

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

IN RE: PACKAGED SEAFOOD) 15-MD-2670-JLS
ANTITRUST LITIGATION)
) JANUARY 14, 2019
)
) VOLUME 1 OF 3

APPEARANCES:

FOR THE PLAINTIFFS: HAUSFELD LLP
BY: BONNY E. SWEENEY
CHRISTOPHER L. LEB SOCK
SAMANTHA J. STEIN

FOR THE DEFENDANTS: LATHAM & WATKINS LLP
BY: BELINDA S. LEE
ASHLEY M. BAUER

PAUL, WEISS, RIFKIND
BY: KENNETH A. GALLO
CRAIG A. BENSON

SULLIVAN & CROMWELL
BY: ADAM S. PARIS

ALLEN & OVERY
BY: JOHN ROBERTI

COURT REPORTERS: FRANK J. RANGUS, OCR
GAYLE WAKEFIELD, RPR, CRR

I-N-D-E-X

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MORNING SESSION 9:00 A.M.

THE DEPUTY CLERK: NUMBER ONE ON THE CALENDAR, 15-MD-2670, REGARDING PACKAGED SEAFOOD PRODUCTS ANTITRUST LITIGATION, FOR A MOTION HEARING.

THE COURT: OKAY. GOOD MORNING.

I'VE GOT A LOT OF DOCUMENTS THAT HAVE BEEN PUT UP HERE.

A COUPLE OF THINGS BEFORE WE GET STARTED. OUR TIME SCHEDULE FOR TODAY. WE'RE ALREADY LATE, AND AS EVERYBODY MAY KNOW, THE COURT IS VERY PUNCTUAL. SO EVERY DAY WE'RE GOING TO START PROMPTLY AT NINE A.M. WE'RE GOING TO GO TILL 12:30, THEN BREAK FOR AN HOUR AND A HALF AND GO FROM TWO TO 4:30. THE COURT HAS A SIGNIFICANT MEETING AT THE NOON HOUR. AS YOU KNOW, THINGS ARE DIFFICULT ON THE FEDERAL SIDE RIGHT NOW, AND IT'S CRITICAL THAT I BE AT A MEETING REGARDING A VARIETY OF FUNCTIONS. I'M GLAD WE GOT THIS MATTER IN BEFORE THINGS CHANGE IN THIS COURT, BECAUSE YOU ARE HERE AT ONE OF THE BUSIEST COURTS IN THE NATION. OUT OF THE 94, I THINK THIS YEAR WE'RE COMING IN AT NUMBER THREE, GIVEN THE WORKLOAD.

THIS WILL BE AN OPEN HEARING. THE COURTROOM WILL NOT BE CLOSED. I'VE READ WHAT'S BEEN FILED BY EVERYBODY IN THIS MATTER. I DON'T THINK WE NEED TO SAY ANYTHING MORE ABOUT THIS. PROTECTIVE ORDERS ARE IN PLACE, AND I KNOW THAT EVERYBODY WILL BE VIGILANT AND SENSITIVE IN REFERRING TO MATTERS. THEY'RE ALL IN THE RECORD, AND THEY CAN BE REFERENCED. SO I'M DIRECTING ALL PARTIES NOT TO DISCUSS ANYTHING OR PUBLISH ANYTHING THAT IS

THE SUBJECT OF A PROTECTIVE ORDER, BECAUSE I DO BELIEVE IT'S VERY IMPORTANT TO HAVE THIS OPEN HEARING.

I DO BELIEVE WE HAVE PEOPLE LISTENING IN. THEY CANNOT ADDRESS THE COURT, AND IF THEY WISH TO LET US KNOW IN WRITTEN FORM THAT THEY WERE LISTENING IN, THEY MAY, BUT OTHERWISE WE'RE NOT GOING TO BE HEARING FROM THEM.

I HAVE RECEIVED A LIST OF WHO'S GOING TO BE TESTIFYING. WELL, YOU HAVE THE COURT'S AGENDA THAT I PUT OUT, AND I HAVE WHO'S GOING TO BE ADDRESSING THE COURT. TODAY'S HEARING IS TO HEAR FROM DR. MANGUM AND DR. JOHNSON, AND THAT'S IT, ON DIRECT AND CROSS, WITH SOME OPENING AND CLOSING.

EACH DAY, WE'RE DOING ONE CLASS AND ONE TRACK. SOMEBODY ASKED SOMEWHERE IN THE PROCESS OF BRIEFING WHETHER OR NOT, IF WE FINISHED EARLY, WE WOULD MOVE ON TO THE NEXT. WE CAN, AND I WILL LET YOU KNOW. BUT I WANT TO PROCEED AND GET STARTED WITH THIS, AND I'M PREPARED TO GO RIGHT INTO OPENING STATEMENT, IF YOU CHOOSE TO MAKE ONE, AND THAT WOULD BE MISS SWEENEY, I BELIEVE.

NOW, SOMEBODY WISHED TO ADDRESS THE COURT ABOUT PRELIMINARY MATTERS, SUCH AS PUBLIC ACCESS AND THE SCOPE OF THE HEARING, BUT I DON'T THINK IT'S NECESSARY. BUT I DON'T MEAN TO BE DIFFICULT.

SIR, COME FORWARD.

MR. ISQUITH: NO, YOU'RE NOT BEING DIFFICULT.

THE COURT: STATE YOUR NAME.

MR. ISQUITH: FRED ISQUITH.

WE'VE DEALT WITH PUBLIC ACCESS WELL ENOUGH. THERE'S ONE OTHER ISSUE. I'M STANDING UP HERE FOR THE THREE CLASSES SO AS TO NOT USE MUCH TIME, AND I WON'T. I THINK YOU ACTUALLY ADDRESSED BOTH ISSUES. YOU'RE GOING TO BE HEARING THE WITNESSES ON THEIR REPORTS TODAY, AND THAT'S WHAT WE WANTED TO MAKE SURE WAS CLEAR. WE RECEIVED A LOT OF THE DESIGNATIONS OF MATERIAL POST YOUR HONOR'S MODIFICATION OF THE ORDER DEALING WITH YOUR AGENDA NUMBER C, BUT YOU NEVER CHANGED "D," AND WE'RE RELYING ON WHAT YOU JUST SAID.

THE COURT: WELL, WE ARE HERE, PURE AND SIMPLE, TO FOCUS IN ON THE EXPERTS, AND THAT'S IT.

MR. ISQUITH: I'M SORRY, YOUR HONOR?

THE COURT: WE ARE HERE, PURELY AND SIMPLY, TO FOCUS IN ON THE EXPERTS --

MR. ISQUITH: EXACTLY.

THE COURT: -- AND THAT'S IT.

MR. ISQUITH: AND THAT'S IT.

THANK YOU.

THE COURT: SO, WITH THAT, I AM PREPARED TO PROCEED.

AND I THINK YOU HAVE BEEN DESIGNATED, MISS SWEENEY.

NOW, I'LL ASK PEOPLE TO ENTER THEIR APPEARANCES. LET ME STOP HERE. MAYBE PEOPLE AT THE TABLES WOULD LIKE TO ENTER APPEARANCES, BUT EVERY TIME YOU SPEAK, I'M GOING TO ASK YOU TO STATE YOUR NAME FOR THE RECORD AND WHO YOU'RE REPRESENTING.

MISS SWEENEY, LET ME START WITH YOU, MA'AM.

MS. SWEENEY: GOOD MORNING, YOUR HONOR. BONNY SWEENEY FROM HAUSFELD REPRESENTING THE DIRECT PURCHASER PLAINTIFFS.

MR. LEBSOCK: GOOD MORNING, YOUR HONOR. CHRIS LEBSOCK FROM THE HAUSFELD FIRM FOR THE DIRECT PURCHASER CLASS.

MS. STEIN: AND SAMANTHA STEIN ALSO OF HAUSFELD.

MS. LEE: GOOD MORNING, YOUR HONOR. BELINDA LEE OF LATHAM & WATKINS REPRESENTING STARKIST AND DONGWON INDUSTRIES.

MR. BAUER: GOOD MORNING, YOUR HONOR. ASHLEY BAUER ALSO OF LATHAM & WATKINS ALSO REPRESENTING STARKIST AND DONGWON INDUSTRIES.

MR. GALLO: GOOD MORNING, YOUR HONOR. KEN GALLO FROM PAUL WEISS REPRESENTING BUMBLE BEE. I HAVE WITH ME EMMETT SHAW, WHO'S OUR COURTROOM TECHNICIAN.

THE COURT: THANK YOU.

MR. BENSON: GOOD MORNING, YOUR HONOR. CRAIG BENSON ALSO FROM PAUL WEISS FOR BUMBLE BEE.

MR. ROBERTI: GOOD MORNING, YOUR HONOR. JOHN ROBERTI WITH THE ALLEN & OVERY LAW FIRM FOR THE CHICKEN OF THE SEA AND THAI UNION DEFENDANTS.

MR. PARIS: GOOD MORNING, YOUR HONOR. ADAM PARIS OF SULLIVAN & CROMWELL. I'M HERE FOR LION CAPITAL AMERICA.

THE COURT: VERY GOOD. WITH THAT, I THINK WE'RE ABLE TO PROCEED.

MISS SWEENEY -- OH, THE ONLY OTHER QUESTION I HAVE, I

DID NOT DIVIDE UP THE TIME ON TODAY'S HEARING, AND I'M ASSUMING THAT'S NOT GOING TO BE NECESSARY. IF PEOPLE BELIEVE IT IS NECESSARY, I'M PREPARED TO DO THAT QUICKLY AND EXPEDITIOUSLY, AND WE WOULD PUT YOU ON THE CLOCK. I WAS HOPEFUL THAT THAT WOULDN'T BE NECESSARY.

MISS SWEENEY, WHAT'S YOUR THOUGHT ON THAT, MA'AM?

MS. SWEENEY: YOUR HONOR, I EXPECT THE OPENING WILL TAKE MAYBE 20 MINUTES, AND THEN MR. LEB SOCK IS GOING TO EXAMINE OUR EXPERT, AND THEN WE WOULD LIKE TO RESERVE TIME AT THE END, AFTER DR. JOHNSON'S TESTIMONY, FOR OUR EXPERT TO GIVE HIS REBUTTAL TESTIMONY, AND THEN WE'LL DO A SHORT CLOSING AT THE END. THAT'S WHAT WE ANTICIPATE.

THE COURT: WELL, WE'RE GOING TO FOLLOW THE AGENDA THAT THE COURT PUT OUT. I MEAN, WE HAVE BRIEFED THIS TO THE POINT OF A FAULT, AND TO SAY THAT WE'RE NOW GOING TO HAVE REBUTTAL TO TESTIMONY, I DON'T KNOW THAT IT'S GOING TO GO THAT WAY, MA'AM, AND YOU WANT 20 MINUTES FOR OPENING. SO YOU THINK WITH THAT (PAUSE) -- DO YOU WANT ME TO PUT TIME LIMITS ON IT?

WHAT DOES MISS LEE SAY?

MS. LEE: YOUR HONOR, YOUR ORDER SAYS, ACTUALLY, THE TIME IN EACH DAY WOULD BE SPLIT EVENLY BETWEEN THE PARTIES, SO WE CALCULATED, BASED ON YOUR NINE TO 12 AND 1:30 TO 4:30, TO SPLIT IT IN HALF. SO WE'RE PREPARED -- WE'RE HAPPY TO KEEP TRACK OF TIME, AND I THINK IT'S WHAT, TWO HOURS, 30 MINUTES, TWO HOURS, 45 MINUTES, PER SIDE.

THE COURT: WELL, YOU'RE NOT GOING TO HAVE QUITE THAT MUCH, BECAUSE WE HAVE TO TAKE A BREAK AT SOME POINT.

OKAY. SO YOU'VE GOT YOUR HALF OF THE TIME. I WILL NOT ALLOCATE ANY FURTHER, BUT WHEN TIME IS UP, TIME WILL BE UP.

MS. SWEENEY: I UNDERSTAND, YOUR HONOR.

THE COURT: OKAY. SO GO AHEAD.

MS. SWEENEY: AND WITH RESPECT TO THE RESERVING TIME FOR THE REBUTTAL, TO BE CLEAR, I WASN'T SUGGESTING THAT OUR EXPERT GET TWO REBUTTALS. IT WAS JUST THAT WE WERE GOING TO MOVE THE REDIRECT TO AFTER DR. JOHNSON. BUT IF YOUR HONOR PREFERS THAT WE DO NOT DO IT THAT WAY, WE'RE CONTENT.

THE COURT: GO AHEAD, MISS LEE.

MS. LEE: YOUR HONOR, WE WOULD OBJECT TO THAT. YOUR HONOR, WE BELIEVE YOUR AGENDA IS PRETTY CLEAR ON THE ORDER OF THE WITNESSES. THAT'S WHAT WE'VE BEEN RELYING ON. THAT'S WHAT WE'VE BEEN PLANNING.

THE COURT: I'M GOING TO STICK WITH THE AGENDA RIGHT NOW. YOUR REBUTTAL MAY BE MY QUESTIONS. I DON'T KNOW HOW FAR THIS IS GOING TO GO. IT VERY MUCH DEPENDS ON YOUR EXPERTS AND HOW YOU ALL CHOOSE TO EXAMINE THEM. SO I'M GOING TO LEAVE IT THE WAY IT IS, BUT AT THE END OF THE DAY I THINK THERE SHOULD BE SOME CLARITY ON SOME OF THESE ISSUES THAT THERE HAS NOT BEEN, QUITE HONESTLY, TO THIS DATE, GIVEN ALL THE MATERIALS THAT HAVE BEEN FILED. SO LET'S SEE HOW IT GOES, BUT RIGHT NOW I'M GOING TO STICK WITH THIS AGENDA.

MS. SWEENEY: OKAY.

THE COURT: SO GO AHEAD. AND THE TIME IS EVENLY SPLIT, AND I WON'T ALLOCATE ANY FURTHER THAN THAT. GO AHEAD.

MS. SWEENEY: THANK YOU.

THE COURT: YOU'RE WELCOME.

MS. SWEENEY: THE DIRECT PURCHASER PLAINTIFFS ASKED THIS COURT TO CERTIFY A CLASS CONSISTING OF ALL PERSONS AND ENTITIES IN THE U. S. THAT PURCHASED THE PACKAGED TUNA PRODUCTS FROM ANY DEFENDANT BETWEEN JUNE 1, 2011, AND JULY 31ST, 2015. AT THIS HEARING, YOUR HONOR, AS YOU RECOGNIZED, IT'S A VERY NARROW ISSUE THAT YOUR HONOR IS CONSIDERING. PLAINTIFFS HAVE ESTABLISHED IN THEIR PAPERS, IN THE BRIEFS, IN THE VOLUMINOUS EXHIBITS THAT WERE ATTACHED TO THE EXHIBITS OF MS. STEIN AND THEN THE TWO EXPERT REPORTS THAT WE SUBMITTED, THAT PLAINTIFFS HAVE SATISFIED ALL OF THE REQUIREMENTS OF RULE 23(A) AND RULE 23(B)(3). THE DEFENDANTS DO NOT CHALLENGE PLAINTIFFS' ASSERTION THAT THEY'VE SATISFIED RULE 23(A), AND THEY DON'T REALLY EVEN CHALLENGE THE SUPERIORITY OF A CLASS ACTION OVER INDIVIDUAL ACTIONS.

SO WE'RE GOING TO FOCUS OUR REMARKS ON 23(B)(3), AND IT'S EVEN MORE NARROW THAN THAT, BECAUSE WE HAVE THREE ELEMENTS OF OUR CLAIM TO PROVE, THE VIOLATION OF THE ANTITRUST LAWS, OF THE FACT OF DAMAGES AND IMPACT, AND THEN THE AMOUNT OF DAMAGES, AND THE DEFENDANTS REALLY ONLY FOCUSED ON THAT SECOND ELEMENT; THAT IS, HAD WE RELIED ON COMMON PROOF, CAN WE USE COMMON PROOF

TO SHOW THAT ALL OR ALMOST ALL OF THE CLASS MEMBERS HAVE BEEN INJURED?

NOW, DEFENDANTS' ARGUMENT IS EVEN NARROWER THAN THAT. THEY SAY THAT THE DIRECT PURCHASER PLAINTIFFS HAVE NO COMMON EVIDENCE CAPABLE OF PROVING THAT ALL OR NEARLY ALL OF THEIR PROPOSED CLASS WAS INJURED BY THE CONSPIRACY, AND THEY FOCUSED ALL OF THEIR AMMUNITION ON DR. MANGUM'S REGRESSION ANALYSIS. BUT I WOULD LIKE TO BE VERY CLEAR THAT THAT IS NOT THE ONLY EVIDENCE ON WHICH WE RELIED, AND WE HAVE ADDUCED IN OUR PAPERS, IN THE MANY EXHIBITS BEFORE YOUR HONOR, A LOT OF OTHER CATEGORIES OF EVIDENCE THAT MANY COURTS WITHIN THIS CIRCUIT AND ACROSS THE COUNTRY HAVE RELIED UPON IN CERTIFYING ANTITRUST CLASS ACTIONS.

THE FIRST CATEGORY OF INFORMATION WHICH IS CRITICAL IN THIS CASE, OF COURSE, ARE THE FIVE GUILTY PLEAS. THERE'S A GUILTY PLEA BY BUMBLE BEE, THERE'S ONE BY STARKIST, AND THEN THERE ARE THREE GUILTY PLEAS BY INDIVIDUAL DEFENDANTS WHO ARE HIGH-LEVEL EXECUTIVES AT STARKIST AND BUMBLE BEE, AND THESE PLEA AGREEMENTS ARE IN THE PAPERS, YOUR HONOR. THEY'RE ATTACHED AS EXHIBITS 1 THROUGH 4 OF THE FIRST STEIN DECLARATION AND EXHIBIT 76 OF THE SUPPLEMENTAL STEIN DECLARATION, AND THESE GUILTY PLEAS ARE CRITICAL FOR A NUMBER OF REASONS.

FIRST, THEY NOT ONLY SHOW THAT THE DEFENDANTS VIOLATED THE ANTITRUST LAWS, AND SO THE FIRST ELEMENT OF PLAINTIFFS' CLAIM IS SATISFIED, BUT FOR PURPOSES OF THIS MOTION THEY SHOW

THAT THE DEFENDANTS INTENDED TO AND DID ENGAGE IN A CONSPIRACY THAT WAS AIMED AT ALL OF THEIR CUSTOMERS, NOT JUST SOME OF THEIR CUSTOMERS, NOT JUST SOME PRODUCTS, BUT ALL PRODUCTS AND ALL CUSTOMERS ACROSS THE UNITED STATES. ALL FIVE OF THOSE GUILTY PLEAS, THE DEFENDANTS IN THESE GUILTY PLEAS ADMITTED TO PARTICIPATING IN A CONSPIRACY BETWEEN 2011 AND 2013 AND THAT THE DATES ARE A LITTLE DIFFERENT.

AND I'M SURE THAT MISS LEE WILL ADDRESS THAT QUESTION, AND I'M HAPPY TO RESPOND TO ANY QUESTIONS YOUR HONOR HAS ABOUT IT, BUT THEY ALL ADMITTED THAT THE PRIMARY PURPOSE OF THAT CONSPIRACY WAS TO FIX, RAISE AND MAINTAIN THE PRICES OF PACKAGED SEAFOOD SOLD IN THE UNITED STATES. SO THEY'VE ADMITTED THEIR INTENT TO AFFECT ALL CUSTOMERS.

THEY ALSO ADMITTED, ALL FIVE CRIMINAL DEFENDANTS, THAT DURING CONVERSATIONS, DISCUSSIONS AND MEETINGS WITH MAJOR PACKAGED SEAFOOD-PRODUCING FIRMS, THAT AGREEMENTS WERE REACHED TO FIX, RAISE AND MAINTAIN THE PRICES OF PACKAGED SEAFOOD SOLD IN THE U. S. SO THEY ADMIT ALSO THAT THE MAJOR PACKAGED SEAFOOD PRODUCERS IN THE UNITED STATES PARTICIPATED IN THIS CONSPIRACY, AND THEN BUMBLE BEE AND STARKIST IN THEIR GUILTY PLEAS ADMITTED THAT THEY NEGOTIATED THE PRICES WITH CUSTOMERS AND ISSUED PRICE ANNOUNCEMENTS FOR PACKAGED SEAFOOD IN ACCORDANCE WITH THE AGREEMENTS AND MUTUAL UNDERSTANDINGS REACHED. SO THEY HAVE ADMITTED THAT NOT ONLY DID THEY AGREE WITH EACH OTHER TO INCREASE PRICES TO THEIR CUSTOMERS, BUT THEY

DID, IN FACT, DO SO.

ALL RIGHT, SO THAT'S THE GUILTY PLEAS. ANOTHER CATEGORY OF EVIDENCE ARE THE OTHER ADMISSIONS BY THE DEFENDANTS THAT THEY HAVE MADE IN THIS CASE. CHICKEN OF THE SEA, OF COURSE, DID NOT ENTER A GUILTY PLEA BECAUSE IT IS A LENIENCY APPLICANT. IT'S BEEN GRANTED CONDITIONAL LENIENCY BY THE DEPARTMENT OF JUSTICE, AND SO IN ORDER TO DO THAT, IT HAD TO ADMIT TO PARTICIPATION IN CRIMINAL VIOLATIONS OF ANTITRUST LAWS. IT DID RECENTLY SUBMIT ANSWERS TO INTERROGATORIES IN WHICH IT DETAILED THE MANY AGREEMENTS THAT IT ENTERED INTO WITH THE OTHER DEFENDANTS, AND THIS IS EXHIBIT 79 TO THE SUPPLEMENTAL DECLARATION OF SAMANTHA STEIN, AND IN THESE ADMISSIONS CHICKEN OF THE SEA ADMITS THAT IT FIRST ENTERED INTO AN AGREEMENT WITH ANOTHER DEFENDANT BEGINNING IN 2008, AND IT DESCRIBES THOSE AGREEMENTS.

SO WE HAVE ADMISSIONS THROUGH THE GUILTY PLEAS. WE HAVE ADMISSIONS THROUGH INTERROGATORIES. WE ALSO HAVE ADMISSIONS IN THE MANY DOCUMENTS THAT WE'VE SUBMITTED AS PART OF THE RECORD AND DEPOSITION TESTIMONY. BUT WHAT ELSE SUPPORTS A FINDING OF CLASS-WIDE IMPACT? WELL, FIRST OF ALL, ALL THREE -- BUMBLE BEE, STARKIST, AND CHICKEN OF THE SEA -- SET PRICES IN THE SAME WAY FOR THEIR CUSTOMERS. MOST IMPORTANTLY, THEY USED NATIONAL, UNIFORM LIST PRICES. THEY HAD ALL OF THEIR PRODUCTS ON THESE LISTS, THESE PRICE LISTS, AND THEY WERE UNIFORM ACROSS THE NATION. THEY DIDN'T HAVE THOSE PRICES FOR

THE NORTHEAST AND THE SOUTHEAST AND THE MIDWEST. THEY HAD THEM FOR ALL CUSTOMERS, AND THEY LISTED ALL PRODUCTS.

NOW, THAT'S NOT TO SAY THAT ALL PRODUCTS WERE SOLD AT THOSE LIST PRICES. IN FACT, ALL THREE DEFENDANTS WOULD GIVE DISCOUNTS OR REBATES OFF THOSE LIST PRICES, BUT THE LIST PRICE WAS THE STARTING POINT. AND, IN FACT, ALL THREE OF THE DEFENDANTS ALSO USED QUARTERLY GUIDANCE MATERIALS, AND THESE WERE GUIDANCE DOCUMENTS THAT WERE SENT TO THEIR SALES REPRESENTATIVES THAT INFORMED THEM, THAT GAVE THEM THE LIMITS AS TO HOW MUCH THEY COULD NEGOTIATE A DISCOUNT OR A REBATE FROM THAT PRICE LIST. AND ALL OF THESE DOCUMENTS, UNIFORM PRICE LISTS, AND THE INFORMATION RELATED TO THE GUIDANCE ARE ALSO FOUND IN THE RECORD, AND I WOULD REFER YOUR HONOR TO EXHIBITS 10 THROUGH 14 OF THE FIRST STEIN DECLARATION.

NOW, THE FACT THAT THE DEFENDANTS WERE NEGOTIATING OFF LIST PRICES IS CRITICAL, BECAUSE THERE ARE NUMEROUS CASES, INCLUDING FROM COURTS WITHIN THE NINTH CIRCUIT, WHICH HAVE HELD THAT WHEN THE DEFENDANTS IN A PRICE-FIXING CONSPIRACY NEGOTIATE PRICES FROM A LIST PRICE, THAT IS SUBSTANTIAL EVIDENCE OF CLASS-WIDE IMPACT. THE COURT IN THE LCD LITIGATION -- THIS IS FROM THE NORTHERN DISTRICT OF CALIFORNIA, 2010 -- SAID, EVEN IF THERE IS CONSIDERABLE INDIVIDUAL PRICING, INDIVIDUAL VARIETY OF PRICING BECAUSE OF INDIVIDUAL PRICE NEGOTIATIONS, PLAINTIFFS MAY SUCCEED IN PROVING CLASS-WIDE IMPACT BY SHOWING THAT THE MINIMUM BASELINE FOR THE BEGINNING NEGOTIATIONS WAS

ARTIFICIALLY RAISED BY THE COLLUSIVE ACTIONS OF THE DEFENDANTS, AND THAT'S WHAT WE HAVE HERE.

SO THOSE ARE SOME OF THE CATEGORIES OF EVIDENCE. IN ADDITION, WE HAVE THE EVIDENCE ABOUT THE STRUCTURE OF THE INDUSTRY, AND THIS IS PART OF DR. MANGUM'S REPORT, AND HE CONDUCTED EXTENSIVE ANALYSIS OF THE INDUSTRY. HE CONCLUDES THAT THE INDUSTRY'S HIGHLY CONCENTRATED, WITH THE DEFENDANTS CONTROLLING NEARLY 80 PERCENT OF THE MARKET, THAT THERE ARE HIGH BARRIERS TO ENTRY. AND THIS IS SUGGESTIVE NOT ONLY THAT THE DEFENDANTS CAN SUCCEED IN THEIR CARTELIZATION OF THE INDUSTRY, BUT ALSO IT'S LIKELY TO HAVE CLASS-WIDE IMPACT BECAUSE MEMBERS OF THE CLASS ARE NOT LIKELY ABLE TO AVOID THE IMPACT OF THE CONSPIRACY.

HE ALSO NOTED, AND THIS IS ALSO IN THE RECORD BEFORE YOUR HONOR, THAT THERE WAS AN INDUSTRY-WIDE PATTERN OF CONSTANT COMMUNICATIONS AMONG THE DEFENDANTS. YOU PROBABLY NOTICED IN THE RECORD THAT A LOT OF THE PRINCIPAL PARTIES WHO WERE INVOLVED IN THESE COLLUSIVE DISCUSSIONS MOVED FROM ONE COMPANY TO THE OTHER. THERE WERE A LOT OF PERSONAL RELATIONSHIPS. SO THERE WAS A WAY OF THE MEMBERS OF THE CONSPIRACY TO IMPLEMENT THE CONSPIRACY AND TO MONITOR AND POLICE THE CONSPIRACY.

AND FINALLY, AS DR. MANGUM OPINED, THE PRODUCT IS INTERCHANGEABLE: CANNED TUNA, CANNED TUNA, CANNED TUNA. THEIR WITNESSES ADMIT THAT THEIR CUSTOMERS MAKE THEIR DECISIONS BASED ON PRICE.

SO ALL OF THESE FACTORS SUPPORT A FINDING OF CLASS-WIDE IMPACT, AND MANY OF THE CASES THAT WE HAVE CITED RELY ON EXACTLY THESE KINDS OF EVIDENCE TO FIND THAT PLAINTIFFS HAVE DEMONSTRATED CLASS-WIDE IMPACT. AND ONE OF THOSE CASES, YOUR HONOR, WHICH I'D LIKE TO REFER TO IT, AND I'LL REFER TO IT A FEW MORE TIMES TODAY, IS THE *IN RE* CAPACITORS ANTITRUST LITIGATION. THIS IS A DECISION THAT JUST CAME DOWN IN NOVEMBER, SO JUST A COUPLE MONTHS OLD, BY JUDGE DONATO IN THE NORTHERN DISTRICT OF CALIFORNIA, AND JUDGE DONATO IN THAT CASE, A VERY SIMILAR CASE, IN THAT CASE THE PRODUCT WAS CAPACITORS. THERE WAS A GLOBAL PRICE-FIXING CONSPIRACY ON CAPACITORS. THERE WERE A NUMBER OF GUILTY PLEAS, AND THERE WERE -- AND THE PLAINTIFFS PRESENTED VERY SIMILAR KINDS OF EVIDENCE TO PROVE THAT THERE WAS CLASS-WIDE IMPACT, AND ONE OF THOSE CATEGORIES OF EVIDENCE WAS EVIDENCE ABOUT THE STRUCTURE OF THE INDUSTRY, SIMILAR TO WHAT DR. MANGUM HAS SUPPLIED HERE, AND JUDGE DONATO CALLED THAT OUT AND SAID THAT THIS EVIDENCE SUPPORTS A FINDING OF CLASS-WIDE IMPACT, AND THAT'S AT STAR EIGHT OF THE WESTLAW CITE, 2018 WESTLAW, AT 5980139. AND NOTABLY, AND I'LL MENTION THIS MORE IN A MINUTE, BUT THE OPPOSING EXPERT ON THAT SIDE WAS DR. JOHNSON, THE DEFENDANTS' EXPERT IN THIS CASE.

OKAY, AND THEN ANOTHER ASPECT OF DR. MANGUM'S REPORT WERE THE TWO KINDS OF STATISTICAL ANALYSES HE CONDUCTED. NOW, DEFENDANTS HAVE FOCUSED ALL THEIR FIREPOWER ON THE REGRESSION ANALYSIS, BUT DR. MANGUM ALSO CONDUCTED A SERIES OF CORRELATION

ANALYSES, AND HE SHOWED THROUGH THESE STUDIES THAT THE PRICES OF PRODUCTS, OF TUNA PRODUCTS MOVED TOGETHER, AND HE CONDUCTED A NUMBER OF DIFFERENT KINDS OF CORRELATION ANALYSES. HE LOOKED AT WHETHER THERE WAS CORRELATION ACROSS PRODUCTS. FOR EXAMPLE, DO THE PRICES OF CANNED TUNA MOVE TOGETHER WITH THE PRICES OF POUCHED TUNA? HE LOOKED AT THE PRICES OF PRODUCTS ACROSS THE DEFENDANTS AND FOUND THOSE PRICES MOVED TOGETHER.

AND HE ALSO LOOKED AT THE PRICES ACROSS CUSTOMER TYPES AND FOUND THAT PRICES, NO MATTER WHAT KIND OF CUSTOMER, WHETHER IT WAS A SMALL RETAILER, A BIG DISTRIBUTOR, OR A MASS MERCHANDISER, THOSE PRICES MOVED TOGETHER. AND DR. MANGUM DOES NOT USE THIS TO SHOW CAUSATION, BUT IT IS THE KIND OF EVIDENCE THAT COURTS RELY UPON, AND IT'S CITED IN MANY CASES. IT'S ONE, OR A PART OF THE EVIDENCE THAT COURTS CAN RELY ON TO FIND THAT THERE IS CLASS-WIDE IMPACT.

AND I WOULD JUST REFER YOUR HONOR, AND THESE CASES ARE CITED IN OUR BRIEFING MATERIALS, BUT IN THE EGGS CASE FROM THE EASTERN DISTRICT OF PENNSYLVANIA, 81 F.SUPP., AT 431. THE RAMEN NOODLES CASE. THAT WAS A CASE IN THE NORTHERN DISTRICT OF CALIFORNIA. JUDGE ORECK CERTIFIED THE CLASS IN 2017. THOSE COURTS ALSO RELIED ON CORRELATION ANALYSES.

NOW, WE GET TO DR. MANGUM'S REGRESSION ANALYSIS, AND HE COMPILED A MODEL RELYING ON VAST AMOUNTS OF TRANSACTION DATA PRODUCED BY THE DEFENDANTS. HE ALSO PUT INTO HIS MODEL DATA THAT HE HAD ABOUT THE TUNA INDUSTRY, INCLUDING COST DATA, AND

HE DEVELOPED A BEFORE, DURING AND AFTER MODEL, AND HE WAS ABLE TO COMPARE THE PREDICTED BUT-FOR PRICES TO ACTUAL PRICES, AND USING THAT ECONOMETRIC MODEL, AND DR. MANGUM WILL EXPLAIN IT, SO I WON'T TRY TO, HE CONCLUDED THAT 94.5 PERCENT OF CLASS MEMBERS WERE IMPACTED. AND THIS WASN'T A SMALL LEVEL OF IMPACT. IT WASN'T TWO, FIVE PERCENT, OR SOMETHING THAT COULD BE A MISTAKE. IT WAS 10.28 PERCENT. THAT WAS THE OVERCHARGE THAT HE DETECTED, THAT HE IDENTIFIED AND QUANTIFIED AS A RESULT OF HIS REGRESSION ANALYSIS.

AND, NOW, THAT 94.5 PERCENT, HE DIDN'T CONCLUDE THAT EVERY SINGLE CLASS MEMBER WAS INJURED, BUT OF COURSE, AS THE SUPREME COURT TOLD US IN TYSON FOODS, THERE IS NO REQUIREMENT UNDER THE LAW THAT EVERY MEMBER OF THE CLASS SHOW HARM.

NOW, DEFENDANTS DO NOT CHALLENGE A LOT OF THE EVIDENCE THAT PLAINTIFFS REPORT IN SUPPORT OF THEIR MOTION FOR CLASS CERTIFICATION. THEY DON'T ARGUE, I DON'T THINK, THAT THE GUILTY PLEAS DON'T EVINCE AN INTENT TO IMPACT ALL THEIR CUSTOMERS ACROSS THE NATION. THEY DON'T CHALLENGE THE EVIDENCE ABOUT UNIFORM PRICING POLICIES, WITH ONE SMALL EXCEPTION. THEY DON'T CHALLENGE DR. MANGUM'S MARKET ANALYSIS, THEY DON'T CHALLENGE HIS CORRELATION ANALYSES, AND THEY ALSO DON'T CHALLENGE THE METHODOLOGY THAT HE USED.

I MEAN, THEY CONCEDE THAT A DUMMY VARIABLE REGRESSION METHODOLOGY IS OFTEN USED IN THESE KINDS OF CASES TO SHOW CLASS-WIDE IMPACT, AND IN FACT THERE ARE MANY CASES WITHIN, IN

COURTS WITHIN THE NINTH CIRCUIT THAT HAVE RELIED ON JUST THOSE KINDS OF ANALYSES. AND I WOULD JUST REFER YOUR HONOR TO THE LCD LITIGATION AGAIN, THE HIGH-TECH EMPLOYEE ANTITRUST LITIGATION. THIS IS BY JUDGE KOH, A 2013 CASE, 985 F.SUPP.2D, AT 1167. THE KOREAN RAMEN NOODLES CASE, WHICH I MENTIONED ALSO, AND ALSO THE VERY RECENT CAPACITORS CASE, WHICH THE OPINION WAS JUST ISSUED IN NOVEMBER.

NOW, THEY DO HAVE, HOWEVER, A NUMBER OF CRITICISMS OF DR. MANGUM'S MODEL. FIRST OF ALL, THEY ARGUE THAT HE SHOULD NOT HAVE USED A POOLED MODEL WITH A SINGLE OVERCHARGE COEFFICIENT. AND DR. MANGUM WILL SPEAK ABOUT THIS AT SOME LENGTH, BUT I JUST WANTED TO DRAW YOUR HONOR'S ATTENTION TO THE NUMEROUS COURTS THAT HAVE CERTIFIED ANTITRUST CLASSES WHERE CLASS-WIDE IMPACT WAS DEMONSTRATED THROUGH A SINGLE OVERCHARGE COEFFICIENT.

NOW, THE DEFENDANTS RELY ON A LOT OF OUT-OF-CIRCUIT AUTHORITY TO SAY YOU CAN'T DO THAT. WELL, I WOULD SUGGEST THAT THE RELEVANT CASES, MANY OF THEM ARE RIGHT HERE IN THE NINTH CIRCUIT, AND MOST RECENTLY IN THE CAPACITORS CASE JUDGE DONATO RELIED ON A POOLED MODEL, A SINGLE OVERCHARGE COEFFICIENT KIND OF REGRESSION ANALYSIS TO CERTIFY THE CLASS, AND THAT IS AT STAR 78 OF THAT OPINION. AND WE CITE A LOT OF THESE CASES IN OUR BRIEFS, YOUR HONOR. I WON'T GO OVER ALL OF THEM AT THIS POINT, BUT THERE IS ABUNDANT AUTHORITY FOR COURTS TO RELY ON THAT KIND OF METHODOLOGY.

IMPORTANTLY, DR. JOHNSON CRITICIZES THE USE OF A SINGLE OVERCHARGE MODEL AND SUBSTITUTES IT BY DOING A CUSTOMER-BY-CUSTOMER REGRESSION ANALYSIS, AND THIS KIND OF SLICING AND DICING OF THE DATA HAS BEEN REPEATEDLY CRITICIZED. IT'S BEEN CRITICIZED BY COURTS. IT'S BEEN CRITICIZED BY COMMENTATORS. WE REFER TO AN ABA MONOGRAPH THAT TALKS ABOUT THE PROBLEMS THAT OCCUR WHEN YOU SLICE AND DICE THE DATA THE WAY THAT DR. JOHNSON HAS.

IMPORTANTLY, THIS PARTICULAR METHODOLOGY HAS BEEN SPECIFICALLY CRITICIZED WITH RESPECT TO DR. JOHNSON. IN THE CAPACITORS CASE, WHICH I MENTIONED, DR. JOHNSON TOOK THE SINGLE COEFFICIENT REGRESSION ANALYSIS PREPARED BY PLAINTIFFS' EXPERT AND HE CHOPPED IT UP INTO DIFFERENT REGRESSIONS, AND JUDGE DONATO SAID, DR. JOHNSON CHOPS THE DATA INTO TINY DATA SETS, RUNNING MORE THAN ONE REGRESSION PER CLASS MEMBER, THEREBY REACHING NO STATISTICALLY SIGNIFICANT RESULTS FOR MOST CLASS MEMBERS AND UNRELIABLE RESULTS PURPORTEDLY SUGGESTING NO INJURY TO OTHERS. THE COURT REJECTED THAT CRITICISM IN THAT CASE, AND THIS COURT SHOULD REJECT IT HERE AS WELL. THE CAPACITORS DECISION DEMONSTRATES YOU CAN PROVE CLASS-WIDE IMPACT USING A SINGLE OVERCHARGE COEFFICIENT MODEL.

A SIMILAR -- A DIFFERENT KIND OF DATA SLICING WAS ALSO CRITICIZED AND REJECTED AS NOT SIGNIFICANT IN THE *IN RE* QUALCOMM ANTITRUST LITIGATION. AGAIN, HERE, DR. JOHNSON WAS THE EXPERT IN THAT CASE, AND THE COURT NONETHELESS CERTIFIED

THE CLASS.

ONE OF THE OTHER CRITICISMS BY DR. JOHNSON IS THAT DR. MANGUM'S REGRESSION ANALYSIS PRODUCES SO-CALLED FALSE POSITIVES, BUT A CLOSE LOOK AT THOSE SO-CALLED FALSE POSITIVES REVEALS SOMETHING IMPORTANT. FOR EXAMPLE, HE SAYS THAT THE MODEL SHOWS FALSE POSITIVES BECAUSE CLASS MEMBERS THAT PURCHASED TUNA FROM NON-DEFENDANTS ALSO SHOWED OVERCHARGES. WELL, THERE'S A COUPLE OF THINGS YOU OUGHT TO THINK ABOUT THAT.

FIRST OF ALL, MANY OF THOSE PURCHASERS, PURCHASES WERE NOT OF NON-DEFENDANT TUNA. IN OTHER WORDS, IT WAS TUNA THAT WAS ACTUALLY PRODUCED BY THE DEFENDANT. SO IT CAN'T COUNT AS A FALSE POSITIVE. IN ADDITION, MANY OF THOSE PURCHASES WERE AT DIFFERENT LEVELS OF DISTRIBUTION, SO THEY WERE PURCHASED FROM AN INTERMEDIATE SUPPLIER. THERE'S BEEN AN ADDITIONAL CHARGE TACKED ON, NO DOUBT AS A RESULT OF IT GOING THROUGH THE DISTRIBUTION CHAIN. AND FINALLY, AS DR. MANGUM WILL EXPLAIN, THE UMBRELLA THEORY, WHICH IS WELL RECOGNIZED BOTH IN ECONOMICS AND ALSO IN A NUMBER OF CASES WHICH ARE CITED, NON-DEFENDANT SUPPLIERS OF A PRODUCT OFTEN TAKE ADVANTAGE OF A CONSPIRACY, JUST IN THE WAY OF SUPPLY AND DEMAND, TO ALSO INCREASE THEIR PRICES.

ANOTHER OF DR. JOHNSON'S CRITICISMS IS THAT DR. MANGUM USED AN INDICATOR VARIABLE FOR THE PERIOD 2008 THROUGH 2010. NOW, I MENTIONED EARLIER THAT CHICKEN OF THE SEA'S INTERROGATORY ANSWERS CONFIRMED THAT, DURING THE PERIOD 2008

THROUGH 2010, THERE WAS COLLUSIVE ACTIVITY. THOSE INTERROGATORY ANSWERS REFERENCE TWO SPECIFIC AGREEMENTS ENTERED INTO BETWEEN CHICKEN OF THE SEA AND BUMBLE BEE. SO TO USE THAT PERIOD AS PART OF THE BENCHMARK WOULD HAVE TAINTED THE RESULTS, AND SO DR. MANGUM WAS PERFECTLY JUSTIFIED IN NOT USING THAT PERIOD AS PART OF THE BENCHMARK.

BUT MOREOVER, YOUR HONOR, AS A LEGAL MATTER, THERE ARE NUMEROUS CASES THAT HOLD THAT DISPUTES OVER THE BENCHMARK PERIOD GO TO THE WEIGHT OF THE TESTIMONY, NOT THE ADMISSIBILITY OF THE TESTIMONY, AND THIS IS AN ISSUE THAT ALSO COMES UP FAIRLY FREQUENTLY. IT'S AN ISSUE THAT CAME UP IN THE KLEEN PRODUCTS ANTITRUST CASE. THIS IS A DECISION FROM THE NORTHERN DISTRICT OF ILLINOIS. IT'S AFFIRMED BY THE 7TH CIRCUIT. THE COURT HELD IT DOESN'T MATTER. WE'RE GOING TO CERTIFY THE CLASS. IT GOES TO THE WEIGHT RAISED AT THE TIME YOU TAKE THIS CASE TO THE JURY. THE SAME THING IN *IN RE URETHANE* ANTITRUST LITIGATION. THAT WAS A 10TH CIRCUIT DECISION IN 2014. THE *IN RE BLOOD REAGENT* ANTITRUST LITIGATION, A RECENT CASE, 2015, FROM THE EASTERN DISTRICT OF PENNSYLVANIA, AND ALSO THE MUSHROOM DIRECT ANTITRUST CASE. SO THOSE KINDS OF CRITICISMS WON'T DEFEAT PREDOMINANCE.

SIMILARLY, DR. JOHNSON CRITICIZES DR. MANGUM'S DECISION TO USE MARKET COST DATA AS OPPOSED TO THE ACCOUNTING COST INFORMATION PROVIDED BY THE DEFENDANTS, AND DR. MANGUM WILL EXPLAIN WHY ACCOUNTING COST DATA IS TYPICALLY UNRELIABLE AND

SHOULD NOT BE USED IN REGRESSION ANALYSIS, SO I WON'T GET INTO THAT. BUT I WOULD JUST LIKE TO POINT OUT THAT OTHER DEFENDANTS HAVE CRITICIZED PLAINTIFFS' EXPERT'S USE OF, OR DECISION NOT TO USE ACCOUNTING CLASS DATA.

IN FACT, DR. MANGUM FACED THAT CRITICISM IN THE KOREAN RAMEN NOODLES CASE. IN THE 2017 DECISION CERTIFYING THE CLASS, JUDGE ORECK SAID THESE CRITICISMS DO NOT UNDERMINE THE RELIABILITY OF THIS METHODOLOGY. SO, AGAIN, IT GOES TO THE WEIGHT. IT'S SOMETHING YOU CAN CROSS-EXAMINE THE EXPERT ABOUT PERHAPS AT TRIAL, BUT IT DOESN'T MEAN THAT THE OPINION SHOULD BE DISCARDED OR THAT THE CLASS SHOULD NOT BE CERTIFIED. JUDGE DONATO SAID THE SAME THING IN THE CAPACITORS CASE.

YOUR HONOR IS LOOKING AT THE CLOCK. I'M ALMOST DONE.

THE COURT: OKAY.

MS. SWEENEY: THANK YOU.

IN THE CAPACITORS CASE, JUDGE DONATO MADE THE SAME COMMENT. THE DEFENDANTS HAD THEIR CHALLENGE TO ONE OF THE COSTS, AND HE SAID CHALLENGES REGARDING QUALITY OF DATA DO NOT GO TO THE ADMISSIBILITY OF THE OPINIONS, BUT RATHER TO MATTERS OF WEIGHT AND PROBATIVE VALUE FOR A JURY TO EVALUATE.

AND I'LL CONCLUDE, YOUR HONOR, AND I WILL TURN IT OVER TO MISS LEE FOR HER OPENING ARGUMENT.

THE COURT: OKAY. VERY GOOD. MISS LEE IS GOING TO.
GO AHEAD, MISS LEE.

MS. LEE: GOOD MORNING, YOUR HONOR.

THE COURT: GOOD MORNING.

MS. LEE: COULD WE PUBLISH?

THE COURT: DO I HAVE COPIES OF THOSE?

MS. LEE: YOU SHOULD.

THE COURT: I SHOULD. THERE ARE A LOT OF THINGS UP
HERE.

MS. LEE: YES.

THE COURT: I'VE GOT IT. THANK YOU. GO AHEAD.

MS. LEE: YOUR HONOR, BELINDA LEE.

YOU'VE HEARD A LOT THIS MORNING ABOUT DPP'S ECONOMIC
EVIDENCE. YOU HEARD AND I'M SURE YOU'VE READ A LOT ABOUT, FROM
PLAINTIFFS ABOUT WHAT THEY'VE DESCRIBED AS DEFENDANTS' IMPROPER
ATTEMPTS TO MODIFY DR. MANGUM'S WORK. THEY'VE DESCRIBED IT AT
NUMEROUS TIMES AS OUR SLICING AND DICING OF DR. MANGUM'S DATA.

THE COURT SHOULD FOCUS ON ONE POINT. IT'S THAT THE
PLAINTIFFS DON'T WANT THIS COURT TO CHECK UNDER THE HOOD TO
TEST THE ECONOMIC EVIDENCE THAT THE PLAINTIFFS HAVE SUBMITTED,
AND I THINK THE COURT NEEDS TO ASK WHY THAT IS, AND THAT THE
PROPOSITION THAT THEY'RE ADVANCING, THAT THE COURT AND THAT
DEFENDANTS CAN'T TEST THIS ECONOMIC EVIDENCE, THAT RUNS
CONTRARY TO THE SUPREME COURT'S INSTRUCTION TO TRIAL COURTS
THAT YOU MUST CONDUCT A RIGOROUS ANALYSIS ON CLASS
CERTIFICATION.

WHEN WE DO THAT, YOUR HONOR, WHEN WE CHECK UNDER THE
HOOD, WHEN WE KICK THE TIRES, THEIR PROOF OF CLASS-WIDE IMPACT

UNRAVELS IN THREE IMPORTANT AND UNCURABLE WAYS.

FIRST, THE POOL OF DPP MODEL REGRESSION WAS WRITTEN TO ESTIMATE A SINGLE AVERAGE OVERCHARGE ACROSS THE ENTIRE DPP CLASS. THAT BUILDS IN AN ASSUMPTION OF CLASS-WIDE IMPACT, BECAUSE THAT IS AN ASSUMPTION THAT EVERY CLASS MEMBER SUSTAINED THE SAME 10.28 PERCENT OVERCHARGE.

IF I MAY STOP FOR A SECOND, YOU HAVE THIS HERE.

THE COURT: YES.

MS. LEE: THANK YOU.

THAT'S AN ASSUMPTION OF CLASS-WIDE IMPACT. THAT'S NOT PROOF OF CLASS-WIDE IMPACT.

SECOND, THERE ARE SOME FUNDAMENTAL FLAWS IN HOW THE DPP'S HAVE BUILT THEIR POOL REGRESSION MODEL, AND MISS SWEENEY REFERRED TO THEM BEFORE, AND THE PROBLEM IS THAT THIS MODEL YIELDS FALSE POSITIVES. IT FINDS IMPACT WHEN, BY DEFINITION, IT SHOULD NOT. THE D. C. CIRCUIT IN THE RAIL FREIGHT DECISION NOTED THAT FALSE POSITIVES SHREDS A CASE FOR CERTIFICATION.

AND FINALLY, AND THIS IS GOING TO BE A RECURRING ISSUE THAT WE ARE GOING TO SEE ACROSS ALL THREE DAYS OF THIS HEARING, OF PLAINTIFFS' OUTCOME-DRIVEN METHODOLOGY. PLAINTIFFS' EXPERTS HAVE MADE CHOICES IN HOW THEY'VE ENGINEERED THEIR MODELS, THE DATA THEY USE, THE TIME PERIODS THEY CHOSE. IN TURN AFTER TURN, PLAINTIFFS HAVE NO EXPLANATION, NO SCIENTIFIC BASES FOR THE CHOICES THEY MADE.

THE TRUTH IS THAT EVERY ONE OF THESE CHOICES BIASES

THEIR MODELING TOWARDS FINDING IMPACT, AND INSTEAD OF OWNING UP TO THAT, PLAINTIFFS' RESPONSE HAS BEEN DEFLECTION IN AN ATTEMPT TO SHIFT THE BURDEN BACK TO THE DEFENDANTS TO ARGUE THAT DEFENDANTS HAVEN'T DISPROVED THE CHOICES THAT THEY'VE MADE AND THEY HAVEN'T DISPROVED COMMON IMPACT. THAT'S WRONG ON THE LAW. THE BURDEN OF CLASS CERTIFICATION STARTS WITH PLAINTIFF AND ENDS WITH PLAINTIFF. IT'S NOT DEFENDANTS' BURDEN TO DISPROVE COMMON IMPACT.

YOUR HONOR, THIS IS MY PLAN FOR HOW I PROPOSE TO STRUCTURE MY ARGUMENT TODAY. I WILL TRY AND BE AS BRIEF AS POSSIBLE. I'LL START WITH A BRIEF OVERVIEW AND THEN TURN TO SOME LEGAL ISSUES, AND THEN PREVIEW FOR YOU SOME OF THE PROBLEMS WITH PLAINTIFFS' ECONOMIC EVIDENCE. OBVIOUSLY, I'M HERE TO ANSWER YOUR QUESTIONS TODAY, THOUGH, SO I WELCOME ANY QUESTIONS AND ANY GUIDANCE AS I GO ALONG THIS.

WE HEARD A LOT FROM MISS SWEENEY TODAY CITING A LOT OF OUT-OF-CIRCUIT AUTHORITY ABOUT CASES THAT HAVE BEEN CERTIFIED AS A CLASS, AND I THINK IT'S IMPORTANT TO TAKE A STEP BACK AND REMEMBER THAT THE SUPREME COURT HAS SAID REPEATEDLY CLASS CERTIFICATION IS AN EXCEPTION TO THE USUAL RULE OF LITIGATION BY INDIVIDUALLY NAMED PARTIES. RULE 23 IMPOSES STRINGENT REQUIREMENTS FOR CERTIFICATION THAT IN PRACTICE EXCLUDE MOST CLAIMS.

WE'VE HEARD A LOT ABOUT DPP CLASS DEFINITIONS JUST BEFORE, SO I WON'T BELABOR THIS POINT. ON THE ONE HAND, WE

HAVE DPP'S CLASS REPRESENTATIVES WHO ARE A COLLECTION OF SIX DIFFERENT WHOLESALERS AND DISTRIBUTORS, ONE OF WHOM IS IN BANKRUPTCY. BUT, OF COURSE, THE DPP'S DEFINITION IS SO BROAD THAT IT INCLUDES MANY GROCERIES AND RETAILERS. YOUR HONOR WILL PROBABLY RECOGNIZE THESE NAMES, WAL-MART, KROGER, AMAZON, COSTCO, POWER BUYERS, WHO ENGAGED IN INDIVIDUALIZED NEGOTIATIONS WITH THE DEFENDANTS. KROGER USES ONLINE BIDDING AUCTIONS FOR THIS IDEA THAT DEFENDANTS SET PRICES IN THE SAME WAY, IN THE SAME PROCESS AND THROUGHOUT THE ENTIRE PROCESS IS JUST WRONG, YOUR HONOR.

A WORD ON THE DEFENDANTS, AND AT THIS POINT I THINK YOU'RE PROBABLY TIRED OF US. AS YOUR HONOR KNOWS, BUMBLE BEE IS BASED HERE IN SAN DIEGO. THEY HAVE THEIR HEADQUARTERS A FEW BLOCKS FROM HERE, IN PETCO PARK. THEY'RE THE SECOND-LARGEST PACKAGED TUNA SUPPLIER IN THE NATION. THEY HAVE A STRONG HOLD IN THE NORTHEAST AND IN ALBACORE IN PARTICULAR. CHICKEN OF THE SEA, SOMETIMES ALSO REFERRED TO AS COSI, IS HEADQUARTERED A FEW HOURS UP THE COAST FROM HERE, IN EL SEGUNDO. COSI IS THE LEADER IN FOOD-SERVICE-SIZED TUNA, AND THEY CONSIDER AND MARKET THEMSELVES AS THE AFFORDABLE CHOICE IN PACKAGED TUNA. AND, OF COURSE, MY CLIENT, STARKIST, WE JUST CELEBRATED OUR 100TH ANNIVERSARY AS A COMPANY. WE'RE HEADQUARTERED IN PITTSBURGH. WE'RE THE LEADING PACKAGED TUNA SUPPLIER IN THE NATION, ALSO THE LEADER IN PREMIUM PRODUCTS LIKE POUCHED TUNA.

AND, OF COURSE, I CAN'T MENTION THE DEFENDANTS IN THIS

CASE WITHOUT OWNING UP TO AND MENTIONING THE CRIMINAL GUILTY PLEAS. YOU HEARD A LOT ABOUT THAT FROM MISS SWEENEY JUST BEFORE, TWO CORPORATE GUILTY PLEAS BY BUMBLE BEE AND STARKIST AND THREE INDIVIDUALS WHO HAVE PLED GUILTY TO PRICE-FIXING. NO ONE'S DENYING THAT. THE COMPANIES HAVE TAKEN RESPONSIBILITY.

I THINK IT IS IMPORTANT, THOUGH, YOUR HONOR, TO KNOW, AS EVEN MISS SWEENEY ACKNOWLEDGED, NONE OF THE GUILTY PLEAS MATCH THE TIME PERIOD IN THE DPP CLASS MOTION, AND IN THE CASE OF THE STARKIST GUILTY PLEA, WHICH IS CLIPPED ON SLIDE A, THE PRODUCTS AT ISSUE DON'T EVEN MATCH THE DPP'S CLASS DEFINITION. MISS SWEENEY JUST BEFORE SAID THAT ALL OF THE GUILTY PLEAS ARE FOR PACKAGED SEAFOOD. THE STARKIST GUILTY PLEA IN PARTICULAR NOTES THAT IT'S PACKAGED SEAFOOD CONSISTING OF CANNED TUNA FISH. THE DPP CLASS, OF COURSE, IS NOT JUST CANNED TUNA FISH, BUT ALSO PACKAGED -- EXCUSE ME -- POUCHED TUNA.

AND MOST IMPORTANTLY, I THINK, THE POINT TO REALLY TAKE AWAY ON THE GUILTY PLEAS IS THAT THE GUILTY PLEAS ARE NOT EVIDENCE OF IMPACT. MISS SWEENEY BEFORE MENTIONED THAT THERE ARE REFERENCES TO INTENT. INTENT DOES NOT IMPACT. AND THERE ARE MANY CASES IN THIS CIRCUIT, IN THE NORTHERN DISTRICT, THE LITHIUM ION BATTERY CASE, OPTICAL DISK DRIVE, WHERE THERE WERE GUILTY PLEAS AND AMNESTY APPLICANTS, MORE GUILTY PLEAS, ACTUALLY, THAN EVEN IN THIS CASE. THERE WERE GUILTY PLEAS, BUT CLASS WAS DENIED. SO THE FACT OF A GUILTY PLEA DOES NOT MEAN AUTOMATIC CLASS CERTIFICATION.

NOW TURNING TO THE LAW OF CLASS CERTIFICATION, I THOUGHT, YOUR HONOR, WE COULD JUST QUICKLY RETURN TO THE BASICS HERE. RULE 23(B)(3) REQUIRES A FINDING THAT QUESTIONS OF LAW OR FACT COMMON TO CLASS MEMBERS PREDOMINATE OVER INDIVIDUALIZED ONES, AND THAT A CLASS ACTION BE SUPERIOR TO PROCEEDING IN THE USUAL RULE OF INDIVIDUAL LITIGATION BY NAMED PARTIES.

IT'S NOT CORRECT THAT WE ARE NOT CHALLENGING SUPERIORITY. WE ARE, OF COURSE, CHALLENGING UNDER RULE 23(B)(3), WHICH IS BOTH PREDOMINANCE AND SUPERIORITY. IN DECIDING ON RULE 23(B)(3), THE COURT SHOULD CONSIDER (A) CLASS MEMBERS' INTEREST IN INDIVIDUALLY CONTROLLING THE PROSECUTION OR DEFENSE OF SEPARATE ACTIONS, AND (B) THE EXTENT AND NATURE OF ANY LITIGATION CONCERNING THE CONTROVERSY ALREADY BEGUN BY OR AGAINST CLASS MEMBERS.

AS YOUR HONOR WELL KNOWS, 108 DIFFERENT COMPANIES HAVE COME TO YOUR COURT AS PLAINTIFFS. THEY HAVE ALREADY TOLD YOU THAT THEY WANT CONTROL OF THE PROSECUTION OF THEIR OWN LITIGATION, AND THEY HAVE BEGUN LITIGATION ABOUT THIS CONTROVERSY. THEY FIND THEIR OWN LITIGATION SUPERIOR TO PROCEEDING THROUGH A CLASS.

NOW, THE ONE THING YOU REALLY DIDN'T HEAR MUCH FROM MISS SWEENEY ABOUT WERE THOSE 108 PLAINTIFFS. MANY OF THE DAP PLAINTIFFS, MANY OF THEM HAVE EVEN SETTLED AND DISMISSED THEIR CLAIMS WITH PREJUDICE AGAINST MANY OF THE DEFENDANTS, OFTENTIMES DIFFERENT GROUPINGS OF DEFENDANTS. AND I WANTED TO

NOTE HERE, YOUR HONOR, THAT IN THEIR PAPERS, BOTH IN THEIR MOTION AND THEIR REPLY PAPERS, DPP'S MISCITE THE CRT DECISION, THE CATHODE RAY TUBE DECISION, TO SUGGEST THAT THIS COURT'S FORBIDDEN FROM EVEN CONSIDERING THE FACT THAT THESE DAPS HAVE FILED SUIT ON THEIR OWN. THAT'S NOT WHAT THAT DECISION SAYS. THAT CRT DECISION INVOLVED A MOTION BROUGHT BY A DAP PLAINTIFF, SHARP ELECTRONICS, SEEKING RELIEF FROM THEIR FAILURE TO TIMELY FILE AN OPT-OUT NOTICE, AND THE COURT IN THAT INSTANCE SAID THE FACT THAT YOU HAD FILED A DAP LAWSUIT DIDN'T EXCUSE YOU FROM THE REQUIREMENT OF FILING AN OPT-OUT NOTICE. IT SAID NOTHING ABOUT RULE 23 AND THE REQUIREMENTS THAT MUST BE MET FOR CLASS CERTIFICATION, AND IT CERTAINLY SAYS NOTHING ABOUT WHETHER OR NOT THE COURT MAY CONSIDER THE FACT THAT DAP PLAINTIFFS HAVE FILED. UNDER RULE 23(B)(3)(A) AND (B), THIS COURT SHOULD CONSIDER THAT.

AT THIS POINT, I WANTED TO BRING THE COURT BACK TO WAL-MART V. DUKES, THE SUPREME COURT DECISION FROM A FEW YEARS AGO, WHERE THE SUPREME COURT, IN THE FIRST OF A SERIES OF CASES, MADE VERY CLEAR THAT THE BURDEN ON RULE 23 LIES WITH THE PLAINTIFFS. IT IS THE PLAINTIFFS' BURDEN TO PROVE COMPLIANCE WITH EVERY ELEMENT OF RULE 23.

WHEN TALKING ABOUT PREDOMINANCE, YOUR HONOR, I THINK IT'S IMPORTANT TO TAKE ONE STEP BACK AND TALK ABOUT COMMON PROOF, BECAUSE THE PREDOMINANCE INQUIRY IS ABOUT WHETHER OR NOT YOU HAVE PREDOMINANTLY COMMON PROOF TO RESOLVE THE ISSUES IN

YOUR CASE. SO THE QUESTION OF COMMON PROOF, OF COURSE, IS A QUESTION ABOUT WHETHER YOU CAN DEMONSTRATE OR RESOLVE A COMMON QUESTION THROUGH GENERALIZED PROOF. IN THE CASE OF IMPACT AND WHAT WE'RE TALKING ABOUT HERE, IT IS THE METHODOLOGY CAPABLE OF DEMONSTRATING CLASS-WIDE IMPACT IN ONE STROKE.

FOR PREDOMINANCE, YOUR HONOR, I THINK IT'S ALSO IMPORTANT TO REMEMBER THAT PREDOMINANCE FOCUSES NOT JUST ON COMMON QUESTIONS AND SIMILAR QUESTIONS APPLICABLE TO THE CLASS. THAT'S REALLY JUST THE COMMONALITY PART OF RULE 23. BUT WHAT REALLY DRIVES PREDOMINANCE IS A FOCUS ON THE DISSIMILARITIES WITHIN THE CLASS, THE DISSIMILARITIES WHICH THE SUPREME COURT NOTED IN WAL-MART V. DUKES, THE DISSIMILARITIES THAT PREVENT THE USE OF COMMON PROOF IN ANSWERING THOSE COMMON QUESTIONS.

AND FINALLY, YOUR HONOR, I THINK IT'S IMPORTANT TO COME BACK TO THE PURPOSE OF THE PREDOMINANCE REQUIREMENT UNDER RULE 23(B)(3). THE CLASS-ACTION MECHANISM WAS INTRODUCED TO INTRODUCE EFFICIENCY IN ALLOWING CERTAIN LIKE CLAIMS TO BE TRIED TOGETHER, BUT THE PURPOSE OF THE PREDOMINANCE REQUIREMENT WAS TO ENSURE THAT WE DIDN'T REACH FOR EFFICIENCY AT THE EXPENSE OF PROCEDURAL FAIRNESS, AND THAT'S BOTH THE PLAINTIFFS AND DEFENDANTS.

CLASS CERTIFICATION, AS THE SUPREME COURT EXPLAINED AGAIN IN WAL-MART V. DUKES, CLASS CERTIFICATION CANNOT ENLARGE THE CLAIM OF UNINJURED PLAINTIFFS AND IT CAN'T BE USED TO SHORT-CIRCUIT DEFENSES OF INDIVIDUALIZED DEFENSES OF THE

DEFENDANTS. THAT WOULD BE A VIOLATION UNDER THE RULE'S ENABLING ACT.

BRINGING THIS ALL BACK NOW TO THE QUESTION ABOUT COMMON IMPACT, I THINK THERE'S NO DISPUTE ON THE LEGAL ISSUE HERE, THAT THE DPP'S BEAR THE BURDEN OF COMING FORWARD WITH A COMMON METHOD CAPABLE OF PROVING COMMON IMPACT. THEY DON'T DISPUTE THIS LEGAL ISSUE, BUT THEY DO, IN MANY SUBTLE AND NOT SO SUBTLE WAYS, TRY TO SHIFT THE BURDEN BACK TO THE DEFENDANTS TO DISPROVE IMPACT. AND I THINK THIS IS A REALLY IMPORTANT POINT TO FOCUS ON, YOUR HONOR, BECAUSE THIS IS NOT SUMMARY JUDGMENT. THIS IS NOT AN INSTANCE WHERE YOU HAVE A BURDEN OF PROOF THAT SHIFTS BACK AND FORTH BETWEEN THE PARTIES. ON CLASS CERTIFICATION, AGAIN, THE BURDEN LIES ON THE PLAINTIFF. IT IS THE ROLE OF THE COURT TO CONDUCT A RIGOROUS ANALYSIS TO TEST PLAINTIFFS' EVIDENCE, AND WHEN DEFENDANTS ASSIST IN THAT AND TEST PLAINTIFFS' EVIDENCE, DEFENDANTS DON'T TAKE ON ANY BURDEN TO DISPROVE PLAINTIFFS' CLAIMS. IT'S STILL ULTIMATELY ON PLAINTIFFS THE BURDEN TO PROVE IMPACT, CLASS-WIDE IMPACT THROUGH COMMON METHODS.

NOW, I'VE MENTIONED RIGOROUS ANALYSIS A FEW TIMES, AND I THINK ON PAPER ALL OF THE PARTIES AGREE THE COURTS MUST, THIS COURT MUST PERFORM A RIGOROUS ANALYSIS OF THE EVIDENCE SUBMITTED IN SUPPORT OF CLASS CERTIFICATION, BUT PLAINTIFFS TRY TO SKIRT THIS REQUIREMENT BY ADVANCING THE NOTION THAT DEFENDANTS AND DR. JOHNSON AND THIS COURT CAN'T TEST WHAT DR.

MANGUM HAS PUT UP IN HIS ECONOMIC THEORIES. THAT'S JUST WRONG ON LAW.

COMCAST, YOUR HONOR, MAKES CLEAR THAT CLASS CERTIFICATION IS NOT A RUBBER-STAMPING OF PLAINTIFFS' ECONOMIC EVIDENCE. IT IS NOT ENOUGH TO JUST COME TO THE COURT WITH A REGRESSION. THIS IS NOT A CHECK-THE-BOX EXERCISE. TRIAL COURTS NEED TO EXAMINE REGRESSIONS BEING OFFERED, AND THEY NEED TO EXAMINE THE RESULTS THAT ARE BEING RECORDED FROM THESE REGRESSIONS. THAT'S BECAUSE, AS THE FIFTH CIRCUIT HAS SAID, MULTIPLE REGRESSION ANALYSIS IS NOT A MAGIC FORMULA.

THE ABA, THE SECTION OF THE ANTITRUST LAWS TREATISE ON ECONOMETRICS EXPLAINED THAT YOU'LL ALWAYS GET SOME KIND OF A RESULT FROM A REGRESSION, AND SO IT'S IMPORTANT TO LOOK AT THE REGRESSION TO DETERMINE WHETHER THE REGRESSION IS ESTIMATING THE RIGHT THINGS AND WHETHER IT'S ANSWERING THE QUESTION THAT IS RELEVANT FOR PURPOSES OF ACCEPTING CLASS-WIDE IMPACT IN THIS PARTICULAR CASE.

AS THE D. C. CIRCUIT EXPLAINED IN RAIL FREIGHT, RULE 23 NOT ONLY AUTHORIZES A HARD LOOK AT THE SOUNDNESS OF STATISTICAL MODELS THAT PURPORT TO SHOW PREDOMINANCE, RULE 23 COMMANDS IT. SO THIS HARD LOOK, AND I'VE MENTIONED THIS BEFORE, SO I WON'T BELABOR THIS, IT'S A TESTING OF PLAINTIFFS' ECONOMIC EVIDENCE. WHAT THE COURT IS REQUIRED TO DO IN PERFORMING ITS RIGOROUS ANALYSIS IS TO ASK FUNDAMENTALLY, IS PLAINTIFFS' EVIDENCE ACTUALLY CAPABLE OF PROVING WHAT THEY CLAIM IT WILL PROVE? IS

IT ANSWERING THE RELEVANT QUESTION FOR CLASS CERTIFICATION? IS IT PROVING THE ANSWER, OR IS IT JUST ASSUMING THE ANSWER?

YOU ALSO HAVE TO ASK YOURSELF, WHAT CHOICES HAVE THESE EXPERTS MADE IN DESIGNING THEIR EVIDENCE? HAVE THESE CHOICES BEEN TESTED? IS THERE ANY ECONOMIC BASIS FOR THESE CHOICES? AND WHAT EFFECT DO THESE CHOICES HAVE ON THE THESE RESULTS? YOU WILL HEAR A LOT OF ECONOMIC EVIDENCE TODAY AND THE NEXT FEW DAYS, YOUR HONOR, ABOUT THESE ISSUES, AND I THINK THESE ARE QUESTIONS THAT THE COURT SHOULD CONSIDER WHEN LISTENING TO THIS TESTIMONY.

NOW, BEFORE I TURN BRIEFLY TO THE ECONOMIC EVIDENCE, AND IN LIGHT OF THE LENGTHY DISCUSSION THIS MORNING BY MISS SWEENEY ABOUT THE GUILTY PLEAS AND HOW THEY VIEW THE CONDUCT IN THIS CASE, I THINK IT'S IMPORTANT TO NOTE THAT RULE 23 APPLIES IN EQUAL AND EXACTING MEASURE TO ALL PLAINTIFFS. THE SUPREME COURT IN THE AMERICAN EXPRESS CASE MADE CLEAR THAT THERE IS NO SPECIAL RIGHT TO CLASS TREATMENT FOR ANTITRUST PLAINTIFFS. THERE IS NO SPECIAL TREATMENT REGARDLESS OF HOW IMPORTANT OR MERITORIOUS A CLAIM MIGHT BE. CLASS PLAINTIFFS MAINTAIN AND ALWAYS MAINTAIN THE BURDEN OF PROVING COMPLIANCE WITH EVERY ELEMENT OF RULE 23.

SO I'M GOING TO WALK YOU NEXT VERY BRIEFLY THROUGH THE ISSUES THAT WE'VE PREVIEWED FOR YOU ON DPP'S METHODOLOGICAL FLAWS AND THE PROBLEMS WITH THEIR PROOF OF CLASS-WIDE IMPACT. MY GOAL HERE IS TO TRY TO SET THE TABLE FOR YOU TO PREVIEW SOME

ISSUES THAT WILL BE ADDRESSED IN THE EXAMINATIONS, AND HOPEFULLY REVIEW WITH SOME QUESTIONS THAT YOU SHOULD BE ASKING, YOUR HONOR, AND EVEN THE WITNESSES DURING THEIR EXAMINATION.

SO DR. MANGUM'S POOLED DPP MODEL. I'LL PAUSE FOR ONE MOMENT TO SAY THAT MISS SWEENEY MENTIONED A NUMBER OF CASES WHERE COURTS HAVE CERTIFIED CLASSES. AS I'VE NOTED, THEY'RE OUT-OF-CIRCUIT AUTHORITY. SHE MENTIONED QUITE A FEW CASES FROM OUT OF THE CIRCUIT. SHE ALSO MENTIONED THE KOREAN RAMEN CASE INVOLVING DR. MANGUM. WHAT SHE DIDN'T MENTION IS THE FLORIDA CEMENT AND CONCRETE ANTITRUST LITIGATION FROM THE SOUTHERN DISTRICT OF FLORIDA IN 2012 WHERE DR. MANGUM MADE ALL THE SAME ARGUMENTS THAT HE MAKES HERE, ARGUMENTS ABOUT MARKET CHARACTERISTICS, CONCENTRATED MARKET, PRICE LISTS, PRICE CORRELATION. HE USED A REGRESSION THAT POOLED CUSTOMERS, AND THE COURT REJECTED EACH OF THOSE OPINIONS AND DENIED CLASS CERTIFICATION. THAT WAS JUDGE ALTONAGA FROM THE SOUTHERN DISTRICT OF FLORIDA.

SO ON TO DR. MANGUM'S POOLED DPP MODEL, AND I'LL TRY AND EXPLAIN THIS AS BEST I CAN. YOU WILL HAVE THE ECONOMIST MOMENTARILY EXPLAINING ALL OF THIS TO YOU. FIRST, DR. MANGUM, WHAT HE CALLS SOMETIMES HIS BASE MODEL OR HIS POOLED DPP MODEL, THE FIRST THING TO KNOW HERE IS THAT DR. MANGUM CHOSE TO WRITE A REGRESSION THAT ESTIMATES A SINGLE AVERAGE OVERCHARGE FOR ALL DIRECT PURCHASERS. USING THAT REGRESSION, HE CALCULATES A 10.28-PERCENT OVERCHARGE ACROSS THE CLASS, HE SAYS, AND THEN IN

WHAT HE CALLS HIS COMMON IMPACT ANALYSIS HE APPLIES THAT SAME 10.28 PERCENT OVERCHARGE TO EVERY PURCHASE IN THE CLASS. FROM THERE, HE ARRIVES AT THE CONCLUSION THAT 94.5 PERCENT OF THE CLASS WAS IMPACTED.

SO, UNDER DR. MANGUM'S POOLED DPP MODEL, HE SAYS THAT HE AND DPP'S ARE SHOWING NO IMPACT TO 5.5 PERCENT OF THE CLASS. THAT, YOUR HONOR, IS AN ASSUMPTION OF IMPACT. REMEMBER WHAT I SAID ABOUT THE CHOICES THAT THESE EXPERTS MAKE. DR. MANGUM CHOSE TO WRITE A REGRESSION THAT ESTIMATES ONLY A SINGLE AVERAGE OVERCHARGE FOR EVERYBODY. HE'S NOT PROVING THAT EVERYONE HAD THE SAME IMPACT. HE'S ASSUMING IT IN THE REGRESSION THAT HE WROTE. HE'S FORCING A SITUATION WHERE YOU HAVE COMMON IMPACT BY VIRTUE OF THE REGRESSION THAT HE WROTE.

I THINK IT'S ALSO HELPFUL TO WALK YOUR HONOR THROUGH DR. MANGUM'S COMMON IMPACT ANALYSIS. THIS IS DIFFERENT THAN HIS ACTUAL REGRESSION. IT TOOK ME A WHILE TO UNDERSTAND THIS, SO HOPEFULLY I CAN HELP IN THIS, AND I'M GOING TO WALK YOUR HONOR THROUGH THE ORDER AND STEPS THAT DR. MANGUM FOLLOWED IN HIS COMMON IMPACT ANALYSIS. LATER TODAY, YOU'LL HEAR FROM OUR EXPERT, DR. JOHNSON, ABOUT THE IMPLICATIONS OF THIS ANALYSIS.

SO DR. MANGUM STARTS WITH HIS POOLED DPP MODEL TO CALCULATE PREDICTED ACTUAL PRICES FOR EVERY PURCHASER, AND THE ILLUSTRATION THAT YOU HAVE HERE USES THE ACTUAL SALES DATA FROM TEN DIFFERENT RETAIL DIRECT PURCHASERS IN CALIFORNIA THAT BOUGHT CHICKEN OF THE SEA 48-PACK FIVE-OUNCE CANS OF CHUNK

LIGHT, WATER, IN FEBRUARY, 2014. THE DATA IS TAKEN DIRECTLY FROM EXHIBIT 4 OF DR. JOHNSON'S REPORT REFERENCED IN PARAGRAPH 35 ON PAGE 20 OF HIS REPORT. EACH BLUE SQUARE THAT YOU SEE HERE IS A DIFFERENT RETAIL DIRECT PURCHASER.

IN HIS SECOND, IN THE SECOND STEP OF DR. MANGUM'S ANALYSIS, HE THEN SUBTRACTS 10.28 PERCENT FROM EVERY PREDICTED ACTUAL PRICE TO CALCULATE A PREDICTED BUT-FOR PRICE FOR EVERY DIRECT PURCHASER. WHAT HE'S DOING RIGHT HERE IS, HE WAS EMBEDDING A 10.28-PERCENT OVERCHARGE ACROSS EVERY PURCHASE IN THE CLASS. THAT IS EMBEDDING COMMON IMPACT IN HIS ANALYSIS.

THIRD, DR. MANGUM THEN COMPARES THE PREDICTED BUT-FOR PRICE TO THE ACTUAL PRICE PAID BY EVERY DIRECT PURCHASER. ON SLIDE 30, IT'S THE LITTLE GREEN TRIANGLES THAT ARE THE ACTUAL PRICES THAT DEFENDANTS, THAT DEFENDANTS SOLD THESE PRODUCTS TO AND THAT THESE INDIVIDUAL DIRECT PURCHASERS BOUGHT AT. THESE ARE THE ACTUAL PRICES THAT CAME FROM DEFENDANTS' SALES DATA.

NOW, IF YOU REMEMBER, EACH BLUE SQUARE IS A DIFFERENT RETAIL DIRECT PURCHASER, AND EACH GREEN TRIANGLE IS THE ACTUAL PRICE THAT THAT DIRECT PURCHASER PAID AT. SO WHAT WE SEE HERE, IF YOU LOOK AT THE DISPERSION OF THE GREEN TRIANGLES, THE ACTUAL PRICES THAT THE DEFENDANTS CHARGED VARIED GREATLY, BUT DR. MANGUM'S MODEL PREDICTS THE SAME BLUE-SQUARE PRICE FOR EVERY ONE OF THESE DIRECT PURCHASERS. SO ALREADY WE'RE SEEING PROBLEMS WITH DR. MANGUM'S MODEL.

AND THEN FOURTH, DR. MANGUM, IN HIS -- WHAT DR. MANGUM

DOES IS, HE THEN TAKES -- IN EVERY INSTANCE WHERE THE PREDICTED BUT-FOR PRICE IS LESS THAN THE ACTUAL PRICE, THAT'S WHERE HE SAYS THAT THERE'S IMPACT TO A DIRECT PURCHASER.

SO LIKE I SAID, YOUR HONOR, THIS WAS VERY HARD FOR ME TO FIGURE OUT. IT TOOK ME A VERY LONG TIME TO FIGURE IT OUT. WE HAVE DR. JOHNSON HERE. HE CAN HELP US HERE, AND I THINK DR. MANGUM WILL ADDRESS IT AS WELL.

BUT RETURNING TO THE POOLED MODEL, I THINK IT'S IMPORTANT, YOUR HONOR, TO FOCUS ON THE FACT THAT IT IS A POOLED MODEL. DR. MANGUM HIMSELF ACKNOWLEDGES THAT IT'S POSSIBLE TO DEPOOL HIS POOLED MODEL. HE PERFORMS DIFFERENT ROBUSTNESS CHECKS WHERE HE DEPOOLS THE DATA BY CUSTOMER TYPE, AND THIS IS MCD 17.3. THAT'S IN THE CORNER OF THE SCREEN HERE, YOUR HONOR.

WHAT DR. MANGUM DID WAS, HE DEPOOLED BY SEVERAL CUSTOMER TYPES, AND MANY OF THE CUSTOMER TYPES WERE STILL VERY LARGE GROUPINGS OF CUSTOMERS. IN HERE, THERE IS DISCOUNT, E-COMMERCE, FOOD SERVICE, MASS MERCHANT, RETAIL, AND SUPERMARKET. THOSE ARE ALL STILL VERY LARGE GROUPS OF POOLED DATA THAT HE PUT TOGETHER FOR THESE DIFFERENT CUSTOMER TYPES.

IN THE CASE OF WAL-MART, YOUR HONOR, HE ALLOWED WAL-MART, ONE DIRECT PURCHASER, TO HAVE ITS OWN OVERCHARGE. THAT'S THE RELEVANT QUESTION HERE FOR CLASS CERTIFICATION. IF YOU LOOK AT THE CLASS MEMBERS, WERE THEY IMPACTED? SO WHAT DR. JOHNSON DID IS APPLY DR. MANGUM'S WAL-MART ROBUSTNESS TEST TO ALL DIRECT PURCHASERS. WHEN YOU DO THAT, WHAT YOU'RE DOING IS

YOU'RE ELIMINATING THE ASSUMPTION OF A SINGLE AVERAGE OVERCHARGE. YOU'RE ALLOWING EVERY DIRECT PURCHASER IN THE REGRESSION TO HAVE THE POSSIBILITY OF A DIFFERENT OVERCHARGE.

NOW, THE CRITICISM THAT WE'VE HEARD FROM, FROM -- AND I SHOULD NOTE, AND THIS WAS THE HEADLINE, ACTUALLY. IT'S RIGHT UP THERE. THE HEADLINE IS, WHEN YOU DO THAT, YOU GO FROM PROOF, NO PROOF OF INJURY FOR 5.5 PERCENT OF THE CLASS ALL THE WAY TO NO PROOF OF INJURY FOR 28 PERCENT OF THE CLASS. THAT'S 169 MEMBERS OF THE CLASS WHO YOU CAN NO LONGER USE DR. MANGUM'S MODEL TO PROVE IMPACT TO.

NOW, THE CRITICISM THAT WE'VE ALREADY HEARD FROM MISS SWEENEY, AND IT'S IN THE PAPERS, IS THAT DR. JOHNSON SLICED AND DICED THE DATA. YOU WILL HEAR, I'M SURE, FROM DR. MANGUM ABOUT IT, AND YOU CAN ASK DR. JOHNSON ABOUT IT DIRECTLY. WHAT I CAN TELL YOU IS THIS. DR. JOHNSON DID NOT RUN SEPARATE REGRESSIONS. HE DID NOT RUN SEPARATE CUSTOMER-BY-CUSTOMER REGRESSIONS, AS MISS SWEENEY JUST MENTIONED. DR. JOHNSON DID NOT USE A SUBSET OF DR. MANGUM'S DATA, EITHER. HE DIDN'T SLICE AND DICE THE DATA. HE USED ALL 1.5 MILLION OBSERVATIONS IN DR. MANGUM'S DATA SET. THE ONLY DIFFERENCE WAS THAT DR. JOHNSON APPLIED DR. MANGUM'S WAL-MART ROBUSTNESS CHECK TO ALLOW EACH, THE POSSIBILITY THAT EACH DIRECT PURCHASER MIGHT HAVE INCURRED A DIFFERENT OVERCHARGE.

I'M GETTING INTO ALL OF THIS, AND I KNOW I'M TAKING TIME, BUT LET ME GO QUICKLY THROUGH THE REST OF THIS. THIS IS

IMPORTANT BECAUSE THE AMOUNT OF CLASS MEMBERS WHO WE CANNOT SHOW IMPACT TO, THAT QUESTION IS DIRECTLY RELEVANT TO WHETHER THE METHODOLOGY IS CAPABLE OF PROVING CLASS-WIDE IMPACT. THE LEGAL STANDARD, YOUR HONOR, IS WHETHER YOU CAN PROVE IMPACT TO ALL OR NEARLY ALL CLASS MEMBERS. THE LACK OF CASES OUTSIDE THIS CIRCUIT SAY ALL OR VIRTUALLY ALL, AND THE EXPERT REPORTS, THEY ARE ALL VIRTUALLY OR VIRTUALLY ALL.

THE FLIP SIDE OF THAT IS THE *DE MINIMIS* STANDARD. WHEN YOU HAVE MORE THAN *DE MINIMIS* LEVELS OF PEOPLE WHO ARE NOT INJURED, YOU CANNOT CERTIFY THE CLASS, AND I THINK IT'S IMPORTANT TO FOCUS ON TWO THINGS WHEN WE TALK ABOUT THE *DE MINIMIS* STANDARD.

FIRST OF ALL, IT'S THE NUMBER OF CLASS MEMBERS. IT'S NOT THE PERCENTAGE OF TRANSACTIONS THAT ARE MONITORED. IT'S THE NUMBER OF CLASS MEMBERS, BECAUSE WHAT YOUR HONOR NEEDS TO DO IS CONSIDER -- IF I PUT -- IF I TAKE -- IF THIS CASE GOES TO TRIAL AND DR. MANGUM USES HIS METHODOLOGY, HE CAN ONLY PROVE IMPACT TO A CERTAIN NUMBER OF CLASS MEMBERS. YOUR HONOR STILL NEEDS TO INTRODUCE INDIVIDUALIZED EVIDENCE FOR ALL OF THOSE OTHER CLASS MEMBERS WHO HE HASN'T PROVEN INJURY FOR.

THE NEXT FEW SLIDES WHICH I WILL RUN YOU THROUGH, BECAUSE NOW I'M USING TOO MUCH TIME, THIS HELPS PUT --

THE COURT: IT'S YOUR TIME, MA'AM. SO WHATEVER TIME YOU SPEAK NOW, YOU HAVE LESS TIME LATER.

MS. LEE: OKAY.

THE COURT: SO IT'S YOUR CALL, MA'AM.

MS. LEE: OKAY. THANK YOU.

I THINK IT'S JUST IMPORTANT TO PUT DR. MANGUM'S OPINION IN THE CONTEXT OF ALL OF THESE OTHER CASES THAT HAVE FOUND THAT NONINJURY THAT EXCEEDED *DE MINIMIS*. THE VISTA HEALTH PLAN CASE, ASACOL, RAIL FREIGHT, THESE ARE ALL CASES WHERE THE NUMBER OF CLASS MEMBERS WHERE THERE WAS NO PROOF OF INJURY EXCEEDED THE *DE MINIMIS* LEVEL. DR. MANGUM'S POOLED MODEL, AS IS, THE SPOT'S RIGHT IN THERE AT 5.5. PERCENT.

IN LIDODERM, IT IS IMPORTANT TO NOTE THAT IN THAT CASE THE NORTHERN DIRECT OF CALIFORNIA FOUND THAT 5.8 PERCENT WAS OKAY. IT WAS ACTUALLY A CALCULATION OF 5.8 PERCENT, BECAUSE IT WAS JUST THREE DIRECT PURCHASERS WHO THE PLAINTIFFS' EXPERT COULD NOT SHOW PROOF OF INJURY TO. SO YOU'RE ONLY TALKING ABOUT THREE PLAINTIFFS, THREE CLASS MEMBERS. IN OUR CASE, WE'RE TALKING ABOUT FAR MORE THAN THAT. AND REMEMBER, REGARDLESS OF WHETHER 5.5 IS *DE MINIMIS* OR NOT, WHEN YOU DEPOOL THE POOLED REGRESSION, YOU CANNOT DEMONSTRATE IMPACT TO 28 PERCENT OF POTENTIAL CLASS MEMBERS.

I'M GOING TO RUN QUICKLY THROUGH SOME OF THE REST OF THIS, BECAUSE YOU WON'T HEAR FROM DR. JOHNSON ON THIS. THE DPP'S CRITICIZE HIM FOR SLICING AND DICING, AND THEY CRITICIZED DR. JOHNSON FOR TESTS THAT HE HAS RUN. I THINK THE IMPORTANT THING TO REMEMBER IS THAT IT IS THE ROLE OF THE COURT TO TEST THESE EXPERT OPINIONS. IN DENYING A MOTION TO EXCLUDE PORTIONS

OF DR. JOHNSON'S REPORT IN THE CASE *IN RE* POOL PRODUCTS, JUDGE VANCE, AND HE SAID IT MOST DIRECTLY AND SUCCINCTLY, ECONOMETRICS LITERATURE IN ANTITRUST CASE LAW SUPPORT DR. JOHNSON'S USE OF SUB-REGRESSION TO TEST THE RESULTS OF THE PLAINTIFFS' REGRESSION MODEL.

THE CHOW TEST. I'M GOING TO STICK THROUGH THIS, YOUR HONOR, BECAUSE YOU'LL HEAR FROM DR. JOHNSON ABOUT THIS LATER. I THINK THE POINT HERE IS THAT PLAINTIFFS ACCUSE DR. JOHNSON OF CREATING A, OF USING A TEST, AS THEY CALL IT, DR. JOHNSON'S CHOW TEST, AND THEY MAKE IT SEEM LIKE IT'S A TEST THAT HE CREATED TO TRIP UP PLAINTIFFS' LAWYERS. IT'S NOT. IT'S A STANDARD, FUNDAMENTAL TEST THAT EVEN THE ABA ECONOMICS, ECONOMETRICS TREATISES ACKNOWLEDGE IS A STANDARD TEST TO DETERMINE WHETHER IT'S APPROPRIATE TO POOL OR NOT.

AND ON FALSE POSITIVES, I'M GOING TO GO THROUGH THIS QUICKLY ALSO, YOUR HONOR, BECAUSE YOU'LL HEAR A LOT ABOUT THIS. FALSE POSITIVES. IT'S IMPORTANT TO NOTE THAT PLAINTIFFS BEAR THE BURDEN OF ADDUCING SPECIFIC EVIDENCE TO REFUTE THE EXISTENCE OF FALSE POSITIVES. AS WE'VE TALKED ABOUT, THERE ARE TWO TYPES OF FALSE POSITIVES IN THIS CASE. YOU'LL HEAR A LOT MORE ABOUT IT. THE POINT HERE IS THAT DR. MANGUM'S MODEL IS FINDING OVERCHARGES WHERE THERE SHOULD BE NONE ON NON-DEFENDANT PURCHASES AND ON TIME PERIODS THAT, BY DEFINITION, ARE SUPPOSED TO BE CLEAN PERIODS.

SO, AGAIN, THERE'S SUPPOSED TO BE NO IMPACT, BUT DR.

MANGUM'S MODEL YIELDS IMPACT AT SIGNIFICANT LEVELS IN THESE TIMES AND FOR THESE PURCHASES, AND SO YOUR HONOR HAS TO QUESTION WHY IS IT, WHAT IS THE MODEL PICKING UP, BECAUSE IT'S NOT PICKING UP DEFENDANTS' CONSPIRATORIAL CONDUCT? BY DEFINITION, THERE IS NO CONSPIRATORIAL CONDUCT IN THOSE PERIODS AND SALES.

AND FINALLY, ON THE ISSUE OF DR. MANGUM'S METHODOLOGICAL CHOICES, HERE, I THINK THE SAME TO LEAVE YOU WITH, AND THIS COMES UP IN PARTICULAR IN DR. MANGUM'S USE OF COSTS, IN HIS TREATMENT OF COST DATA. DR. MANGUM CHOOSES NOT TO USE ACTUAL COST DATA EVEN THOUGH IT'S AVAILABLE. INSTEAD, HE CREATES HIS OWN PROXY COST INDEX. AND, YOU KNOW, AGAIN, THE QUESTION FOR THE COURT IS, YOU KNOW, WHAT CHOICES DID HE MAKE? WHY DID HE MAKE THESE CHOICES IN NOT USING THE ACTUAL COST DATA? AND WHAT WAS THE EFFECT OF THAT? I CAN TELL YOU, YOUR HONOR, IN THIS INSTANCE, THE EFFECT OF NOT USING COST DATA, THE ACTUAL COST DATA, WAS QUITE SIGNIFICANT. WHEN DR. JOHNSON USED THE ACTUAL COST DATA THAT DEFENDANTS HAD PRODUCED, WHEN HE DEPOOLED DR. MANGUM'S MODEL, HE FOUND THAT THERE WAS NO PROOF OF IMPACT FOR 48 PERCENT OF THE CLASS, NEARLY HALF OF THE CLASS.

SO I'LL LEAVE YOU WITH THAT, YOUR HONOR. THESE ARE THE THREE PROBLEMS THAT DOOM DR. MANGUM AND HIS PROPOSED METHODOLOGY. THEY HAVE NOT MET THE DEMANDING REQUIREMENTS FOR RULE 23(B)(3), AND THIS MOTION FOR CLASS CERTIFICATION SHOULD

BE DENIED.

THANK YOU.

THE COURT: OKAY. THANK YOU VERY MUCH, MISS LEE.

WE'RE NOW READY TO PROCEED WITH OUR EXPERT. WHERE IS HE?

MR. LEB SOCK: DR. MANGUM, PLEASE COME ON UP.

GOOD MORNING AGAIN, YOUR HONOR. CHRIS LEB SOCK FROM THE HAUSFELD FIRM FOR THE DIRECT PURCHASER PLAINTIFFS, AND WE'RE CALLING DR. RUSSELL W. MANGUM, III.

THE COURT: OKAY. THANK YOU.

THE DEPUTY CLERK: SIR, PLEASE RAISE RIGHT HAND.

(WITNESS SWORN.)

THE WITNESS: I DO.

THE DEPUTY CLERK: THANK YOU. HAVE A SEAT OVER HERE.

STATE YOUR FULL NAME FOR THE RECORD AND SPELL YOUR LAST NAME SLOWLY.

THE WITNESS: RUSSELL WALKER MANGUM, III. THAT'S SPELLED R-U-S-S-E-L-L, W-A-L-K-E-R, M-A-N-G-U-M, AND I USUALLY USE THREE CAPITAL I'S TO MAKE THE THIRD.

THE COURT: I'M GOING TO ASK YOU BOTH TO TAKE THE EXAMINATION SLOWLY. NO RUSH ON THIS, BECAUSE THIS IS IMPORTANT AND I WOULD LIKE TO MAKE SURE WE ALL GET TO HEAR IT.

MR. LEB SOCK: SURE. AND, YOUR HONOR, IF THE COURT HAS QUESTIONS, I'M SURE YOU WILL INTERRUPT ME.

THE COURT: I CERTAINLY WILL.

MR. LEBSOCK: YOU SHOULD KNOW THAT IT'S FINE IF YOU DO THAT. OKAY?

THE COURT: OKAY. THANK YOU.

RUSSELL W. MANGUM, III, SWORN WITNESS, TESTIFIES:

DIRECT EXAMINATION

BY MR. LEBSOCK:

Q. ALL RIGHT. GOOD MORNING, DR. MANGUM.

A. GOOD MORNING.

Q. ALL RIGHT. WHY DON'T WE START WITH ANY WORK EXPERIENCE THAT YOU THINK BEARS ON YOUR TESTIMONY HERE TODAY.

A. YES. AFTER I FINISHED GRADUATE SCHOOL, MY DOCTORAL PROGRAM AT U.S.C., MY EMPLOYMENT -- I BEGAN MY FIRST EMPLOYMENT AT THE FEDERAL TRADE COMMISSION IN WASHINGTON, D. C. I WAS IN THE ANTITRUST DIVISION OF THE BUREAU OF ECONOMICS, AND MY JOB FOR A FEW YEARS WAS EVALUATING MAINLY PROPOSED MERGERS AND ACQUISITIONS, BUT EVALUATING ECONOMICALLY THE POSSIBLE EFFECTS OF ANTICOMPETITIVE ACTS. IT WAS AFTER A FEW YEARS THERE THAT I BEGAN MY PRIVATE PRACTICE ASSISTING COMPANIES OR GOVERNMENTS OR INDIVIDUALS INVOLVED IN DISPUTES LIKE THIS.

Q. AND WHAT WAS YOUR ASSIGNMENT IN THIS CASE?

A. I WAS ASKED TO EVALUATE WHETHER THE ALLEGED CARTEL'S PRICING ACTIONS HAD A COMMON IMPACT ON PURCHASES OF PACKAGED TUNA TO U. S. DIRECT PURCHASERS. I WAS ALSO ASKED TO EVALUATE IF THERE WAS A METHODOLOGY THAT WOULD ALLOW ME TO ACCURATELY

IDENTIFY THE IMPACT ON A CLASS-WIDE BASIS OF PRICING ACTIONS, THE OVERCHARGE, AND THEN TO QUANTIFY DAMAGES. THIRD, I WAS ASKED TO REVIEW AND COMMENT ON WHAT WAS EXPECTED TO BE AN OPPOSING EXPERT'S ANALYSIS, AND NOW WE KNOW THAT'S DR. JOHNSON.

Q. AND WHY DON'T YOU GIVE US AT A HIGH LEVEL, NOW, WHAT ARE YOUR OPINIONS IN THIS MATTER?

A. AT A HIGH LEVEL, I HAVE DETERMINED THAT THE ACTIONS OF THE CARTEL, THE COLLUSION, HAVE HAD A COMMON IMPACT, CLASS-WIDE IMPACT, ON THE DIRECT PURCHASERS OF PACKAGED TUNA PRODUCTS IN THE U. S. I'VE ALSO IDENTIFIED A RELIABLE METHODOLOGY TO QUANTIFY THAT IMPACT ON A CLASS-WIDE BASIS AND TO CALCULATE DAMAGES.

Q. ALL RIGHT. AND SO WHY DON'T YOU TELL US, WHAT DID YOU DO TO EDUCATE YOURSELF ABOUT THE TUNA MARKET WHEN YOU WERE RETAINED IN THIS MATTER?

A. I REVIEWED QUITE A BIT OF INFORMATION. I WAS FAMILIAR GENERALLY BEFORE THIS CASE WITH SOME OF THE ECONOMIC LITERATURE INVOLVING COLLUSION AND ANTITRUST ACTIONS, BUT I REVIEWED ADDITIONAL LITERATURE IN THE CASE. SO I DID THAT. I ALSO LOOKED AT DOCUMENTS AND MATERIALS ABOUT THE INDUSTRY, THE INDUSTRY REPORTS. I LOOKED AT DEPOSITIONS OF BOTH CLASS PURCHASER REPRESENTATIVES AS WELL AS DEFENDANTS. I LOOKED AT EXPERT REPORTS AND THE DEPOSITIONS OF THE EXPERTS IN THIS CASE. I LOOKED AT QUITE A BIT OF DOCUMENTS PRODUCED BY THE DEFENDANTS IN THE CASE. THIS INCLUDES PRICE LISTS. IT INCLUDES MARKETING

REPORTS, BUSINESS REPORTS. IT INCLUDES INFORMATION, FINANCIAL INFORMATION ON SALES, DISCOUNTS, ETC. ALSO, A SET OF VERY LARGE ELECTRONIC DATABASES ON ALL OF THE PRICING AND FINANCIAL INFORMATION.

Q. HAVE YOU LOOKED AT ANY PUBLICLY AVAILABLE DATA?

A. I HAVE. AS PART OF MY ANALYSIS, I'VE ALSO USED -- SO I NEEDED TO FIND SOURCES FOR INFORMATION MEASURING CONSUMER DEMAND, THINGS LIKE THAT, INCOME, PURCHASES OF PACKAGED GOODS. I FOUND THINGS LIKE THAT FROM GOVERNMENT SOURCES, TYPICALLY AT THE U. S. BUREAU OF LABOR STATISTICS OR THE DEPARTMENT OF AGRICULTURE. I WANTED TO IDENTIFY ALSO INFORMATION ON COST SERIES, VARIOUS COSTS THAT I WANTED TO CONSIDER IN MY MODELING. THOSE ALSO WERE FOUND FROM THIRD-PARTY SOURCES.

Q. YOU MENTIONED COSTS. ARE THEY IMPORTANT WHEN YOU'RE CONSIDERING WHETHER THERE'S AN IMPACT ASSOCIATED WITH CARTEL BEHAVIOR?

A. OF COURSE. YES. ECONOMISTS RECOGNIZE COSTS ARE VERY IMPORTANT FOR THINKING ABOUT WHAT'S HAPPENING IN THE MARKETPLACE. PRICES, QUANTITIES, ETC. SO I WANTED TO INVESTIGATE COST THOROUGHLY.

Q. SO DID YOU LOOK IN PARTICULAR AT FISH COSTS IN THIS CASE?

A. I DID. I FOUND MARKET PRICES OF WHAT THE PRICES OF FISH HAS BEEN AND THE FISH USED IN PACKAGED TUNA PRODUCTS, LIKE IN THIS CASE, AND I FOUND INFORMATION ON THAT FROM THE DEFENDANTS, ACTUALLY, IS WHERE I GOT THAT INFORMATION, ALTHOUGH IT'S MY

UNDERSTANDING THAT THEY RECEIVED THAT FROM OTHER THIRD PARTIES, BUT IT WAS IN THE PRODUCTION OF THE DEFENDANTS.

Q. I SEE. ALL RIGHT. SO, BASED ON YOUR REVIEW, WHAT ARE THE FEATURES OF THE TUNA MARKET THAT ARE IMPORTANT FOR YOU TO RENDER AN OPINION IN THIS CASE?

A. THE PRODUCTS THEMSELVES -- MANY OF US MIGHT HAVE BEEN FAMILIAR WITH THIS EVEN BEFORE THIS CASE, BUT PACKAGED TUNA COMES, OF COURSE, IN CANS MOST PREDOMINANTLY. OVER THE PAST DECADE OR TWO, PACKAGES. SO THERE'S TWO WAYS TO DELIVER IT. THERE ARE VARIOUS PACKAGES, FROM SMALL, MEDIUM SERVINGS, TO LARGER SIZES, BUT ALSO THE TYPE OF TUNA, LIGHT OR WHITE MEAT. YOU MIGHT BE FAMILIAR WITH THAT. ALSO, IS IT PACKAGES OF CHUNK, OR IS IT SOLID WHITE? TWO DIFFERENT PRODUCTS. YOU CAN ALSO BUY TUNA IN WATER VS. TUNA IN OIL. WE CALL THAT THE MEDIUM. THERE'S DIFFERENT WAYS. SO, ALTHOUGH THERE ARE THESE DIFFERENCES, WHICH IS IMPORTANT TO KNOW THIS, THOSE ARE ALL AVAILABLE FROM ALL THREE DEFENDANTS. SO THAT'S IMPORTANT BECAUSE CUSTOMERS, WHEN THEY'RE THINKING ABOUT WHAT THEY WANT TO PURCHASE, THEY DON'T HAVE TO CHOOSE ONE PRODUCER OR ANOTHER. THEY CAN GET IT FROM MANY DIFFERENT PRODUCERS.

Q. DID YOU LOOK AT THE QUESTION ABOUT WHETHER IT WAS IMPORTANT TO LOOK AT DEFENDANT-BRANDED TUNA VS. PRIVATE-LABEL TUNA, FOR EXAMPLE?

A. I DID. I DID. THERE IS AN AMOUNT OF WHAT WE CALL PRIVATE-LABEL TUNA IN THIS INDUSTRY, AND IT CAN MEAN A COUPLE

DIFFERENT THINGS, DIFFERENT THAN SOME PEOPLE MAY USE PRIVATE LABEL. IT CAN BE ANOTHER LABEL THAT'S ACTUALLY SOLD BY THE DEFENDANTS, AND I TALK ABOUT QUITE A FEW OF THOSE IN MY REPORT. SO IT'S PRIVATE, BUT IT'S THE DEFENDANT'S OWN PRODUCTS. THERE'S ALSO PRIVATE LABEL WHERE A COMPANY LIKE A WAL-MART, OR LIKE A COSTCO, OR SOMEONE LIKE THAT MIGHT WANT TO CREATE THEIR BRAND, BUT THEY STILL GET THAT TUNA FROM THE DEFENDANTS IN THIS CASE. SO THAT'S ANOTHER CONSIDERATION OF PRIVATE LABEL. I FOUND THAT ABOUT 80 PERCENT OF THE SALES IN THIS CASE COME FROM THE NAMED PRODUCTS OF CHICKEN OF THE SEA, BUMBLE BEE, AND STARKIST, BUT ABOUT ANOTHER TEN OR 15 PERCENT IS THIS PRIVATE LABEL, WHICH IS A MIX OF THE ACTUAL PRODUCTS SOLD BY THE DEFENDANTS OR MADE FOR THIRD PARTIES BY THE DEFENDANTS.

Q. OKAY. AND JUST TO STOP FOR A SECOND. DID YOU PREPARE SOME SLIDES TODAY?

A. I DID.

Q. ALL RIGHT.

MR. LEB SOCK: AND I BELIEVE THE COURT HAS THOSE, AND IF THE COURT IS INTERESTED IN FOLLOWING ALONG ON THE SLIDE DECK. IT'S IN THE DIRECT PURCHASER PLAINTIFFS BINDER. I DON'T ACTUALLY HAVE IT IN FRONT OF ME, BUT THERE'S A SLIDE DECK IN IT THAT GIVES THAT.

THE COURT: I HAVE IT.

MR. LEB SOCK: OKAY.

THE COURT: THANK YOU.

MR. LEBSOCK: IN THE EVENT THE COURT IS INTERESTED.

THE COURT: OKAY. I'VE GOT IT.

MR. LEBSOCK: ALL RIGHT. WE'RE ON PAGE FOUR OF THE SLIDE DECK.

BY MR. LEBSOCK:

Q. ALL RIGHT. SO IS IT YOUR TESTIMONY OR IS IT YOUR CONCLUSION THAT ALL OR NEARLY ALL OF THE DIRECT PURCHASER CLASS WAS IMPACTED BY THE CONSPIRACY IN THIS CASE?

A. YES, IT IS.

Q. ALL RIGHT. AND WHAT DID YOU BASE THAT ON?

A. THERE WERE MANY COMPONENTS TO MY ANALYSIS. I BEGAN, OR AT LEAST I DID BEGIN SPEAKING TODAY ABOUT THE NON-EMPIRICAL WORK. SO, BEFORE I TALK ABOUT THE STATISTICAL, I CAN TALK ABOUT LOOKING AT OTHER EVIDENCE IN THE CASE WHICH INFORMED ME ABOUT THAT QUESTION.

Q. ALL RIGHT. DID YOU PREPARE A SLIDE ON THAT?

A. YES, SLIDE FIVE.

Q. ALL RIGHT. WHY DON'T YOU TELL US GENERALLY, WHAT IS THIS NON-EMPIRICAL WORK THAT YOU DID?

A. YES. ON THIS SLIDE, IT'S ACTUALLY THE FIRST THREE BULLET POINTS ARE NON-EMPIRICAL. SO I FOUND IT IMPORTANT THAT WE HAVE GUILTY PLEAS IN THIS CASE, THE FACT THAT WE DO AND WHAT THEY SAY AND WHAT INFORMATION IS FOUND IN THOSE GUILTY PLEAS. FOR EXAMPLE, THEY IDENTIFY A TIME PERIOD THAT I FOUND USEFUL. THE LENGTH OF THE TIME PERIOD IS HELPFUL. IT'S A NUMBER OF YEARS.

SO, FOR EXAMPLE, MAYBE IT BEGAN, BUT IT DIDN'T WORK. CERTAIN PARTIES DECIDED TO STOP BEING INVOLVED. THIS HAPPENED FOR YEARS, SO IT WAS GOING ON FOR A WHILE. SOMETHING WAS WORKING TO CONTINUE. ALSO, IN THE GUILTY PLEAS, I'M AWARE OF THERE'S A REFERENCE TO IT WASN'T AIMED AT CERTAIN CUSTOMERS OR CERTAIN CHANNELS OF COMMERCE. THERE'S ALSO REFERENCE TO THE PACKAGED TUNA BROADLY. I ALSO FOUND IT HELPFUL TO SEE THAT IT WAS CLEAR THAT THE PARTIES ENTERED INTO AGREEMENTS TO FIX, RAISE AND MAINTAIN PRICES, BUT THEN ALSO SAID THEY USED THE AGREEMENTS TO THEN GO AND ENTER INTO NEGOTIATIONS WITH CUSTOMERS. SO IT'S GETTING MORE DETAILED ABOUT WHAT THESE COLLUSIVE AGREEMENTS WERE LIKE.

Q. SO I SEE THE SECOND BULLET POINT, NATURE OF THE PRODUCTS AND MARKET DYNAMICS. WHAT DO YOU MEAN TO CONVEY BY THAT?

A. A COUPLE THINGS. ONE, I MENTIONED A LITTLE BIT BEFORE THAT, ALTHOUGH THERE ARE MANY DIFFERENT TYPES OF PRODUCTS YOU CAN BUY IF YOU'RE BUYING PACKAGED TUNA, THEY'RE SIMILAR ACROSS, THE SIZE, IF IT'S CANNED, POUCHED, OR WATER OR OIL. SO CUSTOMERS DON'T HAVE TO CHOOSE ONE DEFENDANT OR ANOTHER. IF THEY WANT IT, THEY CAN CHOOSE BASED ON PRICE, BUT ALSO THE PRODUCTS IN THIS INDUSTRY ARE RELATIVELY SIMPLE IN THIS INSTANCE. IT'S TUNA. ALL RIGHT, IT MAKES UP THE VAST MAJORITY OF THE COST OF THE PRODUCT THAT WE'LL TALK ABOUT IN A LITTLE WHILE, BUT THE DEFENDANTS IN THIS CASE ARE GOING TO BE FACING THE SAME MARKET DYNAMICS IN THE SENSE OF WHAT THEY'RE LOOKING

TO BUY. SO WHAT THEIR COST WILL BE FOR A CAN OR A POUCH. SO THERE'S A LOT OF SIMILARITY IN THAT YOU'LL NOT FIND ANY REASONS TO BELIEVE THERE ARE LARGE DIFFERENCES IN HOW THE DEFENDANTS SHOULD BE INTERACTING IN THIS BUSINESS FROM A PURE CREATION/PRODUCTION SIDE.

Q. DID YOU SEE ANY RECENT TESTIMONY, AND WHEN I SAY RECENT, I MEAN AFTER THE BRIEFING ON CLASS CERTIFICATION, THAT INFORMED YOU ABOUT THIS CONCEPT OF MARKET DYNAMICS?

A. I DID. MR. WHITE FROM CHICKEN OF THE SEA, THERE WAS A DEPOSITION IN DECEMBER.

Q. ALL RIGHT.

MR. LEBSOCK: AND, YOUR HONOR, THERE'S AN EXCERPT OF THAT TRANSCRIPT. I THINK IT'S EXHIBIT 3 IN THAT BINDER.

BY MR. LEBSOCK:

Q. IS THERE ANYTHING IN PARTICULAR ABOUT MR. WHITE'S TESTIMONY THAT YOU'D LIKE TO EMPHASIZE?

A. YES. I WANT TO POINT TO A PART ON PAGE 287. HE WAS BEING ASKED ABOUT PRICES, SIMILARITY OF PRICES ACROSS THE DEFENDANTS. I'M GOING TO READ JUST A LITTLE BIT. IT'S AT LINE 22 ON PAGE 287. WITH REGARD TO THE PRICING, I'LL START, IT SAYS, THE PRICING WOULD ALWAYS, IT WOULD BE CLOSE BECAUSE WE'RE ALL FACED WITH REMARKABLE DYNAMICS WITH WHAT IS GOING ON WITH THE FISH, THE FISH PRICES. SO YES. SO THE YES WAS ABOUT THE PRICES BEING SIMILAR. IT'S ANOTHER REFERENCE THAT THIS IS ONE OF THE DEFENDANTS SAYING THAT ALL THE COMPANIES HAVE THESE DYNAMICS

THEY FACE.

Q. ALL RIGHT. IS THERE ANYTHING ABOUT NATIONAL PRICE LISTS THAT IS INTERESTING TO YOU IN TERMS OF COMING TO YOUR CONCLUSIONS ABOUT COMMON IMPACT?

A. YES. ALTHOUGH THE PRODUCTS THAT ARE AVAILABLE, ALL THE DEFENDANTS HAVE NATIONAL PRICE LISTS THAT LIST ALL THOSE PRODUCTS AND LIST ALL THE PRICES FOR THE DIFFERENT PRODUCTS. THIS IS AVAILABLE. THIS IS AT LEAST INITIALLY SOMETHING THAT'S PUT OUT FOR ALL CUSTOMERS, ALL REGIONS, ETC., AND WHEN PRICES ARE CHANGED, THE WHOLE PRICE LIST CHANGES. SO THIS FACILITATES, AT LEAST THE COMPANIES THAT ARE INVOLVED IN A CARTEL, HOW THEY'RE GOING TO COMMUNICATE WHAT THEY CAN SEE ABOUT EACH OTHER AND CHANGING ALL THE PRICES TOGETHER. SO THAT WAS IMPORTANT FOR ME IN THIS SITUATION, BUT IT ALSO WAS HELPFUL THAT THE EVIDENCE I'VE SEEN THAT THERE ARE NEGOTIATIONS. INDIVIDUAL COMPANIES INTERACT WITH THE DEFENDANTS, BUT THOSE NEGOTIATIONS ARE BASED ON THESE PRICE LISTS. AS I MENTIONED A WHILE AGO, IT WAS AFTER THE CARTEL'S AGREEMENT THAT THEN THE PARTIES ENTERED INTO THOSE NEGOTIATIONS USING THE AGREEMENT, AND SO PRODUCING NEGOTIATIONS ACROSS CUSTOMERS FOR THE PURCHASE PRICES.

Q. DID YOU SEE ANY EVIDENCE IN THE RECORD THAT CONSTRAINED THE RANGE IN WHICH THESE NEGOTIATIONS AT THE PRICE LIST COULD OCCUR?

A. YES. THERE ARE THE PRICES, AS I MENTIONED, BUT THERE'S A

REFERENCE TO GUIDELINES THAT THE PARTIES MENTIONED THAT, ALTHOUGH NEGOTIATIONS COULD HAPPEN, THERE ARE GUIDELINES ABOUT TO WHAT EXTENT THEY CAN NEGOTIATE. THERE'S EVEN A REFERENCE THAT THIS WAS REFERRED TO AS THE SAND BOX, I THINK THE SAND BOX, IN DEALING WITH DIFFERENT CUSTOMERS.

Q. THAT REFERENCE TO THE SAND BOX, WAS THAT IN MIKE WHITE'S DEPOSITION?

A. YES, I BELIEVE SO.

Q. ALL RIGHT. OKAY. SO I THINK -- WELL, LET ME BE CLEAR NOW. YOU'RE NOT SAYING THAT EVERY CUSTOMER PAID THE SAME PRICE FOR TUNA FISH OVER THE CLASS PERIOD, ARE YOU?

A. NO. I MEAN, THERE ARE DIFFERENT PRODUCTS, SO THERE ARE DIFFERENT PRICE LISTS. BUT EVEN LOOKING AT THE SAME PRODUCTS, YOU SEE IN THE DATA THAT THERE ARE DIFFERENT PRICES FOR DIFFERENT CUSTOMERS.

Q. WHAT'S THE IMPLICATION AS IT RELATES TO THE QUESTION OF COMMON IMPACT?

A. WELL, THIS IS DESCRIBED EVEN IN THE CONSPIRACY PERIOD. IT'S A PART OF THE MARKET PRICE. SO YOU SEE DIFFERENT NEGOTIATIONS AND CUSTOMERS WILL NEGOTIATE. SO THE FACT THAT WE SEE IT IN THE CONSPIRACY PERIOD ISN'T REMARKABLE. IT'S SOMETHING YOU WOULD EXPECT BECAUSE IT'S A BENCHMARK PERIOD. SO IT ISN'T ANY KIND OF A RED FLAG WHEN YOU SEE THAT. BUT REMEMBER, IF YOU'RE NEGOTIATING OFF THE PRICE LIST, A COMPANY MIGHT FEEL PRETTY GOOD ABOUT IT. I GOT A DISCOUNT. BUT THAT

WAS THE BENCHMARK. IF YOU'RE GETTING THAT PERCENT OFF A RAISED PRICE LIST, YOU MIGHT FEEL GOOD, BUT YOU'RE STILL AFFECTED BY THE PRICE LIST.

Q. CAN YOU GIVE US AN EXAMPLE?

A. YES. LET'S SAY THERE'S A CERTAIN PRODUCT THAT'S SELLING FOR \$6 AND ONE COMPANY IS PAYING THE LIST PRICE, AND YOU'VE GOT SOMEONE ELSE THAT WAS ABLE TO NEGOTIATE A TEN-PERCENT DISCOUNT. SO, WHILE ONE PURCHASER PAID \$6, ANOTHER PURCHASER MIGHT BE PAYING \$5.40. LET'S SAY THERE'S A CARTEL. THAT \$6 PRICE MOVES TO \$7. WELL, THE \$7 PRICE, THAT CUSTOMER WHO WAS PAYING LIST PRICE IS NOW PAYING SEVEN. BUT IF YOU HAVE ANOTHER CUSTOMER THAT SAYS, WELL, I NEGOTIATE SEPARATELY; I COME TO THE PRODUCERS AND I GET THIS TEN-PERCENT REDUCTION, THAT'S TRUE, BUT THAT'S 30 PERCENT OFF SEVEN. IT'S STILL HIGHER THAN WHAT THEY WERE PAYING BEFORE. SO THE FACT THAT YOU'VE GOT THESE INDIVIDUAL NEGOTIATIONS DOESN'T CHANGE THE FACT THAT THE CUSTOMERS WERE BOTH IMPACTED.

Q. WHAT'S THE CONCEPT OF A RISING TIDE IN A CONSPIRACY THAT RAISES ALL BOATS?

A. I THINK IT'S A PHRASE THAT A RISING TIDE FLOATS ALL BOATS. YOU CAN HAVE A CATAMARAN THAT SITS AT THE VERY TOP OF THE WATER AND A VERY LARGE FREIGHTER THAT SITS VERY LOW, AND IF THE TIDE GOES UP, RIGHT, THE FREIGHTER WON'T GO UP, THEY'RE SO DIFFERENT THAN A CATAMARAN, THE FREIGHTER GOES UP JUST LIKE THE CATAMARAN DID.

Q. SO I UNDERSTAND YOU ALSO DID SOME PRICE CORRELATIONS. IS THAT RIGHT?

A. I DID.

Q. ALL RIGHT. WHY DON'T YOU TELL THE COURT WHAT YOU DID WITH RESPECT TO DOING PRICE CORRELATIONS?

A. SURE. I'D LIKE TO BREAK IT INTO TWO PARTS. FIRST, WHY I DID IT, AND I'LL DETAIL ABOUT WHY I DID IT. WITH THE INFORMATION WE DISCUSSED SO FAR ABOUT THE GUILTY PLEAS AND ABOUT THINKING ABOUT THE SIMILARITY OF PRODUCTS AND SIMILAR MARKET DYNAMICS AND LOOKING AT THE PRICE LISTS AND THESE GUIDELINES, I ALREADY HAVE AN EXPECTATION, WELL, THIS LOOKS LIKE IT WILL AFFECT ALL CUSTOMERS, AFFECT ALL PRODUCTS, BUT I WANTED TO LOOK, AND IF IT IS TRUE, I WOULD EXPECT TO SEE THAT PRICE LISTS FOR DIFFERENT PRODUCTS OR DIFFERENT, SOLD FROM DIFFERENT DEFENDANTS OR DIFFERENT CUSTOMER TYPES, YOU WOULD STILL SEE THE PRICES MOVING TOGETHER. IF ONE GOES UP, THE OTHER ONE GOES UP. WHEN ONE GOES DOWN, THE OTHER GOES DOWN. SO I WANTED TO CHECK THIS. THIS WASN'T PROOF. IT WAS REALLY A RESULT OF MY FIRST EVALUATION OF THE FACTS IN THE INDUSTRY, A HYPOTHESIS AND BELIEF, AND SO I DID RUN CORRELATIONS, QUITE A FEW OF THEM.

NOW, LET ME EXPLAIN WHAT CORRELATION IS. IT'S A MATHEMATICAL PROCESS, AND CORRELATION COEFFICIENT IS WHAT IT'S CALLED, AND THE HIGHEST VALUE YOU COULD HAVE IS ONE. THAT WOULD MEAN THE TWO DIFFERENT PRICES MOVED PERFECTLY TOGETHER.

NOW, YOU COULD GET AS LOW AS A VALUE OF NEGATIVE ONE, WHICH WOULD MEAN IT WOULD MOVE PERFECTLY IN THE OPPOSITE DIRECTION. SO WHEN YOU LOOK AT CORRELATION ANALYSIS, IF YOU THINK TWO PRICES MOVE TOGETHER, YOU WOULD EXPECT A POSITIVE, NOT A NEGATIVE. BUT THEN YOU LOOK AT HOW HIGH. I FOUND MANY OF THEM, OR NOT MANY OF THEM, BUT VERY HIGH CORRELATIONS IN ALMOST ALL INSTANCES IN .9, THE 90-PERCENT RANGE, THE LOWEST IN THE MID-EIGHTIES.

SO I DID THIS ACROSS, FOR EXAMPLE. IT'S CANNED AND POUCHES. FOR THOSE TWO PRODUCTS, THE PRICES MOVE TOGETHER. WHAT ABOUT LOOKING AT STARKIST VS. CHICKEN OF THE SEA OR BUMBLE BEE? THEY MOVE TOGETHER. WHAT ABOUT LOOKING AT CUSTOMER TYPE, OR LIGHT OR WHITE? I STARTED WITH THE THEORY THAT I COULD SEE THAT PACKAGES ARE DIFFERENT. MAYBE THERE COULD BE DIFFERENT PRICE EFFECTS, RIGHT? BUT I HAD A REASON TO CHECK. SO I RAN THE CORRELATION AND IT APPEARED THEY WORKED TOGETHER AND A REASON TO THINK MAYBE CERTAIN CUSTOMER TYPES, MAYBE THERE'S BARGAINING POWER OR SOMETHING THAT CHANGES THE WAY IT IMPACTS, OR AT LEAST THERE'S AN IDEA AS TO WHY. SO I WANTED TO RUN THAT.

I ALSO FOUND HIGH CORRELATION ACROSS DIFFERENT CUSTOMER TYPES. MAYBE THE DEFENDANTS DO SOMETHING, RIGHT? I'VE HEARD REFERENCES TO, WELL, A DEFENDANT DOES A THING IN A CERTAIN WAY. FROM WHAT I'VE SEEN ANYWAY, THEY MAKE THE SAME BASIC PRODUCTS, BUT I HAD AN IDEA WHY THEY DID THIS. I RAN THE CORRELATION.

IT'S STILL VERY HIGH CORRELATION ACROSS ALL THE DEFENDANTS.

Q. CAN YOU TICK OFF FOR US, THEN, THE VARIOUS DIFFERENT WAYS IN WHICH YOU RAN PRICE CORRELATIONS, MEANING BY CUSTOMER TYPE, FISH TYPE, AND THAT SORT OF THING?

A. CORRECT. I RAN CANNED VS. POUCHED. I RAN LIGHT-MEAT VS. WHITE-MEAT PRODUCTS. AND BY THE WAY, WHEN I TALK ABOUT LIGHT MEAT VS. WHITE MEAT, IT'S NOT JUST ONE PRODUCT, WHITE VS. LIGHT. I LOOKED AT A LARGE-SIZED WHITE TO A SMALL-SIZED LIGHT. SO I WANTED TO LOOK AT VERY DIFFERENT DIMENSIONS. I ALSO LOOKED AT THE DIFFERENT -- I MENTIONED THE CUSTOMER-TYPE CATEGORIES, RETAIL OR MASS-MERCHANT, AND THEN I ALSO LOOKED TO SEE, WELL, WHAT ABOUT COMPARING BUMBLE BEE'S PRICES TO STARKIST'S? WHAT ABOUT BUMBLE BEE'S PRICES TO CHICKEN OF THE SEA? AND WHAT ABOUT CHICKEN OF THE SEA PRICES TO STARKIST? THOSE THREE. SO ALL OF THOSE I RAN.

Q. SO I'D LIKE TO DIVERT ONE SECOND. WITH RESPECT TO THE CUSTOMER TYPES, MISS LEE TALKED A LITTLE BIT ABOUT WAL-MART BEING ITS ONLY CUSTOMER TYPE A LITTLE WHILE AGO. HOW DID YOU COME UP WITH THESE VARIOUS CUSTOMER TYPES THAT YOU ANALYZED?

A. I DIDN'T. THE DEFENDANTS DID.

Q. I SEE.

A. SO I'VE USED HOW THE DEFENDANTS HAVE DESCRIBED THE PURCHASERS, THEIR CUSTOMERS, AND WAL-MART IS, MOST OF US REALIZE, A BIT OF A DIFFERENT ANIMAL. THEY CONSTITUTE OVER 20 PERCENT OF THE TWO PURCHASES. SO THEY'RE FAR AND AWAY THE

BIGGEST PURCHASER. I THINK THAT'S WHY THE DEFENDANTS CONSIDER THEM A CUSTOMER TYPE. IT'S A CUSTOMER I.D., BUT IT'S A CUSTOMER TYPE BECAUSE OF THEIR SITUATION IN THE INDUSTRY.

Q. ALL RIGHT. SO THE CATEGORIZATION THAT YOU USED, THEN, WAS ACTUALLY GENERATED BY THE DEFENDANTS IN THE NORMAL COURSE OF THEIR BUSINESS. IS THAT RIGHT?

A. THAT IS CORRECT.

Q. OKAY. SO IF WE WERE TO STOP RIGHT HERE, WOULD YOU HAVE SUFFICIENT INFORMATION TO COME TO A CONCLUSION THAT ALL OR NEARLY ALL OF THE CLASS, THE DIRECT PURCHASER CLASS, WAS IMPACTED BY THE CONSPIRACY?

A. WELL, FIRST, I DIDN'T STOP HERE. I MEAN, I HAVE REGRESSION ANALYSIS. THERE ARE MANY THINGS I'VE ALSO TALKED ABOUT, BUT I THINK IF YOU WERE TO IMAGINE A WORLD WHERE I HAVE TO SAY REGRESSION DOESN'T EXIST OR SOMETHING PRECLUDED SOMEONE FROM DOING THAT, WHAT I HAVE, I BELIEVE, WOULD FORM A HIGH EXPECTATION AND BELIEF THAT THE IMPACT WOULD BE COMMON TO ALL PURCHASERS.

Q. SO IT SOUNDS LIKE YOU DID SOMETHING ELSE.

A. I DID.

Q. WHAT IS IT THAT YOU DID?

A. I PERFORMED SOMETHING CALLED REGRESSION ANALYSIS. MORE FORMALLY, MULTIPLE REGRESSION ANALYSIS.

Q. AND DID YOU PREPARE A SLIDE TO HELP US START TO UNDERSTAND WHAT REGRESSION ANALYSIS IS?

A. I DID.

Q. IS THAT SLIDE SIX, SIR?

A. YES.

Q. OKAY. WHY DON'T YOU TELL US GENERALLY WHAT REGRESSION ANALYSIS IS DESIGNED TO DO AND HOW ECONOMISTS USE IT?

A. REGRESSION ANALYSIS IS A MATHEMATICAL PROCEDURE. IT'S A STATISTICAL PROCEDURE USED BY ECONOMISTS, BUT, QUITE FRANKLY, USED BY SOCIAL SCIENTISTS AND OTHER SCIENTISTS COMMONLY, AND IT'S USED AS PART OF THE SCIENTIFIC PROCESS. SO IT'S NOT, STANDING ON ITS OWN, JUST A MATH CALCULATION, BUT IT STARTS WITH, WHEN I THINK OF A SCIENTIFIC METHOD, I THINK OBSERVING THE WORLD, FORMING EXPECTATIONS, COMING UP WITH A HYPOTHESIS AND THEN TESTING THEM. YOU CAN TEST THE DATA.

SO YOU CAN THINK ABOUT ECONOMIC THEORIES, ECONOMIC CONCEPTS, BUT ANOTHER BRANCH OF THE STUDY OF ECONOMICS IS CALLED EMPIRICAL WORK, WHICH MEANS DEALING WITH THOSE THEORIES AND USING DATA. REGRESSION ANALYSIS FITS IN THIS DATA -- THIS CATEGORY, RATHER -- AND IT'S ALMOST ALWAYS, IF NOT ALWAYS, IT FOCUSES ON A QUESTION, AN ECONOMIC QUESTION ABOUT AN ECONOMIC FACTOR. IN THIS CASE, OUR QUESTION IS: WHAT CAUSES CHANGES IN PRICE?

SO YOU MIGHT START AND SAY, CAN ECONOMICS HELP US? AND SO REGRESSION ANALYSIS WOULD SAY, WELL, OKAY, SO YOU WONDER, WE SEE DIFFERENT PRICE LEVELS OVER TIME AND ACROSS PRODUCTS. WHAT CAUSES THAT? DO OTHER THINGS CAUSE IT? AN ECONOMIST WOULD USE

ECONOMIC THEORY AND LEARN ABOUT THE INDUSTRY AND SAY, YES, WE THINK ACTUALLY OTHER THINGS BECAUSE THEY CHANGE, THEY AFFECT THE PRICE. SO IF YOU SEE IN A DATA SET, FOR EXAMPLE, LIKE THE ONES I HAVE, DIFFERENCES IN PRICE, YOU CAN ASK, WHY? WHAT OTHER FACTORS CAUSE THAT? AND REGRESSION ANALYSIS ALLOWS YOU TO ADD DATA ON THOSE OTHER FACTORS AND THEN ASK MATHEMATICALLY, WELL, WHICH DID AFFECT THE PRICE, AND WHAT MAGNITUDE? REGRESSION ANALYSIS ALSO GIVES YOU RESULTS AUTOMATICALLY. WHEN YOU RUN IT, IT HELPS YOU ASSESS THE RELIABILITY, OR HOW CERTAIN ARE YOUR CONCLUSIONS.

Q. SO WHY DON'T YOU EXPLAIN TO US THE VISUAL ON PAGE SIX? WHAT ARE YOU TRYING TO CONVEY TO THE COURT HERE?

A. SO THE VISUAL ON SIX SIMPLY SHOWS THAT, KIND OF FOCUSING ON THE QUESTION OF PRICE. BY THE WAY, IN THE LANGUAGE OF THE REGRESSION MODEL, WE WOULD CALL PRICE THE DEPENDENT VARIABLE IN THE SENSE THAT IT DEPENDS ON OTHER THINGS. WE CALL THE OTHER VARIABLES THE INDEPENDENT VARIABLES. SO I'VE GOT A BUNCH OF BLUE CIRCLES WHICH ROUGHLY REPRESENT HERE INDEPENDENT VARIABLES, AND THROUGH THE REGRESSION ANALYSIS, WE'RE SAYING, WHAT EFFECT DID THEY HAVE ON THE DEPENDENT VARIABLES, THE PRICE? THESE ARE NOT ALL MY VARIABLES. THESE ARE IN CATEGORIES. I HAVE A COUPLE DOZEN VARIABLES, DEPENDING ON THE PARTICULAR QUESTION I RUN, BUT AT LEAST THIS IS A BIT OF A PICTURE OF THE IDEA OF REGRESSION ANALYSIS.

Q. ALL RIGHT. SO TELL US HOW YOU STRUCTURED YOUR REGRESSION

IN THIS CASE, THEN.

A. SO FAR, WHAT I SAID ABOUT REGRESSION ANALYSIS DOESN'T NECESSARILY RELATE TO A CONSPIRACY QUESTION OR CONTEXT. IT'S JUST ABOUT STUDYING ECONOMIC OUTCOMES, BUT YOU CAN USE REGRESSION ANALYSIS TO ASK A QUESTION. FOR EXAMPLE, WELL, IF WE BUILD A MODEL AND WE ASK WHAT CAUSES PRICE. WAS THERE IN EFFECT A CONSPIRACY? YOU COULD USE REGRESSION TO ASK THAT SUBSEQUENT QUESTION OR RELATED QUESTION. IT HAS TO DO WITH BUILDING IN A VARIABLE WHICH MEASURES THE EXISTENCE OF A CONSPIRACY COMPARED TO TIMES WHEN THERE WASN'T A CONSPIRACY. WE SOMETIMES CALL THIS A BENCHMARK ANALYSIS OR A BEFORE, DURING AND AFTER TYPE ANALYSIS.

I HAVE ANOTHER SLIDE. ACTUALLY, IT MIGHT HELP US MOVE FROM REGRESSION GENERALLY TO WHAT COULD BE USED IN AN ANTITRUST CARTEL CASE.

Q. IS THAT SLIDE SEVEN?

A. YES, IT IS.

Q. OKAY. WHY DON'T YOU EXPLAIN TO THE COURT WHAT YOU'RE TRYING TO CONVEY WITH SLIDE SEVEN NOW?

A. SO THIS IS A GENERAL SLIDE. IT'S NOT MEANT TO REFLECT ALL THE FACTS IN THIS CASE. I HAVE ONE SUBSEQUENT TO THIS. BUT IT'S A STYLIZED WAY THAT SAYS, WELL, HERE'S A WAY YOU MIGHT THINK OF REGRESSION TO EVALUATE THE FACT OF AN ALLEGED CONSPIRACY, AND I'VE GOT THE TWO BLUE-SHADED AREAS ON THE RIGHT AND LEFT, AND I'VE LABELED THEM THE BENCHMARK PERIODS.

SOMETIMES, WE CALL THOSE THE COMPETITIVE BENCHMARK PERIODS.

THE IDEA IS, IT'S NOT WHEN THE CONSPIRACY IS ALLEGED. SO THAT SHOULD BE BUSINESS AS USUAL. WE CAN LOOK AT THOSE PERIODS TO SEE HOW MARKETS WORK, AND THEN YOU CAN SAY, WELL, WE HAVE THIS LITTLE PERIOD, THE GRAY AREA. THAT'S WHERE WE BELIEVE MAYBE THERE'S THE EFFECT OF AN ALLEGED CONSPIRACY, AND WHAT REGRESSION CAN DO BY ADDING IN THE VARIABLE -- WE CALL IT A DUMMY VARIABLE. IN OTHER WORDS, AN INDICATOR VARIABLE. IT TURNS ON OR OFF TO HAVE THAT VARIABLE. I SHOULD SAY MORE SPECIFICALLY THE VALUE OF ONE DURING THE CONSPIRACY OR ZERO. IT'S OUTSIDE THE CONSPIRACY, AND WE CAN SAY, ASKING OUR MATHEMATICAL SOFTWARE, WAS THERE A DIFFERENCE DURING THE CONSPIRACY ON PRICES ABOVE AND BEYOND ALL THE OTHER FACTORS THAT ARE CONTROLLABLE?

IN THE DEPICTION HERE, I'VE WRITTEN IN AN EXAMPLE OF IT. THE BLUE LINE THAT'S A LITTLE BIT HIGHER THAN THE RED ONE IS JUST A VISUAL DEPICTION OF HOW PRICES WENT UP, AND SO THAT VERTICAL DIFFERENCE WE OFTEN CALL THE OVERCHARGE. WHERE THAT RED LINE FOLLOWS, AND IT WAS MEANT TO CONTINUE THAT BLUE-LINE TREND, WE CALL THAT THE BUT-FOR PRICES. WHAT WE MEAN BY THAT IS THE RESULTS FROM OUR REGRESSION WOULD HELP US IDENTIFY IF THERE WAS A PRICING EFFECT DURING THE CONSPIRACY AND WHAT MAGNITUDE. SO YOU COULD ALSO PULL THAT BACK AND SAY, WITHOUT THAT MAGNITUDE, WHAT WOULD THE BUT-FOR PRICES BE? THAT'S WHY WE HAVE THIS RED HERE FOR THE BUT-FOR PRICES.

ONE MORE ELEMENT OF THIS GRAPH I WILL EXPLAIN. THE BLUE LINE THAT WAS ELEVATED DURING THE DAMAGES PERIOD, YOU'LL SEE THAT ONCE WE MOVE OVER TO THE RIGHT-HAND SIDE, THE LIGHT-BLUE PERIOD, THE BENCHMARK PERIOD, WE SEE IT DOESN'T SHIFT DOWN IMMEDIATELY, BUT IT KIND OF SLOWLY MOVES DOWN. THAT'S JUST MEANT TO INDICATE THAT YOU WOULDN'T EXPECT AT THE END OF A CONSPIRACY. YOU WOULD HAVE AN INSTANT, RIGHT-AWAY COMPETITION WITH THE MARKET THAT WOULD MOVE THEIR COMPETITION OVER SOME TIME PERIOD.

Q. SO I THINK THAT YOU SAID THAT YOU HAVE ANOTHER VERSION OF THIS GRAPH THAT IS AT LEAST MILDLY MORE REPRESENTATIVE OF THE SPECIFIC FACTS IN THIS CASE. IS THAT TRUE?

A. YES.

Q. AND IS THAT SLIDE EIGHT?

A. YES, IT IS.

Q. ALL RIGHT. WHAT'S IMPORTANT TO YOU ON SLIDE EIGHT?

A. THERE SHOULD BE JUST TWO DIFFERENCES GENERALLY IN SLIDE EIGHT, AND I'VE GOT A LIGHT-YELLOW COLOR SECTION OF THE GRAPH AND ALSO A LIGHT GREEN. IN THE LIGHT YELLOW, I'VE LABELED IT MARKET SHOCK. REMEMBER, THE PURPOSE OF THE BENCHMARK PERIOD WAS TO BE A TIME WHEN YOU'RE ASKING YOUR REGRESSION TO GIVE YOU RESULTS ON THE AFFECTED PRICE. THE BENCHMARK IS MEANT TO BE WHEN THERE'S A BUSINESS ISSUE, THERE'S COMPETITION. THAT'S WHAT GENERALLY HAPPENS. BUT IF YOU NOTICE THERE WAS SOMETHING THAT WAS UNUSUAL, THAT WAS A SHOCK, OR SOMETHING WHERE MAINLY

YOU WOULD SAY, I DON'T WANT TO TREAT THAT AS BUSINESS AS USUAL, YOU CAN ADD ANOTHER VARIABLE IN THE REGRESSION AND SAY, WELL, LET'S MAKE SURE WE KNOW THE REGRESSION, WE UNDERSTAND SOMETHING ELSE WAS HAPPENING THERE, AND I'VE DONE THAT IN MY MODELING. THERE ARE A FEW THINGS I'LL MENTION IN A MOMENT. I CAN EXPLAIN IT WHEN I'M ON THERE. BUT THAT'S WHY I HAVE THAT LIGHT YELLOW. IT GOES FROM JULY, 2008, TO JUNE, 2010.

AND THEN ON THE RIGHT-HAND SIDE YOU CAN SEE THAT LIGHT-GREEN AREA LABELED DOJ. IT SAYS DOJ BECAUSE AT THE BEGINNING OF THAT PERIOD IS WHEN THE DOJ BEGAN ITS INVESTIGATION. SO I USED THAT AS THE END OF THE CONSPIRACY, BUT I DIDN'T WANT TO ASSUME THAT YOU HAVE, IMMEDIATELY HAVE COMPETITION AFTER THAT. SO I DIDN'T WANT TO CONSIDER THAT. IT'S A SIX-MONTH PERIOD, THE END OF JULY, 2015, FOR SIX MONTHS. I WANTED THE COMPUTER, WHEN I RAN THE REGRESSION, TO SAY, YOU KNOW, THAT STILL MAY BE A LITTLE DIFFERENT THAN BENCHMARK, BUT AFTER SIX MONTHS CONSIDER THE REST OF THE DATA COMPETITIVE BENCHMARK.

Q. ALL RIGHT. SO, AS I UNDERSTAND IT, DR. JOHNSON, THE DEFENDANTS' EXPERT, HAS SOME CRITICISMS OF YOUR DECISION TO ACCOUNT FOR THAT MARKET SHOCK PERIOD BETWEEN 2008 AND 2010. IS THAT YOUR UNDERSTANDING?

A. YES. YES, HE DOES.

Q. AND DO YOU HAVE A RESPONSE TO THAT?

A. YES, I DO, AND I'LL EXPLAIN IT A LITTLE BIT. I DID CREATE

A GRAPH ON THE NEXT SLIDE, SLIDE NINE. IT GIVES THE THREE BLUE BOXES THAT ARE THERE. ONE OF THEM IS BIGGER. I WANT TO EXPLAIN A LITTLE BIT ABOUT WHAT WAS GOING ON, AND REMEMBER THE HIGH-LEVEL QUESTION REALLY IS, WAS THIS BUSINESS AS USUAL DURING THOSE TWO YEARS? YOU WANT TO TELL THE PROGRAM, WHATEVER IS HAPPENING THERE, IT'S OKAY TO PRESUME IT SHOULD HAPPEN IN GENERAL TIMES ABOUT THE CONSPIRACY. WHAT THINGS WERE HAPPENING? IT'S GOING FOR A WHILE, RIGHT UP TO THIS POINT, THE BEGINNING OF 2008. THERE WERE UNPRECEDENTED INCREASES IN FISH COSTS. YOU SEE THIS IN THE DOCUMENTS. UNPRECEDENTED. THAT'S NOT MY WORD; IT'S THE DEFENDANTS'. SOMETHING VERY, VERY STRANGE IS HAPPENING, AND I BELIEVE THAT FED INTO SOMETHING ELSE THAT HAPPENED IN THE INDUSTRY, THAT THE SIZES OF THE PRODUCTS CHANGED. MOST OF US HAVE SEEN THIS, THAT CANS KEEP GETTING SMALLER. WELL, WE SEE THAT IN THE THREE-OUNCE -- EXCUSE ME -- IN THE FIVE-OUNCE, THE SIX-OUNCE. THE SIX-OUNCE WENT TO A FIVE-OUNCE. OTHER SIZES CHANGED. IT WASN'T THE SAME ACROSS ALL THE DEFENDANTS. AT TIMES, IT WAS A LITTLE DIFFERENT, BUT ALL OF THEM CHANGED.

BUT IT ISN'T JUST A CHANGE. WHEN I LOOKED AT THE DATA ON WHAT THE PRICE PER OUNCE WAS, IT SHOT UP DRASTICALLY. IT'S ALMOST AS IF THE INCREASE THEY CHOSE WASN'T QUITE IN LINE WITH THE PRIOR PRICE, THE OUNCES, AND SO WE SAW HUGE INCREASES. BUT THEN THE FOLLOWING MONTHS WE SAW BIG DROPS. THE DEFENDANTS ISSUED PRICE-DECREASE ANALYSES AND OTHER DISCUSSIONS ABOUT MORE

AND MORE DROPS, AND SO THIS IS GOING ON IN THIS TIME PERIOD. THIS WAS NOT BUSINESS AS USUAL. IT WAS THE MARKET TRYING TO FIND ITS FEET AGAIN BECAUSE OF THIS CHANGE.

ON TOP OF THAT, THIS IS DURING THE GREAT RECESSION. WE KNOW IT WAS THE BIGGEST ECONOMIC SHOCK SINCE THE DEPRESSION, SINCE 90 YEARS OR SO, AND WE CAN SEE LARGE CHANGES IN UNEMPLOYMENT AND INCOME AND WHAT NOT. THAT WAS ANOTHER REASON -- DO WE WANT TO SAY, LET'S ASSUME WHAT HAPPENED IN THE GREAT RECESSION IS A GENERAL, COMMON THING? IT'S ANOTHER REASON THAT WE SHOULDN'T TREAT THIS AS BENCHMARK.

BUT FINALLY, WE ALSO HAVE NOW PLEAS BY COSI THAT DURING THAT TIME PERIOD WAS ALSO A PRICE COLLUSION THAT WAS GOING ON. THAT MAY BE THE BIGGEST REASON TO SAY, WELL, WE SHOULDN'T TREAT THAT AS BUSINESS AS USUAL WHEN THERE'S SUBMISSIONS OF ACTIVITY THAT THERE WAS ALSO COLLUSION GOING ON IN THAT PERIOD AS WELL. FOR THESE REASONS, I REALLY THINK YOU CAN'T TELL THE COMPUTER THAT'S BUSINESS AS USUAL AND EXPECT TO GET RELIABLE RESULTS.

Q. AND JUST TO BE CLEAR, SIR, YOU USED THE WORD PLEA WITH RESPECT TO THAT. WELL, I DON'T KNOW IF IT WAS BUMBLE BEE OR COSI, BUT ARE YOU REFERRING TO THE COSI SUPPLEMENTAL INTERROGATORY RESPONSES?

A. CORRECT. THAT'S WHAT I MEANT TO REFER TO.

Q. AND THOSE ARE IN THE BINDER AS EXHIBIT 4. IS THAT RIGHT?

A. YES.

Q. OKAY. ALL RIGHT, SO THE BOTTOM LINE OF THAT IS THAT COSI

IS ACKNOWLEDGING THAT THERE WAS CONSPIRATORIAL CONDUCT IN THOSE YEARS, 2008 THROUGH 2010, RIGHT?

A. CORRECT.

Q. ALL RIGHT. AND THAT'S ONE OF THE REASONS WHY IT WOULD BE INAPPROPRIATE TO LABEL THAT TIME PERIOD BUSINESS AS USUAL. IS THAT RIGHT?

A. THAT'S CORRECT.

Q. ALL RIGHT.

A. AND DR. JOHNSON, HE HAS WRITTEN CRITICISMS ABOUT THIS. HE TALKED ABOUT, WELL, WHEN EXACTLY DID THE RECESSION END, AND DID I FIND DATA TO PRESUME WHEN IT ENDED? I THINK FROM THE UNEMPLOYMENT RATE IT IS PRETTY CLEAR THAT REALLY DIDN'T RETURN TO WHAT WE NORMALLY HAD UNTIL LATER IN 2010. BUT MORE GENERALLY, WE'VE GOT PLENTY OF EVIDENCE THAT DURING THIS TIME PERIOD SO MANY DIFFERENT THINGS WERE HAPPENING AND HIS SOLUTION WAS TO TREAT IT AS BUSINESS AS USUAL, TO NOT DO ANYTHING IN THAT PERIOD IN THE REPORT, THE RESULTS HE GETS. IT MAY BE A SLIGHTLY DIFFERENT TIME OF THAT PERIOD, AND I'VE LOOKED AT THAT. I'VE ENDED THAT, THAT WHAT I CALL THE SHOCK PERIOD, SIX MONTHS EARLIER. I'VE EXTENDED IT SIX MONTHS, EVEN A YEAR, AND MY OVERCHARGES THAT I'LL TALK ABOUT IN A FEW MINUTES MAY CHANGE A LITTLE BIT, BUT THEY DON'T CHANGE MY UNDERLYING CONCLUSIONS. THEY'RE STILL SUBSTANTIALLY, STATISTICALLY SIGNIFICANT OVERCHARGES. IT DOESN'T MATTER WHEN YOU DO IT, BUT THE ANSWER CANNOT BE IGNORED AND JUST TREATED AS BUSINESS AS USUAL.

Q. OKAY. AND SO DID YOU DO ANYTHING ELSE TO TEST WHETHER -- I'M SORRY. SO WHY DON'T WE MOVE ON? WE'LL GO TO THE SUBJECT OF DISCOUNTS AND PROMOTIONS. NOW, YOU MENTIONED DISCOUNTS, I THINK, A LITTLE WHILE AGO, BUT CAN YOU TELL US HOW YOU ACCOUNTED FOR THIS FEATURE OF THIS MARKET WHICH INCLUDED THE IDEA, THE CONCEPTS OF DISCOUNTING AND PROMOTIONS?

A. YES. I DID MENTION EARLIER THAT I'M AWARE THAT DIFFERENT PURCHASERS NEGOTIATE ON THE PRICES, AND WE KNOW THAT HAPPENS IN THE CONCEPT. WE ALSO SEE THAT THERE ARE DISCOUNTS OR PROMOTIONS AVAILABLE. IN DOING OUR ANALYSIS, WHAT WE WANT TO USE IS NET PRICE WHEN WE'RE TRYING TO EXPLAIN WHAT'S HAPPENING IN THE INDUSTRY, AND I HAVE LOOKED AT THE DATA THAT WAS PROVIDED BY THE DEFENDANTS ON DISCOUNTS AND PROMOTIONS, AND I PULLED THAT OUT. IN EVERY INSTANCE THAT I COULD RELIABLY, I PULLED IT OUT AND MADE THE REDUCTIONS TO PRICE SO I'M GETTING THE PROPER NET PRICE TO REFLECT THESE NEGOTIATIONS BY DIFFERENT CUSTOMERS.

Q. ALL RIGHT. WAS THERE SOME, WERE THERE SOME DATA FILES THAT YOU RECEIVED FROM THE DEFENDANTS THAT INCLUDED DISCOUNT OR PROMOTIONAL INFORMATION THAT YOU WERE NOT ABLE TO APPLY TO THE NET PRICE?

A. YES, THERE WERE. SOMETIMES, WHAT WE RECEIVED WAS LARGE AMOUNTS, BUT THERE'S NOT AN INDICATION OF WHAT PRODUCTS IT ACTUALLY REFERRED TO. SO IF THE GOAL WAS TO TAKE THOSE AMOUNTS AND TO REDUCE THEM TO GET A NET PRICE, YOU DON'T KNOW THE

PRODUCTS TO ASSIGN THEM TO, YOU'RE IN A DIFFICULT SPOT. WE PROVIDED QUESTIONS ON THIS TOPIC AND OTHERS AND WE GOT SOME ANSWERS, BUT THERE REALLY WASN'T A WAY. IN FACT, ON THIS SLIDE I HAVE ONE OF THE ANSWERS, IN THIS CASE COSI, INDICATING THAT THERE'S NOT A RELIABLE WAY. SO THERE'S A SET OF INFORMATION OF DISCOUNTS, PROMOTIONS CALLED BILL-BACKS, BUT IT'S NOT CLEAR HOW YOU WOULD TAKE THAT AND HOW YOU WOULD TURN THAT OVER, AND THAT'S WHAT WE LEARNED IN TALKING TO ONE OF THE DEFENDANTS. SO I HAVE DONE ALL THAT I COULD. DR. JOHNSON TALKS ABOUT THIS, BUT HE DOESN'T TALK ABOUT, WELL, HERE'S WHAT YOU DO. HE DOESN'T GIVE ANY SOLUTION. HE SAYS, WELL, THERE'S DISCOUNTS AND PROMOTIONS THAT ARE STILL THERE. SO THAT'S PART OF MY ANSWER, BUT I ALSO KNOW A LITTLE BIT ABOUT THESE DISCOUNTS AND PROMOTIONS WHICH ALSO GIVES ME HESITATION.

Q. AND WHAT'S THAT?

A. A COUPLE THINGS. TWO LARGE CATEGORIES. WITH ONE, I LOOK AND IT'S ABOUT SHRIMP OR CRAB, THINGS LIKE THAT, SO IT'S NOT APPROPRIATE TO USE THOSE. BUT THEN THERE'S ANOTHER CATEGORY, RELATIVELY LARGE, AND IT'S GOT A REASON CODE FOR THE PROMOTION, AND WE GOT INFORMATION ON THAT AND FOUND IT, AND IT SAYS, WELL, IT'S A CANNED RECALL IN 2013. YOU GET DATA THAT'S GOT A LOT OF THESE ISSUES. SO, OKAY, A RECALL. SO, FIRST OF ALL, THAT'S NOT REALLY A DISCOUNT. IT'S A REFUND, IF YOU WANT TO CALL IT, BUT WE SEE THOSE BILL-BACKS HAPPENING ALL THE WAY BACK TO 2004. SO I THINK IT MAY BE MISLABELED. MAYBE IT'S NOT A 2013 RECALL.

I'M NOT EVEN SURE IT'S APPROPRIATE TO DEDUCT THOSE, SETTING ASIDE HOW THEY DEDUCT IT SPECIFICALLY, BUT I'D BE GLAD TO IF I LEARN MORE INFORMATION. BUT RIGHT NOW I DON'T THINK IT'S APPROPRIATE, GIVEN WHAT WE KNOW, TO DO ANYTHING MORE WITH THOSE.

Q. ALL RIGHT. IN THE EVENT THAT YOU DON'T GET ANY MORE CLARITY FROM THE DEFENDANTS ABOUT THESE TWO DATA FILES, HOW WOULD YOU HANDLE THAT AT THE END OF THE DAY? HOW WOULD YOU TAKE -- WOULD YOU GIVE SOME CREDIT BACK TO THE DEFENDANT FOR THOSE PROMOTION DOLLARS THAT THEY PAID?

A. WELL, IN A WAY, IN CALCULATING DAMAGES FOR THE CLASS, I END UP WITH AN OVERCHARGE AMOUNT. I CAN PRODUCE THE COMMERCE. I CAN SIMPLY TAKE THOSE VALUES OUT OF THE COMMERCE AND DETERMINE DAMAGES.

Q. WOULD YOU DO THAT, THEN, AT THE END OF THE DAY IF YOU DON'T GET THE CLARITY?

A. I COULD, IF I WANTED TO BE EXTRA CAREFUL, GIVE THE BENEFIT OF THE DOUBT. I COULD DO THAT. I'M HOPING TO LEARN SOME MORE.

Q. ALL RIGHT. SO, AT THE END OF THE DAY, DOES IT, DOES THIS UNACCOUNTED-FOR DEDUCTION, THESE DEDUCTIONS, DO THEY AFFECT YOUR COMMON IMPACT OPINION AT ALL?

A. I DON'T BELIEVE THEY DO, AND I'LL SAY WHY. I'VE ACTUALLY GOT IT FOR ONE OF THE DEFENDANTS. FOR BUMBLE BEE, I HAVE A LITTLE BIT OF A WINDOW TO ASK THIS QUESTION, AND SO I'LL RESTATE THE QUESTION. IF YOU DON'T TAKE OUT THE DISCOUNTS,

DOES IT CHANGE YOUR RESULTS IN ANY WAY? AND WE HAVE BOTH A LISTING FROM THEM OF THE GROSS AND THE NET PRICES. THEY PRODUCED IT. SO I RAN MY REGRESSION FOR THEM SAYING, WHAT REALLY DO I GET IF I DO THAT? AND AGAIN, THE MODEL REACTS TO THE DATA, THE OVERCHARGES CHANGE, BUT THEY'RE STILL STATISTICALLY SIGNIFICANT. SO IT CERTAINLY WOULDN'T LEAD YOU TO BELIEVE THIS IS AN ISSUE RELATED TO CLASS CERTIFICATION.

Q. ALL RIGHT. SO WHY DON'T WE GET TO WHAT YOUR ACTUAL REGRESSION RESULTS ARE, SIR? DID YOU PREPARE A SLIDE ON THAT?

A. YES, SLIDE 11.

Q. OKAY. WHY DON'T YOU TELL US WHAT'S IMPORTANT ABOUT SLIDE 11?

A. THIS IS A SMALL TABLE. THAT REFLECTS THE ESTIMATES OF MY, WHAT I CALL MY BASE MODEL. I'LL EXPLAIN IT IN A FEW MINUTES. I ACTUALLY RAN QUITE A FEW REGRESSIONS, BUT WHAT I CALL MY BASE MODEL FOR HOW I SEE THIS INDUSTRY IS, I RAN IT AND WHAT THE REGRESSION TOLD ME WAS THAT DURING THE CONSPIRACY ABOVE AND BEYOND ALL THE OTHER FACTORS THAT I CONTROLLED FOR, THAT THERE WAS A 10.28-PERCENT DIFFERENCE IN PRICE, HIGHER PRICE, DURING THE CONSPIRACY. THAT'S WHAT'S REPORTED.

Q. BECAUSE OF THE CONSPIRACY, RIGHT?

A. CORRECT.

Q. ALL RIGHT.

A. AND THE CLASS PERIOD LISTED THERE, JUNE 1, 2011, THROUGH JULY 31ST, 2015.

Q. ALL RIGHT. AND WERE YOUR RESULTS STATISTICALLY SIGNIFICANT?

A. YES, THEY WERE.

Q. AND TELL THE COURT WHAT THAT MEANS TO AN ECONOMIST OR PEOPLE WHO ARE STATISTICIANS WHO ARE RUNNING THESE TYPES OF REGRESSION MODELS?

A. THE CONCEPT OF STATISTICAL SIGNIFICANCE WOULD MEAN, WELL, YOU HAVE A, IF YOU HAVE AN ESTIMATE OF A COEFFICIENT, AN OVERCHARGE ESTIMATE, FOR EXAMPLE, YOU CAN ALSO ASK USING OTHER OUTPUT FROM REGRESSION, HOW CERTAIN ARE YOU? ARE YOU REASONABLY CERTAIN THAT THIS RESULT SHOULD BE RELIED UPON? SO YOU COULD USE THE DATA USING THE STANDARD ERRORS AND COMPARING YOUR ESTIMATE, AND THESE DO PASS. THEY ARE STATISTICALLY SIGNIFICANT GIVEN THE TYPICAL WAY PEOPLE USING REGRESSIONS USE THAT.

Q. AND YOU SAID TYPICAL WAY. IS THERE A LEVEL OF CONFIDENCE THAT IS COMMONLY ACCEPTED BY STATISTICIANS WITH RESPECT TO THE STATISTICAL SIGNIFICANCE OF THE RESULT?

A. YES. IF A HUNDRED PERCENT IS ABSOLUTE CERTAINTY, 95 PERCENT IS THE THRESHOLD THAT'S USED, AND THAT'S WHAT I USED IN EVALUATING MY STATISTICAL RECORDS.

Q. AND DO YOU KNOW IF DR. JOHNSON ALSO AGREES THAT THE 95-PERCENT THRESHOLD IS THE RIGHT THRESHOLD?

A. YES. AT LEAST FROM HIS WORK, THAT'S WHAT HE USES AS WELL.

Q. ALL RIGHT. OKAY. SO WHAT DO YOU CONCLUDE FROM YOUR

REGRESSION RESULT ON YOUR, AS YOU CALL IT, THE BASE MODEL?

A. WELL, BEFORE I RAN THE REGRESSION MODEL, I HAD COMPLETED THE ANALYSIS I TALKED ABOUT. THIS IS ANOTHER WAY TO EVALUATE WHAT'S THE EFFECT OF THE CONSPIRACY IN A QUANTIFIABLE WAY. THAT'S ONE THING I DID. SO THIS IS MY MODEL. IT LED ME TO BELIEVE, OKAY, BASED ON AND INCORPORATING THE OTHER ANALYSIS I DID, I ALSO HAD THE IDEA OF THE MAGNITUDE. WHAT'S THE CLASS-WIDE DAMAGE? THAT'S 10.28 PERCENT. BUT I DIDN'T STOP THERE. I WENT FURTHER. I DEFINITELY CHECKED UNDER THE HOOD, SO TO SPEAK, AND ASKED SEVERAL OTHER QUESTIONS.

Q. ALL RIGHT, AND MISS LEE TALKED ABOUT THAT. SO, JUST FOR CLARITY FOR THE COURT'S PURPOSES, THIS BASE MODEL HAS ALSO BEEN CALLED A POOLED MODEL?

A. CORRECT.

Q. OKAY. SO YOU DIDN'T STOP WITH JUST THE BASE MODEL. YOU DID SOME ROBUSTNESS CHECKS. IS THAT RIGHT?

A. CORRECT.

Q. WHY DON'T YOU TELL THE COURT, THEN, WHAT YOU DID IN ADDITION TO THE BASE MODEL TO BOLSTER YOUR OPINION?

A. SO, AFTER HAVING THE RESULTS FROM MY BASE MODEL, WHAT'S VERY IMPORTANT BEFORE CONTINUING IS TO AGAIN ASK, WHAT'S THE THEORY? THIS IS WHAT MAKES SOMETHING SCIENTIFIC, BY SAYING, WHAT DO I KNOW ABOUT THE WORLD? WHAT JUSTIFICATION DO I HAVE? WHAT DO I BELIEVE IS GOING ON, AND WHAT QUESTIONS THAT LEADS ME TO. AS I DESCRIBED EARLIER, I CAN SEE THAT UNDER CERTAIN

DIMENSIONS THERE MIGHT BE SOMETHING GOING ON THAT MIGHT LEAD ME TO BELIEVE THAT MAYBE, IS THERE SOME CLASS MEMBERS THAT DON'T HAVE OVERCHARGES? MIGHT I FIND THAT? SO I CHECKED SEVERAL DIMENSIONS. SO I MENTIONED SOME OF THESE IN MY CORRELATION ANALYSIS. WHAT IF I LOOK FOR A DIFFERENT OVERCHARGE ON CANNED VS. POUCHES? I DID THAT. WHAT IF I LOOKED FOR A DIFFERENT OVERCHARGE OF WHITE MEAT VS. LIGHT MEAT? I DID THAT. WHAT IF I LOOK AT DIFFERENT CUSTOMER TYPES, RETAIL, MASS MERCHANTS? REMEMBER WAL-MART WAS A CUSTOMER AT THE TIME. I LOOKED AT THAT. I ALSO LOOKED AT, LET ME RUN THIS SEPARATELY FOR THE DEFENDANTS. DO I GET AN OVERCHARGE FOR BUMBLE BEE VS. CHICKEN OF THE SEA VS. STARKIST?

Q. AND AGAIN, THOSE CUSTOMER TYPES THAT YOU CHECKED, THOSE WERE THE CUSTOMER TYPES THAT WERE ALREADY DESIGNATED BY THE DEFENDANTS THEMSELVES IN THEIR BUSINESS RECORDS?

A. CORRECT.

Q. ALL RIGHT. YOU MENTIONED WAL-MART AS ITS OWN CUSTOMER TYPE. ARE THERE IMPLICATIONS OF THAT IN TERMS OF THIS, IN YOUR OPINION OF COMMON IMPACT?

A. I THINK THERE ARE. FOR EXAMPLE, ONE AT LEAST THEORETICAL JUSTIFICATION FOR LOOKING MORE DEEPLY WOULD BE TO SAY THERE ARE DIFFERENT CUSTOMERS THAT MAY HAVE DIFFERENT NEGOTIATING STRATEGIES. MAYBE THEY BRING MORE NEGOTIATING POWER. IF YOU WERE TO THINK THAT'S A THEORY, I DON'T THINK YOU CAN AVOID THINKING, WELL, LET ME CHECK WITH WAL-MART. IF SOMEONE HAD THE

ABILITY TO COME IN AND MAYBE THE THEORY WAS THEY WOULD HAVE BEEN ABLE TO STAND ON THEIR OWN AND DO SOMETHING TO AN OVERCHARGE. I MEAN, WAL-MART WOULD BE A GREAT EXAMPLE, BUT I WAS ABLE TO CHECK THAT, AND IT'S JUST NOT THE CASE. THEY STILL HAVE A SUBSTANTIAL, STATISTICALLY SIGNIFICANT OVERCHARGE. THAT WAS THEN AS A CUSTOMER TYPE, BUT THE WAY THE DEFENDANTS IDENTIFIED IT, IT'S ALSO A WAY TO LOOK AT THE CUSTOMER. BUT I ALSO FOUND THAT FOR OTHER TYPES OF CHANNELS, OTHER RETAIL CATEGORIES. THERE ARE DIFFERENCES. ALL RIGHT? IT'S NOT EXACTLY THE SAME, BUT I DON'T FIND, FOR EXAMPLE, THAT SOME CUSTOMER TYPES DON'T HAVE ANY ESTIMATED OVERCHARGE. SO THE THEORY THAT, WELL, MAYBE SOMETHING IS DIFFERENT ENOUGH ABOUT A CUSTOMER TYPE, OR LIKE WHITE MEAT OR LIGHT MEAT FOR THE DEFENDANT, THAT WOULD MEAN, AH, NO OVERCHARGES. THAT'S KIND OF A GAP. THAT'S SOMETHING WHERE WE DON'T FIND IMPACT. THAT'S JUST NOT THE CASE. I CHECKED ALL THESE SCENARIOS.

Q. I WOULD LIKE TO TURN YOUR ATTENTION TO SLIDE 13 IN YOUR DISK, IF YOU DON'T MIND.

A. YES.

Q. SO WHY DON'T YOU TELL US, THEN, IS THIS THE RESULTS OF ONE OF THESE ROBUSTNESS CHECKS THAT YOU DID?

A. YES. SO THIS JUST SHOWS THE ACTUAL REGRESSION RESULTS, THE OVERCHARGE RESULTS, IF I WAS TO LOOK. THE DARK GREEN ON THE FAR LEFT ON SLIDE 13 IS MY BASE MODEL. IT'S THE POOLED MODEL, MEANING IT LOOKS TOGETHER AT THE SAME TIME AT ALL THESE

DEFENDANTS. BUT THEN THE OTHER BARS ARE WHAT I DID TO CHECK THEM SEPARATELY, AND THEY'RE DIFFERENT. THE OTHER CHARGES ARE DIFFERENT. AS YOU COULD SEE IN THIS INSTANCE, THEY'RE ALSO VERY CLOSE AS FAR AS MAGNITUDE, UPPER NINES, MID-NINES, OR 11 PERCENT, SO.

Q. NOW, ALL STATISTICALLY SIGNIFICANT?

A. YES.

Q. ALL RIGHT. HOW ABOUT THE OTHER WAYS THAT YOU RAN YOUR ROBUSTNESS TEST? DID YOU GET POSITIVE, STATISTICALLY SIGNIFICANT RESULTS FOR ALL THOSE OTHER ROBUSTNESS CHECKS YOU DID?

A. YES, ALL OF THEM. YES.

Q. WAS THERE ANY OTHER ROBUSTNESS-TYPE CHECK THAT YOU DID OF YOUR BASE MODEL?

A. THERE IS. THERE IS ONE MORE TYPE OF ANALYSIS I DID.

Q. ALL RIGHT. WOULD YOU TELL THE COURT -- WE HEARD MISS SWEENEY TALK A LITTLE BIT ABOUT THIS 94.5-PERCENT INJURED NUMBER. I THINK THAT'S WHAT WE'RE TALKING ABOUT. IS THAT RIGHT?

A. THAT'S WHAT'S IN MY MIND, YES.

Q. OKAY. WOULD YOU TELL THE COURT WHAT YOU DID TO ADDITIONALLY CHECK THE RESULTS OF YOUR BASE MODEL?

A. YES, I WILL, AND I THINK IT WAS A BIT MISREPRESENTED. THIS ISN'T THE RESULT FROM THE REGRESSION MODEL. I TALKED ABOUT MY BASE MODEL. I TALKED ABOUT THE OTHER MODELS. I

WANTED TO DO SOMETHING EXTRA. IT'S MORE OF A CONFIRMATION. SO IT'S NOT MY COMMON IMPACT ANALYSIS, THIS THING I'M GOING TO BE TALKING ABOUT IN A MINUTE. I THINK IT INFORMS IT, BUT IT'S ANOTHER WAY TO LOOK AT IT, AND HERE'S WHAT I DID. WHEN YOU RUN A REGRESSION AND YOU GET THE RESULTS, AS I'VE ALREADY TALKED ABOUT, IT WILL GIVE YOU THE ESTIMATED OVERCHARGE AMOUNT, BUT IT GIVES YOU ESTIMATES OF ALL THE OTHER COEFFICIENTS.

WHAT I MEAN IS, IT'S A BIG EQUATION, AND SO EACH OF THESE OTHER FACTORS ARE IN THERE, COST, PRODUCT TYPE. RIGHT? I HAVE THOSE ESTIMATED COEFFICIENTS, AND SO YOU CAN PLUG IN THE RESULTS FROM THE REGRESSION AND YOU COULD COME UP WITH WHAT CAN BE CALLED THE ESTIMATED BUT-FOR PRICES. WHAT THAT IS IS, IT USES WHAT THE MODEL SAYS THIS IS THE WAY ALL THESE FACTORS INTERACT TO AFFECT PRICE, BUT KEEP OUT THE OVERCHARGE, AND SO I CAN CREATE THIS PREDICTIVE BUT-FOR PRICE. ALL THAT I ASKED WAS THE FOLLOWING. ONCE I HAVE THAT, WHAT PERCENTAGE OF THE CLASS MEMBERS HAD AT LEAST ONE PURCHASE ABOVE THAT BUT-FOR PREDICTED PRICE? AND THAT WAS THE 94.5 PERCENT.

I ACTUALLY DID IT TWO WAYS. IN MY REPORT, I MENTIONED ANOTHER ONE, AND WHERE I FIRST READ ABOUT THIS PROCESS BEING DONE, THE PERSON WHO HAD WRITTEN ABOUT THIS SAID, WELL, YOU KNOW, THERE MIGHT JUST BE SOMETHING DIFFERENT ABOUT EACH CLASS MEMBER, SO YOU CAN ADD IN VARIABLES CALLED FIXED-EFFECT VARIABLES, WHICH SAYS IF THERE HAPPENS TO BE SOMETHING ABOUT EACH CUSTOMER YOU CONTROL. SO I RAN IT ALSO THAT WAY. THE

RESULTS WERE VERY SIMILAR GOING THAT WAY. I FOUND ABOUT 97.2-PERCENT CLASS MEMBERS HAD AT LEAST ONE PURCHASE ABOVE THE BUT-FOR PRICE, BUT THAT'S REALLY ALL THIS IS MEANT TO SAY. IT'S CONFIRMATORY, SOMETHING I ADDED ON. IT'S NOT MY COMMON IMPACT ANALYSIS. I TALKED ABOUT LOTS OF OTHER ANALYSES FOR THAT, BUT IT'S ANOTHER WAY TO THINK ABOUT, WHAT'S THE DISTRIBUTION OF THESE PRICES? WHERE DO THEY FALL? ALTHOUGH THERE ARE DIFFERENCES IN THAT BUT-FOR PREDICTED PRICE.

Q. ALL RIGHT. WHY DON'T WE TURN, THEN, TO DR. JOHNSON'S CRITICISMS OF YOUR WORK? OKAY? AND DO YOU HAVE A SLIDE TO HELP US WALK THROUGH THAT?

A. I DO. THIS IS SLIDE 14.

Q. ALL RIGHT. WHY DON'T WE DIVE IN?

A. OKAY.

Q. AND WE'LL JUST START WITH YOUR FIRST ISSUE THERE, COST INPUTS. CAN YOU EXPLAIN TO THE COURT, PLEASE, WHAT ARE THE ISSUES WITH RESPECT TO COSTS, OR THE DISPUTES, I GUESS, BETWEEN YOU AND DR. JOHNSON?

A. DR. JOHNSON AND I BOTH AGREE COST NEEDS TO BE CONTROLLED FOR. THE DISPUTE ISN'T THAT. THE DISPUTE IS HOW IT'S MEASURED, THE SPECIFIC MEASUREMENT OF COST, AND AT ITS ROOT I BELIEVE I SHOULD LOOK AT MARKET PRICES, THE PRICES OF THE MAJOR COMPONENTS THAT MAKE UP THE COST OF THE TUNA, AND DR. JOHNSON HAS SUGGESTED USING THE COST RECORDS FROM THE COMPANY AS THE SOURCE OF THE COSTS.

Q. DO YOU HAVE A SLIDE TO HELP US WALK THROUGH THIS?

A. YES, SLIDE 15.

Q. ALL RIGHT. SO I'M SORRY. I DIDN'T MEAN TO INTERRUPT YOU, BUT CAN YOU EXPLAIN TO THE COURT, THEN, WHAT'S IMPORTANT ABOUT SLIDE 15?

A. YES. I'LL TALK ABOUT THE LEFT-HAND SIDE FIRST, THE MARKET COSTS. WHAT I'VE LEARNED FROM LOOKING AT THE DATA IN THIS CASE AND INFORMATION ON COSTS IS, THE FISH COST WAS FAR AWAY THE MOST. THE LARGEST PART, UP TO 80 PERCENT, OF THE COST TO MAKE A PRODUCT IS THE FISH. IT'S HIGHER FOR ALBACORE, THE WHITE MEAT. IT'S MORE EXPENSIVE, BUT IT'S UP IN THAT RANGE. AND SECOND, IF YOU HAVE 80 PERCENT IN THE FISH, YOU'VE GOT THE TEN PERCENT OR SO. IT'S THE METAL AND THE CANNING, AND THESE ARE FAIRLY SIMPLE PRODUCTS. THERE'S NO ELECTRONICS. SO YOU'VE GOT THOSE TWO, AND THERE WERE SEVERAL OTHER CATEGORIES, THE PACKAGING, IF IT'S AFFORDABLE FOR THE POUCHES, CARDBOARD MAYBE FOR BOXES AND SHIPPING. I ALSO INCLUDE MEASURES FOR WAGES, ETC., BUT I WANT TO LOOKED AT WHAT INDICATIONS I HAVE FOR, WHAT ARE THE COSTS, THE MARKET COSTS OF THOSE ELEMENTS? AND THEN I ADD THEM UP, WHICH MEANS I PUT THEM TOGETHER AND I USE AN APPROPRIATE WEIGHT, AND I COME UP WITH THIS IS WHAT'S HAPPENING TO THE COSTS.

LET ME TALK ABOUT A FEW THINGS ABOUT THAT BLUE BOX ON THE LEFT. FOR ONE THING, IT'S PUBLICLY AVAILABLE DATA. RIGHT? GENERALLY, I DID MENTION THAT I GOT FISH-COST DATA FROM

DOCUMENTS FROM THE DEFENDANTS, BUT PUBLICLY. THEY'RE ALWAYS EXOGENOUS. EXOGENOUS JUST MEANS IT'S SOMETHING THAT, WITH REGARD TO THE DEFENDANTS, IT'S OUTSIDE THE DEFENDANTS' CONTROL. THESE COSTS ARE DETERMINED. RIGHT? NOT LIKE ACCOUNTING RECORDS WHICH FIRMS CAN DECIDE WHAT THEY WANT TO DO. THIS IS EXOGENOUS. THEY ARE MARKET-BASED COSTS, SO I KNOW WHAT'S IN THE MARKETPLACE.

I MENTIONED EARLIER SIMILARITIES WITH THE THREE DEFENDANTS IN THIS CASE. THEY'RE BUYING THE SAME TYPE OF OF FISH IN THE VARIOUS PLACES IN THE WORLD. THEY'RE BUYING FISH, THEY'RE BUYING METAL, AND THERE ARE GLOBAL MARKETS FOR THESE TWO VERY LARGE COST ELEMENTS. BY USING THIS, I HAVE AVAILABILITY OF COST VARIABLES FOR ALL THE DEFENDANTS. I MENTION THAT BECAUSE FOR STARKIST WE DON'T HAVE DATA THAT I CAN USE TO RUN THEIR COMPANY ACCOUNTING RECORDS. THEY GIVE A FEW YEARS, BUT NOT FOR THE TIME PERIOD YOU WANT TO DEAL WITH. AND DR. JOHNSON DOESN'T DO IT, EITHER. HE RUNS SOME REGRESSIONS. HE DOESN'T USE STARKIST. SO HE HASN'T SHOWN THAT HE HAS FOUND A WAY TO DO THAT. SO, IN A REALLY PRACTICAL WAY, IT CAN'T BE DONE IF YOU'RE SAYING YOU HAVE TO USE THE COST RECORDS OF EACH OF THE DEFENDANTS.

NOW, LET ME TALK ABOUT THE --

Q. BEFORE YOU DO THAT, CAN I ASK YOU ONE QUESTION? IN TERMS OF CONSTRUCTING THOSE COSTS IN THE WAY THAT YOU'VE DONE IT, IS THAT ACCEPTED WITHIN THE PROFESSION AS THE RIGHT WAY TO BUILD

UP YOUR COST ANALYSIS THAT GOES INTO THE REGRESSION MODEL?

A. IT'S ACCEPTED. I WOULDN'T SAY THAT -- WHEN YOU SAY IT'S THE RIGHT WAY, THAT WOULD MEAN THE WRONG WAY IS ANYTHING ELSE, BUT IT'S CLEARLY ACCEPTED AND COMMONLY USED.

Q. I DIDN'T WANT TO INTERRUPT YOU, SO WHY DON'T WE TALK ABOUT THE ACCOUNTING COST AND WHAT DR. JOHNSON DID?

A. YES. SO, WITH REGARD TO THINKING ABOUT ACCOUNTING COSTS, SO THESE WERE RECORDS -- I SHOULD BRING UP A QUESTION, OR A TOPIC. ECONOMISTS UNDERSTAND THAT IF YOU'RE TALKING ABOUT MARKET PRICES, IT'S KNOWN THAT PRICES ARE DETERMINED BY WHAT'S CALLED MARKET COSTS, CHANGES IN COSTS. IT'S A BIT OF A LEAP TO SAY IF I EVER LOOK AT A COMPANY'S RECORDS, THEY'RE REFLECTING THE MARKET COSTS. I WORKED QUITE A BIT WITH COMPANIES AND WHAT THEY DO, AND THERE ARE OTHER REASONS THAT MIGHT ACCOUNT FOR COSTS, BUT YOU SHOULDN'T EXPECT YOU'RE GOING TO GET MARKET COST DATA.

SO WHEN I LOOK TO THE RIGHT SIDE OF THIS CHART, WHEN I LOOK AT THE COSTS -- CORRECTION -- COST RECORDS, IF I'M GOING TO DO THAT, WELL, THEY COME FROM THE DEFENDANTS, AND THEY REFLECT HOW THE DEFENDANTS DECIDED TO REPORT THEM, WHAT POLICIES THEY WANT TO PURSUE. SO THEY'RE NOT EXOGENOUS. THEY'RE NOT SEPARATE.

SECOND OF ALL, THE NEXT BOX DOWN, I'VE SEEN IN THE WAY THEY OPERATE AND CREATE THESE COSTS, THEY'RE REFERENCED BY PRICE. REMEMBER, WHEN I TALKED ABOUT REGRESSION A WHILE AGO,

THERE WAS A DEPENDENT VARIABLE AND THE OTHER VARIABLE IS SUPPOSED TO BE INDEPENDENT. WHAT IF YOU HAVE SOME RELATIONSHIP GOING THE OTHER WAY? WHAT IF YOU HAVE PRICE DICTATING THE COSTS? BUT IF YOU HAVE SITUATIONS WHERE THERE'S LUMP-SUM CHARGES FOR MACHINERY, USUALLY THEY SAY, WELL, LET'S JUST TAKE ALL THOSE COSTS AND WE'LL DIVVY THEM UP BASED ON SALES. BUT SALES IS A FUNCTION OF PRICE. SO WHEN PRICE GOES UP, THE COST GOES UP. SO YOU CAN'T SAY THAT THIS COST VARIABLE IS EXOGENOUS. IT'S ACTUALLY ENDOGENY. I WANT TO AVOID THAT.

AND THAT'S A PROBLEM WE HAVE WHEN WE'RE USING COSTS REPORTED BY FIRMS IN THEIR ACCOUNTING COSTS. THEY INCLUDE THINGS LIKE OVERHEAD OR FIXED EXPENSES. THIS IS RELATED TO MAKING THESE PRODUCTS, AND THEREFORE THEY HAVE TO BE ALLOCATED. THAT IS PART OF THE ISSUE, HOW DO YOU ALLOCATE BY SALES? THERE'S ALSO PACKAGING. BUT ALSO IF I CAN SHOW, IF YOU LOOK AT THE ACTUAL COSTS REPORTED BY THE DEFENDANTS, I FIND SOME NONSENSICAL RESULTS, AND I'VE GOT A SLIDE I'M GOING TO SHOW YOU TO TALK ABOUT THAT.

Q. IS THAT SLIDE 16?

A. YES.

Q. ALL RIGHT. SO YOU'RE GOING TO HAVE TO WALK US THROUGH THIS, BUT EXPLAIN TO THE COURT, THEN, HOW THIS HELPS YOU UNDERSTAND THAT THE COST AS REPORTED BY THE DEFENDANT IN THEIR ACCOUNTING DATA PROVIDES THE NONSENSICAL RESULTS.

A. YES, AND I SHOULD CLARIFY. I DON'T MEAN NONSENSICAL, THAT

THESE ARE WRONG, OR THEY SHOULDN'T BE ON THERE, OR SOMETHING LIKE THAT. ALL I MEAN IS I'M THINKING I COULD USE THIS AS A REFLECTION OF REGRESSION. I FIND THIS NONSENSICAL. THE FIRST THING ABOUT THIS SLIDE THAT SORT OF JUMPS OUT, WHAT'S THE RED AND BLUE? IT ALMOST LOOKS LIKE A 4TH OF JULY PARADE, OR SOMETHING. THAT JUST INDICATES IT'S FOR A PRODUCT LIKE WATER POUCH, 12-PACK. THE BLUE IS WHEN IT WAS THREE OUNCES, AND THEN THE 2.5 IS WHEN IT CHANGED. SO IT DOESN'T HAVE ANY OTHER MEANING BESIDES THAT THAT I WOULD BE SHOWING.

AGAIN, THESE ARE THE ACCOUNTING RECORDS FROM THE DEFENDANT. IN THIS CASE, IT'S BUMBLE BEE. IT'S PER OUNCE. SO IT'S COST PER OUNCE, THE LEFT-HAND SIDE OF THE VERTICAL AXIS, AND WHAT I'VE NOTED IS HOW THESE COSTS GREW OVER TIME. BUT I WANT TO DRAW ATTENTION TO THOSE VERY NARROW ELLIPSES. WE HAVE MULTIPLE COSTS AT THE SAME TIME. SO IF YOU'RE ASKING ABOUT WHAT'S THE COST OF LIGHT WATER POUCH 12-PACK, YOU THINK I'D HAVE A VALUE. THE WAY I RUN MY MODEL, I HAVE A VALUE, BUT HERE IT DEPENDS ON THE CUSTOMER. THAT DOESN'T MAKE SENSE. THERE SHOULD BE A COST, BUT IT JUST REFLECTS WHEN YOU HAVE ACCOUNTING COSTS AND YOU HAVE POLICIES FIRMS CAN PURSUE, THIS IS WHAT IT CAN LOOK LIKE. THIS SHOWS YOU REALLY SHOULDN'T BE USING ACCOUNTING RECORDS FROM THE DEFENDANTS IN THIS CASE TO SAY THAT'S THE BEST COST MEASURE IN A REGRESSION MODEL.

Q. SO FOR ALL OF THOSE REASONS, THEN, YOU DECIDED TO CONSTRUCT THE COST INDEX AS OPPOSED TO JUST RELYING ON THE

ACCOUNTING COSTS OF, I GUESS, ONLY BUMBLE BEE AND CHICKEN OF THE SEA, BECAUSE STARKIST DIDN'T HAVE IT.

A. YES, I CHOSE TO USE THE INDEX. THAT IS THE WEIGHTED COLLECTION OF THE MARKET COSTS FOR THE DIFFERENT COST COMPONENTS TO MAKE THESE TYPES OF PRODUCTS.

Q. SO IS THERE ANOTHER ISSUE ABOUT COST THAT YOU WANT TO TALK ABOUT?

A. THERE IS. DR. JOHNSON CRITICIZED A LITTLE BIT THE PARTICULAR FISH-COSTS VARIABLE THAT I USED, AND WHAT I USED, I MADE A REFERENCE TO THE PRICE OF BANGKOK FISH PRICE, AND TWO OF THE MAIN FISH TYPES YOU WOULD BUY IN THIS ARE ALBACORE AND SKIPJACK. I KNOW THOSE ARE AVAILABLE FOR TWO THINGS, BUT I CONSIDERED BANGKOK. IN OTHER WORDS, LET ME LOOK AT THE BANGKOK PRICE, AND HE HAD A PROBLEM WITH THAT. MAYBE THE SUGGESTION WAS THAT'S NOT THE ONLY PLACE, AND THERE MIGHT BE SOME CONFUSION.

I'M NOT SAYING LET'S JUST USE THE PRICE OF FISH CAUGHT IN BANGKOK. IN FACT, TUNA ARE CAUGHT AROUND THE WORLD. THEY'RE CAUGHT IN THE INDIAN OCEAN AND IN THE ATLANTIC, THE PACIFIC OCEAN, ABOVE AND BELOW THE EQUATOR. OF THE PLACE THAT HAS THE SINGLE-MOST SALES, THE VAST MAJORITY OF SALES GOES THROUGH BANGKOK, AND SO THE PRICES THAT YOU SEE THERE ARE USED AS A BENCHMARK.

IT'S LIKE WHEN PEOPLE WANT TO KNOW WHAT'S HAPPENING WITH FISH COSTS, THEY LOOK THERE. I'VE SEEN THAT IN THE DEFENDANTS'

DOCUMENTS. THEY REFER TO BANGKOK PRICE. I KNOW THERE ARE PLACES WHERE YOU CAN ALSO BUY TUNA. YOU CAN BUY IT IN ECUADOR. YOU CAN BUY IT IN THE EASTERN TROPICAL PACIFIC AND THE INDIAN OCEAN. BUT WHAT I'VE SEEN IS THAT WHEN THE DEFENDANTS ARE REFERRING IN THEIR DOCUMENTS, AND I'VE SEEN THIS OVER AND OVER AGAIN, THEY'RE REFERRING TO BANGKOK.

BUT I ALSO LOOKED TO SEE, DO WE REALLY SEE DIFFERENCES OVER TIME? ARE WE REALLY TALKING ABOUT THERE BEING A DIFFERENCE IN THOSE PRICES? BUT BEFORE I TALK ABOUT THE GRAPH, I WOULD JUST SAY, AS I COMMENTED, I WOULD THINK THERE WOULD BE DIFFERENCES. BUT SINCE PEOPLE ARE BUYING MASSIVE AMOUNTS ALL THE TIME, THEY CAN QUICKLY FIND OUT THERE'S AN OPPORTUNITY. WHEN PEOPLE TURN TO IT, THOSE ADVANTAGES TURN AWAY VERY QUICKLY.

Q. SO, WITH RESPECT TO THAT ISSUE, DID YOU SEE EVIDENCE IN YOUR RECORD IN THIS CASE THAT THE DEFENDANTS WERE AWARE OF THE PRICE OF FISH IN DIFFERENT LOCATIONS?

A. YES. IN THE DEPOSITION TESTIMONY OF MR. GAMPUS FROM STARKIST, HE SAID EVERYONE KNOWS THIS. THEY SEE IT RIGHT AWAY. THEY UNDERSTAND WHAT'S HAPPENING. IF THERE'S THESE DISCREPANCIES, THEY CAN RESPOND TO IT.

Q. ALL RIGHT. AND I THINK THAT YOU MENTIONED THAT YOU'D SEEN SOME REFERENCES IN THE DOCUMENTS TO THE BANGKOK FISH PRICE IN THE DOCUMENTS PRODUCED BY THE DEFENDANTS THEMSELVES?

A. YES.

Q. ALL RIGHT. DID YOU WANT TO SAY ANYTHING ABOUT EXHIBIT 2 IN THE BINDER, THE STARKIST TUNA 101 DOCUMENT?

A. YES. LET ME JUST POINT BRIEFLY TO THIS DOCUMENT THERE. IT WAS PUT TOGETHER BY STARKIST. IT'S ACTUALLY QUITE INTERESTING, BECAUSE IT TALKS A LOT ABOUT THE INDUSTRY. THERE'S A REFERENCE ON THE FOURTH PAGE. THEY CALL THIS A TUNA 101 GRAPH. SO IT TALKS ABOUT THE HISTORY OF STARKIST, A LITTLE BIT ABOUT THE PARENT COMPANY, DONGWON, DIFFERENT TYPES OF TUNA, MAPS OF WHERE YOU WOULD CATCH TUNA, BUT I WOULD LIKE TO DRAW YOUR ATTENTION. IT'S ABOUT THE NETS THEY USE AND PURSING, LONG-LINE, WHERE THEY DO THE PROCESSING, BUT IF YOU GO TO -- THERE'S ONE THAT SAYS FISH COSTS, YOUR HONOR, IF YOU GET TO THAT. ALL IT SAYS IS FISH COSTS. SO I SAW THIS AS YOU GET TO THE PART WHERE THEY'RE SAYING, WHAT IS STARKIST GOING TO SAY ABOUT FISH COSTS? AND THEY HAVE TWO SLIDES, BANGKOK LIGHT MEAT, BANGKOK WHITE MEAT, AND THEY DON'T LATER ON TALK ABOUT, GEE, THEY DON'T LATER TALK ABOUT THE INDIAN OCEAN. THAT'S NOT WHAT THEY TALKED ABOUT. SO PEOPLE WERE USING THIS.

BY THE WAY, THERE ARE MULTIPLE LINES, MULTIPLE GRAPH LINES. THAT IS JUST TO REPRESENT DIFFERENT YEARS. SO IT'S A WAY TO SHOW MULTIPLE YEARS IN A GRAPH.

SO IT'S CLEAR THIS IS WHAT THIS DOCUMENT STARKIST WAS POINTING TO, AND THE DOCUMENTS I HAVE SEEN, EVEN WHEN THE DEFENDANTS DO TALK ABOUT OTHER LOCATIONS AND PRICES, THEY'RE MENTIONED IN REFERENCE TO THE BANGKOK PRICE, SOMETIMES

BENCHMARK, OR THEY JUST DESCRIBE THE DIFFERENCES. HOW DIFFERENT IS IT FROM THE BANGKOK PRICE? I THINK IT'S ENTIRELY IMPORTANT TO USE BANGKOK.

I HAVE ONE MORE GRAPH I WANT TO SHOW AS WELL.

Q. YES. SO MY QUESTION TO YOU IS ON SLIDE 17. DID YOU TEST TO SEE WHETHER THE PRICE OF FISH WAS MATERIALLY DIFFERENT FOR LONG PERIODS OF TIME AROUND THE WORLD?

A. I DID. I WOULDN'T CALL IT A TEST. YOU CALLED IT A TEST, BUT AN ANALYSIS.

Q. IS THAT WHAT'S REFLECTED ON SLIDE 17?

A. EXACTLY, BECAUSE THERE'S NOT A COEFFICIENT THAT I ESTIMATE, OR SOMETHING LIKE THAT, BUT I CAN SHOW ON 17, AND I'VE GOT SEVERAL DIFFERENT COLORED LINES, AND WHAT IT'S MEANT TO SHOW IS JUST THE TREND OVER TIME OF FISH PRICES, BUT LOOKING AT DIFFERENT LOCATIONS, AND THEN LOOKING AT POTENTIALLY DIFFERENT PURCHASERS, WHETHER STARKIST OR BUMBLE BEE. FROM THE BOTTOM, IT KIND OF LAYS IT OUT.

I'LL JUST LET YOU KNOW, YOUR HONOR, ON THE BOTTOM LEFT IS ECUADOR, INDIAN OCEAN. OTHERWISE, ON THE FAR RIGHT, THE ETP REFERENCE, THAT'S THE EASTERN TROPICAL PACIFIC. IN PARENS, THAT'S JUST ABBREVIATED PURCHASERS OF STARKIST, OR BUMBLE BEE, OR COSI. BUT IF YOU LOOK AT THE GRAPH, THERE'S MOVEMENTS UP AND DOWN WITH EACH LINE. THESE DON'T MOVE EXACTLY ON TOP OF EACH OTHER, BUT THEY OFTEN MOVE IN CONCERT VERY CLOSE TOGETHER. SO I THINK BANGKOK PRICES NOTED ON THE TRADE IN BANGKOK IS THE

RIGHT WAY TO USE IF YOU'RE THINKING ABOUT DECISION-MAKING WHEN THE COMPANIES ARE LOOKING AT A COST, WHEN THEY'RE DECIDING ABOUT THEIR PRICE.

Q. I SEE. ALL RIGHT. SO DID YOU TEST, NOTWITHSTANDING THE FACT THAT YOU USED YOUR COST SERIES, DID YOU CHECK TO SEE WHETHER IT MADE A MATERIAL DIFFERENCE ON YOUR OPINION OF COMMON IMPACT --

A. I DID.

Q. -- WHETHER YOU USED -- SORRY -- WHETHER YOU USED YOUR COST SERIES OR WHETHER YOU USED DR. JOHNSON'S PROPOSED ACCOUNTING RECORDS FOR PRICING?

A. I DID. THE DATA IS JUST NOT THERE. BUT FOR FOR COSI AND BUMBLE BEE, I DID RUN A REGRESSION, AND I USED THE REPORTED COSTS FOR COSI AND FOR BUMBLE BEE, AND I HAD TO MAKE SOME ADJUSTMENTS. THERE WERE SOME ERRORS BY DR. JOHNSON. BUT WHAT I FOUND IS, I DO GET DIFFERENT OVERCHARGES, BUT THEY'RE STILL SUBSTANTIAL. THEY'RE STATISTICALLY SIGNIFICANT. IT DOESN'T MEAN THAT IF YOU USE THESE OTHER COMPANY-REPORTED COSTS, SETTING ASIDE THE CONCERNS I HAVE THAT THIS SOMEHOW SHOWS, AH, NO OVERCHARGE, IT'S JUST NOT THE CASE.

Q. OKAY. SO LET'S TURN TO -- MISS LEE TALKED A LITTLE ABOUT DR. JOHNSON'S APPROACH OF TAKING YOUR REGRESSION MODEL AND ANALYZING THE QUESTION OF IMPACT CUSTOMER BY CUSTOMER. DID YOU TAKE A LOOK AT WHAT DR. JOHNSON HAD DONE, AND DO YOU HAVE SOME OPINIONS ABOUT THAT?

A. YES, I DID, AND I DO.

Q. AND WHY DON'T WE TURN TO SLIDE 19? DOES SLIDE 19 HAVE SOMETHING TO DO WITH YOUR OPINIONS ABOUT DR. JOHNSON'S CUSTOMER-BY-CUSTOMER APPROACH?

A. SURE. BEFORE I DIVE INTO 19, I THINK I'LL JUST SUMMARIZE WHAT I THINK IS A DESCRIPTION OF WHAT DR. JOHNSON SAID. HE HAS SAID, WELL, THE REGRESSIONS YOU'VE RUN, THEY DON'T DIVE IN DEEP ENOUGH, THEY DON'T GIVE ENOUGH DETAIL, AND HE RUNS A REGRESSION WHERE HE SAYS HE TAKES MY MODEL AND HE CHANGES IT AND SAYS, I WANT TO ASK THE COMPUTER TO RUN, TO ESTIMATE AN ADDITIONAL 604 COEFFICIENTS. HE WANTS TO SAY, WELL, I WANT THE COMPUTER TO, YOU KNOW, YOU NEED TO GIVE ME A DIFFERENT OVERCHARGE BY CLASS MEMBER, BY PURCHASER.

Q. AND THERE'S 604 CLASS MEMBERS?

THE COURT: LET ME JUST ASK THIS. SO THESE, LOOKING AT IT FROM WHAT I'M GOING TO CALL THE SUBREGRESSION, INDIVIDUAL BY INDIVIDUAL AS OPPOSED TO YOUR POOL AVERAGE APPROACH.

THE WITNESS: CORRECT.

THE COURT: OKAY.

THE WITNESS: SO LET ME CLARIFY. I'VE GOT THE POOL APPROACH, WHICH IS MY BASE MODEL, ALTHOUGH I DESCRIBE THE OTHER, YOUR HONOR. I SAY, WELL, LET ME ASK THE OTHER MODEL THAT USES ALL THE DATA POINTS. THAT'S NOT AN ISSUE. BUT HE SAYS YOU CAN SPEAK TO THE COMPUTER, COMPUTER, I WANT A DIFFERENT ANSWER, EVALUATE IT, A DIFFERENT ANSWER FOR ALL OF

THE 604 DIFFERENT CUSTOMERS. SO THAT'S THE INQUIRY, BUT THERE'S A LITTLE PROBLEM WITH DOING THAT, AND THAT'S THE SLIDE I WANT TO TALKED ABOUT NEXT.

THE COURT: OKAY.

BY MR. LEBSOCK:

Q. OKAY, SO SLIDE 19, THEN. WHY DON'T YOU TELL US GENERALLY WHAT IS REFLECTED HERE ON SLIDE 19?

A. THIS ISSUE IS ABOUT DATA AVAILABILITY. WHAT AM I ASKING THE COMPUTER TO DO, AND WHAT DO I HAVE? AND I'M DESCRIBING THE COMPUTER THAT'S AFTER THIS SLIDE. YOU HAVE TO ASK, DO I HAVE ENOUGH DATA TO ACTUALLY DO THIS, OR WILL I BE ASKING TOO MUCH OF MY MODEL? SO WHAT I'VE GOT HERE IS, IT'S DEPICTED HYPOTHETICALLY AS FOUR DIFFERENT TYPES OF CUSTOMERS. THESE AREN'T PARTICULAR CUSTOMERS, YOUR HONOR. IT'S JUST FOUR. AND WHAT I MEAN BY CUSTOMER TYPE ONE, I'VE GOT THAT LONG GREEN BAR, AND IT'S SUPERIMPOSED A LITTLE BIT ON THE GRAPHIC I USED BEFORE. THERE'S A BENCHMARK PERIOD ON THE LEFT AND RIGHT, AND ALL IT'S MEANT TO SHOW IS THAT FOR THAT CUSTOMER ONE WE HAVE DATA ON BENCHMARK BEFORE AND AFTER AND DATA DURING THE CONSPIRACY.

WHAT'S IMPORTANT IS, WE HAVE A LOT OF DATA CALLED BENCHMARK AND CONSPIRACY. THEN YOU HAVE CUSTOMER TWO WHERE YOU HAVE A LOT OF DATA IN THE BENCHMARK AND NOT VERY MUCH IN THE CONSPIRACY, DATA TYPE, CUSTOMER TYPE, RATHER. THREE, YOU HAVE DATA FOR THE WHOLE CONSPIRACY, BUT ONLY A LITTLE BIT IN THE

BENCHMARK, AND THEN CUSTOMER TYPE FOUR, WHICH YOU DON'T HAVE ANY DATA FROM THE BENCHMARK. ALL I HAVE IS A CONSPIRACY. SO WHEN YOU WANT TO ASK A QUESTION SUCH AS I WANT TO TELL THE COMPUTER TO GIVE ME A DIFFERENT OVERCHARGE FOR EVERY ONE OF THE 604 CUSTOMERS, DO YOU WANT DATA TO DO THAT? SO I WANT TO TALK ABOUT THAT.

WHAT I'VE DONE IS, I'VE LOOKED, AND IF YOU'RE GOING TO TELL THE COMPUTER, EVEN IF YOU'RE USING THE HUNDRED AND (PAUSE), THE 1.5 MILLION OBSERVATIONS, AND YOU SAY, OH, BUT I WANT TO KNOW WHAT'S THE OTHER CHARGE FOR JUST ONE CUSTOMER, THE COMPUTER CAN ONLY BE USING THE NUMBER OF OBSERVATIONS YOU HAVE FOR THAT CUSTOMER. SO IT'S MISLEADING TO SAY I USED ALL 1.5 MILLION, BUT I ASKED ABOUT THIS ONE CUSTOMER.

IT WOULD BE LIKE SAYING I'VE EVALUATED SOMETHING LIKE SCORES OF (PAUSE) -- I WAS THINKING THIS MORNING ABOUT PROFESSIONAL RACE CAR DRIVING FOR SOME REASON, AND YOU WERE TRYING TO SAY, I WONDER THESE YEARS YOU'VE BEEN DRIVING, WHAT DOES THAT MEAN ABOUT YOUR SUCCESS RATE? YOU MIGHT ASK, WHAT ABOUT FEMALES? THERE'S NOT VERY MANY FEMALES IN PROFESSIONAL DRIVING. DANICA PATRICK FOR A WHILE. BUT YOU WANT TO IMAGINE, DO I HAVE ENOUGH DATA TO DO THAT? SHE WAS IN NASCAR FOR A WHILE. YOU HAVE TO ASK THAT QUESTION, AND WHEN YOU SAY, I WANT TO ASK BY ALL CLASS MEMBERS, YOU MIGHT HAVE MANY THAT REALLY DON'T HAVE MUCH INFORMATION.

SO I HAVE A SLIDE I WANT TO MOVE TO NEXT, AND I WANT TO

DEPICT A LITTLE BIT OF WHAT DR. JOHNSON FOUND OR WHAT HE DID.

Q. ALL RIGHT. IS THAT SLIDE 20?

A. YES, SLIDE 20.

Q. ALL RIGHT. WHY DON'T YOU, THEN, TELL US WHAT YOU'RE CONVEYING TO THE COURT ON SLIDE 20?

A. SO, FIRST, I WANT TO DRAW ATTENTION TO THE GREEN BOX, AND WHAT HAPPENS IS, A COMPUTER SAYS, IF IT CAN SPEAK, I CAN'T DO THAT. WE DON'T HAVE ANY DATA FROM THE BENCHMARK FOR THOSE CUSTOMERS, SO I CAN'T DO THAT. BY THE WAY, DR. JOHNSON WANTS TO HOLD THIS UP AS SOMETHING ON HIS SIDE THAT THERE'S FAILURE TO PROVE SOMETHING, BUT IT'S ONLY BECAUSE HE'S SLICED HIS QUESTIONS SO THINLY AND THE AVAILABLE OBSERVATIONS, THE COMPUTER CAN'T POSSIBLY DO IT. HE SAYS THIS IN HIS RESULTS. SO, 61, YOU CAN'T EVEN ASK THE QUESTION. RIGHT? NO RESULT COMES OUT.

Q. AND THAT'S BECAUSE THERE'S NO, FOR THOSE 61 CUSTOMERS, NO TRANSACTIONS, NO OBSERVATIONS IN THE BENCHMARK PERIOD, RIGHT?

A. CORRECT.

Q. OKAY. PROCEED, PLEASE.

A. AND THEN FOR THE REST OF THE CUSTOMERS, HE BREAKS THEM UP, YOUR HONOR, INTO FOUR CATEGORIES, SO I'LL DESCRIBE THESE. POSITIVE OR NEGATIVE, OR STATISTICALLY SIGNIFICANT OR NOT. SO IT GIVES US KIND OF A TWO-BY-TWO MATRIX. SO THE 435, THE LARGE SLICE THERE, THAT'S THE POSITIVE OVERCHARGES, STATISTICALLY SIGNIFICANT. NOW, THE THIN ONE IS THE SEVEN. THAT'S A

NEGATIVE OVERCHARGE, STATISTICALLY SIGNIFICANT. BUT THEN YOU HAVE THE PEACH- OR MAUVE-COLORED SLICE OF PIE THAT'S THE 74, AND WE SEE THAT'S POSITIVE, BUT THAT'S STATISTICALLY INSIGNIFICANT. AND THEN FINALLY, THE 27 THERE FALLS IN THAT LAVENDER SLICE. THAT'S NEGATIVE, BUT STATISTICALLY INSIGNIFICANT. THERE'S SOMETHING HERE THAT MAY NOT BE IMMEDIATELY APPARENT.

BUT I THINK -- I WANT TO SHOW YOU THE NEXT SLIDE. I THINK IT'S VERY IMPORTANT TO UNDERSTAND THIS. YOU SHOULDN'T MAKE THE ASSUMPTION THAT IF I WANT TO ASK A QUESTION ABOUT ALL THE CLASS MEMBERS, I HAVE ABOUT THE SAME AMOUNT OF DATA FOR EACH CLASS MEMBER. IT'S JUST NOT TRUE. IN FACT, THERE'S A LOT OF THEM WHERE YOU HAVE HARDLY ANY DATA. I'D LIKE TO MOVE TO THE NEXT SLIDE, 21.

Q. ALL RIGHT. TELL US WHAT'S IMPORTANT ABOUT SLIDE 21.

A. AND IF YOU CAN -- I THINK YOU MIGHT TO SEE BOTH SLIDES AT THE SAME TIME, YOUR HONOR. JUST FOCUS US ON THE 435. IF I JUST LOOK AT THOSE, I'VE DEPICTED THOSE IN THE NEXT SLIDE. THIS IS THE KIND OF OBSERVATIONS IN THE DATA. IT'S 99.09 PERCENT. SO HOW MANY OBSERVATIONS DO WE HAVE LEFT FOR THE OTHER CLASS MEMBERS? RIGHT? IT'S 169, I THINK IT WAS SAID IN OPENING STATEMENT. THAT'S WHAT I MEAN BY SLICING THE OBSERVATIONS.

IF I DID THIS BY SALES, YOUR HONOR, IT'S ROUGHLY THE SAME, ABOUT 98 PERCENT. SO TO THE EXTENT THIS TELLS YOU ANYTHING,

AND I'LL BE TALKING ABOUT IT, WE'RE ONLY TALKING ABOUT .91 PERCENT OF THE OBSERVATIONS IN THE DATA. SO WHATEVER CONCLUSION YOU MIGHT MAKE, IT MEANS, WELL, WE'RE GOING TO MAKE IT ON .91 PERCENT OF THE OBSERVATIONS.

Q. OKAY. AND SO DID YOU -- YOU MENTIONED THIS IDEA OF STATISTICAL SIGNIFICANCE. SO DID YOU DO ANYTHING TO LOOK AT THE NUMBER OF STATISTICALLY SIGNIFICANT POSITIVE INJURED CLASS MEMBERS RELATIVE TO THE NUMBER OF STATISTICALLY SIGNIFICANT NEGATIVE, NEGATIVELY INJURED CUSTOMERS, I GUESS IS WHAT YOU WOULD SAY, THE RESULTS SHOWED --

A. YES, I DID.

Q. -- BASED ON WHAT DR. JOHNSON HAD DONE?

A. YES, AND THAT'S MY SLIDE 22.

Q. OKAY. WHY DON'T YOU TELL US WHAT'S IMPORTANT ABOUT SLIDE 22?

A. SO WHAT I'VE SPECIFICALLY DONE HERE, YOUR HONOR, IS, I WANT TO FOCUS JUST ON THE RESULTS THAT ARE STATISTICALLY SIGNIFICANT, AND I WANT TO COMPARE THEM TO THE ONES DR. JOHNSON FOUND WERE POSITIVE OVERCHARGES VS. ONES THAT WERE NEGATIVE, AND THERE'S A REASON WHY I'M NOT SHOWING HERE STATISTICALLY INSIGNIFICANT. NORMALLY, FINDING STATISTICAL SIGNIFICANCE HELPS US. IT'S A SCIENTIFIC PROCESS. YOU RUN IT. BUT IF YOU KNOW A LITTLE BIT OF THE BACK STORY ABOUT WHY YOU'RE SLICING SO THIN, BECAUSE WHEN YOU DON'T HAVE ENOUGH DATA, THAT'S ONE OF THE BIGGEST REASONS, BUT ONE BIG REASON WHY THE COMPUTER WILL

SAY, I CAN'T TELL YOU, I CAN'T SAY MUCH FOR THOSE TWO OBSERVATIONS. SO IF I SAY, WELL, IF I LOOKED WHERE WE DID HAVE SIGNIFICANCE, I FIND THAT 435 VS. SEVEN OF THE CLASS MEMBERS HAVE A POSITIVE, SUBSTANTIAL OVERCHARGE. THAT'S 98.5 PERCENT, BY THE WAY.

Q. ALL RIGHT. RELATE THIS BACK TO THAT, YOU KNOW, YOUR COMMENTS EARLIER ABOUT WAL-MART AND WHETHER THERE'S ANYTHING THAT YOU CAN DETERMINE ABOUT CLASS-WIDE IMPACT BECAUSE OF WHAT YOU FIND WITH RESPECT TO WAL-MART.

A. YES. I WOULD SAY WHAT'S IMPORTANT IS SOMETHING I MENTIONED A COUPLE TIMES TODAY, AND THAT IS, WHY ARE YOU DOING WHAT YOU'RE DOING? ARE YOU BEING SCIENTIFIC ABOUT IT? WHICH MEANS THE SCIENTIFIC PROCESS. YOU DO THE -- YOU FORM BELIEFS, HYPOTHESES, AND YOU TEST THEM. DR. JOHNSON DOESN'T SAY ANY REASON WHY HE THINKS THEY'RE DIFFERENT. HE WANTS TO JUMP RIGHT TO REGRESSION AND SAY, JUST TELL ME.

WELL, I KNOW SOME REASONS. I TRIED TO CHECK FOR THOSE IN MY REGRESSIONS. I WAS TRYING TO CHECK FOR IT. IS IT A CAN OR POUCH? OR TUNA TYPE, BY DEFENDANT. BUT IF YOU WERE THINKING, WHY WOULD CUSTOMERS BE DIFFERENT? WHAT WE HEAR MOST IN THIS CASE IS, WELL, THERE'S NEGOTIATING POWER. DIFFERENT CUSTOMERS NEGOTIATE. BUT IF YOU'RE WONDERING, YOU KNOW, WAL-MART PROBABLY FALLS VERY HIGH ON THAT. THEY DON'T HAVE A POSITIVE, STATISTICALLY SIGNIFICANT ONE. SO WHAT'S THE STORY, YOUR HONOR? WHY ARE YOU DOING IT? AND THERE'S NO THEORY. IT'S

RANDOMLY PICKING SOMETHING, ALSO THAT MUCH CARE AS TO WHAT DATA YOU ACTUALLY HAVE TO ASK THE QUESTION.

Q. SO LET'S TURN TO THE NEXT CRITICISM THAT DR. JOHNSON HAS OF YOU, AND THAT'S THIS QUESTION ABOUT FALSE POSITIVES, AND AS I UNDERSTAND THAT, THAT'S THE SITUATION WHERE IF YOU RUN SOME OTHER DATA OVER YOUR MODEL AND YOU FIND A POSITIVE OVERCHARGE WHERE NONE SHOULD BE FOUND, THAT WOULD IMPLICATE THE RELIABILITY OF THE MODEL. IS THAT YOUR UNDERSTANDING?

A. YES, I BELIEVE THAT'S DR. JOHNSON'S POINT, THAT HE BELIEVES HE'S FOUND A WAY TO IDENTIFY FALSE POSITIVES, AND IF A MODEL GENERATES FALSE POSITIVES, IT MUST BE BROKEN. HE DOESN'T SAY EXACTLY WHERE, BUT BROKEN SOMEWHERE IS THE IDEA. I'VE GOT A COUPLE RESPONSES TO THAT.

Q. WHY DON'T YOU TELL US WHAT THE RESPONSES ARE?

A. HE STARTS OFF BY, FIRST OF ALL, ASSERTING HE HAS ACTUALLY FOUND FALSE POSITIVES. FOR SOME REASON OR ANOTHER, I THINK OF MY FATHER WHO YEARS AGO HAD PROSTATE CANCER. I THINK OF THE PROSTATE TEST, THE PSA TEST. SOMETIMES, PEOPLE SAY, AH, BE CAREFUL BECAUSE THERE CAN BE A HIGH DEGREE OF FALSE POSITIVES. BUT IN MOST INSTANCES THEY'RE BASED ON MEDICAL RESEARCH AND I'VE LOOKED AT THE TISSUE AND THAT'S ACTUALLY WRONG. AND SO I WANT TO WONDER HERE, DID I HEAR THAT I ACTUALLY FOUND FALSE POSITIVES? BUT REALLY HE ASSERTS IT, AND HE DOESN'T HAVE ANY ANALYSIS TO SAY IT'S POSITIVE.

THE ASSERTION IS, WELL, IF I LOOK AT NON-DEFENDANT DATA,

THERE MUST BE NO OVERCHARGE. THAT'S THE ASSERTION. THEN HE SAYS, OH, WELL, I'VE LOOKED AT NON-DEFENDANT DATA. IT'S SPECIFICALLY U. S. FOODS AND PITCO AND SYSCO PURCHASES OF PRODUCTS THAT HE FOUND THE DATABASE NOT ASSOCIATED WITH STARKIST, CHICKEN OF THE SEA, OR BUMBLE BEE. AND HE SAID, AH, I DO FIND AN OVERCHARGE, AND STAMPS IT FALSE POSITIVE.

BUT I'VE GOT A COUPLE COMMENTS ABOUT THAT. FOR ONE, WHY WOULD YOU MAYBE -- WHY WOULD YOU SAY THERE MUST BE SOME, NO OVERCHARGE FOR THOSE? AND IT RELATES TO SOMETHING IN ECONOMICS CALLED THE UMBRELLA EFFECT. THE CONCEPT IS THAT MAYBE THERE'S EFFECTS OF A CONSPIRACY EVEN BY SALES OF COMPANIES ASSIGNED TO THE DEFENDANTS, AND IT COULD COME FROM A COUPLE REASONS.

ONE IS, WELL, IF YOU'RE OUTSIDE A CONSPIRACY, YOU MIGHT LIKE THE FACT THAT PRICES ARE GOING UP IN YOUR INDUSTRY, AND YOU MIGHT JUST GO AHEAD AND MATCH IT. YOU MIGHT DECIDE THIS IS A GOOD CHANCE FOR MARKET SHARE, BUT YOU CERTAINLY CAN'T SAY EVERY COMPANY MUST BE PRICED LOW. IT'S UNCERTAIN. BUT ON TOP OF THAT, LET'S SAY A COMPANY TRIES THAT. LET'S SAY CONSUMERS RESPOND AND SAY, WELL, DID YOU SEE PRICES ARE GOING UP? BUT NOT FROM A COUPLE OF SUPPLIERS, AND IF A CONSUMER SHIFTS TO THAT, THAT'S NOW A SHIFT IN DEMAND TO THOSE OTHER SUPPLIERS, AND ECONOMISTS KNOW, WHEN YOU HAVE SHIFTS IN DEMAND, THAT INCREASES PRICE.

SO YOU OFTENTIMES SEE THOSE HIGHER PRICES OUTSIDE EVEN IF THOSE NON-DEFENDANT COMPANIES ARE LOWER IN PRICE. SO YOU HAVE

TO EVALUATE THE UMBRELLA EFFECT. HE HASN'T DONE THIS. AND IN MY REPORT, I ACTUALLY CITE LITERATURE THAT HAS BEEN PUBLISHED ON THIS, WHERE IT'S DATA THAT YOU PROBABLY SHOULD EXPECT THE UMBRELLA EFFECT IN ANTITRUST CASES, AND THEY EXIST GENERALLY, AND DR. JOHNSON SIMPLY GOES THE OTHER WAY AND SAYS THERE CANNOT BE, AND THAT'S HIS FALSE POSITIVES. THEN HE MOVES FORWARD. THAT'S MY FIRST ONE.

Q. AND YOU CITED AT LEAST ONE OF THESE PIECES OF LITERATURE ON SLIDE 24. IS THAT TRUE?

A. CORRECT. YES.

Q. IS THERE ANYTHING YOU WANT TO EXPLICITLY CALL OUT TO THE JUDGE ON SLIDE 24?

A. IT WAS JUST A REFERENCE, AND THIS ACTUALLY -- IT'S RIGHT AT THE START, SO IT'S KIND OF STARTING OFF AT THE BEGINNING, AND I'LL READ HERE. THE EXISTENCE OF UMBRELLA VICTIMS PERVADES NEARLY EVERY SECTION OF THE CASE. SO RIGHT AWAY THAT'S KIND OF ACKNOWLEDGED AT THE BEGINNING OF THIS ARTICLE.

Q. ALL RIGHT. SO WHY DON'T YOU FINISH UP ON THE FALSE POSITIVE ISSUE? ARE THERE ANY OTHER CONCERNS YOU HAVE WITH THE WAY THAT DR. JOHNSON APPROACHED THIS FALSE POSITIVE ANALYSIS?

A. YES, TWO OTHER THINGS. LET'S ASSUME FOR A MINUTE WE SET ASIDE, MAYBE ASSUME SOME ANALYSIS HAD BEEN DONE AND HE BELIEVED HE PROVED THE UMBRELLA EFFECT DOESN'T APPLY. HE DIDN'T LOOK AT ENOUGH DATA, AT LEAST NOT COMPLETELY. HE CLAIMS HE DID, BUT WHAT HE DID IS, HE LOOKED AT THE PURCHASES BY SYSCO AND U. S.

FOODS AND PITCO. BUT AS I REPORTED IN MY REPORT, TWO THINGS. ONE, HE'S LOOKING AT PURCHASES OF COMPANIES THAT BOUGHT FROM THE DEFENDANTS. THERE'S TWO PROBLEMS. ONE, IT'S NOT NON-DEFENDANT. BUT SECOND OF ALL, HE'S LOOKING AT INDIRECT PURCHASER TRANSACTIONS IN HIS ANALYSIS. SO YOU'VE GOT A MIDDLEMAN THERE THAT'S AFFECTING THE PRICE, BUT ALSO IT ISN'T A DIRECT PURCHASER. SO EVEN THE IMPLEMENTATION OF THIS ANALYSIS IS FLAWED BECAUSE HE HASN'T ACCOUNTED FOR THAT.

I SEE THIS IN THE DATA, AS I'VE HIGHLIGHTED, THAT WHEN YOU LOOK AT WHAT COSI SAID THEY SOLD TO SYSCO, BUT YOU LOOK AT WHAT SYSCO SAID THEY BOUGHT FROM COSI, IT DIFFERS BY TENS OF MILLIONS OF DOLLARS. IT'S DIFFICULT TO TRACK WHERE YOU'RE ACTUALLY SAYING THE PURCHASES WERE FROM.

Q. ALL RIGHT. AND WHY DON'T WE FINISH THIS FALSE POSITIVES DISCUSSION WITH A COMMENT ABOUT DOLORES, THE DOLORES FOODS TUNA THAT WAS PURCHASED BY PITCO, WHICH IS ONE OF THE CLASS MEMBERS HERE?

A. RIGHT. ANOTHER PART OF DR. JOHNSON'S CRITICISMS IS LOOKING AT PITCO PURCHASES, AND HE CITES TO DEPOSITION TESTIMONY FROM A GENTLEMAN FROM PITCO. HE MAKES A REFERENCE TO PRODUCTS. DOLORES IS A COMPANY THAT PITCO BOUGHT FROM, AND GEISHA IS THE PRODUCT. IN HIS DEPOSITION, DR. JOHNSON ADDED AND EXPANDED ON THAT. THAT'S TRUE FOR DOLORES, BUT NOT FOR GEISHA.

BUT THE ISSUE THERE IS, WHEN HE'S TALKING ABOUT PURCHASING

FROM OTHER DEFENDANTS, WE ALSO KNOW, AS I SAID IN MY REPORT, THOSE TYPES OF PRODUCTS THAT SUPPOSEDLY MADE THEM DIFFERENT, THAT WAS REALLY JUST WHAT THE PITCO PURCHASE CHOICES HAVE BEEN. THE THREE DEFENDANTS MAKE THESE PRODUCTS. SO IT'S NOT AS IF THIS WAS KIND OF A CARVE-OUT, SEPARATE TYPE OF PURCHASES THAT YOU WOULD EXPECT YOU WOULDN'T SEE IN OVERCHARGE. SO, AGAIN, THE CONCEPT OF FALSE POSITIVE IS NOT CORRECT.

Q. ALL RIGHT. SO WE HAVE A FEW MINUTES LEFT, I THINK. I WANT TO COVER SOME OF THE, THE, WHAT YOU EXPECT TO BE SOME CRITICISMS FROM DR. JOHNSON LATER THIS AFTERNOON, AND IF WE COULD RETURN TO SLIDE -- I THINK IT'S 14?

A. 14, YES.

Q. YES. SO WHY DON'T WE FINISH UP QUICKLY WITH BULLET POINT -- WHAT IS THAT? FOR THE ARTIFICIALLY SETTING OVERCHARGE TO ZERO, ONE-THIRD OF THE CLASS. WHAT'S YOUR UNDERSTANDING OF WHAT DR. JOHNSON HAS DONE IN THE LAST FEW WEEKS THAT MAY COME UP LATER TODAY?

A. I CAN TELL YOU WHAT I FOUND IN THE SOFTWARE CODE, BECAUSE THE DEFENDANTS DID PRODUCE SOME SOFTWARE CODE. SO WE WERE ABLE TO LOOK IN THERE AND REPLICATE IT, BUT I HAVEN'T SEEN THE REPORT. BUT WHAT THE CODE DOES IS, IT GOES IN AND IT RANKS ALL THE PURCHASERS FROM BIGGEST TO SMALLEST IN TERMS OF SALES, SALES OBSERVATIONS, AND THEN IT TAKES RANDOMLY A THIRD OF THEM. SO IF YOU WERE TO COUNT THEM 1-2-3, 1-2-3, IT STARTS TO TAKE OUT RANDOMLY ONE-THIRD. THEN HE GOES IN AND HE REDUCES THE

PRICES BY 10.28 PERCENT, AND HE SAYS, AH, SO I'VE EMBEDDED IN THERE A NON-OVERCHARGE CUSTOMER, IS THE IDEA. THAT'S WHAT THE ANALYSIS SHOWS, AND THE OVERCHARGE ADJUSTS. SO MY 10.28 PERCENT GOES DOWN -- I THINK IT WAS FIVE. I HAVE TO DOUBLECHECK, BUT IT GOES DOWN. SO I DON'T KNOW WHAT HE MIGHT SAY ABOUT THIS, BUT THE COMMENT I CAN MAKE IS, THIS IS A SYNTHETIC HYPOTHETICAL. THIS IS NOT WHAT WE SEE IN THE DATA. RIGHT? IT GIVES THE SUGGESTION.

THE COURT: SO YOU'RE SAYING HE WENT IN AND HE RANDOMLY SELECTED A THIRD AND THEN BACKED OUT THE OVERCHARGE.

THE WITNESS: RIGHT. MADE A DEDUCTION. SO HE CHANGED THE PRICE TO A LOWER PRICE.

THE COURT: AND THE POINT WAS?

THE WITNESS: I'M NOT SURE, BUT I THINK IT MAY BE YOU MAY HAVE PEOPLE WHO HAVE ZERO OVERCHARGE AND PEOPLE WHO HAVE A HIGH OVERCHARGE, AND ALL YOUR REGRESSION TELLS YOU IS THE OVERCHARGE, BUT THERE'S NO BASIS TO SAY THAT WE HAVE ZERO OVERCHARGE FOR A THIRD. IN FACT, WHEN I JUST TALKED ABOUT MY ANALYSIS, I LOOKED AT HIS CUSTOMER BY CUSTOMER AND SAID THAT WHEN HE THINKS HE FINDS AN OVERCHARGE, IT'S REALLY ABOUT THE DATA LIMITATION. SO THE FACTS IN THE CASE DON'T SUGGEST THAT THAT'S A FACTOR.

THE COURT: WHY DID HE TAKE OUT A THIRD AND NOT SOME OTHER PERCENTAGE?

THE WITNESS: I'M NOT SURE.

THE COURT: OKAY.

BY MR. LEBSOCK:

Q. IS THAT BASICALLY WHAT YOU WANT TO SAY ABOUT THAT?

A. YES.

Q. OKAY. SO THERE'S BEEN SOME DISCUSSION ABOUT AN F-TEST OR A CHOW TEST.

A. YES.

Q. CAN YOU SPEAK BRIEFLY ABOUT THE F-TEST OR CHOW TEST THAT DR. JOHNSON HAS?

A. YES. PART OF HIS ANALYSIS IS TO RUN -- IT'S A FORM OF AN F-TEST. IT'S CALLED THE CHOW TEST, AND HE RUNS IT AND SAYS, OH, LOOK, I FIND DIFFERENCES ACROSS CLASS MEMBERS. SO, FIRST OF ALL, A DIFFERENCE DOESN'T NECESSARILY MEAN SOMETHING. IT DOESN'T MEAN AN OVERCHARGE. SO HE'S FINDING A DIFFERENCE. WE KNOW CUSTOMERS WERE DIFFERENT. WE SEE DIFFERENT PRICES PEOPLE NEGOTIATED. SO HE STOPS THERE.

BUT THE PROBLEM WITH USING IT THE WAY HE DID, IT'S NOT THE TEST, BUT THE WAY. WHAT THE QUESTION AND WHAT HE ASKED IS, WHAT THE TEST REALLY ASKS IS, ARE THEY STATISTICALLY IDENTICAL FOR ALL THE COEFFICIENTS? AND I DON'T KNOW HOW THAT HELPS, BECAUSE YOU CAN HAVE DIFFERENCES, BUT THAT DOESN'T MEAN THEY WEREN'T ALL AFFECTED BY THE CONSPIRACY. BUT IT'S THE WRONG TOOL TO SAY, WELL, I GET TO SAY DIFFERENCE BY RUNNING THIS F-TEST, BECAUSE YOU MIGHT HAVE SOMETHING VERY, VERY SMALL, THAT MAYBE IT'S ONE OF THE COEFFICIENTS THAT'S NOT PARTICULARLY

IMPORTANT FOR ANSWERING THE QUESTION, AND THAT CAN BE ADDING INTO THE RESULT. SO IT'S NOT ABOUT THE CHOW TEST, BUT HOW HE DOES IT.

Q. SO JUST TO BE CLEAR, WHEN YOU USE THIS WORD COEFFICIENT, I THINK YOU JUST NEED TO BE CLEAR TO ALL OF US. YOU'RE TALKING ABOUT THE COEFFICIENTS ON EACH OF THESE EXPLANATORY OR INDEPENDENT VARIABLES THAT YOU HAVE INCLUDED IN YOUR MODEL?

A. YES. WHEN YOU RUN THE REGRESSION, WHEN YOU HAVE ALL THE DIFFERENT FACTORS, INCLUDING PRICE, INCLUDING A VARIABLE FOR THE CONSPIRACY, THE RESULTS OF THE REGRESSION IS TO SAY, LET ME ESTIMATE THOSE COEFFICIENTS, THE MAGNITUDE OF THE EFFECT, AND SO EACH VARIABLE WILL BE SOME COEFFICIENT. RIGHT? FOR EXAMPLE, WAS IT WHITE MEAT OR NOT? YOU'LL HAVE A PRICE COEFFICIENT ON THAT. THE F-TEST HE RAN SAYS FOR ALL OF THESE STATISTICALLY IDENTICAL.

Q. ALL OF THEM, NOT INDEPENDENT, JOINTLY, JOINT, NOT SEVERAL. IS THAT RIGHT?

A. YES.

Q. ALL RIGHT. FINAL QUESTION. THERE'S BEEN SOME DISCUSSION IN DR. JOHNSON'S REPORT ABOUT THE DIFFERENCES IN METHODOLOGY OR APPARENT DIFFERENCES IN METHODOLOGY BETWEEN WHAT YOU'VE DONE AND WHAT THE, WHAT DR. SUNDING HAS DONE AND WHAT DR. WILLIAMS HAS DONE. WHAT'S YOUR COMMENT ABOUT THAT?

A. I THINK DR. JOHNSON HAS OVERSTATED THE DIFFERENCES. HE HAS A CHART WHERE HE HAS SOME CHECKMARKS AND RED X'S, AND SOME

OF THOSE I DON'T THINK ARE ACCURATE, BECAUSE SOME OF THE DIFFERENCES, YOU CAN'T REALLY COMPARE THEM. I THINK HE'S OVERSTATED.

BUT MORE IMPORTANTLY, EXPERTS CAN DISAGREE A LITTLE BIT ON HOW TO DO SOMETHING AND MEASURE IT, BUT WE DON'T HAVE ANY SERIOUS DIFFERENCES OF THE MAIN UNDERLYING ECONOMIC FACTORS, AND EVEN MORE IMPORTANTLY, WE ALL COME TO RESULTS THAT WOULD SUPPORT THE FINDING OF COMMON IMPACT ACROSS THE CLASS. AND SO DR. JOHNSON SAYS, LOOK AT THEM. THEY'RE DIFFERENT. FOR HIM TO SAY, THEREFORE, THEY'RE ALL WRONG, I DON'T THINK THERE'S SUPPORT FOR THAT. I THINK IT'S A BIT OF A ROBUSTNESS CHECK, ACTUALLY, IF YOU THINK OF MY RESULTS, BECAUSE IF THINGS ARE DONE DIFFERENTLY, IT DOESN'T LEAD TO A DIFFERENT CONCLUSION, AT LEAST WHAT WE'RE THINKING ABOUT FOR THIS PARTICULAR PROCEEDING.

Q. AND THE THING WE'RE THINKING ABOUT FOR THIS PROCEEDING IS WHETHER THERE WAS WIDESPREAD IMPACT TO THE DIRECT PURCHASER CLASS AS A WHOLE, RIGHT?

A. CORRECT.

Q. ALL RIGHT. AND YOUR OPINION, AGAIN, IS ALL OR NEARLY ALL OF THE CLASS MEMBERS IN THE DIRECT PURCHASER CLASS WERE IMPACTED BY THIS CONSPIRACY?

A. YES, THAT'S CORRECT.

Q. OKAY.

MR. LEB SOCK: I DON'T HAVE ANY FURTHER QUESTIONS AT THIS POINT. IS MY UNDERSTANDING THAT THE DEFENDANTS WILL NOW

CROSS AND I MAY ASK DR. MANGUM TO COMMENT?

THE COURT: THAT'S TRUE. THAT'S WHAT THE PLAN IS.

I'D LIKE TO TAKE A VERY BRIEF BREAK. WE'RE GOING TO GO TILL 12:30, AND THAT'S THE PLAN, COUNSEL, AT THIS JUNCTURE, TIME PERMITTING.

OKAY. THANK YOU.

MR. LEB SOCK: THANK YOU.

(RECESS)

THE COURT: COUNSEL, STATE YOUR APPEARANCE AGAIN FOR OUR BENEFIT.

MR. GALLO: THANK YOU. I'M KEN GALLO. I REPRESENT BUMBLE BEE, AND I'M FROM HAUSFELD.

MAY I PROCEED, YOUR HONOR?

THE COURT: YES, YOU CERTAINLY MAY, SIR. GO AHEAD.

MR. GALLO: THANK YOU.

CROSS-EXAMINATION

BY MR. GALLO:

Q. DR. MANGUM, AS I JUST SAID, I'M KEN GALLO. I REPRESENT BUMBLE BEE. WE HAVE NOT HAD THE PLEASURE OF MEETING. GOOD MORNING. PLEASSED TO MEET YOU.

A. GOOD MORNING.

Q. I EXPECT WE'RE GOING TO DISAGREE ABOUT LOTS OF STUFF, SO LET'S SEE IF WE CAN AGREE ON A FEW BASIC THINGS. NUMBER ONE, I JUST HEARD YOU SAY, WE AGREE WE HAVE TO BE SCIENTIFIC IN THE APPROACH TO THESE ISSUES. CORRECT?

A. I BELIEVE SO. YOU USE THE SCIENTIFIC METHOD. CORRECT.

Q. AND YOU JUST CAN'T ASSERT THINGS. YOU NEED TO TEST THEM AND YOU NEED TO PROVE THEM. CORRECT? YOU SAID THAT, TOO.

A. I DID SAY THAT.

Q. RIGHT. AND I THINK YOU'LL PROBABLY AGREE WE NEED TO BE TRUTHFUL.

A. YES.

Q. AND ACCURATE AS WE CAN POSSIBLY BE.

A. YES.

Q. TO THE BEST OF OUR ABILITY. OKAY, GOOD. SO ONE OF THE FUNDAMENTAL PREMISES OF YOUR REGRESSION ANALYSIS IS YOU HAVE A BENCHMARK PERIOD AND YOU HAVE A CONSPIRACY PERIOD, AND THEN YOU ALSO HAVE A HELD-OUT PERIOD, BUT FOR THE MOMENT I DON'T CARE ABOUT THE HELD-OUT MOMENT. YOU HAVE A BENCHMARK AND A CONSPIRACY PERIOD, RIGHT?

A. CORRECT. YES.

Q. AND I HEARD YOU SAY CLEARLY AND UNEQUIVOCALLY THAT DURING THE BENCHMARK PERIOD THERE SHOULD NOT BE EVIDENCE OF A CONSPIRACY. THAT SHOULD BE FREE OF COLLUSION DURING THE BENCHMARK PERIOD. RIGHT?

A. UH (PAUSE), I'M TRYING TO THINK. THE BENCHMARK PERIOD I'VE CHOSEN I WANT TO SEPARATE OUT. I'M GOING TO TELL THE COMPUTER PROGRAM, YOU CAN CONSIDER THAT AS BUSINESS AS USUAL. I WANT THAT NOT TO BE THE TIME OF COLLUSION.

Q. RIGHT. YOU WANT THE BENCHMARK PERIOD TO BE BUSINESS AS

USUAL. YOU SAID THAT AT LEAST FOUR TIMES, DIDN'T YOU?

A. I DID.

Q. AND YOU WANT IT TO BE NO COLLUSION IN THAT BENCHMARK PERIOD, RIGHT?

A. CORRECT.

Q. THAT'S WHEN THERE'S NO CONSPIRACY, RIGHT?

A. CORRECT. WE WERE TALKING ABOUT THE CONSPIRACY THAT WE'RE TALKING ABOUT, THAT YOU'RE EVALUATING. THERE COULD BE OTHERS UNRELATED.

Q. RIGHT. BUT YOU MADE IT CLEAR THAT IT WOULD BE INAPPROPRIATE TO HAVE A BENCHMARK PERIOD THAT HAS COLLUSION DURING THE BENCHMARK PERIOD. THAT'S WHAT YOU JUST TOLD THE COURT, DIDN'T YOU? YOU USED THE WORD INAPPROPRIATE.

A. I DON'T REMEMBER THE PHRASE YOU'RE TALKING ABOUT, BUT I GENERALLY AGREE, WHEN YOU PICK THE BENCHMARK, IT'S DIFFERENT THAN THE CONSPIRACY PERIOD.

Q. OKAY, GOOD.

MR. GALLO: WOULD YOU PUT UP THE DEMONSTRATIVE, PLEASE, OF THE BENCHMARK PERIOD AND CONSPIRACY PERIOD? THANK YOU.

THE COURT: DO I HAVE THAT? DO I HAVE COPIES OF WHAT YOU'RE GOING TO BE SHOWING, OR NO? THOSE BINDERS? OKAY. DON'T WORRY ABOUT IT. I'VE GOT ENOUGH PAPERS HERE. THAT'S FINE. I DON'T KNOW WHAT'S IN THOSE BINDERS.

MR. GALLO: WELL, IN THOSE BINDERS ARE DOCUMENTS THAT I MAY OR MAY NOT ASK THE WITNESS ABOUT. THE WITNESS ALSO HAS A

SET, AND WE'VE GIVEN A SET TO YOUR LAW CLERK AS WELL. WE'RE ALSO GOING TO, FOR THE MOST PART, PROJECT THEM UP ON THE SCREEN.

THE COURT: PLEASE.

MR. GALLO: BUT TO THE EXTENT I USE THEM, YES, YOUR HONOR.

THE COURT: AND TO THE EXTENT THEY'RE NOT UNDER A PROTECTIVE ORDER. I HAVE NO IDEA WHAT'S IN THERE.

MR. GALLO: NO, WE'RE BEING VERY CAREFUL.

THE COURT: OKAY. THAT'S FINE, SIR. GO AHEAD.

AND THIS DOCUMENT, EXHIBIT 6, FROM THE JOHNSON REPORT, IS IN THIS? WELL, IT'S IN THE REPORT.

MR. GALLO: IT'S IN THE REPORT, AND THE REPORT IS IN THE BINDER, AND I CAN REFER YOU TO THE BINDER, IF THAT WOULD BE HELPFUL.

THE COURT: THAT'S GOOD, MR. GALLO. THANK YOU.

MR. GALLO: THANK YOU.

BY MR. GALLO:

Q. NOW, THIS DOCUMENT ACCURATELY REFLECTS YOUR BENCHMARK PERIOD ON THE LEFT AND IN THE DARK PURPLE, RIGHT? IT SAYS THE FIRST BENCHMARK PERIOD RUNNING FROM 2002 THROUGH SLIGHTLY DIFFERENT DATES IN 2008. CORRECT?

A. WELL, I PICKED ONE DATE IN MY BASE MODEL. I THINK YOU MIGHT BE REFERRING TO IF YOU RUN THESE SEPARATELY, ONE OF MY ROBUSTNESS CHECKS.

Q. LET ME BE CLEAR ABOUT THIS. I DIDN'T THINK THIS WOULD BE THAT DIFFICULT. YOU REPORT BENCHMARK PERIODS IN YOUR REPORT. CORRECT?

A. CORRECT.

Q. OKAY. AND ONE OF THE BENCHMARK PERIODS IS, BASICALLY, 2002 TO 2008, WITH SLIGHTLY DIFFERENT END DATES BY DEFENDANT IN 2008. ISN'T THAT TRUE?

A. I THINK GENERALLY IN SOME OF MY REGRESSIONS THAT I RUN, YES.

Q. OKAY. DON'T YOU ALSO HAVE A BENCHMARK PERIOD THAT IS THE PERIOD JULY, 2010, TO MAY, 2011, WHICH SHOWS UP AS WHITE ON THIS CHART? THAT'S A SECOND BENCHMARK PERIOD YOU IDENTIFY.

A. CORRECT.

Q. AND THE THIRD ONE IS ALL THE WAY AT THE RIGHT END, 2016, RIGHT? YOU SAY, I HAVE A THIRD BENCHMARK PERIOD IN 2016. CORRECT?

A. CORRECT.

Q. AND YOU SAY, ON THE OTHER HAND, THE CONSPIRACY PERIOD IS THE BLUE PERIOD, THE CLASS PERIOD, FROM MID-2011 THROUGH MID-2015, AS REFLECTED ON THAT CHART. CORRECT?

A. YES.

Q. ISN'T THAT RIGHT?

A. YES.

Q. RIGHT. AND THAT'S WHAT YOU USED FOR YOUR BENCHMARK PERIOD FOR YOUR REGRESSION PERIODS, FOR YOUR REGRESSION AND YOUR

CONSPIRACY PERIODS, RIGHT?

A. CORRECT. YES. I RAN DIFFERENT REGRESSIONS.

Q. CORRECT. BUT YOU'RE NOT DISAGREEING WITH ME, RIGHT?

THOSE ARE THE PERIODS.

A. NO. I THINK WE'RE, I THINK WE'RE ON THE SAME PAGE, AS I'VE BEEN TESTIFYING.

Q. RIGHT. OKAY. AND SO NOW LET ME ASK YOU ABOUT YOUR REPORT IN THIS CASE. IN YOUR REPORT -- YOUR REPORT WAS DATED MAY -- YOUR FIRST DECLARATION, WHICH IS ACTUALLY A SWORN DECLARATION, IS DATED MAY 29, 2018, RIGHT?

A. I DON'T RECALL. THAT SOUNDS ABOUT RIGHT.

Q. OKAY. AND YOU GAVE US AN ERRATA SHEET A COUPLE DAYS LATER. ISN'T THAT RIGHT?

A. I DO REMEMBER THAT. YES.

Q. OKAY. AND IN YOUR REPORT, WHICH IS IN THE BINDER THAT YOU HAVE -- I'M SORRY -- AT -- IN YOUR REPORT, YOU REFER TO THE FACT THAT THE THIRD AMENDED COMPLAINT WAS ON FILE AT THE TIME YOU ISSUED YOUR REPORT, RIGHT?

A. I CAN'T REMEMBER. IT SOUNDS ABOUT RIGHT.

Q. OKAY. DO YOU REMEMBER -- IF YOU LOOK AT -- THERE'S A BINDER THERE, A WHITE BINDER THERE IN FRONT OF YOU, WHICH IS BINDER NUMBER ONE. IN BINDER NUMBER ONE, AT TAB 11, IS THE THIRD AMENDED COMPLAINT. THERE SHOULD THREE BINDERS UP THERE.

A. AH. YES. BINDER ONE.

THE DEPUTY CLERK: THIS IS EXHIBIT 11, COUNSEL?

MR. GALLO: RIGHT. EXHIBIT 11, TAB NUMBER 11, IN THE BINDER. EXHIBIT 11 ALSO IN THE SUBMISSION WE MADE TO THE REPORT.

BY MR. GALLO:

Q. OKAY. NOW, YOUR REPORT IS UNDER TAB NUMBER 25 IN THE OTHER BINDER, AND IT REFERS REPEATEDLY TO THIS COMPLAINT, DOESN'T IT? YOU REMEMBER THAT.

A. I REMEMBER REFERRING TO THE COMPLAINTS IN MY REPORT, YES.

Q. RIGHT. FOR EXAMPLE, AT PARAGRAPH 12 OF YOUR REPORT, YOU REFER TO THE COMPLAINT. YOU SAY, ON APRIL 17, 2018, THE DPP'S FILED THE THIRD AMENDED COMPLAINT, RIGHT?

A. GIVE ME A SECOND AND I'LL FIND THAT. PAGE 12.

Q. NO, PARAGRAPH 12.

A. PARAGRAPH 12.

Q. PAGE SEVEN OF YOUR REPORT.

A. YES, I SEE THAT PARAGRAPH.

Q. RIGHT. AND AT PARAGRAPH 17 IN YOUR REPORT, YOU CITE TO THE COMPLAINT, AND IN PARAGRAPH 15 OF YOUR REPORT YOU CITE TO THE COMPLAINT, RIGHT?

A. I'M LOOKING.

THE DEPUTY CLERK: COUNSEL, WHAT REPORT? WHAT EXHIBIT IS THAT?

MR. GALLO: IT'S 25, SIR. TAB 25. EXHIBIT 25.

A. (CONTINUING) I DON'T CITE TO THE REPORT. I MEAN, I MENTION THE WORD COMPLAINT AS FAR AS THINGS I'VE REVIEWED.

Q. IN PARAGRAPH 15, IT SAYS, ACCORDING TO THE CAPITAL C COMPLAINT, RIGHT?

A. OH, 15. YOU SAID 17.

Q. IN 17, IT SAYS, ACCORDING TO THE COURT FILE'S CAPITAL C COMPLAINT, RIGHT?

A. (PAUSE)

Q. YOU'RE REFERRING TO THE, WHAT YOU'VE DEFINED AS THE COMPLAINT, THE APRIL 17TH COMPLAINT, RIGHT?

A. PARAGRAPH 17 OR 15?

Q. YES. YOU SEE, FOR EXAMPLE, THE FIRST BULLET POINT IN PARAGRAPH 17?

A. ON 17, FIRST BULLET POINT.

Q. SPECIFIC DOCUMENTS PROVIDED IN THIS LITIGATION, INCLUDING THE COMPLAINT.

A. CORRECT.

Q. I MEAN, THIS ISN'T CONTROVERSIAL. YOU CITED TO THE COMPLAINT AT LEAST TEN TIMES IN YOUR REPORT. IS THAT CORRECT?

A. RIGHT.

Q. AND YOU SAID, YOU SWORE ACTUALLY IN PARAGRAPH 16 THAT YOU ACCEPTED AS TRUE THE DPP ALLEGATIONS THAT THERE WAS COLLUSIVE CONDUCT BY THE DEFENDANTS WITH RESPECT TO THE PRICING OF TUNA, RIGHT?

A. CORRECT.

Q. ALL RIGHT. BUT YOU ACTUALLY DID NOT ACCEPT ALL THE ALLEGATIONS OF THE COMPLAINT AS TRUE FOR PURPOSES OF YOUR

REPORT, DID YOU?

A. I'M NOT SURE WHAT YOU MEAN BY ALLEGATIONS.

Q. WELL --

A. AS FAR AS WHAT?

Q. -- THE WORDS IN THE COMPLAINT AND AS ALLEGATIONS OF FACT. THAT'S WHAT I MEAN. YOU DIDN'T ACCEPT ALL OF THEM AS TRUE FOR PURPOSES OF YOUR REPORT ANALYSIS, DID YOU?

A. I DO REMEMBER THERE BEING EARLIER ALLEGATIONS ABOUT SOMETHING IN 2004, AND THEN SOMETHING CHANGED BY THE TIME THE MOTION FOR CLASS CERTIFICATION WAS FILED, IF THAT'S WHAT YOU'RE TALKING ABOUT.

Q. THIS COMPLAINT WAS ON FILE AT THE TIME YOU FILED YOUR REPORT, RIGHT?

A. YOU'RE ASKING ME QUESTIONS, AND I THINK SO, BUT, I MEAN, AS FAR AS THE TIMING OF THE COMPLAINTS OR WHAT'S EFFECTIVE.

Q. DID YOU SAY ANYWHERE IN YOUR OPENING REPORT THAT YOU WERE ONLY ACCEPTING SOME OF THE ALLEGATIONS IN THE COMPLAINT AS TRUE AND REJECTING OTHER ALLEGATIONS? YOU DIDN'T SAY THAT, DID YOU?

A. WELL, I DON'T SAY COMPLAINT WHEN I USE THE WORD ALLEGATIONS. I WAS WRITING DOWN WHAT I BELIEVED TO BE THE OPERATIVE ALLEGATIONS AT THE TIME, IF THAT'S WHAT YOU MEAN. I DIDN'T CITE TO THE COMPLAINT IN PARAGRAPH 16.

Q. OH. SO IN PARAGRAPH 16, WHEN YOU SAID YOU ACCEPTED THE ALLEGATIONS AS TRUE, YOU ACTUALLY WEREN'T TRYING TO CREATE THE IMPRESSION THAT YOU ACCEPTED THE ALLEGATIONS IN THE

THEN-OPERATIVE COMPLAINT AS TRUE? YOU WERE REFERRING TO SOME OTHER ALLEGATIONS?

A. YOU KNOW, I DON'T COUNT ON MY SHORT-TERM MEMORY FOR ALL THE ALLEGATIONS IN THE COMPLAINT.

Q. YOU DIDN'T IDENTIFY ANYTHING ELSE YOU WERE REFERRING TO.

A. I DON'T REFER TO ANY DOCUMENT IN THAT SENTENCE. I SAY ALLEGATIONS.

Q. YOU WEREN'T TRYING TO CREATE THE IMPRESSION THAT YOU WERE ACCEPTING THE COMPLAINT ALLEGATIONS AS TRUE?

A. YOU KNOW, I'M NOT GETTING A CHANCE TO FINISH MY ANSWERS. I'M NOT SURE IF THAT'S APPROPRIATE OR IF I SHOULD STOP MY ANSWERS WHEN YOU START ASKING A QUESTION. I'M TRYING TO BE RESPONSIVE.

Q. WHAT YOU DID IS ACCEPT THE ALLEGATIONS OF THE COMPLAINT AS TRUE TO THE EXTENT THEY HELPED YOU CREATE YOUR REGRESSION MODEL, RIGHT? THE ONES IN THE REGRESSION MODEL YOU WANTED TO USE.

A. I DON'T KNOW IF THAT'S TRUE, BECAUSE I'M NOT TYING MYSELF. I KNOW THERE WERE COMPLAINTS, THERE WERE ALLEGATIONS IN EARLIER COMPLAINTS THAT I UNDERSTOOD HAD CHANGED BY THE TIME I WROTE MY MODEL.

Q. OKAY.

A. SO I THINK THERE WERE EARLIER TIME PERIODS THAT IT WAS BELIEVED, POSSIBLY EARLY ON IN THIS CASE, MIGHT BE IMPLICATED, BUT THEN THAT CHANGED. AND SO WHEN I WROTE MY REPORT, I BASED

IT ON WHAT I UNDERSTOOD WERE THE ALLEGATIONS REGARDING THE TIMING OF THE CONSPIRACY AT THAT TIME.

Q. YOU ASSUMED A MISCONDUCT PERIOD OF 2011 THROUGH 2015, RIGHT? FOR PURPOSES OF YOUR REPORT.

A. THAT'S WHAT I USED.

Q. THAT'S WHAT YOU USED.

A. I DIDN'T ASSUME. I MEAN, I LOOKED AT THE INFORMATION AND I LOOKED AT SOME OF THE SALES DATA IN MY ANALYSIS, AND I BELIEVE IT WAS PART OF THE DECISION ABOUT WHAT WOULD BE INCLUDED IN THE MOTION FOR CLASS CERTIFICATION.

Q. SO IF YOU'LL LOOK AT PARAGRAPH, IF YOU LOOK AT THE COMPLAINT THAT YOU HAVE IN FRONT OF YOU THERE, IN THE THIRD PARAGRAPH, PARAGRAPH TWO, IT REFERS TO ILLEGAL CONDUCT FROM 2004 THROUGH 2015, DOESN'T IT?

A. YES. I'M READING PARAGRAPH TWO.

Q. I'M SORRY.

A. MAY OF 2004.

Q. 2004 THROUGH 2015. CORRECT?

A. CORRECT.

Q. AND LOOKING BACK AT PARAGRAPH 12, JUST SO WE CAN BE CLEAR ABOUT THIS, IN PARAGRAPH 12, YOU DEFINED THE THIRD AMENDED COMPLAINT AS THE COMPLAINT YOU'RE REFERRING TO, RIGHT?

A. THE WORD -- YEAH, DEFINE THE WORD COMPLAINT, OR I GIVE THE QUOTES IN THE PARENTHETICAL THERE.

Q. RIGHT. AND, NOW, IF YOU LOOK AT THE THIRD AMENDED

COMPLAINT, FOR EXAMPLE, AT PARAGRAPHS 115 AND 116, WHICH ARE ON PAGE, OF THE THIRD AMENDED COMPLAINT, IF YOU TURN TO PARAGRAPHS 115 AND 116, YOU'LL SEE THOSE PARAGRAPHS ALLEGE ILLEGAL CONSPIRACY CONDUCT IN 2004, RIGHT?

A. YES, I SEE THAT, PARAGRAPHS 115, 117.

Q. THAT'S IN YOUR BENCHMARK PERIOD THAT YOU JUST TOLD THE COURT HAS TO BE FREE OF ANTICOMPETITIVE CONDUCT, RIGHT?

A. CORRECT. THAT'S WHAT I CONSIDER THE BENCHMARK TO BE, IS NOT A CONSPIRACY.

Q. RIGHT. EVEN THOUGH THE COMPLAINT SAYS THERE'S ILLEGAL CONDUCT GOING ON THEN.

A. YES, I READ THAT.

Q. YES. AND YOU KNOW THAT, AT PAGES 55 AND 56 OF THE COMPLAINT AND 57 OF THE COMPLAINT AND 58 OF THE COMPLAINT AND 59 OF THE COMPLAINT, IT SAYS THERE'S ILLEGAL PRICE-FIXING GOING ON IN THE PERIOD 2004 TO 2006, RIGHT?

A. YOU START AT PARAGRAPH 55?

Q. PAGES 55 THROUGH 59.

A. PAGES?

Q. YES. THERE WERE FIVE PAGES OF ALLEGATIONS ABOUT ILLEGAL CONDUCT BETWEEN 2004 AND 2006. DO YOU SEE THAT?

A. YES, I SEE -- I'M LOOKING AT PAGE 56, YES. SORRY. 55, 56.

Q. YEAH. ALL ABOUT PRICE-FIXING GOING ON BETWEEN 2004 AND 2006.

A. YES.

Q. WHICH IS THE PERIOD YOU ASSUMED WAS FREE OF ANTICOMPETITIVE CONDUCT.

A. CORRECT.

Q. OKAY. AND THEN PAGES, SAY, TWO THOUSAND (PAUSE) -- LET'S LOOK AT PARAGRAPHS 127 TO 138. THOSE ARE ON PAGES 60 TO 63. THEY TALK ABOUT ALL KINDS OF ILLEGAL CONDUCT BETWEEN 2006 AND 2008, CONSPIRACY CONDUCT, RIGHT?

A. YES, I SEE THAT.

Q. OKAY. AND THIS IS THE PERIOD YOU ASSUMED IS TOTALLY FREE OF ANTICOMPETITIVE CONDUCT.

A. CORRECT. FOR MY MODELING PURPOSES. CORRECT.

Q. RIGHT. TO CREATE YOUR REGRESSION THAT THE COURT IS SUPPOSED TO RELY ON, RIGHT?

A. CORRECT.

Q. OKAY. AND THEN IN 2010, IF YOU'LL LOOK AT, IF YOU'LL LOOK AT THE ALLEGATIONS OF THE COMPLAINT IN PARAGRAPHS 170 THROUGH 180, THERE'S ALLEGATIONS THAT, IN 2010 AND 2011, THERE'S ILLEGAL CONDUCT. DO YOU SEE THAT?

A. YOU SAID PARAGRAPH 170, RIGHT?

Q. YEAH. 170 TO 180 IS ALL ABOUT WHAT'S ILLEGAL CONDUCT GOING ON IN 2010, WHICH IS (PAUSE) -- RIGHT?

A. YES, I SEE THAT.

Q. OKAY. DURING YOUR JULY, 2010, TO JULY, 2011, BENCHMARK PERIOD, SOME OF IT, RIGHT?

A. YES, AS FAR AS THE DATES. 2010 IS IN MY DOWNSIDE PERIOD AND MY HOLDOUT PERIOD, THE MARKET SHOCK PERIOD.

Q. THE SECOND HALF OF 2010 AND '11 ARE IN YOUR BENCHMARK, RIGHT?

A. STARTING AFTER JUNE. CORRECT. STARTING IN JUNE OF TWO THOUSAND -- JULY OF 2010.

Q. RIGHT. AND IF YOU LOOK AT PARAGRAPH, FOR EXAMPLE, IF YOU LOOK AT THESE PARAGRAPHS I JUST REFERRED YOU TO -- 170, 171, AND 172 -- SOME OF THAT IS HAPPENING IN YOUR SECOND BENCHMARK PERIOD, RIGHT?

A. I SEE THE REFERENCES TO LAST HALF OF 2010.

Q. YEAH. SO THAT'S IN YOUR SECOND BENCHMARK PERIOD, WHAT YOU ASSUMED WAS FREE OF ANTICOMPETITIVE CONDUCT.

A. NOT ANTICOMPETITIVE CONDUCT. ANTICOMPETITIVE EFFECT. YOU CAN MAKE AN AGREEMENT, BUT I'M -- YOU CAN MAKE AN AGREEMENT AND THEN DECIDE THE PRICES, AND THEN THE PRICE INCREASES ARE EFFECTIVE MONTHS LATER. YOU CAN'T BE TIED TO THE SPECIFIC AGREEMENTS. YOU WANT TO LOOK AT THE ECONOMIC IMPACT.

Q. YOU DIDN'T DO ANYTHING EMPIRICALLY TO TEST -- YOU HAD THIS COMPLAINT IN FRONT OF YOU THAT SAID THERE'S ALL KINDS OF ANTICOMPETITIVE CONDUCT DURING YOUR FIRST BENCHMARK PERIOD. YOU RAN NO STATISTICAL OR EMPIRICAL TEST TO DETERMINE THAT THERE WAS, THAT IT WAS FREE OF ANTICOMPETITIVE CONDUCT BETWEEN 2002 AND 2008, DID YOU?

A. I BELIEVE I DID.

Q. WHAT DID YOU DO, SIR? WHERE IS THAT IN YOUR REPORT THAT SAYS YOU HAVE CONFIRMED WITH A REGRESSION MODEL THAT 2002 TO 2008 IS FREE OF ANTICOMPETITIVE CONDUCT?

A. I DIDN'T WRITE THAT SENTENCE, SO I WON'T FIND THAT SENTENCE IN MY REPORT. BUT AS PART OF MY ANALYSIS IN THIS CASE, I UNDERSTAND THAT WHEN THE COMPLAINT WAS FILED ON INFORMATION AND BELIEF, THEN I ASSISTED AND I LOOKED AT THE DATA, AND I SAW, WELL, I SEE THE ALLEGATIONS, I SEE THE EVIDENCE, AND I WORKED WITH COUNSEL. I SAID, HERE'S WHAT I FIND AS AN ECONOMIST, AND I UNDERSTAND THAT THE PERIOD OF CLASS, THE MOTION FOR CLASS CERTIFICATION WAS A SMALLER PERIOD BECAUSE OF THAT. SO IT WAS BECAUSE OF THE EVALUATION OF THE EVIDENCE THAT I SAID, I DON'T SEE IT THERE. I SUGGESTED A DIFFERENT PERIOD, AND THAT'S WHAT'S BEEN PURSUED.

Q. CAN YOU POINT ME TO ANYTHING IN YOUR REPORT THAT SAYS THAT YOU OFFERED THAT OPINION IN EITHER YOUR OPENING REPORT OR YOUR REPLY REPORT? BECAUSE I SURE COULDN'T FIND AN OPINION THAT SAID YOU FOUND NO ANTICOMPETITIVE CONDUCT IN THOSE PERIODS.

A. WELL, IT'S NOT PART OF THE OPINIONS I'VE EXPRESSED.

Q. RIGHT. FAIR ENOUGH. UNTIL THIS MOMENT.

A. THAT'S NOT AN OPINION NEEDED TO SUPPORT WHAT I'M SAYING, TO SAY, BY THE WAY, I LOOKED ELSEWHERE AND THERE WAS NOTHING.

Q. THAT'S NOT AN OPINION. THAT'S THE CRUCIAL FOUNDATION OF A BENCHMARK PERIOD, SIR.

A. NO. YOU'RE MISUNDERSTANDING, BECAUSE IF YOU, BY CHANCE,

LEAVE CONSPIRACY CONDUCT IN A BENCHMARK, THEN WHAT YOU'RE TELLING THE COMPUTER, SOME CONSPIRACY'S OKAY, WHICH MEANS YOU'RE GOING TO GET TOO LOW OF AN ESTIMATE.

Q. OKAY, BUT --

A. I'M IN THE MIDDLE. THE ONLY EFFECT OF LEAVING CONSPIRACY IN A BENCHMARK IS UNDERESTIMATING DAMAGES.

Q. THAT'S YOUR TESTIMONY TODAY. IT'S NOT IN YOUR -- IT DOESN'T SAY THAT IN YOUR REPORT.

A. YOU REFERENCED MY TESTIMONY TODAY, BUT IF YOU DON'T STOP INTERRUPTING ME, I'M NOT GOING TO BE ABLE TO GIVE MY TESTIMONY.

THE COURT: NO INTERRUPTIONS. IF YOU DON'T STOP INTERRUPTING, WE'RE NOT GOING TO HAVE A VERY GOOD RECORD.

MR. GALLO: I APOLOGIZE, YOUR HONOR.

THE COURT: SLOW DOWN. OKAY.

BY MR. GALLO:

Q. THANK YOU, SIR. THERE IS NOTHING IN YOUR REPORT THAT SAYS, NUMBER ONE, THAT YOU DID ANY KIND OF TESTING OR DETERMINATION WITH EMPIRICAL EVIDENCE THAT THE FIRST BENCHMARK PERIOD WAS FREE OF ANTICOMPETITIVE CONDUCT, RIGHT?

A. CORRECT. I DON'T REMEMBER TALKING ABOUT THAT SUBJECT IN MY DECLARATION.

Q. THERE'S NOTHING THAT SAYS, IN YOUR REPORT OR YOUR REPLY, IF IT WERE TAINTED, THAT'S OKAY.

A. I DON'T THINK IT'S OKAY IF IT'S TAINTED.

Q. OKAY. THERE'S NOTHING IN YOUR REPORT THAT SAYS YOU DID

EMPIRICAL TESTING TO DETERMINE THAT THE SECOND BENCHMARK PERIOD WAS FREE OF ANTICOMPETITIVE CONDUCT.

A. I DON'T KNOW WHAT YOU MEAN WHEN YOU'RE SAYING TESTING THAT A BENCHMARK IS FREE.

Q. OKAY. WELL, HOW ABOUT ECONOMIC OR STATISTICAL TESTING TO DETERMINE THAT THE BENCHMARK PERIOD IS FREE OF ANTICOMPETITIVE CONDUCT? HAVE YOU EVER HEARD OF SUCH A THING?

A. I UNDERSTAND WHAT ECONOMETRIC TESTING IS. I DON'T KNOW WHAT YOU'RE REFERRING TO AS FAR AS RUNNING A TEST TO VERIFY THAT IT'S FREE OF ANTICOMPETITIVE CONDUCT.

Q. THANK YOU. WOULD YOU LOOK AT TAB NUMBER TEN IN BINDER NUMBER TWO, WHICH SHOULD BE THE ABA PUBLICATION WHICH IS ENTITLED *PROVING ANTITRUST DAMAGES*? YOU'RE FAMILIAR WITH THIS PUBLICATION, AREN'T YOU?

A. UH (PAUSE), YOU KNOW, THERE'S NOT A COVER ON THE COPY HERE. I DON'T KNOW WHAT THIS PUBLICATION IS.

THE COURT: IT'S TAB TEN IN BINDER ONE. THERE'S SOME EXCERPTS, IS WHAT YOU'RE REFERRING TO.

MR. GALLO: DID I MISSPEAK, YOUR HONOR?

THE COURT: YOU SAID BINDER TWO.

MR. GALLO: OKAY. I'M SORRY. I MISSPOKE. I APOLOGIZE. IT IS BINDER ONE.

BY MR. GALLO:

Q. HAVE YOU SEEN THIS BOOK BEFORE, *PROVING ANTITRUST DAMAGES*, BY THE ABA?

A. I THINK SO, BUT IT'S NOT, IT'S NOT LISTED HERE.

MR. GALLO: WITH THE COURT'S PERMISSION, I CAN HAND YOU THE COVER PAGE. WOULD THAT BE HELPFUL?

THE COURT: CERTAINLY. GO AHEAD AND GIVE IT TO THE WITNESS. IT'S TAB TEN.

MR. GALLO: TAB TEN.

A. (CONTINUING) HOW ABOUT IF I USE THE BOOK?

Q. YOU CAN -- WELL, WHATEVER. LET'S TAKE IT ONE STEP AT A TIME.

A. BUT HOW DO I KNOW THIS COMES FROM THAT?

Q. SO YOU'RE FAMILIAR WITH THIS BOOK OR NOT?

A. NO, BECAUSE YOU'VE GOT IT IN YOUR HAND. I DON'T KNOW THIS GOES WITH THAT.

Q. WOULD YOU TURN TO PAGE 185 IN THE EXCERPT YOU HAVE THERE AT TAB TEN, PLEASE?

A. I'M LOOKING AT IT.

Q. OKAY. YOU SEE IT SAYS, IDENTIFYING BEGINNING AND END POINTS OF DAMAGES PERIOD?

A. I DO.

Q. AND THE FIRST SENTENCE SAYS, RECENTLY, ECONOMETRIC METHODS HAVE BEEN DEVELOPED THAT CAN BE USED TO HELP IN CHOOSING BEGINNING AND ENDING DATES FOR ALLEGEDLY UNLAWFUL CONDUCT BASED ON MARKET DATA. DO YOU SEE THAT?

A. I DO.

Q. OKAY. IS IT YOUR TESTIMONY THAT YOU'RE NOT FAMILIAR WITH

THAT, THAT SUCH ECONOMETRIC METHODS CAN BE USED TO DETERMINE WHETHER YOUR BENCHMARK PERIOD IS FREE OF ANTICOMPETITIVE CONDUCT?

A. I'M LOOKING FOR THE PHRASE, FREE OF ANTICOMPETITIVE CONDUCT.

Q. WELL, BEGINNING AND ENDING DATES. DO YOU SEE THAT?

A. THAT'S NOT WHAT YOU SAID IN YOUR QUESTION.

Q. OKAY. WELL, LET'S LOOK DOWN AT THE BOTTOM, AND MAYBE THIS WILL HELP. INDEED, AT THE VERY LAST SENTENCE, LITERATURE HAS SHOWN THAT APPROACHES THAT SEARCH FOR THE BEGINNING AND END DATES WITHOUT USING APPROPRIATE STATISTICAL TESTS ARE VERY LIKELY TO FIND STATISTICAL EVIDENCE OF DAMAGES, EVEN IN CASES WHERE THERE WAS NO ANTICOMPETITIVE CONDUCT. DO YOU SEE THAT?

A. YOU'RE IN THAT FIRST PARAGRAPH ON NUMBER THREE?

Q. CORRECT.

A. I WASN'T FOLLOWING YOU.

THE COURT: NO.

THE WITNESS: THE SECOND PARAGRAPH.

THE COURT: THE SECOND PARAGRAPH. IT'S THE SECOND PARAGRAPH OF THE FINAL SENTENCE.

A. (CONTINUING) YES, I SEE IT.

Q. RIGHT. OKAY. YOU DIDN'T RUN AN ECONOMETRIC MODEL TO PROVE THAT THE ANTICOMPETITIVE CONDUCT WAS LIMITED TO YOUR CONSPIRACY PERIOD, DID YOU?

A. IT'S NOT IN MY REPORT.

Q. I SEE. THIS IS ANOTHER THING YOU DID THAT YOU DIDN'T REPORT ON.

A. WELL, I CAN'T PUT EVERYTHING I DO ON PAPER.

Q. DID YOU DO IT? YOU RAN AN ECONOMETRIC MODEL TO PROVE THAT THE ANTICOMPETITIVE PERIOD WAS LIMITED TO YOUR CONSPIRACY PERIOD AND DID NOT AFFECT YOUR BENCHMARK PERIOD?

A. WE HAVE LOOKED AT ALTERNATIVE PERIODS, YES. I REPORTED IN MY REPLY REPORT ON DIFFERENT ENDING DATES, FOR EXAMPLE, OF THE MARKET SHOCK PERIOD. I LOOKED AT THINGS TO SEE IF THEY WERE SENSITIVE TO MOVING A LITTLE BIT. ABSOLUTELY.

Q. YOU DID NOT, IN EITHER REPORT OR IN YOUR DIRECT TESTIMONY HERE TODAY, TESTIFY THAT YOU RAN AN ECONOMETRIC MODEL TO ESTABLISH THAT THE ANTICOMPETITIVE PERIOD WAS LIMITED TO YOUR CONSPIRACY PERIOD AND DID NOT AFFECT ANY OF YOUR BENCHMARKS.

A. CORRECT. I DID NOT REPORT THOSE IN MY REPORTS.

Q. THANK YOU. ARE YOU FAMILIAR WITH THE FACT THAT THERE'S A SO-CALLED END-PAYER CLASS HERE, THE SO-CALLED EPP CLASS?

A. YES, I AM.

Q. OKAY. AND DO YOU KNOW THAT THE END-PAYER CLASS HAS A COMPLAINT ON FILE TODAY IN THIS CASE?

A. I'M NOT SURE. I ASSUME THERE'S A COMPLAINT ON FILE.

Q. YES. DO YOU KNOW WHETHER THE OPERATIVE END-PAYER CLASS COMPLAINT ON FILE RIGHT NOW, THE EFFECTIVE COMPLAINT IN THE EPP CASE, ALLEGES ANTICOMPETITIVE CONDUCT FROM 2002 ALL THE WAY THROUGH TO 2015?

A. I'D HAVE TO CHECK.

Q. YOU HAVEN'T LOOKED AT THAT?

A. I THINK I HAVE, BUT I HAVE TO CHECK. I DON'T REMEMBER THE DATES.

Q. WHEN YOU CONCLUDED THAT IT WAS SAFE TO USE A BENCHMARK PERIOD OF 2004 TO 2010 AND RELATE TO THE COURT THAT IT WAS FREE OF ANTICOMPETITIVE CONDUCT, YOU DIDN'T CHECK WHETHER THE EPP CLASS WAS ALLEGING THE OPPOSITE?

A. AS I SAID, I'M FAMILIAR WITH THAT. I REMEMBER THIS COMING UP ON A DEPOSITION ABOUT COMPLAINTS AREN'T EVIDENCE OF EFFECT, AND I UNDERSTAND FROM WORKING WITH COUNSEL I HAVE AND THE WORK THAT I DID IN COMMUNICATIONS WITH THEM THAT, ALTHOUGH A WIDER RANGE OF TIME WAS ORIGINALLY THOUGHT OF IN THE COMPLAINT, THAT IT WAS DECIDED, BASED ON THE EVIDENCE, TO HAVE A SMALLER PERIOD OF TIME, AND THAT'S WHY I WAS ASKED TO WRITE A DECLARATION ABOUT IT WAS A SMALLER PERIOD OF TIME.

Q. OKAY. SO IS IT YOUR TESTIMONY THAT COUNSEL TOLD YOU TO ASSUME THE BENCHMARK PERIOD?

A. NO. I THINK WHAT I JUST SAID WAS I DID THE ANALYSIS INTERACTING WITH THEM BASED ON THE ECONOMIC EVIDENCE I HAD.

Q. SO YOUR VIEW -- OKAY. SO LET ME JUST ASK YOU ANOTHER QUESTION. ARE YOU FAMILIAR THAT WAL-MART HAS FILED A COMPLAINT IN THIS CASE?

A. I KNOW THERE'S BEEN A NUMBER OF OTHER COMPLAINTS OF OPT-OUTS. I THINK THEY'RE IN THERE, BUT I WOULDN'T WANT TO

TESTIFY TO THAT FACT.

Q. ARE YOU FAMILIAR WITH THE FACT THAT WAL-MART ALLEGES ANTICOMPETITIVE CONDUCT ALL DURING YOUR BENCHMARK PERIODS?

A. I'M NOT FAMILIAR WITH THAT.

A. ARE YOU FAMILIAR WITH THE FACT THAT MR. BLECHMAN'S CLIENTS, MR. BLECHMAN WHO'S SITTING HERE TODAY, THAT HIS CLIENTS, AHOLD, ALBERTSONS, KROGER, THEY ALL ALLEGE ANTICOMPETITIVE CONDUCT OCCURRED ALL THROUGH YOUR BENCHMARK PERIODS?

A. MR. -- IS IT BLECHMAN?

THE COURT: MR. BLECHMAN.

A. (CONTINUING) MR. BLECHMAN AND I MYSELF, WE'RE NOT ACQUAINTED --

Q. OKAY.

A. -- SO I'M NOT SURE WHAT YOU'RE REFERRING TO.

Q. YOU DIDN'T CONSIDER THAT INFORMING YOUR OPINIONS ABOUT THE BENCHMARK PERIOD BEING FREE OF ANTICOMPETITIVE CONDUCT?

A. CORRECT. TIMINGS OF CONSPIRACY THAT MAY BE IN THE COMPLAINTS OF OPT-OUTS, I HAVE NOT.

Q. OKAY. SO IF I UNDERSTAND IT CORRECTLY, THEN YOU'RE ADVOCATING THAT THERE CAN BE A CLASS ACTION, A COMMON PROOF, AND THE DAMAGE PERIOD IS LIMITED TO THE PERIOD 2011 THROUGH 2015, ROUGHLY FOUR YEARS, RIGHT?

A. A LITTLE BIT MORE. JUNE 1, 2011, THROUGH JULY 31ST, 2015.

Q. SO YOU'RE ASKING THE COURT TO CERTIFY A CLASS THAT LIMITS

THE ABSENT CLASS MEMBERS' DAMAGES TO FOUR YEARS, AND YOU DON'T KNOW WHETHER THERE ARE OTHER PEOPLE IN THIS COURTROOM WHO ARE GOING TO TRY TO PROVE THAT THERE WAS ANTICOMPETITIVE CONDUCT FROM 2004 THROUGH 2015, FOR 11 YEARS?

A. WELL, WHAT SOMEONE ELSE MIGHT BELIEVE IS NOT THE SAME THING AS MY ECONOMIC ANALYSIS.

Q. FAIR ENOUGH. SO -- BUT IF THEY WERE RIGHT, THE CLASS THAT WOULD BE CERTIFIED HERE WITH COMMON PROOF WOULD BE THE ONE THAT POTENTIALLY GIVES UP SEVEN YEARS OF DAMAGES, RIGHT?

A. IF THERE'S SOME DETERMINATION THAT THERE'S SOMETHING DIFFERENT THAN AS ALLEGED AS I UNDERSTAND IN THE MOTION FOR CLASS CERTIFICATION FOR THE DIRECT PURCHASER CLASS, I WOULD READ THAT AND I WOULD RESPOND TO IT, BUT I'M NOT AWARE THAT WHAT YOU'RE SUGGESTING IS TRUE.

Q. IF MY MATH IS RIGHT, ISN'T IT TRUE THAT THEY WOULD BE GIVING UP SEVEN YEARS OF DAMAGES, THIS CLASS WOULD BE?

A. I DON'T THINK SO, BECAUSE IF I LEARNED THAT, I WOULD BE ABLE TO RESPOND AND WE'D HAVE SOMETHING ELSE GOING ON. YOU'RE JUMPING TO A CONCLUSION. YOU'RE SUGGESTING A HYPOTHETICAL. BUT IF THE EVIDENCE WAS DIFFERENT OR THE INFORMATION WAS DIFFERENT, I COULD BE SAYING DIFFERENT THINGS, BECAUSE I WOULD BE LOOKING AT A DIFFERENT PERIOD.

Q. OH, YOU'D COME BACK IN AND SAY, I WAS WRONG ABOUT THAT BENCHMARK PERIOD; IT'S ACTUALLY FULL OF ANTICOMPETITIVE CONDUCT?

A. I DON'T THINK I WOULD SAY I WAS WRONG. I WOULD SAY I'M AWARE OF NEW EVIDENCE, NEW DETERMINATIONS BY THE COURT. BUT AGAIN, YOU'RE MAKING THIS UP. I'M NOT AWARE OF EVIDENCE TO SUPPORT IT. I JUST KNOW I DON'T HAVE THAT EVIDENCE IN THIS CASE.

Q. ALL RIGHT, SIR. LET'S CHANGE SUBJECTS FOR A MINUTE. LET'S GO TO ANOTHER PART OF YOUR REGRESSION. WE AGREE, I THINK, THAT YOUR BASE REGRESSION PROVIDES A SINGLE COEFFICIENT THAT TRANSLATES INTO A 10.28-PERCENT OVERCHARGE, RIGHT? THAT'S WHAT YOU TOLD THE COURT, RIGHT?

A. CORRECT. YES.

Q. ALL RIGHT. AND THAT'S FOR THE ENTIRE CONSPIRACY PERIOD OF JULY 11 THROUGH JANUARY 15. THERE'S A SINGLE OVERCHARGE NUMBER, 10.28 PERCENT, IN YOUR BASE REGRESSION, RIGHT?

A. CORRECT.

Q. AND THAT'S THE POOLED MODEL WHICH POOLS ALL THE DEFENDANTS AND POOLS ALL THE PURCHASERS. CORRECT? IN A SINGLE REGRESSION.

A. CORRECT.

Q. AND IT'S THE CASE WHEN YOU RUN OR STRUCTURE A REGRESSION THE WAY YOU DID, YOU'RE GOING TO GET ONLY ONE OVERCHARGE COEFFICIENT. THAT'S THE WAY IT'S BUILT, RIGHT? THAT'S THE WAY THE REGRESSION MODEL IS BUILT.

A. UHM, NO. YOU SAID A STRUCTURAL MODEL.

Q. WELL, YOUR MODEL, YOUR MODEL, THE BASE MODEL, IT CAN ONLY

PRODUCE ONE COEFFICIENT. THAT'S ALL YOU'VE ASKED FROM THE MODEL, RIGHT?

A. CORRECT.

Q. THAT'S ALL I MEANT TO SAY. AND AS YOU TESTIFIED, OTHER THAN WAL-MART, YOU DIDN'T RUN OVERCHARGE COEFFICIENTS ON THE OTHER INDIVIDUAL MEMBERS OF THE CLASS, AND YOU'VE EXPLAINED TO THE COURT WHY YOU THOUGHT THAT WAS A, WOULD BE A BAD IDEA TO TRY TO DO THAT, RIGHT?

A. CORRECT. I DIDN'T RUN WAL-MART BECAUSE I WANTED TO RUN A SEPARATE CUSTOMER. I RAN IT BECAUSE THE DEFENDANTS CONSIDERED THEM A CUSTOMER TYPE.

Q. I SEE. ACTUALLY, A LITTLE POINT THERE. DID YOU SUGGEST TO THE COURT THAT WHEN YOU RUN, RAN WAL-MART THE FIRST TIME, YOU RAN WAL-MART AS A SINGLE CUSTOMER?

A. I'M NOT SURE I UNDERSTAND YOUR QUESTION.

Q. DIDN'T YOU -- WHEN YOU RAN IT IN YOUR REGRESSION THE FIRST TIME, IT WAS REPORTED IN YOUR OPENING REPORT, DIDN'T YOU TREAT WAL-MART AS 37 SEPARATE CUSTOMERS FOR IMPACT ANALYSIS? DIDN'T YOU DIVIDE IT UP BY WAL-MART LOCATION AND REPORT 37 DIFFERENT RESULTS IN YOUR BACKUP MATERIAL?

A. I'M NOT SURE WHAT YOU'RE TALKING ABOUT. THROUGH MY BACKUP MATERIAL?

Q. MAYBE I MISUNDERSTOOD, SIR. SO YOU TELL ME. YOU DON'T KNOW IF YOU RAN WAL-MART AS 37 SEPARATE CUSTOMERS THE FIRST TIME THROUGH?

A. OKAY. I'M NOT FOLLOWING YOU. YOU SAY THE FIRST TIME THROUGH. I CAN TELL YOU WHAT'S IN MY REPORT. I RUN ONE OF MY ROBUSTNESS CHECKS. WHERE I DO RUNS, I ASK THE MODEL TO GIVE ME WHAT ARE DIFFERENT OVERCHARGES FOR DIFFERENT CUSTOMER TYPES.

Q. RIGHT.

A. SO I RUN IT THAT WAY, AN INTERACTION MODEL. SO I RUN IT THAT WAY. I'M NOT SURE WHAT YOU'RE SAYING ABOUT IN MY BACKUP MATERIALS, OR YOU SAID SOMETHING ABOUT THE FIRST TIME THROUGH.

Q. YES. YOU'RE NOW SAYING THERE ARE 604 CUSTOMERS. THAT'S THE NUMBER OF CUSTOMERS YOU USED TODAY, RIGHT?

A. ACTUALLY, I'M REFERRING TO WHAT DR. JOHNSON DID.

Q. RIGHT. BECAUSE IF YOU LOOK AT YOUR REPORT AGAIN, AT TAB 25, MCD 15-4, IN THE BACK OF THE REPORT, YOU ACTUALLY REPORTED 1,176 CUSTOMERS IN YOUR OPENING REPORT, DIDN'T YOU?

A. LET'S SEE.

MR. GALLO: YOUR HONOR, IT'S ALSO UP ON THE SCREEN, IF THAT HELPS.

A. (CONTINUING) YES, I HAVE IT. I SEE THE NUMBER YOU'RE REFERRING TO. I'VE GOT A NOTE.

Q. SO WHAT EXPLAINS THAT IT WENT FROM 1,176 IN YOUR OPENING REPORT TO 604 FOR PURPOSES OF YOUR TESTIMONY TODAY?

A. WELL, MY TESTIMONY TODAY RELATES TO WHAT DR. JOHNSON DID.

Q. I SEE. WHAT YOU DID IS DIVIDE UP CUSTOMERS LIKE WAL-MART IN YOUR REGRESSION INTO A WHOLE BUNCH OF SUBCUSTOMERS, DIDN'T YOU? YOU DIDN'T RUN IT AS ONE.

A. NO, THAT'S NOT CORRECT. THERE ARE DIFFERENT LOCATIONS FOR WAL-MART.

Q. AND THAT'S THE REGRESSION FOR WAL-MART.

A. THAT'S NOT MY RECOLLECTION.

Q. WELL, SIR, CAN YOU EXPLAIN TO THE COURT THE DIFFERENCE BETWEEN 1,176 AND 604? YOU SEEMED COMFORTABLE WITH 604 ALL MORNING.

A. I'M NOT COMFORTABLE WITH DR. JOHNSON'S ANALYSIS AT ALL.

Q. OH.

A. I THINK MY WHOLE TIME WAS SPENT CRITICIZING IT. IT'S NOT A COMFORT LEVEL.

Q. SO THE REAL NUMBER IS 1,176?

A. THAT'S NOT CORRECT. YOU'RE REFERRING TO A SPECIFIC ANALYSIS I DID, RIGHT? IT'S LABELED MCD 15.4, AND YOU'RE REFERRING TO SOMETHING CALLED A FIXED-EFFECTS MODEL, AND I LOOKED AT IT IN A CONFIRMATORY WAY TO SEE WHAT PERCENTAGE OF PURCHASERS HAD AT LEAST ONE PRICE ABOVE. THAT'S NOT THE SAME AS COUNTING DIRECT PURCHASERS.

Q. OKAY. WELL, YOUR WORDS WERE TOTAL NUMBER OF DIRECT PURCHASERS. THOSE AREN'T MY WORDS, RIGHT?

A. CORRECT. WITH A NOTE, AND THE NOTE SAYS, DIRECT PURCHASERS ARE DEFINED AS A COMBINATION OF A CUSTOMER NAME AND A SHIP-TO STATE.

Q. OKAY. SO DIDN'T YOU RUN WAL-MART DIFFERENTLY?

A. WHEN I IDENTIFIED THE NUMBER OF CUSTOMERS FOR THIS

PURPOSE.

Q. YOU DID, RIGHT?

A. RIGHT, I DID, FOR CUSTOMER FIXED EFFECTS HERE.

Q. THAT'S WHAT YOU DID IN YOUR OPENING REPORT, IN YOUR WAL-MART ANALYSIS.

A. CORRECT. WELL, I WOULDN'T CALL IT MY WAL-MART ANALYSIS. SO THIS IS ACTUALLY NOT MY WAL-MART ANALYSIS. THIS IS A COMMON IMPACT ANALYSIS. THIS IS THE CONFIRMATORY STEP I TALKED ABOUT THIS MORNING. IT'S NOT WHAT I TESTIFIED TO EARLIER ABOUT RUNNING A ROBUSTNESS CHECK WHERE I HAVE A MODEL LOOKING AT DIFFERENT CUSTOMER TYPES.

Q. OKAY. WHEN YOU GET THAT SINGLE COEFFICIENT OF 10.28 PERCENT THAT YOU GOT, FOR PURPOSES OF DETERMINING COMMON IMPACT, THE QUESTION YOU HAVE TO ASK YOURSELF IS WHETHER IT'S MASKING WILDLY VARYING INDIVIDUAL RESULTS, RIGHT?

A. I DON'T BELIEVE SO.

Q. YOU DON'T THINK THAT'S AN APPROPRIATE QUESTION?

A. NO. I'M NOT SURE WHAT YOU MEAN BY WILDLY, BUT I THINK THE QUESTION WAS ABOUT WHETHER OR NOT ALL THE CLASS, COMMON IMPACT, WHAT'S IMPACTED. THE IMPACT DOESN'T HAVE TO BE IDENTICAL.

Q. ALL RIGHT. WELL, LET ME JUST RESTATE IT. YOU HAVE TO ASK YOURSELF WHETHER IT'S MASKING WIDELY VARYING INDIVIDUAL IMPACTS, THE 10.28, RIGHT?

A. NO, I WOULD NOT AGREE TO THAT.

Q. ALL RIGHT. THE 10.28, YOU ALSO WOULDN'T AGREE IT'S AN

AVERAGE. YOU RESIST USING THE WORD AVERAGE.

A. I DO, BECAUSE AN AVERAGE MEANS I HAVE TWO SEPARATE NUMBERS AND I TAKE THOSE AND I CREATE A THIRD THAT WASN'T ACTUALLY PART OF THE FIRST TWO. THE 10.28 IS THE DIRECT NUMBER YOU GET WHEN YOU RUN THE REGRESSION MODEL.

Q. ALL RIGHT. WOULD YOU LOOK AT TAB FOUR IN YOUR BINDER, PLEASE, WHICH IS ENTITLED *ECONOMETRICS, LEGAL AND PRACTICAL* --

A. BINDER TWO HERE OR --

Q. I'M SORRY. BINDER ONE, TAB FOUR. NOW, THIS PUBLICATION YOU CITE, RIGHT? IN YOUR REPLY.

A. I BELIEVE SO. I'D HAVE TO DOUBLECHECK, BUT.

Q. RIGHT. AND IF YOU LOOK AT PAGE 97, A COUPLE PAGES IN, IT SAYS, AN F-TEST IS THE STANDARD APPROACH FOR TESTING GENERAL FORMS OF MULTIPLE LINEAR RESTRICTIONS --

A. PARDON ME. I'M SORRY. I CAN'T FIND IT.

Q. SECOND PARAGRAPH.

THE COURT: AND READ SLOWLY, COUNSEL.

MR. GALLO: I'M SORRY.

BY MR. GALLO:

Q. SECOND PARAGRAPH, UNDER HEADING B.

A. GOT YOU.

Q. AN F-TEST IS THE STANDARD APPROACH FOR TESTING GENERAL FORMS OF MULTIPLE LINEAR RESTRICTIONS ON THE PARAMETERS OF A MODEL. CORRECT?

A. REGRESSION MODEL. CORRECT.

Q. CORRECT. AND THEN IF YOU'LL FLIP OVER FOR ME, PLEASE, TO PAGE 357, WHICH IS A FEW PAGES BACK, UNDER TWO ON 357, AT THE BOTTOM HALF OF THE PAGE, IT SAYS, OTHER STATISTICAL TOOLS, INCLUDING ADDITIONAL REGRESSION --

A. I'M SORRY, I'M SORRY. I CAN'T FIND IT.

Q. SECOND SENTENCE.

A. GOT IT.

Q. OTHER STATISTICAL TOOLS, INCLUDING ADDITIONAL REGRESSION SPECIFICATIONS, MAY BE USED TO TEST WHETHER THE AVERAGE EFFECT REPRESENTED BY A SINGLE COEFFICIENT FROM A CLASS-WIDE REGRESSION MASKS WIDELY VARYING INDIVIDUAL EFFECTS THAT REQUIRE INDIVIDUALIZED INQUIRY OR WHETHER IT TRULY REFLECTS COMMON IMPACT. NOW, DO YOU DISAGREE WITH THAT STATEMENT OUT OF THE ABA PUBLICATION?

A. I DO. YOU KNOW WHO THE CONTRIBUTORS ARE. I THINK THIS MIGHT BE DR. JOHNSON, SOMETHING HE CONTRIBUTED TO. I DISAGREE WITH THE WAY THAT'S STATED, BUT REGRESSION DOES TAKE LOTS OF OBSERVATIONS AND COMES OUT WITH GENERAL TRENDS. IT'S NOT A DETERMINISTIC EQUATION WE'RE TALKING ABOUT. BUT AS I MENTIONED, AN AVERAGE MEANS YOU TAKE TWO DIFFERENT THINGS. YOU ADD THEM TOGETHER AND YOU DIVIDE IT BY TWO AND YOU GET A DIFFERENT NUMBER. THAT'S NOT WHAT THIS IS.

Q. OKAY. THAT'S FAIR ENOUGH. SO LET'S GET OFF THE WORD AVERAGE, EVEN THOUGH THE ABA USES IT. LET'S BE A LITTLE MORE CONCRETE. OKAY? LET'S SAY YOU RAN YOUR SINGLE-COEFFICIENT

REGRESSION MODEL AND YOU HAD 50 CUSTOMERS THAT WERE OVERCHARGED 11 PERCENT IN THE REAL WORLD AND YOU HAD 50 CUSTOMERS THAT WERE OVERCHARGED NINE PERCENT IN THE REAL WORLD AND YOU ASKED FOR A SINGLE COEFFICIENT. YOU'D GET TEN PERCENT, ALL ELSE EQUAL. ASSUMING VOLUMES AND RATES AND EVERYTHING ELSE IS EQUAL, YOU'D GET TEN PERCENT.

A. I SEE WHAT YOU'RE SAYING. SOMETHING LIKE THAT, YES.

Q. OKAY. AND IF YOU RAN REGRESSION ON THE FOLLOWING SITUATION, 50 CUSTOMERS WERE OVERCHARGED BY 20 PERCENT, 50 CUSTOMERS WERE NOT OVERCHARGED AT ALL, ZERO, YOU'D GET TEN PERCENT, ALL ELSE EQUAL, RIGHT?

A. IF THAT WAS THE ONLY THING YOU DID, AND I'M WONDERING WHY, THE FACT THAT YOU'RE SUGGESTING IT WOULD BE TRUE, IF I KNEW THAT I COULD CONTROL. FOR EXAMPLE, LET'S SAY HALF WERE PART OF A REBATE PROGRAM AND THAT'S WHY THEY PAID LESS. I CAN CONTROL FOR THAT AND IT WOULDN'T FALL INTO THIS, AND SO YOU HAVE TO ASSUME AN UNEXPLAINED, RANDOM EVENT, LIKE YOU JUST DID, TO COME UP WITH YOUR EXAMPLE.

Q. RIGHT. AND THAT'S WHY PEOPLE DO ADDITIONAL TESTS.

A. NOT RANDOM. YOU HAVE TO HAVE A THEORY. THAT'S WHY, IF YOU HAVE A THEORY, THEN YOU TEST IT. BUT IF YOU SAY, I DON'T HAVE TO EXPLAIN WHY, I JUST WANT TO START MINING THE DATA FOR DIFFERENT RESULTS, IT'S NOT SCIENCE.

Q. LET'S NOT TALK ABOUT THAT. 10.28 PERCENT DOESN'T TELL YOU IN AND OF ITSELF WHETHER YOU HAVE A WHOLE BUNCH OF PEOPLE AT 20

AND A WHOLE BUNCH OF PEOPLE AT ZERO, OR WHETHER YOU HAVE A WHOLE BUNCH OF PEOPLE AT 11 AND A WHOLE BUNCH OF PEOPLE AT NINE. THAT'S WHAT YOU'VE GOT TO TRY TO FIGURE OUT, RIGHT?

A. CORRECT. IF YOU ONLY DID THE REGRESSION WITHOUT ALL THE OTHER STUFF I TALKED ABOUT, RIGHT, IT WOULD NOT BE CORRECT.

Q. RIGHT.

MR. GALLO: YOUR HONOR, I KNOW YOU WANT TO BREAK, AND SO IF I MAY HAVE ONE LAST QUESTION.

THE COURT: CERTAINLY. GO AHEAD.

MR. GALLO: THANK YOU.

BY MR. GALLO:

Q. SO LET'S GO BACK TO THE END OF YOUR TESTIMONY WHERE YOU REFERRED TO THE FACT THAT DR. JOHNSON GAVE YOU SOME ADDITIONAL REGRESSION ANALYSIS AND DR. JOHNSON RAN A NEW TEST AND HE SAID, LET'S TAKE ONE-THIRD OF THE PURCHASERS, ONE OUT OF EVERY THREE, JUST CHANGE THE MODEL SO THAT WE KNOW THEY WERE NOT OVERCHARGED, PUT THEM AT ZERO, PUT THEM AT ZERO AND RERUN THE MODEL -- AND YOU SAID THAT'S WHAT HIS DATA DID, RIGHT?

A. CORRECT.

Q. AND HE CAME OUT WITH A FIVE-PERCENT -- YOU CAME OUT AND YOU SEE IN THAT DATA A FIVE-PERCENT OVERCHARGE, RIGHT?

A. YEAH. I THINK I SAID I DIDN'T RECALL EXACTLY, BUT I THINK IT WAS SOMETHING LIKE THAT.

Q. THE FIVE PERCENT IS THE ANALOG TO THE 10.28 PERCENT IN YOUR REGRESSION.

A. NO, NOT AT ALL.

Q. WELL, HOLD ON. EXCEPT WE'RE CHANGING IT, OBVIOUSLY, IN THAT WE'RE ADJUSTING IT DOWN TO WHERE WE KNOW, WE KNOW ONE OF EVERY THREE OF THE CUSTOMERS WAS NOT OVERCHARGED.

A. WELL, YOU'RE USING THE PHRASE WE KNOW VERY LOOSELY, BECAUSE IT'S ACTUALLY HYPOTHESIZED RANDOMLY WITHOUT ANY BASIS TO BELIEVE THAT, AND IT'S CERTAINLY NOT CONSISTENT WITH THE EVIDENCE IN THIS CASE. SO TO SAY WE KNOW, IT'S NOT TRUE.

Q. NO, SIR, WE'RE NOT SAYING IT HAPPENED IN THE REAL WORLD. SURELY, YOU UNDERSTAND MY POINT.

A. WELL, NOT --

Q. HOLD ON. LET ME EXPLAIN.

A. BUT YOU'RE SAYING WE KNOW. I DON'T UNDERSTAND THAT.

Q. LET ME EXPLAIN. NOBODY IS SUGGESTING THAT DATA REFLECTS THE REAL WORLD, NECESSARILY. WHAT WE'RE DOING IS SAYING, TO PROVE THE POINT, THAT EVEN IF YOU STIPULATE IN THE DATA, EVEN IF YOU PUT IN THE DATA THAT ONE-THIRD OF THE CUSTOMERS WERE NOT OVERCHARGED, YOUR REGRESSION MODEL STILL PRODUCES A FIVE-PERCENT OVERCHARGE COEFFICIENT, RIGHT?

A. IF ALL YOU DID WAS REGRESSION WITHOUT LOOKING AT OTHER EVIDENCE, YOU COULD GET THAT, BUT THAT'S NOT WHAT I DID. AND BY THE WAY, I KNOW WHAT THE DISTRIBUTION PRICES LOOK LIKE, AND IT'S NOT ZERO OVERCHARGES, LIKE YOU SUGGEST. BUT YES, THE REGRESSION IS NOT TO BE ALL BY ITSELF, ALL THE STORY. IT'S GOT TO BE TAKEN INTO CONSIDERATION WITH EVERYTHING ELSE I TALKED

ABOUT.

Q. THAT'S FINE. I THINK THE COURT UNDERSTANDS MY POINT.

MR. GALLO: WOULD YOU LIKE ME TO STOP, OR WOULD YOU LIKE ME TO CONTINUE?

THE COURT: NO, I THINK WE NEED TO STOP. I'VE GOT TO GO TO MY MEETING.

MR. GALLO: I APPRECIATE IT.

THE COURT: WE WILL RESUME AT TWO O'CLOCK THIS AFTERNOON.

THANK YOU VERY MUCH, DOCTOR.

MR. GALLO: THANK YOU.

(PROCEEDINGS RECESSED AT 12:30 P.M.)

(END OF MORNING SESSION)

I, FRANK J. RANGUS, OFFICIAL COURT REPORTER, DO
HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT IS A TRUE AND
ACCURATE TRANSCRIPTION OF MY STENOGRAPHIC NOTES.

S/FRANK J. RANGUS

FRANK J. RANGUS, OCR

AFTERNOON SESSION

THE COURT: GOOD AFTERNOON. COUNSEL, YOU MAY CONTINUE.

MR. GALLO: THANK YOU, YOUR HONOR.

Q. DR. MANGUM, I WOULD ASK YOU TO LOOK AT TAB 25 OF BINDER 2, IT'S YOUR REPORT, YOUR OPENING REPORT, PARAGRAPH 22 OF YOUR OPENING REPORT, WHICH IS AT TAB 25.

A. I'M THERE.

Q. THANK YOU, SIR. SO IN THE FIRST SENTENCE OF THIS STATEMENT YOU ARE -- THIS IS UNDER THE HEADING OF "SUMMARY OF CONCLUSIONS" IN YOUR REPORT, RIGHT?

A. CORRECT, THAT'S THE HEADING JUST BEFORE 22.

Q. AND YOU'RE SAYING YOU HAVE CONCLUDED THAT THERE IS PROOF OF COMMON IMPACT ON CLASS MEMBERS. THAT'S THE GIST OF THE FIRST SENTENCE, RIGHT?

A. ARE YOU TALKING ABOUT THE FIRST SENTENCE IN THE FIRST BULLET OR THE FIRST --

Q. "BASED ON MY ANALYSIS OF THE AVAILABLE EVIDENCE, I HAVE CONCLUDED," THAT SENTENCE. THE POINT YOU'RE SAYING IS "I'VE CONCLUDED THAT YOU CAN PROVE IMPACT WITH COMMON EVIDENCE," RIGHT? I DIDN'T MEAN IT TO BE HARD?

A. I SAY, "I HAVE CONCLUDED THAT THE FACTS, EVIDENCE, ECONOMETRIC MODELS, AND ANALYSIS USED TO DETERMINE WHETHER DEFENDANTS CHARGED SUPRACOMPETITIVE PRICES TO THE THE DPPS," SO I'M INTRODUCING WHAT I'VE DONE.

Q. FAIR ENOUGH. THE NEXT SENTENCE SAYS, "MORE SPECIFICALLY,

FOR ANY ONE CLASS MEMBER TO PURSUE LITIGATION INDIVIDUALLY AGAINST THE DEFENDANTS, THAT CLASS MEMBER WOULD EMPLOY THE SAME FACTS, EVIDENCE, AND ANALYTICAL MODELS TO SHOW IMPACT AND DAMAGES AS THOSE REQUIRED FOR THE CLASS IN ITS ENTIRETY," CORRECT, THAT'S WHAT YOU SAID?

A. YES.

Q. THAT'S THE TEST YOU SET UP FOR COMMON IMPACT, RIGHT?

A. I DON'T DESCRIBE THIS AS A TEST. IT'S WHAT I'VE SAID.

Q. WELL, IT'S THE STANDARD YOU'RE WORKING AGAINST IN YOUR REPORT, ISN'T IT, IN YOUR SWORN DECLARATION? THIS IS WHAT YOU'RE TRYING TO PROVE THAT CLASS MEMBERS COULD EMPLOY THE SAME FACTS, THE SAME EVIDENCE, AND THE SAME ANALYTICAL METHODS TO SHOW IMPACT INDIVIDUALLY TO A CLASS MEMBER?

A. THE FIRST SENTENCE, BUT I THINK YOU'RE TRYING TO RAISE THIS TO A STANDARD OR TO SOMETHING LIKE THAT. I MEAN, THE SENTENCE SAYS WHAT IT DOES, BUT I'VE DESCRIBED IT DIFFERENT WAYS AS FAR AS MY OPINIONS AND MY TASKS IN THIS CASE.

Q. DO YOU AGREE THAT ONE OF YOUR TASKS WAS TO INFORM THE COURT WHETHER IF A CLASS MEMBER WENT TO TRIAL AND TRIED TO PROVE ITS CASE IT COULD USE THE SAME ANALYTICAL METHOD TO SHOW IMPACT THAT THE CLASS AS AN ENTIRETY USED?

A. YES, THAT'S ONE OF THE THINGS I TALKED ABOUT.

Q. FAIR ENOUGH. NOW, WHEN YOU WERE TESTIFYING ON DIRECT, YOU WERE ASKED TO -- SOME OF YOUR CRITICISMS OF DR. JOHNSON'S ANALYSIS, AND YOU SAID, IN WORDS OF SUBSTANCE, I'M NOT TRYING

TO QUOTE YOU, THAT YOU CAN'T DO ALL 604 REGRESSIONS FOR EACH INDIVIDUAL CLASS MEMBER. YOU THOUGHT THAT WAS INVALID. I REMEMBER YOU SAID, "BECAUSE WHEN YOU PUT ALL THAT DATA IN FOR ALL 600 CLASS MEMBERS THE COMPUTER SAYS, I CAN'T DO THAT," REMEMBER THAT TESTIMONY, YOU USED WORDS TO THAT EFFECT?

A. YES, I WAS TALKING ABOUT PART OF WHAT WAS BEING ASKED OF THE COMPUTER, NOT ALL OF IT.

Q. RIGHT. THE DATA WASN'T SUFFICIENT, THE COMPUTER WOULD SAY THE DATA'S NOT SUFFICIENT TO DO THAT FOR EVERY INDIVIDUAL CLASS MEMBER, THAT'S WHAT YOU WERE SAYING, RIGHT?

A. CORRECT.

Q. OKAY. NOW, TO BE SLIGHTLY MORE PRECISE, IT'S NOT JUST A COMPUTER, IT'S A COMPUTER RUNNING YOUR REGRESSION MODEL MODIFIED TO PUT OUT 604 VARIABLES INSTEAD OF ONE COEFFICIENT?

A. CORRECT, THAT'S THE CHANGE DR. JOHNSON MADE WHEN HE DECIDED TO RUN IT HIS WAY.

Q. WHICH IS ANOTHER WAY OF SAYING THAT IF THOSE INDIVIDUALS WHO HAD INSUFFICIENT DATA WERE AT TRIAL IN THIS COURTROOM, THEY COULD NOT USE YOUR REGRESSION MODEL TO PROVE COMMON IMPACT.

A. NO, THAT'S INCORRECT.

Q. OKAY. HOW DO THEY DO IT IF THERE'S INSUFFICIENT DATA TO GET A RELIABLE RESULT?

A. THEY DON'T TRY TO DO IT JUST FOR THEMSELVES, THAT'S THE POINT, THEY USE A COMMON MODEL TO DO IT.

Q. I SEE. BUT IF THEY WERE HERE ALONE, THEY COULDN'T PROVE

IT FOR THEIR OWN DATA, THEY WOULD HAVE TO RELY ON THE COMMON MODEL?

A. THEY WOULD USE A CLASS-WIDE MODEL LIKE I'VE RUN BECAUSE THAT'S WOULD BE AVAILABLE TO THEM. IT'S PART OF THE DATA LIMITATION THAT THIS HYPOTHETICAL THIS CLASS MEMBER WOULD FACE.

Q. IF THE HYPOTHETICAL CLASS MEMBER WAS HERE LITIGATING ALONE, YOU'RE SAYING THEY WOULD USE A CLASS-WIDE MODEL, THAT'S WHAT YOU'RE ASSUMING?

A. THAT'S WHAT I'M SEEING. WE'RE TALKING ABOUT A HYPOTHETICAL OF A CLASS MEMBER THAT HAD INSUFFICIENT DATA, RIGHT, THAT THE MODEL -- WHEN YOU ASK IT TO GIVE A SPECIFIC OVERCHARGE, IT CAN'T DO IT, THERE'S NOT ENOUGH DATA SO IT WOULDN'T TRY WHAT DR. JOHNSON SUGGESTED, IT WOULD DO WHAT I SUGGESTED.

Q. OKAY. I THINK I UNDERSTAND YOUR TESTIMONY.

DO YOU AGREE WITH THE POINT THAT A CHOW TEST IS WELL ACCEPTED IN ECONOMICS TO TEST WHETHER A POOLED REGRESSION HAS STRUCTURAL DEFICIENCIES IN IT OR NOT, THAT PEOPLE DO USE IT FOR THAT PURPOSE?

A. I DON'T KNOW WHAT YOU MEAN BY "DEFICIENCIES." IT'S A TEST USED TO EVALUATE TWO DIFFERENT WAYS OF REGRESSION METHODOLOGY AND COMPARING RESULTS.

Q. COMPARING A POOL MODEL TO SOME OTHER MODEL, RIGHT?

A. THAT'S ONE COMPARISON THAT COULD BE DONE.

Q. IT'S A WELL-ACCEPTED TEST FOR THAT PURPOSE, YOU DON'T

CONTEST THAT, DO YOU?

A. NO, I DO CONTEST THAT. I WOULD NOT SAY THAT WHAT DR. JOHNSON HAS DONE IS A PROPER USE OF THE CHOW TEST. THERE ARE MANY PROPER USES OF THE CHOW TEST, IT'S JUST NOT WHAT DR. JOHNSON HAS DONE.

Q. I ASKED IF A CHOW TEST IS USED FOR THAT PURPOSE. I DIDN'T ASK ABOUT WHAT DR. JOHNSON HAS DONE SPECIFICALLY. I ASKED THAT IS A WELL-ACCEPTED USE OF A CHOW TEST, ISN'T IT?

A. NO, NOT WHAT YOU EXPLAINED. I THOUGHT YOU WERE MEANING TO EXPLAIN WHAT DR. JOHNSON DID.

Q. OKAY. WELL, LET ME ASK YOU TO LOOK AT TAB 4 AGAIN, PLEASE. YOU'VE LOOKED AT IT BEFORE IN BOOK NUMBER 1, AND I'LL DIRECT YOU TO PAGE 358, PLEASE. IN PARAGRAPH 3 -- ON PAGE 358, IN THE I GUESS IT'S THE THIRD PARAGRAPH, IT SAYS, "STANDARD STATISTICAL TESTS CAN BE APPLIED TO TEST THE STABILITY OF COEFFICIENTS AMONG SUBGROUPS OF CUSTOMERS, PRODUCTS, TIME, GEOGRAPHIES, OR OTHER SUBSAMPLES," DO YOU SEE THAT LANGUAGE?

A. I DO.

Q. "AND TO DETERMINE WHETHER IT IS APPROPRIATE TO POOL POTENTIAL SUBGROUPS WHEN ESTIMATING THE AVERAGE EFFECT OF THE ALLEGED CONSPIRACY," DO YOU SEE THAT?

A. I DO.

Q. AND THEN IT SAYS, "FOR EXAMPLE, A CHOW TEST CAN BE IMPLEMENTED TO DETERMINE WHETHER THE EFFECT OF THE ALLEGED CONSPIRACY SHOULD BE ESTIMATED SEPARATELY FOR TWO OR MORE

POTENTIAL SUBGROUPS OF CUSTOMERS, PRODUCTS OR PERIODS"; DO YOU SEE THAT?

A. I DO.

Q. SO DO YOU AGREE WITH THE WORDS ON THAT PAGE THAT I JUST READ OR DO YOU DISAGREE THAT A CHOW TEST CAN BE USED FOR THAT PURPOSE APPROPRIATELY?

A. I THINK AN ANALYSIS LIKE THIS CAN BE DONE, THE WAY IT DESCRIBES IT GENERALLY, YES.

Q. OKAY. BY A CHOW TEST, RIGHT, IT'S WELL ACCEPTED FOR THAT PURPOSE, RIGHT?

A. NOT JUST LOOKING AT CHOW TEST RESULTS. THERE'S MANY WAYS TO RUN THE CHOW TEST. WHEN YOU SAY "A CHOW TEST," IT'S LIKE SAYING "A CAR." YOU HAVE TO KNOW A LOT MORE INFORMATION BEFORE YOU DESCRIBE IT. IF YOU ASK, "CAN A CAR DO THIS," IT DEPENDS ON WHAT THE "THIS" IS. I NEED MORE INFORMATION ABOUT THE CAR.

Q. DO YOU RECALL WRITING IN YOUR REPLY REPORT THAT YOU AGREED THAT DR. JOHNSON PERFORMED THE TECHNICAL ASPECTS OF HIS CHOW TEST CORRECTLY?

A. RINGS A BELL. I DON'T REMEMBER SPECIFICALLY, BUT I'M NOT -- I WASN'T CLAIMING THERE WAS SOME KIND OF MATHEMATICAL MISTAKE IN THE CALCULATION OF THE CHOW TEST.

Q. RIGHT. YOU DIDN'T RUN A CHOW TEST BEFORE YOU ISSUED YOUR INITIAL REPORT, CORRECT?

A. CORRECT.

Q. AND YOU DIDN'T EVEN REFER TO A CHOW TEST TO SUPPORT THE

VALIDITY OF YOU POOLING ALL 604 CUSTOMERS, CORRECT?

A. CORRECT.

Q. YOU DIDN'T TEST YOUR MODEL THAT WAY BEFORE YOU ISSUED YOUR REPORT, RIGHT?

A. THAT'S CORRECT.

Q. THE FIRST TIME YOU MENTIONED A CHOW TEST WAS AFTER DR. JOHNSON RAN ONE.

A. CORRECT, IN CRITICIZING THE USE OF IT.

Q. RIGHT. AND ONE OF THE CRITICISMS YOU MAKE OF DR. JOHNSON'S CHOW TEST IS YOU SAY, IN SUM OR SUBSTANCE, AND I'M REFERRING TO, FOR EXAMPLE, PARAGRAPH 157 OF YOUR REPLY REPORT, WHICH IS AT TAB 27, AND I'M REFERRING TO PARAGRAPH 90 AND 91 OF YOUR REPLY REPORT AT PARAGRAPH 27, YOU SAY, IN SUM AND SUBSTANCE, THAT HE'S GETTING STATISTICAL RESULTS BUT THEY'RE NOT MEANINGFUL, IN ESSENCE, THEY'RE NOT -- THERE'S NOTHING IMPORTANT OR PRACTICALLY IMPORTANT ABOUT THEM; ISN'T THAT YOUR POINT?

A. YOU'VE PARAPHRASED THE PARAGRAPH. LET ME READ IT MYSELF. I THINK IT'S SOMEWHAT WHAT YOU SAID, BUT I DO THINK WHAT HE'S TESTING, ALTHOUGH TECHNICALLY PROPERLY CALCULATED, ISN'T HELPFUL IN MY MIND TO THE QUESTION BEING ASKED. TO ASK IF THEY ARE STATISTICALLY IDENTICAL IN ALL RESPECTS IS A FINDING, BUT DOES THAT MEAN THAT WE DON'T HAVE A COMMON IMPACT IN THE CLASS? IT DOESN'T HELP WITH THAT QUESTION.

Q. I KNOW I'M MOVING YOU AROUND IN THE BOOKS, BUT BOOK NUMBER

3 IS SOME OF THE BACKGROUND MATERIAL THAT DR. JOHNSON PRODUCED SUPPORTING HIS EXPERT REPORT, AND I'M SURE YOU'RE FAMILIAR WITH IT. IN THAT BOOK, I WANT TO SHOW YOU -- REFER YOU TO TAB C, AND I'LL REPRESENT TO YOU, IF YOU DON'T RECOGNIZE IT, I ASSUME YOU WILL. I ASSUME YOU'VE LOOKED AT IT. TAB C IS SOME OF THE BACKGROUND MATERIAL OF THE CHOW TEST THAT DR. JOHNSON RAN THAT YOU'RE DISCUSSING IN YOUR REPORT.

A. I WOULDN'T BE BE ABLE TO IDENTIFY THAT AS WHAT YOU'VE DESCRIBED. I SEE THE SHEETS IN FRONT OF ME.

Q. I'LL ASK YOU TO ACCEPT MY REPRESENTATION FOR NOW. IF YOU LOOK AT THE BACK OF THE FIRST PAGE UNDER TAB C YOU'LL SEE COBORN'S IS LISTED THERE ABOUT HALFWAY DOWN THE PAGE. DO YOU SEE IT?

A. YES.

Q. IT LISTS A POSITIVE COEFFICIENT OF 2.786, AND IT GOES ON FOR QUITE A WHILE.

A. CORRECT.

Q. AND WAY OVER ON THE RIGHT SIDE IT'S GOT TOTAL SALES OF \$2,174,000, WAY OVER IN THE RIGHT-HAND COLUMN?

A. I SEE THAT.

Q. AND DO YOU RECOGNIZE COBORN'S AS A RETAILER OR DO YOU NOT KNOW?

A. I BELIEVE I'VE HEARD OF IT, BUT I WOULD WANT TO DOUBLE-CHECK BEFORE I TESTIFY AFFIRMATIVELY TO IT.

Q. WELL THEN, LET ME ASK YOU TO FLIP OVER TO THE BACK OF THE

FOLLOWING PAGE, ABOUT TWO-THIRDS OF THE WAY DOWN, DO YOU SEE HOMELAND SOLO WAREHOUSE?

A. I DO.

Q. IT'S GOT -- WHEREAS COBORN'S HAD A POSITIVE COEFFICIENT WHICH INDICATES AN OVERCHARGE, CORRECT?

A. A POSITIVE OVERCHARGE, YES.

Q. HOMELAND SOLO WAREHOUSE HAS A NEGATIVE OVERCHARGE ON \$437,000 OF SALES; DO YOU SEE THAT?

A. I DO.

Q. SO WITHIN YOUR RETAIL GROUP, YOU'VE GOT ONE RETAILER WITH A POSITIVE, ONE RETAILER WITH ACTUALLY A NEGATIVE OVERCHARGE, MEANING IT'S GOT A PRICE BELOW YOUR "BUT FOR" PRICE, RIGHT?

A. NO, I'M NOT FOLLOWING YOU, I'M SORRY. YOU REFER TO IT AS "MY RETAIL GROUP"?

Q. I'M SORRY, FAIR POINT. YOU GROUPED PEOPLE -- YOU CATEGORIZED MERCHANTS, YOU DIDN'T DO IT INDIVIDUAL BY INDIVIDUAL, BUT YOU DID DO CATEGORIES. YOU DID RETAILERS. YOU DID MERCHANDISERS. YOU DID WALMART. YOU DID SPECIALTY STORES, RIGHT?

A. CORRECT. ALTHOUGH I SHOULD CLARIFY HERE, I DIDN'T CATEGORIZE THEM THAT WAY. I DIDN'T GROUP THEM THAT WAY, THE DEFENDANTS DID.

Q. YOU RAN A REGRESSION ON THEM THAT WAY.

A. CORRECT. I RAN A REGRESSION MODEL WHERE I ASKED WHAT ABOUT A DIFFERENT OVERCHARGE FOR DIFFERENT CUSTOMER TYPES.

Q. IF YOU TAKE MY REPRESENTATION THAT HOMELAND AND COBORN'S ARE IN THE GROUP YOU ORGANIZED UNDER RETAIL, YOU HAVE ONE WITH A POSITIVE OVERCHARGE, YOU HAVE ONE WITH A NEGATIVE OVERCHARGE, RIGHT? WHILE DR. JOHNSON'S REGRESSION, WHEN HE RUNS YOUR REGRESSION, BUT HE DOES IT ON AN INDIVIDUALIZED BASIS.

A. OKAY. WHEN HE DOES IT, IT'S HIS REGRESSION BECAUSE HE CHANGES IT.

Q. FAIR.

A. YOU'RE NOW TALKING ABOUT MY ROBUSTNESS CHECK BY CUSTOMER TYPE, BUT YOU'RE SLIDING OVER THE RESULTS WHERE YOU NOW ASK THE COMPUTER FOR 604 DIFFERENT COEFFICIENT ESTIMATES. THEY CAN'T HIGHLIGHT MY FINDING WHEN I HAVE A CUSTOMER TYPE.

Q. I'M DOING THAT, SIR, BECAUSE I JUST SHOWED YOU IN YOUR REPORT WHERE YOU SAID THE RESULTS HE GOT WERE -- STATISTICALLY DIDN'T MATTER, BUT WHAT HE'S GOT IS A POSITIVE COEFFICIENT AND A NEGATIVE COEFFICIENT, WHICH IS EXACTLY THE PROBLEM WITH HAVING AN AVERAGE OVERCHARGE, ISN'T IT?

A. NO, THAT'S NOT THE PROBLEM YOU'VE HIGHLIGHTED HERE. THE PROBLEM IS SAMPLE SIZE.

Q. OKAY. LET'S MOVE ON TO COSTS. YOU AND DR. JOHNSON HAVE A VIGOROUS DEBATE ABOUT THE RIGHT WAY TO MEASURE COSTS, AND FOR THE COURT'S BENEFIT I RECOGNIZE IT'S MORE COMPLICATED THAN THIS, BUT JUST IN VERY BASIC TERMS, YOU SAY YOU SHOULD RELY ON AN INDEX FOR THE VALUE OF A COST. DR. JOHNSON SAYS YOU SHOULD LOOK AT THE ACTUAL COST OF GOODS SOLD DATA THAT THE DEFENDANTS

PRODUCED. THAT'S SORT OF A FAIR, SIMPLE SUMMARY, ISN'T IT?

A. I WOULDN'T USE THE WORD "ACTUAL." I LOOK AT ACTUAL COSTS. HE LOOKS AT HOW COMPANIES HAVE DECIDED TO REPORT THEIR COSTS, WHICH ARE NECESSARILY DERIVED FROM THE COSTS I LOOKED AT. SO IF A FIRM SAYS, "HERE'S MY REPORTED COSTS," IT'S BECAUSE THEY PAID FOR FISH COSTS SOMEWHERE FIRST. I WOULDN'T REFER TO HIM AS ACTUAL AND USE THAT WORD -- TAKE THAT WORD AWAY FROM WHAT I DID.

Q. LOOK, YOU KNOW THAT IN THE DATA YOU COULD GO TO STARKIST DATA AND THEY HAVE LINE BY LINE OF WHAT THEY ACTUALLY PAID FOR FISH EVERY TIME FOR A PERIOD OF YEARS. ALL I'M SAYING IS YOU DIDN'T USE THAT FOR YOUR COST VALUE. YOU USED AN INDEX. YOU TESTIFIED YOU USED THE BANGKOK INDEX, RIGHT?

A. WHAT I STATED IS DIFFERENT THAN THAT. I DID NOT HAVE STARKIST DATA FOR A FEW YEARS, BUT NOT FOR A WIDE ENOUGH TIME PERIOD, AND THEN DR. JOHNSON DIDN'T RUN THAT, HE DIDN'T SHOW THAT DATA WAS AVAILABLE TO RUN IT THAT WAY EITHER.

Q. SIR, LET ME BE CLEAR ABOUT ONE THING THOUGH, YOU TALKED ABOUT THE IMPORTANCE OF COSTS, AND IN TERMS OF THE INPUT IS COST AND THAT CONTRIBUTES TO THE OUTPUT OF YOUR COEFFICIENT, RIGHT, OF WHETHER A PRICE IS -- WHETHER IT EFFECTS THE PRICE THAT COMES OUT OF YOUR REGRESSION, RIGHT?

A. CORRECT, IT RECOGNIZES THAT PRICES ARE A FUNCTION OF COST.

Q. AND YOU'VE SAID IN YOUR REPORT THAT THE SINGLE MOST IMPORTANT INPUT FOR PACKAGED TUNA IS RAW FISH, RIGHT?

A. CORRECT, IN PART. THAT'S THE -- I GUESS EVEN "GENERATES" IS IMPORTANT, BUT ALSO AS FAR AS THE PERCENTAGE OF THE TOTAL COSTS TAKES UP A HUGE AMOUNT, UP TO 80 PERCENT.

Q. RIGHT, AND THEN YOU ALSO SAID IN YOUR REPORT AT PARAGRAPH 70 "THE PRICE OF PACKAGED TUNA PRODUCTS IS LARGELY A FUNCTION OF RAW FISH PRICES"; DO YOU SEE THAT?

A. WHERE, IN MY INITIAL REPORT?

Q. YEAH, YOUR INITIAL REPORT, PARAGRAPH 70, PAGE 41, IT'S TAB 25. YOU SAID, "PRICE IS LARGELY A FUNCTION OF FISH COST."

A. I REMEMBER THE 41, WAS THAT PAGE OR PARAGRAPH?

Q. PAGE 41, PARAGRAPH 70.

A. YES, I'VE READ THAT, THE FIRST SENTENCE THERE IN PARAGRAPH 70.

Q. OKAY. A FUNCTION -- "PRICE IS A FUNCTION OF FISH COST," RIGHT?

A. CORRECT.

Q. NOW, YOU DIDN'T INFORM THE COURT OF WHAT YOUR COST INPUT COEFFICIENT IS IN YOUR REGRESSION MODEL ON YOUR DIRECT TESTIMONY; DO YOU REMEMBER WHAT IT IS?

A. I DON'T. I WOULD HAVE TO LOOK AT MY REPORT.

Q. OKAY. IF YOU LOOK AT MCD 15.1 IN YOUR REPORT, YOU'LL SEE THAT IT'S .2489, .2489, THAT'S YOUR COST INPUT COEFFICIENT. DO YOU SEE IT AT MCD A1 -- 15.1, RATHER?

A. I'M LOOKING AT 15.1, GIVE ME A MINUTE.

Q. THAT'S IT, RIGHT?

A. 15.1, OKAY.

Q. YOU GOT 2489?

A. CORRECT.

Q. YEAH. SO NOW THE -- WHAT THIS MEANS, RIGHT, IS THAT IF COSTS GO UP BY 1 PERCENT YOUR PRICE COEFFICIENT FOR YOUR "BUT FOR" PRICE WILL ONLY GO UP BY .25 PERCENT. I'M ROUNDING OFF 249. COSTS GO UP BY 1 PERCENT -- YOUR "BUT FOR" PRICE COEFFICIENT ONLY GOES UP BY .25 PERCENT, RIGHT, HOLDING ALL ELSE EQUAL?

A. THE PROBLEM IS ALL ELSE EQUAL DOESN'T APPLY TO INTERPRET THIS.

Q. HOLD ON A SECOND, SIR. YOU KNOW THAT THE WAY THIS WORKS IS IF YOU HAVE A REGRESSION MODEL AND THIS IS THE COST INPUT, THAT IF NOTHING ELSE CHANGES, AND YOU INCREASE COST BY 1 PERCENT, YOUR "BUT FOR" PRICE ONLY GOES UP BY A QUARTER OF A PERCENT; ISN'T THAT TRUE?

A. THAT'S NOT TRUE.

Q. OKAY. WHAT'S WRONG WITH THAT?

A. COST IS REFLECTED IN MORE THAN JUST THE COST VARIABLE, DIFFERENT PRODUCTS HAVE DIFFERENT PRICES, RIGHT, AND IT'S BECAUSE THEY COST DIFFERENT. SO WHEN YOU'RE CONTROLLING FOR WHITE MEAT VERSUS LIGHT, THOSE ALSO HAVE DIFFERENT COSTS.

Q. HOLD ALL ELSE EQUAL, ECONOMISTS DO THAT ALL THE TIME, DON'T THEY? HOLD ALL ELSE EQUAL, ASSUME EVERYTHING ELSE IS THE SAME, COST GOES UP BY 1 PERCENT, YOUR "BUT FOR" PRICE ONLY GOES

UP BY A QUARTER PERCENT.

A. THAT'S AN INCORRECT INTERPRETATION BECAUSE YOU CAN'T -- WHEN COSTS GO UP, YOU MIGHT JUST SAY THE PHRASE "ALL ELSE EQUAL," BUT THE FACT IS WE ALSO SEE THE OTHER ELEMENTS IN THE MODEL. WE KNOW THERE'S DIFFERENCES IN COST BETWEEN MAKING OTHER PRODUCTS, SO PART OF THE COST EFFECT ALSO IS CAPTURED IN CHARACTERISTICS OF PRODUCTS. SO YOU CANNOT JUST LOOK AT ONE AND SAY, "I WANT TO CHANGE THAT ONE ALONE." IT'S NOT THE ONLY PLACE THE MODEL COULD BE COST --

Q. IN YOUR MODEL, IF COSTS GO UP BY 1 PERCENT, HOW MUCH DOES PRICE GO UP? ARE YOU ABLE TO TELL THE COURT THAT OR YOU'RE JUST NOT ABLE TO TELL US?

A. YOU CAN'T DO IT THE WAY YOU SUGGESTED.

Q. CAN YOU DO IT AT ALL? CAN YOU JUST INFORM US?

A. NOT BASED DIRECTLY BASED ON COST COEFFICIENTS --

THE COURT REPORTER: I'M SORRY.

A. BUT YOU COULD MODEL IT BY RAISING PRICES AND MAKING NEW PRODUCTS.

Q. YOU CAN'T TELL THE JUDGE IF COSTS GO UP BY 1 PERCENT HOW MUCH YOUR "BUT FOR" PRICE GOES UP.

A. NO, THAT DOESN'T COME FROM REGRESSION --

Q. JUST HUMOR ME AND ASSUME I WAS RIGHT FOR A MOMENT SO WE CAN SHOW THE JUDGE THE IMPLICATIONS OF WHAT YOU'RE DOING WITH THIS COST COEFFICIENT. IF I WERE RIGHT, AND YOU STARTED WITH A COST COEFFICIENT OF .25, AND THE COST OF A DOLLAR, AND LET'S

SAY THERE'S A MARKUP SO THE PRICE OUT THERE IN THE MARKET THAT THIS FISH IS BEING SOLD AT IS 1.20, AND YOU DO THE COST COEFFICIENT, YOU WOULD EXPECT THE "BUT FOR" PRICE ONLY TO GO UP BY .25 PERCENT OUT OF 10 PERCENT INCREASE IN PRICE. MY MATH IS RIGHT, ISN'T IT?

A. I'M SORRY, I'M NOT FOLLOWING.

Q. IF COSTS GOES UP BY 10 PERCENT TO A \$1.10, AND YOU HAVE A COST COEFFICIENT OF .25, YOUR "BUT FOR" PRICE WOULD ONLY GO UP TO 1.23.

A. THE MATH YOU'RE EXPLAINING LOOKS LIKE IT'S ABOUT RIGHT, BUT THAT'S NOT THE WAY YOU WOULD DO THIS TO EVALUATE A CHANGE IN THE MARKETPLACE.

Q. OKAY. IF YOU USED A COST COEFFICIENT OF ONE TO ONE, IF FISH PRICES WERE A PERFECT FUNCTION, TO USE YOUR WORD, OF FISH COSTS, THEY MOVE TOGETHER, YOU USED A ONE TO ONE, AND THE PRICE WENT UP -- THE COST WENT UP BY 10 PERCENT THEN, AND YOU USED 1 PERCENT COEFFICIENT, THE "BUT FOR" PRICE WOULD GO UP BY 1 PERCENT, RIGHT?

A. I CAN'T SEE THE TOP OF YOUR CHART. YOU'RE SUGGESTING THAT IF COSTS GO UP FROM 1.10, IS THAT THE NEW PRICE?

Q. 10 PERCENT INCREASE IN PRICE, AND A 1 PERCENT -- A ONE TO ONE COEFFICIENT, THE PRICE IS GOING TO GO UP BY THE SAME AMOUNT OF THE COST, RIGHT?

A. IF YOU HAVE A -- IF YOU JUST LOOK AT ONE COEFFICIENT, AND YOU DON'T ACKNOWLEDGE ELSEWHERE WHERE COSTS FLOW INTO THE

MODEL, AND IF YOU HAVE A COEFFICIENT OF ONE, ONE TO ONE RELATIONSHIP, IF COSTS GO UP BY \$1 OR 1 UNIT, WHATEVER IT IS, YOU SAY PRICE GOES UP, THAT'S THE WAY YOU INTERPRET THAT.

Q. AND THE IMPACT OF THAT IS THAT BECAUSE YOU HAVE SUCH A LOW COST COEFFICIENT YOUR MODEL -- IF IT SEES A PRICE OF \$1.32 IT'S ASSUMING THAT THE 9 CENT DELTA BETWEEN A \$1.32 AND A \$1.23 IS A \$0.09 OVERCHARGE, THAT'S WHAT YOUR REGRESSION IS PRODUCING.

A. THAT'S NOT CORRECT.

Q. IF YOU USE A 1.0 COEFFICIENT, IT WOULD PRODUCE NO OVERCHARGE.

A. THAT'S NOT CORRECT, AND I DON'T KNOW WHY I WOULD USE A ONE TO ONE COEFFICIENT. I DON'T UNDERSTAND YOUR HYPOTHETICAL.

Q. IT MAY BE BECAUSE FISH PRICES ARE, IN YOUR WORDS, A FUNCTION OF FISH COSTS. DOESN'T THAT MEAN THEY MOVE TOGETHER, SIR?

A. WELL, MOVING TOGETHER IS DIFFERENT THAN ONE TO ONE. THEY'RE A FUNCTION OF WHETHER THEY'RE IN OIL OR THEY'RE IN WATER. THEY'RE A FUNCTION OF WHETHER OR NOT THEY'RE LARGER OR SMALLER. BUT THAT DOESN'T MEAN EVERY TIME YOU CHANGE JUST ONE VARIABLE, YOU MUST HAVE AN EQUAL MOVE IN PRICE.

Q. YOU ARE AWARE THAT IN THIS COURTROOM THERE ARE LAWYERS AND PLAINTIFFS WHO ARE REPRESENTING THE FOOD SERVICE PLAINTIFFS, CORRECT?

A. I DO, YES.

Q. AND THEIR INJURY -- THEY CLAIM THAT WHEN MY CLIENT

BUMBLEBEE SELLS FOOD TO A DISTRIBUTOR AND OVERCHARGES THE DISTRIBUTOR, THE DISTRIBUTOR THEN PASSES THE OVERCHARGE TO THE FOOD SERVICE BUYER, RIGHT? YOU'RE AWARE OF THAT?

A. I UNDERSTAND THE CONCEPT OF PASS-THROUGH.

Q. AND DO YOU KNOW THAT THE EXPERT THAT'S GOING TO TESTIFY HERE ON WEDNESDAY HAS OPINED THAT THOSE DISTRIBUTORS PASS THROUGH THE COST AT A HUNDRED PERCENT, ONE TO ONE. WHEN THEY BUY FISH AND THEY SELL IT TO THE FOOD SERVICE VENDOR, IF MY CLIENT RAISES PRICE 10 PERCENT, THAT EXPERT IS SAYING ALL 10 PERCENT GETS PASSED THROUGH IN THE PRICE, RIGHT?

A. I DON'T KNOW THAT.

Q. YOU DON'T KNOW THAT?

A. I DON'T KNOW WHAT THE OPINIONS OF THE EXPERTS ARE REGARDING PASS-THROUGH.

Q. SO YOU DON'T KNOW THAT THE EXPERT FOR THE FOOD SERVICE REPRESENTATIVE SAYS SAM'S CLUB, WHEN IT FACES A PRICE INCREASE, PASSES ON NOT JUST 100 PERCENT, 103 PERCENT OF THE COST GOES THROUGH A PRICE --

MS. LAVERY YOUR HONOR, I WOULD --

MR. GALLO: I'LL STOP. I APOLOGIZE. I MAY HAVE GONE ON -- I GET IT.

THE COURT: YOU CROSSED THE LINE.

MR. GALLO: I GET IT.

THE COURT: I DON'T KNOW WHO YOU ARE, MA'AM, FOR PURPOSES OF THE RECORD.

MS. LAVERY: KATRINA LAVERY, SUSMAN GODFREY --

THE COURT REPORTER: I CAN'T HEAR YOU.

THE COURT: COUNSEL UNDERSTANDS HE'S CROSSED THE LINE.

MR. GALLO: I THINK MY POINT'S BEEN MADE.

Q. I'LL ONLY MAKE THE POINT -- THAT'S FINE.

LET'S TALK BRIEFLY ABOUT FALSE POSITIVES AND THEN I HAVE TO STOP, AND SPECIFICALLY THIS UMBRELLA THEORY THAT YOU RAISED. YOU RAISED THE UMBRELLA THEORY IN YOUR REPLY DECLARATION FOR THE FIRST TIME, CORRECT?

A. NO.

Q. YOU DIDN'T MENTION IT IN YOUR OPENING DECLARATION.

A. IF YOU'RE TALKING ABOUT THE WORDS "UMBRELLA," I'M ONLY RESPONDING TO THE ASSERTION MADE BY DR. JOHNSON. HE'S SAYING SOMETHING IN FACT DID NOT HAPPEN. I'M ONLY REBUTTING WHAT HE BROUGHT UP.

Q. THAT'S FINE. LET ME MAKE IT CLEAR. I'M SORRY. YOU WERE CORRECT. I WASN'T AS CLEAR AS I SHOULD BE. YOU ISSUED AN OPENING REPORT. IN YOUR OPENING REPORT, YOU DID NOT DISCUSS THE UMBRELLA THEORY.

A. CORRECT.

Q. DR. JOHNSON SAID, "I LOOKED AT SOME NON-DEFENDANT SALES," AND MADE AN ARGUMENT IN HIS OPPOSITION, CORRECT?

A. CORRECT.

Q. IN RESPONSE YOU SAID THE UMBRELLA THEORY MAY EXPLAIN THE INCREASE IN PRICE IN NON-DEFENDANT SALES, RIGHT?

A. NO, I DON'T THINK THAT'S WHAT I SAID. I SAID DR. JOHNSON ASSERTED THERE IS NO SUCH EFFECT, WITHOUT PROVING IT, AND THEN I ALSO SAID, BY THE WAY, HE'S NOT LOOKING AT NON-DEFENDANT TUNA. I WASN'T TRYING TO EXPLAIN HIS FINDING. I DON'T AGREE WITH HIS FINDING. I THINK IT'S FAULTY.

Q. SIR, DO YOU -- YOU'RE SUGGESTING THAT DR. JOHNSON'S REPORT RAISED THE UMBRELLA THEORY?

A. YES.

Q. WHEN YOU RAISED THE UMBRELLA THEORY, YOU DIDN'T -- FIRST OF ALL, LET'S JUST SEE IF WE CAN AGREE ON A COUPLE OF THINGS ABOUT THE WAY THE THEORY WORKS.

AS A MATTER OF ECONOMIC THEORY THE WAY IT WORKS IS, RIGHT, THAT THE DEFENDANT'S PRICE UP HERE BECAUSE OF ILLEGAL CONDUCT, THAT CAUSES A DIVERSION OF SOME OF THE DEFENDANT'S SALES TO NON-DEFENDANTS, CORRECT?

A. THAT'S ONE POSSIBILITY.

Q. THE NON-DEFENDANTS' SHARE, THEREFORE, SHOULD GO UP A LITTLE BIT, IF THEY'RE GETTING MORE SALES, RIGHT?

A. I'M NOT SURE IF THEY HAVE FISHING BOATS, THEY HAVE CONTRACTS TO BUY THE TUNA. WHAT YOU'VE IDENTIFIED IS INCREASE IN DEMAND, AND WE KNOW WHAT INCREASES IN DEMAND DO TO PRICES, THEY RAISE THEM. THAT DOESN'T NECESSARILY MEAN THEY INCREASE SUPPLY ACCORDINGLY.

Q. ALL RIGHT. BUT YOU WOULD EXPECT THAT YOU WOULD SEE A DIVERSION OF SALES TO NON-DEFENDANTS, WOULDN'T YOU? ISN'T THAT

WHAT THE THEORY SAYS?

A. NO, THAT'S INCOMPLETE.

Q. OKAY. WOULD YOU THEN SEE A DIVERSION PLUS THEN YOU WOULD SEE THE PRICE GO UP?

A. WELL, NO, I JUST SAID YOU WOULDN'T SEE THE DIVERSION NECESSARILY, THAT'S NOT WHAT THE THEORY SAYS. IT'S ONE POSSIBILITY.

Q. OKAY. LET ME -- YOU DIDN'T DO ANY EMPIRICAL TESTING TO SEE WHETHER THERE WAS DIVERSION OF SALES TO NON-DEFENDANTS, RIGHT?

A. LET'S SEE. I'VE NOT LOOKED AT -- NO, NON-DEFENDANT SALES, IF YOU WILL, SALES OF TUNA FROM NON-DEFENDANTS TO THE CLASS MEMBERS.

Q. YOU HAVEN'T DONE -- RIGHT, FAIR ENOUGH.

SO YOU DIDN'T SEE WHETHER, FOR EXAMPLE, DEFENDANTS' PRICES WENT UP AND THEN NON-DEFENDANT PRICES FOLLOWED, YOU DIDN'T TEST FOR THAT?

A. CORRECT.

Q. AND YOU KNOW YOU CAN DO AN EMPIRICAL TEST FOR THAT, YOU CAN LOOK AT THE DATA AND SEE IF IT PROVES THAT.

A. I'M NOT SURE I WANT TO, GIVEN THE ANALYSIS THAT I DID, BUT IF THE DATA WAS AVAILABLE, ONE MIGHT BUILD A MODEL.

Q. YOU DIDN'T DO THAT.

A. CORRECT.

Q. ALL RIGHT. AND THE ARTICLE THAT YOU QUOTED EARLIER TODAY,

WHICH IS REFERRED TO IN YOUR SLIDES, THAT ARTICLE TALKS ABOUT DOING ECONOMETRICS TESTING TO DETERMINE WHETHER THE UMBRELLA THEORY APPLIES; YOU KNOW THAT, DON'T YOU?

A. I KNOW THEY TALK ABOUT IT. I WAS SURPRISED DR. JOHNSON DIDN'T DO ANYTHING WHEN HE ASSERTED DEFINITELY IT DIDN'T OCCUR, THAT THERE MUST BE NO PRICE CHANGES BY NON-DEFENDANT.

Q. YOUR TESTIMONY IS THAT HE WAS THE ONE WHO RAISED IT IN HIS OPPOSITION, YOU DIDN'T RAISE IT IN YOUR REPLY FOR THE FIRST TIME.

A. CORRECT.

Q. ARE YOU SURE ABOUT THAT?

A. YES. HE'S THE ONE WHO SAID YOU SHOULD NOT FIND AN EFFECT OF SALES -- PURCHASES BY THE DIRECT PURCHASERS OF NON-DEFENDANT TUNA. I HEARD IT IN THE OPENING ARGUMENTS THAT YOU SHOULD NOT FIND AN EFFECT. THAT'S AN AFFIRMATIVE STATEMENT, BUT IT'S AN ASSERTION BECAUSE THERE'S NOTHING TO SUPPORT IT.

MR. GALLO: THANK YOU, I HAVE NOTHING FURTHER. THANK YOU, SIR.

THE COURT: THANK YOU.

MR. LEB SOCK THANK YOU. YOUR HONOR, I'LL BE BRIEF, I THINK.

THE COURT: I HOPE EVERYBODY REALIZES WE'LL FINISH WITH THIS GROUP, THE DPPS, TODAY.

MR. LEB SOCK: I THINK THAT'S OUR INTENTION, YES, YOUR HONOR.

REDIRECT EXAMINATION

BY MR. LEB SOCK:

Q. SO DR. MANGUM, WITH RESPECT TO THE ISSUE OF THE COMPLAINTS AND THE QUESTIONING BY MR. GALLO ABOUT WHETHER YOU LOOKED AT THE COMPLAINTS TO CREATE YOUR MODEL OR WHETHER YOU LOOKED AT THE EVIDENCE, IS IT PROPER -- WHAT'S THE PROPER APPROACH, FROM A SCIENTIFIC POINT OF VIEW, AS TO WHAT AN EXPERT IS TO DO WHEN THINKING ABOUT A MARKET AND DECIDING HOW THEY ARE GOING TO MODEL IT?

A. IT'S IMPORTANT TO LEARN ABOUT THE INDUSTRY, LEARN ABOUT THE PRODUCTS, AND EVALUATE THEM, CONDUCT ANALYSIS TO BE FAMILIAR WITH THE DYNAMICS THAT ARE APPARENT, BUT THEN TO LOOK AT THE EVIDENCE THAT YOU HAVE ABOUT THE PRICES AND OTHER RELEVANT ECONOMIC FACTORS AND THEN COME TO A CONCLUSION ON THE EVIDENCE.

Q. ALL RIGHT. SO IN THIS CASE DID YOU BLINDLY ACCEPT THE ALLEGATIONS IN ANY ITERATION OF ANY COMPLAINT THAT HAD BEEN FILED IN THIS CASE?

A. NO, I DID NOT.

Q. YOU DID YOUR OWN WORK?

A. CORRECT.

Q. AND YOU CAME TO YOUR OWN CONCLUSIONS?

A. CORRECT.

Q. ALL RIGHT. AND THOSE ARE THE CONCLUSIONS THAT ARE -- THAT YOU TESTIFIED TO EARLIER TODAY.

A. THAT'S CORRECT.

Q. ALL RIGHT. IF A CONSPIRACY -- IF CONSPIRATORIAL CONDUCT EXISTED IN A BENCHMARK PERIOD, AND IT WAS INCLUDED IN A REGRESSION, WHAT IS THE EFFECT ON THE RESULTS OF THE REGRESSION?

A. IF DURING A PERIOD OF A BENCHMARK I WAS TO FIND OUT ACTUALLY THERE WAS A CONSPIRACY GOING ON AND PRICES WERE HIGHER, THEN WHAT THAT WOULD MEAN IS I'VE TOLD THE MODEL THAT EVEN THOUGH PRICES WERE HIGHER, THAT'S NORMAL, AND SO THE ESTIMATED EFFECTS I WOULD HAVE FROM THE CONSPIRACY, WHICH I'VE IDENTIFIED SEPARATELY, ARE LOWER. SO IF YOU THINK ABOUT THE ISSUE OF CALLING IT BENCHMARK -- CORRECTION, CALLING A CONSPIRACY BENCHMARK, IT RELATES TO ACCURACY IN THE SENSE THAT YOU UNDERESTIMATE DAMAGES. THAT'S THE OTHER ERROR, WHICH IS THE CRITICAL ERROR, THE OTHER DIRECTION OF FINDING SOMETHING LIKE MY MARKET SHOCK PERIOD AND SAYING, "WELL, THAT'S NORMAL."

Q. CAN YOU TAKE A LOOK AT YOUR SLIDE 20, PLEASE. DO YOU STILL HAVE THAT?

A. I DO, IF YOU WOULD GIVE ME A MINUTE. OKAY.

Q. ALL RIGHT. SO, DO YOU REMEMBER DISCUSSING THIS SLIDE EARLIER TODAY?

A. I DO.

Q. AND CAN YOU TELL THE COURT FOR THE INSIGNIFICANT OBSERVATIONS THERE, SO BOTH POSITIVE INSIGNIFICANT, NEGATIVE INSIGNIFICANT, PLUS THE NEGATIVE SIGNIFICANT, YOU TALKED ABOUT

-- IN ONE OF YOUR SLIDES ABOUT THE TOTAL NUMBER OF OBSERVATIONS THAT THAT REPRESENTED. DID YOU DO ANYTHING MORE TO LOOK AT THOSE CLASS MEMBERS AND SEE WHAT THEIR -- TO THE EXTENT THAT YOU DID HAVE THEIR PURCHASE OBSERVATIONS, WHAT THEY LOOKED LIKE?

A. I DID. I WENT AND LOOKED AT THEM, AND I SAID, "WELL, I'M SUSPICIOUS OF THE RESULTS BECAUSE OF THE SMALL SAMPLE SIZE." EVEN THOUGH ALL THE OBSERVATIONS WERE USED IN DR. JOHNSON'S REGRESSIONS, BUT WHAT HE'S ASKING, THROUGH HIS SOFTWARE PROGRAM, "I NEED AN OVERCHARGE BY EACH CLASS MEMBER," THEN THE COMPUTER CAN ONLY USE THOSE OBSERVATIONS WHICH ARE FROM THAT CLASS MEMBER TO DO THAT. I SAW THAT, AND I WAS THINKING MAYBE THE RESULTS THAT WERE GIVING HIM STATISTICAL SIGNIFICANCE ARE EFFECTED BY THAT. I WENT AND LOOKED AT THE PRICES, AND I COMPARED THEM TO WHAT WERE THE PRICES OF OTHER CUSTOMERS WHO HAD MORE DATA, AND THE MODEL SAID, "WELL, THAT IS STATISTICALLY SIGNIFICANT AND POSITIVE." THE VAST MAJORITY HAD PRICES THAT WERE HIGHER, SO IT SUGGESTED THAT THOSE CLASS MEMBERS WERE AFFECTED, DESPITE THE FINDINGS IN DR. JOHNSON'S ANALYSIS.

Q. DOES THAT FIT INTO THAT CONCEPT, YOU KNOW, WHEN YOU STUDIED THE MARKET AND THE DIFFERENT CUSTOMER TYPES THAT YOU DON'T SEE ANYTHING THAT WOULD CAUSE A DIFFERENT GROUP OF CUSTOMERS TO CONFRONT THIS CONSPIRACY IN A FUNDAMENTALLY DIFFERENT WAY THAN ANY OTHER SUBSET OF THE GROUP?

A. IT DOES. I MENTIONED WALMART EARLIER AS BEING A LARGE

PURCHASER. AT LEAST A THEORY IF THEY'RE NOT, MAYBE LARGE PURCHASERS MAYBE HAD A DIFFERENT SITUATION WHEN THEY WERE FACED WITH THE DEFENDANTS. IF YOU RUN A MODEL LIKE DR. JOHNSON DID, WITH NO REASON FOR RUNNING EVERY SINGLE CUSTOMER DIFFERENT, AND LOOKING AT THE RESULTS, THERE'S NOTHING YOU'RE TESTING, THERE'S NO THEORY, AND THAT'S WHY I CONCLUDE THIS IS A PROBLEM WITH SAMPLE SIZE BECAUSE IF IT WAS PURCHASING POWER, I'VE KIND OF ADDRESSED THAT BY THE WALMART EXAMPLE. SO I THINK I CAN -- I KNOW THAT THE STATISTICS ARE QUESTIONABLE BECAUSE OF THE SMALL SAMPLE SIZE. THAT'S IN FACT WHY I WENT AND LOOKED AT THE ACTUAL PRICES AND SAID, "WAIT, THEY'RE HIGHER THAN OR THE SAME AS OTHER CLASS MEMBERS THAT WE DID FIND A POSITIVE STATISTICALLY SIGNIFICANT RESULT."

Q. NOW, IN OPENING THIS MORNING -- DID YOU SIT IN FOR MS. LEE'S OPENING?

A. I DID.

Q. AND DO YOU HAVE A RECOLLECTION OF HER SORT OF CONFRONTING THIS ISSUE OF SMALL SAMPLE SIZE IN ADVANCE, WHERE SHE NOTED THAT DR. JOHNSON'S MODEL LOOKED AT ALL OF THE 1.5 MILLION OBSERVATIONS, EVEN THOUGH HE DID THOSE SUB-REGRESSIONS OR CUSTOMER-SPECIFIC REGRESSIONS?

A. YES, I DID. I WAS HERE.

Q. YOU WERE HERE FOR THAT. ALL RIGHT.

DO YOU HAVE A VIEW, BECAUSE THIS IS THE LAST TIME WE'RE GOING TO HEAR FROM YOU I THINK TODAY, AS TO WHETHER DR. JOHNSON

IN FACT USED ALL OF THOSE 1.5 MILLION OBSERVATIONS WHEN HE SLICED THE REGRESSION AND LOOKED AT IT CUSTOMER BY CUSTOMER?

A. I'LL ANSWER IT TWO WAYS; ALL OF THOSE OBSERVATIONS WENT INTO THE MODEL SO IT FED INTO THE REGRESSION. YOU ALSO HAVE TO ASK, HOW HAVE YOU STRUCTURED YOUR MODEL? WHAT ARE YOU REQUIRING FROM THE PROGRAM? AND SINCE HE REQUIRED DIFFERENT OVERCHARGE ESTIMATES FOR EVERY CLASS MEMBER, IN THOSE INSTANCES YOU DON'T USE ALL 1.5 MILLION. FOR EVERY CLASS MEMBER YOU ONLY USE THE OBSERVATIONS THAT YOU CAN TELL FROM THE DATA ARE THOSE CLASS MEMBERS. SO YOU ARE USING THESE VERY SMALL NUMBER OF OBSERVATIONS, SOMETIMES IN THE LOW SINGLE DIGITS, YOUR HONOR, IN THE NUMBER OF OBSERVATIONS WE HAVE OVER ALL THESE TIME PERIODS.

MR. LEBSOCK: I DON'T THINK I HAVE ANY FURTHER QUESTIONS. IF THE COURT HAS QUESTIONS, WE'RE FREE --

THE COURT: ARE YOU GOING TO STAY WITH US FOR THE BALANCE OF THE DAY?

THE WITNESS: I'LL STAY HERE ALL DAY TODAY, YOUR HONOR.

THE COURT: VERY WELL. I DON'T HAVE ANY QUESTIONS AT THIS TIME.

MR. LEBSOCK: THANK YOU, YOUR HONOR.

THE COURT: THANK YOU.

MS. BAUER: GOOD AFTERNOON, YOUR HONOR, ASHLEY BAUER FOR DEFENDANT STARKIST AND DONGWON, AND I HAVE THE PLEASURE OF INTRODUCING THE COURT TO DR. JOHNSON.

THE COURT: VERY WELL. THANK YOU.

MS. BAUER: YOUR HONOR, I HAVE SOME DEMONSTRATIVES
HERE, MAY I BRING THEM UP?

THE COURT: CERTAINLY.

MS. BAUER: THANK YOU.

(WITNESS SWORN ON OATH.)

THE WITNESS: MY NAME IS JOHN HENRY JOHNSON THE FOURTH,
J-O-H-N H-E-N-R-Y J-O-H-N-S-O-N, IV.

DIRECT EXAMINATION

BY MS. BAUER:

Q. GOOD AFTERNOON, DR. JOHNSON.

A. GOOD AFTERNOON, MS. BAUER.

MR. ISQUITH: I WONDER IF THE LAWYERS IN THE CASE --

THE COURT: WHAT DO YOU NEED?

MR. ISQUITH: I'M FROM THE EPP'S, AND I REALIZED
THERE'S SENSITIVE MATERIAL, WHICH IS THE REASON THEY'RE NOT
PUBLISHING, BUT THAT MEANS THAT THE LAWYERS CAN SEE THAT
MATERIAL, AND AT LEAST I THINK THE EPP'S WOULD LIKE TO SHARE
THAT SET OF DOCUMENTS.

MS. BAUER: YOUR HONOR, MAY I MAKE A SUGGESTION. WE
HAVE ONLY THREE SLIDES. AFTER THIS, I WOULD BE HAPPY TO EMAIL
THEM TO COUNSEL, IF THAT WORKS WITH YOU FOLKS.

THE COURT: VERY GOOD. THANK YOU.

MR. ISQUITH: THANK YOU.

Q. GOOD AFTERNOON AGAIN, DR. JOHNSON.

A. GOOD AFTERNOON, MS. BAUER. GOOD AFTERNOON, YOUR HONOR.

Q. DR. JOHNSON, COULD YOU PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND FOR THE COURT?

A. YES, I HAVE A BACHELOR'S DEGREE IN ECONOMICS FROM THE UNIVERSITY OF ROCHESTER IN ROCHESTER, NORTH CAROLINA. I HAVE A PH.D IN ECONOMICS WITH A SPECIALIZATION IN ECONOMETRICS FROM THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY IN CAMBRIDGE, MASSACHUSETTS. I AM THE CEO AND FOUNDER OF EDGEWORTH ECONOMICS, WHICH IS A CONSULTING FIRM WITH OFFICES IN 94 CITIES, INCLUDING WASHINGTON, D.C. PREVIOUSLY I'VE WORKED AT TWO OTHER ECONOMIC CONSULTING FIRMS, AND I'VE ALSO TAUGHT AS A PROFESSOR AT THE UNIVERSITY OF ILLINOIS IN IRBANA-CHAMPAIGN, AND AT GEORGETOWN'S PUBLIC POLICY INSTITUTE.

Q. THANK YOU. DR. JOHNSON, I SEE ON THE SLIDES THAT WE'VE PREPARED THAT YOU HAVE SOME PUBLISHED WORKS, AND I WAS WONDERING WHY YOU OMITTED THIS BOOK THAT DR. MANGUM SAID THAT YOU WROTE.

A. I ACTUALLY DID NOT WRITE THAT BOOK. I DO HAVE A BOOK I WROTE CALLED EVERY DATA, THE MISINFORMATION HIDDEN IN THE LITTLE INFORMATION YOU CONSUME EVERY DAY. I ALSO HAVE SEVERAL PAPERS INCLUDING ONE ON THE ECONOMICS OF CLASS CERTIFICATION, WHICH IS CITED IN THE REFERENCE MATERIAL ON SCIENTIFIC EVIDENCE, WHICH IS A GUIDEBOOK FOR JUDGES, BUT I'M NOT RESPONSIBLE FOR THAT BOOK. I DIDN'T WRITE THAT BOOK.

Q. IN FACT, YOU WERE SET UP. THANK YOU, DR. JOHNSON.

COULD YOU PLEASE TELL US WHAT WAS YOUR ASSIGNMENT IN THIS CASE?

A. YES, MY ASSIGNMENT WAS TO ASSESS WHETHER DR. MANGUM'S PROPOSED METHODS COULD DO TWO THINGS; FIRST, COULD HE ESTABLISH PROOF OF ECONOMIC HARM TO ALL OR VIRTUALLY ALL MEMBERS OF THE PROPOSED CLASS, WHICH IS KNOWN AS COMMON IMPACT. SECOND, I WAS ASKED TO ASSESS WHETHER DR. MANGUM'S PROPOSED METHODS COULD RELIABLY ESTIMATE DAMAGES FROM THE ALLEGED CONDUCT.

Q. BEFORE WE GO ANY FURTHER, I WANT TO STOP ON THIS ASSIGNMENT AND GET INTO A LITTLE MORE DETAIL. THERE'S A REFERENCE TO THE PROPOSED CLASS. WHAT CAN YOU TELL US ABOUT THE SCOPE OF THE PROPOSED CLASS HERE.

A. WELL, THIS IS A BROAD CLASS, AS YOU KNOW THIS IS A DIRECT PURCHASER CLASS, WHICH IS PURCHASES OF TUNA PRODUCTS FROM BUMBLEBEE, STARKIST AND CHICKEN OF THE SEA. THERE ARE 604 DIRECT PURCHASERS IN THIS CLASS BASED ON THE TRANSACTIONAL DATA THAT BOTH DR. MANGUM AND I RELIED UPON IN OUR ANALYSIS.

Q. WE HEARD EARLIER THAT 108 OF THOSE DIRECT PURCHASERS ARE DIRECT ACTION PLAINTIFFS WHO HAVE ALREADY FILED SUIT. IF WE WERE TO REMOVE THOSE DIRECT ACTION PLAINTIFFS FROM THE CLASS COMMERCE, WHAT WOULD REMAIN?

A. I CALCULATED THE VOLUME OF COMMERCE WITH THE CLASS AND REMOVED THE DIRECT ACTION PLAINTIFFS, AND WHAT I FOUND WAS 36 PERCENT OF THE CLASS COMMERCE WOULD REMAIN PURCHASES BY THE REMAINING CLASS MEMBERS.

Q. BUT JUST SO THAT I UNDERSTAND, FOR PURPOSES OF THIS MOTION, THE DPP'S MOTION AND DR. MANGUM'S ANALYSIS INCLUDES THAT COMMERCE AND THOSE PLAINTIFFS -- THOSE CLASS MEMBERS IN THE CLASS ANALYSIS, CORRECT?

A. YES, THAT IS CORRECT.

Q. THANK YOU. AND CAN YOU ALSO TELL US HOW MANY TOTAL PRODUCTS ARE INCLUDED IN DR. MANGUM'S ANALYSIS?

A. YES, THERE ARE 1,136 DIFFERENT TUNA PRODUCTS. THAT INCLUDES FOOD SERVICE SIZED PRODUCTS, THE LARGE GIANT CANS, THAT INCLUDES SMALLER CANS, THE 5 AND-A-HALF OUNCE TINIER CANS. IT ALSO INCLUDES PRIVATE LABEL PRODUCTS, AND IT ALSO INCLUDES POUCHES, INCLUDING THINGS LIKE DORITO FLAVORED TUNA IN POUCHES.

Q. THANK YOU. NOW, LET'S LOOK BACK AT YOUR ASSIGNMENT, AND I SEE A REFERENCE TO THE ALLEGED CONDUCT WHICH WE HEARD ABOUT EARLIER THIS MORNING. DID YOU MAKE ANY ASSUMPTIONS REGARDING THE CONSPIRACY THAT'S BEING ALLEGED BY THE PLAINTIFFS AND THAT'S BEING ASSUMED BY DR. MANGUM?

A. YES, I DID. FOR THE PURPOSES OF MY ASSIGNMENT, I JUST ASSUMED WHAT DR. MANGUM ASSUMED IN HIS REPORT.

Q. AND ARE YOU ALSO AWARE THAT TWO OF THE DEFENDANTS IN THE CASE, BUMBLEBEE AND STARKIST, AS WELL AS SOME OF THEIR EXECUTIVES, ENTERED GUILTY PLEAS?

A. YES, I AM.

Q. AND HOW, IF AT ALL, DID THOSE GUILTY PLEAS INFORM YOUR ANALYSIS?

A. WELL, OBVIOUSLY I REVIEWED THEM. IT WAS IMPORTANT TO SEE AT LEAST WHAT THEY SAID. AGAIN, I ASSUMED WHAT DR. MANGUM DID. I DID NOTICE IN THE GUILTY PLEAS THAT THE TIME PERIODS WERE A BIT DIFFERENT FROM THE CLASS PERIOD, AND THAT SOME OF THE REFERENCES TO THE PRODUCTS WERE A LITTLE BIT DIFFERENT. "BUT FOR" MY ASSESSMENT I JUST TRIED TO ASSUME EXACTLY WHAT DR. MANGUM DID.

Q. THANK YOU. NOW, MOVING ON IN YOUR ASSIGNMENT, THERE'S A REFERENCE TO PROOF OF ECONOMIC HARM. WHAT DOES THAT TERM MEAN TO YOU AS AN ECONOMIST?

A. WHEN WE TALK ABOUT ECONOMIC HARM IN AN ECONOMIC SETTING, WHAT WE'RE TALKING ABOUT IS PRICES, AND SPECIFICALLY WE KNOW THE ACTUAL PRICE PAID BY EACH OF THE DIRECT PURCHASERS FOR VARIOUS TUNA PRODUCTS. WHAT WE COULDN'T KNOW IS WHAT IS THE PRICE THEY WOULD HAVE PAID IF THE ALLEGED CONDUCT HADN'T OCCURRED. THE ECONOMICS, IN JARGON TERMS, IS THE "BUT FOR" PRICE. WHEN WE THINK ABOUT PROOF OF ECONOMIC HARM FOR AN INDIVIDUAL, WE COMPARE THE ACTUAL PRICE TO THAT "BUT FOR" PRICE, AND IF THEY PAID MORE THAN THEY WOULD HAVE ABSENT THE ALLEGED CONDUCT WE CONSIDER THEM TO HAVE BEEN HARMED. THAT'S THE DEFINITION OF ECONOMIC HARM.

Q. DR. JOHNSON, WAS IT PART OF YOUR ASSIGNMENT TO DETERMINE WHETHER IN FACT ANY GIVEN CLASS MEMBER WAS IMPACTED BY THE ALLEGED CONSPIRACY?

A. NO, IT WAS NOT.

Q. WHAT TYPE OF QUESTION WERE YOU BEING ASKED TO ANSWER?

A. THE QUESTION I WAS ASKED TO ANSWER FOCUSES ON METHODOLOGY, WHETHER THE METHODOLOGIES THAT DR. MANGUM HAS PUT FORWARD COULD BE USED TO ESTABLISH PROOF OF ECONOMIC HARM TO ALL OR VIRTUALLY ALL MEMBERS OF THE CLASS, AND WHETHER THEY COULD RELIABLY ESTIMATE DAMAGES FROM THE ALLEGED CONDUCT ON A CLASS-WIDE BASIS.

Q. I SEE YOU ALSO REFER TO COMMON IMPACT. WHAT IS THAT?

A. WELL, TO AN ECONOMIST, COMMON IMPACT IS JUST WHETHER CAN IT BE SHOWN THAT ALL OR VIRTUALLY ALL CLASS MEMBERS HAVE SUFFERED ECONOMIC HARM BASED ON COMMON EVIDENCE. I ACTUALLY THINK DR. MANGUM DESCRIBED THIS -- THE WAY I THINK ABOUT IT -- VERY WELL IN THAT IF THE CASE WERE TO GO FORWARD INDIVIDUALLY, IF EACH LITIGANT HAD TO PURSUE THE CASE INDIVIDUALLY, WOULD THEY USE THE SAME PROOF, THE SAME TYPES OF EVIDENCE TO PURSUE THE CASE OR COULD THEY USE OR WOULD THEY BE REQUIRED TO USE INDIVIDUALIZED PROOF TO PROVE THEIR CASE.

Q. DR. JOHNSON, DID YOU REACH AN OPINION IN THIS CASE ABOUT DR. MANGUM'S PROPOSED METHODS, HIS METHODOLOGY?

A. YES, I HAVE.

Q. AND WHAT IS YOUR OPINION?

A. SO AFTER REVIEWING DR. MANGUM'S ANALYSES, HIS REPORTS, ALL OF THE DATA, ALL THE CODE, I'VE CONCLUDED THAT HIS METHODOLOGY CANNOT SHOW COMMON IMPACT FOR ALL CLASS MEMBERS, IT CANNOT BE USED TO DEMONSTRATE ALL OR VIRTUALLY ALL CLASS MEMBERS SUFFERED

COMMON IMPACT. IT ALSO CANNOT BE USED TO CALCULATE DAMAGES ON AN AGGREGATE BASIS.

Q. DID READING DR. MANGUM'S REPLY EXPERT REPORT, OR LISTENING TO HIM TESTIFY IN COURT EARLIER TODAY, DID THAT CAUSE YOU TO CHANGE THAT OPINION IN ANY WAY?

A. NO, IT DID NOT.

Q. MOVING BACK TO YOUR ASSIGNMENT, THERE'S A REFERENCE TO DR. MANGUM'S PROPOSED METHODS, DID YOU LOOK AT EACH OF DR. MANGUM'S PROPOSED METHODS?

A. YES, I DID. I REVIEWED ALL OF DR. MANGUM'S REPORTS. I REVIEWED ALL OF HIS REPORTS, AND I REVIEWED EACH OF THE FOUR METHODS THAT HE DESCRIBED IN COURT TODAY.

Q. WHAT DID YOU CONCLUDE ABOUT WHETHER DR. MANGUM'S ASSESSMENT OF INDUSTRY CHARACTERISTICS CAN PROVE COMMON IMPACT?

A. WHEN AN ECONOMIST THINKS ABOUT INDUSTRY CHARACTERISTICS, WHAT INDUSTRY CHARACTERISTICS USUALLY TELLS US IS SOMETHING ABOUT THE LIKELIHOOD THAT A CARTEL COULD FORM IN ANY GIVEN INDUSTRY. THOSE SAME CHARACTERISTICS ALSO TELL US SOMETHING ABOUT THE LIKELIHOOD THAT CHEATING WOULD OCCUR ON THE CARTEL. IT'S THE SAME CHARACTERISTICS BECAUSE CARTELS ARE INHERENTLY UNSTABLE --

THE COURT REPORTER: I DIDN'T HEAR THAT.

A. AS AN INITIAL MATTER, RELIANCE ON INDUSTRY CHARACTERISTICS AS PROOF OF COMMON IMPACT IS INSUFFICIENT. IT DOESN'T TELL YOU SOMETHING VALUABLE.

Q. WHY IS CHEATING IMPORTANT?

A. WELL, BECAUSE IN FACT THE VERY NATURE OF HARM, WHEN YOU THINK ABOUT A CARTEL, IS IF YOU COULD EITHER CHEAT ON THE CARTEL, OR ALSO IF THERE'S OTHER SOURCES OF SUPPLY, THAT WOULD BE THE VERY MECHANISM BY WHICH THERE WOULD NOT BE COMMON IMPACT, WHERE SOMEONE COULD BE UNHARMED BY THE ALLEGED CONDUCT.

Q. WHAT DID YOU CONCLUDE ABOUT WHETHER DR. MANGUM'S ANALYSIS OF MARKET SHARE AND MARKET POWER CAN PROVE COMMON IMPACT?

A. WELL, MARKET SHARE AND MARKET POWER ANALYSIS THE IDEA IS THAT IF THE DEFENDANTS COLLECTIVELY CONTROL A VERY LARGE SHARE OF ALL OF PACKAGED TUNA THAT IN SOME WAY WOULD IMPLY THAT THE CARTEL COULD BE EFFECTIVE. BUT THE RELEVANT QUESTION THEN FOR COMMON IMPACT IS, ARE THERE OUTSIDE SUPPLY THAT THEY COULD TURN TO?

FOR EXAMPLE, FOOD SERVICE IS ONE PARTICULAR SEGMENT AT ISSUE HERE, AND IN FOOD SERVICE WE SEE SOME VERY LARGE SHARES OF NON-DEFENDANT BRANDS THAT GET PURCHASED BY COMPANIES LIKE SYSCO AND U.S. FOODS. IN THAT CONTEXT, THE RELIANCE ON THE FACT THAT THE DEFENDANTS HAVE A LARGE SHARE OVERALL DOESN'T REALLY TELL US ANYTHING ABOUT COMMON IMPACT WITH RESPECT TO, FOR EXAMPLE, FOOD SERVICE. AGAIN, MARKET SHARE AND MARKET POWER ANALYSIS IN ISOLATION DOES NOT TELL US ANYTHING MEANINGFUL ABOUT COMMON IMPACT.

Q. WHAT DO YOU CONCLUDE ABOUT WHETHER DR. MANGUM'S PRICE CORRELATION ANALYSIS CAN PROVE COMMON IMPACT?

A. WELL, I HEARD DR. MANGUM TESTIFY ABOUT THE CORRELATION THIS MORNING, AND I DON'T WANT TO BE REPETITIVE, BUT I WOULD LIKE TO TRY TO TEACH THE COURT. CORRELATIONS ARE A VERY RUDIMENTARY STATISTICAL CONCEPT. ONE OF THE THINGS WE HEAR ABOUT ALL THE TIME IS CORRELATION IS NOT CAUSATION. THERE'S A WHOLE CHAPTER IN MY BOOK ABOUT THIS VERY ISSUE. ONE OF THE PROBLEMS WITH CORRELATION IS THE NATURE THAT DR. MANGUM PUT FORWARD IS HE TOLD YOU THAT THE PRICES MOVE TOGETHER VERY CLOSELY, THAT HE AVERAGED A BUNCH OF PRICES TOGETHER AND THEY VERY CLOSELY MOVE TOGETHER.

THE PROBLEM, AS WE KNOW, FOR EXAMPLE, THERE ARE COMMON COST STRUCTURES. THERE'S LOTS OF THINGS THAT GO ON THAT WE WOULD EXPECT WOULD ALSO EFFECT PRICES. IN FACT, THAT'S THE ENTIRE PURPOSE OF THE REGRESSION ANALYSIS TO FIGURE OUT WHAT ARE THE COMMON OR NOT SO COMMON FACTORS THAT DRIVE PRICES. SO ECONOMISTS WIDELY ACCEPT THAT CORRELATIONS ARE A VERY RUDIMENTARY STATISTIC AND DO NOT GIVE THEM A LOT OF CREDENCE, AND SURELY COULD NOT BE USED AS PROOF OF IMPACT. IN FACT, DR. MANGUM IN HIS REPORT SAYS THAT THESE IN ISOLATION CANNOT PROVIDE PROOF OF COMMON IMPACT.

Q. SO ARE THE CORRELATIONS AN ADEQUATE TEST?

A. NO. IN FACT, THIS MORNING, WHEN DR. MANGUM TESTIFIED, HE SAID, "WELL, I LOOKED AT THE CORRELATIONS BY PACK TYPE AND BY CUSTOMERS AND BY DIFFERENT SIZED PRODUCTS," AND THAT WAS HIS TEST FOR WHETHER OR NOT THERE WERE MEANINGFUL DIFFERENCES WHEN

HE WOULD GET TO THE OVERCHARGE MODEL. THAT'S NOT A SUFFICIENT TEST AT ALL. THE PLACE WHERE THE TESTING HAS TO OCCUR IS IN THE REGRESSION, BUT ALSO THE TESTING HAS TO BE RIGOROUS. THE CORRELATION ANALYSIS CANNOT PROVIDE A FOUNDATION FOR THAT.

Q. WHAT ARE YOUR THOUGHTS ON DR. MANGUM'S REGRESSION ANALYSIS, THE FOUR POINTS?

A. SO DR. MANGUM PROVIDED A REGRESSION ANALYSIS, A STATISTICAL ANALYSIS OF PRICING, WHICH I'LL TRY TO DESCRIBE FOR YOU, BUT THERE WERE SEVERAL PROBLEMS WITH THAT REGRESSION THAT MAKE IT INCAPABLE OF DEMONSTRATING COMMON PROOF -- OR COMMON IMPACT ON THE BASIS OF COMMON PROOF.

Q. WHAT ARE THE -- WHAT DID YOUR ANALYSIS FIND?

A. FOR TODAY'S PURPOSES, I WANT TO HIGHLIGHT JUST THREE. THESE ARE THE THREE THAT I THINK ARE VERY IMPORTANT.

SO THE FIRST CRITICISM IS THE FACT THAT BECAUSE OF THE STRUCTURE OF THE VERY ECONOMETRIC MODEL THAT DR. MANGUM DEVELOPED, A SINGLE AVERAGE OVERCHARGE MODEL, WITH A 10.28 PERCENT OVERCHARGE, HE HAS IMBEDDED FOR EVERY CUSTOMER, ACROSS EVERY PRODUCT, ACROSS THE ENTIRE CLASS PERIOD, THE SAME EFFECT. THERE'S ONLY TWO POSSIBLE OUTCOMES FROM DR. MANGUM'S MODEL; EVERYONE IS IMPACTED OR NO ONE IS IMPACTED. HE'S ASSUMED IMPACT IN THE VERY STRUCTURE OF THE MODEL HE DEVELOPED.

THE SECOND POINT HAS TO DO WITH THE TREATMENT OF COSTS. DR. MANGUM IS MAKING STRONG ASSUMPTIONS ABOUT THE USE OF COSTS. IN FACT, HE SAID, "WELL, DEFENDANTS WOULD THINK ABOUT MARKET

COSTS AS THE BASIS FOR DETERMINING THEIR PRICES." THAT IS VERY COUNTER TO MY ECONOMIC INTUITION. COMPANIES HAVE ALL SORTS OF DIFFERENT COST STRUCTURES, AND IN FACT I INTERVIEWED BUSINESS PEOPLE HERE WHO TOLD ME ABOUT THE DIFFERENCES IN COST STRUCTURES ACROSS BUMBLEBEE AND STARKIST AND CHICKEN OF THE SEA, AND SO DR. MANGUM DECIDED TO USE --

THE COURT REPORTER: SLOW DOWN.

A. -- DATA AS A PLATFORM FOR COSTS, ASSUMING THAT THAT'S THE KIND OF INFORMATION THAT THE DEFENDANTS WOULD RELY ON FOR THEIR PRICING, AS OPPOSED TO THEIR OWN COST OF GOODS SOLD DATA, THE VERY DATA THEY HAVE THEMSELVES. THAT JUST DOESN'T MAKE ANY SENSE AS A MATTER OF ECONOMICS, BUT ALSO IT HAS A PROFOUND EFFECT ON THE ECONOMETRIC MODEL, WHICH I'LL DESCRIBE IN MORE DETAIL SHORTLY.

AND THEN THE THIRD ISSUE HAS TO DO WITH WHAT'S CALLED A FALSE POSITIVE. SO FALSE POSITIVES ARE THE IDEA THAT IF YOU'VE GOT A MODEL THAT'S MEASURING OVERCHARGES, YOU SHOULDN'T BE ABLE TO USE THE MODEL ON OTHER SALES, IN OTHER TIME PERIODS THAT ARE CLEAN, AND STILL FIND AN EFFECT. IF THAT'S THE CASE, WHAT THAT TELLS YOU IS THE MODEL IS DEFECTIVE, THE MODEL IS PRONE TOWARDS FINDING IMPACT WHERE NONE SHOULD EXIST. AND IN FACT IN THIS CASE WE HAVE SOME UNIQUE DATA THAT LET'S ME TEST FOUR DIFFERENT TYPES OF FALSE POSITIVES, AND IN EVERY CASE WHERE I HAD DATA TO TEST, I FOUND DR. MANGUM'S MODEL RETURNED FALSE POSITIVE RESULTS. THAT TELLS ME THE MODEL IS NOT CAPABLE OF

DEMONSTRATING IMPACT ON A COMMON BASIS.

Q. THANK YOU. WE'LL TAKE THESE FINDINGS ONE BY ONE. THE FIRST RELATES TO THAT THEY ARE GOING TO PROVE COMMON IMPACT TO THE CLASS. CAN YOU START BY DESCRIBING THE DPP -- POOLED DPP MODEL.

A. SO THERE'S A LOT OF TERMINOLOGY WE'VE USED TODAY, SO I'M GOING TO TRY TO JUST RESET IT, IF I COULD, FOR YOUR HONOR. SO A POOLED REGRESSION IDEA IS THAT YOU STACK ALL THE DATA TOGETHER. YOU'RE GOING TO HEAR A LOT ABOUT 1.5 MILLION OBSERVATIONS. WE DO HAVE VERY LARGE DATA SETS IN THIS CASE. THE POOLING IS THE IDEA THAT DR. MANGUM PUTS ALL THE DATA FOR ALL THREE DEFENDANTS, REPRESENTING ALL 604 DIRECT PURCHASERS, AND ALL THEIR PURCHASES, IN ONE GIANT DATA SET. HE'S GOING TO RUN A REGRESSION MODEL ACROSS ALL THAT DATA. THAT'S WHAT THE NATURE OF POOLING MEANS. SO WHEN WE TALK ABOUT POOLING, THAT'S WHAT WE MEAN. THAT DATA INCLUDES ALL PRODUCTS, ALL DEFENDANTS, ALL CUSTOMERS, THE CLASS PERIOD, AND A BENCHMARK PERIOD -- ACTUALLY SEVERAL BENCHMARK PERIODS.

THE STRUCTURE OF THE MODEL THAT DR. MANGUM PUT FORWARD IS A SINGLE AVERAGE OVERCHARGE. WHAT HE'S TRYING TO DO, AND I THINK HE EXPLAINED THAT QUITE WELL THIS MORNING, HE'S TRYING TO SAY, WHAT ARE THE FACTORS THAT WOULD DETERMINE THE PRICE OF PACKAGED TUNA? SO THERE ARE SUPPLY FACTORS, LIKE COSTS, THERE ARE DEMAND FACTORS, LIKE PERSONAL INCOME, AND THERE'S OTHER CHARACTERISTICS OF TUNA, AND SO WE'RE GOING TO PUT THIS INTO

THIS STATISTICAL MODEL AND IT'S GOING TO VIGOROUSLY ESTIMATE WHAT ARE THE EFFECTS OF THESE VARIOUS FACTORS.

NOW, FOR THE PURPOSES OF THEN ESTIMATING AN OVERCHARGE, YOU NEED SOME VARIATION, SOME COMPARISON, AND SO WHAT THESE TYPES OF MODELS DO IS THEY SAY, ALL RIGHT, I HAVE A BENCHMARK PERIOD, WHICH IS A CLEAN PERIOD, AND I HAVE THE CLASS PERIOD, AND I'M GOING TO SAY ANY DIFFERENCE IN THE EFFECTS OF THOSE SUPPLY AND DEMAND CONDITIONS AND PRICES, ANYTHING THAT DOESN'T PREDICT WOULD BE CAUSED BY THOSE SUPPLY AND DEMAND CONDITIONS IS THE OVERCHARGE, AND THERE'S LITERALLY A VARIABLE IN THE REGRESSION CALLED OVERCHARGE, AND YOU ESTIMATE THAT. THAT'S PICKING UP ANYTHING DIFFERENT BETWEEN THE BENCHMARK PERIOD AND THE CLASS PERIOD THAT'S NOT ACCOUNTED FOR BY THE SUPPLY AND DEMAND FACTORS.

Q. DR. JOHNSON, THIS AVERAGE OVERCHARGE, THIS 10.28 PERCENT THAT WE'VE HEARD ABOUT, HOW DOES THIS RELATE TO COMMON IMPACT?

A. SO DR. MANGUM PUT FORWARD AN ANALYSIS THAT HE CALLED COMMON IMPACT, WHERE HE THEN APPLIED THE 10.28 PERCENT OVERCHARGE TO EVERY SINGLE CUSTOMERS' TRANSACTION, AND HE DERIVED HOW MANY CUSTOMERS THEN HAVE AN ACTUAL PRICE THAT'S GREATER THAN THE "BUT FOR" PRICE THAT COMES OUT OF HIS MODEL, AND WHEN HE DOES THAT, HE FINDS THAT 94.5 PERCENT OF THE CUSTOMERS WERE IMPACTED BY HIS MODEL.

Q. CAN YOU EXPLAIN HOW IT IS THAT YOU CAN STILL FIND 5.5 PERCENT NOT IMPACTED IF THERE'S AN AVERAGE 10.28 PERCENT

OVERCHARGE?

A. YES. THAT ACTUALLY WAS THE FIRST RED FLAG THAT SOMETHING WAS WRONG WITH THE MODEL TO ME BECAUSE IF YOU ASSUME THAT EVERYONE HAD A 10.28 PERCENT ELEVATION IN THEIR PRICES, AND YOU IMBED THAT IN YOUR ANALYSIS, HOW COULD IT BE THAT 5.5 PERCENT OF THE CLASS MEMBERS WEREN'T IMPACTED BY THE CONSPIRACY? YOU'VE ASSUMED EVERYONE'S PRICE WAS 10.28 PERCENT LOWER.

WELL, I CAN SHOW YOU HOW THAT HAPPENS. I HAVE A GRAPH. SO, YOUR HONOR, WHAT THIS IS IS THIS IS THE TRANSACTION DATA THAT DR. MANGUM AND I BOTH RELIED UPON. THIS IS FOR THE STATE OF CALIFORNIA, AND WHAT THIS REPRESENTS IS COSI'S 5-OUNCE CANS OF CHUNK LIGHT TUNA IN WATER, IN FEBRUARY 2014.

YOU'LL SEE AT THE BOTTOM ARE THE NAMES OF SOME RETAILERS, RALPH'S, SAFEWAY, VON'S, AND THEN YOU SEE ON THE OTHER ACCESS IT SAYS "PRICE PER CAN." SO EACH GREEN DOT REPRESENTS THE AVERAGE MONTHLY PRICE THAT A RETAILER PAID.

SO, FOR EXAMPLE, LET'S LOOK AT VON'S OVER HERE, VON'S PAID 88.9 CENTS FOR THIS PARTICULAR PRODUCT ON AVERAGE IN THIS MONTH IN THE STATE OF CALIFORNIA. RALPH'S, ON THE OTHER HAND, PAID 65.5 CENTS. YOU CAN SEE THERE'S A RANGE OF PRICES. THESE ARE THE ACTUAL PRICES FROM THE TRANSACTION DATA. DR. MANGUM'S SUPPLY AND DEMAND FACTORS HAVE TO BE ABLE TO EXPLAIN THESE TYPES OF ACTUAL PRICES, THAT'S WHAT THE PURPOSE OF THE MODEL IS. IF THE MODEL CAN'T EXPLAIN THE ACTUAL PRICES, IT HAS NO CHANCE OF GETTING THE "BUT FOR" PRICES RIGHT.

SO NOW IF WE GO TO THE NEXT SLIDE, PLEASE, DR. MANGUM RUNS HIS REGRESSION, AND WHAT YOU SEE BUILT INTO THE MODEL IS, FOR THIS PARTICULAR PRODUCT IN CALIFORNIA, THE PRICE THAT HIS MODEL WOULD PREDICT IS 78.2 CENTS. NOW, YOU'LL NOTICE 78.2 IS THE ACTUAL PRICE, NOTICE THAT THERE ARE ONE OR TWO THAT ARE CLOSE TO THAT, BUT THERE'S A NUMBER WHERE IT'S ABOVE AND BELOW. THIS, IN SOME RESPECTS, REPRESENTS WHERE HIS MODEL MAY BE MISSING THE MARK, WHERE THE FORECAST ISN'T DOING VERY WELL. IF THE FORECAST ISN'T DOING VERY WELL, THAT'S GOING TO HAVE A CONSEQUENCE FOR THE IMPACT CALCULATION.

SO HOW DOES HE IMBED COMMON IMPACT TO EVERYONE? WELL, EVERY SINGLE PRICE IS ASSUMED TO BE LOWER BY 10.28 PERCENT FOR EVERY SINGLE CLASS MEMBER, EVERY SINGLE PRODUCT, EVERY SINGLE MONTH ACROSS THE ENTIRE CLASS, AND SO NOW YOU SEE THE RED LINE DOTS, WHICH IS WHAT COMES OUT OF HIS MODEL, THE "BUT FOR" PRICE PREDICTED BY THE MODEL.

NOW, HOW DOES HE CALCULATE IMPACT. WELL, HE'S GOING TO COMPARE THE RED, THE 70.9 CENTS, TO EACH OF THE GREEN TRIANGLES. YOU NOTICE THERE ARE SEVERAL WHERE BY HIS MODEL HE HAD IMPACT, BUT THERE ARE ACTUALLY TWO IN THIS EXAMPLE WHERE THERE'S NO IMPACT.

GO TO THE NEXT SLIDE. WHY DOES THAT HAPPEN? WELL, BECAUSE THE PREDICTION FOR THE PRICES IS PARTICULARLY POOR FOR THESE TYPES OF TRANSACTIONS, SO WHEN YOU HEAR DR. MANGUM SAY 94.5 PERCENT ARE IMPACTED, AND 5.5 ARE NOT, YOU HAVE TO

REMEMBER HE'S IMBEDDED A 10.28 PERCENT OVERCHARGE, AND YET HE'S STILL FINDING 5.5 PERCENT WHERE HIS MODEL DOESN'T DO A GOOD AT PREDICTING PRICES. SO THAT'S THE FIRST RED FLAG THAT THERE'S SOMETHING WRONG WITH THAT REGRESSION MODEL.

Q. AND SOMETHING WRONG WITH THAT 10.28 PERCENT AVERAGE OVERCHARGE.

A. YES. WELL, THAT'S WHAT WE NEED TO PUT TO THE TEST.

Q. AND CAN YOU TEST THAT?

A. YES, YOU CAN.

Q. HOW DO YOU TEST IT?

A. SO THERE WAS A LOT OF DISCUSSION THIS MORNING, YOUR HONOR, ABOUT TESTING, AND DIFFERENT TYPES OF TESTING, SO I WOULD LIKE TO AGAIN SORT OF BE VERY CONCRETE ABOUT WHAT I MEAN ABOUT STATISTICAL TESTING. TO AN ECONOMIST OR STATISTICIAN LIKE MYSELF, WHEN WE TALK ABOUT TESTING, WHAT WE MEAN IS WE DO A RIGOROUS ALMOST STATISTICAL TEST WHERE WE HAVE A HYPOTHESIS, AND THEN WE HAVE A LEVEL OF STATISTICAL SIGNIFICANCE AT WHICH WE ACCEPT OR REJECT THE HYPOTHESIS. RUNNING VARIOUS ITERATIONS OF A MODEL AND LOOKING AT THE COEFFICIENT AND SAYING, "OH, THEY'RE ALL POSITIVE," IS NOT ENOUGH TO BE A RIGOROUS TEST.

SO WHAT I DID HERE IS I WANTED TO TEST THE PROPOSITION OF THE SINGLE AVERAGE OVERCHARGE AND OF THE POOLED MODEL OVERALL, AND THERE IS A TEST FOR THAT, IT'S CALLED THE CHOW TEST OR THE F-TEST. NOW, THE CHOW TEST IS A WIDELY-ACCEPTED TEST. DR. MANGUM TESTIFIED HE DIDN'T RUN THE CHOW TEST. DR.

MANGUM NEVER TESTED THE POOLING IN HIS MODEL RIGOROUSLY. DR. MANGUM RAN SOME SENSITIVITIES, AND I'LL EXPLAIN THOSE AGAIN IN A SECOND TO SHOW YOU WHAT'S RIGHT OR WRONG WITH THAT, BUT HE NEVER TESTED THE FUNDAMENTAL PROPOSITION, CAN YOU COMBINE, FOR THIS IS POOLED REGRESSION, ALL THE SUPPLY FACTORS, ALL THE DEMAND FACTORS, ACROSS ALL THE DEFENDANTS, AND A SINGLE AVERAGE OVERCHARGE?

Q. HE DIDN'T TEST IT, BUT YOU DID, AND WHAT DID YOU FIND?

A. SO I RAN SEVERAL DIFFERENT CHOW TESTS, BUT THE CHOW TESTS REJECT THE IDEA THAT A SINGLE MODEL CAN BE APPLIED TO ALL OF THESE TRANSACTIONS, BOTH THE SINGLE AVERAGE OVERCHARGE, BUT ALSO THAT THE SAME SUPPLY FACTORS AND THE SAME DEMAND FACTORS APPLY AS WELL. IN FACT, DR. MANGUM SAID, AND YOU HEARD AT THE VERY BEGINNING OF HIS TESTIMONY, WELL, CHOW TESTS CAN BE SENSITIVE BECAUSE EVEN IF ONE COEFFICIENT IS DIFFERENT THAT'S ENOUGH TO REJECT THE CHOW TEST. THAT'S NOT THE CIRCUMSTANCE HERE.

THERE ARE WIDE DIFFERENCES THAT COME OUT OF THE CHOW TEST, AND WHEN YOU LOOK VERY CLOSELY AT MY OUTPUT YOU SEE THE TEST REJECTS BECAUSE OF -- SUPPLY COST IS NOT THE SAME ACROSS DEFENDANTS. THE TEST REJECTS BECAUSE THE DEMAND FACTORS ARE NOT THE SAME, AND THE TEST REJECTS BECAUSE THE OVERCHARGES ARE NOT THE SAME. SO THIS IS NOT A CIRCUMSTANCE WHERE THERE ARE SMALL DIFFERENCES DRIVING THIS REJECTION, THIS IS A CIRCUMSTANCE WHERE THE VERY FOUNDATION OF HIS MODEL THAT

POOLING IS APPROPRIATE IS REJECTED BY THE RIGOROUS, ACCEPTED STATISTICAL TEST.

Q. YOU JUST MENTIONED SOME OF DR. MANGUM'S SENSITIVITY ANALYSES, AND I WANT TO MAKE SURE I UNDERSTAND WHAT THOSE ARE. I HEARD ABOUT THEM EARLIER AS ROBUSTNESS CHECKS. CAN YOU EXPLAIN THOSE.

A. YES. SO IT IS CUSTOMARY IN ECONOMETRICS TO THINK ABOUT ARE MODELS SENSITIVE TO SMALL CHANGES? BECAUSE WE LIKE TO THINK ABOUT WHAT COULD BE GOING ON IF SOMETHING CHANGES. TO DR. MANGUM'S CREDIT, HE DID RUN SOME TYPE OF SENSITIVITY, BUT THE SENSITIVITIES HE DIDN'T LOOK AT THEM RIGOROUSLY, HE KIND OF RAN THEM AND THEN SAID, "WELL, BECAUSE I FIND THE SAME A-POSITIVE OVERCHARGE ACROSS THESE SENSITIVITIES, THAT'S ENOUGH TO SAY COMMON IMPACT EXISTS."

ONE PARTICULAR ONE HE RAN WAS BY CUSTOMER TYPE. YOU HEARD A LOT ABOUT THAT I THINK IN HIS TESTIMONY. WHAT HE DID IS IN HIS MODEL, AS OPPOSED TO HAVING A SINGLE AVERAGE OVERCHARGE, HE NOW HAD AN OVERCHARGE FOR WALMART, AND THEN AN OVERCHARGE FOR THE FOOD SERVICE CUSTOMERS, ONE OVERCHARGE TO REPRESENT 226 FOOD SERVICE CUSTOMERS. SAME OVERCHARGE FOLLOWED. ONE OVERCHARGE TO REPRESENT 297 RETAIL CUSTOMERS. SO HE HAD ABOUT SIX OR SEVEN CATEGORIES OF THESE CUSTOMER TYPES. HIS CONCLUSION WAS, "WELL, BECAUSE THEY WERE POSITIVE AND STATISTICALLY SIGNIFICANT, THAT WAS ENOUGH TO VALIDATE THAT THE POOLING WAS APPROPRIATE," BUT THAT ISN'T ENOUGH BECAUSE

WHEN I DID THE CHOW TEST ON WHETHER IT WAS APPROPRIATE TO COMBINE 226 FOOD SERVICE CUSTOMERS TOGETHER, THE TEST SAYS, "NO, IT'S NOT, THERE ARE MEANINGFUL DIFFERENCES." WHEN I DID THE CHOW TEST ON THE RETAIL CUSTOMERS, IT SAID, "NO, IT'S NOT, THERE ARE MEANINGFUL DIFFERENCES."

Q. SO WHAT IS YOUR TAKE ON THE ROBUSTNESS CHECKS THAT DR. MANGUM RAN AND THE RESULTS?

A. THE IDEA THAT DR. MANGUM LOOKED AT SOME SENSITIVITIES FOR HIS MODEL AND SAYS, "WELL, BECAUSE I CONTINUE TO GET POSITIVE AND STATISTICALLY SIGNIFICANT OVERCHARGES, THAT'S ENOUGH," IGNORES THE VERY NATURE OF WHAT THE TESTING HAS TO TELL US, BUT ALSO THERE ARE SOME WIDE SWINGS IN THE OVERCHARGES WHEN HE DOES HIS SENSITIVITIES. THERE ARE SOME THAT GO FROM 10.28 TO 7 PERCENT. THAT WOULD HAVE A HUGE CONSEQUENCE FOR IMPACT.

SO IT'S NOT ENOUGH TO JUST LOOK AT COEFFICIENTS AND SAY, "OH, THEY'RE POSITIVE AND STATISTICALLY SIGNIFICANT," THERE'S A REASON WHY WE DO RIGOROUS TESTING IN ECONOMETRICS, AND THAT'S THE TESTING THAT DR. MANGUM FAILED TO DO HERE.

Q. SO NOW WITH RESPECT TO YOUR ASSIGNMENT TO TEST HIS MODELS, CAN YOU DESCRIBE FOR THE COURT WHAT YOU DID.

A. SO DR. MANGUM DESCRIBED IN DIFFERENT WAYS THE TESTING HE DID. THE FIRST STEP WAS TO DO THE POOLING, THE CHOW TEST, THAT WAS STEP ONE. THE CHOW TEST SAYS IT'S INAPPROPRIATE TO POOL. NOW WE WANT TO KNOW, WELL, WHAT'S THE CONSEQUENCE OF THAT? SO WHAT I DID IS I TOOK THE SAME EXACT DATA SET, THE SAME EXACT

EXPLANATORY VARIABLES, AND THE MODIFICATION I MADE WAS I ALLOWED FOR THERE TO BE 604 OVERCHARGES, ONE FOR EACH CLASS MEMBER. NOW, DR. MANGUM SAID THAT THERE WAS NO SCIENTIFIC BASIS TO DO THAT. WELL, I COMPLETELY DISAGREE WITH THAT. IN FACT, THE VERY QUESTION THAT I'VE BEEN BROUGHT HERE TO ANSWER FOR THE COURT TODAY IS WHETHER YOU CAN FIND FROM THIS MODEL THAT ALL OR VIRTUALLY ALL CLASS MEMBERS WERE IMPACTED, AND YOU NEED TO KNOW WHAT'S GOING ON UNDER THE SURFACE OF THAT SINGLE 10.28 PERCENT OVERCHARGE OR IT WOULD BE EASY TO BE MISLED TO THINK IT APPLIES TO EVERYONE, AND SO THAT'S WHAT I DID WITH THE TESTING. WHAT I FOUND THEN IS -- I CAN SHOW YOU -- WHAT IS MAKING UP, UNDER THE SURFACE OF THAT OVERCHARGE, HIS IMPACTS ARE NOT ANALYSIS.

Q. AND WHAT WERE YOUR FINDINGS?

A. SO WHEN YOU RUN INDIVIDUAL OVERCHARGES IN THE POOLED MODEL, WHAT YOU FIND IS 28 PERCENT OF THE DIRECT PURCHASERS HE CANNOT SHOW IMPACT FOR. HE DOES NOT HAVE A POSITIVE AND STATISTICALLY SIGNIFICANT OVERCHARGE. NO SHOWING OF IMPACT. THAT'S 169 INQUIRIES YOU WOULD HAVE TO DO IN THOSE CIRCUMSTANCES TO FIGURE OUT IF THOSE CUSTOMERS WERE IMPACTED.

Q. AND WHAT IF YOU REMOVED THE DAPS?

A. IF YOU REMOVED THE DAPS, THE NUMBER GOES UP TO 32 PERCENT.

Q. IN REPLY, DR. MAGNUM CRITICIZED YOUR TESTING BECAUSE HE SAID YOU MANIPULATED SAMPLE SIZES, AND THIS IS WHAT MS. SWEENEY EARLIER TODAY REFERRED TO AS SLICING AND DICING THE DATA.

WHAT'S YOUR RESPONSE TO THAT?

A. THAT CHARACTERIZATION IS WRONG. THE DATA WE HAVE IS THE DATA WE HAVE.

THE COURT: ARE YOU TALKING ABOUT DATA ON INDIVIDUALS?

THE WITNESS: WE LOOKED AT DATA ON INDIVIDUAL CLASS MEMBERS.

THE COURT: YOU DIDN'T HAVE EQUAL DATA ON EVERY CLASS MEMBER.

THE WITNESS: THAT'S RIGHT.

THE COURT: WEREN'T THERE SOME WHERE YOU HAD AN INSUFFICIENT AMOUNT OF DATA?

THE WITNESS: YES.

THE COURT: WHAT PERCENTAGE WAS THAT?

THE WITNESS: THAT'S THE 61. THE REASON THAT THAT IS IMPORTANT IS BECAUSE YOU HEARD DR. MANGUM START TO DESCRIBE INDIVIDUAL INQUIRIES FOR EACH OF THOSE. YOU HEARD HIM SAY, "I LOOKED AT PRICES, AND SOME WERE HIGHER, AND SOME WERE LOWER, AND SOME WERE ABOUT THE SAME PRODUCT." THE 61 FOR WHICH THE MODEL CAN'T RUN -- I'M NOT HIDING THE FACT THAT YOU CAN'T RUN THE MODEL ON THE 61, THE DIFFERENCE IS THE INTERPRETATION. DR. MANGUM THINKS IT'S OKAY TO SAY, "WELL I HAVE A BIGGER AVERAGE, WALMART'S AVERAGE, AND WALMART'S EFFECT IS ENOUGH TO COVER THE 61 SMALL CUSTOMERS THAT ONLY BOUGHT IN ONE PERIOD," BUT IT'S ACTUALLY A DEFECT OF HIS MODEL BECAUSE HE CHOSE TO DO A BEFORE AND AFTER MODEL, AND HE'S GOT 61 CLASS MEMBERS FOR WHOM HE HAS

NO BEFORE OR AFTER DATA TO MAKE THE COMPARISON. HE ACTUALLY -- ON THE STAND YOU HEARD HIM START TO DESCRIBE FOR YOU, "WHAT I DID IS I LOOKED AT THIS CUSTOMER AND COMPARED IT TO THAT PRICE, AND THEN I LOOKED AT THIS CUSTOMER," AND THEN HE SAID, "WELL, THE MAJORITY HAD ANOTHER PRODUCT." THAT'S AN INDIVIDUALIZED INQUIRY. SO THE 61 YOU CAN'T RUN FOR, THAT'S ONE DEFECT OF HIS MODEL.

THEN THERE'S ANOTHER SET FOR WHOM YOU CAN RUN THE MODEL, THE REST OF THEM, AND THEN IT COMES DOWN TO STATISTICAL SIGNIFICANCE. DR. MANGUM SAID, "WELL, THEY WERE SMALL SAMPLE SIZES, AND THAT'S THE WHOLE ISSUE." THE WHOLE REASON WE DO STATISTICAL SIGNIFICANCE TESTING IS SO THAT WE CAN UNDERSTAND, WE CAN DETERMINE WHETHER YOU CAN DO SOMETHING OR NOT.

SO THE FACT THAT WE FIND EFFECTS THAT ARE NOT STATISTICALLY SIGNIFICANT, THAT'S AN IMPORTANT FINDING. THAT'S NOT SOMETHING TO BE HIDDEN. THAT'S NOT SOMETHING THAT WE SHOULD BE UNCOMFORTABLE ABOUT. THAT'S ACTUALLY SOMETHING THAT SAYS, "WAIT, YOUR MODEL CAN'T ACTUALLY DO SOMETHING ABOUT THIS SET OF CUSTOMERS." AGAIN, THERE'S AN ASSUMPTION BUILT IN. THE ASSUMPTION IS THE EXPERIENCE OF EVERYBODY ELSE APPLIES TO THOSE PEOPLE, AND SO WHEN HE DESCRIBED ON CROSS THIS MORNING, HE SAID, "WELL, IF ONE PERSON HAD THE DATA, THEY'D HAVE TO USE THE CLASS-WIDE MODEL," BUT THAT VERY IDEA IS EXACTLY WHY YOU WOULD HAVE TO DO AN INDIVIDUAL INQUIRY --

THE COURT: IF YOU DON'T HAVE THE DATA TO DO AN

INDIVIDUAL INQUIRY, WHAT DO YOU SUGGEST SHOULD BE DONE?

THE WITNESS: YOU DO HAVE THE DATA WITH RESPECT TO THE 61, WE JUST DON'T HAVE THE BENCHMARK DATA. YOU COULD DO A YARDSTICK MODEL. YOU CAN COMPARE DATA PRODUCTS. DR. MANGUM CHOSE TO DO A BEFORE AND AFTER MODEL. IT'S NOT THAT WE DON'T HAVE DATA.

THE COURT: OKAY.

Q. (BY MS. BAUER) WHAT I'M HEARING YOU SAY, JUST SO THAT I UNDERSTAND THIS, THERE ARE OTHER ALTERNATIVES, BUT WHAT HE CHOSE SIMPLY DOES NOT WORK FOR 10 PERCENT OF THE CLASS MEMBERS; IS THAT RIGHT?

A. THAT IS CORRECT.

Q. THANK YOU. AND YOU WERE SAYING EARLIER IN THE PRIOR SLIDE, JUST GOING BACK A COUPLE SLIDES, THAT YOU USED THE SAME DATA SET, AND SO IN RESPONSE TO THE SLICING AND DICING ARGUMENT, I WANT TO MAKE SURE I UNDERSTAND. IT'S THE FULL, SAME EXACT SET OF DATA THAT DR. MANGUM HIMSELF USED, RIGHT?

A. YES, IT IS.

Q. AND THAT IS THE DATA SET THAT MS. SWEENEY THIS MORNING REFERRED TO AS THE VAST AMOUNT OF DATA, RIGHT?

A. YES. I THINK WHERE THE DISCONNECT MAY BE COMING IS THAT SINGLE AVERAGE OVERCHARGE DR. MANGUM WAS ESTIMATING HAS ALL THOSE OBSERVATIONS AS WELL. IT'S LIVING OFF THE SAME VARIATION. WHAT HE'S SAYING IS, "WELL, THEY DON'T WEIGH HEAVILY IN MY AVERAGE. MY AVERAGE IS FROM ALL THESE OTHER

CUSTOMERS, AND IT'S OKAY TO APPLY IT TO THESE WHERE I HAVE THESE SMALL AMOUNTS OF DATA." THAT'S THE DIFFERENCE. I'M DOING THE EXACT SAME MODEL, AND I'VE JUST INCLUDED THE 604 OVERCHARGES IN A SINGLE REGRESSION.

Q. WHILE WE'RE ON THE TOPIC OF SLICING AND DICING THE DATA, THERE WAS DISCUSSION OF THE *CAPACITORS* CASE THIS MORNING, AND I JUST WANT TO KNOW HOW THE WORK THAT YOU DID HERE COMPARES TO THE WORK THAT YOU DID IN THE *CAPACITORS* CASE.

A. YES, WELL, THE *CAPACITORS* CASE WAS A CASE WITH AN OVERCHARGE MODEL. IN FACT, THERE WERE THREE OVERCHARGES IN THAT MODEL. IT IS THE CASE IN *CAPACITORS* THAT THERE I DID SOMETHING DIFFERENT. I ACTUALLY DID INDIVIDUAL REGRESSIONS FOR EACH CLASS MEMBER ON ALL THE FACTORS. IN THIS CASE, I DID ONE REGRESSION WITH THE OVERCHARGES BEING THE ONLY THING THAT WAS ALLOWED TO VARY. NOW, I STAND BY THE SCIENTIFIC WORK I DID IN THE *CAPACITORS* CASE. THE JUDGE MADE THE DECISION THAT THEY DID, BUT I DID DO SOMETHING DISTINCT HERE, AND I THINK IT'S IMPORTANT TO DRAW THAT DISTINCTION.

THE COURT: I'M CURIOUS ABOUT ONE THING, BASED ON YOUR TESTIMONY, DOES AN AVERAGE DATA ALWAYS RENDER SOMETHING UNRELIABLE? I'M SENSING THAT YOU FEEL THAT IT WOULD.

THE WITNESS: NOT ALWAYS. YOU HAVE TO SHOW THAT IT ACTUALLY IS APPROPRIATE TO BE APPLIED TO EVERYONE.

THE COURT: YOU'RE STARTING FROM THE STANDPOINT THAT IF IT'S AVERAGE, IT'S PROBABLY INHERENTLY UNRELIABLE, AND YOU WANT

TO ESTABLISH THAT IT IS RELIABLE.

THE WITNESS: NO, YOUR HONOR, I THINK I WOULD PUT IT A LITTLE DIFFERENTLY. IF YOU THINK ABOUT THE EXAMPLE THAT MR. GALLO WORKED THROUGH WITH DR. MANGUM, THE SITUATION WHERE YOU HAVE A 9 AND AN 11 AS THE AVERAGE AND YOU GET A 10. THAT'S A CIRCUMSTANCE WHERE THE AVERAGE PROBABLY DOES A GOOD JOB, RIGHT? IT'S THE QUESTION OF IF IT'S 0 AND 20, OR IF YOU'VE MADE AN ASSUMPTION, FOR EXAMPLE, THAT THE COST STRUCTURES ARE THE SAME ACROSS THE DEFENDANTS, THAT'S THE DIFFERENCE. IT DEPENDS ON THE MAGNITUDE OF THE DIFFERENCES. THAT'S WHAT DRIVES IT.

THE COURT: HOW FAR CAN YOU GO AND HAVE A DIFFERENCE? SO IT'S NOT THAT THEY'RE INHERENTLY RELIABLE, BUT YOU WOULDN'T ACCEPT IT IF THERE'S A SIGNIFICANT DIFFERENCE.

THE WITNESS: IF THE CHOW TESTS TELL ME IT REJECTS. I RELY ON THE RIGOROUS TEST. THAT'S THE PURPOSE OF THE TEST.

THE COURT: THANK YOU.

Q. (BY MS. BAUER) LET'S MOVE ON TO THE CHOW TEST. DR. MANGUM CRITICIZED THE USE OF THE CHOW TEST. WHAT'S YOUR RESPONSE TO THAT?

A. I WISH I HAD BEEN THE ONE WHO HAD CREATED THE CHOW TEST. THE CHOW TEST WAS CREATED IN 1960 BY GREGORY CHOW, AN ECONOMETRICIAN AT PRINCETON UNIVERSITY. IT IS TAUGHT IN EVERY MAJOR ECONOMETRICS BOOK. IT IS EXACTLY THE TEST THAT ONE USES TO DETERMINE IF IT'S APPROPRIATE TO POOL. IT'S A SCIENTIFIC TEST. YOU DON'T HAVE TO RELY ON MY JUDGMENT, THE TEST TELLS US

WHETHER IT'S APPROPRIATE.

Q. TO ILLUSTRATE THIS CRITIQUE, DR. MANGUM DID SOME TESTING ON THE WALMART DATA, AND HE -- IN HIS REPLY THERE'S A DISCUSSION CALLED THE "WALMART IS NOT WALMART" SECTION OF THE BRIEF. COULD YOU PLEASE EXPLAIN THAT TO US.

A. YES. SO THE FIRST THING I FOUND A LITTLE ODD ABOUT THE "WALMART IS NOT A WALMART" TEST, DR. MANGUM IN HIS IMPACT RESULTS ACTUALLY HAD 37 DIFFERENT WALMARTS, WALMARTS BY DIFFERENT STATES. SO EVEN IN HIS OWN TREATMENT, HE DIDN'T TREAT WALMART AS WALMART, HE SEPARATED THEM OUT. BUT THIS TEST WHAT HE DID IS HE CREATED 100 RANDOM SUBSETS OF DATA, AND HE HAD SMALL SUBSETS AND LARGE DATA SETS ACROSS DEFENDANTS, ACROSS PRODUCTS, ACROSS TIME PERIODS. HE RAN HIS MODEL TO GET OVERCHARGES, AND HE SAID, "OH, THE CHOW TEST REJECTED THAT ALL THESE OVERCHARGES ARE THE SAME. HOW COULD THAT BE? WALMART IS WALMART." WELL, THE PROBLEM WITH THAT, FIRST, IS THERE'S NO PRINCIPLE BASIS FOR THESE RANDOM SUBSETS OF THE DATA HE RAN. THAT DOESN'T MAKE ANY SENSE. BUT ALSO THAT'S NOT ABOUT THE CHOW TEST. WHAT THAT TELLS ME -- THAT'S BACK TO THERE'S A PROBLEM WITH HIS MODEL AND HOW IT PREDICTS PRICES. THAT'S THE PROBLEM WITH THE ISSUE THERE. SO WHAT THIS TELLS ME IS HIS MODEL IS BAD, NOT THAT THERE'S ANYTHING WRONG WITH THE CHOW TEST.

Q. THANK YOU. THERE WAS ANOTHER TEST THAT I BELIEVE IS CALLED THE ARTIFICIAL OVERCHARGE TEST, AND WE ALSO HEARD A

LITTLE BIT ABOUT THIS. CAN YOU EXPLAIN THAT ONE TO US AND YOUR RESPONSE TO IT.

A. DR. MANGUM DID DO ANOTHER TEST IN HIS REPLY WHERE HE ADDED 5 PERCENT, 10 PERCENT, 30 PERCENT TO HIS PRICES AND SAID, "LOOK, I RUN MY MODEL AND I FIND THERE'S NOT EVEN IMPACT FOR EVERYONE WHEN I ADDED 30 PERCENT." ONCE AGAIN, THAT'S NOT A PROBLEM WITH THE TESTING, THAT SHOWS THAT DR. MANGUM'S MODEL, AND THOSE PREDICTIONS OF WHAT THE PRICES COULD BE, ARE WRONG. SO THIS SHOULDN'T GIVE HIM ANY COMFORT THAT HIS MODEL IS GOOD. THIS -- WHAT I READ THIS TO MEAN IS THE MODEL IS DOING A VERY POOR JOB OF PREDICTING PRICES. IF YOU CAN GET A 30 PERCENT OVERCHARGE AND YOU STILL CAN'T GET IMPACT ACROSS EVERYONE, THAT'S A HUGE ISSUE WITH THE MODEL ITSELF.

Q. WE ACTUALLY HEARD THIS MORNING A LITTLE BIT ABOUT A DIFFERENT TYPE OF FALSIFIABILITY TEST -- I BELIEVE JUDGE SAMMARTINO MAY HAVE EVEN HAD A LITTLE QUESTION ABOUT THAT -- CAN YOU EXPLAIN WHAT THAT WAS, IT WAS SOMETHING ABOUT A THIRD OF PURCHASERS.

A. YES. WHEN I SAW THIS PARTICULAR TEST FROM DR. MANGUM, I JUST WANTED TO BE ABLE TO PUT IT IN PERSPECTIVE FOR YOU, YOUR HONOR. ONE OF THE KEY THINGS HERE IS WHETHER THE 10.28 PERCENT AVERAGE IS APPROPRIATE. IN SOME RESPECTS THAT'S A LOT OF WHERE THE DEBATE BETWEEN DR. MANGUM AND I COMES DOWN TO. SINCE HE ADDED OVERCHARGES, 5, 10, 30, I SAID, "WHAT HAPPENS WHEN YOU TOOK THE OVERCHARGES AWAY?" AND JUST --

THE COURT: JUST RANDOM?

THE WITNESS: JUST RANDOM. THERE WASN'T ANY REASON TO DO IT THAT WAY, IT WAS JUST RANDOM, AND JUST SAID, "WHAT HAPPENS TO THAT OVERCHARGE?" THE OVERCHARGE WAS STILL POSITIVE 5.2 OR SO PERCENT. THE ONLY PURPOSE OF THAT IS TO SAY IF YOU SET THESE THINGS TO ZERO, YOU STILL COULD FIND AN AVERAGE OVERCHARGE. SINCE HIS ENTIRE PREMISE IS YOU ADD 10.28, EVERY SINGLE CUSTOMER IS OVER CHARGED BY THE SAME AMOUNT, THAT WILL MASK POTENTIAL VARIATION IN THE AVERAGE UNDER THE SURFACE. THAT WAS THE ONLY PURPOSE OF THE EXAMPLE THAT YOU HEARD ABOUT THIS MORNING IS JUST SO YOU COULD SEE, EVEN WITH SETTING A THIRD TO ZERO, YOU STILL GOT A POSITIVE OVERCHARGE ACROSS EVERYONE. IT REALLY WAS JUST TO BE A COMPANION TO THIS SAME EXERCISE.

THE COURT: LOOKING AT THIS BENCHMARK PERIOD, THERE WERE A LOT OF QUESTIONS THIS MORNING ABOUT WHETHER OR NOT THERE WAS ANTICOMPETITIVE BEHAVIOR IN THESE BENCHMARK PERIODS. ISN'T THE ESTIMATE OF THE OVERCHARGE ON THE LOW SIDE?

THE WITNESS: THAT'S A GREAT QUESTION, YOUR HONOR. I ACTUALLY RAN IN MY INITIAL REPORT WHAT WOULD HAPPEN IF YOU TOOK THE PLAINTIFFS CLASS PERIOD, THE 2002 ALL THE WAY TO 2015 -- I HAVE THE ORIGINAL DATES IN A FOOTNOTE IN MY REPORT -- THE OVERCHARGE DROPPED TO A NEGATIVE 10.2 PERCENT. SO WHAT THAT TELLS YOU IS IT'S NOT CONSERVATIVE AT ALL. THERE'S SOME OTHER DYNAMIC GOING ON, BUT IT'S NOT PICKING UP THE EFFECT OF THE

CONSPIRACY AT ALL. SO THAT CHOICE OF THOSE BENCHMARK PERIODS IS ACTUALLY A CRITICAL PIECE TO WHAT DRIVES HIS RESULTS, AND IN FACT SINCE I TESTIFIED IT -- IT'S IN A FOOTNOTE IN MY INITIAL REPORT -- IT ACTUALLY GIVES A COMPLETELY DIFFERENT RESULT, SO THAT TELLS ME IT'S NOT CONSERVATIVE. IT'S ACTUALLY THERE'S SOMETHING WRONG WITH THE MODEL.

THE COURT: TELL ME WHAT YOUR TIME FRAME WAS AGAIN ON THAT.

MS. BAUER: IT'S FOOTNOTE 80, YOUR HONOR, IF YOU HAVE THE REPORT HANDY, WHICH I BELIEVE WAS EXHIBIT 26.

THE COURT: IT'S FOOTNOTE 80.

MS. BAUER: IN THOSE WHITE BINDERS.

THE COURT: I'LL LOOK IT UP. YOUR RESULTS SHOW QUITE THE OPPOSITE.

THE WITNESS: AGAIN, DR. MANGUM ASSERTED IT WAS CONSERVATIVE, BUT I ACTUALLY TESTED IT, SO HOW COULD THAT BE.

THE COURT: LOGICALLY ONE WOULD THINK SAYING IT WAS CONSERVATIVE, WHEN YOU INCLUDE IT IN COMPETITIVE BEHAVIOR, IN A BENCHMARK AREA, IT SEEMED AS THOUGH THAT WOULD BE THE RIGHT RESULT, THAT IT WOULD BE UNDERESTIMATED.

THE WITNESS: THE PROBLEM IS BECAUSE HE'S RELYING ON AN AVERAGE ACROSS EVERYTHING, WHAT IF THE ANTICOMPETITIVE CONDUCT IS ONLY FOCUSED ON CERTAIN PARTS, IT WOULD ONLY HAVE AN EFFECT ON CERTAIN PIECES, NOT OTHERS, THAT WOULD MEAN IT'S NOT CONSERVATIVE. YOU'VE GOT TO DO THE TESTING TO SEE, AND SO

AGAIN THAT'S JUST AN ASSERTION BY DR. MANGUM THAT IT'S CONSERVATIVE, BUT IT'S ACTUALLY MORE COMPLICATED, AND THE ACTUAL RESULTS SHOW YOU THAT.

MS. BAUER: JUST FOR YOUR HONOR, THAT DATE, THAT TIME FRAME THAT YOU HAD ASKED FOR IN FOOTNOTE 80, IS FROM JULY 1, 2004 THROUGH MAY 2017.

THE COURT: THANK YOU.

MS. BAUER: WE'RE ACTUALLY GOING TO TURN TO A NEW TOPIC NOW, JUST IN THE INTERESTS OF TIME. WE CAN SPEND ALL DAY ON THIS, BUT IN THE INTERESTS OF TIME WE WILL MOVE ON TO THE SECOND FINDING YOU HAD, SIR.

Q. YOU'VE HEARD A LOT ABOUT THIS TODAY AS TO COSTS. SO LOOKING AT COSTS, I WOULD APPRECIATE IT IF YOU COULD HELP US UNDERSTAND DR. MANGUM'S COST VARIABLE.

A. SO THERE WAS A LOT OF DISCUSSION ABOUT COST, YOUR HONOR. FUNDAMENTALLY THERE IS A METHODOLOGICAL ISSUE HERE. DR. MANGUM HAS SAID THAT HE WANTS TO TURN TO PUBLICLY AVAILABLE DATA IN AN INDEX TO CONSTRUCT COSTS, WHAT HE THINKS IS THE BEST PROXY FOR COSTS, AND SO HE COLLECTS DATA, THE RAW FISH COSTS FROM A DOCUMENT ON THE BANGKOK MARKET PRICES, PACKAGING, LABOR, FUEL, ENERGY, AND THEN HE GOES -- DESPITE HIS RELUCTANCE TO USE DATA FROM THE DEFENDANTS' ACCOUNTING, HE GOES TO THEIR P&L STATEMENTS TO CONSTRUCT WEIGHTS, AND HE TAKES COSI'S P&L COSTS, AND STARKIST'S P&L COSTS, AND HE ASSIGNS WEIGHTS TO THESE VARIOUS VARIABLES. WHAT THAT RESULTS IN IS SIX COST INDICES

WHICH HE APPLIES ACROSS THE PRODUCTS, THE DEFENDANTS, AND OVER TIME.

Q. IS IT COMMON TO USE A PROXY FOR REAL VALUES IF ACTUAL COSTS ARE AVAILABLE?

A. COMMON ASSUMPTION. WE GENERALLY USE PROXIES WHEN DATA IS NOT AVAILABLE OR WHEN THE DATA IS NOT RELIABLE. IN THE PRESENCE OF ACTUAL COST DATA AT A MINIMUM ONE WOULD CHECK TO SEE WHAT IT SHOWED TO SEE IF YOU'RE GOING TO CONSTRUCT AN INDEX, DOES IT HAVE SOMETHING THAT IS DIFFERENT ABOUT IT? DR. MANGUM DIDN'T CHECK THAT. THE CONSEQUENCES ARE SIGNIFICANT, NOT ONLY FOR THE OUTCOME OF HIS REGRESSION BUT THE OVERCHARGES THEMSELVES.

Q. WE HEARD EARLIER THAT FISH COSTS -- THE RAW FISH COST IS ABOUT 80 PERCENT OF THE COST, AND DR. MANGUM WAS ASKED IF HE HAD THE STARKIST BOAT-BY-BOAT FISH PURCHASE DATA, AND HE SAID THERE WAS NO SUCH DATA. DID YOU HAVE THAT DATA? DID YOU LOOK AT THAT?

A. THERE WAS DATA FROM BOTH STARKIST AND DEL MONTE, THE PRIOR COMPANY, FOR ALL OF THE COSTS. NOW, WAS IT COMPLICATED? YES. WAS IT MORE COMPLICATED THAN THE OTHERS? IT WAS. BUT IT DID EXIST. IT DOES EXIST FOR THE TIME PERIOD. DR. MANGUM IS WRONG THAT THE COST DATA DID NOT EXIST.

Q. THANK YOU. WHAT DO YOU THINK, SIR, OF DR. MANGUM'S COST INDEX?

A. THERE ARE MULTIPLE PROBLEMS WITH THE COST INDEX, BUT AT

THE END OF THE DAY THE CRITICAL PIECE IS THERE'S ASSUMPTIONS BUILT IN AGAIN WHICH CRITICALLY EFFECT THE CLASS-WIDE APPROACH.

FOR EXAMPLE, DR. MANGUM IS GOING TO ASSUME STARKIST'S COST STRUCTURES, STARKIST THAT SPECIALIZES IN POUCHED TUNA IS IDENTICAL TO THAT OF COSI AND BUMBLEBEE. HE ALSO ASSUMED THAT BUMBLEBEE'S COST STRUCTURE CAN BE REPRESENTED BY COSI'S DATA, AND THEN HE ALSO ASSUMES THE COST STRUCTURES REMAINED UNCHANGED FOR MANY YEARS. HE DIDN'T TEST THESE ASSUMPTIONS.

Q. AND DO THESE ASSUMPTIONS MAKE SENSE TO YOU, SIR?

A. THEY DON'T. I HEARD DR. MANGUM SAY, YOUR HONOR, THIS MORNING THAT DEFENDANTS LOOK AT MARKET-WIDE COSTS FOR THE PURPOSES OF DETERMINING THEIR PRICES. I DON'T KNOW ANY COMPANY THAT KNOWS WHAT THEIR OWN COSTS ARE AND WON'T FACTOR THAT INTO THEIR PRICING DECISIONS. SO THE NOTION THEY'RE GOING TO GO TO PUBLIC DATA ON COSTS VERSUS THE ACTUAL COST DATA THEY HAVE, WHEN THEY'RE MAKING THEIR PRICING DECISIONS, THAT DOESN'T MAKE MUCH SENSE.

WE SHOULD LOOK AT THE DETAILS. THERE IS ANOTHER SECTION IN MY REPORT WHERE I DETAIL DIFFERENCES IN COST STRUCTURES, ROUNDS VERSUS LOINS, POUCHES. WHAT YOU FIND IS THEY'RE SOURCING PRODUCT FROM ALL OVER THE WORLD, DIFFERENT COMPANIES HAVE DIFFERENT LOCATIONS. STARKIST, FOR EXAMPLE, PACKS THEIR POUCHES BY HAND IN ECUADOR. LIKE, LITERALLY, THERE ARE PEOPLE ALL DAY THAT PACK. I WAS SURPRISED BY THAT. COSI FOR AWHILE WAS IN AMERICAN SAMOA, BUT THEN RELOCATED TO

GEORGIA. THE NOTION THAT DR. MANGUM COULD THINK THAT HE COULD TAKE DATA FROM A PUBLIC SOURCE AND CAPTURE THIS KIND OF DIVERSITY IN COST, THAT DIDN'T MAKE SENSE TO ME AS AN ECONOMIST SO I WANTED TO TEST IT.

Q. WHAT TESTING DID YOU DO AND WHAT DID YOU FIND?

A. WELL, WHAT I DID FIRST IS I LOOKED AND LINED UP HIS PROXY INDEX AGAINST THE BUMBLEBEE AND COSI DATA. WHAT I FOUND WAS THAT THE PROXY HAD SHARP SWINGS IN THEIR COSTS AT TIMES WHEN COSI AND BUMBLEBEE DIDN'T. I ALSO FOUND, FOR EXAMPLE, TIMES WHERE THE COSTS WERE GOING IN VERY LARGE MAGNITUDE DIFFERENCES, COSI INCREASED BY 36 PERCENT BETWEEN MARCH 2010 AND OCTOBER 2011. BUMBLEBEE ONLY INCREASED BY 24 PERCENT. DR. MANGUM'S COST INDEX INCREASED BY 62 PERCENT. THAT JUST DOESN'T SQUARE. THERE'S SOMETHING THAT DIDN'T MAKE SENSE TO ME ABOUT THAT.

I FIND TIMES WHERE COSI AND BUMBLEBEE DON'T MOVE TOGETHER, WHICH WOULD ALSO BELIE DR. MANGUM'S ASSERTION THAT THERE'S ONE MARKET COST. AND THEN I ALSO FOUND THERE'S TIMES WHEN PROXY ALSO DIDN'T MOVE TOGETHER WITH COSTS. SO AGAIN THIS IS A SECOND RED FLAG FOR WHAT'S WRONG WITH THE COST DATA.

Q. I UNDERSTAND THAT DR. MANGUM SAID THAT THERE ARE REASONS THAT YOU SHOULD NOT USE THIS COST DATA. WHAT'S YOUR RESPONSE TO THAT?

A. MY UNDERSTANDING IS THAT DR. MANGUM HAD SORT OF TWO REASONS; ONE HE SAID IS THAT THERE'S SOME TYPE OF ALLOCATION

THAT OCCURS OVERHEAD IN THE COST DATA. LOOK, FIRST, DR. MANGUM HIMSELF SAID THIS MORNING THAT 80 PERCENT OF THE COSTS ARE THE FISH COSTS. SO IF 80 PERCENT ARE THE FISH COSTS, THEN ANY NOTION OF ALLOCATION OR OVERHEAD ALLOCATION, WHICH HE DIDN'T QUANTIFY, DIDN'T TRY TO SEPARATE OUT WHAT THAT WAS, HE JUST ASSERTED IT, THAT CAN'T BE A MAJOR FACTOR, IT JUST CAN'T BE.

THEN HE TALKED ABOUT ENDOGENEITY, AND HE SORT OF THREW THIS OUT, AND THIS IS AN ECONOMIC TERM WHERE PEOPLE TALK ABOUT REVERSE CAUSATION. I HAVE NO CONCERNS ABOUT ENDOGENEITY HERE WITH THIS DATA. FIRST OF ALL, DR. MANGUM DID NO TESTING OF ENDOGENEITY. HE JUST ASSERTED SOMEHOW SOME RELATIONSHIP WHERE HE CLAIMS THAT THE COST DATA WAS CONSTRUCTED BY ALLOCATING SALES OVER TIME. IT'S A SPECULATION BY HIM. IT'S NOT SOMETHING THAT'S BEEN PROVEN. IT'S JUST SOMETHING THAT HE SAYS. BUT AT THE END OF THE DAY WHAT I WANT TO DO IS SAY, "WELL, LET'S PUT THE TWO COST MEASURES INTO A REGRESSION AND SEE HOW THEY PERFORM."

Q. AND HOW DO THEY PERFORM?

A. WHAT I FOUND WAS TWO VERY IMPORTANT THINGS, YOUR HONOR. YOU HEARD DR. MANGUM ON CROSS TALK ABOUT A 1 PERCENT INCREASE IN HIS COST INDEX WOULD LEAD TO A .24 PERCENT INCREASE IN PRICE. THEN HE TALKED ABOUT, WELL, IT'S ACTUALLY CAPTURED IN OTHER VARIABLES, WHICH ABSOLUTELY IS EXACTLY THE TYPE OF THING YOU TALK ABOUT IN ENDOGENEITY. IT DIDN'T MAKE A LOT OF SENSE TO ME.

WHAT YOU LOOK FOR AS AN ECONOMIST IS, WHAT DO YOU EXPECT COSTS TO PASS THROUGH THE PRICES? WHEN I USED THE ACTUAL COST DATA, THE NUMBER GOES UP TO ABOUT \$0.75, SO 1 PERCENT IS ABOUT .75. WE WOULD EXPECT IT TO BE A LOT CLOSER TO 1 THAN THE .25. SO JUST THE RESULT ITSELF SAYS THAT DOESN'T SEEM LIKE THAT COST INDEX IS CAPTURING ALL THE RIGHT THINGS.

BUT THEN I ALSO WANTED TO SEE, WELL, WHAT'S THE CONSEQUENCE FOR THE OVERCHARGE? THIS IS WHAT WE OFTEN CALL SORT OF THE TYPE OF ERRORS AND VARIABLES PROBLEMS IN ECONOMETRICS. IF YOU'RE MIS-MEASURING COSTS IN AN OVERCHARGE MODEL, THE OVERCHARGE WOULD CAPTURE SOME OF THE THINGS THAT ARE MISSING.

SO BUMBLEBEE'S AVERAGE OVERCHARGE DECLINES FROM 9.61 TO 5.18 WHEN YOU USE THEIR ACTUAL COSTS. COSI'S AVERAGE OVERCHARGE DECLINES FROM 11.28 TO 1.19. SO THIS ISN'T JUST A DISAGREEMENT BETWEEN DR. MANGUM AND I, THIS IS A CONSEQUENTIAL CHOICE THAT WOULD CHANGE THE RESULTS OF THE IMPACT, AND THE ECONOMICS TELLS US, QUITE FRANKLY, COMMON SENSE TELLS US, OF COURSE, YOU'RE GOING TO USE THE ACTUAL COST DATA WHEN YOU HAVE IT. WHY WOULD YOU GO AND CONSTRUCT SOME OTHER PROXY WHEN YOU HAVE REAL COST DATA?

Q. WITH THE REAL COST DATA, WHAT HAPPENS WITH THE IMPACT ANALYSIS?

A. NOW IF YOU RETURN OVERCHARGES FOR EACH OF THE 604 DIRECT PURCHASERS WITH THE NEW COST DATA, 48 PERCENT OF ALL DIRECT

PURCHASERS OR 289 HAVE NO PROOF OF IMPACT, AND 53 PERCENT OF ALL DIRECT PURCHASERS AFTER REMOVING THE DAPS.

Q. THANK YOU, DR. JOHNSON. I WANT TO GO THROUGH YOUR THIRD FINDING. WE HAVE ABOUT 10 MINUTES LEFT, SO WE WILL MOVE QUICKLY THROUGH THIS. DR. JOHNSON, WHAT DO YOU MEAN BY FALSE POSITIVE?

A. SIMPLY PUT, A FALSE POSITIVE IS A CIRCUMSTANCE WHERE YOU FIND AN OVERCHARGE WHERE YOU WOULD EXPECT NONE TO EXIST.

Q. AND DID YOU FIND FALSE POSITIVES HERE?

A. YES, I DID. I FOUND TWO TYPES OF FALSE POSITIVES, ONE ON NON-DEFENDANT PURCHASES AND ONE ON DR. MANGUM'S BENCHMARK PERIODS.

Q. LET'S START WITH THE FIRST, WITH THE NON-DEFENDANT PURCHASES. TELL ME WHAT A NON-DEFENDANT IS.

A. WE KNOW THE DEFENDANTS ARE STARKIST, BUMBLEBEE, CHICKEN OF THE SEA. NON-DEFENDANT BRANDS ARE EXACTLY WHAT THEY SOUND LIKE, BRANDS THAT ARE NOT RELATED TO STARKIST, BUMBLEBEE, CHICKEN OF THE SEA. THEY INCLUDE REMA FOODS, GIMA, RYCOFF SEXTON, GEISHA, DOLORES, AND IMPRESS.

Q. I UNDERSTAND THAT YOU RAN SOME TESTING OVER THE DATA OF SYSCO, U.S. FOODS AND PITCO?

MS. BAUER: YOUR HONOR, JUST A PREVIEW, THIS IS WHERE WE ARE GETTING TO -- CLOSE THE SLIDES, AND WE WILL BE NEEDING TO FOLLOW ALONG IN THE PRINTINGS. WE'RE GETTING CLOSE.

Q. I WANT TO UNDERSTAND WHY YOU RAN IT IN THIS DATA SET?

A. SO SYSCO AND U.S. FOODS ARE LARGE FOOD SERVICE PRODUCERS. PITCO IS A DISTRIBUTOR. THESE WERE THE ONLY THREE DATA SETS THAT HAD ACTUAL NON-DEFENDANT SALES. THESE ARE NOT DATA SETS FROM THE DEFENDANTS. THESE ARE OTHER DATA SETS FROM DISCOVERY.

Q. BRIEFLY, WHAT CAN YOU TELL ME ABOUT YOUR TESTING ON THESE THREE DATA.

A. I BELIEVE I TOOK DR. MANGUM'S MODEL AND I RAN IT TO SEE IF HE WOULD FIND OVERCHARGES ON THE NON-DEFENDANT BRANDS, AND WHAT I FOUND IN ALL THREE CASES WAS POSITIVE STATISTICALLY SIGNIFICANT OVERCHARGES, AND IN FACT IN TWO OF THE THREE I FOUND SIGNIFICANTLY LARGER OVERCHARGES ON THE NON-DEFENDANT BRANDS THAN ON THE DEFENDANT BRANDS.

MS. BAUER: AND THESE WOULD BE OUR SEALED SLIDES, AND IN FACT, JUST FOR ABSOLUTE CERTAINTY, WHAT I SUGGEST WE DO IS NOT PROVIDE THE DETAILS IN THE QUESTIONING.

THE COURT: ABSOLUTELY.

MS. BAUER: BUT FOLKS CAN FOLLOW ALONG WITH RESPECT TO DR. JOHNSON'S FINDINGS ON SLIDES 48 AND 49 WITH RESPECT TO SYSCO AND U.S. FOODS, AND WITH RESPECT TO PITCO ON SLIDE 49.

A. CAN I DESCRIBE SOMETHING WITHOUT REFERENCING THE NUMBERS?

Q. THAT'S WHAT I WAS GONG TO ASK.

A. WHAT YOU'LL SEE, WITHOUT DESCRIBING, IS THE LARGE SHARE OF NON-DEFENDANT VERSUS DEFENDANT PURCHASES. YOU'LL SEE POSITIVE AND STATISTICALLY SIGNIFICANT OVERCHARGES, AND YOU'LL SEE SOME THAT ARE VERY LARGE, IN FACT, LARGER THAN WHAT DR. MANGUM'S OWN

MODEL WOULD SUGGEST FOR THE DEFENDANTS. SO IT'S A COMBINATION OF ALL THREE OF THOSE THINGS THAT TELL YOU SOMETHING'S WRONG WITH THE MODEL, THESE ARE ANOTHER TYPE OF FALSE POSITIVE.

Q. THANK YOU. AND NOW TURNING BACK TO THE SLIDES THAT WE CAN SEE, WHAT DOES DR. MANGUM HAVE TO SAY ABOUT YOUR ANALYSIS REGARDING THE NON-DEFENDANT PURCHASES?

A. WELL, FIRST, DR. MANGUM DID NOT REFUTE TODAY IN THE COURTROOM THAT THE RESULTS I FOUND ARE TECHNICALLY RIGHT, THAT MATHEMATICALLY THEY'RE CORRECT, THAT THIS IS WHAT YOU FIND WHEN YOU RUN HIS MODEL ON THESE SIX. WHAT HE DID IS HE SAID THERE'S ALTERNATIVE EXPLANATIONS THAT I SHOULD HAVE ACCOUNTED FOR, AND HE HAS TWO OF THEM; ONE IS HE SAYS THERE'S AN UMBRELLA EFFECTS THEORY, AND THE OTHER HE TALKED ABOUT WAS TUG-SUPPLIED TUNA TO NON-DEFENDANTS.

Q. LET'S START WITH THE UMBRELLA EFFECTS THEORY, WHICH WE'VE HEARD A LITTLE BIT ABOUT EARLIER TODAY. CAN YOU PLEASE EXPLAIN THE UMBRELLA EFFECTS.

A. SO BEHIND THE UMBRELLA EFFECTS THEORY IS IN THE PRESENCE OF A CARTEL, WHERE THE DEFENDANTS MIGHT HAVE A LARGE SHARE OF THE TOTAL SALES, THAT WHEN THE PRICE OF THE CARTEL -- IF THE CARTEL COULD EFFECTIVELY RAISE THE PRICES OF THE PRODUCT, EITHER BECAUSE OF A CHANGE IN DEMAND OR BECAUSE OF SUBSTITUTION, THE PRICE OF THE NON-DEFENDANT PRODUCTS WOULD ALSO BE RAISED UP AS WELL. SO IN OTHER WORDS, THE UMBRELLA IDEA IS UNDER THE UMBRELLA OF THE CARTEL YOU WOULD SEE THE

OTHER PRICES GO UP AS WELL. THAT'S THE ESSENCE OF THE UMBRELLA THEORY.

Q. AND JUST BEFORE WE GET TO THE SPECIFICS, DR. MANGUM TEST FOR THIS?

A. NO, DR. MANGUM, FIRST, HE NEVER MENTIONED IT IN THE FIRST REPORT. HE ONLY MENTIONED IT IN THE REBUTTAL REPORT AS HIS EXPLANATION FOR THE FALSE POSITIVES. HE CITES THEORETICAL PAPERS, WHICH HAVE ALL SORTS OF DISCUSSION OF SPECIFIC CONDITIONS AND TIMES WHEN THEY MAY OR MAY NOT EXIST, AND NOWHERE DID HE TEST IT. BUT I ACTUALLY DID TEST IT IN RESPONSE TO THE REPLY, AND THE UMBRELLA EFFECTS THEORY JUST DOESN'T APPLY HERE.

Q. WHAT EVIDENCE DO YOU SEE THAT SUGGESTS IT DOESN'T APPLY?

A. THERE'S TWO KEY THINGS. I DESCRIBED THE UMBRELLA. IF THE UMBRELLA EFFECT IS APPLYING, YOU SHOULD SEE THE DEFENDANTS' PRICES RISING AND THE NON-DEFENDANT PRICES FALLING UNDER THE UMBRELLA. IN FACT, THE DATA SHOWS THE REVERSE. IT TURNS OUT THE NON-DEFENDANT PRICES WERE GOING UP FIRST, AHEAD OF THE DEFENDANT PRICES, SO THAT CAN'T BE A FUNCTION OF THE UMBRELLA. THAT HAS TO BE A FUNCTION OF SOMETHING MISSING FROM DR. MANGUM'S MODEL WITH RESPECT TO THE SUPPLY AND DEMAND CONDITIONS.

SECOND, HE TALKS ABOUT HAVING A LARGE SHARE, BUT WE KNOW THE DEFENDANTS HAD A MINORITY SHARE OF FOOD SERVICE FOR SYSCO AND U.S. FOODS WHERE THE NON-DEFENDANT OVERCHARGES ARE

FOUND.

Q. AND CAN YOU DESCRIBE WHAT WE'RE SEEING ON SLIDE 53.

A. THIS IS JUST AN EXAMPLE FROM THE SYSCO DATA THAT SIMPLY SHOWS THE BLUE LINE IS THE DEFENDANT PRICES, AND THE RED LINE IS THE NON-DEFENDANT PRICES. THIS IS A 66.5-OUNCE CHUNK LIGHT CAN, YOUR HONOR, AND WHAT YOU SEE IS THE NON-DEFENDANT PRICES ARE GOING -- I DON'T KNOW IF YOU CAN SEE THE PENCIL THAT I'M DRAWING WITH -- GOING UP FIRST AND HIGHER, AND THE BLUE IS PRECEDING IT. FOR MOST OF THE PERIOD, AND ESPECIALLY THE 2011 TO 2012 PERIOD, WHICH IS WHERE THE PRICE LIST ALLEGATIONS ARE, IT'S CLEARLY THE CASE THE NON-DEFENDANTS ARE LEADING, NOT FOLLOWING THE DEFENDANTS. THIS DIRECTLY CONTRADICTS DR. MANGUM'S UNTESTED ASSERTION OF THE UMBRELLA EFFECT.

Q. DID YOU ALSO LOOK AT THE SECOND ISSUE -- AGAIN, A CLOSED SLIDE. DID YOU ALSO LOOK AT THE SECOND ISSUE, WHICH IS DEFENDANTS' SALES SHARES, WHEN EVALUATING THE UMBRELLA EFFECT?

A. YES, I DID. YOUR HONOR, WHAT YOU'LL SEE IS THESE ARE SALES SHARES, SO THIS JUST REPRESENTS SYSCO AND U.S. FOODS. THEY'RE NOT MEANT TO REPRESENT SOME BROADER MARKET. WHAT THIS SIMPLY SHOWS YOU IS SYSCO AND U.S. FOODS THE MAJORITY OF THEIR PURCHASES WERE NON-DEFENDANT BRANDS.

Q. THANK YOU. DOES THAT SALES SHARE SUPPORT DR. MANGUM'S ASSERTION THAT THERE WAS AN UMBRELLA EFFECT?

A. NO, IT DOES NOT.

Q. MOVING ON, I UNDERSTAND THAT THERE'S ALSO AN ANALYSIS OF

TUG-SUPPLIED TUNA?

A. YES. SO THE OTHER ASSERTION THAT DR. MANGUM MADE WAS THAT SOMEHOW TUG, THAI UNION GROUP, WAS RESPONSIBLE FOR SUPPLYING TUNA TO THE NON-DEFENDANT BRANDS. THERE ARE SEVERAL PROBLEMS WITH THAT THEORY BECAUSE, FIRST OF ALL, IT'S UNTESTED AND IT'S SPECULATIVE BY DR. MANGUM. AS I LOOKED AT THE SAME DATA SETS THAT DR. MANGUM SAID HE LOOKED AT, YOU CAN'T DETERMINE WHETHER TUG SOLD SALES TO THOSE BRANDS FROM THE DATA SETS AVAILABLE, AND YOU ALSO CAN'T DETERMINE WHETHER THOSE SALES ULTIMATELY WOULD HAVE MADE THEIR WAY TO SYSCO AND U.S. FOODS. FIRST, THERE'S NO ANALYSIS OF PRICES THAT TUG CHARGED THEIR IMPORTERS THAT SUPPLIED THE NON-DEFENDANTS. DR. MANGUM NOWHERE IN HIS REPORT ALLEGES AN INTERNATIONAL CONSPIRACY WHERE TUG WAS EFFECTING INTERNATIONAL SALES. SO ABSENT SOME DEFENSE EVIDENCE, THERE'S JUST NO BASIS TO JUST THROW THAT ASSERTION OUT THERE.

SECOND, HE CAN'T SHOW THAT SYSCO AND U.S. FOODS ACTUALLY PURCHASED TUG-SOURCED PRODUCTS. HE HAS AN ANALYSIS IN HIS REBUTTAL REPORT WHICH IS ACTUALLY VERY MISLEADING WHERE HE TRIES TO ATTRIBUTE IN ENTIRETY --

THE COURT REPORTER: SLOW DOWN.

A. -- TUG SALES SOLD TO A VENDOR THAT EVER PROVIDED ANY SALES TO ONE OF THE BRANDS, HE SAYS THE ENTIRETY OF ALL OF THOSE SALES WOULD PASS THEIR WAY THROUGH TO ALL OF SYSCO OR U.S. FOODS SALES, AND IT'S MISLEADING. YOU CAN'T ACTUALLY MAKE THAT

LINKAGES. IT'S UNTESTED. HE'S GOT NO SHOWING OF THAT.

FOR THE THIRD FALSE POSITIVE, WHICH IS PITCO, THERE'S NO EVIDENCE THAT TUG EVER SOLD TO DOLORES THE MAJORITY OF PITCO'S FOOD PURCHASES.

Q. THANK YOU. I WANT TO PAUSE ON THAT SECOND ONE BECAUSE I UNDERSTAND THAT SYSCO AND U.S. FOODS ARE FOOD SERVICE, THEY BUY DIFFERENT SIZES, THE REALLY BIG SIZE TUNA, AND I DIDN'T UNDERSTAND IF THE PLAINTIFFS DECIDED TO REMOVE THAT FROM THIS CLASS, IS THAT GOING TO SOLVE THE FALSE POSITIVE PROBLEM?

A. NO, THE FALSE POSITIVE ISN'T ABOUT FOOD SERVICE, THE FALSE POSITIVE IS ABOUT A DEFECT IN THE MODEL. GO BACK TO THE BEGINNING, WHAT I TALKED ABOUT IS IF THE MODEL CAN'T PREDICT THE PRICES WELL, THEN ANY FINDING OF IMPACT, ANY OVERCHARGE IS GOING TO BE CONTAMINATED. SO IT'S NOT ENOUGH TO REMOVE U.S. FOODS AND SYSCO, THAT'S NOT GOING TO SOLVE THE PROBLEM.

BY THE WAY, THE DOLORES FOODS RESULT ALSO IS A PROBLEM.

Q. THANK YOU. I WANT TO GO VERY QUICKLY THROUGH THE PRE AND POST-CLEAN OR BENCHMARK PERIODS. JUDGE SAMMARTINO ASKED AN EXCELLENT QUESTION ABOUT THAT EARLIER. CAN YOU DESCRIBE THE KIND OF FALSE POSITIVES THAT YOUR TESTING IDENTIFIED IN THE MODEL.

A. JUST IN THE INTERESTS OF TIME, I'LL TRY TO BE QUICK. IN DR. MANGUM'S CODE AND IN HIS OUTPUT, HE ACTUALLY PUTS OUT PRICES NOT JUST FOR THE CLASS PERIOD BUT FOR ALL OF THE BENCHMARK PERIODS. SO I COULD LITERALLY GO INTO THE DATA SET

HE PUT FORWARD FROM HIS OWN MODEL AND SAY, ALL RIGHT, LET ME COMPARE WHAT THE PRICES ARE FROM THE ACTUAL "BUT FOR" ROLE WITH NO OVERCHARGE IN ANY BENCHMARK PERIOD, AND USING HIS IMPACT TEST I FOUND 75 PERCENT IMPACTED IN THE PRE-PERIOD, 88 PERCENT IN THE POST-PERIOD.

NOW, POST-PERIOD THERE IS NO ALLEGATION OF ANY OVERCHARGE, THAT IS SUPPOSED TO BE A CLEAN PERIOD, AND I FIND MORE IMPACTED CUSTOMERS THERE THAN ANYWHERE ELSE. SO WHAT THAT SIMPLY TELLS ME IS, AGAIN, IT MEANS THAT THAT BENCHMARK AND WHAT HE'S PREDICTING BETWEEN THE BENCHMARK AND THE CLASS PERIOD IS NOT PICKING UP OVERCHARGE, IT'S PICKING UP SOMETHING ELSE, BECAUSE HOW CAN YOU HAVE 88 PERCENT IMPACTED IN A MODEL THAT'S SUPPOSED TO BE THE CLEAN PERIOD? IT JUST DOESN'T MAKE ANY SENSE.

Q. IN SUMMARY, DR. JOHNSON, COULD YOU GIVE US A QUICK SYNOPSIS OF YOUR FINDINGS AND YOUR CONCLUSIONS HERE.

A. YES, JUST TO SUMMARIZE. THREE MAIN ISSUES WITH THE REGRESSION, IT ASSUMES RATHER THAN PROVES COMMON IMPACT. IT MAKES INAPPROPRIATE ASSUMPTIONS ABOUT COSTS THAT HAVE REAL CONSEQUENCES FOR IMPACT. AND IT RETURNS FALSE POSITIVES WHICH TELLS YOU IT'S NOT CAPABLE OF DEMONSTRATING COMMON IMPACT FOR ALL OR VIRTUALLY ALL CLASS MEMBERS OVER RELIABLY ESTIMATING DAMAGES.

MS. BAUER: THANK YOU, DR. JOHNSON. THANK YOU, YOUR HONOR.

MR. LEB SOCK: SO WE HAVE 45 MINUTES LEFT, YOUR HONOR. ONE THOUGHT I HAD IS I COULD DO JUST A FEW MINUTES OF CROSS-EXAMINATION WITH DR. JOHNSON, AND THEN IF THE COURT WOULD LIKE TO RECALL DR. MANGUM AND ASK SPECIFIC QUESTIONS, WE COULD DO THAT. ALTERNATIVELY, I COULD --

THE COURT: I DON'T SEE HOW ANYBODY IS GOING TO HAVE ANY TIME TO DO CLOSING ARGUMENT. I THINK TIME HAS BEEN ALLOCATED BY YOU IN A DIFFERENT SORT OF WAY BECAUSE YOU TOOK AN INORDINATE AMOUNT OF TIME THIS MORNING, AND THAT'S FINE, THAT'S WHAT YOU CHOSE TO DO, BUT I MIGHT HAVE SOME QUESTIONS FOR YOUR EXPERT.

MR. LEB SOCK: SURE.

THE COURT: GO AHEAD AND ASK --

MR. LEB SOCK: WHY DON'T I BE BRIEF ON THIS AND THEN MOVE ON.

CROSS EXAMINATION

BY MR. LEB SOCK:

Q. DR. JOHNSON, GOOD AFTERNOON. CHRIS LEB SOCK AGAIN.

A. GOOD AFTERNOON, MR. LEB SOCK.

Q. SO JUST TO BE CLEAR IN TERMS OF YOUR ASSIGNMENT HERE, YOU HAVE NOT COME TO A CONCLUSION -- AFFIRMATIVE CONCLUSION ONE WAY OR THE OTHER WHETHER COMMON IMPACT CAN BE SHOWN IN THIS CASE OR NOT; IS THAT TRUE?

A. THAT IS CORRECT.

Q. AND YOU AGREE THAT REGRESSION MODELING IS AN APPROVED

TECHNIQUE, YOU'RE NOT CONTESTING THE FACT THAT REGRESSION MODELING, IN A GENERAL SENSE, IS AN APPROPRIATE WAY TO GO ABOUT MODELING THIS MARKET IN THIS CASE.

A. IF IT WAS DONE PROPERLY, IT COULD BE. ALTHOUGH A MARKET IS A LITTLE BIT OF A LOADED TERM IN ECONOMICS, BUT GENERALLY IF IT WAS DONE PROPERLY, FOR THE RIGHT SETS OF PRODUCTS, OR A SMALLER SET, MAYBE. WE'D HAVE TO LOOK AT THE ACTUAL REGRESSION.

Q. OKAY. YOU MENTIONED EARLIER WHEN WE WERE TALKING YOU MENTIONED THE YARDSTICK APPROACH. I THINK YOUR CRITICISM WAS THAT DR. MANGUM COULD HAVE DONE SOMETHING DIFFERENT TO MODEL THIS MARKET FOR THAT SLICE OF CUSTOMERS WHO HAVE VERY FEW OBSERVATIONS IN THE TRANSACTIONAL DATA OR NONE DURING THE BENCHMARK; DO YOU REMEMBER THAT?

A. YES.

Q. WHY DON'T YOU TELL US HOW YOU WOULD GO ABOUT DOING A YARDSTICK METHOD.

A. WELL, OBVIOUSLY I HAVEN'T BEEN ASKED TO DO THAT SO I WOULD HAVE TO STUDY THAT, BUT IN GENERAL IF YOU DO A YARDSTICK YOU WOULD WANT TO LOOK TO SEE DO YOU HAVE OTHER POTENTIAL PLACES, MAYBE NON-DEFENDANT BRANDS COULD BE AN EXAMPLE, OR OTHER PRODUCTS THAT YOU COULD LOOK TO THAT YOU WOULD THINK WOULD BE COMPARABLE TO DERIVE THAT.

IN FACT, DR. MANGUM STARTED TO LAY THAT OUT THIS MORNING, BECAUSE HE SAID HE HAD TO COMPARE PRICES FOR DIFFERENT

SETS OF CUSTOMERS WITHIN THE SAME PERIOD. AGAIN, I HAVEN'T BEEN ASKED TO DO THAT ANALYSIS, BUT THAT WOULD BE THE STARTING POINT.

Q. FOR EXAMPLE, YOU COULD -- WITH THIS YARDSTICK APPROACH YOU COULD, IN FACT, USE THE EXPERIENCE OF OTHER CUSTOMERS WHO ACTUALLY BOUGHT PACKAGED TUNA AND WERE EVEN IN THE SAME SUBSET OF CUSTOMER CLASSIFICATION, AS THE DEFENDANTS DID, LOOK AT THEIR EXPERIENCE AND COMPARE IT TO THE EXPERIENCE OF THESE CONSUMERS -- THESE PURCHASERS WHO HAD VERY LITTLE TRANSACTIONAL DATA, TRUE?

A. YOU WOULD HAVE TO LOOK AT THAT CLOSELY. THAT CONCEPTUALLY MIGHT BE TRUE, BUT YOU WOULD HAVE TO LOOK AT IT. THE QUESTION IS WOULD IT WORK FOR ALL 61? WOULD IT WORK FOR THE CLASS? YOU WOULD HAVE TO LOOK AT THE SPECIFICS TO FIGURE THAT OUT, BUT THE THE METHODOLOGY SURELY EXISTS, YES.

Q. ISN'T THAT EFFECTIVELY WHAT DR. MANGUM TESTIFIED THAT HE DID, IN FACT STUDIED THE INDUSTRY, IDENTIFIED HOW THE DEFENDANTS WERE CATEGORIZING VARIOUS DIFFERENT TYPES OF CUSTOMERS, AND THEN LOOK AT THE POOLED EXPERIENCE, 1.5 MILLION TRANSACTIONS, AND COME TO DETERMINATIONS ABOUT THE IMPACT TO THE CLASS AND THE CLASS MEMBERS?

A. NO, I DON'T THINK THAT'S WHAT DR. MANGUM TESTIFIED TO AT ALL. I'M SORRY, NO.

Q. OKAY. LET'S TALK ABOUT THE BENCHMARK ISSUE. SO THE COURT ASKED A QUESTION ABOUT YOU DOING MAYBE A ROBUSTNESS TEST. I

DON'T KNOW HOW YOU DESCRIBE IT. BUT WHEN -- YOU DO AN ANALYSIS TO SHOW A NEGATIVE 10 PERCENT OVERCHARGE BY LOOKING AT THE PERIOD 2004 ALL THE WAY TO THE END, TRUE?

A. YES.

Q. SOMETHING LIKE THAT?

A. YES.

Q. IT'S FOOTNOTE 80.

A. MM-HMM.

Q. SO IN THAT TEST, WHAT YOU DID IS YOU LOOKED AT A BENCHMARK THAT WAS 2002 TO 2004 TO THEN COMPARE WHAT HAPPENED FROM 2004 TO, WHAT, 2016 OR 17?

A. YES. I JUST DON'T RECALL IF THERE WAS SOME POST-BENCHMARK PERIOD IN THAT OR NOT.

Q. BUT YOU KNOW, BASED ON THE TESTIMONY EARLIER TODAY FROM DR. MANGUM, THAT YOU WERE TESTING PERIODS OF TIME WHERE DR. MANGUM SAYS THERE WAS A LOT OF COMPETITION IN THE MARKETPLACE FROM 2004 ALL THE WAY THROUGH TO 2008, RIGHT?

A. YES. AND IF THERE WAS A LOT OF COMPETITION, HIS MODEL SHOULD BE ABLE TO PICK THAT UP.

Q. BUT YOUR TEST WAS JUST LOOKING -- THE BUSINESS AS USUAL PERIOD WAS 2002 TO 2004, RIGHT?

A. YES.

Q. OKAY. AND IN FACT WHAT DR. MANGUM HAS TESTIFIED TO IS THAT ACTUALLY HE SEES IN THE EVIDENCE BUSINESS AS USUAL 2004 TO 2008, RIGHT?

A. I MEAN, HE TESTIFIED. I'VE NEVER SEEN ANY ANALYSIS OF THAT FROM HIM SO I CAN'T SPEAK TO IT. IT WASN'T IN ANY OF HIS REPORTS SO I JUST CAN'T SPEAK TO THAT.

Q. HAVE YOU REACHED A CONCLUSION AS TO WHETHER 2004 TO 2008 WAS BUSINESS AS USUAL OR NOT?

A. NO, I HAVE NOT.

Q. THAT WOULD AFFECT THE RESULTS OF THE RESULT THAT YOU GOT, RIGHT?

A. WELL, YEAH, UNDER THE PREMISE I DON'T THINK THERE'S ANY -- I DON'T THINK DR. MANGUM HAS SAID 2002 TO 2004 WAS NOT A PERIOD WHERE HE COULD CAPTURE THE COMPETITIVE DYNAMICS. SO IF THE MODEL IS WORKING PROPERLY, HE CAPTURES THE COMPETITIVE DYNAMICS FROM ITS BENCHMARK, AND WHATEVER CONSPIRACY CONDUCT HE CLAIMS IS THERE, IF THERE'S NONE, YOU WOULD HAVE NO AFFECT ON THE OVERCHARGES. THE POINT IS IN FACT HE HAS A NEGATIVE 10.6 PERCENT OVERCHARGE WHICH INDICTS THE VALIDITY OF THE MODEL.

Q. I SEE. ACTUALLY WHAT'S THAT YOU DID, NOT --

A. YEAH, THAT'S FAIR. I SURELY DIDN'T MEAN TO REPRESENT HE DID THAT.

Q. FAIR ENOUGH. I JUST WANTED TO BE CLEAR.

SO JUST WITH RESPECT TO BENCHMARKS, I DIDN'T HEAR MUCH FROM YOU ABOUT A CONCERN TODAY ABOUT THIS MARKET SHOCK PERIOD, 2008 TO 2010. IS THAT STILL AN ISSUE IN YOUR MIND?

A. ONLY IN THE FOLLOWING SENSE, TO THE EXTENT THAT WHAT IT

REPRESENTS IS A CHOICE THAT DR. MANGUM MADE, AND THE WAY HE SORT OF CHOSE TO INCLUDE OR EXCLUDE, I'M NOT SURE HE'S DEALT WITH IT PROPERLY, BUT AGAIN THAT'S ANOTHER SENSITIVITY.

Q. SO YOU'RE NOT TAKING A POSITION AS TO WHETHER 2008 TO 2010 IS PROPERLY BENCHMARK PERIOD OR NOT, ARE YOU?

A. NO, I'M NOT.

Q. ALL RIGHT. AND YOU'RE ALSO NOT SAYING THAT IT'S CONSPIRACY PERIOD.

A. THAT'S CORRECT.

Q. WHY DON'T WE TALK ABOUT THE FALSE POSITIVE ISSUE. YOU ACKNOWLEDGE, RIGHT, THAT TUG, THE PARENT OF COSI, HAS SOLD HUNDREDS OF MILLIONS OF DOLLARS WORTH OF TUNA TO THESE OTHER FOOD -- TUNA DISTRIBUTORS?

A. I'M SORRY?

Q. REMA. FOR EXAMPLE, I SAW REMA WAS ON THERE.

THE COURT: NON-DEFENDANT.

MR. LEBSOCK: NON-DEFENDANTS.

A. WHAT I BELIEVE I SAID IS THAT WHAT YOU CAN SEE FROM THE DATA IS THAT TUG SOLD TO VENDORS WHO ARE POTENTIALLY LINED UP WITH CERTAIN BRANDS, AND SO FOR SOME YOU CAN SEE SOME SALES, YES, NO WHERE NEAR THE MAGNITUDE OF WHAT DR. MANGUM HAD IN HIS REPORT, BUT THERE ARE SOME.

Q. YOU SAID YOU HAD LOOKED AT THE GUILTY PLEAS, TRUE?

A. YES, I DID.

Q. AND DO YOU REMEMBER THE BUMBLEBEE GUILTY PLEA?

A. I DON'T HAVE A PHOTOGRAPHIC MEMORY, BUT GENERALLY, YES.

Q. THE BUMBLEBEE GUILTY PLEA IS EXHIBIT 5 IN THE BINDERS.
WOULD YOU LIKE TO TAKE A LOOK AT A COPY OF IT?

A. YES.

MR. LEBSOCK: MAY I APPROACH, YOUR HONOR?

THE COURT: CERTAINLY.

Q. JUST A FEW QUESTIONS ABOUT THE BUMBLEBEE GUILTY PLEA.
FIRST OF ALL, THERE'S NO DISPUTE, RIGHT, THAT BUMBLEBEE AND
STARKIST HAVE PLED GUILTY.

A. YES, THAT'S CORRECT.

Q. AND NO DISPUTE THAT BUMBLEBEE HAS ADMITTED THAT THE
CONDUCT OCCURRED NOT LATER THAN THE FIRST QUARTER OF 2011.

A. I BELIEVE THAT'S WHAT THIS SAYS.

Q. OKAY. NO DISPUTE THAT THE CONDUCT WENT ON FOR A NUMBER OF
YEARS.

A. I BELIEVE THAT'S WHAT THIS SAYS, YES.

Q. SO THIS IS NOT A SITUATION -- SORRY, ONE OTHER QUESTION.
NO DISPUTE THAT THE BUMBLEBEE GUILTY PLEA ADMITS THAT
HIGH-LEVEL EXECUTIVES WERE INVOLVED IN THE CONDUCT, RIGHT?

A. YES.

Q. NO DISPUTE THAT THIS WAS NOT AN ACCIDENT, THE CONDUCT THAT
WAS AT ISSUE HERE, RIGHT?

A. I'M NOT EXACTLY SURE, BUT, YEAH.

Q. IT WAS INTENTIONAL.

A. I BELIEVE THAT'S WHAT IT SAYS.

Q. AND SYSTEMATIC.

A. I BELIEVE AGAIN -- WHAT DO YOU MEAN BY "SYSTEMATIC"? I DON'T WANT TO PARSE IT, BUT I JUST TOOK IT AS WHAT IT IS.

Q. NO DISPUTE THAT THE AGREEMENT WAS TO FIX, RAISE, AND MAINTAIN THE PRICES OF PACKAGED SEAFOOD SOLD IN THE UNITED STATES.

A. THAT'S WHAT THIS SAYS.

Q. AND THERE'S NO LIMITATION IN THE GUILTY PLEA ABOUT PARTICULAR PACKAGE SIZES.

A. I DO NOT SEE ANY.

Q. NO DISPUTE ABOUT THE FACT THAT THERE'S NO LIMITATION ABOUT PARTICULAR CUSTOMERS THAT WERE TARGETED?

A. I DON'T SEE ANY LIMITATION.

Q. I DID WANT TO POINT OUT ON PAGE 3 OF THE GUILTY PLEA, IF YOU COULD LOOK AT LINE 25. DO YOU SEE THERE WHERE IT TALKS ABOUT THIS CONSPIRACY WAS ENGAGED IN BY "THE MAJOR PACKAGED SEAFOOD PRODUCING FIRMS," DO YOU SEE THAT?

A. YES.

Q. SO NOTWITHSTANDING -- GOING BACK TO THIS FALSE POSITIVE ISSUE AND TUG, BUMBLEBEE ADMITS THAT BUMBLEBEE, CHICKEN OF THE SEA, STARKIST, THOSE ARE THE MAJOR PRODUCERS; DO YOU AGREE WITH THAT?

A. YES.

Q. WHEN YOU ISSUED YOUR REPORT IN THIS CASE, YOU WERE NOT AWARE THAT TUG HAD SUPPLIED HUNDREDS OF MILLIONS OF DOLLARS

WORTH OF TUNA TO THESE OTHER DISTRIBUTORS, REMA, AND THOSE OTHER DISTRIBUTORS THAT ARE REFERENCED IN YOUR SLIDE DECK?

A. I DON'T RECALL. I REMEMBER WE DISCUSSED THIS IN MY DEPOSITION. I THINK WHEN YOU PHRASED IT THAT WAY, I BELIEVE I SAID NO, I WASN'T SURE THAT THAT WAS EXACTLY ACCURATE.

Q. THAT YOU DIDN'T KNOW.

A. RIGHT.

Q. SO NOW YOU KNOW.

A. WELL, NOW I KNOW WHAT DR. MANGUM HAS SAID, AND THERE IS SOME OTHER ANALYSIS THAT'S BEEN DONE, BUT YES.

Q. AS TO DOLORES AND THE PITCO DATA, WE TALKED ABOUT THAT AT YOUR DEPOSITION, TOO, DIDN'T WE?

A. YES, WE DID.

Q. AND YOUR UNDERSTANDING AT THAT TIME WAS THAT DOLORES MARKETING A HISPANIC BRAND OF TUNA PRODUCT; IS THAT RIGHT?

A. YES.

Q. AND YOUR POINT WAS THAT'S A COMPLETELY SEPARATE TYPE OF PRODUCT THAN OTHER PACKAGED TUNA PRODUCTS, RIGHT?

A. IN PART, YES.

Q. AND THE POINT WAS SO YOU SHOULDN'T SEE AN OVERCHARGE ON THE DOLORES TUNA BECAUSE IT WAS COMPLETELY SEPARATE; WASN'T THAT THE POINT?

A. FOR TWO REASONS, YOU SHOULDN'T SEE IT BECAUSE IT WAS SEPARATE, AND YOU SURELY SHOULDN'T SEE ONE THAT WAS LARGER, OF THAT MAGNITUDE, ESPECIALLY WHEN I FOLLOWED DR. MANGUM'S MODEL

WHEN I INCLUDED BRAND-FIXED EFFECTS, YES.

Q. AND DID YOU KNOW AT THAT TIME THAT STARKIST ALSO MADE A JALAPENO TUNA PRODUCT?

A. I DON'T RECALL THAT COMING UP AT THE DEPOSITION. I KNOW I READ THAT IN DR. MANGUM'S REPLY REPORT.

Q. AND YOU LOOKED INTO THAT TO SEE THAT THAT IN FACT IS TRUE?

A. I BELIEVE THAT TO BE TRUE, YES.

Q. WHY DON'T WE TALK ABOUT THE COST SERIES. SO YOU REMEMBER IN THE DEPOSITION I ASKED YOU ABOUT CONSTRUCTION OF COST SERIES?

A. YES, I DO.

Q. AND IT IS TRUE THAT IT IS ACCEPTED IN THE PROFESSION TO CONSTRUCT A COST SERIES, GENERALLY?

A. IF DONE PROPERLY AND IN CERTAIN CIRCUMSTANCES, SURE.

Q. AND YOU HAVE A CRITICISM HERE AS TO WHETHER DR. MANGUM HAS DONE IT PROPERLY OR NOT.

A. YES.

Q. WHEN YOU ACCEPTED THE USE OF THE ACCOUNTING COST DATA FROM BUMBLEBEE AND COSI, DID YOU DO ANY TESTING TO SEE WHETHER THAT DATA WAS GENERATING NONSENSICAL -- OR WOULD GENERATE NONSENSICAL RESULTS?

A. I DO RECALL LOOKING AT IT. FOR EXAMPLE, I SAW DR. MANGUM'S GRAPH TODAY AS YOU PUT FORWARD, WHICH WAS VERY MISLEADING BECAUSE HE DIDN'T WEIGHT IT BY THE ACTUAL SIZES. IF HE HAD WEIGHTED THOSE DATA PROPERTIES, ALL THOSE BLIPS WOULD

HAVE GONE AWAY. SO I REMEMBER LOOKING AT THINGS LIKE THAT, BUT AT THE END OF THE DAY THE ULTIMATE TEST WAS LET'S LINE UP THE TWO SERIES TOGETHER AND SEE WHAT THEY SHOW.

Q. HAVE YOU DONE ANY ANALYSIS ABOUT THE PACKAGED TUNA MARKET TO SEE IF THE DEFENDANTS, MEANING STARKIST, BUMBLEBEE AND CHICKEN OF THE SEA, ARE CONFRONTING THE MARKET COSTS THAT THEY EXPERIENCED, INCLUDING TUNA, IN A MATERIALLY DIFFERENT WAY?

A. WELL, I THINK WHAT I WOULD SAY IS THAT THE RESULTS OF THE ECONOMETRIC TESTING IS ONE WAY THAT SPEAKS TO THAT, AND THERE IS A SIGNIFICANT PART OF MY REPORT THAT TALKS ABOUT DIFFERENCES IN COST STRUCTURES BASED ON MY RESEARCH, SO I WOULD JUST POINT YOU TO THAT SECTION, YES.

Q. ALL RIGHT. AND THE COST STRUCTURE, ARE WE REFERRING BACK NOW TO THIS IDEA THAT THERE ARE HAND-FILLED POUCHES MADE BY STARKIST IN ECUADOR?

A. THAT WAS ONE PART OF IT. THERE IS ACTUALLY SEVERAL PARAGRAPHS IN MY REPORT WHERE I RECORD MY RESEARCH BASED ON THE INTERVIEWS AND THE DOCUMENTS ABOUT THE DIFFERENCES ACROSS THE DEFENDANTS.

Q. ARE YOU AWARE THAT IN THIS CASE, DURING THE RELEVANT PERIOD IN TIME, ONE OF THE DEFENDANTS MOVED FROM AMERICAN SAMOA TO THE -- PACKING OPERATIONS TO THE UNITED STATES AND ACTUALLY CO-PACKS WITH ONE OF THE OTHER DEFENDANTS?

A. I AM AWARE OF BOTH, YES.

Q. LET US TURN TO YOUR SLIDE DECK, IF WE COULD REAL QUICKLY.

DO YOU HAVE THAT IN FRONT OF YOU?

A. I DO.

Q. PERFECT. SO IF WE COULD LOOK AT MAYBE SLIDE 52. I FORGET IF 53 WAS UNDER SEAL, SO WE'LL JUST STICK WITH 52 AND SEE WHERE WE GO.

SO YOUR POINT IS THAT THE UMBRELLA EFFECT CAN'T BE REAL HERE BECAUSE NON-DEFENDANT TUNA PRICES INCREASED BEFORE DEFENDANT PACKAGED TUNA PRICES INCREASED, RIGHT?

A. I THINK IT'S A LITTLE MORE NUANCED THAN THAT.

Q. SURE. LET'S GET IT RIGHT.

A. SO I BELIEVE WHAT I SAID SPECIFICALLY WAS WHEN I READ DR. MANGUM'S REBUTTAL IN HIS REPORT, AND LOOKED AT THE PAPERS HE CITED, I WANTED TO LOOK AT WHAT WERE THE TESTABLE PROPOSITIONS. THESE TWO ON THIS SLIDE ARE TWO OF THE TESTABLE PROPOSITIONS, AND THEN I DON'T SEE EVIDENCE OF THAT THAT REFUTES HIS SPECULATION THAT THIS THEORY APPLIES. IF YOU DON'T HAVE EVIDENCE OF A THEORY, THEN IT DOESN'T APPLY, AND THE ONLY PERSON THAT STUDIED EVIDENCE OF THE THEORY WAS THIS ANALYSIS THAT I DID. DR. MANGUM JUST PUT THE THEORY FORWARD WITHOUT TESTING IT.

Q. SO HERE'S THE QUESTION -- THANK YOU. HERE'S THE QUESTION, ARE YOU AWARE THAT IN THIS INDUSTRY THE DEFENDANT COMPANIES, STARKIST, BUMBLEBEE, CHICKEN OF THE SEA, ISSUED PRICE ANNOUNCEMENTS THAT DO NOT GET IMPLEMENTED FOR A NUMBER OF MONTHS; DO YOU KNOW THAT?

A. I HAVE SEEN SOME CIRCUMSTANCES OF THAT DEPENDING ON THE PRICE ANNOUNCEMENTS.

Q. SO YOU KNOW THAT THERE'S A PUBLIC ANNOUNCEMENT. IT'S KNOWN IN THE INDUSTRY WHAT THE PRICES BUMBLEBEE, CHICKEN OF THE SEA, AND COSI ARE GOING TO CHARGE A NUMBER OF MONTHS INTO THE FUTURE.

A. I'VE SEEN SOMETHING TO THAT. WHAT THE NUMBERS ARE, I JUST DON'T REMEMBER.

MR. LEBSOCK: YOUR HONOR, I THINK AT THIS POINT I DON'T HAVE ANY FURTHER QUESTIONS, IF WE WANT TO BRING DR. MANGUM UP.

THE COURT: I WANT TO TAKE FIVE MINUTES AND LOOK AT MY NOTES, AND THEN WE'LL COME BACK.

MS. LEE: YOUR HONOR, I WAS JUST GOING TO SUGGEST THAT THE CLOSINGS, NO SLIDES OR ANYTHING LIKE THAT, BUT PERHAPS IF YOU HAVE TIME WE COULD GIVE EACH OF THE SIDES FIVE MINUTES FOR CLOSING.

THE COURT: LET'S SEE IF WE HAVE ANY TIME LEFT AFTER WE HEAR FROM DR. MANGUM AGAIN, AND I MAY LET COUNSEL LEBSOCK GO AHEAD AND ASK QUESTIONS, KIND OF A REDIRECT IF YOU WILL, OF YOUR EXPERT.

YES, MS. SWEENEY.

MS. SWEENEY: YES, YOUR HONOR. CERTAINLY THAT WOULD BE OUR FIRST CHOICE IS TO GIVE THE EXPERTS AN OPPORTUNITY TO SPEAK, BUT IF THERE IS TIME AFTERWARDS, I WOULD JUST LIKE TO POINT OUT THAT WE -- DEFENSE COUNSEL USED UP MORE THAN THEIR

SHARE OF THE TIME AND SO WE BELIEVE THAT THEY HAVE USED UP ALL THEIR TIME AND WE STILL HAVE TIME LEFT, SO I WOULD OBJECT TO THEM GETTING A CLOSING ARGUMENT.

THE COURT: WITH ALL DUE RESPECT TO BOTH OF YOU, HEARING FROM THE EXPERTS IS THE MOST HELPFUL TO THE COURT RATHER THAN HEARING FROM YOU.

MS. SWEENEY: AGREED, YOUR HONOR.

THE COURT: WE'LL SEE WHERE WE ARE COME 4:30, AND I'M NOT LIKELY TO HEAR FROM YOU FOLKS AGAIN. I JUST DON'T KNOW. LET ME TAKE FIVE MINUTES.

(COURT WAS AT RECESS.)

THE COURT: COUNSEL, YOUR EXPERT IS BACK, BUT I'M GOING TO START OFF WITH A COUPLE OF QUESTIONS, AND YOU JUMP IN HERE AND WE'LL GO BACK AND FORTH. LET ME JUST ASK A COUPLE OF QUESTIONS.

EXAMINATION

BY THE COURT:

Q. DR. MANGUM, I APPRECIATE YOUR COMING BACK TO THE WITNESS STAND, SIR, A COUPLE OF QUESTIONS.

A. SURE.

Q. THE DATA FROM THE HOLDOUT PERIODS, AND I'M CALLING THEM HOLDOUT PERIODS, I GUESS THEY'RE THE BENCHMARK PERIODS THAT YOU EXCLUDED, WAS THAT DATA USED IN ANY FASHION IN THE REGRESSION MODE?

A. YES, IT WAS. IN FACT, I WAS SADDENED TO HEAR USED THE

WORD "EXCLUDED," YOUR HONOR, BECAUSE I EXCLUDED NO DATA. ALL THE DATA WAS USED. IN FACT, I CREATED EXTRA VARIABLES. I CREATED ONE TO SAY THIS WAS THE MARKET SHOCK PERIOD, AND THEN LEFT IN ALL THE COSTS AND SALES, AND THEN I CREATED ANOTHER ONE, IT WAS LABELED THE DOJ PERIOD, THE AFTER PERIOD.

Q. SO NOTHING WAS EXCLUDED?

A. CORRECT.

Q. LET ME ASK THIS, THE REGRESSION MODEL THAT YOU CREATED, IF APPLIED TO ONE OF THOSE PERIODS, THE FIRST PERIOD, MAYBE, WHY DOES IT RESULT IN A NEGATIVE RESULT?

A. I THINK THERE WAS SOME CONFUSION. I'VE NOT STATED ANYWHERE THAT MY MODEL IS CONSERVATIVE. WHAT I MEANT TO SAY WAS, IF YOU'RE IMAGINING A SCENARIO WHERE PART OF THE BENCHMARK PERIOD ACTUALLY HAD CONSPIRACY-INFLATED PRICES, THEN YOU'VE TOLD THE MODEL THAT'S OKAY, SO WE'RE -- WHAT YOU CALL THE CONSPIRACY IS HIGHER THAN THE BENCHMARK, BUT YOU'VE TOLD THE COMPUTER THE BENCHMARK IS A LITTLE BIT HIGHER. SO IF YOU DID THAT, IF YOU LEFT CONSPIRACY IN THE PERIOD YOU CALL BENCHMARK, YOU'RE ACTUALLY NOT GETTING A HIGH ENOUGH OVERCHARGE.

IT WAS THE OPPOSITE THING THAT DR. JOHNSON TALKED ABOUT. HE WENT BACK AND ADDED ALL THE WAY BACK TO 2004, AND SO WE'RE GOING TO TREAT ALL OF THAT PERIOD AS CONSPIRACY. SO NOW THE COMPUTER YOU'VE GIVEN IT A WHOLE BUNCH OF COMPETITIVE TIME PERIODS, AND THEN ALSO SOME CONSPIRACY AND TOLD IT, THAT'S THE THING YOU'RE GOING TO ASK IS THAT DIFFERENT, THEN THIS LITTLE

TWO-YEAR EARNING PERIOD FROM '02 TO '04, AND THE FACT THAT YOU GET SOMETHING NONSENSICAL DOESN'T SURPRISE ME BECAUSE WHAT YOU HAVE TOLD THE COMPUTER IS THE "CONSPIRACY."

Q. SO THAT'S WHY HE GETS THE RESULT THAT HE GETS?

A. CORRECT, AS I EXPECT YOU WOULD FIND.

THE COURT: GO AHEAD AND JUMP IN HERE, COUNSEL.

REDIRECT EXAMINATION (CONT.)

BY MR. LEB SOCK:

Q. SO DR. MANGUM, WE HAVEN'T TALKED SO I'M GOING TO BE BROAD AND OPEN ENDED IN MY QUESTIONS TO YOU TO GET WHERE YOU WILL, I SUPPOSE. WE'LL TRY TO CABIN YOU IN. WHY DON'T WE START WITH THE COLLOQUY I HAD WITH DR. JOHNSON ABOUT THE YARDSTICK APPROACH. DO YOU HAVE ANY COMMENTS THAT YOU WOULD LIKE TO SAY ABOUT THAT?

A. HE SAID AT ONE POINT, WELL, THE REAL PROBLEM WAS MY MODEL APPROACH. HE SUGGESTED THERE'S THESE OTHERS. HE DIDN'T DO ANY OTHERS.

THE COURT: NO, HE DIDN'T.

A. IN MY MIND, HE A HARD TIME SAYING EXACTLY -- HE SAID, "I HAVE TO THINK ABOUT IT. I HAVE TO BE CAREFUL." HE MENTIONED, "OH, I COULD MAYBE LOOK AT OTHER PRODUCTS." LET'S THINK ABOUT THIS. HE WAS VERY CAREFUL AND CRITICAL ABOUT "YOU HAVE TO GET SPECIFIC DEFENDANT DATA, YOU KNOW, DON'T USE THIS MARKET INDICES," BUT THEN HE GOES, "OH, USE OTHER PRODUCTS." SO WHAT'S HE TALKING ABOUT? CHICKENS? IS HE TALKING ABOUT CANNED

PEACHES? THAT'S OKAY WITH HIM. OR MAYBE HE MIGHT MEAN OTHER CLASS MEMBERS' DATA, BUT THAT'S THE POINT, THAT'S WHAT I'M SAYING IS SOME CLASS MEMBERS, WITH A FEW OBSERVATIONS, HAVE TO RELY ON THE DATA SET THAT WE HAVE FOR ALL OF THE CLASS MEMBERS. SO I DON'T REALLY KNOW WHAT HE WAS TALKING ABOUT ABOUT A YARDSTICK MODEL. HE CERTAINLY DIDN'T EXPLAIN IT HERE OR IN ANY OF HIS REPORTS.

Q. SO FOLLOWING UP ON THAT THEN, WHAT WOULD BE THE CLOSEST COMPETITIVE SITUATION THAT YOU COULD COME UP WITH TO MEASURE THE EXPERIENCES OF THESE 61 CUSTOMERS, WHERE THERE WAS NO BENCHMARK INFORMATION AT ALL THAN THE EXPERIENCES OF OTHER CLASS MEMBERS WHO THE DEFENDANTS THEMSELVES HAD CATEGORIZED AS BEING LIKE THAT CUSTOMER?

A. I CAN'T THINK OF ANYTHING CLOSER. I WOULDN'T WANT TO TURN TO CHICKEN OR TO PEACHES OR SOMETHING LIKE THAT THAT'S PACKAGED OR CANNED. I DON'T KNOW WHAT WOULD BE CLOSER, AND HE DIDN'T LIST ANYTHING THAT WOULD BE BETTER. HE CLEARLY DOESN'T LIKE TURNING TO CUSTOMER TYPE REGRESSION BUT THERE WERE THINGS THAT WERE PROVIDED.

Q. IS THERE ANYTHING THAT YOU HEARD ABOUT THE WAY IN WHICH YOU CONDUCTED YOUR COST SERIES THAT YOU WOULD LIKE TO COMMENT ON?

A. YEAH, A COUPLE OF THINGS. HE STATED THAT THERE IN FACT WAS STARKIST COST DATA. BUT YOU'LL NOTICE HE DIDN'T RUN ANY REGRESSIONS, HE SHOWED YOU BUMBLEBEE AND COSI. I DISAGREE WITH

HIM. IF HE THOUGHT THEY HAD THIS DATA, WHY WOULDN'T HE HAVE SHOWED IT? HE WAS ASKED IN HIS DEPOSITION WHY, AND HE SAYS, "WELL, THAT WAS DR. MANGUM'S JOB." HE SAID, "I HAD ENOUGH STARKIST DATA," SO THERE IS NOT ENOUGH STARKIST DATA TO DO IT.

ALSO, I'VE SHOWED GRAPHS THAT USING THE DATA COST PER OUNCE, AND I HAD THOSE VERTICAL ELLIPSES, YOUR HONOR, AND HE JUST SAID, "IF YOU WEIGHTED THEM." THESE ARE MULTIPLE, DIFFERENT COSTS FOR THE SAME PRODUCT. WHETHER ONE WOULD BUY A CAN FROM BUMBLEBEE OR SOMEBODY BUYS 100,000 OF THEM, THE QUESTION IS WHAT'S THE COST WHEN YOU MAKE A CAN? YOU DON'T DETERMINE THE COST ONCE YOU DECIDE HOW MUCH TO SELL TO A CUSTOMER.

ONE MORE THING, IF YOU LOOK AT THE PRICES AND THE COSTS OF GOODS, YOU RUN AN REGRESSION, OFTEN YOU'RE LOOKING AT A MONTHLY VALUE AS OPPOSED TO MONTH BY MONTH. WHAT DR. JOHNSON DID IS HE DIDN'T WEIGHT THEM WHEN HE RAN HIS INDIVIDUAL REGRESSIONS. THAT'S WHEN HE FOUND THAT VERY SMALL OVERCHARGE THAT WAS STATISTICALLY INSIGNIFICANT. YOUR HONOR, I CREATED THAT IN MY REPLY REPORT. I SAID YOU'VE GOT TO CHANGE IT. YOU HAVE TO CLEAN DATA SUBSTANTIALLY. AS PLAINTIFFS, WE'RE USED TO CLEANING A LOT OF DATA BECAUSE WE HAVE THESE FOR MONTHS. AND THE DEFENDANTS USE WHAT WE DID, QUITE OFTEN, AND HE DIDN'T DO ENOUGH CLEANING TO ASSUME WHAT THESE PRICES WERE AND TO SEE THE RESULTS. I DID THAT, AND IT'S IN MY REPORT, AND THEN YOU DO GET A SIGNIFICANT OVERCHARGE OF ABOUT 7 PERCENT.

LET ME COMMENT SOMETHING ABOUT THAT 7 PERCENT, A LOT OF THE DISAGREEMENT, THE DISTANCE BETWEEN ME AND DR. JOHNSON IS, WHEN I LOOK AND SAY, "WELL, I RUN MY BASE MODEL, THE POOL MODEL OF 2.28, AND IF I LOOK AT EACH INDIVIDUAL DEFENDANT MAYBE I GET 9, AND 9 AND 11, OR MAYBE WITH MY CUSTOMER TYPE REGRESSION I MIGHT GET 4 AND 7. I BET HE WOULD SAY, "AH-HA, THERE'S YOUR STORY." IT'S DIFFERENT.

I DON'T SEE THE FACT THAT WALMART HAS A LOWER OVERCHARGE TO MEAN WE SHOULD HAVE NO CLASS HERE. THE IMPACT IS COMMON. AND TO SAY, LIKE HE DID, "WELL, IF YOU LOOK AT THE COST VARIABLE, THE COST COEFFICIENT, MAYBE IT'S A DIFFERENT SIZE." OKAY, BUT YOU STILL HAVE THE OVERCHARGE. AND SO IT'S NOT AS IF THE OVERCHARGES HAVE TO BE REALLY, REALLY TIGHT AND CLOSE, COMMON IMPACT. IN FACT, AS I SAID, DIFFERENT CUSTOMERS GET DIFFERENT PRICES THEY NEGOTIATE. WALMART IS BIG. WE SEE THEY HAVE A SMALL OVERCHARGE. THAT'S WHAT THE CHOW TEST IS TALKING ABOUT, IT WILL FLAG, IT WILL IDENTIFY THAT YOU HAVE SOME DIFFERENCES, AND MAYBE THOSE DIFFERENCES CAN LEAD TO A 7 PERCENT OVERCHARGE AS OPPOSED TO A 10.28, BUT THEY BOTH MEAN IMPACT FROM THE COMMON ALLEGATIONS IN THIS CASE, SO I THINK THAT'S A DIFFERENCE.

HE'S LOOKING FOR TESTS OF -- EVEN DIFFERENCES IN THE MAGNITUDE OF OVERCHARGES TO MEAN WE DIDN'T HAVE COMMON IMPACT, BUT WHAT I LOOK AT IS THERE MEANINGFUL HIGHER PRICES PAID, EVEN IF THOSE PRICES WERE DIFFERENT ACROSS DIFFERENT DIMENSIONS OF

CUSTOMERS.

Q. ON COSTS, I WAS TRYING TO DISCUSS WITH DR. JOHNSON, HE HAD MENTIONED THIS IDEA THAT HE KNEW IN EQUADOR WHERE STARKIST HAND FILLS POUCHES WITH TUNA, AND THE QUESTIONS AROUND THAT, MY TAKE WAS THAT THESE COMPANIES EXPERIENCED DIFFERENT COST STRUCTURES, MEANING BUMBLEBEE'S COSTS ARE DIFFERENT THAN STARKIST'S COSTS, WOULD YOU LIKE TO COMMENT ON THAT.

A. WELL, ONE THING I NOTICED IN HIS TESTIMONY EARLY ON, THE VERY BEGINNING, HE WAS CRITICIZING MY CORRELATION ANALYSIS. IF YOU CHECK THE RECORD, YOUR HONOR, HE SAYS, "YOU KNOW WHAT, WE YOU SHOULD CHECK THAT. THESE COMPANIES HAVE COMMON COSTS."

BUT THEN LATER, WHEN WE WANT TO TALK ABOUT THE INPUTS TO REGRESSION, NOW THE STORY'S CHANGED, NOW IT'S NOT COMMON, YOUR HONOR. NOW THERE'S ALL THESE DIFFERENCES. HE SAYS, "I DON'T KNOW -- HE SAID, "I DON'T KNOW THE COMPANIES THAT WOULDN'T LOOK AT THEIR COSTS, WOULDN'T USE THEIR OWN INDIVIDUAL COSTS AS OPPOSED TO SOMETHING ELSE," BUT YET WHEN IT WAS CONVENIENT TO CRITICIZE CORRELATION HE SAID, "THESE COMPANIES HAVE COMMON COSTS, THAT'S WHY I WOULD SEE THE PRICES BE SIMILAR."

HERE'S AN EXAMPLE, LET'S SAY YOU HAVE A GAS STATION -- I'VE GOT ONE CLOSE TO MY HOUSE -- A CORNER WITH THREE GAS STATIONS, AND THEIR PRICES ARE NOT THE SAME, BUT THEY'RE PRETTY CLOSE, USUALLY WITHIN A COUPLE OF CENTS, MAYBE ONE'S A CHEVRON, ONE'S UNICAL. LET'S SAY ONE OF THOSE GAS STATIONS GETS A

NOTICE FROM THE LANDLORD THAT OWNS THAT STRIP MALL LOCATION AND SAYS, "SOMETHING HAPPENED, IT'S GOING TO BE AN EXTRA THOUSAND DOLLARS A MONTH." DOES THAT COMPANY SAY, "MY OWN INDIVIDUAL COSTS MATTER. I'M RAISING MY PRICE OF GAS"? THEY CAN DO THAT, BUT YOU KNOW WHAT, YOU DON'T RESPOND TO IDIOSYNCRATIC COSTS BECAUSE THE OTHER GAS STATIONS ARE RIGHT THERE, AND THEY DON'T RAISE THEIR PRICE.

FIRMS DON'T SAY, "I GET TO RAISE MY PRICE -- CORRECTION, IF I HAVE COST INCREASES, I GET TO RAISE MY PRICE. THAT'S ACTUALLY A BIT OF AN ARCHAIC THINKING, EVEN BACK IN THE 1600'S, 1500'S IN ENGLAND, YOU HAVE THESE GUILDS THAT ARE INVOLVED. OF COURSE THE PRICE IS ALL THE COSTS, AND THEN YOU ADD A PROFIT, BUT THAT'S A DREAM FOR MANY COMPANIES. THEY HAVE TO CONSIDER THEIR COMPETITORS. HERE WE KNOW THE CUSTOMERS SEE THE PRODUCTS, THEY'RE ALL THE SAME OFFERINGS, SIZES, PACK, EVERYTHING. IT'S LIKE THE GAS STATION CORNER. IF YOUR COSTS GO UP, YOU JUST SAY, "BUMMER, MY COST WENT UP." IT'S NOT LOOKING AT INDIVIDUAL COMPANIES' COSTS THAT MATTERS, WHETHER IT'S HAND PACKING IN ECUADOR.

BY THE WAY, IF YOU FIND SOME WAY AND YOUR COSTS ARE LOWERED, WHO IS TO SAY YOU DROP YOUR PRICE? YOU WOULD SAY, "I HAVE HIGHER PROFITS." IN FACT, QUITE OFTEN THAT'S WHY FIRMS TAKE STEPS TO TRY AND GET A LOWER COST, NOT TO DROP THEIR PRICES. NOW, IF IT'S COMMON COSTS ACROSS THE INDUSTRY, THOSE GET COMPETED DOWN IN PRICES, BUT NOT JUST IF IT'S WHEN

COMPANIES DIFFER.

SO WE DISAGREE AT A BASIC LEVEL OF SHOULD IT BE INDIVIDUALIZED IN THESE COSTS DECISIONS OR DO WE THINK ECONOMICALLY THAT WE HAVE SUCH COMPETITION THAT IT'S A COMMON COST SERIES THAT REALLY DETERMINES WHETHER THE MARKET WILL LET YOU RAISE YOUR PRICE.

Q. ONE FINAL QUESTION ON COST THEN. IN YOUR REPLY DECLARATION, DID YOU TALK ABOUT THE -- DID YOU ANALYZE THE FACT THAT STARKIST BOUGHT WHOLE FISH AND THEN PROCESSED THAT FISH AS OPPOSED TO BUMBLEBEE AND COSI WHICH PURCHASED THE PROCESSED LOINS ALREADY?

A. I DID. STARKIST, DURING THE PERIOD WE'RE TALKING ABOUT HERE, THEY WORKED IN WESTERN SAMOA. THEY PACKED FROM THE WHOLE FISH TO THE END PRODUCT, AND I BELIEVE IT WAS COSI THAT SWITCHED WHERE THEY DIDN'T WHOLE PACK. IT WAS RIGHT IN WESTERN SAMOA, CLOSE TO STARKIST. IN FACT, THEY PACKED EACH OTHER'S PRODUCTS SOMETIMES.

AT ONE POINT COSI SHIFTED. NOW, WHAT SHIFTING MEANS IS NOT JUST MOVING LOCATION, BUT THEY START WITH THE LOIN, SO THE LOIN IS PARTIALLY PROCESSED FISH, NOT THE WHOLE FISH WITH THE FINS AND HEADS AND EVERYTHING, AND THEY BUY THAT, RIGHT, WHICH MEANS THERE'S LABOR NEEDED TO GET THE FISH PARTIALLY PROCESSED, BUT THERE'S SOMEONE LIKE COSI SAYING WE'RE GOING TO GO SOMEWHERE ELSE TO BUY THE PROCESSED LOINS. WHEN THEY BUY FISH, NOW IT'S PROCESSED WHICH INCLUDES LABOR COSTS BECAUSE YOU'RE

BUYING IT FROM A THIRD COMPANY, SO YOU HAVE A LITTLE BIT LESS LABOR COSTS, YOU SHIFT OVER. I'VE ACCOUNTED FOR THAT. ONE OF THE REASONS I LOOKED TO THE FINANCIAL STATEMENTS WAS I KNEW WHEN -- WHEN THEY WERE PROCESSING THE WHOLE FISH, THE ROUND FISH, OR WHETHER THEY WERE PROCESSING LOINS. I SAID WHAT ARE THE RATIOS OF THESE ELEMENTS OF COST? AND I MATCHED UP AS BEST I COULD, WELL, I KNOW WHAT EACH COMPANY'S DOING SO I'M GOING TO USE THOSE WEIGHT SETS BASED ON THEIR ACTIVITY OF WHAT THEY'RE DOING, STILL USING THESE RELEVANT MARKET COSTS THAT I KNOW ARE RELEVANT FOR THE INDUSTRY.

Q. LAST QUESTION OR SUBJECT MATTER MAYBE, FALSE POSITIVES. YOU HEARD SOME TESTIMONY ABOUT THAT FROM DR. JOHNSON, IS THERE ANYTHING SPECIFIC THAT YOU WOULD LIKE TO SAY IN ADDITION ABOUT THE FALSE POSITIVE TESTS?

A. TWO THINGS -- SORRY, THE ONE THING I DIDN'T HEAR HIM SAY, "I DIDN'T LOOK AT INDIRECT PURCHASER PRICES." WE DIDN'T HEAR THAT. HE'S LOOKING AND CALLING PURCHASES BY SYSCO, U.S. FOODS, PITCO AND SAYING, "I LOOKED AT THEIR PURCHASES FOR NON-DEFENDANTS," BUT THAT'S AN INDIRECT PURCHASE IF IT'S BUYING FROM SOMEONE WHO THEMSELVES ARE BUYING FROM SOMEONE ELSE. THERE'S NO BUSINESS OF HAVING INDIRECT PURCHASES IN A REGRESSION TO MAKE IMPORTANT CONCLUSIONS HE'S MAKING IN THIS CASE.

THE OTHER THING I'LL SAY ABOUT THAT IS I FOUND I KNOW WE HAVE SALES RECORDS. WE RECEIVED THIS PRETTY CLOSE, JUST A

COUPLE OF WEEKS BEFORE MY REPORT CAME OUT, FROM TUG. WE KNOW THEY SELL TREMENDOUS AMOUNTS TO REMA AND WHATNOT. NOW HE'S SAYING, "WELL, I DON'T KNOW. THEY SOLD SOME." WE DON'T HAVE THE CONNECTION. WE CAN'T TRACK THE PALLETS AND MOVE IT OVER. BUT TO ME IT'S LIKE SAYING, "WELL, I'M NOT SURE I HAVE THAT MANY BOLL WEEVILS IN MY BISCUITS." THE PROBLEM IS THEY'RE IN THERE. HE STILL WANTS TO SAY THERE ISN'T ENOUGH PRECISION ABOUT HOW MUCH NON-DEFENDANT DATA IS THERE. IT'S NOT GOOD ENOUGH, ESPECIALLY IF YOU'RE GOING TO SAY THIS IS A FALSE POSITIVE AND CRITICIZE MY MODEL THE WAY HE HAS.

THE LAST THING I WANT TO SAY ABOUT THE FALSE POSITIVES IS HE'S MISCONSTRUED ONE OF MY ANALYSIS. HE'S CALLED A LOT REGRESSION ANALYSIS, AND I DO USE REGRESSION IN A COUPLE OF WAYS, BUT MY BASE MODEL THAT COMES UP WITH THE OVERCHARGE ESTIMATE, IN MY MIND, AND I HAVE THESE SENSITIVITIES OF IT'S WHITE OR LIGHT TUNA, CAN SIZE, CUSTOMER TYPE, THOSE ARE ALL REGRESSION ANALYSES TO COME WITH OVERCHARGES.

I DO SEE WHEN YOU ASK THE QUESTION, WELL, WHAT PERCENTAGE OF CUSTOMERS HAVE ACTUAL PRICES THAT ARE ABOVE THE "BUT FOR" PRICE? HE'S FLIPPED THAT ON ITS HEAD AND SAID, "OH, THIS IS THE MEASURE OF IMPACT." REMEMBER HE SAID ECONOMIC MEASURE OF IMPACT IS THE DIFFERENCE. I DON'T ANYWHERE SAY THAT. I DON'T SAY, "GO TO THE ACTUAL PRICE, GO TO SOME PREDICTED PRICE." I'M DOING SOMETHING DIFFERENT. IF YOU REMEMBER HE SAID, "OH, I'VE GOT ANOTHER WINDOW. I'LL LOOK

THROUGH THE BENCHMARK AND, LOOK, THERE'S PRICES THAT ARE BELOW THE BENCHMARK. THIS IS HARM. DR. MANGUM'S WRONG," BUT NO ONE IS SAYING THERE'S HARM IN THE BENCHMARK. IN FACT, I NOTED THERE'S DISPERSION OF PRICES. WHAT I'M TALKING ABOUT WHEN I SAID THE ANALYSIS OF LOOKING DURING A CONSPIRACY AND HOW MANY OF THE PURCHASES -- HOW MANY CLASS MEMBERS HAD AT LEAST ONE PURCHASE OF -- ACTUAL PURCHASE THAT WAS ABOVE THE BENCHMARK? I'M JUST SAYING I KNOW THERE'S A DISTRIBUTION OF PRICES, AT ANY POINT IN TIME. ONCE WE GO TO THE CONSPIRACY, DO WE SEE THAT DISTRIBUTION SHIFT UP SUBSTANTIALLY, ALMOST HIGH ENOUGH THAT THEY'RE ALL ABOVE THE "BUT FOR" PRICE, THAT'S ALL I'M SAYING. IT'S A WAY TO THINK ABOUT IMPACT. BUT THAT'S NOT A DAMAGE. I'M NOT TAKING, AS HE SUGGESTED, AND ASSUMING EVERY SINGLE PERSON HAD THIS 10 PERCENT -- THIS PREDICTED PRICE AND SUBTRACTING 10, THAT'S NOT WHAT I DO.

DAMAGES ARE LOOKING AT THE ACTUAL PRICES AND SUBTRACTING 10, IF YOU USE THE BASE MODEL. THE COURT MIGHT CHOOSE ANOTHER ONE OF THOSE MODELS THAT MIGHT BREAK OUT BY CUSTOMER TYPE, AND THAT MIGHT BE VALUABLE. AND THEN AGAIN THESE ISSUES ARE THE DIFFERENCES IN MAGNITUDE, MAYBE IT'S 7 PERCENT, 15 PERCENT. THESE ARE STILL SIGNIFICANT OVERCHARGES FOR THE CONSPIRACY. THAT MIGHT BE THE WAY TO GO, BUT HE DID MISCONSTRUE THIS ISSUE OF THE PERSON EFFECTED BY LOOKING AT THE PREDICTED "BUT FOR" PRICE VERSUS THE ACTUALS.

Q. SO ON THAT THEN, FOR PURPOSES OF CLASS CERTIFICATION, FOR

WHAT YOU'VE DONE HERE, IS ATTEMPTED TO SHOW COMMON CLASS-WIDE IMPACT, MEANING THAT ALL OR NEARLY ALL OF THE CLASS MEMBERS PAID MORE FOR AT LEAST ONE CAN -- ONE TRANSACTION OF PACKAGED TUNA DURING THE CLASS PERIOD. YOU'RE NOT TRYING TO QUANTIFY THE DAMAGES AT THIS POINT; IS THAT TRUE?

A. CORRECT. I COME UP WITH A QUANTIFICATION FOR THE COURT'S REFERENCE OF WHAT IT WOULD LOOK LIKE USING MY MODEL, BUT THERE'S A BIG DIFFERENCE, AT LEAST IN MY MIND, BETWEEN SAYING -- OR AT LEAST ASKING THE QUESTION, IS THERE COMMON IMPACT SUCH THAT ALL OR NEARLY ALL CLASS MEMBERS ARE EFFECTED VERSUS IS THERE COMMON IMPACT VERSUS ALL CLASS MEMBERS HAD THE SAME OR NEARLY THE SAME OVERCHARGE? THAT'S A VERY DIFFERENT QUESTION, AND DR. JOHNSON AND I ARE TALKING ABOUT IT DIFFERENTLY.

MR. LEB SOCK: OKAY, YOUR HONOR, I DON'T THINK I HAVE ANY OTHER QUESTIONS.

THE COURT: THANK YOU. NOR DO I, NOR DO YOU, COUNSEL, BECAUSE THIS IS A LITTLE OUT OF THE ORDINARY. THIS IS THE OPTION YOU CAN HAVE. YOU GET FOUR MINUTES OR YOU CAN GIVE YOUR TIME TO MR. GALLO.

MS. LEE: CAN WE HAVE A MINUTE?

THE COURT: CERTAINLY.

(DISCUSSION HELD OFF THE RECORD.)

MR. GALLO: YOUR HONOR, I'M JUST GOING TO ASK TWO OR THREE QUESTIONS.

THE COURT: GO AHEAD.

RECROSS EXAMINATION

BY MR. GALLO:

Q. DR. MANGUM, CAN YOU CITE FOR THE COURT A TREATISE OR LEARNED TREATISE OR ECONOMIC JOURNAL THAT SAYS IT IS OKAY TO USE FOR A BENCHMARK PERIOD A PERIOD THAT IS TAINTED BY ILLEGAL CONDUCT?

A. I'M NOT SURE I CAN. I DIDN'T IN FACT. I'VE SEPARATED OUT PERIODS. I THINK I HAD SOMETHING ELSE GOING ON.

Q. YOU CANNOT CITE ANY SCHOLARLY WORK TO THE COURT THAT SAYS IT'S OKAY TO USE A TAINTED PERIOD AS A BENCHMARK?

A. NOT THAT I CAN THINK OF, AND I'M NOT PURPORTING THAT'S A THING TO DO EITHER.

Q. OR THAT SAYS IF YOU DO THAT, ALL IT MEANS IS THAT YOUR REGRESSION IS CONSERVATIVE.

A. I DON'T KNOW IF THE WORD CONSERVATIVE APPLIES. I THINK WHAT I SAID WAS IT WILL DILUTE YOUR ESTIMATE OF THE OVERCHARGES.

Q. THAT'S WHY BEFORE I GOT INVOLVED IN CROSS-EXAMINATION WITH YOU, YOU MUST HAVE SAID SIX TIMES THIS MORNING THAT YOU WERE USING AN UNTAINTED PERIOD. THAT'S IMPORTANT TO A VALID REGRESSION, ISN'T IT?

A. I DON'T THINK I USED "UNTAINTED," BUT I USED "BUSINESS AS USUAL" QUITE A FEW TIMES.

Q. YOU KNOW THERE ARE ANY NUMBER OF SCHOLARLY WORKS, INCLUDING THE ABA TEACHING ON DAMAGES, THAT SAY THE ASSUMPTION

OF A VALID BENCHMARK PERIOD IS THAT IT IS UNTAINTED, CORRECT?

A. YES, AND I BELIEVE THAT'S WHAT I DO. I'VE USED UNTAINTED DATA IN MY BENCHMARKS.

Q. IN YOUR DIRECT TESTIMONY, IN YOUR OPENING REPORT, IN YOUR REPLY REPORT, YOU CHARACTERIZED YOUR BENCHMARK PERIOD AS UNTAINTED, CORRECT?

A. I THINK I SAID "BUSINESS AS USUAL," BUT I WON'T QUIBBLE. MAYBE IT MEANS THE SAME THING.

MR. GALLO: THANK YOU, YOUR HONOR.

THE COURT: MS. SWEENEY, GO AHEAD, YOU GET THE FINAL WORD, AND THAT'S APPROPRIATE ON THIS MOTION NOW.

MS. SWEENEY: I DON'T HAVE ANY QUESTIONS FOR DR. JOHNSON.

THE COURT: YOU MAY STEP DOWN. THANK YOU VERY MUCH.

MS. SWEENEY: I JUST HAVE A COUPLE OF POINTS, YOUR HONOR. FIRST OF ALL, WITH RESPECT TO THE ALL OR NEARLY ALL STANDARD, I WOULD JUST LIKE TO POINT OUT THAT THE DEFENDANTS RELY VERY HEAVILY ON OUT OF CIRCUIT AUTHORITY, THE ASACOL CASE, THE *RAIL FREIGHT* CASE, IN THE ASACOL CASE THE COURT WAS CONCERNED BECAUSE IT COULD NOT IDENTIFY WHO THOSE UNINJURED CLASS MEMBERS WERE. THE *RAIL FREIGHT* CASE THE COURT FOUND THAT THE PLAINTIFFS OWN EXPERT -- PLAINTIFFS MAY DISAGREE, BUT THEIR OWN EXPERT FOUND A 12.7 PERCENT OF THE CLASS WAS UNINJURED, AND MOREOVER THAT CASE IS CURRENTLY BEFORE THE COURT OF APPEAL ON A RULE 23(F) PETITION.

THE DEFENDANTS COMPLETELY IGNORE BINDING NINTH CIRCUIT AUTHORITY, THE *TORRES* CASE TALKS ABOUT UNINJURED CLASS MEMBERS. THAT'S NOT AN ANTITRUST CASE, BUT THE CLAIM IN THAT CASE HAD AN ELEMENT OF INJURY OR IMPACT, JUST AS IN AN ANTITRUST CASE, AND THAT'S NOT CITED IN THEIR BRIEF. IN THAT CASE THE COURT DISAGREED WITH THE DEFENDANTS' CHALLENGE THAT IT COULDN'T CERTIFY THE CLASS BECAUSE THE CLASS CONTAINED UNINJURED CLASS MEMBERS. THE COURT SAID IT DOESN'T DEFEAT PREDOMINANCE, AND, MOREOVER, THE DISTRICT COURT IS WELL SITUATED TO WINNOW OUT ANY NONINJURED CLASS MEMBERS AT THE DAMAGES PHASE, SO WE HAVE TO LOOK AT WHAT THE LAW IS, FIRST OF ALL.

MY SECOND POINT IS WITH RESPECT TO THE CRITICISMS OF THE POOLED MODEL, AND AGAIN THE CHOICE OF LAW THAT WE'RE LOOKING AT IT IMPORTANT. THE DEFENDANTS RELY HEAVILY ON A CASE CALLED *PLASTICS ADDITIVES* FROM THE EASTERN DISTRICT OF PENNSYLVANIA. THEY IGNORE DECISIONS WITHIN THIS CIRCUIT THAT HAVE APPROVED THE USE OF A POOLED MODEL, A SINGLE OVERCHARGE ESTIMATE. I THINK *CAPACITORS* IS ONE OF THEM, *CRT*, *AFTERMARKET AUTO LIGHTS*, FROM THE CENTRAL DISTRICT, *LIDODERM*, ALSO FROM THE NORTHERN DISTRICT, AND INSTEAD THEY RELIED ON THIS *PLASTICS* CASE.

WELL, IN *PLASTICS*, THAT CASE, THE COURT FOUND THAT THE PRODUCTS WERE NOT INTERCHANGEABLE. THE COURT FOUND THAT THERE WAS NO MARKET STRUCTURE, THAT THERE WAS A LOT OF COMPETITION FROM NON-DEFENDANT SUPPLIERS. MOST IMPORTANTLY, THE DEFENDANT

IN THAT CASE DEPOOLED THE REGRESSION ON A SAMPLE OF PURCHASERS, BUT HE DID NOT DO WHAT DR. JOHNSON DID, AND WHEN I SAY THAT WHAT I MEAN IS HE DID NOT TAKE -- HE DID MAKE THE SAME SAMPLE SIZE ERROR. HE ONLY RAN THE REGRESSIONS -- THIS IS THE DEFENSE EXPERT -- FOR 115 CUSTOMERS BECAUSE THOSE WERE THE ONLY ONES THAT PURCHASED THE PRODUCTS IN BOTH THE CONSPIRACY AND THE POST-CONSPIRACY PERIODS, AND ALSO THAT HAD WHAT THE EXPERT VIEWED AS SUFFICIENT OBSERVATIONS.

NOW, SO THAT WAS VERY CRITICAL TO THE COURT'S RULING IN THAT CASE. SO ON THAT POINT, I WOULD JUST REFER YOUR HONOR BACK TO DR. MANGUM'S SLIDE 23, AND IN ADDITION TABLES 10 AND 11 OF HIS REPLY REPORT. ALL OF THOSE EXHIBITS GO TO THE SAMPLE SIZE QUESTION.

AND THEN JUST TO ADDRESS A COUPLE OF POINTS THAT MS. LEE MADE THIS MORNING, SHE SAID THAT THE DEFENDANTS HAVE ADMITTED THEIR GUILT. THEY HAVE OWNED UP TO IT. WELL, I WOULD JUST REFER YOUR HONOR TO THE BUMBLEBEE GUILTY PLEA, WHICH POINTS OUT THAT THE SENTENCING IN THAT CASE WAS BASED ON THE FACT THAT RESTITUTION WAS NOT BEING PROVIDED IN THAT CASE BECAUSE THE DEPARTMENT OF JUSTICE IS DEPENDING UPON THE PLAINTIFFS IN THIS CASE TO GET RESTITUTION FOR THE PLAINTIFFS, ALL THE CLASS MEMBERS, NOT JUST THE BIG ONES, NOT JUST THOSE THAT OCCUPIED TWO-THIRDS OF THE COMMERCE, BUT ALL OF THE INJURED MEMBERS OF THE CLASS.

THAT'S ALL, YOUR HONOR. THANK YOU.

THE COURT: THANK YOU VERY MUCH. I THINK THAT CONCLUDES OUR SESSION FOR TODAY. WE'LL BE BACK TOMORROW, AND SOME OF YOU WILL BE BACK -- WELL, YOU FOLKS WILL BE BACK, AND I GUESS THIS TABLE WILL CHANGE A LITTLE BIT. SO ANYTHING YOU DON'T NEED THIS EVENING YOU CAN LEAVE HERE, FOLKS, OTHERWISE WE WILL SEE YOU SHARP AT 9:00 TOMORROW.

(COURT WAS AT RECESS.)

C E R T I F I C A T E

I, GAYLE WAKEFIELD, CERTIFY THAT I AM A DULY QUALIFIED AND ACTING OFFICIAL COURT REPORTER FOR THE UNITED STATES DISTRICT COURT, THAT THE FOREGOING IS A TRUE AND ACCURATE TRANSCRIPT OF THE PROCEEDINGS AS TAKEN BY ME IN THE ABOVE-ENTITLED MATTER ON JANUARY 14, 2019; AND THAT THE FORMAT USED COMPLIES WITH THE RULES AND REQUIREMENTS OF THE UNITED STATES JUDICIAL CONFERENCE.

DATED: JANUARY 22, 2019

/S/ GAYLE WAKEFIELD
GAYLE WAKEFIELD, RPR, CRR
OFFICIAL COURT REPORTER