15 Q. That's okay. I'm just trying to understand where  
16 you thought I was going with it.

17 A. Well, so the -- if we are so -- let's put it this  
18 way. If you have a high, very high profit margin on your  
19 Class I product, then you can afford to buy a Class I  
20 swap. The lower your profit margin is, the more cost  
21 prohibitive those swaps would be. So to the extent that  
22 there was some activity in the swap market prior to 2019,  
23 those would be -- that would be used by those that provide  
24 truly high profit margin Class I products. That would be  
25 my opinion.

26 So from the existence -- to the extent that one  
27 did exist, but from the existence of a Class I swap market  
28 prior to 2019, we can infer only so much about the ability



1 of a wide number, or large a number, or a majority of  
2 Class I handlers to successfully manage their risk if we  
3 were to return to higher-of.

4 Would the grocers that have little or negative  
5 profit margins be able to use swaps to manage their input  
6 risks? No. Would HTST manufacturers who sell to  
7 institutional channels be able to use swaps? I highly  
8 doubt it. Would manufacturers -- I don't know what the  
9 profit margins are for Fairlife or some value-added  
10 products, but I would anticipate that if they had to  
11 expend a bigger part of their profit margin on OTCs, that  
12 their parent companies would think twice and thrice before  
13 they put any serious capital expenditures in the sector  
14 further.

15 Does that help?

16 Q. I believe so.

17 And now we know, under Dodd-Frank, those kind of  
18 swaps would be reported on the market and we would have  
19 visibility into the numbers; is that right?

20 A. To some extent we would. We would not have --  
21 there is a -- there is a difference between having  
22 complete opacity versus some visibility versus the  
23 detailed day-to-day reporting that we get from CME and  
24 weekly reporting that we get through the Commitment of  
25 Traders report published by CFTC.

26 The CME still provides minute-by-minute,  
27 second-by-second price discovery. It reacts very quickly  
28 to news. You could see, for example, in 2020 when the



1 federal administration was about to release some news  
2 about the Farmers to Families Food Box Program extension,  
3 etcetera, you could see a few hours before they would  
4 formally announce it, the news started leaking and the  
5 markets started reacting. So you don't get that sort of  
6 realtime price discovery with OTC markets ever.

7 Q. And even under Dodd-Frank, you are saying we still  
8 wouldn't have that visibility and price discovery?

9 A. Nothing that matches what we get from CME.

10 Q. Okay. So you would have some, just not as much as  
11 you would get from CME?

12 A. Yes, that's correct.

13 Q. And then CME would obviously still have some  
14 opportunities if they wanted to create their own Class I  
15 market now that there is a much larger amount of liquidity  
16 that would be available; is that right?

17 A. Yes, that is right. So if I can add to my answer.  
18 What CME typically does is they look at the size of the  
19 OTC market, and when the OTC -- or the swap market. And  
20 when the swap market rises to a level that they consider  
21 substantial, then they create a publicly-traded contract  
22 on the exchange. From the fact that they did not ever  
23 introduce a Class I contract, one can infer that they  
24 would -- that they have considered such an OTC market to  
25 be a niche market.

26 Q. Okay. And when we're talking about OTC, that's  
27 over-the-counter.

28 That's what it stands for?



1 A. Yes.

2 Q. And that's more of a customizable product, like a  
3 negotiated contract, essentially?

4 A. Yes.

5 Q. Instead of just a ready-made contract, like a  
6 Class III future contract?

7 A. That's correct.

8 Q. Okay. And the benefit of having the negotiated  
9 contract is that you could make it be whatever you want it  
10 to be with a buyer and a seller on either side?

11 A. It's sort of like building a custom house. You  
12 can make it to be anything you want it to be, but the more  
13 you customize, the higher the price tag.

14 Q. Okay. And so you can have a very basic product  
15 that would be the least expensive OTC product, or a very  
16 customized product that would be a very expensive one?

17 A. Yeah. That's fair to say.

18 Q. And the more kind of activity, the more there is  
19 an ability to have kind of a basic or a systemized  
20 contract that would be in the lower end of the cost model?

21 A. What you would also need is to have sufficient  
22 hedging interests on both sides. So one of the reasons  
23 why CME works very well is that you have dairy producers  
24 selling Class III futures, cheese buyers buying cheese  
25 futures, and then dry whey and butter. And then the  
26 arbitragers matchmaking those two markets through the  
27 formula that ties those four markets together.

28 So one of the -- one of my early testimonies in



1 this hearing on the delay of certain proposals is my  
2 rather large concern about the breakdown of that  
3 non-arbitrage relationship between the class markets --  
4 milk futures and the commodity futures.

5 In the context of OTC, in the context of offering  
6 a Class I contract, there's a big question of who would be  
7 on the other side of such an OTC contract. How would an  
8 OTC provider unpack, if you will, a Class I swap, and  
9 then, you know, move it to -- you know, offset that risk  
10 by taking some other position on CME or -- or with another  
11 swap with some other counterpart.

12 Q. Okay. And I want to go to page 2 of your 2019  
13 article, which is Exhibit 275, Attachment B, like boy, and  
14 there you have a bullet point at the top of the page  
15 there.

16 A. Ms. Hancock, could you please show me that page?  
17 I'm not sure the numbers are conveniently placed.

18 Q. Mine says -- I'm sorry, 3 of 12. Did I say 2?

19 A. The first sentence starts with "balance processor  
20 desire?"

21 Q. Yes.

22 A. Okay.

23 Q. And you said that there is, in that sentence, a  
24 desire -- or you want to balance a "processor desire for  
25 better price risk hedging with cooperative and dairy  
26 producer desire to maintain the integrity of the Federal  
27 Milk Marketing Orders."

28 I'm wondering if you could explain what you meant



1 by "the integrity of the Federal Milk Marketing Orders."  
2 And this is why it changed from average -- or from  
3 higher-of to average-of. That's the section we're in.

4 A. So first please understand it's been four years  
5 since this article. I don't know what I thought at the  
6 time. I can try to do my best reading of it now on the  
7 fly here.

8 But it -- in general, you know, the Federal Milk  
9 Marketing Orders would have integrity if there are some  
10 shared benefits of Class I sales among all producers in a  
11 certain geography, even if their milk did not directly go  
12 towards Class I processing. That's one of the deep  
13 principles of Federal Orders, that even if my milk didn't  
14 end up in a Kemp's bottle, if I'm in Minnesota, I'm going  
15 to benefit. I'm going to do better if Kemp's does better.  
16 So that's one of the, you know, pillars of integrity.

17 The other would be that the system is not -- to  
18 the extent it can be helped, is not designed in such way  
19 to encourage opportunistic -- frequent opportunistic  
20 pooling/depooling, because that does complicate producer  
21 risk management in a lot of circumstances.

22 And let's see what else would be there. One,  
23 there's a lot of talk about Make Allowances in the context  
24 of minimum prices. I interpret them differently. I  
25 believe that one thing that adds integrity of Federal  
26 Orders is that if the commodity value of milk is seen as a  
27 fair price to producers. So that necessarily won't be  
28 impacted by the Class I reform deal, but a broader



1 principal that market power of buyers of milk, or buyers  
2 of dairy products, should be curtailed through the  
3 regulation, which we know is a Federal Milk Marketing  
4 Orders.

5 Q. Okay. So were you referring to --

6 THE COURT: Could I interrupt just a moment? I'd  
7 like Dr. Bozic to look at the previous page. Could you  
8 just read out loud that introduction to those bullet  
9 points by reading this last heading and those two lines.

10 THE WITNESS: Sure.

11 "The industry desired to more effectively, and  
12 simply, manage Class I price risk using existing futures  
13 contracts. The stated industry objectives for the price  
14 change were as follows." And then there's a footnote 4.  
15 I wonder if that footnote was addressed maybe in the --  
16 yes. In the -- so I think -- I believe we were just maybe  
17 citing the National Milk/IDFA Dairy Risk Management  
18 Agreement. I see that a footnote 4 is a URL link.

19 BY MS. HANCOCK:

20 Q. Yeah, it's a URL link to IDFA's website?

21 A. Yes.

22 Q. Okay. And so --

23 THE COURT: So it's not your bullet point?

24 THE WITNESS: So maybe that's why I had a hard  
25 time recalling what I thought about it. I didn't think  
26 anything. I was just citing.

27 BY MS. HANCOCK:

28 Q. Well, and it's your bullet point to the extent





1 that it's your synopsis of why the move from higher-of to  
2 average-of; is that right?

3 A. Is that URL still active? Can I use my laptop?

4 THE COURT: He says "the stated industry  
5 objection."

6 MR. ROSENBAUM: Your Honor, I object. That is  
7 word for word -- that's the IDFA/National Milk listing of  
8 advantages. It has nothing -- he's quoting from our  
9 document.

10 MS. HANCOCK: That's what redirect is for, if you  
11 want to ask him that question.

12 THE COURT: No. No. You asked him, why were you.

13 MR. ROSENBAUM: He's quoting --

14 MS. HANCOCK: Well, it's his article, so --

15 MR. ROSENBAUM: He's quoting your client.

16 MS. HANCOCK: Okay. I mean, that's what -- if you  
17 need to clear up --

18 MR. ROSENBAUM: And my client.

19 MS. HANCOCK: If he needs to clear it up, Your  
20 Honor --

21 THE COURT: No, no.

22 MS. HANCOCK: -- I think that that's what redirect  
23 is for.

24 THE COURT: Well, we listened to him explain why  
25 he wrote that bullet point. We need to know that he  
26 didn't write that bullet point.

27 MS. HANCOCK: Well, I don't know that he did. I  
28 haven't seen that it's a direct quote from the other.



1 It's not in quotation marks. It's in his article.

2 THE COURT: Okay. We need a break.

3 THE WITNESS: Ms. Hancock, on the previous page  
4 there is a footnote 4 there. Did you not see that  
5 footnote 4?

6 MS. HANCOCK: I did. I --

7 THE COURT: Stop. Stop. Stop. Stop. We are  
8 going to take -- oh, my goodness. It's already 4:15.

9 We're going to take ten minutes. Please be back  
10 and ready to go at 4:25.

11 (Whereupon, a break was taken.)

12 THE COURT: Let's go back on record.

13 We're back on record at 4:30.

14 Ms. Hancock, I don't object to your getting the  
15 information from Dr. Bozic about these issues. I just  
16 want him to know that he's not the one that wrote them.

17 MS. HANCOCK: That's fair, Your Honor. I wasn't  
18 trying to mislead him, and I didn't -- there weren't  
19 quotations around it. I didn't realize that it was a  
20 direct quotation. I was honestly just trying to  
21 understand what it meant.

22 So it's fair to say that, to clarify, if it's not  
23 his words, then he can give me his interpretation of it  
24 based on including it in the article.

25 THE COURT: I agree.

26 THE WITNESS: If I can just clarify. I produced  
27 so many words over years that I can't immediately tell  
28 whether something are my words or not.



1           And we followed CME formatting guidelines. They  
2           required us to use footnotes instead of quotations, so we  
3           put the footnote 4 on the previous page and then listed  
4           this. So...

5           BY MS. HANCOCK:

6           Q.     Okay.

7           A.     Did not mean to plagiarize.

8           Q.     No, that's okay. It was probably just good for a  
9           reset. Good time for a break. Okay.

10           Let's look at the -- let's see, fifth bullet point  
11           down. It says, "Help processors to manage price risk for  
12           dairy beverage ingredients."

13           Did you understand that one of the reasons of the  
14           change from the higher-of to the average-of was to help  
15           processors engage in risk management tools?

16           A.     Yes.

17           Q.     And that would be for the processors utilizing  
18           risk management for themselves.

19           A.     What do you mean by "themselves"? As opposed to  
20           what?

21           Q.     As opposed to their customers.

22           A.     That could mean many things, but, yes, to manage  
23           input costs, yes.

24           Q.     Okay. And that could mean that the processors  
25           utilize risk management tools for the purchase of milk or  
26           for the sale of milk.

27           A.     Yes. They -- they would only be managing the sale  
28           of milk if the method at which they are pricing milk is



1 different, or if the correlation between what they have to  
2 pay for milk and what they charge for beverage products is  
3 low enough that they would have to realign that by  
4 offering a different pricing structure to their buyers.

5 Q. Okay. And then the next bullet point below that  
6 is to help the dairy producers effectively hedge their  
7 Class I.

8 Did you understand that another purpose of the  
9 change from higher-of to average-of was to allow producers  
10 to use risk management tools?

11 A. I understand that was listed on the agreement  
12 between National Milk and IDFA.

13 Q. Okay. And at the time, you note in this article,  
14 that in 2018, just 26 million pounds of the 44 billion  
15 pounds of packaged milk products were being hedged on the  
16 OTC market?

17 A. That is an information source from an OTC report  
18 published at that time by Rice Dairy, which is now  
19 Ever.Ag. And like Dr. Peterson, OTC, Rice Dairy at the  
20 time relied on publicly available swap repositories to  
21 compile their reports.

22 Q. Okay. So that's before maybe we have the same  
23 visibility into all of the trading that's actually being  
24 done on -- for risk management tools?

25 A. I -- I'm not sure I understand. And if I do  
26 understand, I'm not sure I agree. They have so -- the --  
27 let me -- again, let me find that statement.

28 Q. It's at the bottom of that same page.



1 A. Yep. I'm looking at a web version. It doesn't  
2 have pages.

3 In 2018. 2018 would have been after Dodd-Frank  
4 was put in effect, so any visibility that was available to  
5 Dr. Peterson for his presentation presented in 2015 would  
6 have been also the visibility available to Rice Dairy as  
7 they were preparing these reports that were cited here.

8 Q. Okay. And then if we move forward in your  
9 presentation -- or this article on page 6, it has a graph  
10 at the top of it.

11 A. The red and blue?

12 Q. Yeah.

13 A. Yes.

14 Q. The last paragraph on that page states that:  
15 "With the new formula in place, more dairy farmers are  
16 likely to better understand and hedge their milk revenue  
17 risk associated with Class I prices, especially in the  
18 Southeastern United States."

19 Do you see that?

20 THE COURT: I have a -- I see a red and blue  
21 graph, and I don't find that. I might not be on the right  
22 page.

23 THE WITNESS: It's three pages down in the printed  
24 copy.

25 MS. HANCOCK: Three paragraphs down.

26 THE WITNESS: Will farmers hedge their Class I  
27 milk exposure? Yes, I do see that now.

28 BY MS. HANCOCK:



1 Q. Okay. I'm just wondering if you could help me  
2 understand how you believe the change to average-of would  
3 help more dairy farmers understand and hedge their risk?

4 A. It would be most -- it would be more  
5 straightforward to explain it to dairy farmers in the  
6 Southwestern United States, that if all they do in their  
7 order is Class I, then in order to manage their risk, they  
8 would need to sell 50% of Class III futures, 50% Class IV  
9 futures, or they can use some of the government programs  
10 to achieve essentially the same.

11 Q. Okay. So are you saying that at this time that  
12 you wrote this -- is this language yours?

13 A. I believe so. Mine and Matt Gould. Remember,  
14 this is a co-authored article, and anything that we did  
15 wrong, Matt did it. Just kidding of course.

16 Q. And so you are saying that moving to the  
17 average-of would allow the dairy farmers to hedge their  
18 Class I milk sales by utilizing futures on Class III and  
19 Class IV?

20 A. And notice that the phrase is "better understand"  
21 not necessarily "better execute," but better understand.  
22 It's simpler to understand. We did not make a claim that  
23 the higher-of was in some way disadvantaging dairy  
24 farmers.

25 Q. Okay. But it does say, it would -- "with the new  
26 formula in place, more dairy farmers are likely to better  
27 understand and hedge."

28 Right? So you are saying that they would also be



1 able to actually utilize Class III --

2 A. Yes.

3 Q. -- and Class IV?

4 A. Yes. But there's -- the word "better" extends the  
5 word "understand." Doesn't extend the word "hedge."

6 Q. Okay. So it wouldn't allow dairy farmers to  
7 better hedge, but it would allow them to better  
8 understand?

9 A. And once they better understand, they will hedge.  
10 That was the idea.

11 Q. Okay. And then if we flip the page -- or for me  
12 it is a flip, maybe others it's a scroll. On the next  
13 page you provide some examples about how to choose the  
14 right futures contracts.

15 Do you see that header?

16 A. Yes. Choosing the right contract month, choosing  
17 the right futures contract.

18 Q. And so you say if you are under the average-of,  
19 now you would have to use -- you would have to buy half of  
20 the futures in Class III and half in Class IV to get to  
21 that average-of?

22 A. That's correct.

23 Q. And then in addition to that, you may have some  
24 other products that you will have to buy in order to  
25 complete that as well?

26 A. We were trying to be exhaustive in our analysis to  
27 the extent practical.

28 Q. Yeah.



1 But is that correct?

2 A. Yes.

3 Q. Okay. And --

4 A. I mean, if you have butterfat that is not 3.5,  
5 then I assume that's what we were referring to. Yes.  
6 There's a number of butter futures contracts. So, yes, on  
7 the following page.

8 Q. And one contract for Class III is 200,000 pounds  
9 of milk; is that right?

10 A. 200,000 pounds of milk, yes.

11 Q. And one contract for Class IV is 200,000 pounds of  
12 milk.

13 A. That's correct.

14 Q. And then you give two examples here, one of them  
15 is hedging skim milk price exposure with equal amounts of  
16 Class III and IV futures, and then hedging the remaining  
17 net milk fat exposure with an appropriate number of butter  
18 futures.

19 That's what you were just referencing, right?

20 A. Yes.

21 Q. And so you'd have to buy -- if you were going to  
22 hedge your Class I milk, you would have to buy at least  
23 one Class III futures contract, one Class IV futures  
24 contract, and then whatever the net amount of the butter  
25 futures was as well?

26 A. And you can see now why we had to build DRP.

27 Q. Is that a "yes"?

28 A. That was more than a yes. It -- I'm confirming





1 that you are reading the paper, the page correctly.

2 But I am following up on that that the execution  
3 here requires a certain size, which was one of the  
4 reasons, one of the impetus for creating a more extensive  
5 offering through the risk management agency, so that  
6 producers who do not have the required size to execute  
7 hedges presented here can also, you know, execute risk  
8 management strategies effectively.

9 And under Dairy Revenue Protection, there are no  
10 minimum sizes and you can customize butterfat.

11 Q. Okay. So I just want to talk about the examples  
12 here for a second that you are giving. And you gave an  
13 example here on how to hedge 10 million pounds of milk  
14 with 2% butterfat. That's the example under strategy  
15 number one.

16 A. Yes.

17 Q. And if we just fast forward to the conclusion,  
18 it's if you want to hedge under the average-of, 10 million  
19 pounds of milk, you would have to have 25 Class III  
20 contracts, 25 Class IV contracts, 4.825 million worth of  
21 total pounds of Class III skim milk hedged, and  
22 4.825 million total pounds of Class IV skim milk hedged;  
23 is that right?

24 A. You are reading from the table titled "Strategy1,"  
25 and that -- that is what the table states.

26 Q. And is that -- but is that the conclusion of if  
27 you were going to do a perfect hedge on that 10 million  
28 pounds of milk, these are the contracts you would have to



1 enter into in order to have that hedge?

2 A. I have no reason to doubt what I previously wrote.  
3 My -- I'm not currently fully in that paper, so, you  
4 know -- but, yes. But that -- you can see in there the  
5 hedge is not exactly perfect because you have a amount of  
6 skim milk remaining of 150,000 pounds.

7 Q. Okay. And then you have the butter contracts over  
8 there at 9?

9 A. Sure. Yes.

10 Q. And then that's not a perfect hedge either; is  
11 that right?

12 A. Yes. There's a little bit of milk fat remaining.

13 Q. Okay. And that's what Ms. Dorland had talked  
14 about, right? That even under average-of, when you are  
15 hedging, one, that the volumes have to be pretty sizeable  
16 in order to make it work, and there's not really still a  
17 perfect hedge when you have 2% and you have the butterfat  
18 left over.

19 Do you recall her talking about?

20 A. I do recall her talking about that.

21 Q. And so do you agree that this is an example that  
22 illustrates the same point she was making with respect to  
23 that 2% hedge?

24 A. I believe that they are quite similar.

25 Q. And when you were talking about, in this example,  
26 hedging 10 million pounds of milk, is that 10 million  
27 pounds in a year?

28 A. No, this would be 10 million pounds per month.



1 This is a contract month.

2 Q. Okay. So this hedge is talking about somebody who  
3 has the ability to engage in a buy or sell transaction of  
4 10 million pounds a month?

5 A. Which would be, if they work 20 days a month,  
6 which would be an intake of about half a million pounds a  
7 day.

8 Q. And so that's quite sizeable for a dairy producer;  
9 wouldn't you agree?

10 A. But I think that we were talking here about the  
11 dairy processor, not a producer -- or at least I  
12 understood that Ms. Dorland was talking about the  
13 processor end. Let's see. Yeah. Let me jiggle my  
14 memory. It's not clear to me that this is talking from a  
15 producer perspective.

16 Q. Would it also eliminate a lot of processors as  
17 well?

18 A. I'm not sure it would. I'm really not sure it  
19 would -- I'm not sure what is a typical size of -- what is  
20 a typical daily intake of a Class I plant. That's a  
21 question better answered by Mr. Brown or someone in the  
22 processing sector.

23 But 10 million pounds a month, which, you know,  
24 translates to, if you are working every day -- nobody --  
25 okay. If they work five days a week, if they have 20 work  
26 days a month, just for simplicity, that's half a million  
27 pounds of intake. Even some of the -- I'm not sure that  
28 that's really very large, to be honest.



1           But, again, that may be a question that's better  
2 asked of some of the other witnesses.

3           Q.    Okay.  Do you -- can you think of a plant that  
4 could handle 10 million pounds of milk a day?

5           A.    A day?

6           Q.    Yeah.  I mean, a month.  I'm sorry, a month.

7           A.    For example, Crystal that was here a few -- was it  
8 last week?  I would imagine them to be quite above that  
9 level.

10          Q.    Okay.  And I remember the gentleman from Crystal,  
11 he put his pictures of his plant on the screen.  They had  
12 that dome.  Was that the one?

13          A.    Yeah.

14          Q.    And didn't he say, look at that massive plant?

15          A.    Yeah.  But I was just trying to be on the safe  
16 side here.  I'm not suggesting that that is the minimum  
17 size required for 10 million.  It's my understanding that,  
18 you know -- I would, for example, just -- my guess is that  
19 even Turner Dairy from Pennsylvania would -- would, you  
20 know, absorb 10 million pounds a month.

21          Q.    And in your experience, is most of the products  
22 that are hedged today, ESL?

23          A.    So I will admit that, you know, when it comes to  
24 ESL, I'm here to learn more than to testify as an expert.  
25 I believe that the testimonies we have heard over the last  
26 two weeks on the ESL space were quite instrumental for the  
27 record and for the crafting a new policy on this topic.

28                Here's what I -- Ms. Hancock, here's what I



1 believe I've learned over the last two weeks. That  
2 hedging matters the most for ESL, for aseptic, and for  
3 HTST that is placed either in foodservice, schools, or  
4 other government channels, maybe military or prisons,  
5 etcetera. But that hedging does not matter for bottlers  
6 who are shipping to grocery stores.

7 Now, we can still discuss whether, you know,  
8 Ms. Brown, I believe, said this morning that even  
9 groceries may want to hedge their input, but that's now  
10 the third order of concern. At some point, the policy  
11 needs to have some tradeoffs, and we can't make everybody  
12 exactly, you know, exalted with the result.

13 Q. And did you hear Mr. Brown say that 75% of the  
14 Class I fluid milk goes into the grocery store or the  
15 retail outlet?

16 A. I think his number was 70, but I wouldn't trust my  
17 memory.

18 Q. Do you know what percentage of the Class I milk is  
19 ESL?

20 A. So the testimony that had that information well  
21 presented, I believe, was from Ms. O'Keefe, I believe it  
22 was last week, so I would refer you to her testimony. I  
23 think it was in double digits, but not very high.

24 Q. You don't know independently?

25 A. I don't. I'm trying to be helpful, that's a  
26 professional hazard. But -- but, yes, I don't have that  
27 information.

28 Q. Okay. All right.



1 MS. HANCOCK: That's all I have. Thank you so  
2 much for your time.

3 THE WITNESS: Thank you.

4 THE COURT: Thank you, Ms. Hancock.

5 Now, I'm cognizant that Exhibit 275 is the record  
6 copy and I want to give it back.

7 Do you have also a record copy, Dr. Bozic?

8 THE WITNESS: Yes, I do.

9 THE COURT: Would you hand those to the  
10 Agricultural Marketing Service?

11 Now, I'm going to return to whether we have an  
12 issue with respect to the information that Dr. Bozic found  
13 from 2015 in his laptop. I personally see no need for  
14 there to be a transformation of what's in his laptop to a  
15 piece of paper for this hearing. I think it was used for  
16 questioning the witness. I think that's typical  
17 impeachment. I think it was fine.

18 I have been in many situations where nobody gets a  
19 copy of the document that was used to impeach. It's  
20 between the witness and the lawyer asking the questions.  
21 And very often it's done without the rest of the document  
22 being presented to anyone else. So that's how I see that.

23 Does anyone want to request anything further with  
24 regard to what was in Dr. Bozic's laptop about a  
25 presentation made in 2015?

26 THE WITNESS: Your Honor, can I ask a question?

27 THE COURT: You may.

28 THE WITNESS: So I'm changing my hat here as



1 quasi-legal. There's a paralegal and then a quasi-legal.  
2 In this hearing we've introduced a new category of  
3 quasi-legals, that would be Lucas and I and Dr. Cryan.

4 So based on the cross-examination, is AMS allowed  
5 to use the information contained in Mr. Peterson's  
6 presentation from 2015 in consideration of their  
7 policymaking?

8 THE COURT: Now, Dr. Peterson is the one who gave  
9 the presentation on which you got the information about  
10 risk management?

11 THE WITNESS: Yes.

12 THE COURT: No.

13 THE WITNESS: Thank you.

14 THE COURT: It was meant to test your own  
15 testimony about how much risk management was happening  
16 back in those earlier days, and I think that -- that is  
17 still at issue in this hearing.

18 THE WITNESS: Sure.

19 THE COURT: But I think what that person wrote in  
20 that report that you were looking at is not in evidence  
21 and would not be used as evidence for the same reasons  
22 that Mr. Hill mentioned. Unless we can question the  
23 author, see if he's changed his ideas since then --

24 THE WITNESS: Sure.

25 THE COURT: -- we don't know what to do with that.

26 THE WITNESS: Well, the part that is -- if I can  
27 just follow up, Your Honor. The part that is in evidence,  
28 that would be somewhat similar to -- to Mr. Peterson's



1 presentation, is the paragraph that Ms. Hancock brought up  
2 in the article that I co-authored with Mr. Matt Gould,  
3 that's the Exhibit 275, where we do report that in 2018  
4 just 26 million pounds out of the 44 billion pounds of  
5 packaged milk produced were hedged using OTC Class I milk  
6 contracts.

7 So that part is in evidence, correct?

8 THE COURT: Well, and what source did you give for  
9 that information?

10 THE WITNESS: In my paper with Mr. Gould we cited  
11 the OTC report published by Rice Dairy.

12 THE COURT: Yes, that is in evidence.

13 THE WITNESS: Thank you very much.

14 THE COURT: All right. Let's see. Rather than  
15 have another person cross-examine this witness, I would  
16 like to talk about what we're doing the rest of today and  
17 what we think we're doing tomorrow.

18 So I would ask preferences. Does anyone have a  
19 witness that must testify tomorrow?

20 MS. HANCOCK: I don't know that I have one that  
21 has to testify, but we have Calvin Covington ready to go,  
22 and I believe Lucas Sjostrom.

23 MS. TAYLOR: Yes. So on my list is to finish the  
24 cross-examination of Dr. Bozic. Then Lucas Sjostrom still  
25 needs to go on the topic. And Dr. Cryan for American Farm  
26 Bureau Federation is here to testify. That would be first  
27 order of business tomorrow. At that point, I believe we  
28 will conclude this topic.





1 Oh, is Cal here to testify on this topic?

2 MS. HANCOCK: Yeah.

3 MS. TAYLOR: And then Mr. Covington as a rebuttal  
4 witness -- and Mr. Covington?

5 And then that apparently will conclude this topic.  
6 So we may or may not get that all done tomorrow.

7 DR. BOZIC: Did you mention Dr. Cryan?

8 MS. TAYLOR: Yes.

9 THE COURT: So while we're kind of thinking about  
10 all that, I would like Mr. Covington to describe his  
11 departure from this hearing last Friday and his arrival  
12 back today.

13 We're still on the record. It's just illustrative  
14 of disorderly -- did you drive?

15 Oh, first, state who you are.

16 MR. COVINGTON: Calvin Covington representing  
17 Southeast Milk.

18 THE COURT: Did you drive away from here?

19 MR. COVINGTON: No, ma'am. When I left here last  
20 week, I was given permission by all these people here that  
21 I would probably not be on the stand on Friday, so I flew  
22 back home to North Carolina.

23 THE COURT: Oh, you got to fly one way?

24 MR. COVINGTON: Yes, ma'am.

25 THE COURT: And then when you were told, "Oh,  
26 we're in business, come back," what happened?

27 MR. COVINGTON: Then -- then I got back in my  
28 truck on Sunday and drove up here yesterday.



1 THE COURT: From North Carolina?

2 MR. COVINGTON: Yes, ma'am.

3 THE COURT: Do you know how many miles or hours  
4 you covered?

5 MR. COVINGTON: Yes, ma'am. It's about 550 miles,  
6 and counting time I stopped was about nine hours.

7 THE COURT: You were here ready to go in case we  
8 needed you.

9 MR. COVINGTON: Yes, ma'am, because that's what I  
10 was told to do.

11 THE COURT: I don't know how many stories like  
12 this there are --

13 MS. TAYLOR: A lot.

14 THE COURT: -- but we have got a lot of them. And  
15 I really appreciate the efforts everyone has made. Thank  
16 you.

17 MR. COVINGTON: Yes, ma'am.

18 THE COURT: All right. Is there anything else  
19 that someone wants to put on record before we close for  
20 the day?

21 MS. TAYLOR: I have a few more things, Your Honor.

22 THE COURT: Oh, yes.

23 MS. TAYLOR: Okay. So as we proceed through the  
24 week, a change from this morning.

25 According to our Hearing Notice, we will offer  
26 virtual producer testimony every Friday we're in session,  
27 which means we will honor that this coming Friday, because  
28 that is what was in the Hearing Notice.



1           So tomorrow at noon, the poll will go up, just  
2 like -- the same procedure as last week. It will go up.  
3 There will be six producer slots for this Friday. And  
4 when those are filled, the poll will close.

5           And producer testimony, then, what I would  
6 advocate for on Friday is we go from 8:00 to noon to do  
7 testimony here, with people physically here in the room,  
8 break at noon to 1:00 for lunch, and then do the virtual  
9 testimony from 1:00 to 3:00, and we will still end at  
10 3 o'clock. And if there's extra time left over, you know,  
11 we can wrap up somebody as well, if the producers don't  
12 take the full two hours.

13           THE COURT: So the difference in the way we did it  
14 last time is we're hoping that all six can complete their  
15 testimony in two hours?

16           MS. TAYLOR: Correct.

17           THE COURT: I get it. Good.

18           MS. TAYLOR: Then next week, just for everyone's  
19 planning purposes, we will hold the hearing on Monday,  
20 Tuesday, and Wednesday, from 8:00 to 5:00 all three days.

21           At that point, we'll need to recess the hearing,  
22 and we will not convene again until the week of  
23 November 27th.

24           THE COURT: You let us have Thanksgiving first?

25           MS. TAYLOR: Yes, you will have Thanksgiving.  
26 That is the week after Thanksgiving.

27           And we will reconvene at 1 o'clock on that Monday  
28 to allow some travel to happen Monday morning, instead of



1 Thanksgiving weekend. And we will go that full week.

2 If we need a second -- we have this facility for  
3 that week. We do not have this facility after that. So  
4 we will look to see what we can find. I don't have a  
5 place yet, or God willing, we might be done by then.

6 THE COURT: So November 27th is a Monday, and  
7 we'll begin at 1:00 p.m.

8 MS. TAYLOR: We will begin at 1:00 p.m.

9 So that's kind of the schedule we have kind of  
10 laid out. But there's been -- there's a lot of logistics  
11 and a lot of necessary people -- everyone's necessary, but  
12 there's a few that are really necessary to be able to have  
13 this hearing, so to accommodate all of those people and to  
14 find a place and the holidays, it will be after  
15 Thanksgiving before we can reconvene.

16 THE COURT: During the season where we eat more  
17 cream cheese and less butter.

18 MS. TAYLOR: You have been paying attention. Yes.  
19 Yes.

20 So that's where we are. I wanted to give people  
21 as much notice as we could on that. I don't know if  
22 anyone else has any questions.

23 THE COURT: We didn't see if we needed to recall  
24 Mr. Brown. I don't know whether someone wants to ask him  
25 more questions and whether he will be available later this  
26 week if we didn't get to that tomorrow?

27 MR. BROWN: I would prefer to have some  
28 flexibility. I need to take care of some personal



1 business some time this week. So let's figure that out  
2 now.

3 THE COURT: Yeah, we're on the record.

4 So, Mr. Brown, your availability this week?

5 MR. BROWN: Well, who is left to ask questions?

6 THE COURT: If you would get closer to the mic.

7 MR. BROWN: I'm curious who is left to ask  
8 questions.

9 THE COURT: So you are thinking you have completed  
10 what you came to say?

11 MR. BROWN: I thought I had. The only person I  
12 thought might have questions was Farm Bureau because Roger  
13 was unable to make it this morning. So that would be the  
14 one I was expecting maybe to answer questions to.

15 THE COURT: All right.

16 Dr. Cryan, would you come forward for just a  
17 minute?

18 DR. CRYAN: I told Mike this earlier today, but I  
19 guess he wants it on the record that I'm not going to  
20 recall him. The questions that Marin asked on my behalf  
21 were all I needed, and I'm happy.

22 THE COURT: Great. Does everyone agree that  
23 Mr. Brown is released for this part of the hearing?

24 Everyone does. You are free to go.

25 MR. BROWN: I'll be back. Thank you.

26 THE COURT: Thank you so much.

27 Mr. Rosenbaum? Nothing further?

28 MR. ROSENBAUM: Nothing.



1 THE COURT: All right. Good. So tomorrow  
2 morning, 8 a.m., we will resume. And we now go off record  
3 at 5:00 p.m.

4 (Whereupon, the proceedings concluded.)

5

6

---o0o---

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28



1 STATE OF CALIFORNIA )  
 ) SS  
 2 COUNTY OF FRESNO )

3

4 I, MYRA A. PISH, Certified Shorthand Reporter, do  
 5 hereby certify that the foregoing pages comprise a full,  
 6 true and correct transcript of my shorthand notes, and a  
 7 full, true and correct statement of the proceedings held  
 8 at the time and place heretofore stated.

9

10 DATED: November 17, 2023

11 FRESNO, CALIFORNIA

12

13

14

15

16 MYRA A. PISH, RPR CSR  
 17 Certificate No. 11613

18

19

20

21

22

23

24

25

26

27

28



\$	6383:28 6384:7 6385:19,20	6441:3	10:20 6378:1
\$1.65	6451:2,6	\$3.09 6454:2	10:45 6393:24
\$0.01 6401:5	\$1.67 6452:28	\$3.68 6457:20	10:48 6395:7
\$0.03 6438:13	\$1.70 6382:7 6384:3	\$3.75 6389:19 6441:4	10:58 6395:8
\$0.06 6453:21	\$1.74 6349:3	\$3.95 6455:3	10:59 6395:12
\$0.10 6424:11 6438:22 6473:18	\$1.75 6455:4	\$30 6438:7	11 6426:23,28
\$0.12 6454:8	\$1.76 6384:11	\$4 6455:6 6458:18	11.40 6452:26 6453:13,14
\$0.15 6424:10	\$10.78 6455:2	\$5 6352:26 6413:28 6438:7 6447:14 6454:6	110 6380:10
\$0.20 6424:12 6452:20 6457:19	\$12 6493:28 6494:1	\$6.87 6458:12	116 6528:7
\$0.25 6424:9	\$12.14 6453:13 6454:24	\$60 6438:12	11:55 6430:3,5
\$0.27 6446:15 6457:27	\$12.53 6456:18	\$7.05 6454:17	11th 6306:1
\$0.30 6437:6,16,25	\$12.90 6454:27	\$8.14 6453:28 6458:8	12 6381:21 6520:11 6533:18
\$0.36 6458:12,15	\$13 6437:12	(	12% 6314:20 6381:13
\$0.375 6449:17	\$13.76 6454:28 6456:18	(	12-month 6345:19,22
\$0.48 6454:2	\$14 6437:12	(2022) 6413:5	12.8 6519:25,27
\$0.54 6451:19 6453:2	\$14.30 6437:13	(d)(4) 6487:13	120 6440:28 6446:22
\$0.58 6451:14	\$14.87 6451:28 6452:26	-	123 6449:20
\$0.59 6453:22	\$15 6447:11	-	125 6391:18
\$0.60 6382:6 6451:19 6453:3	\$15.02 6405:12	---o0o--- 6430:7 6557:6	125% 6440:10,27 6441:6,9 6448:24 6449:5,19
\$0.70 6347:27 6384:4,7 6385:20 6424:13	\$15.93 6405:8	0	126 6455:15,17
\$0.72 6450:28 6452:21	\$16.20 6451:28	0s 6313:10	13 6334:10 6383:13 6414:27 6416:14 6435:25 6443:24 6446:5 6469:13
\$0.73 6368:24	\$17 6451:23	1	13.07 6452:25 6453:12
\$0.74 6310:6,9 6347:15,25 6367:1,2,6 6368:24,27,28 6372:2 6374:5,8 6401:28 6445:20,28	\$18 6440:16	1 6301:26 6381:7,17,21,23 6406:5 6419:16 6420:1,5 6436:1 6440:4,5 6441:8 6446:4 6460:4,6 6468:17,19, 21,24 6554:27	13921 6379:6
\$0.75 6446:14 6451:23	\$19.77 6456:13,17	1-5 6396:6	14 6331:7 6443:28 6444:7 6445:15 6469:14
\$0.90 6383:27	\$2.05 6328:27	1.25 6436:6 6439:7,10	14.87 6451:17
\$0.91 6453:7	\$2.27 6330:7,8	1.60 6327:15 6328:19,27	140 6457:8
\$1 6456:27	\$2.30 6384:8 6385:14,17	10 6360:10 6476:9 6544:13, 18,27 6545:26,28 6546:4,23 6547:4,17,20	15 6360:10 6434:27 6444:6 6445:15 6452:22 6469:14 6494:7
\$1.00 6383:7 6384:1 6451:14 6452:11	\$2.39 6454:16	10% 6319:6 6516:7	15% 6319:6
\$1.15 6453:10	\$2.40 6441:4	10.67 6453:14	15.72 6458:23
\$1.37 6457:22	\$2.50 6383:5,26	10.78 6456:19	15.93 6405:5
\$1.38 6451:18 6452:28	\$2.61 6456:21	100 6482:7	150 6446:20 6449:1
\$1.42 6329:8	\$2.88 6454:5	100% 6329:23 6364:21	150,000 6545:6
\$1.47 6453:17,28	\$20 6392:5 6447:12	102 6449:20	15A 6417:12 6434:24 6435:4
\$1.48 6453:20 6455:21	\$20.54 6456:13	102,504 6404:16	15B 6417:12 6434:26 6435:4,5
\$1.52 6347:26	\$21 6440:17	10:19 6377:26	16 6377:15 6395:16 6398:11 6399:8,10 6406:28 6407:3, 12 6408:2 6416:12,15,17
\$1.60 6327:11 6328:16 6330:9,20 6364:28 6365:3	\$21.04 6454:24,25		
	\$21.61 6458:4		
	\$23.34 6458:23		
	\$24 6493:28		
	\$24.54 6454:25 6456:16		
	\$3 6322:27 6440:19,27		





6444:8 6445:2,5	6380:15 6381:8,10,16,20	<b>2025</b> 6406:3	6478:16 6492:26 6494:16
<b>16.25</b> 6451:16,23 6452:25	6382:4,13 6390:5 6400:24	<b>205</b> 6328:25	<b>291</b> 6435:7 6479:28 6480:2
<b>16.43</b> 6457:18 6458:3	6401:2,11 6404:28 6405:3	<b>21</b> 6328:6 6494:7	6483:10,18 6487:8 6502:13
<b>166</b> 6405:1	6413:13 6422:9	<b>22</b> 6330:18	6503:5 6504:27
<b>17</b> 6325:22 6377:15 6380:2	<b>2000s</b> 6404:25	<b>22-plus</b> 6381:3	<b>292</b> 6435:7
6398:11,12 6399:8 6409:13	<b>2002</b> 6404:15	<b>23</b> 6301:21 6302:1,13,28	<b>2:00</b> 6478:1
6414:22 6415:4,11 6416:13	<b>2006</b> 6422:4	6317:6 6360:27 6361:7	<b>2:05</b> 6461:9
6444:15,19 6445:2,11	<b>2007</b> 6422:4	6383:13	<b>2:06</b> 6461:13
<b>17,279</b> 6381:8	<b>2009</b> 6383:6,12,16,25	<b>24</b> 6345:15 6381:11 6472:10	<b>2:37</b> 6479:20
<b>17.5%</b> 6364:17	<b>2010</b> 6399:18 6451:3,4,6	<b>24-month</b> 6345:14,25	<hr/> <b>3</b> <hr/>
<b>18</b> 6316:16 6325:23 6335:26	6462:26	<b>244</b> 6397:11 6485:1 6486:12	<b>3</b> 6383:14 6436:8 6439:28
6398:12 6409:13 6414:28	<b>2010s</b> 6384:5	6487:2,8 6491:6	6440:1 6441:12 6494:25
6415:4 6416:13 6444:15,20	<b>2011</b> 6446:19 6509:1	<b>25</b> 6314:6 6367:24 6370:4	6533:18 6554:10
6445:11 6494:7,8	<b>2012</b> 6399:22	6449:11 6544:19,20	<b>3-1</b> 6451:10,11
<b>19</b> 6309:10,19 6311:8	<b>2013</b> 6383:6,16,20,25 6389:9	<b>25%</b> 6448:25 6476:23	<b>3.5</b> 6543:4
6335:28 6336:3,8 6363:20,	<b>2014</b> 6389:10 6405:16	<b>250</b> 6380:14 6449:11	<b>30</b> 6380:5 6419:8 6424:8
24 6364:14	6408:16	<b>255,352</b> 6404:9	6463:22 6466:26 6476:9
<b>19.77</b> 6457:18	<b>2015</b> 6336:1 6513:24 6514:7	<b>26</b> 6370:3 6539:14 6551:4	<b>30%</b> 6362:23 6381:18
<b>190</b> 6379:20 6389:15	6516:2 6517:1 6518:15	<b>260</b> 6459:1	6497:2,4
<b>1988</b> 6380:6	6521:16 6524:7 6525:19	<b>27</b> 6381:12	<b>318</b> 6457:7
<b>1992</b> 6380:8	6540:5 6549:13,25 6550:6	<b>275</b> 6301:7 6502:8 6515:16,	<b>31st</b> 6450:24
<b>1995</b> 6380:11	<b>2017</b> 6372:1 6374:11,12,21	21 6529:1 6533:13 6549:5	<b>32.6%</b> 6446:22
<b>1999</b> 6366:22 6380:12	6383:7 6389:10 6400:24	6551:3	<b>33</b> 6413:12,15 6450:13
<b>1:00</b> 6430:4 6431:3 6554:8,9	6401:3,11	<b>276</b> 6301:7,13,21 6302:2,13	6455:13
6555:7,8	<b>20171</b> 6379:6	6309:17 6311:6 6351:17	<b>341,437</b> 6404:20
<b>1:54</b> 6461:10	<b>2018</b> 6350:5 6372:1 6374:10	6363:21 6366:9 6370:6,7	<b>38</b> 6519:19 6520:12
<b>1s</b> 6313:10	6389:10 6400:5,11 6402:4,	<b>277</b> 6301:8,27 6302:3,7	<b>3:00</b> 6305:26 6306:13
<hr/> <b>2</b> <hr/>	6540:3 6551:3	6307:25	6554:9
<b>2</b> 6301:1,4 6413:7 6431:1	<b>2019</b> 6335:5 6336:1 6342:23,	<b>278</b> 6302:17	<b>3:10</b> 6501:1,2
6436:4 6439:4,5,19 6452:18	27 6354:24 6359:17 6400:21	<b>28,877</b> 6404:21	<b>3:20</b> 6501:2
6462:17 6473:9 6480:8	6401:17 6402:1 6413:13	<b>28.3%</b> 6364:18	<b>3:21</b> 6501:5
6533:12,18	6423:1 6439:3 6451:6	<b>286</b> 6302:20,23 6303:1,6,8	<hr/> <b>4</b> <hr/>
<b>2%</b> 6339:17 6544:14	6477:6 6510:23 6516:23	6312:3 6361:3,5 6363:15	<b>4</b> 6377:19 6386:14 6402:25
6545:17,23	6518:15 6529:22,28 6533:12	6393:27	6436:11 6443:21 6450:6
<b>2,000</b> 6438:8	<b>2020</b> 6315:2,6,17,21,25	<b>287</b> 6303:2,5,7,8,11,15,18	6454:6 6516:1,6 6535:14,18
<b>2.27</b> 6330:1,3	6322:26 6349:14 6358:2	6393:27	6537:4,5 6538:3
<b>2.30</b> 6385:21	6368:19 6406:23 6417:19	<b>288</b> 6378:2,4 6379:11	<b>4,708</b> 6404:18
<b>20</b> 6301:21 6302:1,2,13,28	6450:8,10,26 6451:15	6383:15 6386:14 6393:9,18,	<b>4.825</b> 6544:20,22
6312:1,11 6327:2 6337:2	6454:26 6460:5 6478:28	19,21	<b>40</b> 6376:6 6529:7
6345:12 6363:14,18,22	6479:3 6480:14 6485:17	<b>289</b> 6396:3,4 6431:10,21	<b>400,000</b> 6438:12
6364:12,28 6365:11,18	6494:18 6495:23 6510:24	6433:21 6462:16 6465:3	<b>400plus</b> 6516:5
6404:14 6476:9 6506:2	6530:28	6499:26	<b>416</b> 6457:7
6546:5,25	<b>2021</b> 6347:26 6401:25	<b>29</b> 6413:15	<b>42</b> 6448:28
<b>20%</b> 6319:7	6417:15,19,26 6450:24	<b>290</b> 6396:7,8 6431:10	
<b>200</b> 6379:20	6480:16 6510:25	6433:21 6435:10 6439:19	
<b>200,000</b> 6438:8 6543:8,10,11	<b>2022</b> 6349:4,15 6381:10,13,	6440:2 6443:22 6446:5	
<b>2000</b> 6374:10,12,17,21	18,21 6404:20 6405:16	6447:1,8 6466:19 6473:9	
	6408:17		



425 6379:21 6478:27		ability 6321:28 6343:4,8 6344:4 6345:19 6406:2 6463:7 6496:25 6497:10,12, 23,28 6498:7 6529:28 6532:19 6546:3	accurately 6314:17 6370:10
436 6450:5,6	<u>7</u>		achieve 6410:3 6425:15 6541:10
438 6494:19,28 6495:7	7 6332:9 6419:12 6487:12		achieving 6448:17 6482:8
44 6539:14 6551:4	7.24 6456:19		acknowledge 6414:23 6498:28
44% 6381:16	70 6373:24 6374:1 6385:21 6548:16		acquire 6380:5
440 6489:25	70% 6333:23 6455:15		acres 6379:21
45 6447:24 6519:18	72 6455:17 6457:8		Act 6349:24,25 6350:4,6 6402:20 6528:11
45-degree 6448:3,10	74 6368:21,27 6369:2		active 6516:22 6518:1 6522:8 6536:3
48 6381:21 6520:13	75% 6373:24 6374:1 6476:24 6548:13		activities 6436:6 6439:7 6464:28 6509:5
49 6301:22 6311:7 6446:21	76 6397:7 6413:5 6450:3,6 6478:23,27 6479:1 6480:8, 11 6489:22,25 6493:3 6494:20 6495:9		activity 6360:7 6481:16 6529:22 6532:18
49A 6301:27		absorb 6385:11 6391:7 6547:20	actual 6308:28 6327:25 6412:14 6413:26 6423:16 6440:17 6442:6 6446:20 6447:14 6449:14 6450:27 6465:25 6493:17 6494:26
4:15 6537:8		absorbed 6437:23	ad 6403:13
4:25 6537:10		academia 6503:10,23 6504:21 6505:26	add 6322:19 6408:26 6416:20 6428:15 6487:1 6494:19 6501:14,22 6508:28 6526:26 6531:17
4:30 6537:13	<u>8</u>	academic 6399:21 6400:15 6423:27 6505:16	added 6380:10 6452:9
		academics 6450:15	adding 6323:22 6364:21 6398:3
<u>5</u>		accent 6428:25	addition 6379:24 6481:2 6542:23
5 6410:26 6447:1,8,13 6448:8 6449:11 6494:27	8 6436:5 6439:7,10 6481:4 6557:2	accept 6489:18 6490:8	additional 6323:22 6376:18 6388:10 6426:26 6465:20 6482:23
5-9 6451:11	8,317 6381:9	acceptable 6336:6	address 6326:1 6337:7 6367:20 6379:4 6402:27 6418:4 6436:19
50 6380:7,10 6457:9	80 6336:14 6440:26,28 6441:6,9 6448:24 6449:5,19	accepted 6412:4 6436:4 6488:4 6499:28	addressed 6317:19 6535:15
50% 6381:10 6541:8	80% 6314:20 6440:10	access 6304:2,25 6424:11 6427:10	addresses 6370:9
50-some 6329:23	83% 6449:20	accessible 6522:6	addressing 6311:3 6314:9, 16 6317:6 6361:11,24 6367:14
50/50 6310:9 6321:18 6362:17	8:00 6554:6,20	accessing 6397:24	adds 6367:1 6420:20 6468:15 6534:25
508 6304:9	8:04 6301:6	accommodate 6371:8 6372:16 6555:13	adequate 6303:24
54.2% 6364:18	<u>9</u>	accompanied 6448:5	adequately 6322:1
550 6553:5		accomplish 6350:4	adhere 6433:15 6434:18
58.4% 6405:1	9 6481:5 6545:8	accomplished 6308:12	adjust 6482:10
591 6455:14	9,601 6404:11	account 6318:21 6331:17,26 6447:27,28 6471:7 6472:11, 12,13,18,20	adjusted 6331:26 6382:22
5:00 6306:20 6554:20 6557:3	90 6336:15	accountant 6346:28 6477:28	
	900.8(d) 6487:12	accountants 6336:10 6340:3	
<u>6</u>	90s 6404:25	accounted 6331:15 6420:7	
6 6351:17 6395:27 6419:12 6423:12 6462:16 6465:20 6492:26 6494:16 6540:9	93 6458:28	accounting 6336:6 6436:4,7 6439:5 6440:9,11 6448:15 6459:22 6460:14,17,24 6467:25	
60 6380:10 6381:20 6426:14, 18,21,26 6427:19,23 6428:5, 9 6429:13	9:24 6351:6	accurate 6466:28 6511:15 6512:12	
60% 6318:4 6376:6	9:35 6351:6		
60s 6349:4,6	9:39 6351:9		
67% 6329:10	<u>A</u>		
		a.m. 6557:2	
		abandon 6402:4 6409:20	
		abandoning 6421:6	
		abbreviation 6514:19	
		abilities 6450:18	



<p><b>adjuster</b> 6331:7 6356:15                  6362:15,17,20,26 6368:3,27                  6401:27 6402:20 6408:14                  6409:4,5 6419:1 6445:16,23</p> <p><b>adjusters</b> 6356:17</p> <p><b>adjustment</b> 6350:6 6356:7                  6409:8</p> <p><b>adjustments</b> 6318:24                  6341:14</p> <p><b>adjusts</b> 6341:11</p> <p><b>administer</b> 6510:3,15</p> <p><b>administering</b> 6507:15</p> <p><b>administration</b> 6389:17                  6453:18 6531:1</p> <p><b>administratively</b> 6305:4                  6393:27</p> <p><b>administrator</b> 6423:20                  6466:14</p> <p><b>ADMIS</b> 6471:8</p> <p><b>admissible</b> 6325:7 6524:8,                  18</p> <p><b>admission</b> 6393:8,18                  6397:11 6483:10,18</p> <p><b>admit</b> 6304:17 6305:10                  6422:3 6488:24 6526:23                  6547:23</p> <p><b>admitted</b> 6302:9 6303:4,5,6,                  7,19,27 6393:19,28 6394:2                  6397:6 6478:23 6483:28                  6485:7 6486:13,16,18                  6488:17 6489:14 6490:25                  6491:28 6492:5</p> <p><b>admittedly</b> 6311:17</p> <p><b>admitting</b> 6303:20,25                  6526:3</p> <p><b>adopt</b> 6322:4 6416:16</p> <p><b>adopted</b> 6372:1</p> <p><b>adopters</b> 6336:26</p> <p><b>Adopting</b> 6399:8</p> <p><b>advance</b> 6304:23 6356:1                  6427:9</p> <p><b>advanced</b> 6319:2,18,27                  6321:9 6322:4 6323:6,14                  6324:11 6337:26 6357:19                  6387:23,25 6388:1,5,7                  6401:23 6406:7,9,15                  6409:13,21,22 6410:2,5,6,8,                  20 6411:16,19 6413:2,3,10,                  17 6414:16,20 6415:1,20                  6418:21,23 6420:15,17,20                  6421:6,21 6422:2,9,13,17,24                  6436:26 6437:17 6441:27</p>	<p>6442:10,11,19 6443:25                  6444:3,10 6448:12,19,20,21                  6452:2,6 6453:5,20 6454:4,9                  6455:4,20 6456:21 6457:23                  6458:24 6469:8,12 6496:21                  6498:23 6499:1,28</p> <p><b>advantage</b> 6359:24 6411:10</p> <p><b>advantages</b> 6351:17 6536:8</p> <p><b>advice</b> 6343:11,15,23                  6344:17 6476:1 6511:12,19</p> <p><b>advisable</b> 6323:23</p> <p><b>advise</b> 6524:12</p> <p><b>advised</b> 6465:15</p> <p><b>advisor</b> 6478:3</p> <p><b>advisory</b> 6476:3 6512:28                  6513:2</p> <p><b>advocate</b> 6427:4 6554:6</p> <p><b>advocating</b> 6429:15</p> <p><b>affect</b> 6320:7 6380:23,24                  6481:12</p> <p><b>affected</b> 6384:6 6400:27                  6479:4 6528:15,16</p> <p><b>affects</b> 6320:5 6334:2,3</p> <p><b>affix</b> 6461:26</p> <p><b>afford</b> 6321:28 6432:22                  6529:19</p> <p><b>afoul</b> 6485:27</p> <p><b>afraid</b> 6462:10</p> <p><b>afternoon</b> 6325:4 6326:11                  6376:24 6405:28 6431:1                  6461:15,18,20</p> <p><b>Ag</b> 6350:6</p> <p><b>age</b> 6380:2 6463:20</p> <p><b>aged</b> 6485:16</p> <p><b>agency</b> 6405:25 6544:5</p> <p><b>agenda</b> 6515:5</p> <p><b>agent</b> 6497:14</p> <p><b>agents</b> 6507:1</p> <p><b>ages</b> 6419:15</p> <p><b>aggregate</b> 6317:22,27</p> <p><b>aggressive</b> 6342:19 6352:28</p> <p><b>agree</b> 6320:3,4 6346:10                  6371:6 6376:8 6387:7                  6394:23 6431:20 6463:8                  6475:12 6496:26 6499:21                  6509:16 6510:26 6525:10,12                  6537:25 6539:26 6545:21                  6546:9 6556:22</p>	<p><b>agreed</b> 6400:9</p> <p><b>agreeing</b> 6459:8</p> <p><b>agreement</b> 6339:15 6343:2                  6377:6 6400:8,11 6511:2                  6535:18 6539:11</p> <p><b>agreements</b> 6507:21</p> <p><b>agrees</b> 6402:27</p> <p><b>Agricultural</b> 6306:10                  6326:22 6376:19,21 6388:11                  6549:10</p> <p><b>Agriculture</b> 6402:20</p> <p><b>aha</b> 6456:28</p> <p><b>ahead</b> 6302:4 6330:23                  6353:12,24 6354:3,9                  6518:27 6520:18 6527:25</p> <p><b>air</b> 6454:22</p> <p><b>akin</b> 6437:16</p> <p><b>algebra</b> 6368:16</p> <p><b>aligning</b> 6467:12</p> <p><b>allotted</b> 6427:17,19</p> <p><b>Allowances</b> 6534:23</p> <p><b>allowed</b> 6353:21 6373:12                  6497:26 6550:4</p> <p><b>allusion</b> 6358:25</p> <p><b>almond</b> 6334:1 6356:12                  6357:4 6359:22</p> <p><b>almonds</b> 6356:22,26</p> <p><b>alter</b> 6431:12</p> <p><b>alternative</b> 6418:25</p> <p><b>alternatives</b> 6308:4</p> <p><b>AMAA</b> 6371:23 6372:13                  6373:2,9,16</p> <p><b>amazing</b> 6345:11 6368:21</p> <p><b>amend</b> 6372:15</p> <p><b>amended</b> 6372:14,15</p> <p><b>amendment</b> 6372:12,21</p> <p><b>American</b> 6551:25</p> <p><b>AMMA</b> 6373:8</p> <p><b>amount</b> 6313:28 6315:24                  6324:19 6340:16 6392:7                  6420:1 6429:21 6431:13                  6476:16 6482:3 6483:1                  6516:10 6518:12 6531:15                  6543:24 6545:5</p> <p><b>amounts</b> 6354:19 6543:15</p> <p><b>AMS</b> 6307:15 6350:28</p>	<p>6392:9 6405:22 6411:12,14                  6412:26 6442:24 6550:4</p> <p><b>AMS's</b> 6426:19</p> <p><b>analysis</b> 6309:15 6311:14,                  18 6327:5 6334:6 6337:10                  6348:4,20 6364:27 6365:8                  6367:12 6413:14 6436:14,15                  6445:3,6,9 6496:8,18 6500:3                  6514:19 6527:2,5 6542:26</p> <p><b>analyze</b> 6325:21 6419:28</p> <p><b>analyzed</b> 6375:12 6420:1                  6445:12 6495:3</p> <p><b>Andy</b> 6456:2 6479:25</p> <p><b>announce</b> 6531:4</p> <p><b>announced</b> 6413:10,16                  6414:13 6444:10 6494:17,                  18,26</p> <p><b>announcement</b> 6342:4                  6453:23</p> <p><b>announces</b> 6453:18</p> <p><b>annual</b> 6404:15,20 6409:5</p> <p><b>annually</b> 6389:19 6408:14                  6516:6</p> <p><b>anomalous</b> 6315:7,11</p> <p><b>anomaly</b> 6316:4</p> <p><b>anonymous</b> 6450:20</p> <p><b>answering</b> 6466:17</p> <p><b>answers</b> 6420:22,24                  6436:17 6480:20</p> <p><b>anti-competitive</b> 6410:7                  6412:22</p> <p><b>anticipate</b> 6306:22 6401:19                  6490:10 6496:19,20 6530:10</p> <p><b>anticipating</b> 6335:6,8</p> <p><b>anticipation</b> 6305:28</p> <p><b>antiquated</b> 6410:6</p> <p><b>anymore</b> 6352:26 6432:27                  6481:19 6527:16</p> <p><b>anytime</b> 6357:16 6369:19</p> <p><b>apologize</b> 6324:9 6373:9                  6445:4 6453:3 6456:14                  6469:24 6500:18</p> <p><b>apparently</b> 6552:5</p> <p><b>appeared</b> 6302:2 6475:9</p> <p><b>appears</b> 6302:6 6331:19</p> <p><b>Appendix</b> 6446:4</p> <p><b>appendixes</b> 6427:1</p>
--	--	--	---



<b>apples</b> 6362:18	<b>assertion</b> 6436:20 6439:4,5 6441:12 6449:22,24	<b>August</b> 6331:8,10 6404:9 6450:8 6456:12,17,18,19 6457:5,10,12,18	<b>axis</b> 6447:8,14,16
<b>applied</b> 6367:15 6375:13 6485:26	<b>assertions</b> 6435:24,27	<b>authenticate</b> 6487:5	<b>B</b>
<b>apply</b> 6367:21 6485:26	<b>assertive</b> 6412:12	<b>authenticated</b> 6487:8 6492:19	<b>B-O-Z-I-C</b> 6396:16
<b>applying</b> 6492:9	<b>assess</b> 6440:22 6446:1	<b>authenticating</b> 6488:1	<b>baby</b> 6402:28
<b>approach</b> 6301:16 6358:10 6380:20 6414:26 6422:28 6436:3 6438:4 6510:27 6514:2,5	<b>assessing</b> 6361:20	<b>authentication</b> 6490:27	<b>back</b> 6301:3,4 6307:12 6315:10 6325:13 6339:25 6340:8 6342:27 6351:5,8,9 6358:3,12,14 6362:1 6364:27 6366:21 6375:3 6376:27 6377:28 6378:1 6389:11,13 6390:21 6392:21 6394:7,27 6395:5,7,11,12 6397:13 6401:17 6402:5 6407:5 6408:12,28 6414:8 6422:15,21 6427:16 6430:4 6431:2,3 6433:13 6434:22, 26 6437:4 6451:3,4 6455:9 6459:23 6461:9,12,13 6465:20 6473:9 6479:18,20 6485:23 6492:11 6495:27 6499:24 6501:1,4,5 6506:1,6 6514:10 6515:17 6516:12 6521:16 6524:20 6525:19 6537:9,12,13 6549:6 6550:16 6552:12,22,26,27 6556:25
<b>approached</b> 6417:18	<b>assigned</b> 6313:10	<b>authenticity</b> 6487:18	<b>background</b> 6484:2
<b>approved</b> 6506:22	<b>assist</b> 6334:26	<b>author</b> 6527:25 6550:23	<b>backstory</b> 6379:27
<b>approximately</b> 6301:5 6379:21	<b>assistance</b> 6527:19	<b>authority</b> 6412:23	<b>backward</b> 6406:5
<b>April</b> 6315:28 6331:20 6417:15 6452:24,25,28 6453:12,14	<b>associate</b> 6504:8	<b>authorized</b> 6507:2	<b>backward-looking</b> 6405:23
<b>apt</b> 6327:13 6342:5,7	<b>Associates</b> 6410:24	<b>authors</b> 6485:15	<b>bad</b> 6314:3 6380:23 6392:20 6465:14
<b>arbitrage</b> 6415:18,22 6442:26	<b>association</b> 6301:11 6344:1 6351:14 6379:24 6400:5 6418:11,13 6503:9,13,15 6504:24,27 6505:1,3,5,6	<b>automate</b> 6513:14	<b>bag</b> 6383:10
<b>arbitrators</b> 6442:28 6532:26	<b>associations</b> 6428:17	<b>availability</b> 6463:20 6464:2 6556:4	<b>bags</b> 6512:16
<b>area</b> 6368:24 6380:16 6381:23,28 6383:2 6384:11, 26 6385:7 6390:6 6391:17, 18 6463:14 6513:7	<b>assume</b> 6321:14 6334:25 6437:10 6441:2 6496:12 6518:19 6543:5	<b>avenues</b> 6399:27	<b>balance</b> 6371:7 6416:17 6533:19,24
<b>areas</b> 6383:1 6422:2	<b>assumed</b> 6364:28 6452:18	<b>average</b> 6308:6 6310:13 6312:12,14 6314:10,19 6316:6 6319:27 6320:17 6322:5 6328:15,19,26,28 6329:11,12,14,18,26 6330:3, 8,10 6331:2 6335:25 6345:14,25 6349:10,13 6364:13 6367:4,6 6368:6,21, 26 6369:1 6374:17 6381:8,9 6386:17 6391:17 6401:3,28 6405:10,16 6408:15 6411:18,24 6442:14,15,16 6445:23 6451:5 6477:11 6496:5 6520:20 6527:10 6528:2,6 6534:2	<b>balancing</b> 6403:27 6409:16
<b>argue</b> 6314:28 6317:9 6329:15	<b>assuming</b> 6437:4	<b>average-of</b> 6344:19 6351:20 6354:23 6359:3 6367:1 6371:13 6372:2 6375:14 6376:1,2 6402:22 6405:3 6418:28 6419:3 6422:14,15 6423:4 6436:1,9,11,21 6438:4,9,22 6441:14 6444:1 6445:19,27 6446:3,15,17 6448:7,9,14,22,25 6449:1, 19,25 6470:12 6473:12,16, 18 6475:6 6496:16 6534:3 6536:2 6538:14 6539:9 6541:2,17 6542:18,21 6544:18 6545:14	<b>bank</b> 6472:7,25,26
<b>arbitrators</b> 6442:28 6532:26	<b>assump-</b> 6364:27	<b>aware</b> 6360:16,18,25 6372:18 6480:18 6520:26	<b>bar</b> 6494:5
<b>area</b> 6368:24 6380:16 6381:23,28 6383:2 6384:11, 26 6385:7 6390:6 6391:17, 18 6463:14 6513:7	<b>assumption</b> 6314:18 6326:5 6346:11 6443:8,11	<b>awareness</b> 6525:19	<b>barely</b> 6454:27 6456:7 6457:19,28 6458:24
<b>areas</b> 6383:1 6422:2	<b>assumptions</b> 6446:7		<b>barn</b> 6380:7,13
<b>argue</b> 6314:28 6317:9 6329:15	<b>assurance</b> 6347:24		<b>barrel</b> 6391:7
<b>argues</b> 6323:18 6366:10	<b>astounds</b> 6521:14		<b>base</b> 6308:24 6312:13 6322:28 6328:27 6341:17 6363:16 6365:22 6374:23,26 6392:7 6400:6 6406:18 6407:9 6408:6 6415:22 6435:26 6436:25 6441:18,25 6442:20,25,27 6443:2,5,9 6446:12,26 6447:9 6448:4
<b>argument</b> 6433:14 6501:23 6502:1	<b>asymmetric</b> 6401:16		
<b>arguments</b> 6436:14	<b>attached</b> 6374:15 6382:19 6515:21 6529:1		
<b>arithmetic</b> 6445:8	<b>Attachment</b> 6533:13		
<b>arm's</b> 6340:26	<b>attempt</b> 6334:13		
<b>arrangement</b> 6346:26 6360:5 6400:13	<b>attempted</b> 6518:16		
<b>arrangements</b> 6508:12,25	<b>attempts</b> 6336:28		
<b>arrival</b> 6552:11	<b>attend</b> 6513:24		
<b>arrives</b> 6325:11	<b>attended</b> 6517:16 6520:25 6525:24		
<b>article</b> 6480:25 6494:20,28 6504:26 6515:22,25 6529:2 6533:13 6534:5 6536:14 6537:1,24 6539:13 6540:9 6541:14 6551:2	<b>attention</b> 6488:10 6555:18		
<b>artificial</b> 6429:24,27	<b>attorney</b> 6350:7 6521:25		
<b>artificially</b> 6460:25	<b>attractive</b> 6335:3 6344:22		
<b>aseptic</b> 6320:6 6548:2	<b>audience</b> 6522:18		
<b>aspect</b> 6421:27	<b>audited</b> 6466:13		
	<b>auditor</b> 6477:28 6478:4		
	<b>augments</b> 6398:18		



6449:13,16 6468:6 6470:10 6484:24	<b>believes</b> 6398:24 6439:9	<b>blue</b> 6386:20 6540:11,20	<b>break</b> 6351:3,7 6376:27 6393:24 6394:7 6395:5,10 6429:18 6430:3,6 6431:25 6459:14,21 6461:2,11 6500:27 6501:3 6537:2,11 6538:9 6554:8
<b>base/excess</b> 6318:12 6481:6,8,23 6482:23	<b>belong</b> 6409:23 6504:3 6513:23	<b>board</b> 6379:26 6382:20 6386:20 6388:22 6392:5	<b>breakdown</b> 6533:2
<b>based</b> 6314:25,26 6329:19 6335:24 6345:3 6356:15 6364:12 6374:9 6406:4,22, 25,26 6411:18,25 6429:2 6437:25 6440:16 6441:26 6442:1,10,15 6451:10 6477:1 6493:15,17 6498:15 6499:4 6527:13 6537:24 6550:4	<b>bench</b> 6428:18	<b>Bob</b> 6504:1	<b>brevity</b> 6429:4
<b>baseline</b> 6451:2 6494:22	<b>benchmark</b> 6412:11	<b>book</b> 6450:14	<b>Brian</b> 6433:2
<b>basement</b> 6454:11	<b>benefit</b> 6369:15,17,21,26 6500:11 6532:8 6534:15	<b>bookkeeping</b> 6339:13	<b>briefly</b> 6399:12 6447:2 6498:23 6503:17
<b>basic</b> 6440:5 6468:8 6470:16 6523:17 6532:14,19	<b>benefits</b> 6350:16 6408:18 6534:10	<b>books</b> 6474:1	<b>briefs</b> 6501:23
<b>basically</b> 6319:22 6329:9,10 6332:23 6333:25 6336:7 6337:24 6339:21 6340:22,26 6341:26 6343:17 6358:6 6368:16 6390:15 6426:16 6481:25	<b>benevolent</b> 6475:14	<b>booming</b> 6405:17	<b>brilliant</b> 6324:1
<b>basis</b> 6322:13 6324:25 6335:2 6337:1 6341:8 6346:14 6352:3,19 6358:18 6359:18 6389:20 6399:23 6401:12 6406:15 6419:10 6445:3,5 6446:11,13,16 6447:23 6465:4 6466:20,22, 24 6467:1,4,7,9,11,16 6468:1,4,13,14,22,26,27 6469:2 6470:14 6497:3,18 6499:18	<b>Berks</b> 6379:19 6388:23	<b>born</b> 6422:3	<b>bring</b> 6425:28 6456:9
<b>bath</b> 6403:1	<b>betrayed</b> 6414:10	<b>bottle</b> 6341:12 6534:14	<b>brings</b> 6451:18
<b>bear</b> 6474:13,18 6507:1	<b>bets</b> 6464:11	<b>bottlers</b> 6410:7 6548:5	<b>broad</b> 6314:18 6343:20 6527:5
<b>bears</b> 6398:23 6473:23	<b>beverage</b> 6351:21 6355:8 6356:19 6410:19 6538:12 6539:2	<b>bottling</b> 6411:5	<b>broaden</b> 6340:16
<b>beat</b> 6412:11	<b>beverages</b> 6355:12,14 6356:8 6408:25 6463:9	<b>bottom</b> 6311:8 6331:1 6365:24 6386:14,16 6391:7 6410:25 6439:19 6447:21 6448:8 6481:4 6539:28	<b>broadened</b> 6315:23
<b>beer</b> 6418:7	<b>bias</b> 6442:23 6443:27 6444:4,11,22	<b>bought</b> 6447:19	<b>broader</b> 6315:1,6 6344:28 6354:28 6497:25 6534:28
<b>began</b> 6380:25 6431:11	<b>bibliography</b> 6489:23	<b>bound</b> 6484:7	<b>broke</b> 6305:15
<b>begin</b> 6555:7,8	<b>bid-ask</b> 6442:18 6445:12 6474:20	<b>box</b> 6315:23 6316:2 6401:22 6403:17 6453:18,25 6457:17 6458:2 6482:16 6495:23 6531:2	<b>broken</b> 6423:1
<b>beginning</b> 6304:13 6426:5 6459:24 6484:14 6499:25	<b>big</b> 6313:26 6333:12 6335:11 6336:2,16 6345:10 6353:2,25 6355:18 6359:16 6360:19,23 6361:25 6362:12 6389:9 6455:22 6456:4,10 6457:12,23 6533:6	<b>boxes</b> 6302:6 6312:10	<b>broker</b> 6392:2 6471:9,14,22 6472:3,19,25 6478:3
<b>begins</b> 6309:11 6461:14	<b>bigger</b> 6319:8,10 6335:7 6359:17 6363:8 6510:20 6530:11	<b>boy</b> 6533:13	<b>brokerage</b> 6339:23 6438:6
<b>behalf</b> 6325:6 6343:1 6412:18 6513:22 6556:20	<b>biggest</b> 6321:26 6338:12,13 6354:21 6495:1 6514:8	<b>Boze</b> 6407:4,15	<b>brokers</b> 6340:23 6343:16 6345:11 6437:2
<b>behavior</b> 6414:8 6481:13,22	<b>bill</b> 6350:6 6390:28 6402:21	<b>Bozic</b> 6324:28 6325:15,19 6326:9 6338:9 6394:14 6395:22 6396:13,15,19,21, 22 6397:13,18 6398:9,28 6405:6 6407:14 6413:5 6417:4,14 6418:8 6420:15 6422:1 6426:16 6429:8,25 6431:10 6434:22,28 6435:15,20 6447:4 6457:2 6459:19 6461:18 6480:5 6484:13 6487:3 6488:1 6500:17 6501:10 6502:22 6506:9,13,14 6507:11,14 6508:26 6509:26 6521:22 6522:14 6523:19,22,23 6524:6,11,28 6525:12 6535:7 6537:15 6549:7,12 6551:24 6552:7	<b>brought</b> 6313:25 6332:17 6342:20 6409:19 6490:26 6491:11 6551:1
<b>belabor</b> 6399:14 6432:27 6458:20 6485:21 6488:28	<b>billion</b> 6381:11,12 6476:9 6516:1,5,6 6529:7 6539:14 6551:4	<b>Bozich</b> 6502:22	<b>Brown</b> 6305:14,18 6307:1,4, 11,24 6324:6 6325:4 6326:20,24 6351:15 6371:4 6373:21 6376:19,23 6399:2 6412:17 6432:15 6433:4 6443:7 6515:21,24 6546:21 6548:8,13 6555:24,27 6556:4,5,7,11,23,25
<b>belaboring</b> 6424:27	<b>billions</b> 6506:5	<b>brand</b> 6456:15	<b>Brown's</b> 6370:28 6496:8 6529:1
<b>believed</b> 6529:6,10	<b>bit</b> 6334:17 6357:12 6358:22 6367:17 6371:26,28 6389:14 6391:13 6410:5 6412:10 6419:4 6424:25 6426:3 6439:12 6462:24 6468:18 6469:28 6480:13 6503:3 6508:5,20 6545:12	<b>brand</b> 6323:1 6380:13	<b>BST</b> 6315:13
<b>believer</b> 6333:12	<b>black</b> 6398:1 6514:1,5	<b>brands</b> 6321:18,22 6346:24 6354:27,28 6355:1,4	<b>bucket</b> 6492:28 6493:22 6510:4,6 6512:8,9



<b>buffer</b> 6349:7		<b>carry</b> 6355:22 6357:8 6506:4	<b>change</b> 6303:27 6304:2 6312:7 6322:17 6326:6 6331:16 6332:12,18,19,26 6335:8 6341:6 6342:1,9,27 6344:21 6345:12 6347:9 6349:1,18 6350:6 6372:23, 24 6373:11,13,15 6383:19 6384:10,13,14 6400:26 6401:27 6421:13,18 6423:6, 11 6440:18,19,28 6441:2 6443:5 6449:6,16 6451:12 6455:14,15 6458:28 6459:1 6478:14 6482:8 6497:19,24 6500:10 6507:5 6516:23 6520:11 6535:14 6538:14 6539:9 6541:2 6553:24
<b>build</b> 6355:1,15 6357:10 6403:23,26 6411:9 6412:5 6449:8 6509:23 6543:26	<b>C</b>	<b>case</b> 6309:7 6311:21 6320:17 6321:24 6335:3 6340:6 6341:1,10 6362:16 6369:5 6376:24 6414:17 6416:12 6422:25 6427:17 6433:22 6438:20 6439:23,27 6441:2 6448:28 6472:14 6474:4 6486:5 6492:10 6494:16 6497:11 6508:16 6553:7	<b>changed</b> 6303:21 6304:7 6312:6 6316:16 6317:3 6345:2 6372:19 6382:2,26 6398:2 6401:26 6441:10 6449:13 6451:8 6465:16 6534:2 6550:23
<b>building</b> 6532:11	<b>Caitlyn</b> 6379:17	<b>cases</b> 6302:5 6339:14 6424:4 6448:4 6501:24	<b>changing</b> 6302:5 6419:4 6421:5 6476:1 6549:28
<b>built</b> 6349:19 6356:17 6369:10 6380:13 6392:3 6446:3	<b>Cal</b> 6552:1	<b>cash</b> 6440:12,13 6445:2 6460:20	<b>channel</b> 6402:11
<b>bulk</b> 6356:17	<b>calculate</b> 6308:2 6369:4 6424:1	<b>catch</b> 6310:11	<b>channels</b> 6530:7 6548:4
<b>bullet</b> 6351:20 6533:14 6535:8,23,28 6536:25,26 6538:10 6539:5	<b>calculated</b> 6308:27 6331:7 6374:9 6386:19 6442:11	<b>categories</b> 6395:14 6464:26 6483:3 6518:18	<b>characterization</b> 6518:4,8
<b>bump</b> 6355:18	<b>calculation</b> 6375:1	<b>categorizations</b> 6527:3	<b>charge</b> 6402:14 6427:24 6473:23 6507:23 6517:24 6539:2
<b>bunch</b> 6360:3	<b>calendar</b> 6446:22	<b>category</b> 6454:6 6464:1,8,12 6477:14 6550:2	<b>charged</b> 6523:22
<b>bundled</b> 6493:19	<b>California</b> 6394:27 6400:17 6510:23	<b>caused</b> 6423:6 6436:11 6449:25 6459:4	<b>charging</b> 6510:19 6513:4
<b>Bureau</b> 6444:15 6551:26 6556:12	<b>California's</b> 6319:8	<b>causing</b> 6341:27 6423:7 6482:23	<b>chart</b> 6309:22 6335:19,21, 23,25 6382:19 6385:27 6386:14,15,17 6389:9 6423:12 6452:11 6494:6,25
<b>Bureau's</b> 6414:28	<b>call</b> 6340:20,21 6353:1 6354:17 6392:2 6427:25 6428:12 6441:22 6442:18 6459:28 6472:1,19,26,28 6480:22 6504:28 6525:12	<b>caution</b> 6327:15	<b>charts</b> 6487:15
<b>burning</b> 6492:12	<b>called</b> 6301:26 6332:26 6410:23 6440:21 6451:1 6452:14 6472:11 6481:5 6503:11 6506:11 6509:26 6515:25 6518:8	<b>caveat</b> 6490:9	<b>cheap</b> 6408:22 6464:22
<b>business</b> 6323:11 6333:13 6338:28 6339:22 6344:9 6379:4 6380:20 6387:24 6389:17,18 6390:19 6418:12 6440:8 6467:15 6475:17,24 6476:25 6478:6 6500:1 6505:6 6506:26 6509:17 6551:27 6552:26 6556:1	<b>calling</b> 6407:1 6443:13 6469:5 6518:9	<b>cells</b> 6313:5	<b>cheaper</b> 6403:23 6438:23 6474:15
<b>butter</b> 6315:3 6340:7 6349:16 6353:20 6354:4,10 6411:22 6437:11 6450:16 6532:25 6543:6,17,24 6545:7 6555:17	<b>calls</b> 6412:18 6437:19 6438:20 6454:18 6475:25	<b>Center</b> 6379:6	<b>check</b> 6316:11 6390:13,17 6394:1 6406:13 6413:26 6414:18 6423:15,26 6424:7, 9,13,17 6454:21 6465:24 6477:22 6483:27
<b>butterfat</b> 6420:7,10 6543:4 6544:10,14 6545:17	<b>Calvin</b> 6551:21 6552:16	<b>Central</b> 6314:5,13 6450:8	<b>checks</b> 6423:18,25 6424:5, 28 6479:5,8
<b>buy</b> 6335:1 6336:21 6339:17 6352:17 6354:9,17,20 6403:9 6406:3 6412:9 6438:19 6443:3 6464:24 6474:7,23 6529:19 6542:19, 24 6543:21,22 6546:3	<b>candidate</b> 6465:15	<b>centralized</b> 6314:3	<b>cheddar</b> 6316:3
<b>buy-side</b> 6340:9	<b>capable</b> 6380:14	<b>cents</b> 6405:7	<b>cheese</b> 6315:4,23,24,28 6316:1,2 6318:3 6322:27 6332:28 6340:7 6349:14 6351:26,27 6352:10,18,20 6353:8,19 6354:16,20 6357:9 6369:14 6403:16,23, 24,27 6406:22 6414:1 6453:24 6454:22 6482:16,19
<b>buyer</b> 6321:2 6410:9 6411:8 6412:5 6413:26 6423:16 6437:19 6465:25 6473:3 6482:12 6498:6,12,17,18 6499:6 6532:10	<b>capacity</b> 6483:2	<b>CEO</b> 6460:26	
<b>buyers</b> 6411:4 6412:13 6464:15 6500:16 6532:24 6535:1 6539:4	<b>capita</b> 6399:15 6462:20,22 6463:1	<b>certainty</b> 6312:28 6405:21 6410:16 6467:17	
<b>buying</b> 6412:6,8 6437:16 6453:24 6471:4 6473:6 6474:23 6532:24	<b>capital</b> 6410:14 6530:13	<b>certification</b> 6315:14	
<b>buys</b> 6320:26 6346:25	<b>capitalist</b> 6504:9	<b>cesspool</b> 6424:17	
	<b>capitalized</b> 6343:5	<b>CFO</b> 6460:26	
	<b>capture</b> 6337:4 6379:14 6481:28	<b>CFR</b> 6487:12 6488:7	
	<b>care</b> 6334:25 6339:25 6340:8 6380:19 6459:22 6475:20 6489:10 6555:28	<b>CFTC</b> 6530:25	
	<b>careful</b> 6343:10,11 6495:21 6520:6 6526:13	<b>chain</b> 6353:26 6513:3	
	<b>Cargill</b> 6339:24 6343:17 6472:2	<b>chains</b> 6334:13	
	<b>Carolina</b> 6552:22 6553:1	<b>chair</b> 6400:18 6475:28	
	<b>carries</b> 6363:18	<b>challenge</b> 6336:4 6339:14	
		<b>chance</b> 6340:13 6417:1 6419:2 6491:24	



6483:1,4,5 6498:6,20 6532:24 6555:17 <b>cheesy</b> 6514:14 <b>Chicago</b> 6404:10 6442:21 6470:23 6471:2,5 6473:7 6474:11 <b>Chip</b> 6305:20 6461:18 6471:15 6490:3 <b>choice</b> 6314:4 6361:21,28 6362:6 6371:12 6409:14 <b>choose</b> 6444:17 6542:13 <b>choosing</b> 6542:16 <b>chose</b> 6327:11 <b>Chris</b> 6322:10 <b>Christopher</b> 6449:26 <b>circumstance</b> 6363:6 <b>circumstances</b> 6305:23 6498:1 6534:21 <b>cite</b> 6314:10 6465:3 6490:14 <b>cited</b> 6440:10 6490:15,16 6492:7 6516:3 6540:7 6551:10 <b>cites</b> 6489:23 <b>citing</b> 6535:17,26 <b>claim</b> 6346:16 6445:21 6463:9 6541:22 <b>clam</b> 6527:16 <b>clarification</b> 6307:15 6324:15 6332:1 6427:15 6458:14 6511:8 <b>clarify</b> 6537:22,26 <b>clarifying</b> 6398:2 <b>clarity</b> 6470:21 <b>Clark</b> 6400:16 <b>class</b> 6308:16 6309:12 6311:18 6312:15,16,17,18, 21 6313:28 6314:2,24,26 6317:7,8,11,16 6318:2,4 6319:7,11 6320:14 6321:28 6323:22,25 6324:26 6325:28 6326:2 6327:9,18 6328:1,15, 19,26,27,28 6329:23 6330:9, 10,19,20,26 6331:23 6332:14,20 6334:14,22 6337:7,20,22,26 6338:8 6339:24 6341:17 6345:3 6346:4,23 6347:5 6350:19 6352:10,12 6353:19 6354:25 6357:16,19,20 6358:1 6359:4 6360:6,15 6361:16, 22 6362:21,23,27 6363:4,5	6364:2,7,13,17,18,21,28 6365:3 6369:20 6371:13,17 6372:7 6373:22 6375:6 6376:3 6381:2,15,17 6382:10,20 6383:4,8 6384:9, 17,20 6385:17 6391:19,23, 26 6392:2,6 6394:17 6395:16 6399:23 6400:3,6 6401:6,9,20,23 6402:19 6403:20,21 6404:4,5,6,7,10, 11,13,15,18,21,26,27,28 6405:3,4,10,11,12,14,19,20 6406:12,18,23,28 6407:2,9 6408:3,5,6,7,10,15,16,21,23 6409:7,11,15,22 6411:17,19, 23 6412:3,4,5,6,8,13,15,27 6413:15 6414:6,7,12,15 6415:2,9,17,18,19,21,22,23, 26,27 6416:2,3,8,15 6417:14,25,27 6418:2,3,10 6419:1,2,9,11,24,26 6420:3 6435:26 6436:2,25,26,27 6437:8,9,10,18,23,27 6438:4,18 6440:15,24 6441:18,21,23,24,25,26 6442:2,3,4,6,10,20,23,25,27 6443:2,6,9 6444:5,9,13,17 6445:13,17 6446:12,20,21, 27 6447:9,10,25 6448:5,6,24 6449:13,17,23 6451:3,9,15, 16,22,27 6452:5,8,25,26 6453:7,8,12,19,28 6454:7,9, 10,13,24,25,26 6455:6,7,10, 13,20,21 6456:11,12,16,17, 24 6457:1,6,8,11,12,14,16, 17,19,24 6458:3,12,17,23, 24,25,26,28 6459:4 6460:7, 8,12,20 6464:8 6465:5 6466:9 6468:5,6,7,10 6469:19,21,22 6470:5,6,8, 10,11,22 6471:16,23 6472:15,16 6474:7,9 6477:6, 8 6493:10,11,15,22,24,25, 27,28 6494:1,4,15,17,18 6495:13,17,28 6496:1,21 6497:1,2,13,19,23 6498:9, 10,15,20,21 6499:27 6500:1 6516:2,6,8,22,23 6518:1,12, 18,22 6519:10,16,18,20,28 6520:4,8,12,13,15 6522:3,8 6524:26 6526:6,19 6527:10 6528:2,6 6529:3,19,24,27 6530:2 6531:14,23 6532:6, 24 6533:3,6,8 6534:10,12,28 6535:12 6539:7 6540:17,26 6541:7,8,18,19 6542:1,3,20 6543:8,11,16,22,23 6544:19, 20,21,22 6546:20 6548:14, 18 6551:5 <b>classes</b> 6311:19,21 6323:20 6328:17,20 6329:19 6330:28 6364:4,5 6365:16 6375:15, 21 6376:2,3,13 6454:1 6493:9	<b>classic</b> 6320:8 <b>classically</b> 6323:7 <b>classifies</b> 6389:17 <b>classify</b> 6518:17 <b>classifying</b> 6518:20 <b>clean</b> 6527:1 <b>clear</b> 6314:12 6344:16 6361:8 6363:13 6364:11 6367:5 6375:28 6384:24 6387:7,14 6401:25 6415:18 6438:28 6473:14 6485:3 6486:9 6491:23 6501:9 6503:2 6509:7 6512:20 6518:13 6524:17 6525:20 6527:2,3 6536:17,19 6546:14 <b>Clerk</b> 6305:2,3,5 <b>Clerk's</b> 6304:19 <b>client</b> 6475:22,23 6476:6 6522:15 6536:15,18 <b>clients</b> 6476:6 6500:13,15 6507:19 6513:11,20 6526:17 <b>Clifton</b> 6427:11 <b>Clifton's</b> 6427:25 <b>clock</b> 6434:18 6492:12 <b>close</b> 6306:23 6311:20 6322:27 6323:2 6359:28 6362:5,19 6366:2 6409:9 6438:10 6448:2 6449:10 6452:7,8 6453:8 6454:11 6467:10 6507:18 6520:16 6525:15 6553:19 6554:4 <b>closed</b> 6527:12 <b>closely</b> 6391:20 6467:12 <b>closer</b> 6347:28 6382:7 6383:7 6441:7 6448:10 6520:9 6556:6 <b>closest</b> 6381:25 <b>closures</b> 6381:22,28 <b>club</b> 6480:23 <b>CME</b> 6340:15 6404:11 6415:16 6416:5,7 6438:6 6444:12,14,17 6472:4,8 6474:28 6475:7 6476:16 6530:23,26 6531:9,11,13,18 6532:23 6533:10 6538:1 <b>co-authored</b> 6493:4 6541:14 6551:2 <b>co-op</b> 6390:8,11 6391:9,10 <b>co-ops</b> 6482:22	<b>co-organize</b> 6517:17,18 6523:26 <b>co-organizer</b> 6522:4 6523:20 6525:24 <b>co-variance</b> 6439:16,21,25 <b>Coca-cola</b> 6463:26 <b>coefficient</b> 6436:5 6439:4,6, 10,13,15,22,27 6440:4,11 6441:8 6470:4 <b>coffee</b> 6359:11,23 6360:3 6425:11 <b>cognizant</b> 6549:5 <b>coincidence</b> 6410:19 <b>coincidentally</b> 6380:24 <b>Coke</b> 6463:23 <b>cold</b> 6482:26 <b>collapses</b> 6439:27 <b>collateral</b> 6495:22 <b>colleague</b> 6325:3 6462:8 6475:27 6500:6 <b>colleagues</b> 6431:28 6456:1 <b>collect</b> 6513:9 <b>collecting</b> 6518:20 <b>collectively</b> 6408:13 <b>collusions</b> 6412:22 <b>colorful</b> 6450:9 <b>colorfulness</b> 6370:28 <b>column</b> 6312:11 6329:13 6331:2 6444:23 6493:20 <b>columns</b> 6308:27 6312:24 6456:24 <b>combination</b> 6315:27 <b>combine</b> 6429:2 <b>combined</b> 6364:15 6426:17 6448:1 <b>combining</b> 6466:19 <b>comfort</b> 6355:16 6411:8 <b>comfortable</b> 6340:4 6342:17 6345:8 6421:11 6477:26 <b>comforting</b> 6411:6 <b>comment</b> 6425:6 6502:6 <b>commentator</b> 6503:21 <b>commenting</b> 6490:17 <b>comments</b> 6317:18 6332:6
--	--	---	--



<b>commercialized</b> 6504:9	<b>completed</b> 6306:18 6556:9	<b>conclusively</b> 6303:26	<b>consulting</b> 6510:19,22 6511:2
<b>commission</b> 6471:8	<b>completely</b> 6317:3 6401:16 6466:13 6476:2 6482:28 6496:6	<b>condition</b> 6303:26	<b>consumer</b> 6463:19 6464:5
<b>commissions</b> 6438:6	<b>completes</b> 6444:26	<b>conditions</b> 6384:15 6414:17 6415:12 6416:5	<b>consumers</b> 6319:21 6407:12 6409:17 6416:19 6425:10
<b>commit</b> 6356:14	<b>complex</b> 6444:14 6496:18	<b>conducted</b> 6410:22	<b>consumption</b> 6399:15 6462:20
<b>Commitment</b> 6530:24	<b>complexity</b> 6323:21	<b>conference</b> 6513:24 6514:6, 23 6515:9 6517:14,16,18,23, 26 6523:24,25 6524:21,22	<b>contact</b> 6343:25
<b>committed</b> 6301:15 6315:28 6380:12	<b>compliant</b> 6304:9,10	<b>conferences</b> 6511:22	<b>contained</b> 6550:5
<b>Committee</b> 6400:18	<b>complicate</b> 6410:2 6534:20	<b>confident</b> 6349:8 6360:23	<b>contemplate</b> 6417:22 6487:28
<b>commodities</b> 6471:2 6524:27	<b>complicated</b> 6308:22	<b>confidential</b> 6507:17	<b>contemplated</b> 6401:26 6418:27
<b>commodity</b> 6316:23 6317:23 6442:11,15 6498:14 6533:4 6534:26	<b>complication</b> 6345:26	<b>confirm</b> 6516:21 6517:5	<b>contemplating</b> 6477:25
<b>common</b> 6315:15 6319:15 6331:19 6416:24	<b>complications</b> 6415:13,14 6420:21	<b>confirmed</b> 6471:19	<b>contention</b> 6309:12 6314:10 6317:7 6333:18
<b>communicate</b> 6424:19 6481:20	<b>component</b> 6362:12 6419:27 6425:3 6451:3,9,13	<b>confirming</b> 6543:28	<b>contents</b> 6487:18
<b>communication</b> 6398:19	<b>components</b> 6308:16 6392:4	<b>conflict</b> 6409:6 6508:14 6509:16	<b>contest</b> 6433:7 6476:12 6514:25 6516:27 6528:28
<b>community</b> 6402:2 6409:25, 26 6420:25,26 6424:16	<b>composition</b> 6419:17	<b>conflicts</b> 6508:26	<b>context</b> 6315:6 6379:28 6408:26 6470:24 6481:9 6533:5 6534:23
<b>companies</b> 6336:27 6342:18 6343:21 6344:2 6359:11 6463:25,28 6473:27 6530:12	<b>comprehend</b> 6421:26	<b>conform</b> 6372:20	<b>continents</b> 6507:19
<b>company</b> 6336:12 6339:6 6341:5 6355:21 6359:10 6410:23 6459:26 6463:26 6474:1 6475:24 6476:2 6477:11,14,24 6506:2,11,13 6508:8 6509:25	<b>comprehensive</b> 6477:5	<b>confronted</b> 6523:10	<b>continue</b> 6305:16 6349:1 6392:24 6433:15,28 6453:11 6459:13 6472:21 6488:13 6525:18
<b>compare</b> 6312:13 6362:18 6384:8 6445:25	<b>comprise</b> 6493:11	<b>confused</b> 6367:17	<b>continued</b> 6414:15 6418:3 6457:26
<b>compared</b> 6313:5 6316:8 6324:21 6337:20 6381:9,12, 21 6401:14 6419:11 6464:17	<b>comprised</b> 6435:10 6493:9	<b>congratulate</b> 6387:13	<b>continues</b> 6415:1 6457:27 6487:21
<b>comparing</b> 6401:5	<b>comprises</b> 6503:14 6504:15	<b>Congress</b> 6349:26 6351:18 6372:1 6373:12 6400:9	<b>continuing</b> 6322:16
<b>comparison</b> 6325:25 6330:19 6364:23 6365:18 6473:6	<b>compromise</b> 6343:4 6511:3	<b>Congress's</b> 6373:15	<b>contortions</b> 6347:1
<b>compete</b> 6354:28 6357:4 6512:21	<b>computer</b> 6520:27 6521:15 6522:7 6525:13,25	<b>connect</b> 6472:6	<b>contract</b> 6321:5 6331:12 6340:13 6341:4 6356:9,24, 26 6387:26 6392:7 6406:13 6411:21,23 6415:17 6416:8 6421:2 6437:17 6438:7,8 6442:1,21 6444:2,5,13,18,21 6445:13,14 6447:18,19 6468:12 6473:2,3,4,5,25 6475:16 6509:8 6520:9 6531:21,23 6532:3,5,6,9,20 6533:6,7 6542:16,17 6543:8, 11,23,24 6546:1
<b>competing</b> 6464:18	<b>concede</b> 6410:2 6433:3 6502:2	<b>connected</b> 6481:3	<b>contracts</b> 6331:9,12,18,27 6339:10,26 6399:24 6404:7, 10,12,16,18,20,21 6405:1 6415:19 6416:6 6436:22,24 6437:15 6438:9,11 6445:2 6448:16 6465:5 6470:27,28 6473:17 6476:5 6507:23
<b>competition</b> 6411:6 6513:21	<b>conceived</b> 6509:3	<b>consensus</b> 6345:17 6347:23 6400:5 6402:8,10 6429:28 6431:9,12 6432:3	
<b>competitive</b> 6355:12,26 6357:8 6411:9	<b>concept</b> 6320:5	<b>consequence</b> 6322:23	
<b>competitor</b> 6513:6	<b>concern</b> 6316:1 6339:14 6341:26,27 6485:14 6508:6 6533:2 6548:10	<b>consequences</b> 6495:25	
<b>competitors</b> 6513:8	<b>concerned</b> 6412:20 6444:9 6499:1	<b>conservative</b> 6365:22	
<b>compile</b> 6539:21	<b>concerns</b> 6326:2 6416:5	<b>consideration</b> 6352:4 6500:4,5,8 6550:6	
<b>complete</b> 6474:14 6513:18 6530:22 6542:25 6554:14	<b>conclude</b> 6551:28 6552:5	<b>considered</b> 6406:17 6407:8 6452:10 6492:10 6513:21 6531:24	
	<b>concluded</b> 6399:22 6557:4	<b>consistent</b> 6333:5 6342:12 6372:8,26	
	<b>concludes</b> 6400:21	<b>consolidation</b> 6385:6,7	
	<b>conclusion</b> 6319:26 6348:25,26 6365:24 6381:13 6416:16 6446:18 6448:13,19 6476:8 6544:17,26	<b>constitutes</b> 6492:28	
	<b>conclusions</b> 6446:6,10 6449:21 6459:8 6480:11,25, 28 6496:4 6520:7 6527:5	<b>constraint</b> 6429:24	
		<b>constraints</b> 6429:27	
		<b>consult</b> 6510:18	
		<b>consultants</b> 6419:18	





6509:12 6510:14,16,22 6511:11 6518:17 6535:13 6542:14 6543:6 6544:20,28 6545:7 6551:6	<b>copy</b> 6304:20,21 6361:2 6398:5 6489:11 6515:18 6521:9,12,16 6522:21 6540:24 6549:6,7,19	<b>correspond</b> 6445:23 6447:13 6528:7	6310:18,20 6311:28 6324:1, 15 6325:8 6326:10,13,18,22 6330:4,7 6332:1 6344:10 6351:2,5,8 6361:3 6370:6, 18,27 6373:18 6376:18,28 6377:2,8,21,24,28 6378:6, 22,25 6379:1,14 6383:14,18 6386:7,12,25,27 6387:2,5,13 6388:10 6392:12,15,17,23 6393:10,15,17,25 6394:2,4, 25 6395:4,11,26 6396:1,6, 10,17,20,25 6397:1,14 6398:7,20 6399:4 6405:6 6407:4,16,19,23 6425:25 6426:6,9,11 6427:26 6428:22 6429:19 6431:2,9, 18,27 6433:8,18,19 6434:1, 12 6435:8,13 6458:14 6459:10,16 6461:3,6,8,12, 14,25 6462:1 6465:26 6478:19,21 6479:15,18,27 6481:27 6483:11,26 6484:6, 9 6485:11,20 6486:2,3,21 6488:12 6489:4,10,16 6490:4,7 6491:1,17 6492:14, 23 6495:6,8,10 6500:20,26 6501:1,4,22 6502:17,20,24, 27 6506:14,16 6511:8 6515:17 6518:6,11 6519:6 6521:7,14 6522:10,19 6523:14 6524:24 6525:4,6,8 6526:10 6527:24 6535:6,23 6536:4,12,21,24 6537:2,7, 12,25 6540:20 6549:4,9,27 6550:8,12,14,19,25 6551:8, 12,14 6552:9,18,23,25 6553:1,3,7,11,14,18,22 6554:13,17,24 6555:6,16,23 6556:3,6,9,15,22,26 6557:1
<b>contradict</b> 6398:17	<b>core</b> 6323:11 6414:6	<b>correspondingly</b> 6406:14	
<b>contrary</b> 6480:25	<b>corn</b> 6379:22	<b>cost</b> 6319:21 6322:20 6335:28 6340:25 6341:16 6356:18 6357:11 6382:2,5,9 6385:24 6390:21 6391:1 6392:12 6411:5 6412:14 6413:26 6437:5,22,24 6438:11,14,15,21,24 6464:21 6465:25 6468:11 6473:12,19 6475:4,6 6476:14,18,27,28 6499:19, 23 6529:20 6532:20	
<b>contrast</b> 6405:10	<b>Corporation</b> 6506:24 6507:4,10 6508:7	<b>costly</b> 6442:28	
<b>contribute</b> 6350:14 6418:1, 23 6454:16 6455:10	<b>correct</b> 6307:20,21 6309:21 6311:23,26 6312:4,5,7 6313:4 6315:8 6316:17,20 6317:22 6323:16 6327:15 6329:2 6330:24 6331:4 6338:22,25 6345:28 6347:20 6352:3,8,9,12,15 6355:23,26 6356:2 6357:8,20,21,23,24 6358:20,21,28 6359:1 6360:7,8,13 6361:12,16,17, 22,23,25,27 6362:3,9,13,24, 27 6363:2,6,7,20,27,28 6364:3,8,15,16,18,22 6365:1,4,5 6366:12,22,26,27 6367:3,7,10,11,16,23 6368:9,12,13,15 6369:8,9 6371:4,5 6372:3 6373:28 6375:26,28 6376:14 6388:25 6397:21,22,26 6418:14 6420:13 6426:8 6462:24,27, 28 6463:2,3,9,14 6464:18,19 6466:10,11,14,15 6467:18, 21 6468:13,23 6469:3,16,23, 26,27 6470:15 6475:13 6476:16,17,21 6477:1,2,9,10 6478:16 6479:1 6482:19,25 6484:5,8 6492:16 6496:2,3, 6,7,27 6499:2,6,7,11,15 6504:6 6505:27 6508:19 6520:6 6526:8 6529:4 6531:12 6532:7 6542:22 6543:1,13 6551:7 6554:16	<b>costs</b> 6335:13 6342:12 6382:12 6384:20 6390:3,15, 22,27 6391:7 6400:7 6410:10 6411:3,13 6416:11 6423:16 6449:23 6464:10,16 6473:10 6500:15 6509:23 6538:23	
<b>contributed</b> 6452:20 6453:7		<b>counsel</b> 6370:22 6485:4,28 6490:24 6501:23 6518:7 6521:10,12 6523:5	
<b>contributes</b> 6453:19 6458:25		<b>counseling</b> 6511:12	
<b>contributing</b> 6418:22		<b>count</b> 6313:6,8 6318:17 6362:17 6449:4	
<b>contribution</b> 6319:11 6406:18 6407:9 6421:27 6450:12 6453:1 6454:1 6455:3,4 6456:20 6457:11, 12,21,24 6458:9,12		<b>counted</b> 6501:11	
<b>contributor</b> 6495:1		<b>counter</b> 6333:18	
<b>contributors</b> 6363:9		<b>counter-punch</b> 6416:26	
<b>control</b> 6464:10,21		<b>counterfactual</b> 6443:9	
<b>controls</b> 6477:20		<b>counterintuitive</b> 6496:11,13	
<b>controversy</b> 6524:24		<b>counterpart</b> 6303:16 6533:11	
<b>convene</b> 6554:22		<b>counterparty</b> 6474:17	
<b>convenient</b> 6360:4		<b>counting</b> 6553:6	
<b>conveniently</b> 6533:17		<b>countless</b> 6484:17	
<b>Convention</b> 6458:5		<b>country</b> 6339:7 6360:6,10 6381:24 6382:26 6402:15 6410:10 6418:21 6422:4 6452:22 6513:5	
<b>convergence</b> 6402:22		<b>County</b> 6379:19 6388:23	
<b>conversation</b> 6484:28 6526:23		<b>couple</b> 6301:13 6341:25 6344:24 6345:13 6373:7,21 6384:24 6462:13 6463:4 6477:9	
<b>conversations</b> 6327:27		<b>coupled</b> 6375:18,19 6381:18	
<b>convert</b> 6443:12		<b>court</b> 6301:2,17 6302:10,14, 20,22,26 6303:20 6304:12, 15 6305:1,9,13,17 6306:3,9, 26 6307:2,7 6309:4,16	
<b>convince</b> 6357:6			
<b>convincing</b> 6459:3			
<b>cooperative</b> 6324:5 6325:1 6334:20 6377:13 6379:24 6387:20 6390:9 6394:15 6396:28 6417:20 6424:28 6431:6 6533:25	<b>corrected</b> 6301:14,15,21,23 6302:4,9,13,19,28 6303:16 6312:1 6360:28 6363:15		
<b>cooperative's</b> 6379:26	<b>correction</b> 6383:11		
<b>cooperatives</b> 6318:13 6424:24	<b>corrections</b> 6301:28		
<b>coordinate</b> 6417:20 6517:22	<b>correctly</b> 6302:15 6317:10 6328:10 6468:28 6476:13 6519:21 6525:1 6544:1		
<b>coordination</b> 6411:11	<b>correlate</b> 6423:3		
<b>copies</b> 6301:16,18,19,23 6304:18,27 6377:24 6425:26 6522:17 6523:11 6525:11	<b>correlated</b> 6470:9,11,13		
	<b>correlation</b> 6423:24,27 6424:1,8 6436:5 6439:4,6,9, 12,15,22,27 6440:4,10 6441:7 6467:1,5,7,8 6468:17,19 6469:21,24 6470:2,4,7,8 6539:1		
	<b>correlations</b> 6322:10		
			<b>courtesy</b> 6304:22
			<b>cover</b> 6322:21,26 6334:13 6518:22
			<b>coverage</b> 6406:3
			<b>covered</b> 6324:8 6344:25 6399:13 6511:27 6553:4
			<b>covers</b> 6440:8
			<b>COVID-19</b> 6402:24 6408:5 6479:3
			<b>Covington</b> 6484:18 6490:21 6551:21 6552:3,4,10,16,19, 24,27 6553:2,5,9,17
			<b>cow</b> 6464:20
			<b>cows</b> 6379:20 6380:5,8,10, 14,17 6389:15 6391:18 6482:8
			<b>craft</b> 6321:27
			<b>crafting</b> 6547:27
			<b>craze</b> 6356:4,12



<b>crazy</b> 6356:3	<b>Cryan's</b> 6377:16	6400:4,15,16,17 6401:18,19 6402:15 6403:11,14,16 6405:15,18,22,24 6406:1,8, 16 6407:11,12 6408:11,18, 25 6409:12,17,18 6410:10, 11,13,16 6411:12 6414:24 6415:7 6416:18,19 6417:19, 21 6418:10,12 6419:7,18 6420:19 6422:3,5,12,16 6425:10 6431:6 6444:14 6450:1,21 6454:19 6456:3 6458:4 6463:9 6464:12,25 6470:24,28 6471:11,12 6475:24 6479:10,23 6480:23 6481:21,26 6493:4 6496:22 6497:4 6498:6 6503:7,9,11, 21 6504:24 6505:5,6 6506:20 6508:9 6509:1,2 6510:15,16 6513:1,3,17,22, 25 6514:1,5,18,19,20 6517:19 6532:23 6533:25 6535:2,17 6538:12 6539:6, 18,19 6540:6,15 6541:3,5, 17,23,26 6542:6 6544:9 6546:8,11 6547:19 6551:11	<b>dealer</b> 6438:5
<b>cream</b> 6352:18,20 6353:8,18 6354:16,20 6357:9 6369:14 6555:17	<b>Crystal</b> 6547:7,10	<b>decade</b> 6504:25 6505:10	
<b>create</b> 6384:14 6412:21 6414:16 6415:17 6416:8 6438:9 6495:17 6531:14,21	<b>crystalize</b> 6311:13	<b>decade-long</b> 6451:5	
<b>created</b> 6315:5 6417:15 6418:4 6497:5 6513:14 6528:26	<b>culprits</b> 6466:15	<b>decades</b> 6399:15 6462:20 6499:4 6504:22	
<b>creating</b> 6512:3 6544:4	<b>cumulative</b> 6456:23	<b>December</b> 6331:13 6353:22 6401:3 6450:10 6458:22,24 6459:1 6460:7,21,23 6471:16,24 6480:16	
<b>creatively</b> 6506:9 6509:26	<b>cumulatively</b> 6452:12	<b>decide</b> 6316:24 6319:1 6355:21 6468:11	
<b>credibility</b> 6503:20	<b>cunning</b> 6416:27	<b>decided</b> 6316:21 6354:5 6380:3,21 6420:5 6462:6 6501:24	
<b>credit</b> 6472:25 6519:3	<b>curiosity</b> 6330:15	<b>decimal</b> 6524:4	
<b>crisis</b> 6403:15	<b>curious</b> 6313:16,17 6327:11 6329:16 6331:14 6332:16 6334:16 6335:20 6347:8,9 6348:18 6385:1 6388:22 6389:8,11 6393:3 6419:10 6484:2 6503:1 6556:7	<b>decision</b> 6318:26 6327:20, 25 6328:5 6337:17 6338:2 6478:13 6498:2	
<b>criteria</b> 6373:10 6375:12	<b>current</b> 6319:19 6320:20,21 6321:20,21 6323:13 6339:9 6345:3 6349:5 6367:6,15 6368:8 6380:9 6381:4 6392:12 6401:6 6414:14 6438:22 6440:16 6445:19,27 6465:16 6471:19 6482:11 6497:26	<b>decision-makers</b> 6484:6	
<b>critical</b> 6391:15 6398:25	<b>curtailed</b> 6535:2	<b>decisions</b> 6313:16 6327:23 6337:15	
<b>criticism</b> 6337:4 6367:9	<b>curtailing</b> 6320:2	<b>decisive</b> 6459:3	
<b>criticisms</b> 6366:17	<b>custom</b> 6473:2,8 6532:11	<b>decisively</b> 6449:21	
<b>criticize</b> 6400:11	<b>customer</b> 6334:20 6358:28 6359:2	<b>decline</b> 6399:16 6425:16 6437:20 6455:15 6456:13 6462:21 6483:3 6493:10 6499:27,28	
<b>Croatia</b> 6509:25	<b>customers</b> 6336:9 6538:21	<b>declined</b> 6384:1 6462:27	
<b>crop</b> 6405:27 6506:23,28 6507:3,10 6508:7 6510:11	<b>customizable</b> 6532:2	<b>declining</b> 6399:19 6400:2 6414:15 6421:10 6463:11	
<b>Cropp</b> 6504:1,2	<b>customization</b> 6473:20	<b>decomposing</b> 6449:27	
<b>cross</b> 6326:15 6426:17 6429:13 6459:14 6461:9	<b>customize</b> 6532:13 6544:10	<b>decouple</b> 6375:5,14 6376:1, 12	
<b>cross-exam</b> 6394:19 6417:8 6445:7	<b>customized</b> 6473:4 6532:16	<b>decouples</b> 6376:8	
<b>cross-examination</b> 6307:9 6324:3 6325:18 6326:13,25 6366:20 6387:12,18 6388:13 6394:28 6395:24 6416:27 6428:7 6431:11 6436:18 6439:8 6446:8 6461:1,14,16 6483:14 6488:14 6502:10 6511:16 6512:12 6522:20 6550:4 6551:24	<b>cut</b> 6495:19	<b>decoupling</b> 6375:24	
<b>cross-examine</b> 6551:15	<b>cutoff</b> 6349:12	<b>decrease</b> 6381:10 6385:17	
<b>cross-examined</b> 6305:15 6406:1 6483:24 6491:27 6521:11	<b>D</b>	<b>decreased</b> 6381:15	
<b>cross-examining</b> 6492:2 6524:2	<b>D-A-V-I-D</b> 6378:14	<b>dedicate</b> 6427:23	
<b>cross-product</b> 6468:4	<b>daily</b> 6411:14 6449:18 6507:6 6546:20	<b>deductions</b> 6479:8	
<b>crossing</b> 6500:21	<b>dairies</b> 6385:11 6496:28	<b>deem</b> 6303:17	
<b>crucial</b> 6347:27	<b>dairy</b> 6301:11 6305:27 6306:14,20 6307:17,18 6322:25 6324:5,24,28 6338:28 6345:11 6351:13, 21,27 6354:22 6358:26,27 6369:27 6377:5,13 6379:28 6380:2,3,7 6383:9 6385:3,9 6387:20,24 6389:18 6390:16,17 6391:9,10,15,17 6394:14 6396:27 6398:25	<b>deemed</b> 6345:20,22	
<b>crunch</b> 6474:27			
<b>Cryan</b> 6325:3,5,10 6550:3 6551:25 6552:7 6556:16,18			
		<b>dairy-based</b> 6357:3 6464:3	
		<b>dairymarkets.org/pubpod/ pubs/il20-03.pdf.</b> 6489:27	
		<b>Dakota</b> 6417:21 6418:12	
		<b>damages</b> 6495:22	
		<b>Darigold</b> 6327:28	
		<b>dark</b> 6444:23 6482:26	
		<b>data</b> 6308:1,27 6309:14 6310:1 6311:24 6312:10 6445:12 6478:26 6487:15 6513:8,9 6517:11 6518:20 6521:24 6522:5 6526:26,28 6527:2,4,8,9	
		<b>date</b> 6383:12 6428:1	
		<b>dating</b> 6474:3	
		<b>daughters</b> 6379:17	
		<b>David</b> 6377:5 6378:14,26 6379:16	
		<b>day</b> 6326:19,21 6412:9,10 6458:25 6472:22 6473:22 6475:25 6546:7,24 6547:4,5 6553:20	
		<b>day-to-day</b> 6530:23	
		<b>days</b> 6306:19 6389:28 6404:24 6414:11 6437:1 6446:23 6520:20 6528:7 6546:5,25,26 6550:16 6554:20	
		<b>deal</b> 6361:25 6390:9 6534:28	



<b>deep</b> 6330:16 6348:3,20 6437:3 6534:12	6458:18 6459:4,7 6478:15 6495:28 6496:5,8,15,25 6497:20	<b>detrimental</b> 6383:1	<b>dilemmas</b> 6318:5
<b>deeper</b> 6418:4 6419:28 6420:1 6422:26	<b>depools</b> 6413:27	<b>develop</b> 6313:8 6477:12 6512:5	<b>dipped</b> 6381:18
<b>defer</b> 6394:20	<b>deposit</b> 6472:20	<b>developed</b> 6380:1 6386:19 6449:26 6450:4	<b>dipping</b> 6414:5
<b>deficiencies</b> 6486:15	<b>deposited</b> 6423:26	<b>developers</b> 6509:24	<b>direct</b> 6311:17 6326:16 6328:7 6340:4 6370:25 6378:8 6391:4 6396:25 6397:16 6417:5,9 6426:15 6428:6 6429:8,27 6431:14 6435:18 6488:10 6497:12,23 6536:28 6537:20
<b>define</b> 6449:5	<b>depress</b> 6451:14	<b>deviation</b> 6329:7,10,11 6330:8 6446:12	<b>directed</b> 6372:23 6404:3
<b>defined</b> 6439:15 6494:3	<b>depresses</b> 6403:18	<b>deviations</b> 6439:17	<b>directing</b> 6420:2
<b>definition</b> 6375:26 6389:21	<b>derivatives</b> 6340:4 6460:2, 11	<b>devil</b> 6421:8	<b>direction</b> 6463:23 6480:19 6510:26
<b>defy</b> 6452:17	<b>derive</b> 6509:14 6511:6,18 6512:6	<b>DHI</b> 6490:22	<b>direction</b> 6463:23 6480:19 6510:26
<b>degree</b> 6374:24 6433:24 6447:24 6497:1	<b>derived</b> 6314:12 6519:10	<b>DHIA</b> 6484:18	<b>direction</b> 6463:23 6480:19 6510:26
<b>deincentivized</b> 6313:20	<b>describe</b> 6447:2 6461:3 6493:23 6552:10	<b>diagram</b> 6447:3	<b>directly</b> 6317:19 6324:9 6325:24 6338:7,15 6339:15, 21 6340:1 6360:2,18 6390:21 6399:24 6405:26 6438:6 6465:6 6472:1,26 6474:10 6495:15 6508:15 6534:11
<b>delay</b> 6533:1	<b>description</b> 6310:24,25 6318:19 6363:25,26 6467:1	<b>diagrams</b> 6459:2	<b>Directors</b> 6379:26
<b>deliver</b> 6382:3	<b>deserve</b> 6325:16 6490:12 6519:4	<b>differ</b> 6420:25 6425:4 6494:23	<b>disadvantage</b> 6485:10
<b>demand</b> 6314:25,27 6317:16,21,22,23 6322:16 6381:15,19 6403:20 6405:17 6408:4 6483:2	<b>design</b> 6368:1 6376:2 6400:24 6403:3,6 6406:17 6407:8 6444:25 6445:1 6514:17	<b>differed</b> 6401:4	<b>disadvantaging</b> 6541:23
<b>demonstrate</b> 6361:9 6384:12	<b>designated</b> 6484:13,23	<b>difference</b> 6310:8 6313:27 6316:28 6324:20 6328:15,18 6329:4 6330:9,14 6341:18 6348:23 6349:7 6358:16 6361:21 6362:8 6365:25,26 6383:27 6384:3,7,10 6385:14,20 6415:5 6424:10 6437:21 6438:17 6447:17 6451:17,18 6475:22 6486:11 6487:7 6493:24 6494:3,6,7, 9,10 6530:21 6554:13	<b>disagree</b> 6376:5 6476:11 6488:16
<b>demonstrated</b> 6361:27	<b>designating</b> 6484:12	<b>differences</b> 6313:3 6350:22 6374:10 6382:15 6415:5 6421:20 6426:7 6482:23	<b>disbursed</b> 6434:21
<b>denominator</b> 6449:9	<b>designed</b> 6367:20 6409:7 6446:28 6472:9 6534:18	<b>differential</b> 6327:11 6328:16 6341:18,20 6363:1 6365:1,3, 4,6,14,23 6381:2 6384:10 6450:27 6489:2	<b>disclosure</b> 6327:26 6330:16
<b>denoted</b> 6528:6	<b>designing</b> 6529:13	<b>differentials</b> 6308:17 6365:13 6382:11 6384:18 6393:2 6406:15 6413:4 6449:28 6452:4 6494:22 6495:2	<b>discount</b> 6482:5
<b>dense</b> 6426:3	<b>desire</b> 6464:11 6474:23 6533:20,24,26	<b>differently</b> 6388:1 6421:13 6534:24	<b>discounters</b> 6353:3
<b>Department</b> 6349:27	<b>desired</b> 6446:8 6535:11	<b>difficult</b> 6304:10 6315:25 6317:4 6319:20 6322:6 6323:13 6360:21 6385:10 6388:6,8 6421:14,25,28	<b>discovered</b> 6336:9
<b>departure</b> 6552:11	<b>desk</b> 6339:23	<b>difficulties</b> 6399:19 6448:17	<b>discovery</b> 6530:27 6531:6,8
<b>depend</b> 6319:20	<b>destigmatizing</b> 6425:8	<b>dig</b> 6410:5 6439:12	<b>discrepancies</b> 6315:5 6317:1
<b>depending</b> 6310:8 6312:25 6335:14 6337:22 6354:7,19 6375:19 6376:7 6421:23	<b>detail</b> 6512:27	<b>digging</b> 6382:17	<b>discretion</b> 6488:5
<b>depends</b> 6313:21 6368:7 6444:17 6483:1	<b>detailed</b> 6451:24 6530:23	<b>digits</b> 6548:23	<b>discriminatory</b> 6428:23
<b>depool</b> 6312:17 6413:21 6455:28 6466:10,12 6497:10 6498:2,7,12,18	<b>details</b> 6509:17		<b>discuss</b> 6482:24 6483:24 6548:7
<b>depooled</b> 6318:21 6413:24 6414:4 6423:14 6465:23 6466:6	<b>determination</b> 6350:1		<b>discussed</b> 6301:23 6345:3 6372:24 6431:15 6481:3 6483:9 6518:12
<b>depooling</b> 6309:13 6311:16 6312:15,22,24 6313:16,19 6314:1 6318:17,28 6319:3 6320:2 6322:4 6327:6 6337:8,12 6338:4,12 6365:27 6413:20 6414:14,18 6418:19,22 6422:25 6423:2 6425:8 6436:11 6449:25 6452:14,19 6453:21,22 6454:15,16 6455:5,8,11,16, 23,25,27 6456:5,7,25 6457:3	<b>determine</b> 6308:26 6316:25 6338:1 6348:20 6487:24 6489:5		<b>discusses</b> 6329:21
	<b>determined</b> 6390:14 6486:14		<b>discussing</b> 6515:24
	<b>determines</b> 6327:19 6505:24		<b>discussion</b> 6323:26 6324:2 6328:2 6342:3,20 6348:5 6377:27 6388:21 6406:18 6407:9 6418:1 6444:26 6459:24 6465:17 6466:4 6479:17 6502:4,13 6521:20 6524:16,17
	<b>determining</b> 6339:27		
	<b>detract</b> 6436:8 6441:13 6449:22 6453:10		



<b>discussions</b> 6342:2,21 6514:20	<b>doors</b> 6509:21	<b>dwindling</b> 6382:18	<b>Edge's</b> 6346:3 6395:16 6415:11 6418:5 6436:15 6522:2
<b>disentangle</b> 6421:26	<b>Dorland</b> 6439:9 6445:21 6475:15 6476:4 6512:22 6513:19 6514:23,27 6515:7 6525:1,3,6,7 6526:16 6545:13 6546:12	<b>dynamic</b> 6399:4	<b>Edge-15</b> 6395:20 6396:6 6429:13 6434:21 6435:10
<b>dishonest</b> 6322:7	<b>dots</b> 6447:23 6448:3,9	<hr/> <b>E</b> <hr/>	<b>Edge-15a</b> 6435:10
<b>disorderly</b> 6384:14 6414:16 6552:14	<b>dotted</b> 6386:1,3,16,22	<b>e-mail</b> 6484:20 6490:22,24 6491:11,12,13 6492:17,20 6497:14	<b>Edge-15b</b> 6435:11 6440:1
<b>disposal</b> 6425:15	<b>double</b> 6394:1 6414:4 6425:26 6464:1 6548:23	<b>e-mails</b> 6486:7	<b>Edge-2</b> 6397:6 6413:6 6450:2 6489:26
<b>disprove</b> 6449:21	<b>doubt</b> 6530:8 6545:2	<b>earlier</b> 6371:27 6412:12 6521:20 6522:25 6524:15,17 6526:13 6529:5 6550:16 6556:18	<b>Edge-244</b> 6397:12
<b>disruptive</b> 6384:14	<b>doubts</b> 6326:4	<b>earliest</b> 6513:13	<b>Edge-6</b> 6394:17 6395:17 6396:1 6397:21 6425:26
<b>distance</b> 6381:25 6382:1	<b>downs</b> 6336:2	<b>early</b> 6336:26 6353:22 6383:3 6384:5 6404:24,25 6414:11 6417:26 6532:28	<b>editor</b> 6450:20
<b>distant</b> 6381:24	<b>downward</b> 6383:6 6386:2 6404:3	<b>earnings</b> 6460:16,23	<b>educate</b> 6343:2
<b>distinction</b> 6489:19	<b>dozen</b> 6510:8	<b>ease</b> 6398:18	<b>education</b> 6478:10
<b>distributed</b> 6301:18 6377:25 6408:12	<b>drafting</b> 6415:5	<b>easier</b> 6339:18 6342:10 6360:12 6372:9 6400:7 6463:25 6464:4 6489:27	<b>effect</b> 6319:8 6371:12,15,16 6384:8 6446:25 6448:27 6455:27 6456:23 6496:18,19 6528:12 6540:4
<b>distributing</b> 6381:19,20,22, 25	<b>dramatically</b> 6404:24 6451:27	<b>east</b> 6388:23,27	<b>effective</b> 6335:24 6406:8 6481:21 6524:26
<b>distribution</b> 6522:22	<b>drank</b> 6319:22	<b>easy</b> 6347:6 6352:11 6386:26 6400:10 6402:18 6408:22 6421:14,27 6465:1 6474:12 6511:1 6516:14	<b>effectively</b> 6384:6 6509:24 6535:11 6539:6 6544:8
<b>diversify</b> 6510:13	<b>draw</b> 6348:25,26 6428:18 6459:7 6520:7 6527:5	<b>eat</b> 6450:16 6555:16	<b>effectiveness</b> 6443:6 6444:28 6445:17,18,25 6446:1 6448:14
<b>divulging</b> 6509:17	<b>drive</b> 6403:5 6465:2 6492:26 6493:17 6552:14,18	<b>econ</b> 6440:7	<b>effects</b> 6496:20
<b>DMAP</b> 6503:25	<b>drives</b> 6463:18	<b>economic</b> 6348:4 6400:18 6411:5 6514:19	<b>effectuate</b> 6507:28
<b>DMC</b> 6391:15,18	<b>driving</b> 6317:17 6493:12	<b>economical</b> 6458:7	<b>efficiency</b> 6428:21
<b>doctor</b> 6465:12	<b>drop</b> 6389:9 6452:2 6453:6 6455:17 6457:14,18 6458:22 6465:28 6493:16	<b>economically</b> 6438:3	<b>efficient</b> 6371:2 6394:22 6427:3 6428:3,14 6429:25 6472:24 6482:10
<b>doctoral</b> 6465:15	<b>dropped</b> 6455:14 6465:26	<b>economics</b> 6316:22	<b>efficiently</b> 6495:24
<b>document</b> 6301:20,25 6303:15 6387:14 6435:6 6479:11,23 6480:5,7,11 6483:23,24 6485:2,8,15 6486:15,19 6487:22,24 6489:2,5 6490:2 6491:24,26, 27,28 6521:12,13 6522:21 6523:3,4,18 6524:20 6525:28 6536:9 6549:19,21	<b>dropping</b> 6391:24	<b>economist</b> 6400:17 6466:25 6480:23 6491:7 6505:16	<b>efforts</b> 6342:28 6553:15
<b>documents</b> 6302:9 6303:3 6304:26 6483:9,14 6485:19 6492:4 6523:10 6526:3	<b>drops</b> 6452:25,26 6453:12 6456:16,17,26	<b>economists</b> 6419:18 6479:10 6503:9,14 6504:15, 18 6505:8 6514:20	<b>elaborate</b> 6399:10 6428:1 6465:18
<b>Dodd-frank</b> 6526:27 6528:11,22 6530:17 6531:7 6540:3	<b>drove</b> 6552:28	<b>economy</b> 6503:21	<b>elastic</b> 6333:20,26 6410:13
<b>Doelman</b> 6319:23 6409:2	<b>DRP</b> 6391:20,25 6543:26	<b>edge</b> 6324:5,28 6377:12 6387:20 6394:14 6396:27 6398:22,24 6399:6 6402:27 6406:17 6407:8 6408:27 6409:24 6414:7 6416:9,16 6417:19 6418:13 6420:5 6422:27 6431:6 6432:21 6444:8,15 6461:28 6462:1 6466:5 6510:25	<b>elasticity</b> 6333:24 6334:9
<b>dog</b> 6486:22 6491:18	<b>dry</b> 6403:9 6456:15 6532:25		<b>elections</b> 6458:1
<b>doghouse</b> 6481:17	<b>drying</b> 6404:3		<b>electronic</b> 6304:20 6305:7, 10
<b>dollar</b> 6440:21 6449:3,5	<b>ducks</b> 6477:15		<b>electronically</b> 6304:5
<b>dollars</b> 6310:5 6405:7 6472:27 6506:4,5	<b>due</b> 6312:15 6347:10 6377:16 6388:1 6390:10 6403:12 6406:14 6408:22 6410:20 6431:23 6444:4,25 6445:1 6448:26 6497:19 6509:15		<b>elements</b> 6476:14
<b>dome</b> 6547:12	<b>duly</b> 6378:27		<b>elevated</b> 6528:22
<b>domestic</b> 6403:19	<b>duplication</b> 6324:10		<b>eligible</b> 6503:19 6505:22
<b>dominant</b> 6496:20	<b>duration</b> 6528:7		<b>eliminate</b> 6319:3,13 6324:11,18 6443:24,25,26, 28 6444:8,10 6445:3,5



6499:18 6546:16	<b>entire</b> 6316:26 6395:20 6522:15 6526:19	<b>events</b> 6315:11 6511:24	6489:1
<b>eliminates</b> 6414:28 6447:22	<b>entities</b> 6508:13 6509:11,13, 19 6511:6	<b>eventually</b> 6380:4	<b>exceptionally</b> 6392:20
<b>elimination</b> 6448:26	<b>entitled</b> 6490:26 6501:14 6522:28 6525:26	<b>Ever.ag</b> 6343:17 6471:11	<b>excess</b> 6403:9 6404:2
<b>emergency</b> 6417:28	<b>entity</b> 6503:8,11 6505:7 6507:18 6509:8,9,10,11,27	<b>Ever.ag.</b> 6410:24 6539:19	<b>exchange</b> 6339:19,20 6404:11 6442:22 6443:7 6470:23,26,27 6471:2,5 6473:7 6474:11 6531:22
<b>emotional</b> 6402:14	<b>entrepreneur</b> 6507:8	<b>everybody's</b> 6377:6 6450:17	<b>exchanged</b> 6520:5
<b>empathic</b> 6402:12	<b>entrepreneurial</b> 6512:1	<b>everyday</b> 6332:27 6353:2,15 6357:11	<b>exchanges</b> 6470:25
<b>emphasis</b> 6498:9	<b>entrusts</b> 6506:3	<b>everyone's</b> 6377:8 6427:10 6432:1 6554:18 6555:11	<b>excluded</b> 6364:21
<b>employees</b> 6506:2	<b>enumerated</b> 6450:3	<b>evidence</b> 6302:9 6303:6,7,9, 19,21,25 6304:17 6305:10 6393:18,20,22 6394:2 6420:4 6459:3 6483:27 6484:1,11 6485:2,27 6486:1, 11,14,16,18 6487:13,15,20, 26,27 6488:4 6490:11 6491:24 6492:1,4,5 6501:15, 24,28 6502:4 6516:19,26 6522:9 6526:24 6550:20,21, 27 6551:7,12	<b>exclusive</b> 6399:7
<b>employment</b> 6410:14	<b>equal</b> 6415:26 6440:26 6442:16 6445:18 6543:15	<b>evidenced</b> 6409:18	<b>excuse</b> 6303:6 6334:15 6406:10 6414:26 6415:14 6445:26 6448:20 6453:14 6456:12 6473:11
<b>enactment</b> 6528:12	<b>err</b> 6327:14	<b>evidentiary</b> 6492:3	<b>execute</b> 6347:1 6471:20 6541:21 6544:6,7
<b>encourage</b> 6332:13,20 6534:19	<b>error</b> 6302:1	<b>evil</b> 6353:4	<b>executed</b> 6471:21 6495:24
<b>end</b> 6306:13 6321:3 6338:21 6347:25 6354:5 6372:10 6391:6 6397:12 6407:20 6412:10 6415:11 6438:12 6442:5 6447:18 6460:9 6469:21 6475:4 6505:25 6532:20 6534:14 6546:13 6554:9	<b>errors</b> 6301:14	<b>evolution</b> 6417:22	<b>executing</b> 6475:6
<b>ends</b> 6390:17 6458:26 6469:22	<b>escrow</b> 6472:11	<b>evolved</b> 6404:23	<b>execution</b> 6408:22 6416:11 6544:2
<b>enforcement</b> 6340:15	<b>ESL</b> 6320:6 6321:11,12,14 6323:4,5,19 6334:28 6335:12,16 6336:27 6355:6 6420:28 6547:22,24,26 6548:2,19	<b>exact</b> 6313:1 6324:24	<b>exhaustive</b> 6542:26
<b>engage</b> 6345:28 6359:12 6511:2 6538:15 6546:3	<b>essence</b> 6352:6 6367:12	<b>exaggerate</b> 6365:7	<b>exhibit</b> 6301:13,21,22,27 6302:2,3,7,11,13,15 6303:1, 2,5,6,7,8,11,15,18 6307:25 6309:17 6311:6,7 6312:3 6314:7 6351:17 6361:3,5 6363:15,21 6366:9 6370:6 6377:25 6378:2,3,4 6379:8, 11 6383:15,19 6386:14 6393:9,18,19,21 6396:2,4,8 6397:5,7,10,11 6411:1 6413:5,6 6417:2 6426:7 6429:13 6431:10,21 6433:21 6434:27 6435:10 6439:19 6440:2 6443:22 6446:5 6447:1,8 6450:2,3,6 6462:16 6466:19 6473:9 6478:23,27 6479:1 6480:2,8,11 6483:10 6485:1 6486:24 6487:2,26 6489:22,25 6491:6 6492:26 6493:3 6494:16,20 6495:9 6502:8,13 6503:5 6504:27 6515:21,22 6522:16 6529:1 6533:13 6549:5 6551:3
<b>engaged</b> 6358:23 6360:7,16	<b>essentially</b> 6371:19 6403:10 6532:3 6541:10	<b>exalted</b> 6548:12	<b>exists</b> 6365:13 6367:8 6529:27
<b>engagements</b> 6511:25	<b>establish</b> 6310:1 6470:4	<b>examined</b> 6307:5 6378:27 6396:23 6435:16	<b>existed</b> 6526:15
<b>engineering</b> 6411:5	<b>established</b> 6310:2 6375:4	<b>examining</b> 6307:7	<b>existence</b> 6529:26,27
<b>English</b> 6305:19,20 6306:6 6394:25,26 6426:10,11,12, 22,27 6461:15,17,19,20,27 6462:4,5,12 6465:28 6466:3 6473:1,11 6474:6 6478:22 6479:11,21,27 6480:1,4 6483:7,13 6484:10 6485:18, 21 6486:4,23,27 6488:9,13, 15 6489:9,12,18 6490:3,5,6, 8 6491:2,16 6492:15,24 6493:1 6494:19 6495:9,11 6499:9 6500:12,18,20,23 6518:4,7 6521:18 6522:11 6523:15	<b>establishes</b> 6309:15 6311:15	<b>examples</b> 6315:2 6423:17, 18 6484:17 6510:22 6542:13 6543:14 6544:11	
<b>English's</b> 6306:11	<b>esteem</b> 6484:3	<b>exceed</b> 6403:21 6413:10	
<b>enhanced</b> 6322:3	<b>esteemed</b> 6485:15	<b>exceeded</b> 6404:28	
<b>enjoy</b> 6500:21	<b>estimate</b> 6313:23	<b>Excel</b> 6303:12,16,17 6304:5, 8 6308:28 6313:9 6446:8 6513:12	
<b>ensure</b> 6357:1	<b>etcetera</b> 6369:14,25 6389:25 6412:22 6463:20 6464:4 6477:23 6531:3 6548:5	<b>excellent</b> 6302:26 6305:1 6354:15 6397:14 6398:7,20 6399:5 6434:12	
<b>entails</b> 6433:27	<b>ethos</b> 6510:27	<b>exception</b> 6485:3,6 6488:23	
<b>enter</b> 6308:5 6360:5 6471:20 6472:15 6474:10 6545:1	<b>Europe</b> 6470:27 6509:26		
<b>Entertainment</b> 6514:17	<b>European</b> 6470:28		
	<b>evaluate</b> 6307:28 6308:4 6443:16 6444:28 6445:22		
	<b>evaluated</b> 6528:27		
	<b>evaluation</b> 6440:22		
	<b>evaluator</b> 6503:21		
	<b>event</b> 6304:3 6365:15 6522:5 6525:24		



<b>existing</b> 6403:27 6535:12	<b>explaining</b> 6360:1	<b>facility</b> 6555:2,3	6390:23 6391:17 6399:27
<b>exists</b> 6365:4,6	<b>explains</b> 6402:3	<b>facing</b> 6461:26 6462:1 6468:22	6402:21 6414:28 6444:15 6479:4,8 6551:25 6556:12
<b>exit</b> 6308:5 6385:3	<b>explanation</b> 6369:13 6475:14	<b>fact</b> 6318:9 6348:21 6352:17 6358:25 6366:16,17 6432:20 6444:25 6445:1 6463:7 6466:6 6476:21 6490:24 6491:10 6494:21 6499:26 6500:6 6531:22	<b>farm's</b> 6382:5,6
<b>expand</b> 6334:16 6371:27 6403:27	<b>explode</b> 6453:26	<b>factor</b> 6338:13 6339:27 6418:21 6450:12	<b>farmer</b> 6306:14,20 6307:17, 18 6308:3,5 6324:5,28 6335:28 6357:1 6377:13 6380:3 6387:20 6390:16,17 6394:14 6396:28 6406:12 6410:10 6414:24 6417:19 6431:6 6458:4 6497:8
<b>expect</b> 6354:27 6362:4 6374:19 6405:19 6414:15 6456:4 6496:14	<b>explored</b> 6413:4 6479:3	<b>factors</b> 6380:23,24 6390:12 6413:2 6423:7 6452:20 6453:22 6455:5 6457:26 6463:19,21 6469:4 6484:19 6492:25 6493:12,19 6494:21	<b>farmer's</b> 6497:28 6498:1
<b>expectation</b> 6404:2 6442:24	<b>export</b> 6315:28	<b>facts</b> 6403:4 6406:17 6407:8 6445:23	<b>farmers</b> 6305:27 6317:9,10 6324:24 6348:15 6361:12,15 6367:2,26 6368:10 6369:3,7, 17,21,27 6381:23,27 6383:10 6390:6 6391:6,10, 17 6398:25 6401:21 6403:17 6405:18 6406:8 6407:11 6408:11,18 6410:13 6420:19 6422:12,16 6453:18,25 6457:17 6458:2 6499:8 6531:2 6540:15,26 6541:3,5, 17,24,26 6542:6
<b>expected</b> 6332:5 6352:2 6437:22,24 6443:4 6446:21 6447:15 6449:14	<b>exporters</b> 6410:11,17	<b>fail</b> 6441:16 6465:27	<b>farming</b> 6379:25 6380:16
<b>expecting</b> 6556:14	<b>exports</b> 6405:17	<b>faint</b> 6311:8	<b>farms</b> 6380:15 6381:8,9,14 6384:27 6385:3,6 6422:12, 17
<b>expedient</b> 6429:5 6431:19, 24	<b>exposing</b> 6322:3	<b>fair</b> 6321:14 6326:8 6348:4,6 6363:10 6393:14 6422:11 6424:3 6425:11 6427:28 6498:13 6508:1 6512:1,21 6514:15 6516:24 6518:25 6528:22,25 6532:17 6534:27 6537:17,22	<b>farther</b> 6468:24 6516:16
<b>expedite</b> 6402:22	<b>exposition</b> 6394:17	<b>fairly</b> 6311:17 6331:19 6334:4 6336:1 6425:10 6452:7 6453:8	<b>fast</b> 6429:14 6439:14 6544:17
<b>expend</b> 6530:11	<b>exposure</b> 6342:22 6399:23 6447:25 6465:4 6466:21 6471:17 6472:15 6474:28 6477:6 6540:27 6543:15,17	<b>faith</b> 6400:12	<b>fat</b> 6352:27 6353:20 6419:20 6543:17 6545:12
<b>expenditures</b> 6460:21 6530:13	<b>express</b> 6317:20 6405:6	<b>fall</b> 6354:10 6357:10 6414:12 6441:9 6447:23 6448:24 6449:2,19 6452:22 6453:11	<b>favor</b> 6404:4 6414:25 6432:16,23 6475:19
<b>expense</b> 6385:9 6447:28	<b>expressed</b> 6311:24	<b>fallen</b> 6451:21	<b>feasible</b> 6438:3
<b>expenses</b> 6391:10 6392:3	<b>expressly</b> 6478:24	<b>fallible</b> 6450:17	<b>February</b> 6451:22,23,28 6452:6,7
<b>expensive</b> 6438:28 6476:16 6532:15,16	<b>extend</b> 6427:4 6457:16 6528:2 6542:5	<b>falls</b> 6346:14	<b>federal</b> 6306:17 6313:28 6318:10 6342:2 6347:6 6350:2,4 6375:3 6380:26 6381:7,17,20,23 6382:23 6383:3 6401:3,8,11 6403:8, 13 6404:24 6413:8,12,22,25 6417:22 6418:4 6419:8,26 6422:7 6423:14,24 6425:4,7, 14,17 6453:24 6465:23 6466:13 6471:1 6479:9 6484:10 6485:2,27 6486:1,2 6490:10 6491:23 6492:3 6495:25 6502:3 6506:3,23 6507:3,10 6508:7 6531:1 6533:26 6534:1,8,13,25 6535:3
<b>experience</b> 6312:23 6321:3, 17 6322:19 6327:22 6333:10 6337:28 6338:26 6339:28 6341:9 6350:23 6385:1 6406:27 6407:28 6526:5,18 6527:14 6547:21	<b>extends</b> 6542:4	<b>familiar</b> 6512:26,27 6525:13	<b>Federation</b> 6381:1 6384:9, 19 6400:4 6401:26 6436:24 6496:24 6551:26
<b>experienced</b> 6385:23 6413:12	<b>extension</b> 6531:2	<b>Families</b> 6401:22 6403:17 6453:18,25 6457:17 6458:2 6531:2	
<b>experiences</b> 6423:3	<b>extensive</b> 6544:4	<b>family</b> 6380:2	
<b>expert</b> 6436:24 6450:20 6475:8 6483:8,21 6484:13, 19,23 6485:14 6487:4 6488:1,26 6489:7 6490:23, 25 6491:2,3,26,27 6492:21 6496:24 6516:21 6522:1,2 6525:21 6528:19 6547:24	<b>extent</b> 6365:25 6367:2,13,14 6369:2,22 6440:12 6485:24 6526:15 6529:21,26 6530:20 6534:18 6535:28 6542:27	<b>famous</b> 6502:13	
<b>expert-in-residence</b> 6507:7	<b>extra</b> 6369:7 6447:26,28 6554:10	<b>Fantasyland</b> 6379:18	
<b>expertise</b> 6528:17	<b>extraordinarily</b> 6315:7	<b>Fargo</b> 6343:17 6472:3	
<b>experts</b> 6420:16 6428:18 6484:15 6486:1	<b>extreme</b> 6316:8 6403:20 6439:23	<b>farm</b> 6350:5 6379:18,21,23 6380:2,9,11,20 6381:7 6382:1,2 6389:14,18,21,27	
<b>expire</b> 6438:11	<b>extremely</b> 6318:1 6349:15 6503:26		
<b>explain</b> 6301:20 6312:12 6330:1 6334:6 6335:21 6339:1,3 6392:1 6466:24 6471:18 6533:28 6536:24 6541:5	<b>eye</b> 6512:16		
<b>explained</b> 6351:18 6352:1 6372:24,27 6496:28			
	<b>F</b>		
	<b>face</b> 6403:14		
	<b>facetious</b> 6490:17		
	<b>facial</b> 6347:1		
	<b>facilitate</b> 6400:6 6436:2		
	<b>facilitates</b> 6471:26		
	<b>facilitating</b> 6350:2 6510:16 6511:5		
	<b>facilitation</b> 6511:13,19 6512:9		



<b>feed</b> 6410:13 6482:9	<b>fix</b> 6402:8 6423:1 6466:1 6485:24	<b>Foods</b> 6301:11 6351:14 6400:4 6505:5	6462:4 6477:4 6540:8 6544:17 6556:16
<b>feel</b> 6329:28 6354:23 6430:1 6477:26	<b>fixed</b> 6331:22 6340:5,6 6342:11 6346:24 6347:5 6352:3 6355:9,15 6356:24, 26 6359:24 6363:2 6401:27 6402:19 6421:2	<b>foodservice</b> 6321:6,9,24 6335:18 6336:27 6338:24 6339:3,17 6341:4 6342:8 6360:21 6373:26,27 6403:19 6548:3	<b>found</b> 6301:13 6336:28 6338:11 6413:6 6484:3 6524:16 6549:12
<b>fees</b> 6507:9,12 6508:6,16,18 6510:1	<b>flail</b> 6449:10	<b>football</b> 6401:16	<b>foundation</b> 6521:4,25 6524:1
<b>fell</b> 6441:5 6451:27 6456:21 6508:20	<b>flat</b> 6352:8,18 6356:14 6369:14	<b>footing</b> 6408:25	<b>four-week</b> 6322:9
<b>felt</b> 6348:13 6373:10	<b>flatter</b> 6336:2,25	<b>footnote</b> 6535:14,15,18 6537:4,5 6538:3	<b>fourth</b> 6353:8,9,21
<b>fertilizer</b> 6390:28	<b>flavored</b> 6355:8	<b>footnotes</b> 6538:2	<b>fraction</b> 6476:22,27
<b>fewer</b> 6381:14,19,22 6384:27	<b>flew</b> 6552:21	<b>force</b> 6416:8 6417:20,28 6418:3	<b>framework</b> 6497:27
<b>fight</b> 6363:9	<b>flex</b> 6348:12	<b>forced</b> 6380:19 6500:10	<b>frankly</b> 6308:23 6329:16 6332:18 6353:8 6372:9 6484:11,19 6485:8 6490:15
<b>fighths</b> 6488:25	<b>flexibility</b> 6555:28	<b>forecast</b> 6327:24 6337:16 6338:1 6354:12	<b>freakish</b> 6368:22
<b>figure</b> 6308:6 6313:15 6334:28 6369:4 6411:24 6413:7 6450:6 6482:10 6494:27 6556:1	<b>flights</b> 6377:16	<b>forecasting</b> 6529:6	<b>free</b> 6421:15 6556:24
<b>figures</b> 6384:12	<b>flip</b> 6385:15 6542:11,12	<b>forego</b> 6398:4	<b>freedoms</b> 6424:15
<b>file</b> 6308:28 6450:23 6515:2	<b>floor</b> 6310:5 6347:15,21 6348:13 6349:6,7,10,12 6368:2,4,6 6374:5,8 6392:3	<b>foresight</b> 6401:18	<b>freestall</b> 6380:13
<b>filled</b> 6554:4	<b>Florida</b> 6314:20 6341:21 6419:12,25 6421:22	<b>forest</b> 6304:26	<b>freight</b> 6390:20
<b>final</b> 6312:11 6413:10 6415:20 6453:10	<b>flow</b> 6460:21	<b>forget</b> 6417:19 6515:2	<b>frequency</b> 6414:19 6496:15
<b>finally</b> 6406:7 6416:8 6449:24 6452:5	<b>flows</b> 6440:12,13	<b>Forgot</b> 6426:4	<b>frequent</b> 6534:19
<b>finances</b> 6508:23 6514:13	<b>fluid</b> 6320:8 6322:25 6327:12 6333:20 6343:1,3 6344:28 6345:9 6347:4,12 6355:5 6373:22 6382:18 6383:4 6390:1 6395:24 6398:27 6399:15,17,18,26 6400:2,7 6403:16 6407:11 6408:19,21 6409:3,28 6410:7 6411:3 6412:13 6415:15 6425:16 6451:8 6462:20,26 6465:7 6471:4 6500:14 6515:25 6548:14	<b>form</b> 6372:12 6474:19 6507:20	<b>frequently</b> 6463:17
<b>financial</b> 6459:27 6460:25 6467:27 6476:20	<b>FMMO</b> 6479:5	<b>formal</b> 6411:28 6488:5	<b>fresh</b> 6403:16
<b>financially</b> 6475:10	<b>focus</b> 6403:15	<b>formally</b> 6401:28 6501:12 6531:4	<b>Friday</b> 6301:12,24 6305:23, 27,28 6306:13 6552:11,21 6553:26,27 6554:3,6
<b>find</b> 6333:25 6334:27 6345:9 6356:23 6401:2,7,12 6402:8 6416:24 6427:4 6439:13 6450:2 6459:3 6463:23,24 6464:5 6474:8,10 6480:28 6489:26 6496:13,14 6522:19 6524:2 6539:27 6540:21 6555:4,14	<b>focused</b> 6440:11	<b>format</b> 6303:11	<b>friend</b> 6325:3
<b>finding</b> 6474:16	<b>folks</b> 6307:16,27 6317:13 6333:27 6334:28 6339:13 6356:27 6456:3 6464:22	<b>formatting</b> 6538:1	<b>front</b> 6301:7 6315:7 6461:26 6483:5 6520:23 6522:5
<b>finds</b> 6414:2 6485:14	<b>follow</b> 6330:4 6393:11 6416:28 6428:20 6498:18 6511:28 6518:21 6550:27	<b>forms</b> 6468:2 6509:22	<b>fruits</b> 6417:24
<b>fine</b> 6389:8 6427:7 6459:15 6486:4 6487:6 6549:17	<b>follow-up</b> 6394:5	<b>formula</b> 6321:21 6337:7 6341:6 6345:3 6349:5 6363:5 6368:1 6369:10 6372:8,17 6373:13 6400:6, 23,25,26 6401:1,10,14,20 6402:1 6415:25 6439:18,19 6440:1 6532:27 6540:15 6541:26	<b>frustrated</b> 6414:8
<b>finish</b> 6307:8 6409:9 6506:1 6514:11 6551:23	<b>font</b> 6453:4	<b>formulas</b> 6401:6	<b>frustration</b> 6418:19 6454:21
<b>finishing</b> 6306:22	<b>Food</b> 6315:23 6401:22 6403:17 6453:18,25 6457:17 6458:2 6495:23 6531:2	<b>forthcoming</b> 6408:24 6411:15	<b>fuel</b> 6382:22 6410:13
<b>firm</b> 6409:22 6434:4		<b>fortunate</b> 6381:27 6391:23	<b>full</b> 6312:27,28 6327:26 6330:16 6387:14 6407:14 6442:13,15 6446:8,9 6483:6 6489:5 6493:2,8 6503:28 6554:12 6555:1
<b>firms</b> 6339:23		<b>forum</b> 6344:25	<b>fun</b> 6428:25
<b>fiscal</b> 6301:5		<b>forward</b> 6320:10 6334:28 6336:21 6342:16 6354:9,17 6355:2 6376:23 6399:7 6403:6 6408:17 6409:19 6412:23 6413:3 6447:4	<b>function</b> 6515:4
<b>fits</b> 6332:3			<b>functional</b> 6477:14
<b>five-year</b> 6308:3			<b>funny</b> 6457:4
			<b>furnished</b> 6414:18



<p><b>future</b> 6403:18 6410:18 6504:5 6532:6</p> <p><b>futures</b> 6326:1 6336:24 6337:28 6340:2,14 6352:12 6356:25,26 6359:15 6360:22 6399:24 6404:6,7,10,12,13, 21,22 6405:26 6406:4,13 6408:23 6411:14,18,20,23, 25 6412:6,8 6415:17,19,23, 24,26,27,28 6437:11,15,17 6438:6,10,19 6440:17,24 6441:24,25 6442:2,4,20,22, 24,27,28 6443:2,10 6444:13 6445:1,13 6447:18,19 6448:16 6465:5 6468:11 6469:21 6470:5,19,22 6471:5,8,24 6472:16 6473:2, 5,7,8,20 6474:9 6475:1 6532:24,25 6533:4 6535:12 6541:8,9,18 6542:14,17,20 6543:6,16,18,23,25</p> <hr/> <p style="text-align: center;"><b>G</b></p> <hr/> <p><b>GAAP</b> 6436:5 6439:11 6440:9</p> <p><b>gains</b> 6440:26 6441:4,9,20 6443:5 6446:13,27 6447:16, 26 6448:23 6449:1</p> <p><b>gap</b> 6358:19</p> <p><b>gave</b> 6351:26 6450:15 6544:12 6550:8</p> <p><b>general</b> 6313:23 6332:3 6344:28 6388:19 6425:6 6460:5 6478:15 6504:17 6507:17 6534:8</p> <p><b>generalizable</b> 6526:18</p> <p><b>generally</b> 6312:19 6324:20 6333:26 6337:27 6341:15 6347:20 6350:23 6354:11 6356:8 6436:4</p> <p><b>generated</b> 6450:23</p> <p><b>generating</b> 6508:1</p> <p><b>gentleman</b> 6547:10</p> <p><b>genuinely</b> 6408:28</p> <p><b>geographic</b> 6421:20</p> <p><b>geographical</b> 6391:18</p> <p><b>geography</b> 6534:11</p> <p><b>Georgia</b> 6421:22</p> <p><b>get all</b> 6516:15</p> <p><b>give</b> 6309:24 6323:16 6333:28 6343:8,10,11,19,23 6346:28 6354:4 6355:3,23 6356:24 6377:15,17 6425:17</p> <p>6437:4 6484:2 6489:16 6500:2,4,5 6504:2 6515:17 6528:14 6537:23 6543:14 6549:6 6551:8 6555:20</p> <p><b>giving</b> 6343:15 6344:17 6463:13 6519:3 6544:12</p> <p><b>glad</b> 6313:15 6407:23 6427:27 6485:12</p> <p><b>Glanbia's</b> 6327:28</p> <p><b>goal</b> 6427:3 6433:11</p> <p><b>God</b> 6513:5 6555:5</p> <p><b>golden</b> 6345:15,16</p> <p><b>good</b> 6301:10 6304:15 6305:9 6306:3,4,9,26 6307:11,12 6310:24,25 6318:19 6324:2,6,7 6326:27, 28 6332:11 6334:1 6335:27 6351:2,5 6353:3,6 6354:13 6378:10,11 6379:16 6380:23 6382:25 6386:27 6387:5,21, 22 6388:15,16 6391:16 6395:4 6397:18,19 6398:7 6400:12 6409:10 6421:17 6422:8 6460:26 6461:15,18, 20,25 6482:21 6486:24 6497:13,17 6538:8,9 6554:17 6557:1</p> <p><b>goodness</b> 6537:8</p> <p><b>Gould</b> 6515:23 6541:13 6551:2,10</p> <p><b>governing</b> 6487:12</p> <p><b>government</b> 6403:8,14 6453:24 6506:3,18 6508:15 6510:2 6511:10,11 6541:9 6548:4</p> <p><b>grab</b> 6515:16</p> <p><b>grade</b> 6462:10</p> <p><b>gradually</b> 6383:4</p> <p><b>grains</b> 6379:22</p> <p><b>grandchildren</b> 6426:1</p> <p><b>grant</b> 6326:5,7 6443:8</p> <p><b>graph</b> 6331:1 6540:9,21</p> <p><b>grateful</b> 6422:5</p> <p><b>great</b> 6305:9 6307:22 6309:3 6349:15 6352:20 6357:14 6377:23 6378:21 6426:9 6500:28 6502:27 6514:21 6556:22</p> <p><b>greater</b> 6302:5 6312:6 6323:24 6374:24 6413:17</p> <p><b>greatest</b> 6500:20</p> <p><b>grew</b> 6380:7</p> <p><b>grocer</b> 6464:19</p> <p><b>groceries</b> 6548:9</p> <p><b>grocers</b> 6500:16 6530:4</p> <p><b>grocery</b> 6322:24 6353:1 6359:21 6421:3 6548:6,14</p> <p><b>groovy</b> 6459:19 6461:4,6</p> <p><b>gross</b> 6389:19 6506:21</p> <p><b>ground</b> 6379:21 6416:24</p> <p><b>group</b> 6305:21 6355:9 6408:13 6409:12 6412:18 6415:16 6416:7 6456:3 6461:19 6504:4,14,28 6505:4,7,8,9,13,14,15,18,22 6513:22,23 6517:19</p> <p><b>Group's</b> 6416:5</p> <p><b>grow</b> 6350:17 6354:27 6379:22 6382:17 6464:9</p> <p><b>growing</b> 6356:23 6373:8</p> <p><b>grown</b> 6336:24 6380:1</p> <p><b>grows</b> 6454:2</p> <p><b>growth</b> 6399:16 6462:21,23 6463:2</p> <p><b>guarantee</b> 6416:9 6444:18 6500:12</p> <p><b>guess</b> 6310:16 6321:23 6333:12 6337:13 6342:28 6390:5 6393:1 6426:17,22 6427:18 6433:22,25 6478:12 6499:24 6519:21 6547:18 6556:19</p> <p><b>guest</b> 6458:4</p> <p><b>guidelines</b> 6538:1</p> <p><b>guilty</b> 6407:20</p> <p><b>gut</b> 6412:28</p> <p><b>guys</b> 6402:7</p> <hr/> <p style="text-align: center;"><b>H</b></p> <hr/> <p><b>half</b> 6306:25 6353:8 6358:7 6368:26 6404:16,19 6416:23 6434:27 6435:5 6449:18 6476:23 6482:15 6498:10 6510:8 6542:19,20 6546:6, 26</p> <p><b>Hancock</b> 6370:17,19,20,27 6371:6 6373:20 6376:16 6377:3,10 6378:6,7,9 6379:1,2 6384:22 6387:6,11 6392:19,24,25,27 6393:7 6434:3 6491:15,19,20</p> <p>6492:14 6500:26,28 6501:6, 7,19 6502:7,11 6503:1,4 6506:17 6509:15 6511:9 6512:16 6514:28 6515:19 6516:5 6518:24 6519:7,8 6520:22 6521:28 6523:19 6525:2,5,7,20 6526:21 6527:21,27 6528:1 6533:16 6535:19,27 6536:10,14,16, 19,22,27 6537:3,6,14,17 6538:5 6540:25,28 6547:28 6549:1,4 6551:1,20 6552:2</p> <p><b>hand</b> 6409:18 6481:28 6498:25 6549:9</p> <p><b>handed</b> 6523:11</p> <p><b>handle</b> 6431:28 6547:4</p> <p><b>handled</b> 6432:15</p> <p><b>handler</b> 6412:5 6437:8,23,27 6438:4,9 6445:18 6497:9,10, 11,13,24 6498:11</p> <p><b>handler's</b> 6498:2</p> <p><b>handlers</b> 6321:28 6326:2 6337:18 6360:15 6369:22 6411:3 6438:18 6493:15 6530:2</p> <p><b>handlers'</b> 6411:27 6412:14</p> <p><b>handles</b> 6471:26</p> <p><b>handling</b> 6396:10</p> <p><b>hands</b> 6481:27</p> <p><b>hanging</b> 6397:13</p> <p><b>happen</b> 6306:15 6308:5 6315:19 6322:22 6335:6 6337:15 6343:8 6368:18 6392:15 6416:10 6442:26 6458:19 6470:23 6554:28</p> <p><b>happened</b> 6334:23 6342:12 6374:17 6382:16 6386:22 6423:3,5 6452:16 6455:9 6485:16 6487:2 6552:26</p> <p><b>happening</b> 6368:7 6455:24 6516:9 6517:2 6519:11,17 6522:25 6550:15</p> <p><b>happy</b> 6371:8 6409:8 6445:7 6446:7 6556:21</p> <p><b>hard</b> 6411:4 6421:13 6455:26 6459:8 6474:16 6502:15 6535:24</p> <p><b>harmless</b> 6408:11</p> <p><b>hat</b> 6549:28</p> <p><b>haul</b> 6390:11</p> <p><b>hauling</b> 6382:5 6383:26 6384:2,6 6385:24 6390:14</p>
--





<p><b>havoc</b> 6342:13</p> <p><b>hazard</b> 6390:5 6548:26</p> <p><b>head</b> 6348:24 6359:6 6417:11 6453:11</p> <p><b>header</b> 6456:3 6542:15</p> <p><b>heading</b> 6481:5 6535:9</p> <p><b>headline</b> 6456:10</p> <p><b>headquartered</b> 6509:25</p> <p><b>heads-up</b> 6398:14 6502:7</p> <p><b>healthier</b> 6500:14</p> <p><b>hear</b> 6332:5 6346:3 6378:16 6386:9 6407:17 6431:27 6432:4 6459:16 6486:28 6508:21 6527:7 6548:13</p> <p><b>heard</b> 6333:19 6335:4 6346:9 6358:24 6392:18 6407:26 6409:2 6412:17 6416:22 6420:16,19 6434:2 6436:28 6463:4 6466:22 6470:17,19 6477:7,21 6493:23 6514:17 6526:10 6547:25</p> <p><b>hearing</b> 6301:21,26 6302:7, 13 6303:14,18 6304:19,21 6305:2,4 6306:16,18 6333:22 6342:4 6347:19 6351:16 6361:4 6363:20 6366:18 6382:23,24 6393:5 6395:2 6397:7 6402:1,10,26 6408:27 6416:22,23 6417:28 6418:6 6419:7 6424:26 6425:20 6428:2,3,4 6429:5 6433:7,14,16 6439:2 6443:17,18 6450:1,25 6458:6 6478:9 6484:14 6485:10 6487:16,25 6488:26 6489:11 6491:22 6495:12 6502:3 6523:9,21 6533:1 6549:15 6550:2,17 6552:11 6553:25,28 6554:19,21 6555:13 6556:23</p> <p><b>hearings</b> 6429:20 6497:25</p> <p><b>hearsay</b> 6485:3,5,7 6524:7, 18</p> <p><b>heavily</b> 6338:26 6352:23 6450:22</p> <p><b>heavy</b> 6459:10,19 6482:4</p> <p><b>hedge</b> 6321:12,15,28 6322:2,12 6334:14 6335:24 6336:7 6339:21 6340:9,28 6341:19 6343:4 6344:19 6345:19 6346:6,13,16,22,25 6347:2 6352:11 6358:9 6359:18 6369:23,24 6387:26 6388:2 6391:12 6412:6 6436:21 6438:1,5,10 6441:3</p>	<p>6442:1,2,5 6443:6 6444:28 6447:18,20,21 6448:15 6459:22,28 6460:1,14,17,24 6463:7,12,26 6467:3,6,7,13, 17,19,22,25 6468:5 6469:20 6471:16 6472:24 6473:2 6475:18 6476:9,19 6496:25 6497:8,28 6498:16,18,20,21 6515:26 6526:20 6539:6 6540:16,26 6541:3,17,27 6542:5,7,9 6543:22 6544:13, 18,27 6545:1,5,10,17,23 6546:2 6548:9</p> <p><b>hedgeable</b> 6323:12,16 6372:17 6439:1</p> <p><b>hedged</b> 6436:2 6440:13,18, 19 6441:3,10,17 6449:7 6470:5 6539:15 6544:21,22 6547:22 6551:5</p> <p><b>hedger</b> 6468:21</p> <p><b>hedgers</b> 6416:2</p> <p><b>hedges</b> 6345:28 6449:19 6460:12,18 6475:6,11 6526:16 6544:7</p> <p><b>hedging</b> 6320:1 6321:1 6332:13 6333:5 6338:20,23, 28 6339:24 6341:24 6345:5, 23 6346:5 6347:10 6351:16 6352:7 6353:28 6358:23,26 6359:2,4,12 6360:7,16 6371:22 6372:9 6387:26 6391:19,27 6399:19,20 6400:7,28 6401:13 6406:11 6412:14 6416:6,11 6420:18 6436:2,7,25 6437:22,24 6438:2,25 6440:12,23,25,26 6441:4,9,16,19,20,23,24 6442:8,9,17 6443:4,13,15,19 6445:15,17,18,25 6446:1,3, 13,22,27 6447:16,22,25,27 6448:13,15,23 6449:1,23 6460:12 6466:23 6467:20 6468:25 6469:19 6470:20,22 6472:8,15 6476:14,15,18,24, 28 6477:5,12,24 6478:10 6496:23 6497:1,4 6498:8 6499:17,18 6502:3 6527:14 6529:3 6532:22 6533:25 6543:15,16 6545:15,26 6548:2,5</p> <p><b>heifers</b> 6379:20</p> <p><b>held</b> 6408:11 6413:21</p> <p><b>helped</b> 6349:7 6454:8 6480:19 6515:6 6517:17,18, 22 6534:18</p> <p><b>helpful</b> 6306:26 6348:13 6490:4 6548:25</p> <p><b>helps</b> 6347:28 6348:1 6353:25 6438:20 6515:2</p>	<p><b>herd</b> 6380:7</p> <p><b>herdsman</b> 6380:4</p> <p><b>Herlache</b> 6322:11</p> <p><b>Herndon</b> 6379:6</p> <p><b>hesitant</b> 6415:8</p> <p><b>hesitate</b> 6424:18</p> <p><b>hesitated</b> 6415:16</p> <p><b>Hey</b> 6471:15</p> <p><b>hide</b> 6328:13</p> <p><b>high</b> 6312:22 6317:20 6318:1,2 6322:10 6349:15 6358:13 6403:12 6405:18 6406:23 6408:7,16,23 6409:27 6438:12 6439:21, 22,23 6443:9 6458:10 6468:13 6469:2 6476:27 6477:13 6483:4 6503:26 6504:20 6529:18,24 6548:23</p> <p><b>high-level</b> 6353:1</p> <p><b>higher</b> 6310:4,7 6328:27 6333:16 6348:23 6357:19,22 6365:13 6368:5 6369:1 6371:19 6374:19,22,23,26 6376:3 6382:28 6404:27 6405:4,11,14,16,20 6408:10, 14,15 6416:4,12 6418:22 6440:4 6442:3,4,7 6443:4 6447:14 6449:17 6451:9 6452:4 6453:9,20 6455:21 6464:13,27 6467:5,8 6468:19 6473:19 6474:19,20 6475:1 6476:18 6508:8 6532:13</p> <p><b>higher-of</b> 6309:12 6310:8 6311:15,16 6314:17,26 6316:13,15 6317:7,14 6318:3 6319:19,28 6320:11, 21 6324:21 6325:24 6333:6 6334:12 6335:24 6336:7 6337:6 6342:1 6346:6,13 6348:1 6349:9,11 6350:19 6351:19 6352:14 6357:13, 15,28 6358:10 6359:3 6361:11 6362:1,16,17 6364:2,4 6367:3 6368:12 6369:3 6370:10 6371:13 6372:3 6374:24 6375:4,17 6399:20 6402:17,23 6408:8 6409:12 6413:16,17 6414:25,26 6415:1,9,12 6419:3 6422:14,24 6436:3,8, 22,26 6437:5,14,17,21 6438:16,24,25 6441:12,26 6445:26 6446:2,14,17,19 6448:2,16,26 6449:22 6452:9 6469:2,19,22 6473:13 6474:22,24,25 6475:5,11 6496:5,16 6522:4</p>	<p>6530:3 6534:3 6536:1 6538:14 6539:9 6541:23</p> <p><b>highest</b> 6329:4 6330:27 6341:15 6349:3 6365:11 6369:21 6401:8</p> <p><b>Highground</b> 6471:11</p> <p><b>highlighted</b> 6337:13</p> <p><b>highly</b> 6470:11,13 6471:10 6477:14 6530:7</p> <p><b>Hill</b> 6311:4 6393:26 6394:3 6429:7,11 6433:1,2,12,22 6434:16 6483:17 6484:5,8 6486:9 6491:10 6492:17 6550:22</p> <p><b>hire</b> 6509:23</p> <p><b>historical</b> 6368:14 6374:9 6445:12</p> <p><b>historically</b> 6392:22 6458:10,11</p> <p><b>history</b> 6374:23</p> <p><b>hit</b> 6401:19 6432:10</p> <p><b>hoc</b> 6403:13</p> <p><b>hold</b> 6306:18 6415:23 6472:13,21 6503:26 6554:19</p> <p><b>holding</b> 6383:10 6417:27</p> <p><b>holiday</b> 6306:17</p> <p><b>holidays</b> 6353:22 6555:14</p> <p><b>holy</b> 6450:14</p> <p><b>home</b> 6425:28 6489:24 6552:22</p> <p><b>homework</b> 6421:7</p> <p><b>honest</b> 6346:10 6420:24 6427:5 6546:28</p> <p><b>honestly</b> 6308:21 6315:22 6321:7 6356:3 6417:19 6429:12 6514:24 6537:20</p> <p><b>honor</b> 6301:10,12,16,25,28 6302:8,18 6303:10,17,28 6304:4 6305:12 6309:18 6320:10 6325:2 6344:11 6361:4 6370:17 6371:9 6373:17 6377:3,12 6383:11, 23 6387:11 6393:8,23 6394:16,26 6395:15,25 6396:19 6397:4,28 6398:14 6405:9 6407:14 6410:28 6417:2 6425:22 6426:10 6427:21,28 6428:15,27 6431:5 6432:5 6433:2 6434:18,20 6435:3 6459:12 6460:28 6461:15 6462:3 6466:2 6479:12,21,22</p>
---	--	---	---



6483:7,14 6484:8,10 6485:19 6486:5 6487:10 6488:15 6489:19 6490:6 6491:20 6492:15 6495:7 6500:18,23 6501:7 6521:6, 18,28 6522:27 6523:15 6524:10 6525:5 6536:6,20 6537:17 6549:26 6550:27 6553:21,27	5 6446:14,15 6447:11,12,15 6449:17 6451:20,28 6452:26,27 6454:6 6455:2 6456:18 6458:9 6473:18 6519:19,28	6391:24 6394:17 6395:16 6399:23 6401:23 6403:20 6404:5,6,10,13,15,21,26,28 6405:3,4,10,11,14,20 6406:12,23,28 6407:2 6408:3,5,10,16,21,23 6409:7,11,15,22 6411:19,23 6412:6,8 6415:2,19,21,23,27 6416:15 6417:14,25 6418:2, 3,10 6419:2 6436:26 6437:10,18 6440:24 6441:23,24,26 6442:2,3,27 6444:13 6451:15,16,22 6452:25,27 6453:12,16 6454:1,9,24,25 6455:2,13,20 6456:11,12,16 6457:14,17, 20 6458:3,23,26,28 6465:5 6468:5 6469:21 6470:5,8,11, 22 6471:23 6472:16 6474:9, 24,25 6475:2 6493:24,27,28 6494:1,4,15,17 6495:13,17, 28 6498:9,10,15,20 6520:13, 15 6532:6,24 6541:8,18 6542:1,20 6543:8,16,23 6544:19,21	<b>impasse</b> 6489:21 <b>impeach</b> 6522:21 6549:19 <b>impeachment</b> 6492:1 6549:17 <b>imperfect</b> 6443:13 <b>impetus</b> 6544:4 <b>implement</b> 6408:22 <b>implementation</b> 6345:22 6380:26 <b>implemented</b> 6331:11 6382:11 6399:9 <b>implementing</b> 6347:10 <b>implication</b> 6504:18 <b>implied</b> 6437:11,15 <b>implies</b> 6470:2 6505:6 <b>importance</b> 6347:20 6403:13 6478:10 6494:21 <b>important</b> 6317:8 6340:21 6345:18,23 6353:18 6355:20 6361:12 6370:23 6400:11 6405:2 6429:16 6432:26 6449:3 6459:23 6467:19,23 6473:26 6479:10 6510:21 <b>impose</b> 6443:1 <b>impossible</b> 6336:7 <b>improve</b> 6382:15 <b>Improvement</b> 6402:20 <b>improvements</b> 6410:15 <b>inappropriate</b> 6344:1 <b>incentive</b> 6309:13 6364:3 6464:7,11,26 <b>incentivize</b> 6482:6 <b>incentivized</b> 6313:19 <b>incentivizes</b> 6481:22 <b>inclined</b> 6463:27 6464:1 <b>include</b> 6315:25 6382:22 6436:16 <b>included</b> 6315:24 6374:6 6402:21,25 6436:15 6444:24 6446:9 6484:19 6518:18 <b>includes</b> 6373:4 6483:28 <b>including</b> 6386:15 6403:4 6417:27 6420:17 6537:24 <b>income</b> 6409:15 6460:13,15, 18,19 6510:13 6512:10,11 <b>incomes</b> 6463:19
<b>hope</b> 6310:21 6326:10 6347:3 6393:13 6409:26 6443:15 6478:12 6501:20 <b>hoped</b> 6349:6 <b>hoping</b> 6357:1 6554:14 <b>hops</b> 6468:12 <b>horizon</b> 6445:16 6446:22 <b>horizontal</b> 6447:8,14 <b>hosting</b> 6523:20 <b>hot</b> 6482:27 <b>hotel</b> 6325:13 <b>hour</b> 6429:4 6431:7,21 6432:9 6433:15 6434:15,16 6514:11 <b>hourly</b> 6510:20 6511:12 <b>hours</b> 6472:10 6502:6 6509:21 6531:3 6553:3,6 6554:12,15 <b>house</b> 6532:11 <b>housekeeping</b> 6397:5 <b>housing</b> 6380:14 <b>How's</b> 6378:20 <b>HTST</b> 6320:8,28 6321:3 6322:17 6323:11,19,25 6335:17,18 6338:20,23 6339:6,12 6341:10,23 6346:23 6360:8 6421:4,6 6498:28 6500:1 6530:6 6548:3 <b>huge</b> 6345:11 6425:7 6453:6 6458:22 6506:5 <b>human</b> 6422:19 6423:5 <b>humiliate</b> 6462:7 <b>humor</b> 6514:21 <b>hundred</b> 6390:11 6453:13 6482:1,4 6507:18 <b>hundred-mile</b> 6389:27 <b>hundredweight</b> 6382:6,8 6383:5,7,26,27 6384:2,3 6386:21 6401:5 6405:5,8,12 6437:6,12,14,16,25 6438:13, 23 6440:16,18,20,27 6441:3,	<b>hundredweights</b> 6438:8 6520:12 <b>hurdles</b> 6400:3 <b>hurry</b> 6346:14 <b>hurting</b> 6422:22 <hr/> <b>I</b> <hr/> <b>idea</b> 6320:14 6343:28 6395:6 6425:10 6542:10 <b>ideas</b> 6432:4 6500:7 6550:23 <b>identical</b> 6302:3 6362:2 6398:12 6415:4 <b>identification</b> 6378:5 6396:5,9 6479:13,26 6480:3 6487:16,23 <b>identified</b> 6363:19 <b>identify</b> 6305:18 6306:27 6386:8 6400:28 6490:2 6491:12 <b>IDFA</b> 6301:22,27 6307:1 6311:7 6323:10 6331:24 6342:28 6343:1,16 6344:17 6347:24 6351:18 6361:28 6365:19,26 6368:11 6400:18 6402:6 6409:19 6412:18 6443:28 6492:18 6510:24 6539:12 <b>IDFA's</b> 6308:12 6309:14 6310:3,7 6311:15 6323:15 6337:5 6348:15 6366:25 6367:15,21 6371:20 6374:6 6375:1 6535:20 <b>IDFA/NATIONAL</b> 6536:7 <b>idiosyncratic</b> 6476:7 <b>ignore</b> 6456:24 <b>ignoring</b> 6315:17 6455:17 <b>II</b> 6312:16,17 6323:25 6328:28 6329:18,27 6330:10 6364:7,15,17 6371:13 6457:6 6519:28 6520:8,12 <b>III</b> 6309:12 6312:16,21 6317:7 6319:9 6329:18,23, 27 6330:11,20,26 6337:21 6346:4,16 6352:10,12 6353:19 6357:19 6358:1,8 6363:4 6364:2,7,15,18 6371:13 6374:10 6375:6,19	<b>III/IV</b> 6313:26,27 6319:6,7 6338:7,11 6453:28 6493:22 6496:21 <b>illegal</b> 6350:10 <b>Illinois</b> 6503:25 6515:9 <b>illustrate</b> 6415:11,25 6437:6 6446:25 <b>illustrated</b> 6450:5,7 <b>illustrates</b> 6413:8 6545:22 <b>illustration</b> 6411:19 <b>illustrative</b> 6552:13 <b>imagine</b> 6336:9 6352:22 6368:17 6437:8 6455:26 6547:8 <b>imagines</b> 6419:8 <b>immediately</b> 6318:22 6537:27 <b>immigrant</b> 6428:19,23 <b>impact</b> 6319:10 6325:22 6365:7,18 6387:14,25 6391:4 6400:22 6401:21 6411:26 6413:3,8 6421:21 6452:5 6453:5 6454:7 6456:7,22 6494:8 6496:25 6528:20 <b>impacted</b> 6534:28 <b>impacts</b> 6466:23 6497:1 <b>impart</b> 6374:25 <b>impartial</b> 6503:21	



<b>incorporate</b> 6488:5	<b>inflated</b> 6460:25	6473:27 6474:1 6497:14,15 6506:22,23,28 6507:1,2,3,10 6508:7 6510:9,10,11	<b>intuition</b> 6449:8
<b>incorporated</b> 6487:27	<b>inflation</b> 6342:12	<b>intake</b> 6546:6,20,27	<b>inversion</b> 6405:13 6408:9
<b>incorporates</b> 6332:10	<b>informal</b> 6503:9,13 6505:3,7	<b>integrity</b> 6533:26 6534:1,9, 16,25	<b>inversions</b> 6319:4 6337:7
<b>incorporating</b> 6507:27	<b>informally</b> 6407:2	<b>intellectually</b> 6416:27	<b>inversions/depooling</b> 6325:22
<b>increase</b> 6317:24 6365:14 6367:2 6369:20,25 6381:13, 26 6382:5 6383:9 6384:26 6385:23 6404:1 6406:13 6464:2 6493:14	<b>information</b> 6308:24 6338:2 6371:5 6405:23 6429:26 6434:8 6445:12 6479:24 6507:17 6514:25 6520:26 6521:5,22 6523:22 6525:19 6537:15 6539:17 6548:20,27 6549:12 6550:5,9 6551:9	<b>intending</b> 6524:11	<b>invest</b> 6410:14 6463:27 6464:8
<b>increased</b> 6332:14 6354:1 6382:10 6383:4 6384:19 6390:4 6404:20 6526:27	<b>information's</b> 6308:22	<b>intent</b> 6375:5 6415:5,11 6427:3 6428:8 6462:25 6526:14	<b>investment</b> 6380:13
<b>increases</b> 6409:14 6441:20 6452:27 6460:7,16	<b>informed</b> 6400:24	<b>intentionally</b> 6403:26	<b>investments</b> 6464:2
<b>increasing</b> 6404:4 6414:19 6451:13	<b>ingredient</b> 6351:27	<b>interest</b> 6318:15 6321:25 6331:22 6379:28 6380:22,25 6416:15 6458:16 6504:17 6508:14 6509:17	<b>invite</b> 6373:18 6388:11
<b>increasingly</b> 6399:28	<b>ingredients</b> 6351:21,22 6390:2 6538:12	<b>interested</b> 6334:21 6335:12 6343:19	<b>invited</b> 6386:13
<b>incremental</b> 6455:27	<b>Inherently</b> 6382:27	<b>interesting</b> 6342:20 6407:28	<b>inviting</b> 6522:23
<b>indemnities</b> 6406:10,11	<b>initially</b> 6475:9	<b>Interestingly</b> 6334:19	<b>invoked</b> 6435:25
<b>indemnity</b> 6454:19	<b>initiated</b> 6342:24 6442:5	<b>interests</b> 6407:11 6414:25 6416:6,18 6532:22	<b>involve</b> 6522:20
<b>independent</b> 6391:9	<b>initiation</b> 6447:20	<b>interfere</b> 6495:16,20	<b>involved</b> 6327:23 6338:28 6414:7 6472:7 6509:4 6517:25
<b>independently</b> 6348:28 6548:24	<b>innovating</b> 6421:15	<b>interject</b> 6370:17 6398:16 6428:27 6522:19	<b>involvement</b> 6379:28
<b>index</b> 6341:11 6382:25	<b>innovation</b> 6305:21 6412:16 6421:14 6423:2 6461:19	<b>internal</b> 6338:1	<b>Iowa</b> 6417:21
<b>indicating</b> 6344:3,17	<b>innovators</b> 6398:26 6408:19 6410:1 6415:15	<b>international</b> 6301:11 6351:13 6400:4 6403:13 6505:5	<b>issue</b> 6320:23 6331:12 6402:16 6414:7 6463:7 6466:5 6469:2 6475:26 6476:14 6478:14,15 6491:1, 9 6495:27 6496:22 6499:12, 13 6501:12 6525:23 6528:19 6549:12 6550:17
<b>indication</b> 6317:15	<b>input</b> 6308:27 6390:22,27 6410:10 6411:3 6449:23 6464:10,16,21 6500:15 6530:5 6538:23 6548:9	<b>internet</b> 6410:25 6490:2	<b>issues</b> 6319:28 6338:12 6352:14 6394:28 6402:7 6418:4 6474:21 6499:26 6524:14 6537:15
<b>indicative</b> 6411:17,26 6412:27	<b>inputs</b> 6388:2 6499:6,19	<b>interpret</b> 6328:8 6329:8 6330:1 6534:24	<b>item</b> 6424:17 6440:14,18,19 6441:3,10,18 6449:7
<b>indicator</b> 6313:2,6	<b>inquiry</b> 6363:19 6364:3 6487:23 6516:18 6529:13	<b>interpretation</b> 6398:17 6400:8 6537:23	<b>IV</b> 6309:12 6312:16,17,21 6317:7 6318:2,4 6319:10 6329:18,27 6330:11 6337:21 6346:16 6357:20 6358:1,9 6363:5 6364:2,8,15,18 6371:14 6374:10 6375:6,19 6399:23 6401:23 6403:21 6404:7,11,13,18,21,27,28 6405:3,4,10,12,14,19 6406:12 6408:6,10,15 6415:2,19,21,23,27 6436:27 6437:10,18 6440:24 6441:23,24,26 6442:4,6,27 6451:16,27 6452:26,27 6453:13,16 6454:2,10,26 6455:2,21 6456:17 6457:7,8, 19,20 6458:24 6465:5 6468:6 6469:22 6470:6,8,22 6471:23 6472:16 6474:9,24, 25 6475:2 6493:25 6494:4, 15,18 6495:13,18 6496:1 6498:20,21 6541:8,19
<b>indirectly</b> 6338:15 6373:8 6390:21	<b>inside</b> 6383:2	<b>interrupt</b> 6328:22 6370:20 6535:6	
<b>individual</b> 6314:13,22 6346:15	<b>instance</b> 6305:26 6469:20 6481:2 6492:27	<b>interrupting</b> 6377:4	
<b>individually</b> 6408:13	<b>instill</b> 6425:9	<b>intertwined</b> 6338:6	
<b>induce</b> 6402:13 6406:10,11 6413:20 6414:13	<b>instinct</b> 6422:20	<b>intervention</b> 6403:14	
<b>industry</b> 6317:3 6322:15 6401:18 6419:7 6420:16 6422:6,7 6477:3 6478:10 6500:11,14 6510:15,17,21, 26 6525:22 6535:11,13 6536:4	<b>Institute</b> 6400:17	<b>introduce</b> 6411:13 6444:12, 17,19 6486:10,17 6531:23	
<b>industrywide</b> 6476:8	<b>institutional</b> 6420:28 6530:7	<b>introduced</b> 6400:13 6401:21 6402:6 6442:21 6490:3 6550:2	
<b>ineffectiveness</b> 6443:19	<b>instruct</b> 6325:2	<b>introducing</b> 6471:9,14 6472:3	
<b>inelastic</b> 6333:20	<b>instrument</b> 6322:13 6425:14 6440:13,23,26 6442:8 6444:14	<b>introduction</b> 6483:17 6535:8	
<b>infer</b> 6411:5 6513:27 6529:28 6531:23	<b>instrumental</b> 6547:26	<b>introductory</b> 6440:6	
<b>inferred</b> 6516:18	<b>instruments</b> 6334:14 6438:2 6499:17		
	<b>insurance</b> 6332:23 6340:23 6388:3 6405:27 6406:10,11		



6542:3,20 6543:11,16,23 6544:20,22	6315:11 6318:11 6320:16 6322:11 6329:16 6332:4,11 6335:2 6336:28 6339:3,13 6345:6 6346:7 6347:19 6348:4,7 6349:21 6355:2,3, 7,8,9 6356:24 6357:9 6359:21 6380:19 6390:12 6394:28 6429:24 6432:20 6468:14 6491:8 6498:1 6512:6 6516:15 6525:19 6529:5 6530:17 6532:18,19 6552:9 6555:9	larger 6380:3,15 6531:15 late 6404:25 latest 6356:12 6378:2 6380:26 latitude 6508:5 laugh 6514:8 law 6400:9 6476:2 lawyer 6373:3 6549:20 lay 6491:4 6492:18 6521:4 lead 6311:16 6412:15 leader 6464:20 leaders 6464:27 leading 6337:12 leaking 6531:4 learn 6408:28 6416:24 6547:24 learned 6312:20 6315:22 6419:22 6509:6 6548:1 learning 6381:3 6477:26 learnings 6403:4 leave 6411:9 6417:7 leaves 6384:4 leaving 6376:5 6383:9 6503:19 6504:4 6505:23,26 lectured 6333:11 left 6305:22 6334:23 6463:22 6503:24 6545:18 6552:19 6554:10 6556:5,7 legal 6398:1 6475:24 6503:11 6505:7 6528:26 legally 6343:14 legend 6494:25 legislation 6372:12 legislative 6418:5 6422:27 6497:24,26 legitimacy 6527:4 legitimate 6409:27 length 6335:12 6340:26 6357:14 lens 6528:26 lessons 6315:21 let alone 6382:17 6476:23 lets 6355:15 Letters 6479:24	letting 6368:28 6407:20 level 6335:15 6383:5 6451:5 6462:11 6466:7 6477:25 6531:20 6547:9 levels 6382:19 liability 6506:5 licensed 6506:28 licensing 6512:6,14 6513:15 life 6323:24 6335:13 6347:3 6380:21 6421:1 6459:2 6516:20 life-changing 6380:19 lift 6403:10 6452:3 6454:8 light 6371:17 6465:14 6482:27 6498:22 likelihood 6314:1 likes 6357:4 likewise 6410:1 limbo 6397:13 limit 6428:8 6449:18 limitations 6318:11 limited 6376:26 6432:9 6434:13 limits 6399:25 6465:6 linear 6452:17 lines 6344:18 6386:20 6510:8 6513:13 6535:9 lining 6339:25 6483:4 link 6360:2 6535:18,20 liquid 6325:28 6391:1 6392:13 6404:7,14 6444:14 liquidity 6326:4,5 6408:23 6416:2 6443:9 6444:5,21 6473:23 6474:26 6531:15 list 6332:9,10 6343:19 6471:12 6473:10 6503:28 6551:23 listed 6337:6 6365:11 6410:25 6412:7 6425:1 6445:25 6449:21 6479:2 6528:5 6538:3 6539:11 listen 6469:11 6485:13 listened 6536:24 listeners 6489:24 listening 6307:16 6419:7 listing 6536:7
<b>J</b>			
<b>J-O-H-N</b> 6386:26 <b>January</b> 6331:11,12 6358:2 6401:2 6404:9 6405:2 6406:3 6413:13 6446:19 6480:16 6503:20 6505:17 <b>JDS</b> 6494:20,27 <b>Jersey</b> 6334:20,24 6335:16 6380:2,6 <b>jiggle</b> 6546:13 <b>job</b> 6324:2 6327:6 6345:6 6465:17 <b>jobs</b> 6465:16 <b>John</b> 6386:10 6387:8 6465:12 <b>join</b> 6523:15 <b>joke</b> 6504:13 6514:8,14,16 <b>joking</b> 6504:12 <b>Jordan</b> 6400:16,21 <b>Journal</b> 6450:1,21 6493:4 <b>Judge</b> 6427:11,24 6486:14 6487:23 6488:4 <b>judgment</b> 6504:18 <b>judicial</b> 6305:3 <b>July</b> 6331:8,10 6454:23,24, 28 6455:16,19,25 6456:11, 16,18,19 6457:5,10,13 <b>jumped</b> 6322:27 <b>jumping</b> 6518:27 <b>June</b> 6331:20 6446:20 6453:23 6454:1,3,18,23,25, 27 6455:9,12,14,16,19,25 6456:1,4,13 6460:4,6 6478:25 6480:14	kindly 6527:27 kindred 6510:28 kinds 6471:27 6486:6 knew 6353:11,12,13 6375:8 6428:2 knowing 6410:9,15 6499:6 knowledge 6397:26 6424:24 6450:25 6525:22 6526:4 <b>Kroger</b> 6321:19 6333:11 6334:18 6336:10 6340:5,6 6342:19 6346:21,25 6352:2, 17,28 6353:14,26 6354:16, 22,28 6355:21 6356:14 6357:6,8	6315:11 6318:11 6320:16 6322:11 6329:16 6332:4,11 6335:2 6336:28 6339:3,13 6345:6 6346:7 6347:19 6348:4,7 6349:21 6355:2,3, 7,8,9 6356:24 6357:9 6359:21 6380:19 6390:12 6394:28 6429:24 6432:20 6468:14 6491:8 6498:1 6512:6 6516:15 6525:19 6529:5 6530:17 6532:18,19 6552:9 6555:9	6315:11 6318:11 6320:16 6322:11 6329:16 6332:4,11 6335:2 6336:28 6339:3,13 6345:6 6346:7 6347:19 6348:4,7 6349:21 6355:2,3, 7,8,9 6356:24 6357:9 6359:21 6380:19 6390:12 6394:28 6429:24 6432:20 6468:14 6491:8 6498:1 6512:6 6516:15 6525:19 6529:5 6530:17 6532:18,19 6552:9 6555:9
<b>K</b>			
<b>keeping</b> 6341:23 <b>Kemp's</b> 6534:14,15 <b>key</b> 6359:26 <b>kicked</b> 6342:6 6355:17 <b>kidding</b> 6541:15 <b>kids</b> 6425:28 <b>kind</b> 6304:27 6306:23 6308:18 6313:2 6314:3,13	land 6447:11 landed 6452:20 language 6350:6 6373:11,15 6414:28 6541:12 laptop 6514:10 6524:12 6525:15,16 6527:12,16,18, 22 6536:3 6549:13,14,24 large 6339:23 6341:10 6359:10 6402:23 6428:17 6438:21 6446:16 6447:26 6475:5,22,23 6516:10 6530:1 6533:2 6546:28 largely 6380:18	6315:11 6318:11 6320:16 6322:11 6329:16 6332:4,11 6335:2 6336:28 6339:3,13 6345:6 6346:7 6347:19 6348:4,7 6349:21 6355:2,3, 7,8,9 6356:24 6357:9 6359:21 6380:19 6390:12 6394:28 6429:24 6432:20 6468:14 6491:8 6498:1 6512:6 6516:15 6525:19 6529:5 6530:17 6532:18,19 6552:9 6555:9	6315:11 6318:11 6320:16 6322:11 6329:16 6332:4,11 6335:2 6336:28 6339:3,13 6345:6 6346:7 6347:19 6348:4,7 6349:21 6355:2,3, 7,8,9 6356:24 6357:9 6359:21 6380:19 6390:12 6394:28 6429:24 6432:20 6468:14 6491:8 6498:1 6512:6 6516:15 6525:19 6529:5 6530:17 6532:18,19 6552:9 6555:9



<p><b>literature</b> 6399:21</p> <p><b>live</b> 6406:21 6422:4 6450:22</p> <p><b>lived</b> 6333:1 6422:12</p> <p><b>livestock</b> 6506:21 6508:9 6510:9,10</p> <p><b>living</b> 6381:3</p> <p><b>LLC</b> 6379:18 6503:10 6506:9,13,15,16 6507:11,14 6508:27</p> <p><b>local</b> 6339:12 6360:9 6423:24</p> <p><b>locate</b> 6521:15</p> <p><b>located</b> 6379:18 6382:1</p> <p><b>location</b> 6382:10 6384:18 6490:2</p> <p><b>locations</b> 6464:3</p> <p><b>lock</b> 6437:9 6476:5</p> <p><b>lockdown</b> 6452:23</p> <p><b>lodge</b> 6486:19 6501:8</p> <p><b>lodged</b> 6526:1</p> <p><b>logic</b> 6308:9 6346:12 6382:9</p> <p><b>logistics</b> 6555:10</p> <p><b>long</b> 6310:3 6312:18 6331:27 6332:3 6342:4 6356:6,11,13 6417:24 6422:1 6424:2 6428:3,18 6429:7 6445:15 6456:14 6472:16 6477:11 6504:23 6505:15,20 6513:27 6514:24</p> <p><b>long-term</b> 6317:21 6406:25 6417:22 6419:2 6421:10 6425:15</p> <p><b>longer</b> 6345:18 6414:20 6418:24 6421:1,2 6427:5,7 6433:17 6463:24 6503:25 6505:19</p> <p><b>longer-term</b> 6356:4</p> <p><b>lookback</b> 6367:1 6368:14 6371:17</p> <p><b>looked</b> 6311:18 6314:22 6348:18 6388:23 6516:7</p> <p><b>loophole</b> 6427:4</p> <p><b>lose</b> 6464:25</p> <p><b>losing</b> 6315:13 6463:8</p> <p><b>loss</b> 6316:10,12 6464:20,27</p> <p><b>losses</b> 6384:12 6385:11 6406:11 6447:25 6472:17,18</p> <p><b>lot</b> 6315:27 6316:7,28</p>	<p>6319:7,28 6320:20 6323:10 6328:1,13 6331:22 6338:12 6342:7,21,22 6352:22 6353:7 6354:6 6356:9,16 6359:16,19 6368:17 6391:17 6395:3 6405:17 6418:19 6429:25 6433:16 6453:24 6454:21 6455:11,16 6456:4 6457:15 6464:24 6466:22 6475:17 6477:20 6481:10 6512:17 6524:13,24 6534:21,23 6546:16 6553:13,14 6555:10,11</p> <p><b>lots</b> 6333:17 6339:10,17</p> <p><b>loud</b> 6535:8</p> <p><b>love</b> 6310:20 6397:8 6502:27 6527:6</p> <p><b>low</b> 6313:28 6319:5 6347:24 6353:2,14 6356:11 6362:20 6444:4 6453:8 6454:12 6458:11 6539:3</p> <p><b>lower</b> 6302:6 6312:6,11 6335:28 6350:24 6357:19 6365:12,15 6369:1 6416:6 6438:15 6440:4 6443:5 6455:18 6457:9 6460:27 6467:4,9 6493:13 6529:20 6532:20</p> <p><b>lowering</b> 6458:25</p> <p><b>lowest</b> 6308:18 6327:13 6329:6 6349:4 6365:3,6 6410:21</p> <p><b>Lucas</b> 6324:5 6377:12 6387:20 6396:27 6416:20 6419:14 6431:5 6435:22 6445:10 6447:5 6459:25 6465:21 6550:3 6551:22,24</p> <p><b>lumping</b> 6432:20</p> <p><b>lunch</b> 6394:20,21 6423:8 6429:18 6430:2,3 6465:21 6554:8</p> <p><b>luncheon</b> 6430:6</p>	<p>6522:22 6523:11 6549:25 6553:15</p> <p><b>Madison</b> 6341:22</p> <p><b>magic</b> 6374:15</p> <p><b>magnitude</b> 6414:12 6420:2</p> <p><b>main</b> 6333:4 6342:15 6456:10 6469:2 6511:10</p> <p><b>maintain</b> 6382:17 6533:26</p> <p><b>maintenance</b> 6507:6,9,11 6510:1</p> <p><b>major</b> 6380:12,26 6403:15 6414:24 6440:7 6448:17</p> <p><b>majority</b> 6414:10 6518:22 6530:1</p> <p><b>make</b> 6302:14 6304:10 6310:14 6316:17 6318:24 6322:26 6328:4,9,24 6332:24 6336:6,16 6337:17 6338:2 6344:16,22 6347:28 6348:15,25 6349:28 6350:19 6358:15 6361:8 6363:12 6364:24 6366:17 6371:17 6372:23 6373:13 6374:22,23 6377:18 6378:16 6384:24 6385:15,27 6387:12 6388:7 6389:18 6409:8 6410:14 6419:6 6428:3,25 6434:10 6435:9 6454:14 6455:22,23 6457:23 6463:25 6464:4,24, 28 6466:27 6472:9,24 6473:14 6474:12 6475:11 6476:19 6477:22 6483:11 6484:23 6485:12 6486:2 6491:23 6501:16 6508:21 6509:7 6512:20 6514:11 6516:19 6517:8 6518:28 6522:1,9 6532:9,12 6534:23 6541:22 6545:16 6548:11 6556:13</p> <p><b>makers</b> 6340:20 6416:1 6442:28</p> <p><b>makes</b> 6304:21 6313:26 6315:18 6324:19 6333:13 6355:1 6357:7 6361:22 6368:3 6388:5 6394:23 6395:2,23 6406:7 6407:28 6458:27 6494:23 6503:14 6505:18</p> <p><b>making</b> 6314:18 6322:17 6327:23,25 6332:19 6355:28 6356:22 6357:3 6366:24 6370:14 6420:18 6431:24 6498:19,20 6501:12 6514:12 6545:22</p> <p><b>manage</b> 6319:19 6334:21 6351:21 6358:17,18 6388:1 6391:12 6467:2 6468:10</p>	<p>6530:2,5 6535:12 6538:11, 22 6541:7</p> <p><b>manageable</b> 6322:20 6324:13,19</p> <p><b>management</b> 6315:15 6322:13 6326:1 6335:8 6340:22 6342:5 6349:24 6350:3,19,21 6354:17,22 6398:24 6399:27 6400:3 6405:25 6406:8 6408:21 6409:28 6410:2 6412:12 6415:14,15 6420:21 6421:28 6436:6,9 6439:7 6441:13 6507:26 6509:1,14 6510:3, 12 6511:5,14,19 6514:1,5 6524:25 6525:21 6526:5 6528:13,16,20,24,27 6534:21 6535:17 6538:15, 18,25 6539:10,24 6544:5,8 6550:10,15</p> <p><b>manages</b> 6319:16</p> <p><b>managing</b> 6391:4 6399:24 6422:12,17 6465:6 6538:27</p> <p><b>mandated</b> 6382:20,22,27</p> <p><b>manually</b> 6513:9</p> <p><b>manufactured</b> 6335:15</p> <p><b>manufacturer</b> 6356:11 6358:27 6403:26</p> <p><b>manufacturer's</b> 6358:27</p> <p><b>manufacturers</b> 6321:11,15 6407:11 6409:4 6412:3 6530:6,8</p> <p><b>manufacturing</b> 6314:26 6327:9,19 6328:17 6330:11, 28 6337:22 6364:13 6365:16 6375:15,21 6376:1,3,6,12 6410:19</p> <p><b>manuscript</b> 6449:28 6493:3, 8</p> <p><b>map</b> 6384:17</p> <p><b>March</b> 6406:3 6450:10,24,26 6451:15,21,22 6452:1,6,7, 21,22,24,28 6453:13 6494:18</p> <p><b>margarine</b> 6450:16</p> <p><b>margin</b> 6332:23 6333:15,16 6350:25 6355:16 6357:2 6359:26 6437:19,24,27 6438:20 6447:27 6472:12, 13,18,20,28 6476:19,22,23 6481:13,16 6506:21 6508:10 6514:1,5 6529:18,20,24 6530:11</p> <p><b>margins</b> 6353:17 6391:4,5 6410:21 6412:15 6530:5,9</p>
--	--	---	---

**M**

**M-A-R-I-N** 6396:15

**machines** 6464:4

**macro** 6313:18

**made** 6303:23 6313:12,17  
6317:4 6325:26 6331:16  
6332:12,19 6336:28 6342:27  
6359:20 6361:15 6366:21  
6367:13,27 6372:19,23  
6373:12,13 6399:17 6408:24  
6440:22 6463:2,17 6486:5,9  
6487:20,26 6500:16 6516:21



<p><b>Marin</b> 6324:28 6394:14 6396:15,22 6435:15 6556:20</p> <p><b>mark</b> 6383:18 6407:27 6456:1 6459:28 6460:2,11 6479:13,25 6483:19 6486:23</p> <p><b>Mark's</b> 6343:26</p> <p><b>marked</b> 6303:14 6378:2,4 6379:11 6393:28 6395:18,21 6396:4,8 6479:12,26 6480:2 6489:25</p> <p><b>market</b> 6315:1,12,20 6316:1, 25,26 6317:20,27 6318:3 6319:19 6320:4 6321:1,12 6323:19 6326:1,4 6327:25 6334:14 6340:2,17,20 6341:18,19 6343:24,28 6352:12 6353:19 6354:5,12 6360:23 6373:23 6376:6 6382:1,3,7,10 6385:2 6388:4 6390:18 6400:1 6401:19 6406:9 6408:21 6414:2 6416:1 6423:19 6424:7 6437:3 6442:28 6460:1,3,11 6466:14 6471:19,20 6472:7, 9 6475:16 6476:15,28 6481:11 6495:17,21 6503:12 6513:25 6516:22 6518:1 6522:4,8 6526:6,15,17,25 6529:22,27 6530:18 6531:15,19,20,24,25 6535:1 6539:16</p> <p><b>market's</b> 6323:2</p> <p><b>market-traded</b> 6520:9</p> <p><b>marketing</b> 6306:10 6319:16 6320:6 6326:23 6369:25 6376:20,21 6380:1 6381:23 6382:20 6384:11 6385:7 6386:20 6388:12,22 6401:4, 8 6413:9 6414:16 6417:23 6420:18 6484:20 6486:7 6533:27 6534:1,9 6535:3 6549:10</p> <p><b>marketplace</b> 6383:2 6384:15</p> <p><b>markets</b> 6315:13 6317:1 6318:6 6320:22 6323:19 6336:24 6337:28 6340:14 6345:1 6356:25 6359:15,21 6373:8 6379:23 6381:6 6391:24 6403:14 6404:23 6405:26 6456:3 6470:19,20 6471:26 6477:1 6479:24 6503:7 6504:24 6513:23 6517:19 6531:5,6 6532:26, 27 6533:3</p> <p><b>marks</b> 6537:1</p> <p><b>markup</b> 6474:20</p> <p><b>Marlin</b> 6407:27</p>	<p><b>Martha</b> 6379:17</p> <p><b>Martin</b> 6407:27</p> <p><b>Marvin</b> 6407:27</p> <p><b>Maryland</b> 6379:23 6385:8 6386:10</p> <p><b>massive</b> 6458:10,27 6495:25 6547:14</p> <p><b>master's</b> 6400:19</p> <p><b>match</b> 6474:12,14</p> <p><b>matches</b> 6531:9</p> <p><b>matchmaker</b> 6345:6</p> <p><b>matchmakers</b> 6474:3</p> <p><b>matchmaking</b> 6532:26</p> <p><b>material</b> 6426:2 6429:17 6490:22 6520:23</p> <p><b>materiality</b> 6487:18</p> <p><b>materials</b> 6481:3 6486:2 6488:9,27 6490:20,26</p> <p><b>math</b> 6363:18</p> <p><b>mathematically</b> 6439:15 6440:3</p> <p><b>Matt</b> 6541:13,15 6551:2</p> <p><b>matter</b> 6328:2 6347:9 6390:16 6391:8 6409:3 6477:27 6483:22 6492:13 6495:2 6548:5</p> <p><b>matters</b> 6467:15 6494:7,9 6510:28 6511:1 6548:2</p> <p><b>matured</b> 6336:24</p> <p><b>max</b> 6329:3 6415:26</p> <p><b>maximal</b> 6409:15</p> <p><b>maximum</b> 6328:21 6413:16, 17,18</p> <p><b>MCP</b> 6419:19 6420:3 6495:4</p> <p><b>meaning</b> 6449:12 6497:2</p> <p><b>meaningful</b> 6449:13 6501:28</p> <p><b>means</b> 6320:12 6329:9 6350:23 6352:25 6353:1 6368:25 6406:15 6408:9 6421:7 6437:7 6454:3 6467:11 6468:21 6470:8,9, 13 6472:10 6474:13 6488:25 6498:15 6553:27</p> <p><b>meant</b> 6533:28 6537:21 6550:14</p> <p><b>meantime</b> 6454:27</p>	<p><b>measure</b> 6317:26 6474:27 6495:19</p> <p><b>measured</b> 6446:11 6452:7</p> <p><b>measurements</b> 6449:6</p> <p><b>measuring</b> 6454:9</p> <p><b>mechanics</b> 6339:4</p> <p><b>mechanism</b> 6402:21 6409:21 6411:11</p> <p><b>meet</b> 6306:12,16,17 6389:21 6448:14</p> <p><b>meeting</b> 6514:18</p> <p><b>melamine</b> 6315:12</p> <p><b>melatonin</b> 6493:5</p> <p><b>member</b> 6323:9 6503:27 6504:23 6505:22</p> <p><b>members</b> 6323:8,10 6324:12 6343:15,16 6344:24 6345:9 6414:8 6498:27 6503:23 6505:15</p> <p><b>membership</b> 6344:28</p> <p><b>memorized</b> 6334:8</p> <p><b>memory</b> 6515:1 6520:28 6546:14 6548:17</p> <p><b>mention</b> 6318:9 6420:20 6426:4 6456:8 6465:13 6552:7</p> <p><b>mentioned</b> 6332:15 6391:26 6433:13 6456:8 6480:8 6512:3 6528:11 6529:7 6550:22</p> <p><b>mentors</b> 6422:5 6480:22</p> <p><b>menus</b> 6342:11</p> <p><b>Mercantile</b> 6404:11 6442:21 6470:23 6471:2,5 6473:7 6474:11</p> <p><b>merchandise</b> 6333:11</p> <p><b>merchandising</b> 6350:23</p> <p><b>merchants</b> 6471:8</p> <p><b>message</b> 6344:23</p> <p><b>met</b> 6373:11,16</p> <p><b>metaphor</b> 6474:4</p> <p><b>method</b> 6402:22 6440:21,22 6448:14 6449:2,4,6 6470:12 6538:28</p> <p><b>methodology</b> 6446:4 6449:27 6450:4,5,11,19 6493:2</p> <p><b>mic</b> 6465:26 6556:6</p>	<p><b>microphone</b> 6378:15 6514:3</p> <p><b>middle</b> 6354:5 6411:21 6442:12</p> <p><b>middle-of-the-road</b> 6409:10</p> <p><b>Midwest</b> 6450:13,28</p> <p><b>midsummer</b> 6419:24</p> <p><b>Midwest</b> 6314:20 6413:12 6418:20 6419:8,22</p> <p><b>MIG</b> 6323:10 6409:3,19 6444:6,7 6498:27</p> <p><b>MIG's</b> 6323:15</p> <p><b>Mike</b> 6307:1,4 6325:16 6386:6,10 6412:17 6433:4 6515:21 6556:18</p> <p><b>miles</b> 6390:11 6553:3,5</p> <p><b>military</b> 6548:4</p> <p><b>milk</b> 6305:20 6307:14 6308:16 6311:19 6314:10, 17,25,27 6316:14,15,19,21, 23 6317:6,16 6318:4,15,21 6319:21 6320:26 6322:25 6323:20,22 6324:16 6333:20,23 6334:1,2 6339:6, 11,18 6341:12,14 6344:28 6347:4,5 6351:18 6355:28 6356:3,11,12,18 6357:4,5 6359:22 6360:6,9 6362:1,16, 24,25 6365:19,28 6366:6,10, 14,17,20 6369:28 6370:11 6373:23 6375:13 6379:20,23 6380:10,22 6381:1,6,7,11, 13,15,16,17 6382:5,6,20,26 6383:4 6384:9,19,20,26 6385:23 6386:4,11,20 6387:25 6388:3,22 6389:15, 24,27 6390:13 6391:2 6392:7 6393:2 6398:27 6399:16,17,18,23,24,26 6400:2,3,6,7,23 6401:4,8,20, 23,24,26 6402:4 6403:9,10, 17,22,25 6404:1,2,5,6,7,10, 12,13,26,27,28 6406:12,13, 19 6407:10,11 6408:5,6,7, 10,19,21,23 6409:4 6410:1, 16,19 6411:3,6,7,17,23 6412:6,8,13 6413:8,26 6414:18 6415:2,15,21,26,27 6417:23 6418:11,26,27 6419:9,11,17,24,26 6420:2 6421:27 6423:15,16,18,25, 26 6424:4,7,13,17,28 6425:10,11,12,16 6432:6,17 6435:27 6436:23,25,27 6437:9,10,11,18 6438:13 6440:15 6441:21,25,27 6442:10,14,20,23,25,27 6443:2,6,9,24 6444:13,18 6446:13,27 6447:9,10 6448:5,24 6449:23 6454:21</p>
---	--	--	--



6457:4,5,6,8,9 6460:7 6461:19 6462:21,26 6463:8, 24 6464:5,20,22,24,28 6465:5,6,7,22,24,25 6466:5, 6,13 6468:10,11 6469:20 6470:10 6471:4,16,23 6472:15 6474:7,9 6475:8,10 6476:10 6479:4,5,8 6481:19, 23 6482:3,12,17 6483:5 6487:4 6493:12 6496:24 6497:2 6498:10,14 6499:4, 15,20 6510:24 6515:25 6516:6,8 6518:7,12,18 6519:18,20 6520:4 6524:26 6529:7 6533:4,27 6534:1,8, 11,13,26 6535:1,3 6536:7 6538:25,26,28 6539:2,12,15 6540:16,27 6541:18 6543:9, 10,12,15,17,22 6544:13,19, 21,22,28 6545:6,12,26 6547:4 6548:14,18 6551:5 6552:17	<b>Minnesota</b> 6400:20 6406:21 6417:21 6418:11 6503:20 6534:14 <b>minor</b> 6398:5 <b>minus</b> 6329:11 6384:4,7,8 6385:14 6454:6 <b>minute</b> 6369:12 6394:6 6463:15 6556:17 <b>minute-by-minute</b> 6530:26 <b>minutes</b> 6426:14,18,21,23, 26,28 6427:7,19,23 6428:5,9 6429:13 6459:11,12 6461:8 6537:9 <b>mirror-image</b> 6464:14 <b>mirrors</b> 6314:13 <b>mislead</b> 6537:18 <b>misleading</b> 6414:18 6466:7 <b>misled</b> 6413:24 6423:14 6465:23 <b>mispronouncing</b> 6502:16 <b>misread</b> 6445:4 <b>missed</b> 6328:7 6394:1 6401:16 6493:21 6498:5 <b>missing</b> 6425:9 <b>mission</b> 6425:17 <b>misstated</b> 6522:24 <b>mistake</b> 6486:9 <b>mix</b> 6314:26 6498:15 <b>model</b> 6450:15 6532:20 <b>moderate</b> 6379:13 6515:6 <b>moderates</b> 6333:7 <b>modernization</b> 6510:24 <b>modest</b> 6324:25 <b>modification</b> 6420:7 <b>modified</b> 6450:24 <b>modify</b> 6401:27 6402:1 <b>modifying</b> 6411:28 <b>moment</b> 6377:26 6465:19 6466:18 6468:9 6469:10,13 6470:16 6471:3 6478:27 6480:8 6486:28 6535:6 <b>momentarily</b> 6483:16 <b>Monday</b> 6301:1 6306:17,19 6397:24 6431:1 6554:19,27, 28 6555:6 <b>Monday-morning</b> 6400:10	<b>money</b> 6369:8 6447:27 6452:9 6464:25 6472:13,20 6473:21 6493:16 6498:12 6504:16 6506:4 <b>money-making</b> 6507:8 <b>monitor</b> 6391:20,21 <b>month</b> 6318:22 6322:9,10 6329:4 6330:20 6349:3 6357:17 6375:19 6376:9 6411:15,24 6414:4 6419:23 6421:5,12 6424:6 6442:12, 13,15 6450:7 6477:22 6493:23 6494:10,11,12,13, 14,16,24 6495:2 6499:20 6542:16 6545:28 6546:1,4,5, 23,26 6547:6,20 <b>monthly</b> 6341:8 6354:7 6356:22 <b>months</b> 6345:15 6353:24 6404:8,17,19 6405:3,11 6410:18 6413:12,15 6446:20,21,23 6448:23 6449:1,4,15,20 6450:10 6451:24 6459:6 6477:16 6503:18 6527:11 6528:3,8,9 <b>morning</b> 6301:1,6,10 6307:11,12 6324:6,7 6326:27,28 6378:10,11 6379:16 6387:21,22 6388:15,16 6397:18,19 6399:2 6412:17 6443:8 6548:8 6553:24 6554:28 6556:13 6557:2 <b>motivated</b> 6477:15 <b>move</b> 6323:13 6371:2,3 6378:18 6391:25 6393:8 6397:12 6425:23 6433:7 6434:20 6437:19 6439:20 6446:6 6447:4 6449:18 6457:19 6458:27 6476:2 6483:7,10 6486:5 6491:8 6492:15,22 6533:9 6536:1 6540:8 <b>moved</b> 6358:3 6380:6 <b>mover</b> 6307:28 6311:21 6317:17 6322:5 6323:16 6328:16 6330:9 6334:12 6345:2,20 6349:26 6357:16, 22 6363:10 6372:8 6391:19, 26 6392:6 6415:9 6441:22, 23,28 6442:7 6443:24,28 6444:8,16 6446:18,20,21,25 6448:6,26,27 6468:5 6469:4, 14 <b>movers</b> 6361:22 <b>moves</b> 6458:24 6472:14 6473:21	<b>moving</b> 6342:16 6355:2 6401:28 6418:28 6444:27 6445:22 6468:6 6470:6 6499:1 6541:16 <b>multiple</b> 6339:6 6419:27 6432:7 6470:3 6480:12 6509:19 6513:10 <b>multiple-component</b> 6419:20 <b>museum</b> 6409:23 <b>muting</b> 6347:22 <b>mutually</b> 6399:7
<b>N</b>			
<b>Milk's</b> 6311:22 6337:4 6393:4 6414:27 <b>milk-drying</b> 6403:23 <b>Milk/Idfa</b> 6535:17 <b>milking</b> 6380:14 <b>million</b> 6389:19 6455:14,15, 17,18 6457:7,8,9 6458:28 6459:1 6519:19,25,27 6520:11,12,13 6539:14 6544:13,18,20,22,27 6545:26,28 6546:4,6,23,26 6547:4,17,20 6551:4 <b>millions</b> 6472:27 6506:4 <b>Miltner</b> 6307:10,14,15,22,23 6309:6,18,20 6311:1,6,10 6312:4,9 6323:27 6324:8 6327:3,17 6432:5 6486:28 6487:9,10 6488:12 6490:15 6492:7 <b>Miltner's</b> 6488:19 <b>mimic</b> 6419:2 <b>min</b> 6329:6 <b>mind</b> 6311:14 6316:4,5 6320:18 6321:27 6323:4 6335:11 6347:21 6378:12 6379:4,13 6450:15 6465:1 <b>mindful</b> 6407:25 <b>minds</b> 6415:10 6425:9 <b>Mine</b> 6533:18 6541:13 <b>minimal</b> 6416:1 <b>minimize</b> 6509:23 <b>minimum</b> 6320:13 6413:22 6534:24 6544:10 6547:16	<b>named</b> 6450:2 <b>nation's</b> 6398:25 <b>national</b> 6311:22 6314:10,19 6317:6 6321:22 6337:4 6339:5 6346:24 6351:18 6354:27 6355:1,4 6362:1,16 6364:7 6365:19,28 6366:6, 10,14,17,20 6375:13 6381:1 6384:9,18 6393:2,4 6400:3 6401:26 6402:4 6405:24 6414:26 6418:26,27 6432:17 6436:23 6443:24 6458:5 6475:8,10 6487:4 6496:24 6518:7 6535:17 6539:12 <b>nationwide</b> 6419:26 <b>natural</b> 6431:25 6474:22 <b>naturally</b> 6499:1 <b>nature</b> 6423:5 6476:2 <b>NDPSR</b> 6405:24 <b>Nebraska</b> 6417:21 6418:10 <b>necessarily</b> 6314:2 6331:25 6335:27 6345:16,25 6356:25 6360:4 6376:13 6524:20 6534:27 6541:21 <b>neck</b> 6342:9 <b>needed</b> 6372:16 6401:25 6414:13 6418:24 6553:8 6555:23 6556:21 <b>needless</b> 6315:4 6316:2 6416:9 <b>negate</b> 6482:28 <b>negative</b> 6310:13 6327:14 6337:11,14 6338:3 6353:17 6400:14 6406:14 6413:11, 13,15,20,25,28 6423:15 6424:13 6440:5 6449:16 6450:12 6452:20 6453:2,3, 21 6454:2,14,16,17 6455:3,		



4,6,10,22 6456:21,26 6457:2,11,12,21,27,28 6458:11,13,15,18 6459:5 6460:13,15,18 6465:24 6466:8 6492:26 6530:4	<b>nonetheless</b> 6365:17	<b>O-O-L</b> 6377:10	6392:2 6409:16 6412:19 6417:1 6420:6 6434:3 6437:13 6473:28 6510:7,14 6553:25
<b>negatively</b> 6453:19	<b>nonfat</b> 6403:9	<b>oat</b> 6355:28 6356:3,11 6357:5 6359:23	<b>offered</b> 6352:8 6355:25 6426:16 6487:15 6488:3
<b>negotiate</b> 6340:6	<b>normal</b> 6431:20	<b>oats</b> 6356:1,23	<b>offering</b> 6392:5 6406:2 6418:1 6533:5 6539:4 6544:5
<b>negotiated</b> 6331:18 6532:3, 8	<b>north</b> 6383:5 6388:26 6552:22 6553:1	<b>object</b> 6483:17 6488:19 6490:18,23 6491:10 6518:8 6521:27 6523:7 6524:8 6536:6 6537:14	<b>offers</b> 6406:1 6410:14,17 6421:1 6471:19
<b>negotiating</b> 6343:1	<b>Northeast</b> 6318:27 6384:11 6421:22	<b>objected</b> 6377:18 6488:9	<b>office</b> 6304:19 6340:8
<b>negotiation</b> 6400:12	<b>Northern</b> 6385:8	<b>objecting</b> 6489:13 6491:21 6492:8	<b>official</b> 6304:21 6402:18
<b>negotiations</b> 6411:8 6412:3	<b>Northwest</b> 6318:1 6421:23	<b>objection</b> 6303:3 6393:17 6396:10,12 6484:21 6485:8, 9 6486:12,19 6501:8,13 6518:4 6522:12,13 6523:16 6536:5	<b>offset</b> 6382:12,15 6384:19 6399:16 6440:13,22 6441:17,20 6446:28 6449:4, 5 6462:21 6467:16 6533:9
<b>neighboring</b> 6380:3	<b>nose</b> 6475:3	<b>objectionable</b> 6522:9	<b>Oftentimes</b> 6424:28
<b>nervous</b> 6340:3	<b>note</b> 6417:12 6449:3 6488:18 6503:6 6539:13	<b>objections</b> 6325:17 6526:1	<b>OGC</b> 6485:4,28 6490:24
<b>Nestle</b> 6355:7 6358:24 6463:28 6477:17,22	<b>noted</b> 6366:20	<b>objective</b> 6350:8	<b>Ohio</b> 6465:11
<b>net</b> 6383:27 6384:3,6,7,8 6385:14 6412:14 6543:17,24	<b>notes</b> 6338:16	<b>objectives</b> 6350:13 6535:13	<b>Olympic</b> 6316:6,7
<b>Netflix</b> 6421:16	<b>notice</b> 6399:6 6406:20 6428:2,4 6443:17 6501:19 6541:20 6553:25,28 6555:21	<b>obligations</b> 6411:27 6526:28	<b>one's</b> 6343:5
<b>neutrality</b> 6402:23	<b>noticed</b> 6443:17,23	<b>obliged</b> 6413:21	<b>one-</b> 6356:9
<b>newly-reformed</b> 6400:22	<b>Novakovic</b> 6456:2 6478:26 6479:3,25 6480:17,22 6483:19 6484:27 6502:14,18 6503:17 6505:13	<b>observation</b> 6320:27,28 6470:3	<b>one-hour</b> 6434:13
<b>news</b> 6530:28 6531:1,4	<b>Novakovich</b> 6502:18,19,21	<b>observations</b> 6350:26 6366:16,21,24 6367:13,15, 21 6385:2 6406:25	<b>one-month</b> 6421:2
<b>Newton</b> 6399:22 6465:4,9, 12,13,14,16 6466:18 6485:1 6503:24 6509:3	<b>November</b> 6354:5 6458:2, 20,23,27 6554:23 6555:6	<b>observe</b> 6411:14,20,22	<b>one-time-a-year</b> 6409:5
<b>NGO</b> 6503:10	<b>number</b> 6302:11,15 6310:13 6329:8 6330:2 6345:15 6363:2 6365:15 6374:18 6378:4 6381:18 6393:21 6396:2,4,8 6403:21,22 6404:6,26 6405:22 6408:4,9, 19 6424:13 6436:20 6439:4, 5,27 6440:9 6441:12,22 6443:28 6448:13,19,23 6449:10,24 6463:5 6480:2 6520:20 6522:14 6523:9 6530:1 6543:6,17 6544:15 6548:16	<b>observed</b> 6381:5 6406:4	<b>onerous</b> 6318:28
<b>nice</b> 6483:26 6524:12 6525:11	<b>numbered</b> 6487:19	<b>observing</b> 6489:11	<b>online</b> 6304:22 6378:16 6427:13 6434:23,24 6435:5, 11 6450:1 6474:3 6489:11 6519:12 6521:2
<b>nicer</b> 6326:12	<b>numbering</b> 6488:6	<b>obvious</b> 6424:6	<b>opacity</b> 6530:22
<b>niche</b> 6531:25	<b>numbers</b> 6303:8 6312:6 6313:1 6319:14 6328:8 6329:22 6334:7 6348:22 6364:12 6374:14 6398:2 6432:10 6450:23 6517:4 6520:11,17 6524:3 6530:19 6533:17	<b>occasionally</b> 6429:19 6438:18	<b>opaque</b> 6500:16
<b>Nicholson</b> 6503:17		<b>occur</b> 6346:6 6405:15	<b>open</b> 6471:7 6489:28 6520:21
<b>nickel</b> 6358:15		<b>occurred</b> 6308:1 6517:12 6519:28	<b>opening</b> 6509:21
<b>nickname</b> 6407:1		<b>occurrences</b> 6311:25 6312:23	<b>operate</b> 6379:18
<b>night</b> 6502:6		<b>OCD</b> 6469:28	<b>operated</b> 6354:24 6422:7
<b>nitrogen</b> 6391:1 6392:13		<b>October</b> 6301:1,4 6306:1 6352:22 6411:20,23,25 6412:8 6431:1 6458:1	<b>operation</b> 6410:15
<b>NMPF</b> 6309:11		<b>odds</b> 6409:14	<b>operations</b> 6466:9
<b>NMPF-84</b> 6377:25 6378:3 6379:8		<b>off-the-record</b> 6377:27 6479:17	<b>opine</b> 6484:23 6486:10
<b>nodding</b> 6359:6 6377:8		<b>offer</b> 6320:10,11 6321:23 6340:9 6343:18 6350:24 6355:14 6357:6 6359:25	<b>opining</b> 6488:27
<b>non-arbitrage</b> 6533:3			<b>opinion</b> 6324:2 6337:4 6348:15 6402:25 6409:21 6415:16 6420:23 6443:11 6528:18 6529:25
<b>non-dairy</b> 6351:22			<b>opinions</b> 6343:12 6484:24 6488:3
<b>non-disclosure</b> 6507:21			
<b>non-foodservice</b> 6374:1			
<b>non-milk</b> 6463:8			
<b>non-time-based</b> 6512:11			
	<b>O</b>		
	<b>O'KEEFE</b> 6548:21		





<p><b>opportunistic</b> 6319:3 6414:17 6425:8 6534:19</p> <p><b>opportunities</b> 6354:25 6531:14</p> <p><b>opportunity</b> 6312:26 6327:27 6332:25 6358:9 6380:8 6425:9</p> <p><b>opposed</b> 6331:26 6370:22 6373:26 6432:24 6501:20 6518:9 6538:19,21</p> <p><b>opposes</b> 6377:20</p> <p><b>opposite</b> 6382:16 6474:18</p> <p><b>opposition</b> 6432:16 6435:26</p> <p><b>optimal</b> 6400:28</p> <p><b>option</b> 6511:25</p> <p><b>options</b> 6307:28 6320:20 6326:1 6405:26</p> <p><b>oral</b> 6366:18</p> <p><b>order</b> 6301:2 6308:17 6312:25,28 6313:17,21,22, 28 6314:13 6317:28 6342:2 6347:6 6350:4 6363:2 6366:22 6375:3 6377:4 6381:7,9,12,17,21,23 6382:13,23 6383:3 6401:4 6404:25 6413:9,12,23,25 6419:8,25,26 6421:23 6422:2,7 6423:14,19,24 6424:7,8,12,14 6425:5 6443:11,23 6450:8,13,28 6455:13 6464:8 6465:23 6467:16 6471:17,21 6479:9 6495:3,26 6496:19 6497:9 6498:9 6507:28 6509:23,24 6541:7 6542:24 6545:1,16 6548:10 6551:27</p> <p><b>order-by-order</b> 6318:25</p> <p><b>orders</b> 6314:14,22 6316:27 6318:10 6319:5,6 6350:2 6365:13 6380:27 6401:8,11 6408:22 6417:23 6418:5 6419:12,13,20,27 6420:3 6425:7,14,18 6471:1 6495:4 6533:27 6534:1,9,13,26 6535:4</p> <p><b>Oregon</b> 6518:16</p> <p><b>organic</b> 6334:2 6355:9</p> <p><b>organization</b> 6503:8 6517:26</p> <p><b>organizations</b> 6418:16</p> <p><b>organized</b> 6504:15</p> <p><b>orient</b> 6357:14</p> <p><b>original</b> 6303:11 6373:15</p>	<p><b>originally</b> 6368:24 6375:4</p> <p><b>OTC</b> 6436:3,22 6437:2,3,13 6438:15,26 6472:1,6 6473:2, 4,8,11,12,17,19,22,25,26 6474:2,6,14,23,26 6475:5, 17,19 6476:5,15,28 6516:22 6518:17 6526:5,17 6531:6, 19,24,26 6532:15 6533:5,7,8 6539:16,17,19 6551:5,11</p> <p><b>OTCS</b> 6530:11</p> <p><b>ounces</b> 6352:26</p> <p><b>ourself</b> 6343:27</p> <p><b>outcome</b> 6393:14</p> <p><b>outdated</b> 6384:17 6409:20</p> <p><b>outlet</b> 6548:15</p> <p><b>outlets</b> 6369:28</p> <p><b>outline</b> 6308:19</p> <p><b>outlined</b> 6428:4 6434:26</p> <p><b>outlook</b> 6343:11,20,24 6344:26,27 6345:1,3 6412:19</p> <p><b>outlying</b> 6397:10</p> <p><b>over-order</b> 6382:14,21,25,27 6383:9,25 6384:1 6386:18</p> <p><b>over-the-counter</b> 6334:14 6436:24 6470:20 6471:26 6531:27</p> <p><b>overly</b> 6469:25</p> <p><b>overseas</b> 6509:24</p> <p><b>overview</b> 6513:25</p> <p><b>owned</b> 6339:12</p> <p><b>ownership</b> 6380:5</p> <hr/> <p style="text-align: center;"><b>P</b></p> <hr/> <p><b>P-O-O-L</b> 6378:14</p> <p><b>p.m.</b> 6306:20 6430:4 6431:3 6461:9,13 6555:7,8 6557:3</p> <p><b>pace</b> 6379:13</p> <p><b>Pacific</b> 6318:1 6421:23</p> <p><b>Pack</b> 6490:24</p> <p><b>package</b> 6377:19</p> <p><b>packaged</b> 6539:15 6551:5</p> <p><b>pages</b> 6301:13,15,21,23 6302:1,13,28 6366:12 6427:2 6540:2,23</p> <p><b>paid</b> 6367:3 6368:11 6369:8 6411:7 6413:28 6504:16</p>	<p>6507:11</p> <p><b>pain</b> 6342:9 6422:21</p> <p><b>Pak</b> 6484:20 6491:16</p> <p><b>Pak's</b> 6492:21</p> <p><b>pandemic</b> 6401:19 6403:18 6414:11 6479:3 6481:18</p> <p><b>pandemics</b> 6403:15</p> <p><b>panel</b> 6514:22,26 6515:5,6</p> <p><b>paper</b> 6304:18,21 6338:9 6361:2 6399:22 6413:7 6450:4,5 6456:2,9 6479:10 6480:14,15,17 6489:23 6544:1 6545:3 6549:15 6551:10</p> <p><b>paperwork</b> 6477:27</p> <p><b>paragraph</b> 6332:10 6334:11 6383:12,15,22 6423:12 6466:16 6540:14 6551:1</p> <p><b>paragraphs</b> 6398:21 6540:25</p> <p><b>paralegal</b> 6550:1</p> <p><b>parameters</b> 6306:2</p> <p><b>paraphrased</b> 6435:27</p> <p><b>paraphrasing</b> 6366:11</p> <p><b>parent</b> 6463:26 6481:14 6530:12</p> <p><b>Park</b> 6379:6</p> <p><b>parlor</b> 6380:14</p> <p><b>part</b> 6310:2 6312:17,18 6315:1,11 6318:26 6323:5 6333:24 6337:2 6340:21 6352:4 6353:25 6354:20 6363:5 6366:22 6373:8 6382:11 6403:25 6410:24 6411:1 6418:20 6465:21 6480:10 6487:20,26 6503:25 6504:9,23,27 6505:9,12,14, 18,21,22 6506:7 6513:15 6517:19 6526:22 6530:11 6550:26,27 6551:7 6556:23</p> <p><b>participant</b> 6515:7</p> <p><b>participants</b> 6301:19 6306:7 6399:26 6465:8 6471:11 6479:23 6513:3</p> <p><b>participate</b> 6340:18 6343:21 6471:4 6496:1</p> <p><b>participating</b> 6523:5</p> <p><b>particulars</b> 6478:5</p> <p><b>parties</b> 6416:15</p> <p><b>parties'</b> 6429:21</p>	<p><b>partly</b> 6318:28 6362:23</p> <p><b>partners</b> 6409:25</p> <p><b>partnerships</b> 6506:27</p> <p><b>parts</b> 6318:9 6381:24 6395:23 6470:25</p> <p><b>pass</b> 6356:27 6433:6,27 6474:19</p> <p><b>passed</b> 6395:16,19 6400:9</p> <p><b>passively</b> 6412:5</p> <p><b>password</b> 6304:6</p> <p><b>past</b> 6390:25 6403:5 6484:21 6485:9,27</p> <p><b>path</b> 6491:22</p> <p><b>patience</b> 6500:19</p> <p><b>patron's</b> 6448:1</p> <p><b>patrons</b> 6424:19</p> <p><b>pattern</b> 6444:6</p> <p><b>patterns</b> 6406:26</p> <p><b>Paul</b> 6377:10 6515:8 6518:14</p> <p><b>paused</b> 6397:11</p> <p><b>pay</b> 6320:13 6369:7 6390:10,18 6392:4 6400:23, 27 6411:6 6413:22 6424:11 6425:27 6447:28 6451:10 6473:24 6475:3 6482:2 6493:15 6498:12,14 6539:2</p> <p><b>paychecks</b> 6466:13</p> <p><b>paying</b> 6382:6,7 6390:18 6451:9 6555:18</p> <p><b>payment</b> 6497:3</p> <p><b>pays</b> 6390:20</p> <p><b>PDF</b> 6303:12,15 6434:25 6489:28</p> <p><b>PDFS</b> 6303:22 6304:9</p> <p><b>peak</b> 6383:24</p> <p><b>peaks</b> 6333:7</p> <p><b>pedantic</b> 6423:28</p> <p><b>peer</b> 6450:20</p> <p><b>Pennsylvania</b> 6379:19 6380:6 6382:20 6385:8 6386:18,20 6388:22 6547:19</p> <p><b>people</b> 6304:25 6330:4 6333:26 6336:15,21 6338:8 6340:20 6342:16,18,22 6343:19,24 6345:4,8,27 6354:12 6392:16 6422:14 6430:1 6433:15 6439:13</p>
--	---	---	---



6440:28 6454:18 6455:28 6459:22 6466:23 6468:1 6470:18 6483:11,22 6486:25 6489:10 6496:12 6500:9 6501:23 6503:22 6511:21 6513:9 6514:9 6516:3 6528:23 6552:20 6554:7 6555:11,13,20	19 6520:2 6521:21,23 6524:2,7 6527:7 6528:4 6539:19 6540:5 6550:8	22 6403:23,24 6404:3 6420:3	6413:24 6419:26,27 6423:13 6425:10 6455:13 6457:4,5,6, 7,10 6465:22 6466:5 6493:12 6498:10
<b>people's</b> 6486:11 6488:27	<b>Peterson's</b> 6517:4,24 6519:5,9 6520:21 6550:5,28	<b>plastic</b> 6341:13	<b>pooling</b> 6327:19,23 6337:14, 17 6364:3 6457:26 6458:27
<b>Pepsi</b> 6463:24	<b>petroleum</b> 6392:16	<b>play</b> 6529:10	<b>pooling/depooling</b> 6534:20
<b>percent</b> 6312:11 6329:23 6493:11	<b>Philadelphia</b> 6388:24	<b>player</b> 6475:15	<b>pools</b> 6327:8
<b>percentage</b> 6311:24 6313:11 6362:22 6373:22 6548:18	<b>philosophical</b> 6349:23	<b>plenty</b> 6368:19 6506:8	<b>poor</b> 6433:4
<b>percentages</b> 6362:2 6364:20 6365:11,12 6419:10 6420:10	<b>phone</b> 6471:15	<b>PMMB</b> 6389:3	<b>popular</b> 6335:5 6345:17 6353:10
<b>perfect</b> 6322:12 6442:9,18 6448:11 6472:9 6544:27 6545:5,10,17	<b>phrase</b> 6383:15 6466:20 6541:20	<b>podium</b> 6386:7 6461:26	<b>population</b> 6399:16 6462:21,23 6463:1
<b>perfectly</b> 6346:10 6441:17, 20 6443:15 6447:23,24	<b>physically</b> 6487:25 6554:7	<b>point</b> 6304:1,2 6314:23,24 6327:8 6333:19 6336:21 6343:6 6348:8 6351:20,28 6354:10 6361:14 6365:9 6370:21 6380:16 6391:22 6395:25 6399:14 6403:21,22 6404:6,26 6405:22 6408:19 6410:7 6412:2 6416:4,26 6417:18 6418:25 6424:27 6432:11,12 6450:17 6452:11,13 6454:15 6455:7, 20 6457:23 6458:21 6460:13 6467:20 6484:22 6485:22 6491:2 6502:5 6504:5 6506:3 6515:27 6516:19 6533:14 6535:23,28 6536:25,26 6538:10 6539:5 6545:22 6548:10 6551:27 6554:21	<b>portion</b> 6307:20 6330:11,19 6350:9
<b>performance</b> 6339:15 6340:12	<b>pick</b> 6330:25 6345:17 6351:25 6493:23	<b>pointed</b> 6366:15	<b>Portland</b> 6513:24 6514:6,16 6518:16
<b>period</b> 6308:3 6310:3 6328:18,26 6329:1 6331:8, 20 6332:7 6348:27 6358:1 6362:13 6368:23 6374:15 6382:13 6385:18 6386:24 6400:24 6404:12 6411:16 6413:14 6447:18 6451:5 6454:13 6456:28 6460:22 6469:22 6471:22 6474:13 6481:19 6517:3 6520:1	<b>picked</b> 6327:16 6349:8 6365:22	<b>pointing</b> 6418:23	<b>position</b> 6416:2 6426:19 6432:27 6438:10,19 6440:23 6459:28 6460:1,2,3,4,6 6471:23 6472:16,21,28 6474:11 6533:10
<b>periods</b> 6328:12 6439:25	<b>pickles</b> 6421:9	<b>points</b> 6311:3 6348:21 6370:14 6398:16 6403:7 6406:20,24 6412:20 6470:3 6535:9	<b>positions</b> 6460:13
<b>perishable</b> 6403:16,24	<b>pickup</b> 6389:26	<b>policy</b> 6350:8,13 6380:1 6381:4 6388:3 6400:18 6403:2,5 6456:3 6479:24 6503:7,12 6504:24 6507:3 6513:23 6517:20 6527:5 6547:27 6548:10	<b>positive</b> 6383:28 6408:6 6424:9,10,11,12 6439:21,22 6449:16 6450:28 6451:20 6453:7,10,22 6456:22 6457:2,24,25 6458:26 6510:12
<b>permission</b> 6552:20	<b>pictures</b> 6547:11	<b>policies</b> 6380:23 6482:21 6507:27	<b>possesses</b> 6527:4
<b>permitted</b> 6484:15	<b>pie</b> 6362:28	<b>political</b> 6458:7	<b>possession</b> 6304:1
<b>person</b> 6306:27 6307:7 6377:6 6412:23 6419:6 6428:8 6471:15 6474:25 6484:2 6491:13 6497:20 6523:21 6550:19 6551:15 6556:11	<b>piece</b> 6345:23 6362:27,28 6390:24 6427:12 6484:20 6549:15	<b>poll</b> 6554:1,4	<b>possibility</b> 6444:1
<b>personal</b> 6338:25 6555:28	<b>pieces</b> 6305:5 6486:8	<b>pool</b> 6313:1 6314:24 6318:22 6319:1,8,10 6320:13 6377:5,10,14,20,22 6378:10,14,26 6379:16 6381:20,22,25 6387:13,21 6388:10 6392:28 6393:10 6411:27 6424:11 6447:28 6451:10 6452:9 6493:15,16 6496:1 6497:12,19 6498:2, 12	<b>possibly</b> 6305:22
<b>personally</b> 6328:4 6334:18 6360:24 6527:6 6549:13	<b>pile</b> 6434:5	<b>pooled</b> 6318:2 6381:9,19	<b>post</b> 6437:19 6489:15 6491:8
<b>perspective</b> 6348:7 6383:24 6416:25 6420:27 6421:18 6445:18 6546:15	<b>pillars</b> 6534:16		<b>post-hearing</b> 6436:15,16 6445:8 6496:17
<b>pertinent</b> 6465:17	<b>place</b> 6327:26 6332:13 6353:7 6377:27 6401:10 6428:13 6450:25 6461:25 6469:1 6479:17 6496:16 6524:4 6526:16 6540:15 6541:26 6555:5,14		<b>posted</b> 6303:13,15 6304:22 6483:15,16 6490:9
<b>Peterson</b> 6515:8,20 6516:1 6517:1,13,22,28 6518:14,15,	<b>places</b> 6333:17		<b>posting</b> 6483:13
	<b>plagiarize</b> 6538:7		<b>potential</b> 6399:25 6443:27 6465:6 6509:16
	<b>plain</b> 6398:16		<b>potentially</b> 6357:16 6417:27 6444:20 6474:28 6502:8 6508:11,14 6527:20
	<b>plan</b> 6306:18 6346:13 6352:28 6353:22,24 6354:3, 8 6387:24 6394:12		<b>pound</b> 6403:22
	<b>planning</b> 6554:19		<b>pounds</b> 6308:15 6381:11,12 6419:24 6438:8,12 6455:13, 18 6457:9 6458:28 6476:10 6516:1,5,7 6529:7 6539:14, 15 6543:8,10,11 6544:13,19,



21,22,28 6545:6,26,27,28 6546:4,6,23,27 6547:4,20 6551:4	6386:23 6389:1,3,9 6444:22	<b>price</b> 6312:13 6315:1,3,4 6317:3,8,10,11,14,20,24 6318:13 6319:4,18 6320:10, 11 6322:8,9,19 6323:12,14, 16 6325:22 6327:8,18,19 6328:16,26,27,28 6329:10 6330:12,14,19,20 6332:24, 26,27 6333:5,8,14,16 6334:21 6335:1,2 6337:7,20 6338:7,8 6340:5,7,10,18,19 6341:11,12,13 6342:8,9,11 6346:17,24 6347:20,21,22, 28 6348:28 6349:2,20 6350:2,14,20,22,24 6351:21 6352:3,8,19,27 6353:12,14, 23 6354:19 6355:2,18 6356:1,5,14,22 6357:6,15, 19,20 6359:24 6361:12,15, 16 6362:2,8,12,19,21,27 6363:9 6364:28 6368:3 6369:14,19,21 6370:1 6371:14,17 6372:7,17 6373:7 6374:22,27 6376:4 6380:23 6384:17 6385:17 6386:4 6387:25 6392:2,4 6399:24 6400:6 6401:20,23, 24 6403:10,11,12,20,21 6404:26,27,28 6405:1,4,5, 11,12,14,20 6406:14,19 6407:10 6408:7,10,11 6410:9,16 6411:7,17,26,28 6412:2,4,25,27 6413:4 6414:1 6415:2,22,26,27,28 6416:4 6421:3 6425:3,11 6435:27 6436:25,27 6437:9, 10,11,22 6438:21 6439:24 6440:15 6441:18,21,26 6442:4,10,24,25 6443:1,3,4, 6 6446:13,27 6447:9,10,14, 15,17,19,25 6448:5,12,25 6449:13,17,18,27 6450:27 6451:16,22,27 6452:3 6453:12,13 6454:24,26 6456:16 6458:3 6460:7,12, 27 6463:18 6464:6 6465:6 6468:7 6469:8 6470:10 6472:14,17 6473:6,21 6475:1 6477:6 6479:5 6482:3,4,5 6494:4,15,17,18, 22 6495:2 6497:2,3 6499:5,6 6530:27 6531:6,8 6532:13 6533:25 6534:27 6535:12,13 6538:11 6543:15	6409:22 6410:2,5,6,8 6411:15,16,18,21 6412:21, 23 6413:2,4,10,16,17,23 6414:13,16,20 6415:1,20,21 6418:21,24 6421:4,7,12,21 6425:5 6437:11,15,18,19,22 6439:20,24 6440:17 6441:27,28 6442:6,10,11,12, 14,15,16,19,22 6443:25 6444:3,10,11 6448:19,20,21 6451:4,21 6452:2,6 6453:5, 6,8,11,20 6454:3,4,10 6455:4 6456:12,21 6457:15, 18,19,23 6458:23,24 6460:8 6463:13 6479:4 6482:24 6483:4 6494:6,9,26 6495:14 6507:8 6534:24 6540:17
<b>powder</b> 6315:3,13 6349:16 6403:9,10,25 6498:21	<b>prepare</b> 6379:8 6434:28	<b>pricing</b> 6319:2,18,27 6320:20,21 6321:9 6322:4 6324:11 6331:22 6337:26 6347:5 6355:15 6381:2 6387:23,25 6388:1,5,7 6400:22,25,26 6401:1,6,9 6406:7,15 6409:13,21 6410:17,20 6413:2,11 6417:27 6420:15,18,20 6421:27 6422:2,10,13,18,24 6425:3 6436:1,3,8,9,11 6437:5 6438:16 6441:12,14 6442:20 6445:19,27 6446:2 6448:16 6449:25 6452:3 6469:12 6481:6,8,23 6495:26 6496:21 6498:23 6499:2,28 6507:27 6510:24 6538:28 6539:4	
<b>power</b> 6535:1	<b>prepared</b> 6301:28 6427:8 6488:28	<b>primary</b> 6493:19	
<b>powerful</b> 6481:12	<b>preparing</b> 6540:7	<b>primitive</b> 6313:9,12	
<b>Powerpoint</b> 6366:9 6370:4 6435:23 6444:23	<b>present</b> 6508:26 6513:24 6514:4 6517:23 6518:16	<b>principal</b> 6535:1	
<b>Powerpoint-type</b> 6435:6	<b>presentation</b> 6309:9 6329:21 6333:21 6335:20 6431:14 6462:15 6514:4 6515:11 6517:1,5,12,13,25 6518:9,14,21 6519:9,12,16 6520:18 6540:5,9 6549:25 6550:6,9 6551:1	<b>principle</b> 6415:12	
<b>PPD</b> 6337:15,19,24 6423:15 6424:7 6425:1 6450:12,27 6451:2,6,14,19 6452:11,20 6453:2,7,9,10,22 6454:4,5,7, 14,17 6455:3,10,22 6456:22, 26 6457:1,24,27 6458:11,26 6459:5 6465:24 6466:8 6479:4 6493:12,17 6494:8	<b>presented</b> 6308:2 6432:10 6448:7 6450:19 6514:9 6515:9 6516:1,2 6517:2,11, 28 6520:2 6523:3 6524:23 6527:9 6540:5 6544:7 6548:21 6549:22	<b>principles</b> 6336:6 6409:6 6436:4 6439:6 6440:9 6534:13	
<b>PPDS</b> 6337:11,14 6338:3 6413:11,13,16,20,25,27 6423:11,18,23 6478:15 6492:26 6494:23	<b>presenter</b> 6523:28	<b>print</b> 6434:24	
<b>practical</b> 6410:27 6415:3 6434:3,10 6542:27	<b>presenters</b> 6501:26	<b>printed</b> 6311:8 6413:25 6423:15,24 6424:9 6434:27 6444:23 6465:24 6540:23	
<b>practice</b> 6304:16,27 6320:24 6398:12 6428:24 6439:3	<b>presenting</b> 6436:13 6514:22,26 6526:13	<b>printing</b> 6304:26 6434:24	
<b>practices</b> 6424:25 6528:21	<b>preserve</b> 6503:20	<b>prior</b> 6422:4,7 6423:1 6439:3 6442:12 6477:6 6483:15 6486:15 6516:23 6529:22,28	
<b>pre-2018</b> 6414:27	<b>preserves</b> 6332:11	<b>prioritize</b> 6350:2	
<b>preceded</b> 6513:17	<b>President</b> 6400:17 6457:16	<b>priority</b> 6307:19 6409:28	
<b>precise</b> 6470:1 6479:7 6493:7	<b>press</b> 6400:15 6418:9	<b>prisons</b> 6548:4	
<b>precisely</b> 6410:9 6497:18	<b>pressure</b> 6404:4	<b>private</b> 6413:27 6424:23 6504:7,19 6508:13,25 6509:8 6510:6,14,16	
<b>precision</b> 6371:3	<b>pretend</b> 6471:3		
<b>preclude</b> 6399:8	<b>pretended</b> 6466:26		
<b>predict</b> 6337:24	<b>pretty</b> 6313:9 6321:6 6341:9 6362:21 6386:26 6391:23 6413:18 6520:16 6524:17 6545:15		
<b>predictable</b> 6319:18 6408:24	<b>prevailing</b> 6382:28		
<b>predominantly</b> 6379:22	<b>prevalent</b> 6455:23		
<b>prefer</b> 6409:12,20 6431:28 6527:8 6555:27	<b>prevaricate</b> 6515:4		
<b>preference</b> 6399:9	<b>prevent</b> 6414:19 6496:5		
<b>preferences</b> 6463:19 6551:18	<b>preventing</b> 6327:6		
<b>preliminary</b> 6436:14	<b>prevents</b> 6399:23 6465:5		
<b>premium</b> 6382:21 6386:18, 21 6437:28 6442:19 6443:13,27 6444:4,11 6473:24	<b>previous</b> 6322:9 6327:22 6331:3 6337:3 6399:20 6401:5,14 6403:5 6415:9 6416:22 6435:24 6535:7 6537:3 6538:3		
<b>premiums</b> 6382:14,21,25, 27,28 6383:4,6,25 6384:1,5	<b>previously</b> 6306:14 6307:5 6378:23 6384:2 6396:17,23 6398:23 6435:16 6461:4 6516:20 6523:11 6545:2		



<p><b>privately</b> 6413:20</p> <p><b>privately-owned</b> 6344:2</p> <p><b>problem</b> 6303:20,25 6402:19 6422:26 6425:7 6523:17 6524:5</p> <p><b>problems</b> 6317:1 6336:28 6402:27 6422:25 6444:20,22</p> <p><b>procedural</b> 6305:22</p> <p><b>procedurally</b> 6501:8</p> <p><b>procedure</b> 6431:20 6523:13 6554:2</p> <p><b>proceed</b> 6379:12 6394:8 6395:13,22 6397:2 6431:4 6434:7,13 6479:19 6553:23</p> <p><b>proceeding</b> 6301:5 6305:3 6378:23 6396:18 6426:14 6484:18 6490:12,19 6492:6 6522:16 6523:1,6</p> <p><b>proceedings</b> 6484:12 6557:4</p> <p><b>process</b> 6318:16 6370:21 6374:28 6417:24,25 6472:24</p> <p><b>processed</b> 6389:27 6403:22</p> <p><b>processing</b> 6409:25,26 6424:16 6534:12 6546:22</p> <p><b>processor</b> 6320:1 6324:26 6338:21 6339:1,16 6341:5 6359:5,8 6399:27 6413:27 6414:3 6420:25 6468:10 6471:4 6477:4 6500:1 6533:19,24 6546:11,13</p> <p><b>processor's</b> 6476:19</p> <p><b>processors</b> 6320:25 6334:12 6343:1,3 6351:20 6360:22 6369:15 6372:10 6382:17 6383:4,8 6384:21 6400:8 6409:17,18 6410:1 6413:21 6414:9,10 6416:18 6424:23 6477:8 6513:4 6538:11,15,17,24 6546:16</p> <p><b>processors'</b> 6420:27</p> <p><b>produce</b> 6483:1 6527:8</p> <p><b>produced</b> 6487:25 6537:26 6551:5</p> <p><b>producer</b> 6320:1,7 6322:3 6348:7 6377:5 6391:27 6400:23,27 6402:2 6406:14 6409:16 6413:4,28 6414:2 6415:13 6420:26 6421:19 6449:27 6450:27 6452:3 6481:26 6482:6 6494:22 6495:1 6497:15,17 6498:6 6533:26 6534:20 6546:8,11, 15 6553:26 6554:3,5</p>	<p><b>producers</b> 6307:14 6315:15 6317:15 6322:1 6372:10 6379:24 6381:1 6384:9,19 6386:11 6400:4,15 6401:26 6402:15 6406:2,16 6409:12 6410:3 6413:22,23 6414:19 6415:7,10 6416:18 6417:22 6418:11,12 6421:25 6422:23 6423:13 6432:6 6436:23 6465:22 6481:21 6487:4 6496:23,24 6513:1 6532:23 6534:10,27 6539:6,9 6544:6 6554:11</p> <p><b>producers'</b> 6496:25</p> <p><b>produces</b> 6449:6</p> <p><b>producing</b> 6318:15 6385:4</p> <p><b>product</b> 6323:24 6335:13,14 6340:7 6352:3,21 6354:1,7 6355:23 6357:4,8,11 6376:7 6403:12,24 6405:15,24 6412:16 6439:17 6467:2,3,5, 6,12 6469:2,5,20 6483:3 6498:15 6510:8 6513:13 6529:19 6532:2,14,15,16</p> <p><b>production</b> 6404:1 6481:23 6482:11 6483:2</p> <p><b>products</b> 6319:16 6321:4,7 6323:1,25 6332:14 6340:17 6347:13,14 6352:18 6354:6, 25 6355:7,8,13,26 6369:27 6403:16 6405:18 6407:12 6416:19 6421:1 6463:9,12 6464:3,16,17 6468:3 6470:24 6529:24 6530:10 6535:2 6539:2,15 6542:24 6547:21</p> <p><b>professional</b> 6516:20 6548:26</p> <p><b>professor</b> 6334:5 6449:26 6465:10,15 6502:21</p> <p><b>proffered</b> 6522:3</p> <p><b>profile</b> 6474:17</p> <p><b>profit</b> 6410:21 6412:15 6437:24,27 6476:19,22,23 6529:18,20,24 6530:5,9,11</p> <p><b>profitability</b> 6399:28 6405:18 6408:16</p> <p><b>program</b> 6316:2 6318:12 6338:28 6339:24 6345:5 6347:10,26 6354:17,18,22 6391:16,21 6401:22 6403:12,17 6406:6 6446:3, 27 6447:22 6448:16 6453:19,25 6457:17 6458:3 6477:5,12 6482:16 6495:23 6499:18 6506:18 6507:6 6510:2 6512:5 6523:20,27</p>	<p>6531:2</p> <p><b>programs</b> 6391:14 6405:22, 27 6411:13 6506:4,22,25 6507:15,16 6508:12 6509:4 6511:11 6512:4,15 6529:3 6541:9</p> <p><b>prohibited</b> 6347:5</p> <p><b>prohibitive</b> 6529:21</p> <p><b>projected</b> 6440:16</p> <p><b>projects</b> 6511:11</p> <p><b>prominent</b> 6465:1</p> <p><b>promise</b> 6514:11 6515:17</p> <p><b>promote</b> 6350:16 6352:23, 24 6359:20 6433:10</p> <p><b>promotion</b> 6357:10</p> <p><b>promotions</b> 6353:25 6357:10</p> <p><b>prompt</b> 6460:27</p> <p><b>promptly</b> 6489:15</p> <p><b>pronounce</b> 6502:17</p> <p><b>pronounced</b> 6502:24</p> <p><b>pronunciations</b> 6407:27</p> <p><b>proper</b> 6522:26 6523:12 6525:9</p> <p><b>properly</b> 6445:22 6488:3</p> <p><b>proponent</b> 6426:25 6432:9, 13 6487:17</p> <p><b>proponents</b> 6308:2</p> <p><b>proportional</b> 6330:10</p> <p><b>proportions</b> 6314:28</p> <p><b>proposal</b> 6308:13 6310:3 6311:16,22 6323:15 6324:11 6325:25 6331:7 6332:10 6337:5 6345:13 6346:3 6347:16 6348:15 6361:28 6362:1 6364:5 6365:19,26, 28 6366:26 6367:10,16,22 6368:11 6371:20 6373:16 6374:6 6375:1 6381:1 6393:2 6395:16 6398:12 6399:8,10 6400:9 6402:4,6 6406:28 6407:3,12 6408:2,3, 8 6409:7 6411:28 6414:22, 26,27,28 6415:4,11 6416:12, 14,15,17 6417:6,25 6418:6 6422:27 6432:8 6433:25 6434:18 6435:25 6443:24,28 6444:6,7,8 6445:5 6495:12</p> <p><b>proposals</b> 6325:22 6346:2 6377:15 6393:4 6398:11 6399:7 6409:13,19 6416:13</p>	<p>6417:1 6429:1 6432:7,14,16, 19,23 6435:26 6443:16,17 6444:15,19,28 6445:2,11,15 6469:13 6533:1</p> <p><b>propose</b> 6377:14 6394:16 6395:13 6507:5</p> <p><b>proposed</b> 6331:25 6384:13, 18 6418:26,27</p> <p><b>proposer</b> 6431:23</p> <p><b>proposing</b> 6345:14 6362:15</p> <p><b>proprietary</b> 6320:12 6512:4</p> <p><b>protect</b> 6304:6 6333:16 6352:7 6460:5,6</p> <p><b>protecting</b> 6333:15</p> <p><b>protection</b> 6454:19 6473:28 6506:20,21 6508:9 6509:3 6513:17 6544:9</p> <p><b>Protections</b> 6406:1</p> <p><b>protein</b> 6420:12 6425:4 6451:11 6493:14,16,17</p> <p><b>proud</b> 6401:15</p> <p><b>prove</b> 6303:26</p> <p><b>proverbial</b> 6402:28</p> <p><b>provide</b> 6352:2 6379:27 6386:8 6387:2 6395:23 6398:10 6399:27 6410:8,17 6445:7 6470:21 6489:23 6499:5 6513:16 6521:21 6526:19 6529:23 6542:13</p> <p><b>provided</b> 6308:23 6412:1 6443:20,22 6479:22 6496:9 6517:13</p> <p><b>provider</b> 6437:13 6473:23 6474:6 6475:18,19 6533:8</p> <p><b>providers</b> 6437:2 6472:1,6 6473:27 6474:2,26 6507:2</p> <p><b>providing</b> 6301:15 6416:1 6513:8</p> <p><b>provision</b> 6371:18 6372:2</p> <p><b>provisionally</b> 6486:23</p> <p><b>proximate</b> 6422:20</p> <p><b>proxy</b> 6327:7</p> <p><b>public</b> 6480:27 6489:22 6503:11 6504:16,17 6505:21 6507:18</p> <p><b>public-private</b> 6506:27</p> <p><b>publication</b> 6413:1 6485:17</p> <p><b>publicly</b> 6539:20</p>
--	---	---	---



<p><b>publicly-traded</b> 6336:11 6459:26 6531:21</p> <p><b>publish</b> 6411:17 6456:2 6460:9 6480:24</p> <p><b>published</b> 6423:20 6425:5 6442:25 6447:12 6449:28 6450:21 6480:14 6493:3 6530:25 6539:18 6551:11</p> <p><b>publishes</b> 6412:26 6424:12</p> <p><b>pull</b> 6309:27</p> <p><b>pulled</b> 6520:27</p> <p><b>punch</b> 6408:28 6438:14</p> <p><b>purchase</b> 6468:11 6511:5 6538:25</p> <p><b>purchased</b> 6380:11</p> <p><b>purchases</b> 6315:23 6334:15</p> <p><b>purpose</b> 6348:12 6372:5,21 6373:2,4,6 6425:17 6427:19 6433:8 6472:23 6484:12 6494:5 6511:16 6512:12 6526:4 6539:8</p> <p><b>purposes</b> 6332:12 6351:16 6371:23 6373:6 6374:14 6415:3 6424:22 6434:4 6436:7 6469:13 6479:13,26 6492:2 6554:19</p> <p><b>pursue</b> 6529:12</p> <p><b>pursuits</b> 6408:20</p> <p><b>put</b> 6308:21 6312:19 6318:12 6328:13 6329:14 6334:22 6335:7 6345:5 6346:13 6348:12 6349:11,26 6350:10 6354:16 6359:23 6383:24 6390:17 6393:2,4 6399:6 6424:18 6426:16 6428:5,13 6432:7 6461:28 6464:11,15 6471:17 6473:21 6488:8 6498:8 6501:20 6514:9 6522:5 6525:23,28 6529:17 6530:13 6538:3 6540:4 6547:11 6553:19</p> <p><b>puts</b> 6392:3 6485:10</p> <p><b>putting</b> 6404:3 6408:24 6412:23</p>	<p>6494:20</p> <p><b>quantitative</b> 6445:3,6</p> <p><b>quantitatively</b> 6444:27 6445:11</p> <p><b>quarter</b> 6353:8,9,21 6454:20 6460:10</p> <p><b>quarterback</b> 6400:10</p> <p><b>quarterly</b> 6459:27 6460:25 6467:27</p> <p><b>quasi-legal</b> 6550:1</p> <p><b>quasi-legals</b> 6550:3</p> <p><b>query</b> 6306:11</p> <p><b>question</b> 6310:27 6311:2 6318:17 6319:17 6321:26 6325:28 6344:14 6348:19 6349:23 6353:28 6354:2 6357:26 6361:11,25 6363:17 6364:1 6366:15 6370:9 6371:9 6373:1 6374:4 6389:7 6393:26 6394:21 6412:24 6420:15 6424:20 6431:17 6434:28 6455:22 6459:14,16,21,25 6466:17 6467:10 6481:20 6482:13 6484:26 6498:4 6513:26 6517:7 6527:28 6533:6 6536:11 6546:21 6547:1 6549:26 6550:22</p> <p><b>questioning</b> 6366:6,14 6371:27 6377:19 6524:9 6549:16</p> <p><b>questions</b> 6309:8 6325:6,9, 15,20 6326:23 6342:25 6343:25 6345:13 6351:15 6358:23 6371:22 6373:21 6375:12 6376:18,20,22 6384:24 6387:16,23 6388:10,11,19 6393:11 6409:1 6417:5 6423:10 6436:17 6462:14 6465:20 6489:7 6490:5,27 6521:1 6522:18,25,28 6523:4,24,26 6524:13 6529:11 6549:20 6555:22,25 6556:5,8,12,14, 20</p> <p><b>quick</b> 6307:15 6325:15 6528:14</p> <p><b>quickly</b> 6371:2 6530:27</p> <p><b>quiz</b> 6514:13</p> <p><b>quota</b> 6510:23</p> <p><b>quotation</b> 6537:1,20</p> <p><b>quotations</b> 6537:19 6538:2</p> <p><b>quote</b> 6400:21 6437:4,25 6536:28</p>	<p><b>quote/unquote</b> 6420:2</p> <p><b>quoted</b> 6437:5 6466:18</p> <p><b>quoting</b> 6536:8,13,15</p> <hr/> <p style="text-align: center;"><b>R</b></p> <hr/> <p><b>R-SQUARED</b> 6336:5</p> <p><b>radius</b> 6389:27</p> <p><b>raise</b> 6322:20 6374:26 6379:20</p> <p><b>raised</b> 6322:28 6342:13 6484:21 6485:9</p> <p><b>raises</b> 6332:22 6462:4</p> <p><b>raising</b> 6485:4,8</p> <p><b>rallies</b> 6406:9</p> <p><b>rally</b> 6414:13</p> <p><b>range</b> 6346:17 6355:17 6441:6,9 6449:2,19 6477:13</p> <p><b>ranges</b> 6349:2</p> <p><b>rapidity</b> 6358:8</p> <p><b>rarely</b> 6510:18</p> <p><b>rate</b> 6383:26 6384:2</p> <p><b>rates</b> 6364:7 6390:14 6414:12 6493:9</p> <p><b>ratio</b> 6439:16 6449:8</p> <p><b>ration</b> 6482:9</p> <p><b>rationalized</b> 6424:14</p> <p><b>ratios</b> 6400:28</p> <p><b>raw</b> 6411:7</p> <p><b>ray</b> 6392:17</p> <p><b>re-cross</b> 6373:18</p> <p><b>reached</b> 6400:5 6437:2</p> <p><b>reaches</b> 6455:1</p> <p><b>reacting</b> 6531:5</p> <p><b>reaction</b> 6400:14</p> <p><b>reacts</b> 6530:27</p> <p><b>read</b> 6383:21 6407:5,13 6410:27 6426:3 6488:6 6493:5 6503:2 6524:20 6535:8</p> <p><b>reading</b> 6325:20 6379:13 6384:23 6398:15 6447:21 6493:8 6521:1 6525:14 6534:6 6535:9 6544:1,24</p> <p><b>readopted</b> 6357:13</p>	<p><b>reads</b> 6309:14 6351:20</p> <p><b>ready</b> 6351:5 6395:8 6430:4 6461:9 6501:2 6537:10 6551:21 6553:7</p> <p><b>ready-made</b> 6532:5</p> <p><b>real</b> 6303:25 6339:27 6476:28 6484:22 6522:5</p> <p><b>realign</b> 6539:3</p> <p><b>realistic</b> 6358:9</p> <p><b>reality</b> 6309:14 6336:15,20 6346:17 6357:12 6358:19 6368:19,28</p> <p><b>realize</b> 6458:1 6537:19</p> <p><b>realized</b> 6302:1 6335:9 6420:4</p> <p><b>realtime</b> 6409:14 6531:6</p> <p><b>reason</b> 6310:4 6312:20 6326:3 6332:19,21 6403:28 6431:24 6439:1 6441:22 6442:9,17 6443:12 6448:11 6473:19 6477:2 6484:22 6486:13 6492:8 6495:28 6498:11 6518:19 6545:2</p> <p><b>reasonable</b> 6404:2 6419:6</p> <p><b>reasoning</b> 6402:13</p> <p><b>reasons</b> 6304:8 6332:6,11 6336:20 6338:10 6342:15 6351:19 6384:16 6399:10 6414:6 6418:18 6441:19 6443:14 6445:24 6463:10 6467:22 6476:7 6486:20 6532:22 6538:13 6544:4 6550:21</p> <p><b>reassociate</b> 6318:22</p> <p><b>reblend</b> 6320:15</p> <p><b>Reblending</b> 6481:5</p> <p><b>rebound</b> 6369:26</p> <p><b>rebuttal</b> 6377:17 6394:18 6395:19 6425:24 6426:25 6427:12,16,17 6436:13 6552:3</p> <p><b>rebuttals</b> 6417:1</p> <p><b>recalculated</b> 6408:14</p> <p><b>recalibrated</b> 6445:17</p> <p><b>recall</b> 6303:10 6394:27 6417:17 6439:8 6443:7 6515:11,24 6527:12 6545:19,20 6555:23 6556:20</p> <p><b>recalled</b> 6325:10</p> <p><b>recalling</b> 6422:14 6535:25</p>
--	---	---	--



<b>recalls</b> 6326:10	<b>recovered</b> 6384:12 6454:27	6404:25 6413:15 6422:8	6497:18
<b>receipts</b> 6389:19	<b>recovering</b> 6423:27	6452:5,8 6453:7,8,19	<b>release</b> 6418:9 6531:1
<b>receive</b> 6308:3 6396:2 6410:16 6508:8 6510:2	<b>RECROSS-EXAMINATION</b> 6373:19	6454:7,13 6455:6,7,10,21	<b>released</b> 6406:10 6556:23
<b>received</b> 6303:8 6385:18 6393:21 6487:19 6491:12,13	<b>recurringly</b> 6435:25	6456:8,24,26 6457:1,11,12, 25 6458:12,17,25 6459:4 6516:23 6534:28	<b>relevancy</b> 6487:18
<b>receives</b> 6507:14	<b>red</b> 6444:23 6540:11,20	<b>reformed</b> 6400:28	<b>relevant</b> 6398:26 6524:1 6525:26
<b>recent</b> 6358:20 6406:26 6436:12 6449:26	<b>redirect</b> 6326:17 6351:11 6392:24,26 6536:10,22	<b>regard</b> 6393:11 6489:8 6503:27 6504:20 6513:18 6549:24	<b>reliability</b> 6490:28 6491:1
<b>recently</b> 6383:28 6395:2	<b>reduce</b> 6406:11 6453:5 6454:5 6468:15 6481:22 6495:13 6497:17	<b>regime</b> 6436:1,8,10,11 6437:5 6438:16,22,24 6441:12,14 6445:19,27 6446:3,17,19 6448:2,7,9,17, 22,25,26 6449:19 6474:22	<b>relied</b> 6491:7 6516:20 6539:20
<b>recess</b> 6554:21	<b>reduced</b> 6309:12 6322:16 6401:10,13 6413:11 6414:14 6437:24 6448:25 6476:23	<b>regimes</b> 6446:2	<b>relief</b> 6480:28
<b>reckless</b> 6518:19	<b>reduces</b> 6364:2	<b>region</b> 6382:26	<b>relies</b> 6405:23,26
<b>recognize</b> 6310:12 6317:5 6333:23 6341:20 6373:2 6409:27 6480:5 6488:20 6492:6	<b>reducing</b> 6443:6 6467:11,15	<b>regional</b> 6389:2	<b>rely</b> 6480:10,12 6484:15 6486:1 6488:2 6490:21,26 6491:3,26
<b>recognized</b> 6436:6 6460:22	<b>reduction</b> 6381:21 6386:4 6399:25 6463:18 6465:7	<b>regions</b> 6400:27	<b>relying</b> 6484:18 6486:6 6488:27
<b>recognizes</b> 6368:3	<b>reductions</b> 6479:5	<b>regular</b> 6425:8 6439:2	<b>remain</b> 6307:2 6341:27,28 6365:18 6367:15 6369:20 6396:20 6418:28 6448:19,21
<b>recollect</b> 6418:15	<b>redundant</b> 6413:19 6445:4,6	<b>regularly</b> 6405:26 6410:17	<b>remained</b> 6382:12
<b>recollection</b> 6400:14 6418:14 6522:24	<b>reemerge</b> 6403:18	<b>regulated</b> 6328:2 6356:22 6362:25 6369:18 6383:2	<b>remaining</b> 6402:11 6543:16 6545:6,12
<b>recommendation</b> 6450:16	<b>refer</b> 6343:18 6359:10 6407:2 6410:22 6440:10 6488:9 6489:24 6548:22	<b>regulation</b> 6409:23 6413:22 6414:21,27 6424:15 6476:3 6479:9 6487:12 6488:10 6528:20 6535:3	<b>remains</b> 6323:11 6380:18
<b>recommended</b> 6384:9 6478:13	<b>reference</b> 6366:7 6397:8 6412:1,2,20 6487:27 6488:5 6489:26 6490:1	<b>regulations</b> 6372:20 6411:28 6479:6	<b>remarkably</b> 6311:19 6362:19,20
<b>recommends</b> 6416:16	<b>referenced</b> 6478:24,28 6492:1	<b>reinsured</b> 6506:23	<b>remember</b> 6301:12 6329:24 6332:18 6336:23 6346:20 6389:11,13 6400:12 6453:17 6457:15 6497:6,7 6514:22, 26 6529:8 6541:13 6547:10
<b>reconcile</b> 6460:20	<b>references</b> 6309:2	<b>reinvestments</b> 6412:15	<b>remembered</b> 6524:19
<b>reconsider</b> 6486:5	<b>referencing</b> 6488:18 6492:17 6543:19	<b>reinvigorate</b> 6408:20	<b>remembers</b> 6522:28
<b>reconvene</b> 6554:27 6555:15	<b>referred</b> 6364:10 6516:3	<b>rejoined</b> 6318:28	<b>reminiscent</b> 6521:19
<b>reconvened</b> 6305:24	<b>referring</b> 6466:16 6469:14 6473:11 6480:7 6488:1 6492:20 6535:5 6543:5	<b>relate</b> 6363:27 6446:26	<b>remiss</b> 6414:23
<b>record</b> 6301:3,4,14 6303:23 6304:21 6305:5,6 6308:1 6310:21 6311:4,14 6314:11 6332:18 6351:6,8,9 6361:8 6363:13 6370:23 6375:27 6377:24,25,28 6378:1,13 6379:5,12 6387:7 6389:23 6395:9,11,12 6407:6 6410:28 6411:1 6420:9 6424:21 6430:5 6431:2,3 6443:22 6444:24 6447:2 6450:3 6454:26 6455:1 6461:10,12,13,22 6478:24 6479:15,18,20 6481:27 6483:28 6485:19 6486:13 6487:20 6490:27 6491:10, 23,28 6501:2,4,5,9,13,17,20 6503:2 6504:13 6508:1 6512:20 6521:22 6526:1 6537:12,13 6547:27 6549:5, 7 6552:13 6553:19 6556:3, 19 6557:2	<b>refers</b> 6447:7 6487:13,22	<b>related</b> 6417:6 6467:8 6469:9 6471:1 6498:1 6510:9	<b>remote</b> 6305:27
<b>recover</b> 6310:4	<b>reflect</b> 6316:13,15,22 6317:22 6318:3 6419:11 6479:5	<b>relating</b> 6487:23	<b>remove</b> 6444:16
	<b>reflected</b> 6316:19,21	<b>relation-</b> 6324:20	<b>removed</b> 6423:25 6448:3
	<b>reflective</b> 6374:20	<b>relationship</b> 6313:23 6322:8 6324:20 6327:14,18 6334:24 6349:19 6415:18,22 6424:6 6448:10 6498:13 6533:3	<b>Removing</b> 6399:26
	<b>reflects</b> 6314:17 6315:1 6316:26 6317:23 6370:10 6413:26 6423:15 6465:24 6508:1	<b>relationships</b> 6317:3 6327:9 6334:4 6349:1 6354:19 6355:11 6509:9	<b>rendering</b> 6488:2
	<b>reform</b> 6342:2 6366:22 6375:3 6380:26 6382:13 6383:3 6401:9,14 6402:5,19	<b>relative</b> 6337:22 6362:21 6374:22 6419:19 6421:26 6437:28 6446:1 6450:11 6457:5 6482:5 6494:9,10,21	<b>rent</b> 6380:8



<b>replacement</b> 6379:20	<b>resistance</b> 6421:18	6530:3 6549:11	<b>riskiness</b> 6468:15
<b>replowing</b> 6434:9	<b>resolve</b> 6412:24 6422:24 6489:20	<b>returning</b> 6369:12	<b>risks</b> 6340:24 6530:6
<b>reply</b> 6410:11	<b>respect</b> 6367:21 6463:6 6476:11 6478:25 6481:5 6490:12 6500:21 6509:15 6510:15,16 6545:22 6549:12	<b>reutilization</b> 6314:4	<b>risky</b> 6321:20
<b>repool</b> 6458:27	<b>respectable</b> 6471:10	<b>revenue</b> 6370:2 6399:25 6402:23 6406:1 6408:11,17 6454:19 6465:7 6467:24,26 6506:20 6507:15 6508:2,8,9, 11 6509:3,14 6511:6,18 6512:6 6513:17 6540:16 6544:9	<b>riveting</b> 6439:14 6458:16
<b>report</b> 6405:24 6411:12 6412:26 6459:27 6460:15,18 6483:9 6487:22,24 6488:2 6490:23 6528:4,24 6530:25 6539:17 6550:20 6551:3,11	<b>respectfully</b> 6488:16	<b>revenue-generating</b> 6504:9 6506:25 6509:5	<b>road</b> 6379:6 6524:11
<b>reported</b> 6530:18	<b>respond</b> 6306:4,7,10 6463:15 6521:1,28	<b>reversal</b> 6422:23	<b>roadblocks</b> 6399:26
<b>reporter</b> 6324:15 6332:1 6379:14 6433:18 6458:14 6481:28 6511:8	<b>responded</b> 6499:8	<b>reversed</b> 6414:27	<b>Robesonia</b> 6379:18
<b>reporting</b> 6346:27 6526:27 6528:23 6530:23,24	<b>response</b> 6400:2 6416:21 6478:19	<b>reviewed</b> 6450:19 6496:14	<b>robust</b> 6518:22 6526:19
<b>reports</b> 6467:27 6484:16 6486:6 6539:21 6540:7	<b>responsibility</b> 6506:6	<b>reviewers</b> 6450:20	<b>Roger</b> 6325:3 6556:12
<b>repositories</b> 6526:28 6539:20	<b>responsible</b> 6336:12 6507:6	<b>revisit</b> 6419:28	<b>role</b> 6517:19
<b>represent</b> 6362:2 6386:1 6498:27	<b>rest</b> 6325:16 6326:21 6390:1 6488:25 6549:21 6551:16	<b>Rice</b> 6539:18,19 6540:6 6551:11	<b>rolling</b> 6409:4 6412:6
<b>representation</b> 6343:21	<b>restart</b> 6357:26 6431:7 6458:2	<b>rid</b> 6319:2,18,26 6322:4	<b>room</b> 6376:24 6387:16 6398:4 6483:12 6486:25 6503:18 6554:7
<b>REPRESENTATIVE</b> 6302:21,24	<b>restaurant</b> 6334:13	<b>rise</b> 6454:3	<b>Rosenbaum</b> 6301:9,10,11, 18 6302:12,17 6303:10,28 6305:12,14 6326:17 6351:2, 4,10,12,13 6361:1,4,6 6370:7,8,18 6371:1,8,11 6373:17 6521:6,7,8 6522:10, 11,27 6525:10 6536:6,13,15, 18 6556:27,28
<b>representing</b> 6307:14 6414:24 6432:6 6552:16	<b>restaurants</b> 6342:10 6359:25	<b>rises</b> 6531:20	<b>Rosenbaum's</b> 6523:16
<b>represents</b> 6386:3 6519:19	<b>restrict</b> 6449:15	<b>risk</b> 6319:19 6322:1,2,3,12, 19,26 6324:12,24,25 6326:1 6332:23,24 6334:21 6335:2, 8 6337:1 6339:15,22 6340:12,22 6341:26 6342:5 6346:14 6349:24 6350:2,18, 21 6351:21 6354:16,21 6359:7,18 6391:13 6398:24 6399:25,27 6400:3 6401:12, 16 6405:25 6406:8,15 6408:21 6409:28 6410:2,20 6412:12 6415:13,15 6416:1 6420:21 6421:28 6436:6,9 6439:7 6441:13,23,28 6442:1,7,8,10,19 6443:13, 25,27 6444:1,3,4,8,10,11,12, 16,22 6445:3,5 6446:11,13, 16,18 6447:23 6448:12,21, 27 6462:5 6465:6 6466:6,22, 24 6467:3,4,9,11,16 6468:1, 4,5,10,13,14,22,25,26,27 6469:1,3,5,6,8,9,14,19 6470:14 6473:23,28 6474:1, 13,17,18 6476:28 6497:5,18 6499:18 6506:21 6507:1,26 6508:9 6509:1,14 6510:3,12 6511:5,14,19 6514:1,5 6524:25 6525:21 6526:5 6528:12,15,20,23,27 6530:2 6533:9,25 6534:21 6535:12, 17 6538:11,15,18,25 6539:10,24 6540:17 6541:3, 7 6544:5,7 6550:10,15	<b>rough</b> 6514:12
<b>reprinted</b> 6413:7	<b>restricting</b> 6413:14		<b>roughly</b> 6319:9 6333:23 6528:7
<b>Republican</b> 6458:5	<b>result</b> 6312:24 6319:3 6354:1 6418:5 6440:26 6441:19 6453:27 6548:12		<b>round</b> 6315:22
<b>request</b> 6445:7 6549:23	<b>resulted</b> 6441:4		<b>routinely</b> 6388:2
<b>requested</b> 6401:28	<b>results</b> 6365:21 6367:28 6460:10 6496:11		<b>row</b> 6328:17 6477:15
<b>require</b> 6354:14 6436:5 6439:6	<b>resume</b> 6557:2		<b>rule</b> 6426:13 6427:26,27 6433:8 6434:4,13,14 6485:6, 11,26 6489:6 6492:3
<b>required</b> 6448:15 6476:25 6496:1 6538:2 6544:6 6547:17	<b>retail</b> 6321:18 6322:20 6332:27 6333:23 6373:24 6374:1 6412:13 6548:15		<b>rulemaking</b> 6349:27
<b>requires</b> 6439:11 6544:3	<b>retailer</b> 6360:3 6369:24 6399:28		<b>rules</b> 6336:13,14 6427:20 6428:4,13 6429:3 6431:13 6483:26 6484:10 6485:2,27, 28 6487:28 6488:20 6490:10 6491:23 6492:3 6501:14 6502:3 6507:3,5
<b>requisite</b> 6467:17	<b>retailers</b> 6334:13 6369:16 6411:9 6412:3 6421:4,5		<b>ruling</b> 6431:6 6486:26 6488:17 6489:17
<b>researchers</b> 6400:15	<b>retails</b> 6322:28		<b>run</b> 6310:3 6312:28 6327:7 6331:9,12 6352:25,27 6353:3,6 6473:18 6474:21 6493:5 6506:2,19,26
<b>resemblance</b> 6424:5	<b>retain</b> 6345:19 6514:28		<b>running</b> 6334:1 6456:15 6507:15
<b>reserve</b> 6488:22 6513:4	<b>retainer-style</b> 6512:28 6513:2		<b>runs</b> 6480:25 6485:27
<b>reserved</b> 6488:16	<b>retaken</b> 6305:14		<b>rush</b> 6412:28
<b>reserving</b> 6486:26	<b>retired</b> 6354:13 6465:11		
<b>reset</b> 6538:9	<b>retrospect</b> 6402:18		
<b>residual</b> 6446:11,13	<b>return</b> 6368:12 6402:17 6483:23 6490:9 6491:9		
<b>resin</b> 6341:12			



<b>Ryan</b> 6307:14 6310:26 6323:4 6432:5	<b>scoot</b> 6378:15	<b>senior</b> 6314:25	6341:15 6354:21 6362:19 6364:15 6379:27 6382:18
<hr/> <b>S</b> <hr/>	<b>scope</b> 6411:9 6418:6 6424:26 6425:19 6458:6 6497:25	<b>seniors</b> 6480:23	<b>shared</b> 6344:23 6534:10
<b>S-J-O-S-T-R-O-M</b> 6396:28	<b>screaming</b> 6482:16	<b>sense</b> 6313:13,18 6315:18 6319:15 6333:14 6355:1 6357:7 6373:3 6377:18 6394:24 6395:3 6419:6 6425:17 6476:20,26 6480:27 6514:21	<b>sheet</b> 6446:8
<b>sacrifice</b> 6428:21	<b>screen</b> 6439:18 6443:21 6447:6 6448:9 6547:11	<b>sentence</b> 6330:1 6337:11,13 6407:6,13 6413:19 6533:19, 23	<b>sheets</b> 6304:5,8
<b>sadly</b> 6368:18	<b>scroll</b> 6542:12	<b>sentences</b> 6398:3	<b>shelf</b> 6333:15 6335:13,14 6342:9 6350:24 6355:22 6421:1 6464:18
<b>safe</b> 6359:17 6547:15	<b>scrutinized</b> 6450:22	<b>sentiment</b> 6402:2	<b>shielded</b> 6410:20
<b>sake</b> 6428:20 6434:23	<b>season</b> 6555:16	<b>separate</b> 6311:3 6323:20 6339:10 6375:20 6426:25 6432:14,19 6435:4 6509:8	<b>shift</b> 6336:16
<b>sale</b> 6334:1 6340:5 6353:12, 22 6354:1 6421:2 6511:5,13 6512:14 6538:26,27	<b>seasonal</b> 6352:21 6353:14	<b>separated</b> 6429:3 6512:10	<b>shins</b> 6342:6 6355:18
<b>sales</b> 6332:14,20 6333:20,24 6334:2,3 6338:23 6347:10 6350:17 6353:3,6,9 6354:8, 21 6355:15 6369:26 6373:23,24 6382:18 6399:17,18 6400:2 6403:19 6405:24 6409:15 6414:15 6420:28 6421:3 6425:16 6462:26 6463:8,10,18 6464:9 6465:2 6493:10 6499:27 6508:9,11 6534:10 6541:18	<b>seat-of-the-pants</b> 6315:26	<b>separately</b> 6427:15	<b>ship</b> 6382:26 6389:25 6414:4 6482:2,3,6 6516:5
<b>sample</b> 6424:2 6449:15	<b>second-by-second</b> 6530:27	<b>September</b> 6353:23 6411:22 6457:14,18,28 6460:9	<b>shipments</b> 6482:11
<b>Sara</b> 6515:6	<b>secret</b> 6485:22	<b>series</b> 6366:10 6479:24	<b>shipper</b> 6497:12,23
<b>Sarbanes</b> 6346:27	<b>Secretary</b> 6349:28	<b>serve</b> 6379:25 6403:27	<b>shipping</b> 6548:6
<b>Sarbanes-oxley</b> 6346:27	<b>section</b> 6377:19 6395:20 6403:2 6406:28 6407:5 6408:2 6425:24 6487:21 6488:7 6534:3	<b>serves</b> 6373:2	<b>shock</b> 6315:20 6403:20 6404:1 6408:4
<b>satisfactory</b> 6487:17	<b>sector</b> 6321:10 6338:24 6398:27 6410:19 6421:9 6500:14 6504:8,19 6508:13, 25 6518:23 6526:19 6530:13 6546:22	<b>service</b> 6306:10 6326:23 6376:20,21 6388:12 6475:3 6549:10	<b>shocked</b> 6315:11,13
<b>Saturday</b> 6303:13 6421:15	<b>secure</b> 6410:13	<b>services</b> 6343:18 6381:7 6507:19 6510:6 6511:12 6513:1,2,8,11,15	<b>shocks</b> 6402:24
<b>save</b> 6304:26 6458:25	<b>seeks</b> 6402:4	<b>servicing</b> 6384:20	<b>shopper's</b> 6465:1
<b>saved</b> 6326:14	<b>segment</b> 6373:26 6421:6	<b>servicing</b> 6384:20	<b>shops</b> 6360:3
<b>scale</b> 6475:21	<b>Select</b> 6307:14 6432:6 6490:26	<b>serving</b> 6412:2	<b>short</b> 6433:9 6471:21 6473:10 6474:13 6481:19
<b>scares</b> 6315:13	<b>Select's</b> 6432:27	<b>session</b> 6301:1 6343:22 6344:26 6431:1 6553:26	<b>short-term</b> 6317:21 6515:1
<b>scattergram</b> 6447:6,7 6448:8	<b>selected</b> 6305:6	<b>sessions</b> 6343:20 6344:24	<b>shorter</b> 6345:18 6445:16
<b>scattergrams</b> 6446:26 6447:1	<b>selecting</b> 6352:4	<b>set</b> 6317:7 6340:18 6372:20 6386:23 6405:24 6412:24 6426:7 6436:26 6451:25 6507:2,8 6508:6,17,18	<b>shortfall</b> 6408:12
<b>schedule</b> 6331:10 6555:9	<b>sell</b> 6340:17 6352:21 6359:22 6369:13 6370:1 6391:8,9 6443:2 6464:26 6467:12 6474:8,24 6482:8 6497:15 6499:14 6506:28 6510:18 6530:6 6541:8 6546:3	<b>setting</b> 6340:19 6411:16 6507:27	<b>show</b> 6308:15 6334:7 6382:25 6386:20,22 6425:28 6460:13 6479:12 6533:16
<b>scheduled</b> 6306:15	<b>seller</b> 6340:1 6341:5 6473:3 6532:10	<b>settling</b> 6415:21	<b>shown</b> 6447:6 6448:9
<b>scheme</b> 6387:26	<b>sellers</b> 6340:16 6464:7	<b>seven-hour</b> 6343:10	<b>shows</b> 6307:18 6328:18 6378:3 6382:19 6383:8 6386:17 6421:17 6519:16
<b>school</b> 6331:9,12,18,26 6440:8	<b>selling</b> 6499:20 6510:19 6532:24	<b>shakes</b> 6429:23	<b>shrinks</b> 6453:16 6456:19 6457:20
<b>schools</b> 6331:23 6548:3	<b>sells</b> 6359:11	<b>share</b> 6324:25 6330:10	<b>shut</b> 6524:12
<b>Schreiber</b> 6321:24 6358:24	<b>send</b> 6318:6 6481:12		<b>sic</b> 6407:4
<b>science</b> 6330:16 6450:21 6493:4	<b>sending</b> 6347:20		<b>side</b> 6321:2 6322:3,17 6327:15 6339:21 6340:11 6360:21 6388:27 6415:18,20 6416:3,26 6421:19 6474:7,8, 23,27 6532:10 6533:7 6547:16
<b>Sciences</b> 6450:1	<b>sends</b> 6317:8,14 6361:11		





<b>side's</b> 6416:25	6417:3 6425:22,27 6426:4,8 6427:21 6428:27 6431:5,15, 22 6434:17 6435:3,12,14,19 6459:12,17,18 6460:28 6461:5,7 6500:6 6524:10 6551:22,24	6493:18	<b>specials</b> 6352:25
<b>sides</b> 6363:15 6532:22	<b>skim</b> 6339:18 6400:6 6401:20,23 6406:18 6407:9 6408:7 6411:17,19 6415:2 6419:20 6435:27 6436:25,27 6437:9,10,18 6440:15 6441:18,25,27 6442:14 6451:10 6454:10 6455:21 6468:7 6470:10 6543:15 6544:21,22 6545:6	<b>solution</b> 6407:10 6409:10 6416:14 6476:9 6497:13 6518:21 6526:19	<b>specific</b> 6343:11 6367:22 6373:12 6441:16 6528:19
<b>sign</b> 6457:1 6461:21 6474:18	<b>skip</b> 6398:21	<b>solve</b> 6319:28 6422:20,26 6497:22,23 6524:13	<b>specifically</b> 6381:6 6402:16 6420:16 6487:13,28
<b>signal</b> 6317:8,10,15 6318:14 6361:12,15 6362:8 6481:12	<b>skyrocketed</b> 6390:27	<b>solved</b> 6411:12	<b>specification</b> 6512:13
<b>signals</b> 6318:6 6347:20,22 6481:11,13 6495:17,21	<b>Slav</b> 6502:25	<b>sooner</b> 6306:7	<b>speculators</b> 6340:21
<b>significant</b> 6334:9 6476:16, 22 6500:2	<b>sleep</b> 6376:26 6502:5	<b>sophomore</b> 6462:9	<b>speed</b> 6451:25
<b>significantly</b> 6310:7 6332:26 6401:13	<b>slide</b> 6309:10,11,19 6314:6 6317:19 6327:3,5 6328:6,7, 9,11,12 6329:21 6330:18 6331:3 6337:10 6360:27 6361:19 6363:14 6439:28 6447:4 6448:8	<b>sort</b> 6319:27 6322:5 6353:27 6359:28 6361:20 6362:11 6373:27 6394:28 6424:17 6428:23 6480:19 6482:16 6499:24 6503:11 6507:7 6523:20 6531:5 6532:11	<b>spell</b> 6377:9 6396:26
<b>similar</b> 6333:7 6336:1 6351:28 6474:17 6480:28 6487:15 6520:17 6545:24 6550:28	<b>slides</b> 6309:9 6327:2 6360:27 6366:10 6520:19 6528:5	<b>sorts</b> 6485:19	<b>spelled</b> 6386:25
<b>simple</b> 6308:18 6311:17 6312:16 6344:23 6367:4 6411:18 6445:8 6522:1	<b>slight</b> 6420:6	<b>sought</b> 6372:6	<b>spelling</b> 6378:12
<b>simpler</b> 6339:26 6349:21 6455:18 6541:22	<b>slightly</b> 6310:4,7 6311:20 6366:1,4 6368:11 6369:1 6371:19 6459:4	<b>souls</b> 6510:28	<b>spend</b> 6433:1 6521:17
<b>simplicity</b> 6546:26	<b>slots</b> 6554:3	<b>sound</b> 6406:25 6527:13	<b>spent</b> 6481:10
<b>simplification</b> 6511:16	<b>slow</b> 6309:4 6310:22 6399:1 6461:22	<b>Sounds</b> 6377:23	<b>spike</b> 6317:24
<b>simplify</b> 6481:26	<b>small</b> 6319:12 6324:21 6345:10 6362:22 6379:22 6389:17,18 6437:28 6438:16 6449:7 6475:16 6480:23 6506:7	<b>sour</b> 6402:9	<b>spikes</b> 6332:25
<b>simply</b> 6301:22 6302:5 6321:22 6329:18,26 6335:3 6342:11 6358:1 6361:24 6367:28 6437:28 6438:1 6445:13 6476:10 6504:14 6535:12	<b>smoothing</b> 6350:21	<b>source</b> 6539:17 6551:8	<b>spirit</b> 6373:14
<b>simultaneously</b> 6523:12	<b>snub</b> 6368:2,4,5 6369:2	<b>sources</b> 6443:19 6480:17 6510:13 6512:6 6513:10	<b>splintering</b> 6416:5
<b>Singapore</b> 6470:26	<b>snubbing</b> 6368:28	<b>soured</b> 6402:3	<b>spoke</b> 6390:3 6432:18 6486:23
<b>single</b> 6459:21 6477:3	<b>socialists</b> 6504:11	<b>South</b> 6417:21 6418:12	<b>spoken</b> 6398:16
<b>sir</b> 6307:26 6423:10 6481:7	<b>society</b> 6504:10	<b>Southeast</b> 6318:10 6419:12 6552:17	<b>spooked</b> 6323:3
<b>sister</b> 6405:25	<b>software</b> 6509:23 6512:4,5, 15 6513:15	<b>Southeastern</b> 6385:8 6540:18	<b>spot</b> 6391:19
<b>site</b> 6474:3	<b>sold</b> 6369:27 6406:12 6447:17 6499:5	<b>Southwest</b> 6413:8	<b>spread</b> 6313:26,27 6319:6,7 6336:18,19 6338:11 6349:19 6401:22 6404:4 6408:5 6416:2 6442:19 6443:1 6445:13 6451:15,18 6452:27 6453:1,16,20,28 6454:1 6455:1,2,3,20 6456:4,7,19, 20 6457:20,21 6458:8 6474:20 6493:22,25 6494:2, 3,26,28 6495:13,17,27 6496:21
<b>sitting</b> 6525:4,5	<b>solids</b> 6425:4 6451:11	<b>Southwestern</b> 6541:6	<b>spreadsheet</b> 6303:12,16,18 6308:11 6309:8 6313:5 6329:25 6434:25 6513:13
<b>situation</b> 6403:20 6458:20		<b>soybeans</b> 6379:22	<b>spreadsheets</b> 6307:25 6480:26
<b>situations</b> 6423:23 6549:18		<b>space</b> 6355:22 6464:8 6547:26	<b>stability</b> 6353:28 6357:7 6373:7 6399:25 6464:7 6465:7 6476:26
<b>six-month</b> 6356:17		<b>span</b> 6482:27	<b>stabilize</b> 6460:23 6467:24
<b>size</b> 6391:15 6438:8 6453:4 6531:18 6544:3,6 6546:19 6547:17		<b>spanning</b> 6417:20	<b>stabilized</b> 6467:26
<b>sizeable</b> 6545:15 6546:8		<b>speak</b> 6310:22 6321:16 6389:23 6390:9 6391:27 6423:11 6426:14 6461:28 6511:21 6514:3 6522:11	<b>stable</b> 6350:13,14 6356:1 6359:27 6399:17 6463:13
<b>sizes</b> 6544:10		<b>speaker</b> 6458:5 6523:23	<b>staff</b> 6397:5
<b>Sjostrom</b> 6324:4,5,16,22,27 6377:12,23 6387:19,20 6388:9 6395:15,28 6396:27 6397:3,15,17,28 6398:8		<b>speakers</b> 6426:14	<b>stage</b> 6451:25
		<b>speaking</b> 6432:13 6473:15 6497:7 6511:25	<b>stagnant</b> 6382:12
		<b>speaks</b> 6412:18 6424:15	
		<b>special</b> 6344:27	



<b>stake</b> 6380:21	6487:14 6518:23 6540:14,18 6541:6 6544:25	<b>strategies</b> 6401:13 6524:25 6544:8	<b>successfully</b> 6526:16 6530:2
<b>stakeholder</b> 6409:11		<b>strategy</b> 6353:12 6355:2,15 6357:10 6420:21 6509:18 6529:14 6544:14	<b>Sudden</b> 6406:8
<b>stakeholders</b> 6414:24	<b>statewide</b> 6389:1,5,6	<b>Strategy1</b> 6544:24	<b>suddenly</b> 6482:22
<b>stance</b> 6409:22	<b>stating</b> 6378:12 6379:4 6472:19	<b>strengths</b> 6444:7	<b>sued</b> 6343:28
<b>stand</b> 6302:19 6305:15 6306:27 6325:5 6377:7 6397:13 6428:19 6432:19,23 6434:22 6456:14 6466:25 6487:3 6488:19 6491:5 6552:21	<b>statistical</b> 6445:9	<b>stress</b> 6336:17 6368:17,19	<b>suffer</b> 6443:18,26 6444:3,20 6500:10
<b>standard</b> 6320:24 6329:7,9 6419:17 6439:17 6446:11 6492:7,9 6493:16	<b>statistics</b> 6328:13 6419:21 6440:5,6	<b>stricter</b> 6505:7	<b>suffice</b> 6436:25
<b>standards</b> 6440:11 6448:15	<b>status</b> 6448:15,18 6459:22 6460:14,17 6467:25 6505:24	<b>strike</b> 6374:3 6383:20	<b>sufficient</b> 6308:1 6445:25 6477:16 6527:4 6528:17 6532:21
<b>standpoint</b> 6327:24 6343:14 6350:22 6409:25	<b>statute</b> 6372:20 6487:22,24	<b>stringent</b> 6484:11	<b>sufficiently</b> 6473:22 6511:15 6518:22 6526:18
<b>stands</b> 6531:28	<b>stay</b> 6342:17	<b>strives</b> 6409:24	<b>suggest</b> 6346:5 6365:10 6382:9 6384:13 6393:23 6403:7 6516:9
<b>Starbucks</b> 6407:28	<b>stayed</b> 6346:16	<b>strong</b> 6317:16 6318:14 6334:4 6335:26 6399:9 6408:6 6477:2	<b>suggested</b> 6317:14 6431:18 6479:4
<b>start</b> 6305:21 6306:1 6307:24 6309:10 6343:7 6346:13 6363:17 6366:7,15 6367:19 6398:9,13 6407:5 6412:8 6425:7 6451:1 6453:24 6456:13 6462:13,17 6473:15 6480:15 6499:19 6502:12	<b>stays</b> 6347:28	<b>strongly</b> 6350:18 6414:25 6476:11 6510:26	<b>suggesting</b> 6522:24 6547:16
<b>started</b> 6316:2 6335:5,9 6336:3 6419:21 6460:8 6480:18 6481:18 6518:27 6531:4,5	<b>steadily</b> 6399:19 6462:27	<b>Strother</b> 6486:14	<b>suggests</b> 6420:4
<b>starting</b> 6336:3 6412:2 6446:5 6478:8	<b>step</b> 6331:24 6370:18 6377:2 6395:24 6452:18 6462:4 6494:25	<b>structure</b> 6332:4 6528:26 6539:4	<b>suited</b> 6416:17
<b>starts</b> 6412:12 6449:10 6452:22 6533:19	<b>Stephenson</b> 6456:2 6478:26 6479:2,25 6480:17,21 6483:20,23 6484:27 6489:1 6492:11 6502:14 6503:16 6505:13	<b>struggling</b> 6314:18	<b>sum</b> 6446:12 6456:23
<b>state</b> 6311:4 6317:9 6333:22 6386:18 6388:27 6396:13,25 6418:10 6465:11 6526:11 6552:15	<b>Stephenson's</b> 6485:23	<b>stuck</b> 6325:3	<b>Summaries</b> 6443:19
<b>state-specific</b> 6382:24	<b>steps</b> 6446:7 6463:22	<b>student</b> 6400:19	<b>summary</b> 6398:10 6493:7 6499:12 6516:24 6526:2
<b>stated</b> 6398:23 6436:23 6475:15 6477:7 6479:2 6535:13 6536:4	<b>Steve</b> 6301:10 6351:13	<b>study</b> 6365:9 6400:22,25 6410:22,24 6478:25,28	<b>summit</b> 6344:25
<b>statement</b> 6314:12 6332:4 6388:20 6428:16 6459:9 6460:16,19,20 6462:14,16, 18 6463:17 6465:19 6466:4 6476:12 6481:2 6482:24 6499:11,22 6504:18 6516:21 6518:9 6526:9,11 6539:27	<b>stick</b> 6433:19	<b>style</b> 6509:11	<b>Sunday</b> 6421:15 6552:28
<b>statements</b> 6414:18 6426:17 6428:10 6459:27 6460:25 6486:5 6487:14	<b>stimulate</b> 6412:14	<b>subject</b> 6356:14 6467:13 6469:20 6477:8 6496:22	<b>sunshine</b> 6392:18
<b>states</b> 6360:4 6381:3 6424:13 6425:13 6470:28	<b>stipulate</b> 6446:24	<b>subjects</b> 6419:4 6423:11	<b>super</b> 6462:9
	<b>stochastic</b> 6439:16	<b>submit</b> 6305:5 6486:25 6501:28	<b>superior</b> 6416:13
	<b>stock</b> 6460:27	<b>submitted</b> 6304:5 6308:28 6444:24 6489:17	<b>supermarket</b> 6333:27
	<b>Stonex</b> 6471:12	<b>subscription</b> 6512:15	<b>supermarkets</b> 6320:25 6322:28 6333:1 6342:5,8 6373:23
	<b>stop</b> 6305:26 6310:18 6330:4 6429:23 6509:27 6537:7	<b>subsidized</b> 6506:23	<b>supervise</b> 6405:27
	<b>stopped</b> 6497:16 6553:6	<b>substantial</b> 6358:20 6411:13 6446:18 6448:20,21 6455:27 6472:18 6531:21	<b>supervisor</b> 6400:20
	<b>store</b> 6322:24 6323:1 6353:1,26 6359:22 6464:23 6548:14	<b>substantially</b> 6381:16,26 6382:2,28 6448:3 6497:17	<b>supplier</b> 6321:5 6340:8,26, 27,28 6346:26 6352:2,5 6356:23
	<b>store-level</b> 6332:22	<b>substantive</b> 6398:2	<b>suppliers</b> 6356:21 6360:6
	<b>stored</b> 6403:25	<b>substantively</b> 6503:6	<b>supplies</b> 6410:14
	<b>stores</b> 6548:6	<b>substitute</b> 6413:1	<b>supply</b> 6314:25 6316:3 6318:11 6339:11 6384:26 6397:6 6404:1,2 6405:15 6513:3
	<b>stories</b> 6553:11	<b>substituted</b> 6372:2	<b>supply/demand</b> 6316:23
	<b>straightforward</b> 6541:5	<b>subtotal</b> 6452:15	
	<b>strangers</b> 6472:9	<b>success</b> 6359:19 6398:25	
	<b>strategic</b> 6354:20		



<p><b>supplying</b> 6382:10 6384:20</p> <p><b>support</b> 6348:2 6351:19 6379:8 6380:28 6393:1 6398:11 6403:12 6418:17 6420:5 6435:25 6510:27</p> <p><b>supported</b> 6408:20 6418:9</p> <p><b>supporting</b> 6507:26</p> <p><b>supportive</b> 6332:7 6345:20 6393:3</p> <p><b>suppose</b> 6317:13 6318:18 6358:15</p> <p><b>surcharges</b> 6382:22</p> <p><b>surface</b> 6381:2 6384:17</p> <p><b>surprise</b> 6429:6 6496:9</p> <p><b>surprised</b> 6346:15 6402:15 6496:10</p> <p><b>surrounding</b> 6383:1</p> <p><b>survey</b> 6343:26 6471:1</p> <p><b>surveys</b> 6442:11</p> <p><b>suspect</b> 6429:2</p> <p><b>Swan</b> 6514:1,5</p> <p><b>swap</b> 6437:13,22,28 6438:5, 19,24 6472:5 6474:7 6520:8 6529:20,22,27 6531:19,20 6533:8,11 6539:20</p> <p><b>swaps</b> 6436:3 6438:21 6513:25 6516:2,4 6517:2,11 6518:17,18 6519:10,16,18, 28 6520:5,15,21 6526:26 6527:10,13 6528:2,6 6529:21 6530:5,7,18</p> <p><b>swear</b> 6378:25</p> <p><b>swings</b> 6438:21</p> <p><b>switch</b> 6351:19 6357:16,17 6358:12 6474:28</p> <p><b>switched</b> 6357:28 6358:14 6457:1</p> <p><b>switches</b> 6475:1</p> <p><b>switching</b> 6358:8</p> <p><b>swords</b> 6500:21</p> <p><b>sworn</b> 6307:2,5 6378:27 6386:28 6396:20,23 6435:16 6501:24</p> <p><b>symptom</b> 6338:4,6</p> <p><b>synopsis</b> 6536:1</p> <p><b>system</b> 6339:9 6367:6 6368:2 6393:13 6399:20 6415:9 6419:26 6473:12,13, 18 6475:7 6534:17</p>	<p><b>systemized</b> 6532:19</p> <hr/> <p style="text-align: center;"><b>T</b></p> <hr/> <p><b>tab</b> 6301:26 6302:3 6303:1 6313:4</p> <p><b>table</b> 6302:3,7 6331:25 6443:20,21 6518:16 6544:24,25</p> <p><b>tables</b> 6301:26 6303:1 6363:22,23,27</p> <p><b>tabulations</b> 6487:15</p> <p><b>tag</b> 6332:27 6532:13</p> <p><b>tags</b> 6322:28</p> <p><b>tail</b> 6486:22 6491:17</p> <p><b>takes</b> 6333:6 6409:9</p> <p><b>taking</b> 6331:24 6380:18,19 6416:2 6438:19 6533:10</p> <p><b>talk</b> 6333:27 6337:9 6347:19 6348:14 6357:12 6359:6 6377:3 6390:22,25 6391:13 6412:17 6418:7 6422:6 6423:8 6429:14 6430:1 6440:28 6450:26 6456:6 6469:12 6498:22 6508:22 6534:23 6544:11 6551:16</p> <p><b>talked</b> 6327:2,17 6337:9,18 6357:14 6358:22 6390:23 6391:12 6468:18 6501:15 6545:13</p> <p><b>talking</b> 6310:17 6329:20 6334:11 6342:23 6350:8 6355:4 6368:23 6371:24 6374:3,5 6375:11,24 6384:26 6420:17 6434:5 6463:6 6481:11 6503:6 6508:28 6516:28 6517:10,12 6521:24,26 6529:2 6531:26 6545:19,20,25 6546:2,10,12, 14</p> <p><b>talks</b> 6349:25</p> <p><b>tall</b> 6378:19 6443:11</p> <p><b>task</b> 6417:20,28 6418:3</p> <p><b>tax</b> 6408:17 6475:26,28 6476:3 6509:22</p> <p><b>taxpayer</b> 6506:4</p> <p><b>Taylor</b> 6304:4,13,18 6305:8 6306:12 6307:16,21 6326:16,26 6330:17 6332:2 6344:11,13 6350:28 6379:17 6388:14 6392:9 6393:23 6394:13,23 6398:28 6426:20,24 6427:1,14,18,24, 28 6429:14,15,18 6434:15</p>	<p>6551:23 6552:3,8 6553:13, 21,23 6554:16,18,25 6555:8, 18</p> <p><b>team</b> 6503:26</p> <p><b>technical</b> 6345:13 6373:14</p> <p><b>technically</b> 6427:18 6438:2</p> <p><b>technology</b> 6514:9,17</p> <p><b>TED</b> 6514:17</p> <p><b>telling</b> 6302:23 6328:25 6344:3,4 6482:7 6488:21</p> <p><b>tells</b> 6318:13 6319:15</p> <p><b>ten</b> 6368:22 6390:26 6438:15,27 6451:7 6459:11 6461:8 6475:5 6537:9</p> <p><b>ten-minute</b> 6351:3 6393:24 6394:7 6395:5 6500:27</p> <p><b>ten-year</b> 6328:12,18</p> <p><b>tend</b> 6352:23 6365:7,27 6421:16 6422:23 6423:28 6428:25 6439:20 6451:8</p> <p><b>tended</b> 6385:3</p> <p><b>tendencies</b> 6412:22</p> <p><b>tendency</b> 6405:21</p> <p><b>tenure</b> 6528:6</p> <p><b>terms</b> 6361:20 6362:6,11 6364:26</p> <p><b>territory</b> 6451:20 6457:25</p> <p><b>test</b> 6336:17 6368:17 6493:14,16,17 6550:14</p> <p><b>testified</b> 6307:6 6319:23 6377:22 6378:23,28 6396:17,24 6431:10 6432:16 6435:17 6475:10 6518:11 6526:6</p> <p><b>testify</b> 6307:19 6321:11 6380:28 6388:17 6407:24 6416:20 6420:6 6428:6 6483:20 6492:12 6500:6 6547:24 6551:19,21,26 6552:1</p> <p><b>testifying</b> 6370:22,24 6433:23 6483:19 6506:1 6507:26 6522:15</p> <p><b>testimonies</b> 6532:28 6547:25</p> <p><b>testimony</b> 6306:14,20 6307:17 6310:21 6317:12,13 6323:18 6329:25 6331:5,9, 11 6332:17 6333:19 6338:17 6347:18 6348:14,21 6351:26 6364:10 6366:18 6367:19,20</p>	<p>6370:28 6377:15 6379:9,12 6384:23,25 6385:14 6387:3, 15 6392:28 6394:11,18 6395:14,23 6396:11 6397:20 6398:10 6399:11 6409:2 6419:5 6420:17,19 6426:25 6427:2,8,11,12,16,17 6429:27 6433:24 6435:21 6436:13 6445:24 6468:18 6469:11 6477:8 6487:21 6496:9 6499:25 6501:25 6515:22 6516:25 6517:28 6518:5,8,9 6519:5,6 6520:21 6548:20,22 6550:15 6553:26 6554:5,7,9,15</p> <p><b>tests</b> 6451:3,9,13</p> <p><b>Tetra</b> 6484:20 6490:24 6491:16 6492:21</p> <p><b>Thanksgiving</b> 6554:24,25, 26 6555:1,15</p> <p><b>theories</b> 6503:22</p> <p><b>theory</b> 6406:25 6415:28</p> <p><b>thereof</b> 6487:19</p> <p><b>thesis</b> 6400:20,21 6401:15</p> <p><b>thing</b> 6318:8,25 6320:9 6322:18 6333:28 6335:11 6336:8,23 6345:18 6347:4 6353:14 6407:18 6433:23 6434:6 6436:19 6457:4 6467:12 6469:19 6481:15 6483:26 6490:23 6492:16 6506:12 6521:15 6534:25</p> <p><b>things</b> 6303:21 6305:22,25 6306:5 6308:19 6313:18 6315:12,27 6320:12 6328:13 6333:4 6338:8 6340:2 6341:12,25 6348:11 6349:25 6350:3 6361:19 6373:7 6381:4 6390:13 6421:13 6428:3 6429:20 6432:25 6451:7 6452:10,15,18,22 6453:25 6458:7 6462:13 6463:6 6466:7 6470:1,17,18 6480:13 6493:24 6506:8 6509:22 6510:12 6515:1 6522:28 6523:1 6524:26 6538:22 6553:21</p> <p><b>thinking</b> 6306:4 6315:12 6395:6 6497:16 6552:9 6556:9</p> <p><b>thinks</b> 6376:24</p> <p><b>third-party</b> 6412:1</p> <p><b>thought</b> 6305:21 6306:1 6308:20 6314:2 6326:12,14, 20 6333:25 6338:20 6377:11 6394:10 6407:16 6417:28 6419:1 6434:26 6442:3</p>
---	---	--	--



6450:8 6461:5 6512:9 6514:18 6517:27 6518:26,28 6529:16 6534:5 6535:25 6556:11,12	6460:13,22 6464:2 6465:10, 12,14 6469:1,9,22 6470:2 6473:21 6474:14,16 6475:1 6481:10,20 6483:8 6487:3 6489:4 6493:10 6495:3,20 6500:17 6504:26 6505:12 6510:18,19 6513:4,27 6514:24 6517:2 6518:1 6519:17 6520:1,5 6521:13, 17 6522:16 6534:6 6535:25 6538:9 6539:13,18,20 6541:11 6549:2 6553:6 6554:10,14 6556:1	tool 6315:15 6499:28 6526:5	translates 6438:13 6447:11 6546:24
<b>thoughtful</b> 6498:26	<b>time-based</b> 6512:10	<b>tools</b> 6354:14 6410:3 6507:26,27,28 6509:14 6510:2 6511:6,14,20 6528:13,16,23,24,27 6538:15,25 6539:10,24	<b>transmits</b> 6317:15
<b>thoughts</b> 6323:21 6331:14 6346:7 6377:22	<b>time-out</b> 6481:15	<b>top</b> 6328:17 6330:18 6334:11 6378:3 6409:14 6440:1 6443:21 6447:7 6464:21 6465:1 6481:4 6533:14 6540:10	<b>transparency</b> 6412:13 6446:9 6500:15
<b>thousand</b> 6383:12	<b>timeframe</b> 6332:3	<b>topic</b> 6398:26 6402:14,25 6419:16 6420:1,5,6 6435:26 6497:7 6547:27 6551:25,28 6552:1,5	<b>transparent</b> 6411:4 6498:13
<b>Thraen</b> 6399:22 6465:4,9,10, 15 6466:18 6485:1	<b>timely</b> 6479:9	<b>topics</b> 6478:14	<b>transportation</b> 6341:13 6356:8,15,17 6390:3,12,19, 23
<b>three-</b> 6356:16	<b>times</b> 6311:18,20 6322:24 6342:7 6356:16 6357:27 6358:3,20 6365:15 6390:4 6391:2,3 6398:15 6404:16 6422:15 6428:11 6432:14,19, 6433:13,23 6438:12,15,23, 27 6439:25 6446:16 6475:5 6480:26 6501:11 6520:4 6523:9	<b>total</b> 6313:10 6319:12 6329:20,22 6330:11 6333:23 6380:10 6384:7 6385:14 6386:21 6399:18 6404:15,18 6455:13 6457:9,27 6458:12 6462:26 6493:11 6544:21,22	<b>travel</b> 6325:4 6431:23 6554:28
<b>three-quarters</b> 6419:25	<b>timing</b> 6501:27	<b>totality</b> 6402:5	<b>treat</b> 6432:1
<b>threefold</b> 6382:4 6385:23	<b>timing-wise</b> 6425:23	<b>totally</b> 6525:13	<b>treated</b> 6432:2 6490:11 6528:18
<b>threw</b> 6353:27	<b>tiny</b> 6518:12	<b>tougher</b> 6323:6	<b>treating</b> 6364:17
<b>thrice</b> 6530:12	<b>title</b> 6514:4	<b>toughest</b> 6336:9	<b>treatment</b> 6489:2
<b>thrive</b> 6500:11	<b>titled</b> 6301:20 6403:2 6406:28 6413:6 6479:23 6487:13 6503:7 6544:24	<b>track</b> 6429:21	<b>trend</b> 6386:22 6414:14 6421:10
<b>thriving</b> 6500:13	<b>to-</b> 6329:28	<b>tracking</b> 6452:12	<b>trended</b> 6383:6
<b>throw</b> 6316:10 6402:28 6428:22	<b>today</b> 6306:2,23 6377:4 6379:9 6380:9,18,28 6382:7 6384:5 6388:17 6392:6 6400:16 6402:16 6406:5 6422:12,17 6437:2 6445:14 6471:16 6472:4 6526:13 6547:22 6551:16 6552:12 6556:18	<b>trade</b> 6323:5 6344:1 6403:13 6428:17	<b>trending</b> 6386:2 6391:24
<b>thrown</b> 6316:7	<b>today's</b> 6374:14 6402:25	<b>traded</b> 6404:10,12,18	<b>trends</b> 6451:12,13 6452:17 6492:28 6493:8,20
<b>Thursday</b> 6313:26 6339:19 6429:10 6477:28	<b>told</b> 6354:12 6469:26 6529:5 6552:25 6553:10 6556:18	<b>tradeoffs</b> 6548:11	<b>trial</b> 6521:11 6523:2
<b>ties</b> 6532:27	<b>tomorrow</b> 6416:21 6427:16 6500:7 6551:17,19,27 6552:6 6554:1 6555:26 6557:1	<b>Traders</b> 6530:25	<b>trials</b> 6429:20
<b>tight</b> 6405:15	<b>ton</b> 6355:25	<b>trades</b> 6470:26	<b>triangulate</b> 6406:26
<b>tightened</b> 6316:3 6370:26	<b>tone</b> 6399:5	<b>trading</b> 6404:15 6472:22 6520:15 6539:23	<b>trickle</b> 6390:15
<b>tightest</b> 6316:25	<b>tongue-in-cheek</b> 6503:3	<b>traditional</b> 6421:3	<b>trickled</b> 6391:11
<b>till</b> 6455:12	<b>tonight</b> 6418:7	<b>traditionally</b> 6464:27	<b>trouble</b> 6456:10
<b>Tim</b> 6339:19		<b>trail</b> 6407:20	<b>troughs</b> 6333:8
<b>time</b> 6304:24,27 6305:8 6308:21 6310:3,5 6317:4,24 6320:16 6321:17 6322:1,13 6328:26 6329:1,10 6331:8, 25 6332:7 6333:6 6334:18 6336:22 6343:6,7 6345:27 6346:22 6349:2,10,13 6350:1,15 6351:3 6353:12 6354:8 6356:1,13 6362:4,10 6365:14 6367:2,10,14,27 6368:4,6,11,26 6369:1,19,21 6370:1 6371:20 6372:8 6374:15,26,27 6375:5,8 6383:26 6385:18,22 6386:24 6387:11 6392:10 6400:13,19 6404:12 6405:1 6410:23 6416:4,23,26 6417:25 6418:10,25 6419:23 6421:16 6422:16,17 6423:4,6 6424:2, 27 6427:10,17 6428:8 6429:21 6431:13 6432:22,26 6433:1,5,6,9,28 6442:5 6446:22 6449:20 6454:13 6456:14,28 6459:8,27		<b>transacted</b> 6443:3	<b>trucks</b> 6483:5
		<b>transaction</b> 6438:7 6474:15 6546:3	<b>true</b> 6321:16 6322:14 6327:21 6348:21 6350:15 6352:13 6361:26 6363:11 6375:4 6380:18 6441:7,27 6464:14 6470:25 6490:1 6491:14 6524:3
		<b>transactions</b> 6471:27	<b>Trump</b> 6457:16
		<b>transcript</b> 6330:5	<b>trust</b> 6414:11 6472:9 6478:4 6548:16
		<b>transferring</b> 6408:17	<b>truth</b> 6387:3 6429:23
		<b>transformation</b> 6549:14	<b>Tuesday</b> 6306:19 6554:20
		<b>transgressions</b> 6515:3	<b>turn</b> 6314:6 6327:1 6331:5 6334:10 6337:2 6361:7 6367:24 6370:3,4 6376:21 6388:20 6435:20 6454:26 6463:22
		<b>translate</b> 6444:21 6476:8	



<b>Turner</b> 6547:19	6397:20,23 6402:12 6415:3, 6 6417:14 6421:9,10,18 6422:28 6426:2 6435:9 6438:26 6443:14 6452:16 6468:28 6469:10,11 6473:26 6476:13 6480:19 6481:8 6485:20 6486:27 6492:25 6498:4,26,27 6499:3 6505:4 6508:3,24 6513:7,20 6516:16 6517:8 6518:26 6519:1 6526:25 6529:15 6534:4 6537:21 6538:13 6539:8,11,25,26 6540:16 6541:2,3,20,21,22,27 6542:5,8,9	<b>unnumbered</b> 6528:5	<b>variable</b> 6439:26
<b>turning</b> 6349:16 6465:19 6466:19		<b>unpack</b> 6533:8	<b>variables</b> 6439:17
<b>turns</b> 6439:25 6440:17 6442:6 6460:21 6468:6 6470:6		<b>unreasonable</b> 6446:23	<b>variance</b> 6439:26
<b>two-week</b> 6322:8 6411:15 6412:7,9,11 6442:16		<b>unrelated</b> 6479:5,8	<b>variants</b> 6357:5
<b>two-year</b> 6348:27 6356:9,10, 24,25		<b>unusual</b> 6465:28	<b>variation</b> 6328:21 6494:22
<b>twofold</b> 6372:7		<b>update</b> 6381:1 6400:5	<b>variations</b> 6336:3
<b>tying</b> 6419:1		<b>updated</b> 6301:26 6302:7 6303:1 6395:17 6396:1 6397:21,23 6398:5 6425:26	<b>varies</b> 6363:2 6389:26
<b>types</b> 6315:24 6469:1 6524:27	<b>understandable</b> 6415:7	<b>updates</b> 6397:25	<b>variety</b> 6507:19 6510:11
<b>typical</b> 6483:13 6546:19,20 6549:16	<b>understanding</b> 6350:5 6359:14 6372:5,11,21 6385:16 6422:8 6431:16 6434:8 6437:3 6466:27 6477:1 6487:1,6 6499:12,13 6524:27 6527:24 6528:15 6547:17	<b>updating</b> 6384:17 6420:9	<b>vary</b> 6424:25 6438:7
<b>typically</b> 6404:27 6471:9 6475:27 6510:18 6531:18		<b>upper</b> 6314:20 6413:12 6418:20 6419:8,22 6447:3	<b>varying</b> 6401:12
<b>U</b>		<b>upward</b> 6442:23	<b>vastly</b> 6404:13
<b>U.S.</b> 6403:11 6436:4 6439:5 6470:24	<b>undertake</b> 6497:1	<b>urge</b> 6384:16	<b>vats</b> 6483:6
<b>ubiquitousness</b> 6463:20	<b>undesired</b> 6495:22	<b>urged</b> 6371:2	<b>vending</b> 6464:3
<b>ugly</b> 6434:23	<b>unexpected</b> 6315:19 6403:28 6440:19,28 6441:17,20 6443:5 6446:12, 26,28 6447:9 6448:4,5	<b>URL</b> 6410:25,28 6489:24 6535:18,20 6536:3	<b>vendor</b> 6339:8 6354:15
<b>Uh-huh</b> 6338:14 6341:1 6390:22 6462:19 6482:20 6498:24	<b>unfair</b> 6485:25	<b>USDA</b> 6301:19 6302:21,24 6303:13 6308:15 6366:21,24 6367:5,9,13 6371:22 6372:18 6384:16 6405:25 6406:6 6416:16 6479:23 6495:16 6502:8 6523:20,22	<b>vendors</b> 6339:7,10 6359:14 6360:10
<b>ultimate</b> 6353:27 6358:27 6363:9 6524:6	<b>unfortunate</b> 6424:15	<b>USDA's</b> 6304:1 6308:22	<b>verbiage</b> 6364:14
<b>ultimately</b> 6369:26 6418:17, 27	<b>unified</b> 6394:19,28 6402:16 6417:7	<b>user</b> 6338:21 6508:6,16	<b>versa</b> 6399:9
<b>unable</b> 6556:13	<b>uniform</b> 6401:3,7 6414:1 6453:6 6482:3,5 6497:3	<b>users</b> 6321:3 6360:19 6372:10 6508:18	<b>version</b> 6303:12,18 6305:7 6540:1
<b>unanticipated</b> 6495:25	<b>uninformative</b> 6449:6	<b>utilization</b> 6314:11,20 6316:28 6319:5 6329:19,27 6330:27 6364:7 6414:12 6421:23 6451:2,13 6452:17 6493:9 6497:2,8,19 6511:19	<b>versions</b> 6304:20 6305:11
<b>unbiased</b> 6442:24	<b>unit</b> 6359:26	<b>utilizations</b> 6401:9	<b>versus</b> 6320:7 6323:25 6325:25 6328:16,19 6330:9, 14,20 6332:27 6338:7 6340:1 6350:3 6359:3 6362:7,8,17 6364:4,5 6365:19 6371:13 6402:23 6419:20 6421:8,22 6436:9 6441:13 6446:2 6447:19 6448:25 6449:14 6457:10,13 6464:12 6466:5 6473:19 6494:7,8 6530:22
<b>uncertain</b> 6305:23	<b>United</b> 6360:4 6381:2 6425:13 6470:28 6518:23 6540:18 6541:6	<b>utilize</b> 6484:7 6528:23 6538:25 6542:1	<b>vertical</b> 6447:16
<b>uncertainty</b> 6433:26 6457:15	<b>units</b> 6370:2 6464:26 6482:1,4,7	<b>utilized</b> 6381:17 6391:16	<b>viable</b> 6475:11
<b>unclarity</b> 6433:26	<b>universal</b> 6390:7	<b>utilizing</b> 6538:17 6541:18	<b>vibrant</b> 6352:11
<b>unclear</b> 6433:25	<b>university</b> 6400:19 6465:11 6503:19,25 6505:21 6515:9	<b>V</b>	<b>vice</b> 6399:9
<b>uncomfortable</b> 6508:24	<b>unknown</b> 6339:21 6445:13	<b>valid</b> 6337:5 6365:18 6367:15	<b>vice-president</b> 6379:25
<b>uncover</b> 6480:13	<b>unlike</b> 6343:26 6428:17	<b>valuable</b> 6329:15 6429:26	<b>view</b> 6313:19 6315:21 6346:2 6355:12 6399:12 6426:17,20 6467:1 6524:28
<b>underlying</b> 6491:28 6492:4 6526:2,24	<b>unlimited</b> 6428:7	<b>value-added</b> 6400:7 6530:9	<b>viewers</b> 6490:1
<b>underscore</b> 6416:7	<b>unnecessary</b> 6409:20,21	<b>values</b> 6315:5 6511:3	<b>views</b> 6323:9
<b>understand</b> 6306:2,6 6328:9,24 6338:27 6346:11 6349:25 6361:18 6372:14 6382:23 6385:27 6386:13		<b>Vandenheuvel</b> 6432:18	<b>violently</b> 6449:11
		<b>variability</b> 6495:1	<b>Virginia</b> 6379:6,23 6385:8 6386:10
			<b>virtual</b> 6553:26 6554:8



<b>visibility</b> 6530:19,22 6531:8 6539:23 6540:4,6	<b>weaknesses</b> 6444:7	<b>wide</b> 6313:27 6336:18,19 6443:1 6530:1	6342:18 6376:26 6418:3 6422:27 6456:8 6467:19,22, 23,24 6477:23 6480:15 6546:24
<b>Vitaliano</b> 6374:9 6504:21	<b>wealth</b> 6371:5	<b>widened</b> 6453:28	<b>works</b> 6323:6 6339:1,4 6346:25 6349:22 6393:13 6435:13 6464:7 6532:23
<b>voice</b> 6373:9 6465:26,28 6508:20	<b>web</b> 6304:9 6413:6 6540:1	<b>widens</b> 6458:8	<b>workshop</b> 6518:15
<b>voices</b> 6407:20	<b>webinar</b> 6343:10	<b>wider</b> 6336:4	<b>world</b> 6316:22 6403:10 6409:24 6410:12 6416:24 6420:28 6422:3,8,13 6438:17 6470:26 6491:24
<b>volatile</b> 6317:2 6341:15 6346:18 6350:20 6353:21 6358:20 6399:28 6401:8 6467:27 6494:23	<b>website</b> 6303:14 6485:23 6503:28 6535:20	<b>widespread</b> 6400:14	<b>world-dependent</b> 6317:2
<b>volatility</b> 6310:11 6322:19 6332:22 6333:12,14 6342:7 6358:12 6359:7 6388:3 6401:10 6460:16,24	<b>Wednesday</b> 6306:19 6416:21 6500:7 6554:20	<b>wife</b> 6379:17 6380:11 6474:4 6506:1	<b>worlds</b> 6420:28
<b>volume</b> 6353:25 6404:15,18, 20 6419:10 6438:28	<b>week</b> 6306:2,12,14,15,16,21, 25 6307:17 6309:5 6331:9 6332:15 6338:17,20 6342:26 6377:11 6388:21 6389:28 6390:1 6397:24 6429:11 6462:8 6475:9 6546:25 6547:8 6548:22 6552:20 6553:24 6554:2,18,22,26 6555:1,3,26 6556:1,4	<b>window</b> 6308:6 6412:7,9,11	<b>worried</b> 6333:15 6350:24
<b>volumes</b> 6341:10 6545:15	<b>weekend</b> 6555:1	<b>wine</b> 6418:7	<b>worry</b> 6335:1
<b>voluntarily</b> 6318:12	<b>weekly</b> 6354:7 6530:24	<b>wire</b> 6472:27	<b>worst</b> 6365:21 6497:20
<b>voluntary</b> 6382:13,14	<b>weeks</b> 6333:19 6411:21,25 6416:23 6419:16 6435:24 6442:12 6475:9 6477:9 6481:11 6482:27 6547:26 6548:1	<b>Wisconsin</b> 6341:22 6417:20 6418:13	<b>worth</b> 6519:26,28 6544:20
<b>vote</b> 6395:4	<b>weigh</b> 6487:9 6489:13 6491:15	<b>wisdom</b> 6374:25	<b>worthwhile</b> 6322:17
<b>vouch</b> 6517:4	<b>weight</b> 6320:22 6376:7 6419:19 6500:2	<b>witnesses</b> 6335:4 6371:22 6399:13 6409:3 6432:8,15, 17,21 6433:3,13 6463:5 6488:26 6490:25 6492:19 6523:10 6527:22 6547:2	<b>worthy</b> 6323:25 6324:2
<b>W</b>	<b>well-documented</b> 6399:21	<b>Wolf</b> 6413:5 6449:26 6450:18 6480:14 6493:4 6503:27	<b>wrap</b> 6554:11
<b>wag</b> 6486:22	<b>well-established</b> 6477:5	<b>Wolf's</b> 6338:9	<b>wrapped</b> 6348:24
<b>wagging</b> 6491:18	<b>well-intended</b> 6495:24	<b>wondered</b> 6317:18	<b>write</b> 6383:20 6536:26
<b>wait</b> 6394:20,21	<b>well-respected</b> 6400:16 6480:24	<b>wonderful</b> 6435:14 6452:11 6461:7	<b>written</b> 6366:18 6398:18 6427:8 6479:24 6487:14
<b>waiting</b> 6438:11 6486:17 6501:20	<b>Wells</b> 6343:17 6472:2	<b>wondering</b> 6309:16 6390:8, 24 6528:14 6533:28 6541:1	<b>wrong</b> 6343:28 6350:7 6361:28 6366:11 6427:12 6442:1,8 6444:2 6487:5 6502:25 6524:4 6541:15
<b>walk</b> 6463:24	<b>whatnot</b> 6314:21	<b>word</b> 6302:5 6353:5 6428:22 6480:12 6505:2 6513:12 6536:7 6542:4,5	<b>wrote</b> 6338:16 6397:20 6423:13 6483:22 6504:26 6515:22,25 6529:2 6536:25 6537:16 6541:12 6545:2 6550:19
<b>walked</b> 6322:11	<b>whichever</b> 6357:22 6416:3	<b>words</b> 6312:6 6314:4 6330:13 6347:3 6366:28 6398:3 6402:5 6413:18,27 6437:23 6442:23 6446:16 6455:28 6494:23 6526:13,14 6537:23,27,28	<b>Y</b>
<b>wanted</b> 6304:13 6308:26 6312:2 6327:14 6353:13 6365:21 6388:19 6393:28 6394:26 6407:13 6426:3 6508:20 6527:1 6531:14 6555:20	<b>white</b> 6322:28 6332:27	<b>work</b> 6313:9 6320:15,24 6322:12 6334:15 6339:25 6340:8,19 6341:4 6342:21 6345:7,10 6346:4,19 6380:3 6402:7 6421:12 6432:25 6443:15 6454:4 6464:6 6467:17 6478:3 6483:27 6484:24,26 6498:16 6504:16 6511:4 6512:16,26,28 6514:28 6545:16 6546:5,25	<b>Y'ALL</b> 6343:12
<b>wanting</b> 6437:9	<b>Whoa</b> 6344:10	<b>workable</b> 6340:28	<b>year</b> 6301:5 6315:7,28 6316:9 6341:26 6347:25 6349:3,15,16,18,20 6353:9 6354:11,18 6368:4,7,8 6369:4 6380:15,25 6386:21 6390:28 6391:1,2,3 6392:13, 19 6400:24 6401:11,20 6404:8,17,19,27 6405:16 6408:24,27 6414:2 6417:18 6422:9 6455:1 6460:6 6478:7 6505:25 6545:27
<b>warehouse</b> 6473:28	<b>whole-farm</b> 6389:19	<b>worked</b> 6313:15 6334:22 6360:17 6368:24 6381:5 6415:10 6510:25	<b>Year's</b> 6352:23
<b>watch</b> 6421:16 6429:22	<b>wholesale</b> 6421:4	<b>working</b> 6321:18 6339:15	<b>year-round</b> 6353:10
<b>watching</b> 6474:5	<b>wicked</b> 6353:3,6		<b>years</b> 6310:6,7,10,12
<b>water</b> 6403:1 6420:2	<b>wicked's</b> 6353:4		
<b>waterfall</b> 6494:5			
<b>waving</b> 6481:28			
<b>ways</b> 6317:26 6318:16 6325:8 6368:18 6390:20 6471:28 6500:10 6507:14 6508:16 6511:18			
<b>weak</b> 6318:14			



6312:21 6316:16 6320:24  
6336:20,25 6342:13 6345:12  
6356:7 6358:6,7 6381:3  
6383:3,5,24 6386:23  
6390:26 6402:6,9 6403:5,26  
6404:14 6405:19 6408:13,16  
6414:7 6415:16 6423:3  
6436:12 6449:26 6451:7  
6466:26 6478:8 6496:15  
6497:15 6509:1,2,4 6534:4  
6537:27

**yesterday** 6552:28

**yield** 6484:19

**yields** 6384:10

---

**Z**

---

**Zealand** 6470:27

**zeroed** 6425:2

**zone** 6424:10

**zones** 6390:15

**Zoom** 6307:20

