



## **Panel: Bruce Springsteen on Expert Witnesses**

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Moderator: Lewis Wiener

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A graphic featuring a photograph of Bruce Springsteen from the waist down, wearing a white t-shirt, a studded belt, blue jeans, and a red leather cap tucked into his back pocket. The background is a solid red color with white text.

**Bruce Springsteen  
on Expert Witnesses**

You can't start a fire without a spark  
This gun's for hire  
Even if we're just dancing in the dark

Moderator:  
**Lewis Wiener, Sutherland**

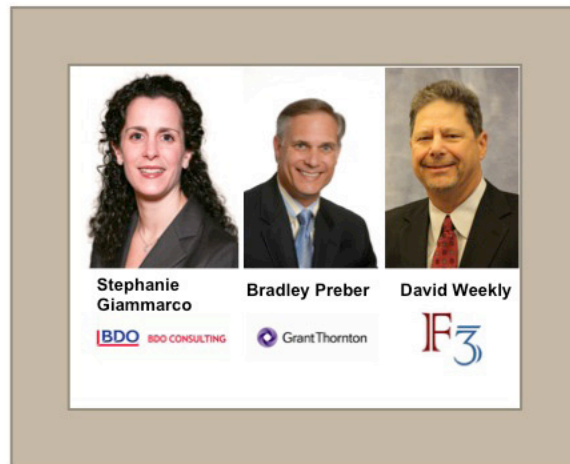
Panel: **Stephanie Giammarco, BDO Consulting**  
**David Harris, Lowenstein Sandler**  
**Bradley Preber, Grant Thornton**  
**David Weekly, Fenix Financial Forensics**

## You Can't Start a Fire....



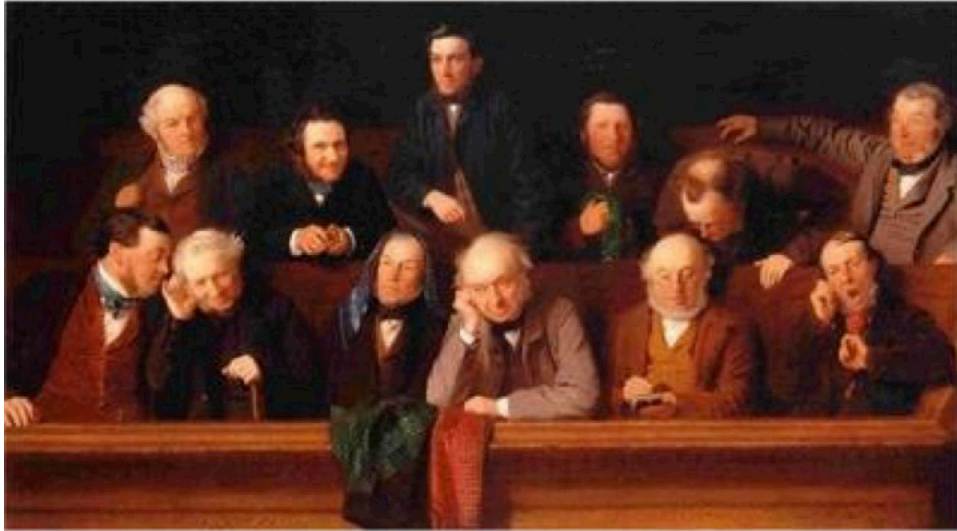
2

## This Gun's for Hire....



3

## Even if We're Just Dancing in the Dark



4

## Expertise

- Witness may qualify as expert based on:
  - Knowledge
  - Skill
  - Experience
  - Training, or
  - Education

*Federal Rules of Evidence, 702*



5

## Role of the Expert

- The expert's "technical, scientific, or other specialized knowledge" must "help the trier of fact to understand the evidence or to determine a fact in issue." *Federal Rules of Evidence 702 (a)*

6

## Testifying Experts

- A testifying expert who is retained or specifically employed to provide testimony or whose duties as a party's employee regularly involve giving expert testimony.
  - Testifying-only expert has acquired facts or developed opinions solely in anticipation of litigation or for trial.
    - Parties entitled to full discovery of each other's testifying-only experts, except for drafts of the expert reports and most attorney-expert communications (*Federal Rules of Civil Procedure 26*)

7

## Testifying Experts

- Federal Rules of Civil Procedure Rule 26
  - Disclosure of expert testimony
    - A. Witnesses who must provide a written report:
      - i. Complete statement of all opinions
      - ii. Factors or data considered by the witness
      - iii. Exhibits that will be used
      - iv. Witness' qualifications
      - v. Listing of all other cases in which witness has testified in previous 4 years
      - vi. Statement of compensation paid

8

## Testifying Experts

- B. Witnesses who do not provide a written report
  - i. Must state the subject matter on which the witness is expected to present evidence under Federal Rule of Evidence 702, 703, or 705; and
  - ii. A summary of the facts and opinions to which the witness is expected to testify

9

## Consulting Experts

- An expert who has been consulted, retained, or specifically employed by a party in anticipation of litigation or to prepare for trial, but who will not testify at trial.
  - Has no firsthand factual knowledge about the case and no secondhand knowledge except for knowledge acquired through the consultation
  - Work product, opinions, or mental impressions have not been reviewed by a testifying expert

10

## Daubert Challenges

- In 1993, the Supreme Court's Daubert opinion made judges "gatekeepers" against "junk science."  
*Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993)
- In Kumho Tire, the Supreme Court expanded Daubert to cover all testifying experts, not just those offering scientific opinion.  
*Kumho Tire Co. Ltd. v. Carmichael*, 526 U.S. 137 (1999)

11



## Daubert Challenges

- *Daubert* asks whether the evidence is relevant and reliable?
- After *Kumho Tire*, financial experts must also be prepared to meet this test.

12

## Daubert Challenges

- From 2000 to 2011 at least 100 *Daubert* challenges were brought against financial experts.
  - 28% resulted in complete exclusions
  - 17% in partial exclusions. *PWC Report at 7*
- On average, *Daubert* challenges against financial experts appear to succeed in part approximately 45% of the time. *PWC Report at 7*
- Economists, accountants, and appraisers are most often challenged. *PWC Report at 7*

13

## Daubert Challenges

- Bases for Exclusion of Financial Experts

- Unreliable (most common basis)
  - Misuse of Accepted Methodology
  - Incorrect Application of Methodology
- Irrelevant
- Unqualified
- Unfamiliarity with Supporting Documents

14

## Daubert Challenges

- To best protect against *Daubert* challenges, make sure your experts:

- Know and apply the relevant professional standards
- Know the relevant professional literature
- Know the relevant professional organizations
- Use generally accepted analytical methods
- Use multiple analytical methods and synthesize their conclusions
- Disclose all significant analytical assumptions and variables
- Subject analysis to peer review
- Test all analyses and conclusions for reasonableness

15



## Questions?

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## TITLE V. DISCLOSURES AND DISCOVERY

**Rule 26. Duty to Disclose; General Provisions Governing Discovery**

## (a) REQUIRED DISCLOSURES.

(1) *Initial Disclosure.*

(A) *In General.* Except as exempted by Rule 26(a)(1)(B) or as otherwise stipulated or ordered by the court, a party must, without awaiting a discovery request, provide to the other parties:

(i) the name and, if known, the address and telephone number of each individual likely to have discoverable information—along with the subjects of that information—that the disclosing party may use to support its claims or defenses, unless the use would be solely for impeachment;

(ii) a copy—or a description by category and location—of all documents, electronically stored information, and tangible things that the disclosing party has in its possession, custody, or control and may use to support its claims or defenses, unless the use would be solely for impeachment;

(iii) a computation of each category of damages claimed by the disclosing party—who must also make available for inspection and copying as under Rule 34 the documents or other evidentiary material, unless privileged or protected from disclosure, on which each computation is based, including materials bearing on the nature and extent of injuries suffered; and

(iv) for inspection and copying as under Rule 34, any insurance agreement under which an insurance business may be liable to satisfy all or part of a possible judgment in the action or to indemnify or reimburse for payments made to satisfy the judgment.

(B) *Proceedings Exempt from Initial Disclosure.* The following proceedings are exempt from initial disclosure:

(i) an action for review on an administrative record;

(ii) a forfeiture action in rem arising from a federal statute;

(iii) a petition for habeas corpus or any other proceeding to challenge a criminal conviction or sentence;

(iv) an action brought without an attorney by a person in the custody of the United States, a state, or a state subdivision;

(v) an action to enforce or quash an administrative summons or subpoena;

(vi) an action by the United States to recover benefit payments;

(vii) an action by the United States to collect on a student loan guaranteed by the United States;

(viii) a proceeding ancillary to a proceeding in another court; and

(ix) an action to enforce an arbitration award.

(C) *Time for Initial Disclosures—In General.* A party must make the initial disclosures at or within 14 days after the parties' Rule 26(f) conference unless a different time is set

by stipulation or court order, or unless a party objects during the conference that initial disclosures are not appropriate in this action and states the objection in the proposed discovery plan. In ruling on the objection, the court must determine what disclosures, if any, are to be made and must set the time for disclosure.

(D) *Time for Initial Disclosures—For Parties Served or Joined Later.* A party that is first served or otherwise joined after the Rule 26(f) conference must make the initial disclosures within 30 days after being served or joined, unless a different time is set by stipulation or court order.

(E) *Basis for Initial Disclosure; Unacceptable Excuses.* A party must make its initial disclosures based on the information then reasonably available to it. A party is not excused from making its disclosures because it has not fully investigated the case or because it challenges the sufficiency of another party's disclosures or because another party has not made its disclosures.

(2) *Disclosure of Expert Testimony.*

(A) *In General.* In addition to the disclosures required by Rule 26(a)(1), a party must disclose to the other parties the identity of any witness it may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 705.

(B) *Witnesses Who Must Provide a Written Report.* Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report—prepared and signed by the witness—if the witness is one retained or specially employed to provide expert testimony in the case or one whose duties as the party's employee regularly involve giving expert testimony. The report must contain:

(i) a complete statement of all opinions the witness will express and the basis and reasons for them;

(ii) the facts or data considered by the witness in forming them;

(iii) any exhibits that will be used to summarize or support them;

(iv) the witness's qualifications, including a list of all publications authored in the previous 10 years;

(v) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and

(vi) a statement of the compensation to be paid for the study and testimony in the case.

(C) *Witnesses Who Do Not Provide a Written Report.* Unless otherwise stipulated or ordered by the court, if the witness is not required to provide a written report, this disclosure must state:

(i) the subject matter on which the witness is expected to present evidence under Federal Rule of Evidence 702, 703, or 705; and

(ii) a summary of the facts and opinions to which the witness is expected to testify.

(D) *Time to Disclose Expert Testimony.* A party must make these disclosures at the times and in the sequence that the court orders. Absent a stipulation or a court order, the disclosures must be made:

(i) at least 90 days before the date set for trial or for the case to be ready for trial; or

(ii) if the evidence is intended solely to contradict or rebut evidence on the same subject matter identified by another party under Rule 26(a)(2)(B) or (C), within 30 days after the other party's disclosure.

(E) *Supplementing the Disclosure.* The parties must supplement these disclosures when required under Rule 26(e).

(3) *Pretrial Disclosures.*

(A) *In General.* In addition to the disclosures required by Rule 26(a)(1) and (2), a party must provide to the other parties and promptly file the following information about the evidence that it may present at trial other than solely for impeachment:

(i) the name and, if not previously provided, the address and telephone number of each witness—separately identifying those the party expects to present and those it may call if the need arises;

(ii) the designation of those witnesses whose testimony the party expects to present by deposition and, if not taken stenographically, a transcript of the pertinent parts of the deposition; and

(iii) an identification of each document or other exhibit, including summaries of other evidence—separately identifying those items the party expects to offer and those it may offer if the need arises.

(B) *Time for Pretrial Disclosures; Objections.* Unless the court orders otherwise, these disclosures must be made at least 30 days before trial. Within 14 days after they are made, unless the court sets a different time, a party may serve and promptly file a list of the following objections: any objections to the use under Rule 32(a) of a deposition designated by another party under Rule 26(a)(3)(A)(ii); and any objection, together with the grounds for it, that may be made to the admissibility of materials identified under Rule 26(a)(3)(A)(iii). An objection not so made—except for one under Federal Rule of Evidence 402 or 403—is waived unless excused by the court for good cause.

(4) *Form of Disclosures.* Unless the court orders otherwise, all disclosures under Rule 26(a) must be in writing, signed, and served.

(b) **DISCOVERY SCOPE AND LIMITS.**

(1) *Scope in General.* Unless otherwise limited by court order, the scope of discovery is as follows: Parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense—including the existence, description, nature, custody, condition, and location of any documents or other tangible things and the identity and location of persons who know of any discoverable matter. For good cause, the court may order discovery of any matter relevant to the subject matter involved in the action. Relevant information need not be admissible at the trial if the discovery appears reasonably calculated to lead to the discovery of admissible evidence. All discovery is subject to the limitations imposed by Rule 26(b)(2)(C).

(2) *Limitations on Frequency and Extent.*

(A) *When Permitted.* By order, the court may alter the limits in these rules on the number of depositions and interrogatories or on the length of depositions under Rule 30. By order or local rule, the court may also limit the number of requests under Rule 36.

(B) *Specific Limitations on Electronically Stored Information.* A party need not provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the party from whom discovery is sought must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(C) *When Required.* On motion or on its own, the court must limit the frequency or extent of discovery otherwise allowed by these rules or by local rule if it determines that:

(i) the discovery sought is unreasonably cumulative or duplicative, or can be obtained from some other source that is more convenient, less burdensome, or less expensive;

(ii) the party seeking discovery has had ample opportunity to obtain the information by discovery in the action; or

(iii) the burden or expense of the proposed discovery outweighs its likely benefit, considering the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the action, and the importance of the discovery in resolving the issues.

(3) *Trial Preparation: Materials.*

(A) *Documents and Tangible Things.* Ordinarily, a party may not discover documents and tangible things that are prepared in anticipation of litigation or for trial by or for another party or its representative (including the other party's attorney, consultant, surety, indemnitor, insurer, or agent). But, subject to Rule 26(b)(4), those materials may be discovered if:

(i) they are otherwise discoverable under Rule 26(b)(1); and

(ii) the party shows that it has substantial need for the materials to prepare its case and cannot, without undue hardship, obtain their substantial equivalent by other means.

(B) *Protection Against Disclosure.* If the court orders discovery of those materials, it must protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of a party's attorney or other representative concerning the litigation.

(C) *Previous Statement.* Any party or other person may, on request and without the required showing, obtain the person's own previous statement about the action or its subject matter. If the request is refused, the person may move for a court order, and Rule 37(a)(5) applies to the award of expenses. A previous statement is either:

- (i) a written statement that the person has signed or otherwise adopted or approved; or
- (ii) a contemporaneous stenographic, mechanical, electrical, or other recording—or a transcription of it—that recites substantially verbatim the person's oral statement.

(4) *Trial Preparation: Experts.*

(A) *Deposition of an Expert Who May Testify.* A party may depose any person who has been identified as an expert whose opinions may be presented at trial. If Rule 26(a)(2)(B) requires a report from the expert, the deposition may be conducted only after the report is provided.

(B) *Trial-Preparation Protection for Draft Reports or Disclosures.* Rules 26(b)(3)(A) and (B) protect drafts of any report or disclosure required under Rule 26(a)(2), regardless of the form in which the draft is recorded.

(C) *Trial-Preparation Protection for Communications Between a Party's Attorney and Expert Witnesses.* Rules 26(b)(3)(A) and (B) protect communications between the party's attorney and any witness required to provide a report under Rule 26(a)(2)(B), regardless of the form of the communications, except to the extent that the communications:

- (i) relate to compensation for the expert's study or testimony;
- (ii) identify facts or data that the party's attorney provided and that the expert considered in forming the opinions to be expressed; or
- (iii) identify assumptions that the party's attorney provided and that the expert relied on in forming the opinions to be expressed.

(D) *Expert Employed Only for Trial Preparation.* Ordinarily, a party may not, by interrogatories or deposition, discover facts known or opinions held by an expert who has been retained or specially employed by another party in anticipation of litigation or to prepare for trial and who is not expected to be called as a witness at trial. But a party may do so only:

- (i) as provided in Rule 35(b); or
- (ii) on showing exceptional circumstances under which it is impracticable for the party to obtain facts or opinions on the same subject by other means.

(E) *Payment.* Unless manifest injustice would result, the court must require that the party seeking discovery:

- (i) pay the expert a reasonable fee for time spent in responding to discovery under Rule 26(b)(4)(A) or (D); and
- (ii) for discovery under (D), also pay the other party a fair portion of the fees and expenses it reasonably incurred in obtaining the expert's facts and opinions.



(5) *Claiming Privilege or Protecting Trial-Preparation Materials.*

(A) *Information Withheld.* When a party withholds information otherwise discoverable by claiming that the information is privileged or subject to protection as trial-preparation material, the party must:

- (i) expressly make the claim; and
- (ii) describe the nature of the documents, communications, or tangible things not produced or disclosed—and do so in a manner that, without revealing information itself privileged or protected, will enable other parties to assess the claim.

(B) *Information Produced.* If information produced in discovery is subject to a claim of privilege or of protection as trial-preparation material, the party making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information to the court under seal for a determination of the claim. The producing party must preserve the information until the claim is resolved.

(c) PROTECTIVE ORDERS.

(1) *In General.* A party or any person from whom discovery is sought may move for a protective order in the court where the action is pending—or as an alternative on matters relating to a deposition, in the court for the district where the deposition will be taken. The motion must include a certification that the movant has in good faith conferred or attempted to confer with other affected parties in an effort to resolve the dispute without court action. The court may, for good cause, issue an order to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense, including one or more of the following:

- (A) forbidding the disclosure or discovery;
- (B) specifying terms, including time and place, for the disclosure or discovery;
- (C) prescribing a discovery method other than the one selected by the party seeking discovery;
- (D) forbidding inquiry into certain matters, or limiting the scope of disclosure or discovery to certain matters;
- (E) designating the persons who may be present while the discovery is conducted;
- (F) requiring that a deposition be sealed and opened only on court order;
- (G) requiring that a trade secret or other confidential research, development, or commercial information not be revealed or be revealed only in a specified way; and
- (H) requiring that the parties simultaneously file specified documents or information in sealed envelopes, to be opened as the court directs.

(2) *Ordering Discovery.* If a motion for a protective order is wholly or partly denied, the court may, on just terms, order that any party or person provide or permit discovery.

(3) *Awarding Expenses*. Rule 37(a)(5) applies to the award of expenses.

(d) TIMING AND SEQUENCE OF DISCOVERY.

(1) *Timing*. A party may not seek discovery from any source before the parties have conferred as required by Rule 26(f), except in a proceeding exempted from initial disclosure under Rule 26(a)(1)(B), or when authorized by these rules, by stipulation, or by court order.

(2) *Sequence*. Unless, on motion, the court orders otherwise for the parties' and witnesses' convenience and in the interests of justice:

(A) methods of discovery may be used in any sequence; and

(B) discovery by one party does not require any other party to delay its discovery.

(e) SUPPLEMENTING DISCLOSURES AND RESPONSES.

(1) *In General*. A party who has made a disclosure under Rule 26(a)—or who has responded to an interrogatory, request for production, or request for admission—must supplement or correct its disclosure or response:

(A) in a timely manner if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing; or

(B) as ordered by the court.

(2) *Expert Witness*. For an expert whose report must be disclosed under Rule 26(a)(2)(B), the party's duty to supplement extends both to information included in the report and to information given during the expert's deposition. Any additions or changes to this information must be disclosed by the time the party's pretrial disclosures under Rule 26(a)(3) are due.

(f) CONFERENCE OF THE PARTIES; PLANNING FOR DISCOVERY.

(1) *Conference Timing*. Except in a proceeding exempted from initial disclosure under Rule 26(a)(1)(B) or when the court orders otherwise, the parties must confer as soon as practicable—and in any event at least 21 days before a scheduling conference is to be held or a scheduling order is due under Rule 16(b).

(2) *Conference Content; Parties' Responsibilities*. In conferring, the parties must consider the nature and basis of their claims and defenses and the possibilities for promptly settling or resolving the case; make or arrange for the disclosures required by Rule 26(a)(1); discuss any issues about preserving discoverable information; and develop a proposed discovery plan. The attorneys of record and all unrepresented parties that have appeared in the case are jointly responsible for arranging the conference, for attempting in good faith to agree on the proposed discovery plan, and for submitting to the court within 14 days after the conference a written report outlining the plan. The court may order the parties or attorneys to attend the conference in person.

(3) *Discovery Plan*. A discovery plan must state the parties' views and proposals on:

(A) what changes should be made in the timing, form, or requirement for disclosures under Rule 26(a), including a

statement of when initial disclosures were made or will be made;

(B) the subjects on which discovery may be needed, when discovery should be completed, and whether discovery should be conducted in phases or be limited to or focused on particular issues;

(C) any issues about disclosure or discovery of electronically stored information, including the form or forms in which it should be produced;

(D) any issues about claims of privilege or of protection as trial-preparation materials, including—if the parties agree on a procedure to assert these claims after production—whether to ask the court to include their agreement in an order;

(E) what changes should be made in the limitations on discovery imposed under these rules or by local rule, and what other limitations should be imposed; and

(F) any other orders that the court should issue under Rule 26(c) or under Rule 16(b) and (c).

(4) *Expedited Schedule*. If necessary to comply with its expedited schedule for Rule 16(b) conferences, a court may by local rule:

(A) require the parties' conference to occur less than 21 days before the scheduling conference is held or a scheduling order is due under Rule 16(b); and

(B) require the written report outlining the discovery plan to be filed less than 14 days after the parties' conference, or excuse the parties from submitting a written report and permit them to report orally on their discovery plan at the Rule 16(b) conference.

(g) **SIGNING DISCLOSURES AND DISCOVERY REQUESTS, RESPONSES, AND OBJECTIONS.**

(1) *Signature Required; Effect of Signature*. Every disclosure under Rule 26(a)(1) or (a)(3) and every discovery request, response, or objection must be signed by at least one attorney of record in the attorney's own name—or by the party personally, if unrepresented—and must state the signer's address, e-mail address, and telephone number. By signing, an attorney or party certifies that to the best of the person's knowledge, information, and belief formed after a reasonable inquiry:

(A) with respect to a disclosure, it is complete and correct as of the time it is made; and

(B) with respect to a discovery request, response, or objection, it is:

(i) consistent with these rules and warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law, or for establishing new law;

(ii) not interposed for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation; and

(iii) neither unreasonable nor unduly burdensome or expensive, considering the needs of the case, prior discovery in the case, the amount in controversy, and the importance of the issues at stake in the action.

(2) *Failure to Sign.* Other parties have no duty to act on an unsigned disclosure, request, response, or objection until it is signed, and the court must strike it unless a signature is promptly supplied after the omission is called to the attorney's or party's attention.

(3) *Sanction for Improper Certification.* If a certification violates this rule without substantial justification, the court, on motion or on its own, must impose an appropriate sanction on the signer, the party on whose behalf the signer was acting, or both. The sanction may include an order to pay the reasonable expenses, including attorney's fees, caused by the violation.

(As amended Dec. 27, 1946, eff. Mar. 19, 1948; Jan. 21, 1963, eff. July 1, 1963; Feb. 28, 1966, eff. July 1, 1966; Mar. 30, 1970, eff. July 1, 1970; Apr. 29, 1980, eff. Aug. 1, 1980; Apr. 28, 1983, eff. Aug. 1, 1983; Mar. 2, 1987, eff. Aug. 1, 1987; Apr. 22, 1993, eff. Dec. 1, 1993; Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 12, 2006, eff. Dec. 1, 2006; Apr. 30, 2007, eff. Dec. 1, 2007; Apr. 28, 2010, eff. Dec. 1, 2010.)

### Rule 27. Depositions to Perpetuate Testimony

(a) BEFORE AN ACTION IS FILED.

(1) *Petition.* A person who wants to perpetuate testimony about any matter cognizable in a United States court may file a verified petition in the district court for the district where any expected adverse party resides. The petition must ask for an order authorizing the petitioner to depose the named persons in order to perpetuate their testimony. The petition must be titled in the petitioner's name and must show:

(A) that the petitioner expects to be a party to an action cognizable in a United States court but cannot presently bring it or cause it to be brought;

(B) the subject matter of the expected action and the petitioner's interest;

(C) the facts that the petitioner wants to establish by the proposed testimony and the reasons to perpetuate it;

(D) the names or a description of the persons whom the petitioner expects to be adverse parties and their addresses, so far as known; and

(E) the name, address, and expected substance of the testimony of each deponent.

(2) *Notice and Service.* At least 21 days before the hearing date, the petitioner must serve each expected adverse party with a copy of the petition and a notice stating the time and place of the hearing. The notice may be served either inside or outside the district or state in the manner provided in Rule 4. If that service cannot be made with reasonable diligence on an expected adverse party, the court may order service by publication or otherwise. The court must appoint an attorney to represent persons not served in the manner provided in Rule 4 and to cross-examine the deponent if an unserved person is not otherwise represented. If any expected adverse party is a minor or is incompetent, Rule 17(c) applies.

(3) *Order and Examination.* If satisfied that perpetuating the testimony may prevent a failure or delay of justice, the court must issue an order that designates or describes the persons

(d) a person authorized by statute to be present.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 25, 1988, eff. Nov. 1, 1988; Pub. L. 100-690, title VII, §7075(a), Nov. 18, 1988, 102 Stat. 4405; Apr. 24, 1998, eff. Dec. 1, 1998; Apr. 26, 2011, eff. Dec. 1, 2011.)

#### ARTICLE VII. OPINIONS AND EXPERT TESTIMONY

##### **Rule 701. Opinion Testimony by Lay Witnesses**

If a witness is not testifying as an expert, testimony in the form of an opinion is limited to one that is:

- (a) rationally based on the witness's perception;
- (b) helpful to clearly understanding the witness's testimony or to determining a fact in issue; and
- (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

##### **Rule 702. Testimony by Expert Witnesses**

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

(As amended Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

##### **Rule 703. Bases of an Expert's Opinion Testimony**

An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted. But if the facts or data would otherwise be inadmissible, the proponent of the opinion may disclose them to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

##### **Rule 704. Opinion on an Ultimate Issue**

(a) **IN GENERAL—NOT AUTOMATICALLY OBJECTIONABLE.** An opinion is not objectionable just because it embraces an ultimate issue.

(b) **EXCEPTION.** In a criminal case, an expert witness must not state an opinion about whether the defendant did or did not have a mental state or condition that constitutes an element of the

crime charged or of a defense. Those matters are for the trier of fact alone.

(As amended Pub. L. 98-473, title II, §406, Oct. 12, 1984, 98 Stat. 2067; Apr. 26, 2011, eff. Dec. 1, 2011.)

**Rule 705. Disclosing the Facts or Data Underlying an Expert's Opinion**

Unless the court orders otherwise, an expert may state an opinion—and give the reasons for it—without first testifying to the underlying facts or data. But the expert may be required to disclose those facts or data on cross-examination.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 22, 1993, eff. Dec. 1, 1993; Apr. 26, 2011, eff. Dec. 1, 2011.)

**Rule 706. Court-Appointed Expert Witnesses**

(a) APPOINTMENT PROCESS. On a party's motion or on its own, the court may order the parties to show cause why expert witnesses should not be appointed and may ask the parties to submit nominations. The court may appoint any expert that the parties agree on and any of its own choosing. But the court may only appoint someone who consents to act.

(b) EXPERT'S ROLE. The court must inform the expert of the expert's duties. The court may do so in writing and have a copy filed with the clerk or may do so orally at a conference in which the parties have an opportunity to participate. The expert:

- (1) must advise the parties of any findings the expert makes;
- (2) may be deposed by any party;
- (3) may be called to testify by the court or any party; and
- (4) may be cross-examined by any party, including the party that called the expert.

(c) COMPENSATION. The expert is entitled to a reasonable compensation, as set by the court. The compensation is payable as follows:

- (1) in a criminal case or in a civil case involving just compensation under the Fifth Amendment, from any funds that are provided by law; and
- (2) in any other civil case, by the parties in the proportion and at the time that the court directs—and the compensation is then charged like other costs.

(d) DISCLOSING THE APPOINTMENT TO THE JURY. The court may authorize disclosure to the jury that the court appointed the expert.

(e) PARTIES' CHOICE OF THEIR OWN EXPERTS. This rule does not limit a party in calling its own experts.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 26, 2011, eff. Dec. 1, 2011.)

ARTICLE VIII. HEARSAY

**Rule 801. Definitions That Apply to This Article; Exclusions from Hearsay**

(a) STATEMENT. "Statement" means a person's oral assertion, written assertion, or nonverbal conduct, if the person intended it as an assertion.



(d) a person authorized by statute to be present.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 25, 1988, eff. Nov. 1, 1988; Pub. L. 100-690, title VII, §7075(a), Nov. 18, 1988, 102 Stat. 4405; Apr. 24, 1998, eff. Dec. 1, 1998; Apr. 26, 2011, eff. Dec. 1, 2011.)

#### ARTICLE VII. OPINIONS AND EXPERT TESTIMONY

##### **Rule 701. Opinion Testimony by Lay Witnesses**

If a witness is not testifying as an expert, testimony in the form of an opinion is limited to one that is:

- (a) rationally based on the witness's perception;
- (b) helpful to clearly understanding the witness's testimony or to determining a fact in issue; and
- (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

##### **Rule 702. Testimony by Expert Witnesses**

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

(As amended Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

##### **Rule 703. Bases of an Expert's Opinion Testimony**

An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted. But if the facts or data would otherwise be inadmissible, the proponent of the opinion may disclose them to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

##### **Rule 704. Opinion on an Ultimate Issue**

(a) **IN GENERAL—NOT AUTOMATICALLY OBJECTIONABLE.** An opinion is not objectionable just because it embraces an ultimate issue.

(b) **EXCEPTION.** In a criminal case, an expert witness must not state an opinion about whether the defendant did or did not have a mental state or condition that constitutes an element of the

crime charged or of a defense. Those matters are for the trier of fact alone.

(As amended Pub. L. 98-473, title II, §406, Oct. 12, 1984, 98 Stat. 2067; Apr. 26, 2011, eff. Dec. 1, 2011.)

**Rule 705. Disclosing the Facts or Data Underlying an Expert's Opinion**

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(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 22, 1993, eff. Dec. 1, 1993; Apr. 26, 2011, eff. Dec. 1, 2011.)

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(a) APPOINTMENT PROCESS. On a party's motion or on its own, the court may order the parties to show cause why expert witnesses should not be appointed and may ask the parties to submit nominations. The court may appoint any expert that the parties agree on and any of its own choosing. But the court may only appoint someone who consents to act.

(b) EXPERT'S ROLE. The court must inform the expert of the expert's duties. The court may do so in writing and have a copy filed with the clerk or may do so orally at a conference in which the parties have an opportunity to participate. The expert:

- (1) must advise the parties of any findings the expert makes;
- (2) may be deposed by any party;
- (3) may be called to testify by the court or any party; and
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(c) COMPENSATION. The expert is entitled to a reasonable compensation, as set by the court. The compensation is payable as follows:

- (1) in a criminal case or in a civil case involving just compensation under the Fifth Amendment, from any funds that are provided by law; and
- (2) in any other civil case, by the parties in the proportion and at the time that the court directs—and the compensation is then charged like other costs.

(d) DISCLOSING THE APPOINTMENT TO THE JURY. The court may authorize disclosure to the jury that the court appointed the expert.

(e) PARTIES' CHOICE OF THEIR OWN EXPERTS. This rule does not limit a party in calling its own experts.

(As amended Mar. 2, 1987, eff. Oct. 1, 1987; Apr. 26, 2011, eff. Dec. 1, 2011.)

ARTICLE VIII. HEARSAY

**Rule 801. Definitions That Apply to This Article; Exclusions from Hearsay**

(a) STATEMENT. "Statement" means a person's oral assertion, written assertion, or nonverbal conduct, if the person intended it as an assertion.

119 S.Ct. 1167

Supreme Court of the United States

**KUMHO TIRE COMPANY,****LTD., et al.,** Petitioners,

v.

Patrick CARMICHAEL, etc., et al.

No. 97–1709. | Argued Dec. 7,  
1998. | Decided March 23, 1999.

Plaintiffs brought products liability action against tire manufacturer and tire distributor for injuries sustained when right rear tire on vehicle failed. The United States District Court for the Southern District of Alabama, No. 93–0860–CB–S, 923 F.Supp. 1514, *Charles R. Butler, J.*, granted summary judgment for defendants, and plaintiffs appealed. The Court of Appeals for the Eleventh Circuit, 131 F.3d 1433, reversed and remanded. Defendants filed application for writ of certiorari. The Supreme Court, Justice *Breyer*, held that: (1) *Daubert's* “gatekeeping” obligation, requiring an inquiry into both relevance and reliability, applies not only to “scientific” testimony, but to all expert testimony; (2) when assessing reliability of engineering expert's testimony, trial court may consider the *Daubert* factors to the extent relevant; and (3) trial court did not abuse its discretion in its application of *Daubert* to exclude tire failure analyst's expert testimony that particular tire failed due to manufacturing or design defect.

Reversed.

Justice *Scalia* filed concurring opinion in which Justice *O'Connor* and Justice *Thomas* joined.Justice *Stevens* filed opinion concurring in part and dissenting in part.**\*\*1169 Syllabus\***

\* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Timber & Lumber*

*Co.*, 200 U.S. 321, 337, 26 S.Ct. 282, 50 L.Ed. 499.

**\*137** When a tire on the vehicle driven by Patrick Carmichael blew out and the vehicle overturned, one passenger died and the others were injured. The survivors and the decedent's representative, respondents here, brought this diversity suit against the tire's maker and its distributor (collectively Kumho Tire), claiming that the tire that failed was defective. They rested their case in significant part upon the depositions of a tire failure analyst, Dennis Carlson, Jr., who intended to testify that, in his expert opinion, a defect in the tire's manufacture or design caused the blowout. That opinion was based upon a visual and tactile inspection of the tire and upon the theory that in the absence of at least two of four specific, physical symptoms indicating tire abuse, the tire failure of the sort that occurred here was caused by a defect. Kumho Tire moved to exclude Carlson's testimony on the ground that his methodology failed to satisfy *Federal Rule of Evidence 702*, which says: “If scientific, technical, or other specialized knowledge will assist the trier of fact ..., a witness qualified as an expert ... may testify thereto in the form of an opinion.” Granting the motion (and entering summary judgment for the defendants), the District Court acknowledged that it should act as a reliability “gatekeeper” under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589, 113 S.Ct. 2786, 125 L.Ed.2d 469, in which this Court held that *Rule 702* imposes a special obligation upon a trial judge to ensure that scientific testimony is not only relevant, but reliable. The court noted that *Daubert* discussed four factors—testing, peer review, error rates, and “acceptability” in the relevant scientific community—which might prove helpful in determining the reliability of a particular scientific theory or technique, *id.*, at 593–594, 113 S.Ct. 2786, and found that those factors argued against the reliability of Carlson's methodology. On the plaintiffs' motion for reconsideration, the court agreed that *Daubert* should be applied flexibly, that its four factors were simply illustrative, and that other factors could argue in favor of admissibility. However, the court affirmed its earlier order because it found insufficient indications of the reliability of Carlson's methodology. In reversing, the Eleventh Circuit held that the District Court had erred as a matter of law in applying *Daubert*. Believing that *Daubert* was limited to the scientific context, 138 **\*138** the court held

that the *Daubert* factors did not apply to Carlson's testimony, which it characterized as skill or experience based.

*Held:*

1. The *Daubert* factors may apply to the testimony of engineers and other experts who are not scientists. Pp. 1174–1176.

(a) The *Daubert* “gatekeeping” obligation applies not only to “scientific” testimony, but to all expert testimony. Rule 702 does not distinguish between “scientific” knowledge and “technical” or “other specialized” knowledge, but makes clear that any such knowledge might become the subject of expert testimony. It is the Rule's word “knowledge,” not the words (like “scientific”) that modify that word, that establishes a standard of evidentiary reliability. 509 U.S., at 589–590, 113 S.Ct. 2786. *Daubert* referred only to “scientific” knowledge because that was the nature of the expertise there at issue. *Id.*, at 590, n. 8, 113 S.Ct. 2786. Neither is the evidentiary rationale underlying *Daubert's* “gatekeeping” determination limited to “scientific” knowledge. Rules 702 and 703 grant all expert witnesses, not just “scientific” ones, testimonial latitude unavailable to other witnesses on the assumption that the expert's opinion will have a reliable basis in the knowledge and experience of his discipline. *Id.*, at 592, 113 S.Ct. 2786. Finally, it would prove difficult, if not impossible, for judges to administer evidentiary rules under which a “gatekeeping” obligation depended upon a distinction between “scientific” knowledge and “technical” or “other specialized” knowledge, since there is no clear line dividing the one from the others and no convincing need to make such distinctions. Pp. 1174–1175.

**\*\*1170** (b) A trial judge determining the admissibility of an engineering expert's testimony *may* consider one or more of the specific *Daubert* factors. The emphasis on the word “may” reflects *Daubert's* description of the Rule 702 inquiry as “a flexible one.” 509 U.S., at 594, 113 S.Ct. 2786. The *Daubert* factors do *not* constitute a definitive checklist or test, *id.*, at 593, 113 S.Ct. 2786, and the gatekeeping inquiry must be tied to the particular facts, *id.*, at 591, 113 S.Ct. 2786. Those factors may or may not be pertinent in assessing reliability, depending on the nature of

the issue, the expert's particular expertise, and the subject of his testimony. Some of those factors may be helpful in evaluating the reliability even of experience-based expert testimony, and the Court of Appeals erred insofar as it ruled those factors out in such cases. In determining whether particular expert testimony is reliable, the trial court should consider the specific *Daubert* factors where they are reasonable measures of reliability. Pp. 1175–1176.

(c) A court of appeals must apply an abuse-of-discretion standard when it reviews a trial court's decision to admit or exclude expert 139 **\*139** testimony. *General Electric Co. v. Joiner*, 522 U.S. 136, 138–139, 118 S.Ct. 512, 139 L.Ed.2d 508. That standard applies as much to the trial court's decisions about how to determine reliability as to its ultimate conclusion. Thus, whether *Daubert's* specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine. See *id.*, at 143, 118 S.Ct. 512. The Eleventh Circuit erred insofar as it held to the contrary. P. 1176.

2. Application of the foregoing standards demonstrates that the District Court's decision not to admit Carlson's expert testimony was lawful. The District Court did not question Carlson's qualifications, but excluded his testimony because it initially doubted his methodology and then found it unreliable after examining the transcript in some detail and considering respondents' defense of it. The doubts that triggered the court's initial inquiry were reasonable, as was the court's ultimate conclusion that Carlson could not reliably determine the cause of the failure of the tire in question. The question was not the reliability of Carlson's methodology in general, but rather whether he could reliably determine the cause of failure of *the particular tire at issue*. That tire, Carlson conceded, had traveled far enough so that some of the tread had been worn bald, it should have been taken out of service, it had been repaired (inadequately) for punctures, and it bore some of the very marks that he said indicated, not a defect, but abuse. Moreover, Carlson's own testimony cast considerable doubt upon the reliability of both his theory about the need for at least two signs of abuse and his proposition about the significance of visual inspection in this case. Respondents stress that other tire failure experts, like

Carlson, rely on visual and tactile examinations of tires. But there is no indication in the record that other experts in the industry use Carlson's *particular* approach or that tire experts normally make the very fine distinctions necessary to support his conclusions, nor are there references to articles or papers that validate his approach. Respondents' argument that the District Court too rigidly applied *Daubert* might have had some validity with respect to the court's initial opinion, but fails because the court, on reconsideration, recognized that the relevant reliability inquiry should be "flexible," and ultimately based its decision upon Carlson's failure to satisfy either *Daubert's* factors or any other set of reasonable reliability criteria. Pp. 1176–1179.

131 F.3d 1433, reversed.

BREYER, J., delivered the opinion of the Court, Parts I and II of which were unanimous, and Part III of which was joined by REHNQUIST, C.J., and O'CONNOR, SCALIA, KENNEDY, SOUTER, THOMAS, \*\*1171 and GINSBURG, 140 \*140 JJ. SCALIA, J., filed a concurring opinion, in which O'CONNOR and THOMAS, JJ., joined, *post*, p. 1179. STEVENS, J., filed an opinion concurring in part and dissenting in part, *post*, p. 1179.

#### Attorneys and Law Firms

Joseph H. Babington, Mobile, AL, for petitioners.

Jeffrey P. Minear, Washington, DC, for the United States as amicus curiae, by special leave of the court.

Sidney W. Jackson, for respondents.

#### Opinion

141 \*141 Justice BREYER delivered the opinion of the Court.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), this Court focused upon the admissibility of scientific expert testimony. It pointed out that such testimony is admissible only if it is both relevant and reliable. And it held that the Federal Rules of Evidence "assign to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and

is relevant to the task at hand." *Id.*, at 597, 113 S.Ct. 2786. The Court also discussed certain more specific factors, such as testing, peer review, error rates, and "acceptability" in the relevant scientific community, some or all of which might prove helpful in determining the reliability of a particular scientific "theory or technique." *Id.*, at 593–594, 113 S.Ct. 2786.

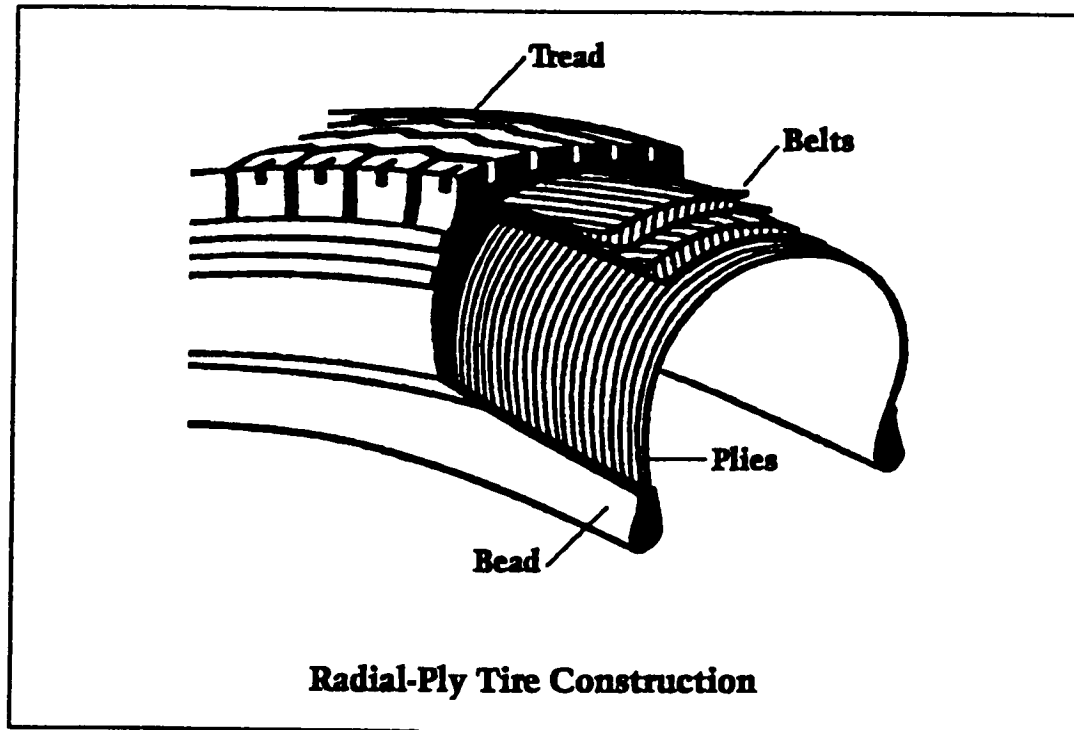
This case requires us to decide how *Daubert* applies to the testimony of engineers and other experts who are not scientists. We conclude that *Daubert's* general holding—setting forth the trial judge's general "gatekeeping" obligation—applies not only to testimony based on "scientific" knowledge, but also to testimony based on "technical" and "other specialized" knowledge. See Fed. Rule Evid. 702. We also conclude that a trial court *may* consider one or more of the more specific factors that *Daubert* mentioned when doing so will help determine that testimony's reliability. But, as the Court stated in *Daubert*, the test of reliability is "flexible," and *Daubert's* list of specific factors neither necessarily nor exclusively applies to all experts or in every case. 142 \*142 Rather, the law grants a district court the same broad latitude when it decides *how* to determine reliability as it enjoys in respect to its ultimate reliability determination. See *General Electric Co. v. Joiner*, 522 U.S. 136, 143, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997) (courts of appeals are to apply "abuse of discretion" standard when reviewing district court's reliability determination). Applying these standards, we determine that the District Court's decision in this case—not to admit certain expert testimony—was within its discretion and therefore lawful.

#### I

On July 6, 1993, the right rear tire of a minivan driven by Patrick Carmichael blew out. In the accident that followed, one of the passengers died, and others were severely injured. In October 1993, the Carmichaels brought this diversity suit against the tire's maker and its distributor, whom we refer to collectively as Kumho Tire, claiming that the tire was defective. The plaintiffs rested their case in significant part upon deposition testimony provided by an expert in tire failure analysis, Dennis Carlson, Jr., who intended to testify in support of their conclusion.

Carlson's depositions relied upon certain features of tire technology that are not in dispute. A steel-belted radial tire like the Carmichaels' is made up of a "carcass" containing many layers of flexible cords, called "plies," along which (between the cords and the outer tread) are laid steel strips called "belts." Steel wire loops, called "beads," hold the cords together at the plies' bottom edges. An outer layer, called the "tread," encases the carcass, and the entire tire is bound

together in rubber, through the application of heat and various chemicals. See generally, *e.g.*, J. Dixon, *Tires, Suspension and Handling* 68–72 (2d ed.1996). The bead of the tire sits upon a "bead seat," which is part of the wheel assembly. That assembly contains a "rim flange," which extends over the bead and rests against the side of the 143 \*143 tire. See M. Mavrigian, *Performance Wheels & Tires* 81, 83 (1998) (illustrations).



**\*\*1172** Carlson's testimony also accepted certain background facts about the tire in question. He assumed that before the blowout the tire had traveled far. (The tire was made in 1988 and had been installed some time before the Carmichaels bought the used minivan in March 1993; the Carmichaels had driven the van approximately 7,000 additional miles in the two months they had owned it.) Carlson noted that the tire's tread depth, which was  $\frac{11}{32}$  of an inch when new, App. 242, had been worn down to depths that ranged from  $\frac{3}{32}$  of an inch along some parts of the tire, to nothing at all along others. *Id.*, at 287. He conceded that the tire tread had at least two punctures which had been inadequately repaired. *Id.*, at 258–261, 322.

Despite the tire's age and history, Carlson concluded that a defect in its manufacture or design caused the blowout. He rested this conclusion in part upon three premises which, 144 \*144 for present purposes, we must assume are not in dispute: First, a tire's carcass should stay bound to the inner side of the tread for a significant period of time after its tread depth has worn away. *Id.*, at 208–209. Second, the tread of the tire at issue had separated from its inner steel-belted carcass prior to the accident. *Id.*, at 336. Third, this "separation" caused the blowout. *Ibid.*

Carlson's conclusion that a defect caused the separation, however, rested upon certain other propositions, several of which the defendants strongly dispute. First, Carlson said that if a separation is *not* caused by a certain kind of tire misuse called



“overdeflection” (which consists of underinflating the tire or causing it to carry too much weight, thereby generating heat that can undo the chemical tread/carcass bond), then, ordinarily, its cause is a tire defect. *Id.*, at 193–195, 277–278. Second, he said that if a tire has been subject to sufficient overdeflection to cause a separation, it should reveal certain physical symptoms. These symptoms include (a) tread wear on the tire's shoulder that is greater than the tread wear along the tire's center, *id.*, at 211; (b) signs of a “bead groove,” where the beads have been pushed too hard against the bead seat on the inside of the tire's rim, *id.*, at 196–197; (c) sidewalls of the tire with physical signs of deterioration, such as discoloration, *id.*, at 212; and/or (d) marks on the tire's rim flange, *id.*, at 219–220. Third, Carlson said that where he does not find *at least two* of the four physical signs just mentioned (and presumably where there is no reason to suspect a less common cause of separation), he concludes that a manufacturing or design defect caused the separation. *Id.*, at 223–224.

Carlson added that he had inspected the tire in question. He conceded that the tire to a limited degree showed greater wear on **\*\*1173** the shoulder than in the center, some signs of “bead groove,” some discoloration, a few marks on the rim flange, and inadequately filled puncture holes (which can also cause heat that might lead to separation). **\*145** *Id.*, at 256–257, 258–261, 277, 303–304, 308. But, in each instance, he testified that the symptoms were not significant, and he explained why he believed that they did not reveal overdeflection. For example, the extra shoulder wear, he said, appeared primarily on one shoulder, whereas an overdeflected tire would reveal equally abnormal wear on both shoulders. *Id.*, at 277. Carlson concluded that the tire did not bear at least two of the four overdeflection symptoms, nor was there any less obvious cause of separation; and since neither overdeflection nor the punctures caused the blowout, a defect must have done so.

Kumho Tire moved the District Court to exclude Carlson's testimony on the ground that his methodology failed Rule 702's reliability requirement. The court agreed with Kumho that it should act as a *Daubert*-type reliability “gatekeeper,” even though one might consider Carlson's testimony as “technical,” rather than “scientific.” See *Carmichael*

*v. Samyang Tires, Inc.*, 923 F.Supp. 1514, 1521–1522 (S.D.Ala.1996). The court then examined Carlson's methodology in light of the reliability-related factors that *Daubert* mentioned, such as a theory's testability, whether it “has been a subject of peer review or publication,” the “known or potential rate of error,” and the “degree of acceptance ... within the relevant scientific community.” 923 F.Supp., at 1520 (citing *Daubert*, 509 U.S., at 589–595, 113 S.Ct. 2786). The District Court found that all those factors argued against the reliability of Carlson's methods, and it granted the motion to exclude the testimony (as well as the defendants' accompanying motion for summary judgment).

The plaintiffs, arguing that the court's application of the *Daubert* factors was too “inflexible,” asked for reconsideration. And the court granted that motion. *Carmichael v. Samyang Tires, Inc.*, Civ. Action No. 93–0860–CB–S (S.D.Ala., June 5, 1996), App. to Pet. for Cert. 1c. After reconsidering the matter, the court agreed with the plaintiffs that *Daubert* should be applied flexibly, that its four factors were **\*146** simply illustrative, and that other factors could argue in favor of admissibility. It conceded that there may be widespread acceptance of a “visual-inspection method” for some relevant purposes. But the court found insufficient indications of the reliability of

“the component of Carlson's tire failure analysis which most concerned the Court, namely, the methodology employed by the expert in analyzing the data obtained in the visual inspection, and the scientific basis, if any, for such an analysis.” *Id.*, at 6c.

It consequently affirmed its earlier order declaring Carlson's testimony inadmissible and granting the defendants' motion for summary judgment.

The Eleventh Circuit reversed. See *Carmichael v. Samyang Tire, Inc.*, 131 F.3d 1433 (1997). It “review[ed] ... *de novo*” the “district court's legal decision to apply *Daubert*.” *Id.*, at 1435. It noted that “the Supreme Court in *Daubert* explicitly limited its holding to cover only the ‘scientific context,’ ” adding that “a *Daubert* analysis” applies only where an expert relies “on the application of scientific principles,” rather than “on skill- or experience-based observation.” *Id.*, at 1435–1436. It concluded that

Carlson's testimony, which it viewed as relying on experience, "falls outside the scope of *Daubert*," that "the district court erred as a matter of law by applying *Daubert* in this case," and that the case must be remanded for further (non-*Daubert*-type) consideration under Rule 702. 131 F.3d, at 1436.

Kumho Tire petitioned for certiorari, asking us to determine whether a trial court "may" consider *Daubert's* specific "factors" when determining the "admissibility of an engineering expert's testimony." Pet. for Cert. i. We granted certiorari in light of uncertainty among the lower courts about whether, or how, *Daubert* applies to expert testimony that might be characterized as based not upon "scientific" knowledge, but rather upon "technical" or "other specialized" \*147 knowledge. Fed. Rule Evid. 702; compare, e.g., *Watkins v. Telsmith, Inc.*, 121 F.3d 984, 990–991 (C.A.5 1997), with, e.g., \*\*1174 *Compton v. Subaru of America, Inc.*, 82 F.3d 1513, 1518–1519 (C.A.10), cert. denied, 519 U.S. 1042, 117 S.Ct. 611, 136 L.Ed.2d 536 (1996).

## II

### A

[1] In *Daubert*, this Court held that Federal Rule of Evidence 702 imposes a special obligation upon a trial judge to "ensure that any and all scientific testimony ... is not only relevant, but reliable." 509 U.S., at 589, 113 S.Ct. 2786. The initial question before us is whether this basic gatekeeping obligation applies only to "scientific" testimony or to all expert testimony. We, like the parties, believe that it applies to all expert testimony. See Brief for Petitioners 19; Brief for Respondents 17.

For one thing, Rule 702 itself says:

"If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or

education, may testify thereto in the form of an opinion or otherwise."

This language makes no relevant distinction between "scientific" knowledge and "technical" or "other specialized" knowledge. It makes clear that any such knowledge might become the subject of expert testimony. In *Daubert*, the Court specified that it is the Rule's word "knowledge," not the words (like "scientific") that modify that word, that "establishes a standard of evidentiary reliability." 509 U.S., at 589–590, 113 S.Ct. 2786. Hence, as a matter of language, the Rule applies its reliability standard to all "scientific," "technical," or "other specialized" matters within its scope. We concede that the Court in *Daubert* referred only to "scientific" knowledge. But as the Court there said, it referred to "scientific" \*148 testimony "because that [wa]s the nature of the expertise" at issue. *Id.*, at 590, n. 8, 113 S.Ct. 2786.

Neither is the evidentiary rationale that underlay the Court's basic *Daubert* "gatekeeping" determination limited to "scientific" knowledge. *Daubert* pointed out that Federal Rules 702 and 703 grant expert witnesses testimonial latitude unavailable to other witnesses on the "assumption that the expert's opinion will have a reliable basis in the knowledge and experience of his discipline." *Id.*, at 592, 113 S.Ct. 2786 (pointing out that experts may testify to opinions, including those that are not based on firsthand knowledge or observation). The Rules grant that latitude to all experts, not just to "scientific" ones.

Finally, it would prove difficult, if not impossible, for judges to administer evidentiary rules under which a gatekeeping obligation depended upon a distinction between "scientific" knowledge and "technical" or "other specialized" knowledge. There is no clear line that divides the one from the others. Disciplines such as engineering rest upon scientific knowledge. Pure scientific theory itself may depend for its development upon observation and properly engineered machinery. And conceptual efforts to distinguish the two are unlikely to produce clear legal lines capable of application in particular cases. Cf. Brief for National Academy of Engineering as *Amicus Curiae* 9 (scientist seeks to understand nature while the engineer seeks nature's modification); Brief for Rubber Manufacturers Association as *Amicus Curiae*

14–16 (engineering, as an “ ‘applied science,’ ” relies on “scientific reasoning and methodology”); Brief for John Allen et al. as *Amici Curiae* 6 (engineering relies upon “scientific knowledge and methods”).

Neither is there a convincing need to make such distinctions. Experts of all kinds tie observations to conclusions through the use of what Judge Learned Hand called “general truths derived from ... specialized experience.” Hand, Historical and Practical Considerations Regarding Expert Testimony, \*149 15 Harv. L.Rev. 40, 54 (1901). And whether the specific expert testimony focuses upon specialized observations, the specialized translation of those observations into theory, a specialized theory itself, or the application of such a theory in a particular case, the expert's testimony often will rest “upon an experience confessedly foreign in kind to [the jury's] own.” *Ibid.* The trial judge's effort to assure that the specialized testimony is reliable and relevant can help the jury evaluate \*\*1175 that foreign experience, whether the testimony reflects scientific, technical, or other specialized knowledge.

We conclude that *Daubert's* general principles apply to the expert matters described in Rule 702. The Rule, in respect to all such matters, “establishes a standard of evidentiary reliability.” 509 U.S., at 590, 113 S.Ct. 2786. It “requires a valid ... connection to the pertinent inquiry as a precondition to admissibility.” *Id.*, at 592, 113 S.Ct. 2786. And where such testimony's factual basis, data, principles, methods, or their application are called sufficiently into question, see Part III, *infra*, the trial judge must determine whether the testimony has “a reliable basis in the knowledge and experience of [the relevant] discipline.” 509 U.S., at 592, 113 S.Ct. 2786.

## B

Petitioners ask more specifically whether a trial judge determining the “admissibility of an engineering expert's testimony” may consider several more specific factors that *Daubert* said might “bear on” a judge's gatekeeping determination. Brief for Petitioners i. These factors include:

—Whether a “theory or technique ... can be (and has been) tested”;

—Whether it “has been subjected to peer review and publication”;

—Whether, in respect to a particular technique, there is a high “known or potential rate of error” and whether there are “standards controlling the technique's operation”; and

150— \*150 Whether the theory or technique enjoys “ ‘general acceptance’ ” within a “ ‘relevant scientific community.’ ” 509 U.S., at 592–594, 113 S.Ct. 2786.

Emphasizing the word “may” in the question, we answer that question yes.

[2] Engineering testimony rests upon scientific foundations, the reliability of which will be at issue in some cases. See, e.g., Brief for Stephen N. Bobo et al. as *Amici Curiae* 23 (stressing the scientific bases of engineering disciplines). In other cases, the relevant reliability concerns may focus upon personal knowledge or experience. As the Solicitor General points out, there are many different kinds of experts, and many different kinds of expertise. See Brief for United States as *Amicus Curiae* 18–19, and n. 5 (citing cases involving experts in drug terms, handwriting analysis, criminal *modus operandi*, land valuation, agricultural practices, railroad procedures, attorney's fee valuation, and others). Our emphasis on the word “may” thus reflects *Daubert's* description of the Rule 702 inquiry as “a flexible one.” 509 U.S., at 594, 113 S.Ct. 2786. *Daubert* makes clear that the factors it mentions do *not* constitute a “definitive checklist or test.” *Id.*, at 593, 113 S.Ct. 2786. And *Daubert* adds that the gatekeeping inquiry must be “ ‘tied to the facts’ ” of a particular “case.” *Id.*, at 591, 113 S.Ct. 2786 (quoting *United States v. Downing*, 753 F.2d 1224, 1242 (C.A.3 1985)). We agree with the Solicitor General that “[t]he factors identified in *Daubert* may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony.” Brief for United States as *Amicus Curiae* 19. The conclusion, in our view, is that we can neither rule out, nor rule in, for all cases and for all time the applicability of the factors mentioned in *Daubert*, nor can we now do so

for subsets of cases categorized by category of expert or by kind of evidence. Too much depends upon the particular circumstances of the particular case at issue.

**\*151** *Daubert* itself is not to the contrary. It made clear that its list of factors was meant to be helpful, not definitive. Indeed, those factors do not all necessarily apply even in every instance in which the reliability of scientific testimony is challenged. It might not be surprising in a particular case, for example, that a claim made by a scientific witness has never been the subject of peer review, for the particular application at issue may never previously have interested any scientist. Nor, on the other hand, does the presence of *Daubert's* general acceptance factor help show that an expert's testimony is reliable where the discipline itself lacks reliability, as, for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy.

**\*\*1176** At the same time, and contrary to the Court of Appeals' view, some of *Daubert's* questions can help to evaluate the reliability even of experience-based testimony. In certain cases, it will be appropriate for the trial judge to ask, for example, how often an engineering expert's experience-based methodology has produced erroneous results, or whether such a method is generally accepted in the relevant engineering community. Likewise, it will at times be useful to ask even of a witness whose expertise is based purely on experience, say, a perfume tester able to distinguish among 140 odors at a sniff, whether his preparation is of a kind that others in the field would recognize as acceptable.

We must therefore disagree with the Eleventh Circuit's holding that a trial judge may ask questions of the sort *Daubert* mentioned only where an expert "relies on the application of scientific principles," but not where an expert relies "on skill- or experience-based observation." 131 F.3d, at 1435. We do not believe that Rule 702 creates a schematism that segregates expertise by type while mapping certain kinds of questions to certain kinds of experts. Life and the legal cases that it generates are too complex to warrant so definitive a match.

[3] [4] 152 **\*152** To say this is not to deny the importance of *Daubert's* gatekeeping requirement. The

objective of that requirement is to ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field. Nor do we deny that, as stated in *Daubert*, the particular questions that it mentioned will often be appropriate for use in determining the reliability of challenged expert testimony. Rather, we conclude that the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable. That is to say, a trial court should consider the specific factors identified in *Daubert* where they are reasonable measures of the reliability of expert testimony.

[5] [6] The trial court must have the same kind of latitude in deciding *how* to test an expert's reliability, and to decide whether or when special briefing or other proceedings are needed to investigate reliability, as it enjoys when it decides *whether or not* that expert's relevant testimony is reliable. Our opinion in *Joiner* makes clear that a court of appeals is to apply an abuse-of-discretion standard when it "review[s] a trial court's decision to admit or exclude expert testimony." 522 U.S., at 138–139, 118 S.Ct. 512. That standard applies as much to the trial court's decisions about how to determine reliability as to its ultimate conclusion. Otherwise, the trial judge would lack the discretionary authority needed both to avoid unnecessary "reliability" proceedings in ordinary cases where the reliability of an expert's methods is properly taken for granted, and to require appropriate proceedings in the less usual or more complex cases where cause for questioning the expert's reliability arises. Indeed, the Rules seek to avoid "unjustifiable expense and delay" as part of their search for **\*153** 153 "truth" and the "jus[t] determin[ation]" of proceedings. Fed. Rule Evid. 102. Thus, whether *Daubert's* specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine. See *Joiner, supra*, at 143, 118 S.Ct. 512. And the Eleventh Circuit erred insofar as it held to the contrary.



### III

[7] We further explain the way in which a trial judge “may” consider *Daubert's* factors by applying these considerations to the case at hand, a matter that has been briefed exhaustively by the parties and their 19 *amici*. The District Court did not doubt Carlson's qualifications, which included a masters degree in mechanical engineering, 10 years' work at Michelin America, Inc., and testimony as a tire failure consultant in other tort cases. Rather, it excluded the testimony because, despite those qualifications, it initially **\*1177** doubted, and then found unreliable, “the methodology employed by the expert in analyzing the data obtained in the visual inspection, and the scientific basis, if any, for such an analysis.” Civ. Action No. 93–0860–CB–S (S.D.Ala., June 5, 1996), App. to Pet. for Cert. 6c. After examining the transcript in “some detail,” **923 F.Supp.**, at **1518–1519**, **n. 4**, and after considering respondents' defense of Carlson's methodology, the District Court determined that Carlson's testimony was not reliable. It fell outside the range where experts might reasonably differ, and where the jury must decide among the conflicting views of different experts, even though the evidence is “shaky.” *Daubert*, 509 U.S., at 596, 113 S.Ct. 2786. In our view, the doubts that triggered the District Court's initial inquiry here were reasonable, as was the court's ultimate conclusion.

For one thing, and contrary to respondents' suggestion, the specific issue before the court was not the reasonableness *in general* of a tire expert's use of a visual and tactile inspection to determine whether overdeflection had caused 154 **\*154** the tire's tread to separate from its steel-belted carcass. Rather, it was the reasonableness of using such an approach, along with Carlson's particular method of analyzing the data thereby obtained, to draw a conclusion regarding *the particular matter to which the expert testimony was directly relevant*. That matter concerned the likelihood that a defect in the tire at issue caused its tread to separate from its carcass. The tire in question, the expert conceded, had traveled far enough so that some of the tread had been worn bald; it should have been taken out of service; it had been repaired (inadequately) for punctures; and it bore some of the

very marks that the expert said indicated, not a defect, but abuse through overdeflection. See *supra*, at 1172; App. 293–294. The relevant issue was whether the expert could reliably determine the cause of *this* tire's separation.

Nor was the basis for Carlson's conclusion simply the general theory that, in the absence of evidence of abuse, a defect will normally have caused a tire's separation. Rather, the expert employed a more specific theory to establish the existence (or absence) of such abuse. Carlson testified precisely that in the absence of *at least two* of four signs of abuse (proportionately greater tread wear on the shoulder; signs of grooves caused by the beads; discolored sidewalls; marks on the rim flange), he concludes that a defect caused the separation. And his analysis depended upon acceptance of a further implicit proposition, namely, that his visual and tactile inspection could determine that the tire before him had not been abused despite some evidence of the presence of the very signs for which he looked (and two punctures).

For another thing, the transcripts of Carlson's depositions support both the trial court's initial uncertainty and its final conclusion. Those transcripts cast considerable doubt upon the reliability of both the explicit theory (about the need for two signs of abuse) and the implicit proposition (about the significance of visual inspection in this case). Among other things, the expert could not say whether the tire had traveled **\*155** more than 10, or 20, or 30, or 40, or 50 thousand miles, adding that 6,000 miles was “about how far” he could “say with any certainty.” *Id.*, at 265. The court could reasonably have wondered about the reliability of a method of visual and tactile inspection sufficiently precise to ascertain with some certainty the abuse-related significance of minute shoulder/center relative tread wear differences, but insufficiently precise to tell “with any certainty” from the tread wear whether a tire had traveled less than 10,000 or more than 50,000 miles. And these concerns might have been augmented by Carlson's repeated reliance on the “subjective[ness]” of his mode of analysis in response to questions seeking specific information regarding how he could differentiate between a tire that actually had been overdeflected and a tire that merely looked as though it had been. *Id.*, at 222, 224–225, 285–286.

They would have been further augmented by the fact that Carlson said he had inspected the tire itself for the first time the morning of his first deposition, and then only for a few hours. (His initial conclusions were based on photographs.) *Id.*, at 180.

**\*\*1178** Moreover, prior to his first deposition, Carlson had issued a signed report in which he concluded that the tire had “not been ... overloaded or underinflated,” not because of the absence of “two of four” signs of abuse, but simply because “the rim flange impressions ... were normal.” *Id.*, at 335–336. That report also said that the “tread depth remaining was  $\frac{3}{32}$  inch,” *id.*, at 336, though the opposing expert's (apparently undisputed) measurements indicate that the tread depth taken at various positions around the tire actually ranged from  $\frac{5}{32}$  of an inch to  $\frac{4}{32}$  of an inch, with the tire apparently showing greater wear along *both* shoulders than along the center, *id.*, at 432–433.

Further, in respect to one sign of abuse, bead grooving, the expert seemed to deny the sufficiency of his own simple visual-inspection methodology. He testified that most tires have some bead groove pattern, that where there is reason **\*156** to suspect an abnormal bead groove he would ideally “look at a lot of [similar] tires” to know the grooving's significance, and that he had not looked at many tires similar to the one at issue. *Id.*, at 212–213, 214, 217.

Finally, the court, after looking for a defense of Carlson's methodology as applied in these circumstances, found no convincing defense. Rather, it found (1) that “none” of the *Daubert* factors, including that of “general acceptance” in the relevant expert community, indicated that Carlson's testimony was reliable, **923 F.Supp., at 1521**; (2) that its own analysis “revealed no countervailing factors operating in favor of admissibility which could outweigh those identified in *Daubert*,” App. to Pet. for Cert. 4c; and (3) that the “parties identified no such factors in their briefs,” *ibid*. For these three reasons *taken together*, it concluded that Carlson's testimony was unreliable.

Respondents now argue to us, as they did to the District Court, that a method of tire failure analysis that employs a visual/tactile inspection is a reliable method, and they point both to its use by other experts

and to Carlson's long experience working for Michelin as sufficient indication that that is so. But no one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience. Nor does anyone deny that, as a general matter, tire abuse may often be identified by qualified experts through visual or tactile inspection of the tire. See Affidavit of H.R. Baumgardner 1–2, cited in Brief for National Academy of Forensic Engineers as *Amicus Curiae* 16 (Tire engineers rely on visual examination and process of elimination to analyze experimental test tires). As we said before, *supra*, at 1977, the question before the trial court was specific, not general. The trial court had to decide whether this particular expert had sufficient specialized knowledge to assist the jurors “in deciding the particular issues in the case.” 4 J. McLaughlin, Weinstein's Federal Evidence ¶ 702.05[1], p. 702–33 (2d ed.1998); see also Advisory 157 **\*157** Committee's Note on Proposed Fed. Rule Evid. 702, Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure and Evidence: Request for Comment 126 (1998) (stressing that district courts must “scrutinize” whether the “principles and methods” employed by an expert “have been properly applied to the facts of the case”).

The particular issue in this case concerned the use of Carlson's two-factor test and his related use of visual/tactile inspection to draw conclusions on the basis of what seemed small observational differences. We have found no indication in the record that other experts in the industry use Carlson's two-factor test or that tire experts such as Carlson normally make the very fine distinctions about, say, the symmetry of comparatively greater shoulder tread wear that were necessary, on Carlson's own theory, to support his conclusions. Nor, despite the prevalence of tire testing, does anyone refer to any articles or papers that validate Carlson's approach. Cf. Bobo, Tire Flaws and Separations, in *Mechanics of Pneumatic Tires* 636–637 (S. Clark ed.1981); C. Schnuth, R. Fuller, G. Follen, G. Gold, & J. Smith, Compression Grooving and Rim Flange Abrasion as Indicators of Over-Deflected Operating Conditions in Tires, presented to Rubber Division of the American Chemical Society, Oct. 21–24, 1997; J. Walter & R. Kiminecz, Bead **\*\*1179** Contact Pressure Measurements at the Tire–Rim Interface, presented to the Society of Automotive Engineers, Inc., Feb. 24–28, 1975. Indeed, no one has



argued that Carlson himself, were he still working for Michelin, would have concluded in a report to his employer that a similar tire was similarly defective on grounds identical to those upon which he rested his conclusion here. Of course, Carlson himself claimed that his method was accurate, but, as we pointed out in *Joiner*, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.” 522 U.S., at 146, 118 S.Ct. 512.

158 \*158 Respondents additionally argue that the District Court too rigidly applied *Daubert's* criteria. They read its opinion to hold that a failure to satisfy any one of those criteria automatically renders expert testimony inadmissible. The District Court's initial opinion might have been vulnerable to a form of this argument. There, the court, after rejecting respondents' claim that Carlson's testimony was “exempted from *Daubert*-style scrutiny” because it was “technical analysis” rather than “scientific evidence,” simply added that “none of the four admissibility criteria outlined by the *Daubert* court are satisfied.” 923 F.Supp., at 1521. Subsequently, however, the court granted respondents' motion for reconsideration. It then explicitly recognized that the relevant reliability inquiry “should be ‘flexible,’ ” that its “ ‘overarching subject [should be] ... validity’ and reliability,” and that “*Daubert* was intended neither to be exhaustive nor to apply in every case.” App. to Pet. for Cert. 4c (quoting *Daubert*, 509 U.S., at 594–595, 113 S.Ct. 2786). And the court ultimately based its decision upon Carlson's failure to satisfy either *Daubert's* factors or any other set of reasonable reliability criteria. In light of the record as developed by the parties, that conclusion was within the District Court's lawful discretion.

In sum, Rule 702 grants the district judge the discretionary authority, reviewable for its abuse, to determine reliability in light of the particular facts and circumstances of the particular case. The District Court did not abuse its discretionary authority in this case. Hence, the judgment of the Court of Appeals is

*Reversed.*

Justice SCALIA, with whom Justice O'CONNOR and Justice THOMAS join, concurring.

I join the opinion of the Court, which makes clear that the discretion it endorses—trial-court discretion in choosing the manner of testing expert reliability—is not discretion to 159 \*159 abandon the gatekeeping function. I think it worth adding that it is not discretion to perform the function inadequately. Rather, it is discretion to choose among *reasonable* means of excluding expertise that is *fausse* and science that is junky. Though, as the Court makes clear today, the *Daubert* factors are not holy writ, in a particular case the failure to apply one or another of them may be unreasonable, and hence an abuse of discretion.

Justice STEVENS, concurring in part and dissenting in part.

The only question that we granted certiorari to decide is whether a trial judge “[m]ay ... consider the four factors set out by this Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), in a Rule 702 analysis of admissibility of an engineering expert's testimony.” Pet. for Cert. i. That question is fully and correctly answered in Parts I and II of the Court's opinion, which I join.

Part III answers the quite different question whether the trial judge abused his discretion when he excluded the testimony of Dennis Carlson. Because a proper answer to that question requires a study of the record that can be performed more efficiently by the Court of Appeals than by the nine Members of this Court, I would remand the case to the Eleventh Circuit to perform that task. There are, of course, exceptions to most rules, but I firmly believe that it is neither fair to litigants nor good practice for this Court to reach out to decide questions not raised by the certiorari petition. See *General Electric Co. v. Joiner*, 522 U.S. 136, 150–151, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997) \*\*1180 (STEVENS, J., concurring in part and dissenting in part).

Accordingly, while I do not feel qualified to disagree with the well-reasoned factual analysis in Part III of the Court's opinion, I do not join that Part, and I respectfully dissent from the Court's disposition of the case.

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# Daubert challenges to financial experts

*A yearly study of trends and outcomes*

2011

07

Exclusion success rate reaches six-year high

09

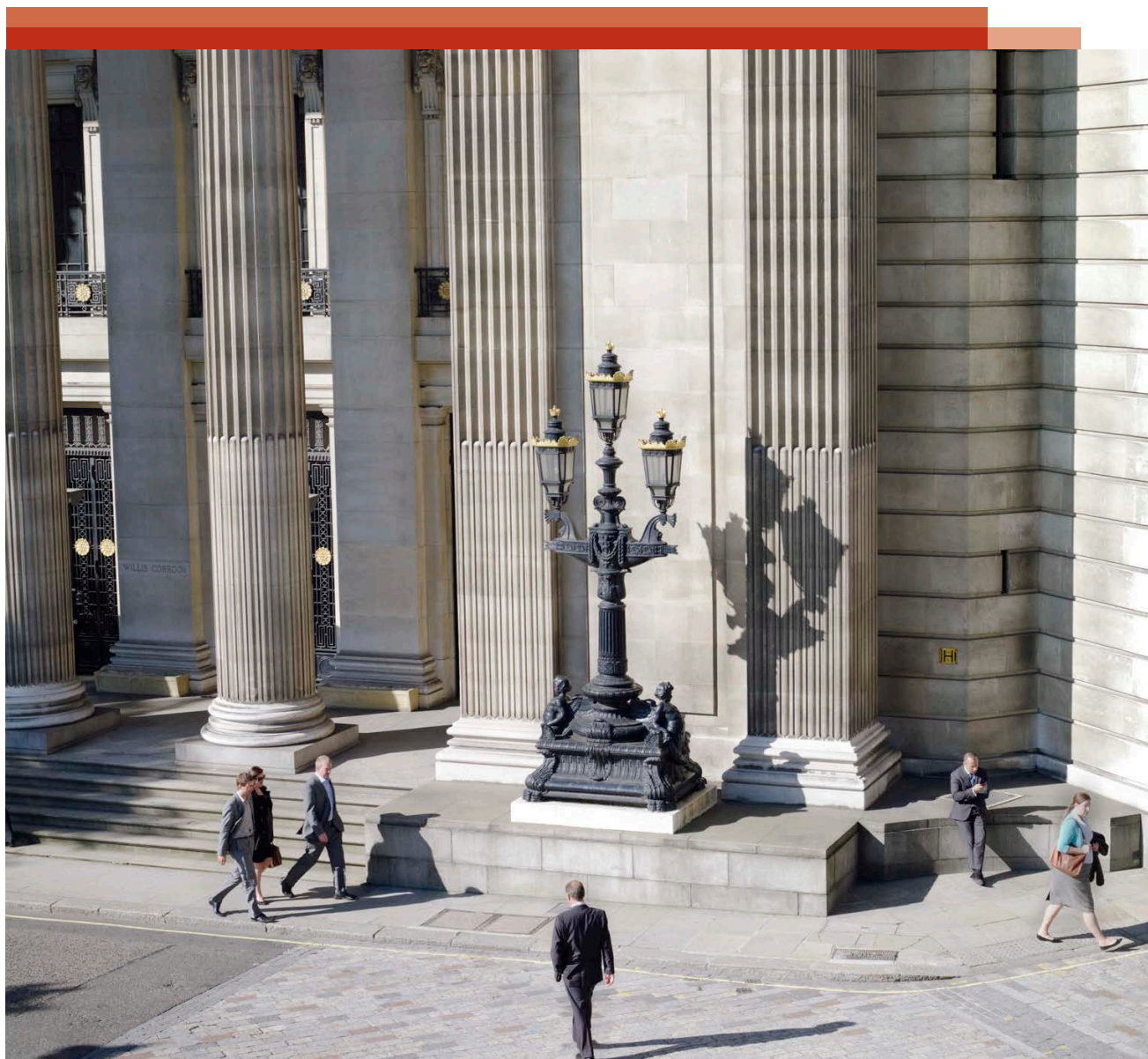
11th circuit has highest exclusion rate

11

Accountants and economists survive exclusion most often

13

Lack of reliability is the top exclusion reason





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## ***Table of contents***

---

### ***Overview*** ***4***

---

#### ***12-year trends***

1. Number of challenges to all expert witnesses declines, but success rates remain steady. ***6***
2. Number of challenges to financial expert witnesses falls to its lowest level in six years. The number of successful challenges also falls, but the rate of successful challenges increases to a six-year high. ***7***
3. Three federal circuits (Second, Fifth, and Sixth) adjudicate nearly 40% of all *Daubert* challenges to financial expert witnesses. ***8***
4. Plaintiff financial expert witnesses are challenged more frequently, consistently two to three times as often as defense experts, but their exclusion rates have been lower than defense experts' in six of the last eight years. ***10***
5. Economists, accountants, and appraisers remain the top challenged financial expert witnesses, but economists and accountants are the most likely to survive a challenge while appraisers are the least likely to survive. ***11***
6. Case type affects the frequency and outcome of *Daubert* challenges to financial expert witnesses. ***12***
7. For the 12th consecutive year, lack of reliability is the top reason financial experts are excluded. ***13***
8. Of the 68 *Daubert* challenges they considered in 2011, appellate courts overturned the lower courts' rulings in part or in whole for 10 experts. ***16***
9. Exclusions more commonly result from the misuse of accepted methodologies than from the introduction of unusual or untested analytical methods. ***18***

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### ***Methodology*** ***28***

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### ***Appendix*** ***30***

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## ***Overview***

*Daubert* criteria apply to all types of expert testimony in federal cases, including financial expert witness testimony.

In 1993, the US Supreme Court's opinion in *Daubert v. Merrell Dow Pharmaceuticals Inc.* addressed the admissibility of expert scientific testimony in federal trials, affirming a gatekeeping role for judges in determining the reliability and relevance of the testimony.

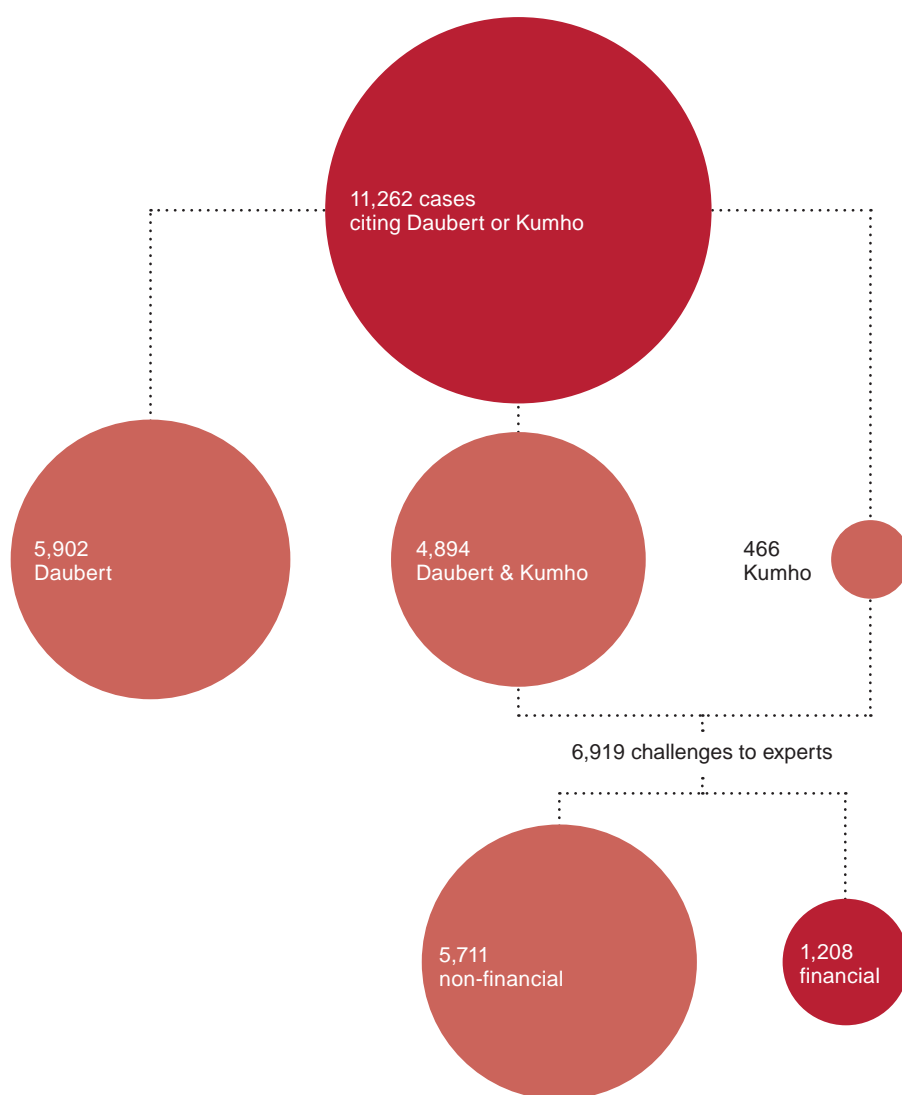
In 1999, the Supreme Court's decision in *Kumho Tire Co. v. Carmichael* clarified that the *Daubert* criteria were applicable to all types of expert testimony in federal jurisdictions, not merely testimony relating to science. Subsequently, many state courts also adopted the *Daubert* standard.

2011 marked the 12th anniversary of the *Kumho Tire* decision. This study analyzes post-*Kumho Tire* (2000–2011) challenges to financial expert witnesses under the *Daubert* standards. We identify observable trends in the frequency and outcome of these challenges based on written opinions in federal and state courts. Because the study is limited to written opinions, the related results should not be presumed to apply to all financial expert challenges, including those resolved by motion or those decisions that do not specifically reference *Kumho Tire*. The study examines these challenges to provide insight into why experts were challenged and excluded and to delve more analytically into the causes of exclusions based on the experts' qualifications and the relevance and reliability of the expert testimony. The study also summarizes some of the specific financial, statistical, economic, and valuation methods that courts have found inadmissible.

Our study of published court opinions has now classified 6,919 *Daubert* challenges to expert witnesses of all types in federal and state courts during 2000–2011. While our study is restricted to the 5,360 cases that

reference *Kumho Tire*, we note that 11,262 cases cite either *Daubert* or *Kumho Tire*. Of those cases, 5,902 cases cite only *Daubert*, 466 cases cite only *Kumho Tire*, and 4,894 cite both *Daubert* and *Kumho Tire* (see Figure 1).

**Figure 1: Cases citing *Daubert* and/or *Kumho Tire***



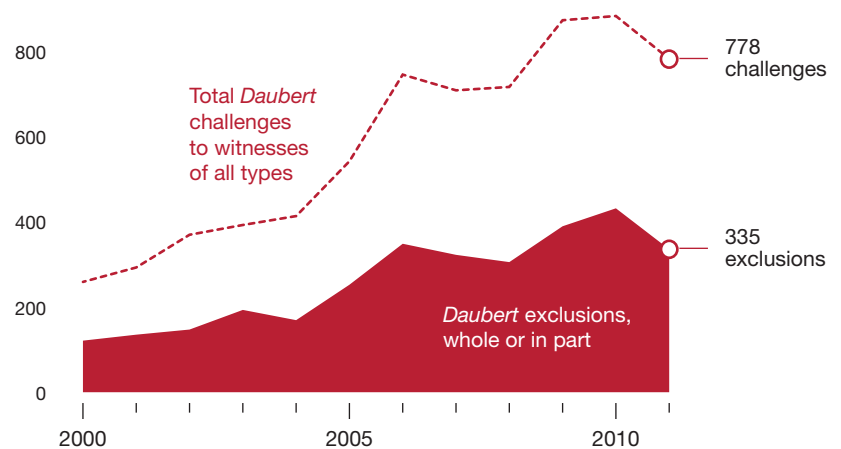


## 1. Number of challenges to all expert witnesses declines, but success rates remain steady.

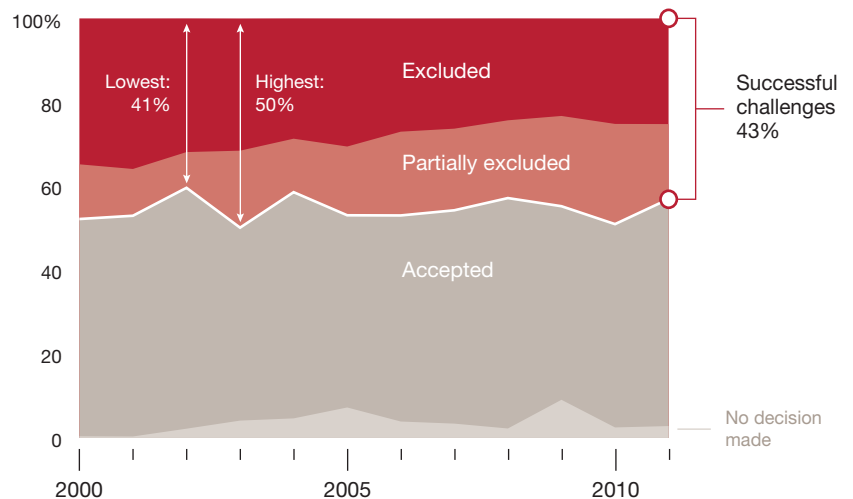
Since the *Kumho Tire* opinion in 1999, the number of challenges to expert witnesses of all types increased from 253 in 2000 to a record 879 in 2010, but decreased to 778 in 2011.<sup>1</sup> In 2011, 335 expert testimonies were excluded in whole or in part as the result of *Daubert* challenges — down from 431 in 2010 (see Figure 2).

Of all the expert testimony challenged during 2000–2011, 45% was excluded in whole or in part, and 50% was admitted.<sup>2</sup> The percentage of all experts excluded in whole or in part decreased to 43% in 2011, down from the 2010 and 2009 exclusion rates of 49% and 45%, respectively. The percentage of successful challenges has remained relatively consistent over the past 10 years, with the highest percentage (50%) in 2003 and the lowest (41%) in 2002 (see Figure 3).

**Figure 2: *Daubert* challenges and exclusions to expert witnesses of all types, 2000–2011**



**Figure 3: Outcome of *Daubert* challenges to expert witnesses of all types, 2000–2011**



<sup>1</sup> Expert witnesses of all types includes both financial and other non-financial experts. See “Methodology” section in back.

<sup>2</sup> Judges did not render a decision in 4 percent of the challenges reviewed. Because of rounding, totals may not equal 100 percent.

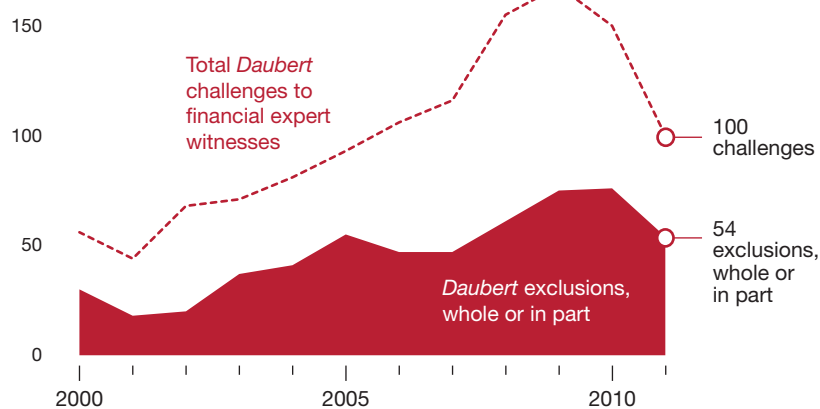


## 2. Number of challenges to financial expert witnesses falls to its lowest level in six years. The number of successful challenges also falls, but the rate of successful challenges increases to a six-year high.

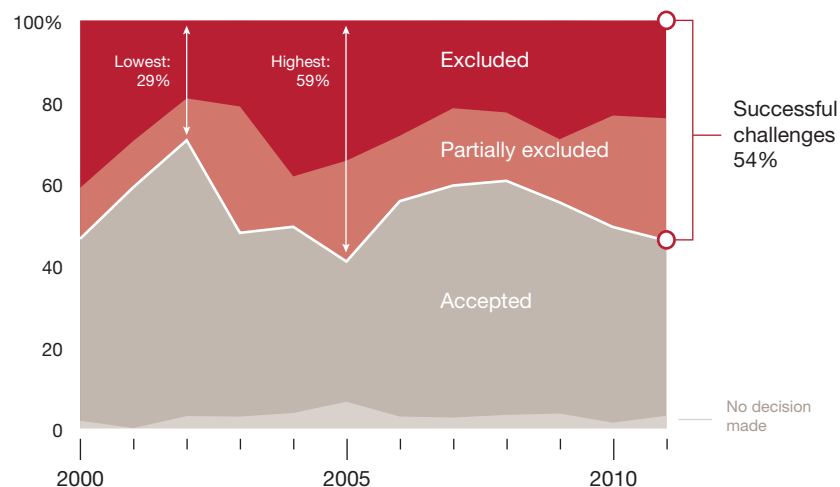
The remaining sections of this study, with the exception of Section 8, are devoted to challenges specifically to financial expert witnesses rather than all experts. Of the 6,919 *Daubert* challenges for 2000–2011 identified in our study, 1,208 were targeted to financial expert witnesses.

- The number of *Daubert* challenges to financial expert witnesses rose every year between 2001 and 2009. In 2010 and 2011, however, the number of financial experts challenged fell in consecutive years for the first time ever, with challenges falling 40% since the peak in 2009. In 2010 and 2011, the testimony of 76 and 54 financial experts, respectively, was excluded in whole or in part (see Figure 4).
- Of all the financial experts challenged during 2000–2011, 28% were completely excluded, 17% were partially excluded, and 52% were admitted. This breakdown is consistent with the outcome of challenges to experts of all types (see Figure 5 compared to Figure 3).<sup>3</sup>
- The percentage of successful challenges has varied widely over the past 12 years, with a low of 29% in 2002 and a high of 59% in 2005. In 2011, 54% of all challenges to financial experts were successful at excluding the expert's testimony in whole or in part; this was above the 12-year average of 45% and the highest level since 2005 (see Figure 5).

**Figure 4: *Daubert* challenges and exclusions to financial expert witnesses, 2000–2011**



**Figure 5: Outcome of *Daubert* challenges to financial expert witnesses, 2000–2011**



<sup>3</sup> Judges did not render a decision in 3% of the challenges reviewed.

### 3. Three federal circuits (Second, Fifth, and Sixth) adjudicate nearly 40% of all Daubert challenges to financial expert witnesses.

The *Daubert* criteria are the standard of review for the admission of expert witness testimony in federal courts, and the First through Eleventh federal circuits opine on a supermajority of all *Daubert* challenges to financial expert witnesses. Some states have also adopted *Daubert* factors as their standard of review. We noted the following trends in the frequency and outcome of *Daubert* challenges to financial expert witnesses by jurisdiction:

- *Daubert* challenges to financial expert witnesses were concentrated in the Second, Third, Fifth, Sixth, Seventh, and Ninth Circuits, which heard approximately 66% of all challenges during 2000–2011. The Second Circuit alone accounted for 15% of the total challenges to financial experts (see Figure 6).
- In 2011, the Fifth, Sixth, Seventh, and Tenth Circuits each had more than 40% declines in the number of *Daubert* challenges to financial expert witnesses as compared to 2010 (see Figure 6).
- The success rate of challenges varied widely by jurisdiction. During 2000–2011, 62% and 63% of the financial expert witness testimony challenged under *Daubert* in the 10th and 11th Circuits, respectively, were excluded in whole or in part. This represented the highest success rate for exclusions among all federal circuits. In contrast, the Third Circuit excluded only 34% of the challenged financial expert witnesses, the lowest success rate among all circuits (see Figure 7).

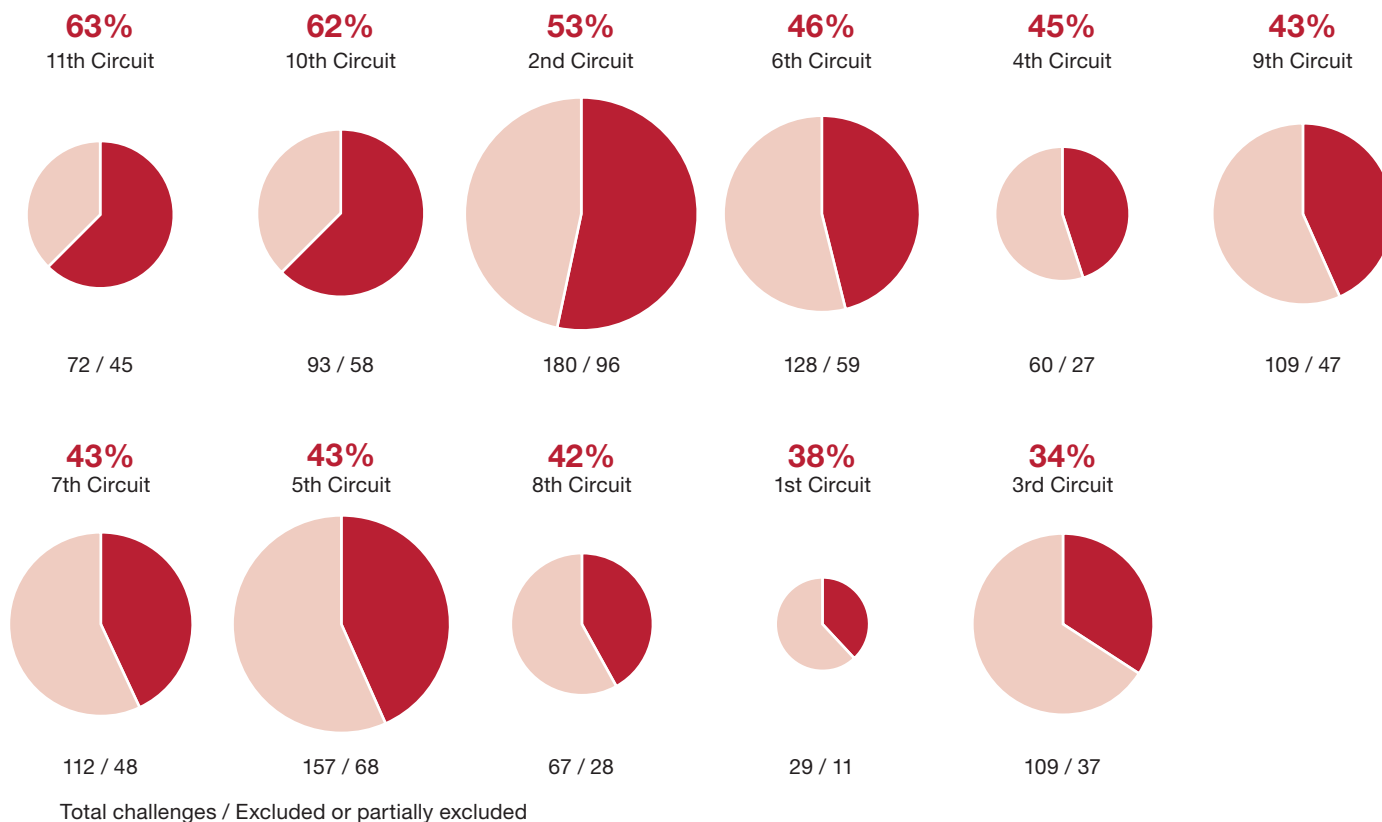
**Figure 6: Number of *Daubert* challenges to financial expert witnesses, by year and jurisdiction, 2000–2011**

	2000	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	2011	Total 2000–2011	Percent
1st Circuit	2	2	2	3	4	3	1	2	5	3	2	0	29	2%
2nd Circuit	9	7	9	17	16	20	27	8	19	15	20	13	180	15%
3rd Circuit	2	4	4	4	10	7	19	13	22	13	4	7	109	9%
4th Circuit	3	3	4	3	2	6	3	11	3	7	9	6	60	5%
5th Circuit	8	2	8	5	5	10	4	21	33	26	23	12	157	13%
6th Circuit	1	3	12	11	7	3	6	13	17	17	24	14	128	11%
7th Circuit	7	5	13	3	6	15	8	14	2	24	11	4	112	9%
8th Circuit	4	3	5	8	8	4	5	8	2	6	8	6	67	6%
9th Circuit	1	2	2	4	5	7	7	7	15	17	23	19	109	9%
10th Circuit	5	5	0	1	7	3	13	13	16	16	9	5	93	8%
11th Circuit	5	2	1	0	2	5	10	4	11	17	5	10	72	6%
Other federal & state courts	9	6	8	12	9	10	3	2	10	7	12	4	92	8%
	56	44	68	71	81	93	106	116	155	168	150	100	1,208	100%

■ Highest number in each year

**Figure 7: Success rate of *Daubert* challenges to financial expert witnesses, by jurisdiction, 2000–2011**

Percentage of excluded or partially excluded



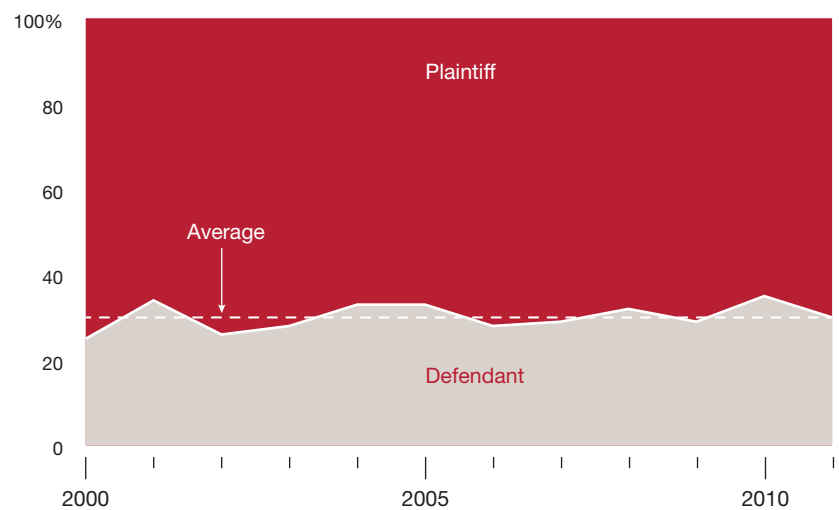
*During 2000–2011, success rates varied widely by jurisdiction. They were highest in the 10th and 11th Circuits (62% and 63%, respectively) and lowest in the 3rd Circuit (34%).*

#### 4. Plaintiff financial expert witnesses are challenged more frequently, consistently two to three times as often as defense experts, but their exclusion rates have been lower than defense experts' in six of the last eight years.

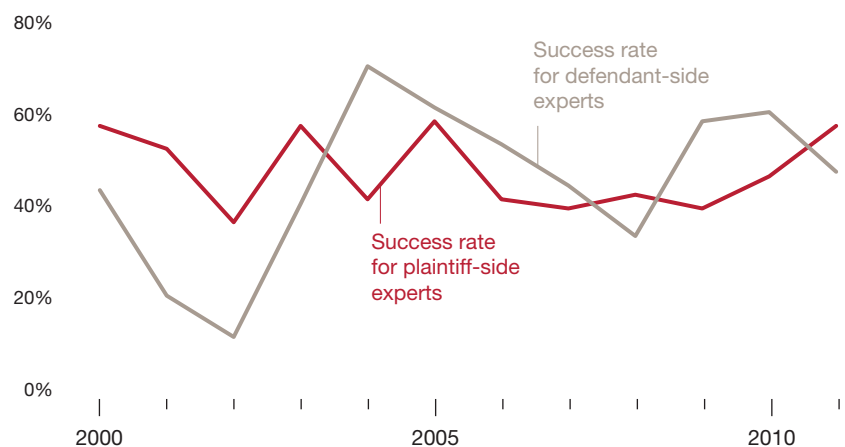
Being a plaintiff-side expert witness versus a defendant-side expert witness is correlated with a higher frequency of *Daubert* challenges. We noted the following trends:

- Plaintiff-side financial experts are consistently challenged much more frequently than defendant-side financial experts. Both in 2011 and for the period 2000-2011, 70% of all financial expert challenges targeted the plaintiff-side expert (see Figure 8).
- On an annual basis, the outcome of challenges varies greatly, with the success rate of challenges ranging from 36% to 58% for plaintiff-side financial experts and 11% to 70% for defendant-side financial experts (see Figure 9).
- For the four-year period of 2000–2003, challenges to plaintiff-side financial experts had a higher success rate than challenges to defendant-side financial experts. The reverse was true for six of the following eight years from 2004–2011. In 2011, 57% of plaintiff-side financial experts were completely or partially excluded from testifying once challenged, versus 47% of defendant-side financial experts (see Figure 9).
- Over the 12-year period, plaintiff-side financial experts have been excluded slightly less often than defendant-side financial experts. During 2000–2011, 46% of challenged plaintiff-side versus 48% of challenged defendant-side financial experts' testimony was either completely or partially excluded from testifying (see Figure 9).

**Figure 8: *Daubert* challenges to financial expert witnesses, plaintiff-side vs. defendant-side, 2000–2011**



**Figure 9: Success rate of *Daubert* challenges to expert witnesses of all types, plaintiff-side vs. defendant-side, 2000–2011**



## 5. Economists, accountants, and appraisers remain the top challenged financial expert witnesses, but economists and accountants are the most likely to survive a challenge while appraisers are the least likely to survive.

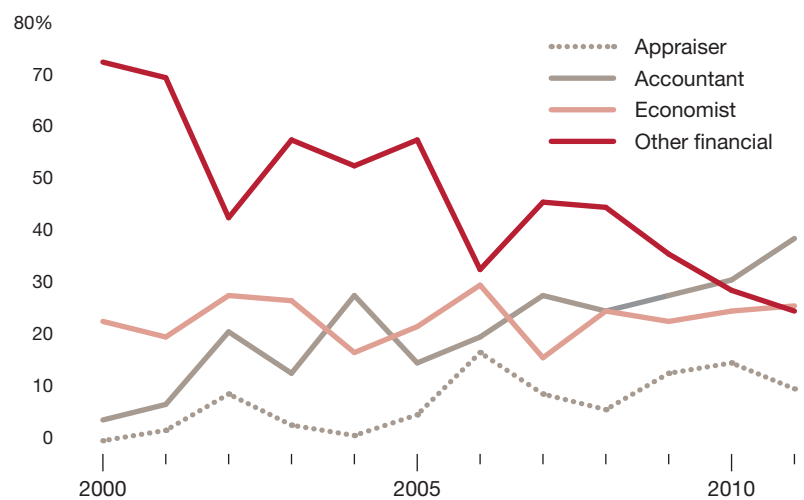
To examine whether certain types of financial expert witnesses were challenged or excluded more frequently than others, we grouped the challenges based on the type of financial experts targeted and observed the following:

Economists, accountants, and appraisers are the most frequently challenged financial expert witnesses, accounting for 24%, 24%, and 9% of all financial expert challenges, respectively, during 2000–2011 (see Figure 10). This trend is likely due to the fact that economists, accountants, and appraisers were engaged more frequently as financial expert witnesses.<sup>4</sup>

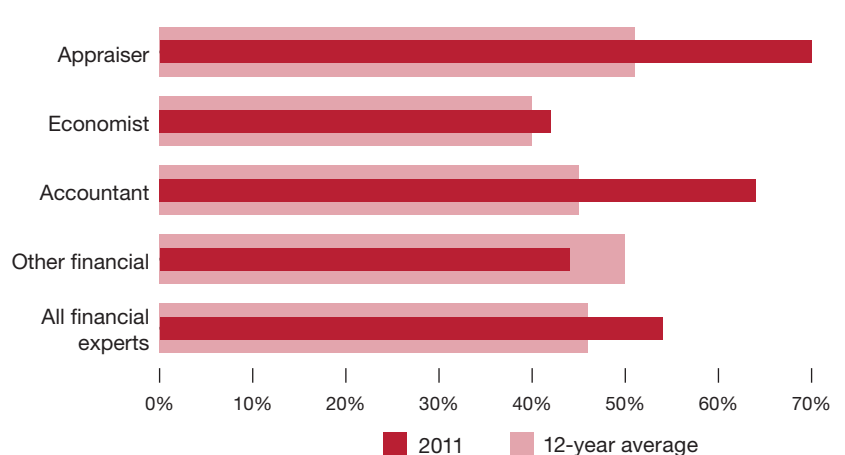
Although more frequently challenged, economists and accountants are more likely to survive a *Daubert* challenge than other financial expert witnesses. During 2000–2011, the success rate of challenges to other financial expert witnesses (50%) was higher than that of successful challenges to accountants (45%) and economists (40%). Over a 12-year period, appraisers were successfully challenged at a rate of 51% (see Figure 11).

Accountants and appraisers were excluded much more frequently in 2011 compared with their 12-year average. Specifically, accountants and appraisers saw their testimony excluded, in whole or in part, 64% and 70% of the time, respectively, in 2011. ‘Other financial experts’ was the only group to see a lower rate of successful challenges in 2011 when compared to its 12-year average (see Figure 11).

**Figure 10: *Daubert* challenges to financial expert witnesses by expert type, 2000–2011**



**Figure 11: Success rate of *Daubert* challenges to financial expert witnesses, by expert type, 2000–2011**



<sup>4</sup> Other financial expert witnesses include statisticians, financial analysts, finance professors, business consultants, etc.

<sup>5</sup> Figures include exclusions made in whole or in part.

6. Case type affects the frequency and outcome of Daubert challenges to financial expert witnesses.

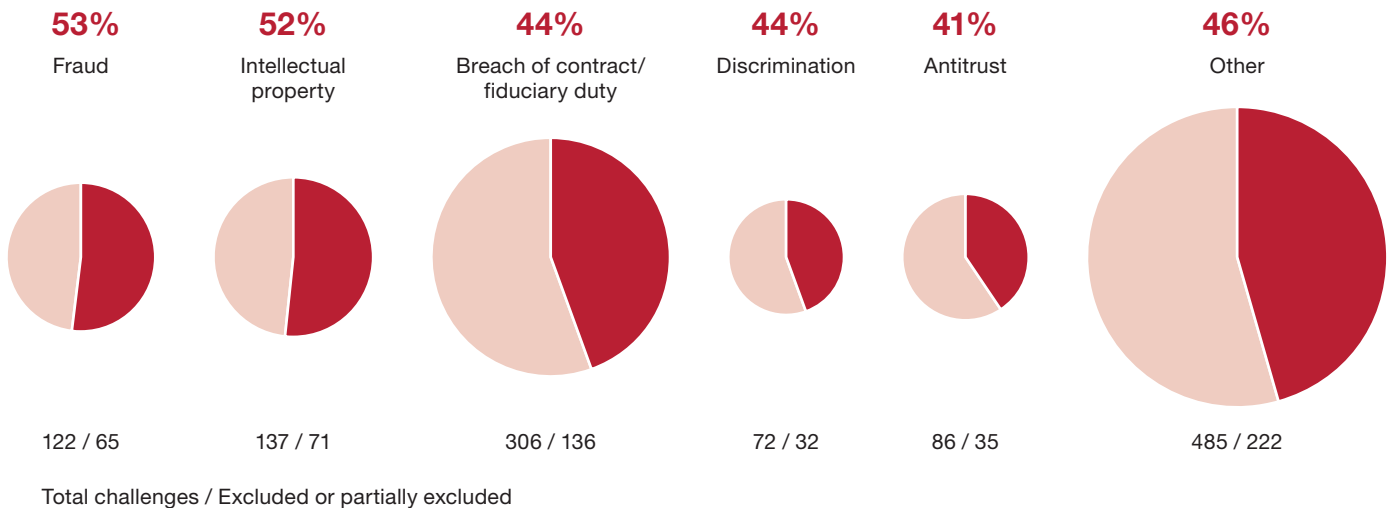
Financial experts assist in a wide range of disputes. However, certain types of disputes are more likely to result in *Daubert* challenges than others.

- During 2000–2011, challenges to financial expert witnesses occurred most frequently in disputes involving a breach of contract or fiduciary duty (see Figure 12).

- During 2000–2011, once challenged, financial expert witnesses experienced higher rates of exclusion in matters involving fraud or intellectual property as compared to disputes involving a breach of contract or fiduciary duty, antitrust, or discrimination (see Figure 12).

Figure 12: *Daubert* challenges to financial expert witnesses, by case type (2000–2011)<sup>6</sup>

Percentage of excluded or partially excluded



<sup>6</sup> Figures include exclusions made in whole or in part. Percentages for excluded or partially excluded witnesses represent success rates for each case type. 'Intellectual property' includes cases involving infringement of patent, copyright, trademark, trade dress, and trade secrets. 'Other' includes case types of asbestos claims, bankruptcy, civil rights, criminal proceedings, insurance claims, medical malpractice, personal injury, product liability, real estate, securities litigation, and wrongful death.

## 7. For the 12th consecutive year, lack of reliability is the top reason financial experts are excluded.

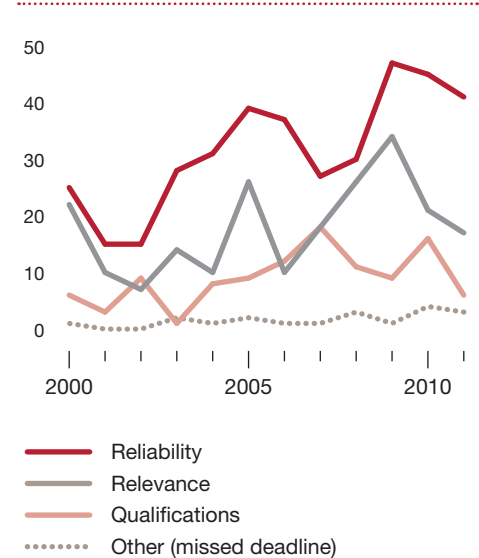
Federal Rule 702 of the Federal Rules of Evidence, “Testimony by Experts,” focuses on the qualifications of the expert and the relevance and reliability of the expert testimony. We analyzed the reasons financial expert testimony was excluded in whole or in part using Rule 702. Our analysis shows that:

- In each year from 2000–2011, lack of reliability was the leading cause that a financial expert opinion was excluded in whole or in part, followed by lack of relevance, then lack of qualifications. During the past 12 years, of the 561 *Daubert* challenges that resulted in full or partial exclusion of financial expert testimony, lack of reliability was a cause in 380 instances (68%), lack of relevance in 215 instances (38%), and lack of qualifications in 108 instances (19%) (see Figure 13, 14 and 15).
- In 2011 alone, lack of reliability was a cause in 76% of the exclusions of financial expert testimony (see Figure 15).
- When a financial expert is excluded for lack of reliability, it’s most frequently caused by a lack of valid data. Particularly, there is more often a problem with the quality of

the data (218 of the 380 instances) available to the financial expert or how the data is reflected in the analytical framework of the financial expert rather than the misuse of an otherwise acceptable methodology (see Figure 14).

- A significant number of exclusions are also related to the relevance of the financial expert testimony. When the expert is addressing a topic requested by counsel, this type of exclusion speaks more to the suitability of the task assignment from counsel rather than the poor execution by the financial expert. Typically relevance is cited with other factors; it’s rare that a financial expert is successfully challenged on the basis of relevance alone.
- Financial expert testimony is often excluded because of a failure to meet multiple *Daubert* criteria. Over the past 12 years, of the 561 challenges in which expert testimony was excluded in whole or in part, 157 exclusions (28%) resulted from failure to meet two or more criteria. Of these, the most common combination was lack of relevance and reliability, which accounted for 85 exclusions in whole or in part (15%) (see Figure 14 and Figure 15).

Figure 13: Exclusion reasons history



**Figure 14: Number of exclusions of financial expert testimony, by exclusion reason (2000–2011)<sup>7</sup>**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Total partially or fully excluded financial experts	30	18	20	37	41	55	47	47	61	75	76	54	<b>561</b>
<b>Breakdown by exclusion reason</b>													
Reliability	25	15	15	28	31	39	37	27	30	47	45	41	<b>380</b>
Relevance	22	10	7	14	10	26	10	18	26	34	21	17	<b>215</b>
Qualifications	6	3	9	1	8	9	12	18	11	9	16	6	<b>108</b>
Other (missed deadline)	1			2	1	2	1	1	3	1	4	3	<b>19</b>
<b>Further breakdown of reliability</b>													
<b>Facts/data</b>	Quantity	17	8	13	7	3	3	2	1				<b>54</b>
	Validity	16	12	14	20	15	31	31	16	15	25	10	<b>218</b>
<b>Methods/principles</b>	Testability	14	7	4	8	8	6	5	8	5	3	1	<b>71</b>
	Peer review	10	6	8	2		3	4	2	4	4	2	<b>46</b>
	Rate of error	8	6	5	14	9	3	3	1	2	1	1	<b>54</b>
	General acceptance	10	9	8	7	17	10	13	17	12	10	1	<b>120</b>
<b>Further breakdown of qualifications</b>													
Education	6	1	4	1	5	3	5	4	1	1		1	<b>32</b>
Knowledge	5	2	7	1	4	5	7	8	6	4	4	2	<b>55</b>
Skill	5	2	6	1	2	1	3	1			1		<b>22</b>
Training	3	2	6		2	3	2	2	2	2		1	<b>25</b>
Experience	5	3	9	1	6	6	8	14	3	4	3	2	<b>64</b>
<b>Breakdown of exclusions resulting from failure to meet two or more criteria</b>													
Reliability and relevance	12	6	2	8	1	11	3	3	7	15	8	9	<b>85</b>
Qualifications and reliability	2	2	4		6	4	3	4	4	4	6	1	<b>40</b>
Qualifications, reliability & relevance	4		3		1	2	3	3	1			2	<b>19</b>
Qualifications & relevance						2	1	3			1		<b>7</b>
Missed deadline, relevance & reliability	1												<b>1</b>
Missed deadline & reliability								1		1		1	<b>3</b>
Missed deadline & qualifications				1					1				<b>2</b>
Missed deadline, reliability & qualifications													
Total exclusions resulting from failure to meet two or more criteria	19	8	9	9	8	19	10	14	13	20	15	13	<b>157</b>

<sup>7</sup> The exclusion reasons are not mutually exclusive. An expert's testimony may have been excluded for more than one reason. Figures include exclusions made in whole or in part.



**Figure 15: Percentage of exclusions of financial expert testimony, by exclusion reason (2000–2011)<sup>8</sup>**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Total partially or fully excluded financial experts	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Breakdown by exclusion reason</b>													
Reliability	83%	83%	75%	76%	76%	71%	79%	57%	49%	63%	59%	76%	68%
Relevance	73%	56%	35%	38%	24%	47%	21%	38%	43%	45%	28%	31%	38%
Qualifications	20%	17%	45%	3%	20%	16%	26%	38%	18%	12%	21%	11%	19%
Other (missed deadline)	3%	0%	0%	5%	2%	4%	2%	2%	5%	1%	5%	6%	3%
<b>Further breakdown of reliability</b>													
<b>Facts/data</b>	Quantity	57%	44%	65%	19%	7%	5%	4%	0%	2%	0%	0%	10%
	Validity	53%	67%	70%	54%	37%	56%	66%	34%	25%	33%	13%	39%
<b>Methods/ principles</b>	Testability	47%	39%	20%	22%	20%	11%	11%	17%	8%	4%	1%	13%
	Peer review	33%	33%	40%	5%	0%	5%	9%	4%	7%	5%	3%	8%
	Rate of error	27%	33%	25%	38%	22%	5%	6%	2%	3%	1%	1%	10%
	General acceptance	33%	50%	40%	19%	41%	18%	28%	36%	20%	13%	1%	21%
<b>Further breakdown of qualifications</b>													
Education	20%	6%	20%	3%	12%	5%	11%	9%	2%	1%	0%	2%	6%
Knowledge	17%	11%	35%	3%	10%	9%	15%	17%	10%	5%	5%	4%	10%
Skill	17%	11%	30%	3%	5%	2%	6%	2%	0%	0%	1%	0%	4%
Training	10%	11%	30%	0%	5%	5%	4%	4%	3%	3%	0%	2%	4%
Experience	17%	17%	45%	3%	15%	11%	17%	30%	5%	5%	4%	4%	11%
<b>Breakdown of exclusions resulting from failure to meet two or more criteria</b>													
Reliability and relevance	40%	33%	10%	22%	2%	20%	6%	6%	11%	20%	11%	17%	15%
Qualifications and reliability	7%	11%	20%	0%	15%	7%	6%	9%	7%	5%	8%	2%	7%
Qualifications, reliability & relevance	13%	0%	15%	0%	2%	4%	6%	6%	2%	0%	0%	4%	3%
Qualifications & relevance	0%	0%	0%	0%	0%	4%	2%	6%	0%	0%	1%	0%	1%
Missed deadline, relevance & reliability	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Missed deadline & reliability	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	2%	1%
Missed deadline & qualifications	0%	0%	0%	3%	0%	0%	0%	0%	2%	0%	0%	0%	0%
Missed deadline, reliability & qualifications													
Total exclusions resulting from failure to meet two or more criteria	63%	44%	45%	24%	20%	35%	21%	30%	21%	27%	20%	24%	28%

<sup>8</sup> The exclusion reasons are not mutually exclusive. An expert's testimony may have been excluded for more than one reason. Figures include exclusions made in whole or in part.

8. Of the 68 Daubert challenges they considered in 2011, appellate courts overturned the lower courts’ rulings in part or in whole for 10 experts.

While we have always included federal and state appellate court rulings in our study, we examined the rate of reversal of *Daubert* rulings<sup>9</sup> as to financial and non-financial experts for the first time in 2011.

- In 2011, appellate courts considered 68 *Daubert* challenges to financial and nonfinancial experts. Of those 68 challenges, the lower court had excluded in part or in whole the testimony of 37 experts, had accepted the testimony of 29 experts, and had not considered testimony under *Daubert* criteria for two experts (see Figure 16).
- Of the 68 *Daubert* challenges considered by appellate courts in 2011, the appellate court affirmed the lower court’s ruling for 58 experts and overturned the lower court’s ruling for 10 experts (see Figure 16).
- The 6th Circuit and 11th Circuit appellate courts heard the most appeals regarding *Daubert* challenges with nine and seven financial and non-financial experts, respectively (see Figure 17).
- For the 68 experts considered on appeal, appellate courts heard cases for six financial experts and 62 non-financial experts. Of the six financial experts, appellate courts affirmed the lower courts’ rulings for four financial experts and overturned the rulings for two financial experts.

Figure 16: *Daubert* challenges to financial and non-financial expert witnesses in appellate courts in 2011, by whether the appellate courts agreed or disagreed with lower court ruling

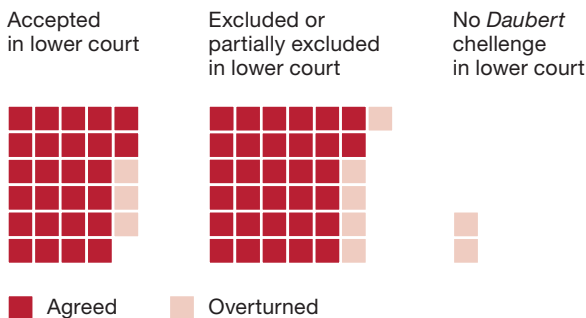
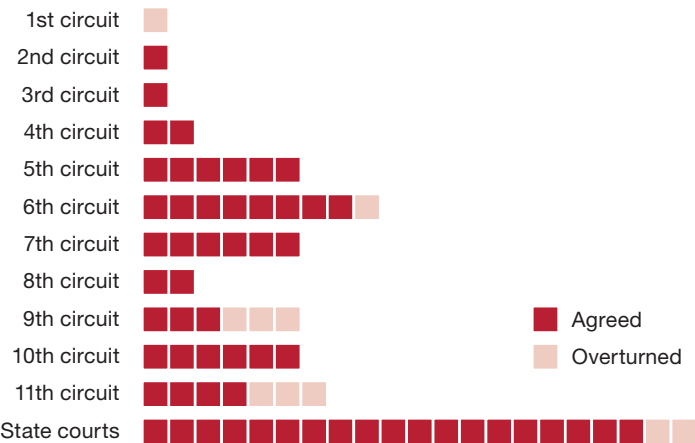


Figure 17: *Daubert* challenges to financial and non-financial expert witnesses in appellate courts in 2011, by federal and state jurisdictions



9 In written opinions referencing *Kumho Tire* in 2011.

## Overtured cases in 2011

When overturning the lower courts' rulings, the appellate courts allowed four experts to testify at trial, excluded the testimony of one expert, and remanded the case for the trial court to apply or reapply the *Daubert* standards for five experts.

### Experts allowed by appellate courts:

- In *Milward v. Acuity Specialty Products Group, Inc.*, the appellate court overturned the district court's ruling and allowed the expert to testify at trial. The appellate court ruled that the district court exceeded the scope of its discretion in placing "undue weight on the lack of general acceptance" of the expert's testimony and crossing the "boundary between gatekeeper and trier of fact" (2011 WL 982385).
- In *Rosenfeld v. Oceania Cruises, Inc.*, the appellate court ruled that the lower court erred in excluding the expert's testimony because the lower court believed the testimony would be unhelpful to a jury. The appellate court found that the expert's testimony would be relevant to a jury's decision and ordered a new trial in which the expert's testimony would be admitted (2011 WL 3903172).
- In *Robertson v. Doug Ashy Building Materials, Inc.*, the appellate court ruled that the trial court's decision to exclude the plaintiff's expert was in legal error, as the defendant did not prove that the expert's report was unreliable and the trial court failed to perform the required analysis of the *Daubert* standards (2011 WL 4572067).
- In *Wells v. Illinois Central Railroad Company*, the appellate court overturned the trial court's exclusion of one expert, arguing that the expert's testimony had "expressed sufficient factual knowledge to opine" on the plaintiff's work activities. In the same case, the appellate court also affirmed the exclusion of another expert because the plaintiff failed to provide the appellate court with relevant testimony that was necessary for a proper review of the trial court's decision (2011 WL 6777921).

### Expert excluded by appellate court

- In *Uniloc USA, Inc. v. Microsoft Corp.*, the appellate court ruled that the district court erred by including the expert's testimony, as the testimony was based on an "arbitrary, general rule" that was "unrelated to the facts of the case" (2011 WL 9738).

*Appellate courts remanded case and ordered lower court to apply or reapply Daubert standards*

- In *Ellis v. Costco Wholesale Corp.*, the appellate court vacated and remanded the district court's ruling to allow three experts' testimony at the class certification stage. The appellate court ruled that the district court failed to apply the "rigorous analysis" required to assess commonality at the class certification stage (2011 WL 4336668).
- In *An v. Active Pest Control South, Inc.*, the trial court did not perform a *Daubert* analysis to determine the admissibility of two of the plaintiff's experts before granting summary judgment to the defendant. The appellate court vacated the lower court's judgment and remanded the case to the trial court to reconsider the experts using *Daubert* standards (2011 WL 5529847).

## **9. Exclusions more commonly result from the misuse of accepted methodologies than from the introduction of unusual or untested analytical methods.**

Our study reveals that methodological flaws caused by the misuse of accepted financial or economic methods are a more frequent cause of financial expert exclusion than the use of novel or untested methodology. We have summarized illustrative recent cases where one or more courts found fault with the approach taken under the *Daubert* standard of reliability, as follows.

### **Illustrative recent cases**

#### **Failure of plaintiffs in class action case to establish commonality at the class certification stage.**

In *Wal-Mart Stores, Inc. v. Dukes*, the Supreme Court of the United States ruled that the plaintiffs' case failed the test of commonality required in class action cases. The plaintiffs' case included a statistical expert who used a regression analysis showing "statistically significant disparities between men and women at Wal-Mart in terms of compensation and promotions" and another statistical expert who used a benchmarking study showing that Wal-Mart "promotes a lower

percentage of women than its competitors." Despite support for the expert's findings by statistical and other anecdotal evidence, the Supreme Court held that the plaintiffs' case failed to demonstrate that the cause of the disparities evidenced was the result of common Wal-Mart institutional practices so as to constitute a class action. The Supreme Court's decision is widely understood to endorse greater scrutiny of experts at the class certification stage.<sup>10</sup> (*Wal-Mart Stores, Inc. v. Dukes*, 131 S.Ct. 2541)

#### **Failure to use the income-capitalization approach to calculate the present value of future cash flows.**

In a condemnation action, the plaintiff moved to exclude the expert's testimony regarding the present value of future cash flows derived from an intangible asset. The expert computed the present value as the difference between the revenue earned as if the plaintiff were allowed to charge monopoly prices and the revenue received if the plaintiff had to charge lower rates. According to the court, the expert failed to implement the income-capitalization approach, under

***During 2000–2011, methodological flaws more often than novel approaches resulted in the inadmissibility of expert testimony.***

<sup>10</sup> The appellate court ruling in *Wal-Mart Stores, Inc. v. Dukes* was included in our study *Daubert* challenges in 2010. We have included the US Supreme Court ruling in our summary of illustrative cases because of the ruling's impact on expert testimony at the class certification stage. Although not counted in our 2011 study, on January 13, 2012, the Seventh Circuit appellate court also endorsed greater scrutiny of expert testimony at the class certification stage. The Seventh Circuit appellate court held that the district court failed to make a necessary *Daubert* ruling at the class certification stage. During the class certification stage, the district court declined to make a *Daubert* ruling regarding the defendant's expert report, finding that the plaintiffs had ample opportunity to respond and the court had given the report "the weight it believes it is due." The appellate court rejected the district court's argument, stating that a *Daubert* ruling is required at the class certification stage unless the court believes the expert report is "not relevant to the predominance inquiry" (*Messner v. Northshore University HealthSystem*, 2012 WL 129991).

which “the anticipated net income which the property is expected to generate over its usable life is capitalized and processed to indicate the capital investment which produces the net income.” The court held that the expert’s testimony should be excluded because it was based upon “subjective beliefs or unsupported speculation.” (*Dedaux Utility Company, Inc. v. The City of Gulfport, Mississippi*, 2011 WL 1314049)

#### **Failure to reference a recognized authority when valuing an intangible asset.**

In the same condemnation action cited in the previous example, the defendant moved to exclude the expert’s testimony regarding the present value of future “contributions in aid of construction,” which is also defined as “donated property.” The expert’s testimony on future contributions in aid of construction was based on professional judgment. The court held that the expert’s testimony was inadmissible because it did not “reference a recognized authority,” and it was “too speculative to constitute a valid consideration in intangible-asset valuation.” (*Dedaux Utility Company, Inc. v. The City of Gulfport, Mississippi*, 2011 WL 1314049)

#### **Failure of expert witness to sufficiently validate inputs in damages calculation.**

In a tortious interference and breach of contract case, the plaintiff filed an appeal against the district court’s decision to exclude its expert witness. The district court stated that the plaintiff’s expert witness had little to no familiarity with how the damages presented in his expert report were calculated as they were provided to him by the plaintiff and the expert did not undertake an analysis or perform due diligence to verify the calculations. The district court determined that the expert’s opinion was not based on “sufficient facts and data” and, thus, could not be considered reliable. The appellate court affirmed the district court’s decision to exclude. (*Auto Industries Supplier Employee Stock Ownership Plan v. Ford Motor Company*, 2011 WL 2610584)

#### **Lack of acceptance of damage assessment methodology.**

In a class action fraud case, the plaintiff’s expert witness, a forensic accountant with long-standing experience, calculated damages using the “benefit-of-the-bargain” method, where the damages were calculated as the difference between what the plaintiff actually received and what the plaintiff was fraudulently led to believe he would receive. According to California law, the appropriate methodology for

assessing damages in fraud cases is the “out-of-pocket” loss rule. Therefore, the court determined that the expert’s testimony was not “the product of reliable principles and methods” because the method is precluded by law. (*Ralston v. Mortgage Investors Group, Inc.*, 2011 WL 6002640)

#### **Lack of reliability in a comparables model.**

In a case involving breach of contract relating to the development of video games, the plaintiff’s expert witness, a certified public accountant and chartered financial analyst, calculated the plaintiff’s alleged damages using two models. The court excluded the damage calculation under the comparables method because it determined that the expert’s process for determining comparable video games revealed “a series of ad hoc decisions based on subjective considerations, rather than identifiable (or principled) criteria.” Regarding the unjust enrichment model, the court found that the model “rested on an unfounded assumption” and, where the expert witness substituted alternative figures into an audit report that was relied upon, “provided no factual support for the alternative figures he used.” Therefore, the expert witness’s testimony was ruled unreliable and excluded. (*Silicon Knights, Inc. v. Epic Games, Inc.*, 2011 WL 6748518)

**Failure to apply realistic or objective assumptions in valuations.**

In a charitable contribution deduction case related to conservation easement, the judge excluded the expert testimonies of the petitioner regarding the value of property. The experts provided the highest and best use valuation of the property prior to the easement, but not after. Also, the experts did not make any adjustments to their calculations after admitting factual errors. The court held that the experts' appraisals "fail to apply realistic or objective assumptions," and it reasoned that the calculations were not conducted using reliable methods. (*Boltar, LLC v. Commissioner of Internal Revenue*, 2011 WL 1314445)

**Failure to take into account market factors and previous year's financial statements to value property.**

In a debtor action against a creditor, the court found the creditor's expert to be less reliable than the debtor's expert in valuing a poultry farm, which was used as collateral. Thus, the debtor's expert's opinion was assigned more weight in the decision. The creditor's expert failed to take into consideration the economic recession when using the sales comparison approach to value the real estate, resulting in an inflated

number. Under the income approach, the creditor's expert included the value of the farmer's house and land per acre based on the assumption that the house could be rented and the acreage used. However, the court agreed with the debtor's expert that these should not be included because the farmer would live in the house and the land would bring in little income from hay production. Therefore, the court reasoned that the creditor's expert was not as reliable and gave his calculations less weight when reaching a decision. (*In re Mark Hudson, and Rachel Scarlett Hudson*, 2011 WL 1004630)

**Improper calculation of royalty rates.**

In a patent infringement action, the defendant moved to exclude the expert's testimony regarding the plaintiff's royalty calculations. The expert based the royalty calculation upon two settlement agreements that were not similar to this particular patent. In addition, the expert calculated the royalty rate and then increased it without offering an explanation. The court excluded the expert's testimony because the calculations were speculative. The court reasoned that the expert's opinions were not "based in sound economic precepts" and that the proposed royalty rate could not be explained to the jury. (*ePlus, Inc. v. Lawson Software, Inc.* 2011 WL 250671)

**Failure to provide reliable basis in calculation of reasonable royalty.**

In a misappropriation of trade secrets and breach of contract case, the plaintiff's expert witness, a certified public accountant who is also certified in financial forensics, created his royalty analysis according to the guidelines set forth in *Georgia-Pacific Corp. v. United States Plywood Corp.* These guidelines outline a 15-point process in developing a "reasonable" royalty analysis. One of the factors requires identifying a date at which "the misappropriation began." The date identified by the expert was designated as arbitrary and without any factual basis, and the testimony was excluded. (*De Lage Landen Operational Services, LLC v. Third Pillar Systems, LLC* 2011 WL 1771044)



## **Illustrative 2000–2010 cases**

### **Arbitrary and unreliable method for calculating royalty rates.**

In an intellectual property dispute, the plaintiff's expert witness used the 25 percent rule of thumb to calculate an estimate of the damages to be awarded based off the royalty fees that would have been expected from a negotiation. Despite the fact that the 25 percent rule was a commonly referenced rule of thumb originally based on examination of years of licensing and profit data across multiple companies and industries, the court found in a well-publicized decision that the rule of thumb was fundamentally flawed because it was too abstract and had no relation to the specific facts of the case. The expert was unable to support his use of the 25 percent royalty rate beyond stating that it was a generally accepted practice. The court ruled that the expert's "starting point of a 25 percent royalty had no relation to the facts of the case and as such, was arbitrary, unreliable, and irrelevant." (*Uniloc v. Microsoft*, 2011, Case No. 03-CV-0440)<sup>11</sup>

### **Inappropriate selection of growth rate to calculate business-interruption loss.**

In the calculation of business-interruption losses for a 14-month period, the plaintiff's expert, a forensic accountant, failed to conduct an economic analysis in determining the appropriate growth rate to calculate projected revenues. The expert used a growth rate based on a five-month period, during which new management was in place, assuming that the growth rate under new management would have continued throughout the interruption period. The Eastern District Court of Wisconsin determined that the expert failed to consider various economic factors that could have impacted the revenue growth rate and hence deemed the testimony unreliable. (*Manpower Inc. v. Insurance Co. of Pennsylvania*, 2010 WL 3730968)

### **Failure to consider other relevant data in a statistical analysis.**

In a case of discriminatory employment practices based on gender and pregnancy, a labor economist analyzed the impact of gender and maternity leave on compensation. The expert performed a statistical analysis of historical data to determine whether gender and/or maternity leave played a role in the defendant's pay decisions.

However, the expert failed to consider other employees who have taken a substantial amount of leave; hence, his testimony could not assist the trier of fact in understanding the unique impact of gender and pregnancy and was therefore deemed inadmissible. (*E.E.O.C. v. Bloomberg L.P.*, 2010 WL 3466370)

### **Insufficient supporting market data in calculating infringement damages.**

In calculating damages and profits related to copyright infringement, the defendant's expert failed to support his calculation with sufficient historical data or prove that it was based on his experience. The court ruled that the damage amount calculated by the expert included numbers that "have no basis in fact or his experience" and that the testimony should be partially excluded due to absence of "concrete support for such estimates." (*Dalen Products, Inc. v. Harbor Freight Tools, USA*, 2010 WL 3083543)

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11 As the court opinion was issued in 2011, this case was not counted in the survey results elsewhere in this report.



**Unreliable methodology for calculating trading volume and determination of an efficient market.**

In a securities fraud class action, the plaintiff's expert witness calculated trading volume of public shares using the average trading volume over a five-year period, rather than calculating the average daily trading volume for various months or various years within the relevant class period. Furthermore, the expert understated the volatility of the stock by excluding 117 event dates in her calculations, which led to the skewed determination of an efficient market. The District Court of Illinois ruled to exclude the expert's testimony based on these unreliable methodologies. (*In re Northfield Laboratories, Inc., Securities Litigation*, 2010 WL 2011945)

**Testimony irrelevant to the case facts.**

In a case of breach of contract, the defendant's expert's testimony about the appraised or market value of leases was deemed irrelevant because it "does not 'fit' the particular facts of the case." The appraiser's testimony, although based on an acceptable methodology to appraise the market value of leases, was not relevant to the inquiry "as it does not address whether the fact allegedly concealed affected the value of the property to the reasonably prudent buyer." (*Lafarge North America, Inc. v. Discovery Group LLC*, 2010 WL 3025120)

**Insufficient evidence for calculation of damages.**

In a case of copyright infringement, the plaintiff's expert, a certified public accountant, sought to calculate the estimated gross revenues and net profit realized from the alleged copyright infringement. The expert witness based his damage assessment on a "long string of assumptions" regarding the lost profits and lacked proper evidence to support his assertion. The assumptions included what the terms of contracts would be and the amount of profits that would be realized, among other assumptions. The District Court of Texas found the expert's opinion concerning actual damages to be too speculative and therefore unreliable. (*Baisden v. I'm Ready Productions Inc.*, 2010 1855963)

**Lack of detail and supporting data.**

In a case for breach of contract, the plaintiff's expert aimed to calculate the premium paid by the plaintiff for a product based on one of the characteristics of the product. However, the expert did not review and rely on all the relevant information in pleadings or testimony to calculate the premium. The court found that the expert's testimony was based on, "at most, a cursory review of the underlying record in this action. His report shows that [the

expert] reviewed the complaints, but no other pleadings or testimony. He did not read the plaintiffs' depositions." Therefore, the court deemed the expert's testimony to be unreliable. (*Weiner v. Snapple Beverage Corp.*, 2010 WL 3119452)

**Failure to include variables in calculation of damages.**

In a case of copyright infringement, the plaintiff's expert's calculation of lost revenues failed to account for all of the reasons contributing to the defendant's gross revenues. Instead, the expert assumed that all of the revenues were derived solely from the alleged infringement. Furthermore, the court believed that the expert's testimony should have included a comparison of projected revenues and the realized revenues. Due to the lack of "non-speculative evidence," the court deemed the expert's testimony unreliable. (*Interplan Architects, Inc. v. C.L. Thomas, Inc.*, 2010 WL 4065465)

**Incomplete statistical analysis.**

In a litigation case, an expert was retained to provide a statistical comparison of the incidence rates and high levels of calcium in patients treated with two Vitamin D analogs. The statistician's testimony was deemed incomplete by the Seventh Circuit Court because, although the expert used a methodology that is acceptable in his industry, the expert

presented an incomplete analysis because he failed to gather patient level data, interview the clinician, and conduct a sensitivity analysis. The court determined that the expert did not meet the “standards of intellectual rigor that are demanded in their professional work.” (*Bone Care Intern. LLC v. Pentech Pharmaceuticals, Inc.*, 2010 WL 3928598)

#### **Improper and unreliable statistical analysis and survey.**

In an employment discrimination case, the defendant’s expert performed a sub-store (micro level) analysis of the company’s facilities. The expert’s survey of store managers was concluded to be biased based on its methodology and therefore “not the type of evidence that would be ‘reasonably relied upon by experts.’” The court determined the defendant’s expert analysis to be both insufficient and unreliable, and dismissed the statistical challenges. (*Dukes v. Wal-Mart Stores Inc.*, 2010 WL 1644259)

#### **Improper exclusion from sample population.**

In evaluating the aggregate change of hospital billing over time, an accountant excluded certain selections from a sample population. The expert reasoned that the excluded selections’ associated charges were reduced to

zero, resulting in individual percentage change calculations that required division by zero. The court, however, found this reason to be unacceptable because when the selections were combined with the entire population, there was no mathematical problem in the overall calculation. The District Court of Illinois found that it was improper for the expert to exclude the selections and deemed the expert unreliable. (*Alexian Brothers Health Providers Ass’n, Inc. v. Humana Health Plan, Inc.*, 2009 WL 1059189)

#### **Unreliable lost profits calculation.**

In an intellectual property dispute, the plaintiff’s damages expert made a lost profit projection 10 years into the future without providing supporting industry research. The expert failed to test the model against historical data to confirm its long-term predictive power. Both the District Court for the Eastern District of Michigan and the Sixth Circuit Court of Appeals agreed that the expert’s calculations fell short of the level of rigor that professional economists normally exercise. The testimony was excluded because of the lack of testability, peer review, and general acceptance in the economic community. (*Multimatic, Inc. v. Faurecia Interior Systems USA, Inc.*, 2009 WL 4927957)

#### **Improper use of averages in lost earnings calculation.**

In a personal injury lawsuit, the plaintiff’s damages expert used average national figures to calculate the plaintiff’s lost earnings capacity. However, the expert failed to account for the plaintiff’s actual historical wages, even though he admitted that the plaintiff’s “actual earnings didn’t match what the capacity determinations were.” The Sixth Circuit District Court ruled to exclude the expert’s testimony in its entirety because the use of averages was based on unreasonable assumptions. (*Andler v. Clear Channel Broadcasting, Inc.*, 2009 WL 3855178)

#### **Unreliable discounted cash flow (DCF) analysis.**

In valuing a company involved in a bankruptcy case, an economist employed the DCF method. Upon *Daubert* review, the 11th Circuit District Court recognized the DCF method as a well-accepted valuation methodology, but concluded the expert did not correctly apply the facts of the case when determining the variables used in the DCF analysis. As a result, the expert was precluded from offering any conclusions with respect to the company’s solvency. (*Kipperman v. Onex Corp.*, 2009 WL 2515664)

**Failure to provide sufficient facts and data.**

In a fire-related insurance claim, an expert calculated a building's pre-damage value as its replacement cost less depreciation. Because this calculation essentially relied on only two numbers, the court focused on determining the reliability of those two figures. The expert was unable to provide sufficient support for the two numbers used. In addition, the court found that the methodology used had not been reviewed or generally accepted in the relevant community. The expert's opinion was, therefore, excluded from trial. (*James River Ins. Co. v. Rapid Funding, LLC*, 2009 WL 481688)

**Improper use of sampling and extrapolation methodologies.**

In a false claims lawsuit, the plaintiff's statistical expert used a cohort sampling and extrapolation methodology instead of a random sample. The expert's cohort sampling method was not exclusive among samples and resulted in an overlap of the sample selections. Extrapolation of the overlapping sample selections resulted in an overstated damage claim. The District Court of Massachusetts ruled that the expert's sampling and

extrapolation methodology was invalid because the expert failed to use a generally accepted sampling methodology and failed to provide justification for the use of weighted averages to compensate for acknowledged overlapping samples. (*U.S. ex rel. Loughren v. UnumProvident Corp.*, 2009 WL 530575)

**Lack of support for the duration of the damage period.**

Three certified public accountants developed a "but for" model to assess economic losses related to a contract dispute. In calculating the losses, the experts assumed that the plaintiffs would have enjoyed the same trading returns for up to 46 years in the future, were it not for the defendant's actions. With no data to support this long-lived assumption, the experts' methodology was seen as nothing more than a "blind extrapolation" from the plaintiffs' trading history. The Second Circuit District Court ruled that despite the qualifications of the experts, their unreliable methodology was sufficient to rule that none of the experts was qualified to offer a relevant expert opinion in this case. (*Helft v. Allmerica Financial Life Ins. and Annuity Co.*, 2009 WL 815451)

**Doubtful principles and errors.**

In a contract dispute case, the plaintiff retained an accountant to testify on the valuation of a closely held business. The expert had considerable experience in valuing large public companies but acknowledged that he was not an expert on valuing closely held businesses to the extent that the principles underlying the valuation differed from those of a large, publicly traded company. As a result, the Seventh District Court ruled that the accountant was not qualified as an expert for this case. The court further stated that even if the accountant was qualified as an expert, his opinions failed to satisfy *Daubert's* reliability standard because of significant methodological errors. (*MDG International, Inc. v. Australian Gold, Inc.*, 2009 WL 1916728)

**Unreliable methodology for valuing personal guaranties.**

When valuing personal guaranties, the defendant's expert witness determined that the risk of providing personal guaranties is comparable to the risk of an equity investment. His methodology pertained to the cost of debt in the context of valuing a business, rather than a personal guaranty. Furthermore, prior to this case, the expert had never valued a personal

guaranty, nor had he seen someone value a personal guaranty using the methodologies that he employed. The District Court of Maine ruled to exclude the expert's testimony based on unreliable methodology. (*Baldwin v. Bader*, 2008 WL 2875351)

#### **Unreliable analysis based on purely anecdotal data.**

In this criminal case, the defendant's financial expert testified to inaccuracies and incompleteness in the National Firearms Registration and Transfer Record (NFRTR). His testimony relied on his conversations with the Bureau of Alcohol, Tobacco, Firearms and Explosives personnel; a 1998 audit of the NFRTR; and the experiences of two gun owners. The First Circuit Court of Appeals affirmed the district court's decision to exclude the expert's testimony because he relied on data that was purely anecdotal and without scientific basis. (*United States v. Giambro*, 2008 WL 4427360)

#### **Unreliable assumption used for sales comparison valuation.**

In a products liability case, the plaintiff's expert witness offered an opinion on the value of a building rendered uninhabitable. The expert used both the cost approach and the sales comparison approach to determine the value of the building. In applying

a sales comparison model, the expert assumed that the highest and best use for the property was "a non-impact home based business," which can be conducted only in a dwelling. The expert admitted that the building at issue did not fit the legal definition of a dwelling. The District Court of Pennsylvania excluded the expert's sales comparison valuation because his underlying assumption was unreliable. (*Steffy v. The Home Depot, Inc.*, 2008 WL 5189505)

#### **No identifiable technique or theory.**

In an antitrust case, the plaintiff's damage expert calculated lost aluminum sales related to an antitrust violation by including nonaluminum sales without providing any justification. Furthermore, the expert's method of estimating lost sales was not based on any identifiable theory or technique. The expert's approach involved considering multiple factors and evaluating them as a matter of professional judgment. The plaintiff argued that this approach is generally accepted in various settings for making profit projections, but the expert never identified his methodology beyond saying that he used professional judgment. The District Court of Oklahoma ruled to exclude the expert's testimony because it was neither testable nor reliable. (*Champagne Metals v. Ken-Mac Metals, Inc.*, 2008 WL 5205204)

#### **Unreliable economic damages calculation.**

In proving damages arising from the loss of enjoyment of life (hedonic damages), the plaintiff's economics expert witness proposed a hypothetical benchmark of the dollar value of a statistical life. However, the District Court of New Mexico ruled to exclude the expert's testimony because the sustainability of the hypothetical benchmark was not established. (*Harris v. United States*, 2008 WL 5600225)

#### **Determination of terminal value.**

In determining the enterprise value of Chapter 11 debtors' business under a discounted cash flow (DCF) analysis, the debtors' valuation expert used the debtors' projected earnings before interest, tax, depreciation, and amortization (EBITDA) minus capital expenditures as the metric of value for determining the debtors' terminal value. The opposing experts testified that "while EBITDA minus Cap Ex [capital expenditures] is used as a 'credit statistic' to measure, among other things, whether a company can adequately service its debt, it has never been used by any expert before any court in the United States to determine a company's terminal value under a DCF analysis." Given

the expert's inability to identify any publications, treatises, or articles that validated his methodology, the Delaware Bankruptcy Court found that "the unprecedented use by the Debtors' expert of EBITDA minus Cap Ex to determine the Debtors' terminal value was so unreliable as to render the opinion of the Debtors' expert witness as to the Debtors' enterprise value inadmissible." (*In re Nellson Nutraceutical, Inc.*, 2006 WL 3479293)

#### **Failure to consider discounted cash flow (DCF) analysis in business valuation.**

The Eastern District Court of New York ruled that failing to use the DCF method and relying solely on the comparable companies method did not provide the necessary "check" that would render the expert's value assessment a reliable measure of the company's worth. (*In re Med Diversified, Inc.*, 334 B.R. 89, 2005)

The Southern District Court of New York, in *Lippe v. Bairnco Corp.*, excluded a financial expert because he "failed to adequately explain why he chose not to use DCF as a check against the comparables he employed in the valuations." (*Lippe v. Bairnco Corp.*, 288 B.R. 678, 2003)

#### **Misuse of the Black-Scholes method of valuation.**

In this constructive fraudulent transfer case, the plaintiff argued that the Black-Scholes model could be used in valuing an option to purchase 100% of controlled shares in a privately held company since each of the variables in the model could be instantiated. The Eastern District of New York Bankruptcy Court indicated that the Black-Scholes model is principally applied to valuing an option for a minority of publicly traded shares. The court ruled that the method should not be used for valuing an option to purchase 100% of controlled shares in a privately held company. (*In re Med Diversified, Inc.*, 334 B.R. 89, 2005)

#### **Unreliable "straight-line ramp-up method" (SLR method).**

The SLR method plots the known value of a stock at one point in time and the known value at a later time, then draws a line between the two points and assumes that the value of the stock changed at a consistent rate in the intervening time. The Utah Court of Appeals ruled that the SLR method is "not an accepted method of business valuation." (*Haupt v. Heaps*, 2005 UT App 436)

#### **Enhancement of a reasonable royalty rate through the application of a multiplier.**

In a patent infringement matter, a methodology for determining actual damages to a patentee (the producer of the patented item) is to determine the sales and profits lost to the patentee because of the infringement. In cases where the patentee cannot establish entitlement to lost profits, the statute provides entitlement at no less than a reasonable royalty on an infringer's sales. The Northern District Court of California stated that "application of an additional amount, over and above a royalty rate, must be based on realistic, appropriate factors, such as royalties actually received by the patentee and the patentee's relationship with the infringer."

The Federal Circuit law "nowhere sanctions the use of a multiplier to determine adequate compensation for infringement." The court ruled that "such an enhancement to the reasonable royalty calculation is simply untethered by legal or factual support." (*Technology Licensing Corp. v. Gennum Corp.*, Not Reported in F.Supp.2d, 2004 WL 1274391, 2004 US Dist. LEXIS 10604)

**Unreliable “consumption theory.”**

In proving damages arising from contended fraudulent transfers, the plaintiff’s accounting expert applied a “consumption theory,” which estimated losses over a period of time by examining the values of “cash assets” — a measure of liquid assets defined by the expert — at two points in time. Damages were calculated as the difference between these two values. This theory assumes that all of the downward change in the amount of ‘cash assets’ was caused by or consumed in a company’s operating activities. The consumption theory employs “indirect evidence, the decrease in the amount of the ‘cash assets,’ as proof of both payment of less than reasonably equivalent value and the amount of monies a company was entitled to receive had it been paid the market price, its damages, in lieu of comparing each price paid for products to each’s reasonably equivalent value damage measuring point, generally the market price.” The Northern District of Alabama Bankruptcy Court found this method of calculating damages unreliable. (*In re Perry County Foods, Inc.*, 313 B.R. 875, 2004)

**Untested “proportional trading model.”**

In a securities litigation matter, the plaintiff’s expert applied the proportional trading model to estimate aggregate damages to a class of securities by multiplying the alleged per-share price differential by the aggregate number of shares “damaged” by the alleged fraud. The Northern District Court of Illinois ruled that the proportional trading model does not meet any of the *Daubert* standards because it “has never been tested against reality” and “has never been accepted by professional economists.” (*Kaufman v. Motorola Inc.*, Not Reported in F.Supp.2d, 2000 WL 1506892, 2000 US Dist. LEXIS 14627)

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## ***Methodology***



We searched written court opinions issued between January 1, 2000 and December 31, 2011 (i.e., post-*Kumho Tire*), using the citation search string “526 U.S. 137” (*Kumho Tire v. Carmichael*). During 2000–2005, our search was conducted in the LexisNexis database; and since 2006, we have used the WestLaw database. Our search identified 4,107 federal and state cases during 2000–2011 that involved 6,919 *Daubert* challenges to expert witnesses of all types. In some instances, more than one *Daubert* motion was filed in a case or several expert witnesses were challenged with one motion.

From each *Daubert* challenge, we extracted detailed information concerning each case, the characteristics of each challenged expert, the nature of the evidence challenged, and the outcome of each challenge. We classified experts into two categories for this study: financial experts (accountants, economists, statisticians, finance professors, financial analysts, appraisers, business consultants, etc.) and non-financial experts (scientists, engineers, mechanics, physicians, police officers, fingerprint experts, psychologists, psychiatrists, etc.). Our search showed that 1,208 *Daubert* challenges were addressed to financial experts during 2000–2011. In each instance where a challenge to a financial expert resulted in the full

or partial exclusion of the expert’s testimony by the court, we categorized the factor(s) that resulted in the inadmissibility of the expert’s testimony, using as a basis for analysis Federal Rules of Evidence Rule 702, “Testimony by Experts.”

Our methodology entailed searches on written opinions related to expert challenges and may not encompass all challenges in all cases. Consequently, our analysis focused on trends and comparative metrics rather than on the absolute number of challenges or exclusions.

Throughout the study, whenever we refer to the success rate of *Daubert* challenges or similar phrases, ‘success’ is defined as the exclusion of expert witness testimony in whole or in part. Similarly, when we refer to the exclusion of an expert witness, we are referring to the testimony and opinions the witness intended to proffer.

We appreciate the assistance of the following PwC survey team members: Richard Abbott, Amy Brunner, Joseph Devlin, Stefanie Dvorak, Christopher Gordon, Katherine Kotowski, Timothy Maldonado, Minaz Mavany, Holly Mills, Sean Moroney, Regan Owen, Matthew Rao, Anveshica S. Tayi, and Viktoriya Smith.

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***Appendix:  
Supporting yearly data for  
report figures***

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**Support data for figure 2: *Daubert* challenges and exclusions to expert witnesses of all types, 2000–2011**


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	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Challenges	253	287	364	387	408	537	741	704	712	869	879	778
Exclusions	121	135	147	193	169	252	348	322	305	389	431	335

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**Support data for figure 3: Outcome of *Daubert* challenges to expert witnesses of all types, 2000–2011**


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	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Accepted	52%	53%	57%	46%	54%	46%	49%	51%	55%	46%	48%	54%	<b>50%</b>
Excluded	35%	36%	32%	32%	29%	31%	27%	26%	24%	23%	25%	25%	<b>28%</b>
Partially excluded	13%	11%	9%	18%	13%	16%	20%	19%	19%	22%	24%	18%	<b>17%</b>
No decision made	0%	0%	2%	4%	5%	7%	4%	3%	2%	9%	3%	3%	<b>4%</b>

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**Support data for figure 4: *Daubert* challenges and exclusions to financial expert witnesses, 2000–2011**


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	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Challenges	56	44	68	71	81	93	106	116	155	168	150	100
Exclusions	30	18	20	37	41	55	47	47	61	75	76	54

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**Support data for figure 5: Outcome of *Daubert* challenges to financial expert witnesses, 2000–2011**


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	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Accepted	45%	59%	68%	45%	46%	34%	53%	57%	57%	52%	48%	43%	<b>52%</b>
Excluded	41%	30%	19%	21%	38%	34%	28%	22%	23%	29%	23%	24%	<b>28%</b>
Partially excluded	13%	11%	10%	31%	12%	25%	16%	19%	17%	15%	27%	30%	<b>17%</b>
No decision made	2%	0%	3%	3%	4%	6%	3%	3%	3%	4%	1%	3%	<b>3%</b>

Support data for figure 8: *Daubert* challenges to financial expert witnesses, plaintiff-side vs. defendant-side, 2000–2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Plaintiff	75%	66%	74%	72%	67%	67%	72%	71%	68%	71%	65%	70%	<b>70%</b>
Defendant	25%	34%	26%	28%	33%	33%	28%	29%	32%	29%	35%	30%	<b>30%</b>

Support data for figure 9: Success rate of *Daubert* challenges to financial expert witnesses, plaintiff-side vs. defendant-side, 2000–2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Plaintiff-side experts	57%	52%	36%	57%	41%	58%	41%	39%	42%	39%	46%	57%	<b>46%</b>
Defendant-side experts	43%	20%	11%	40%	70%	61%	53%	44%	33%	58%	60%	47%	<b>48%</b>

Support data for figure 10: *Daubert* challenges to financial expert witnesses, by expert type, 2000–2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Avg.
Appraiser	0%	2%	9%	3%	1%	5%	17%	9%	6%	13%	15%	10%	<b>9%</b>
Accountant	4%	7%	21%	13%	28%	15%	20%	28%	25%	28%	31%	39%	<b>24%</b>
Economist	23%	20%	28%	27%	17%	22%	30%	16%	25%	23%	25%	26%	<b>24%</b>
Other financial	73%	70%	43%	58%	53%	58%	33%	46%	45%	36%	29%	25%	<b>44%</b>

Support data for figure 11: Success rate of *Daubert* challenges to financial expert witnesses, by expert type, 2000–2011

	2011	Avg.
Appraiser	70%	<b>51%</b>
Economist	42%	<b>40%</b>
Accountant	64%	<b>45%</b>
Other financial	44%	<b>50%</b>
All financial experts	54%	<b>46%</b>



***To have a deeper conversation  
about how this subject may affect  
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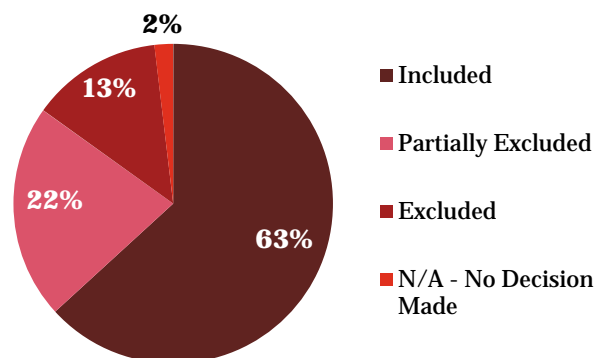
# Daubert challenges to financial experts: 2013 mid-year update

We are pleased to present this mid-year update to our annual study of *Daubert* challenges to financial experts. This update reflects observations from our analysis of *Daubert* challenges for the first six months of 2013, and also highlights challenges of particular interest.

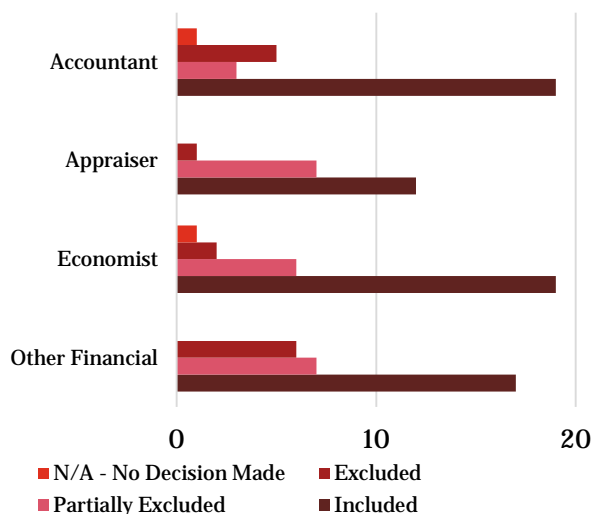
During the first six months of 2013, our study classified 461 *Daubert* challenges to expert witnesses of all types in federal and state courts. Of these 461 *Daubert* challenges of all types, our study classified 106 *Daubert* challenges to financial experts.<sup>1</sup>

***The testimonies of 37 financial experts were excluded in whole or in part during the first six months of 2013 (see Figure 1).***

**Figure 1: Success rate of *Daubert* challenges to financial expert witnesses**



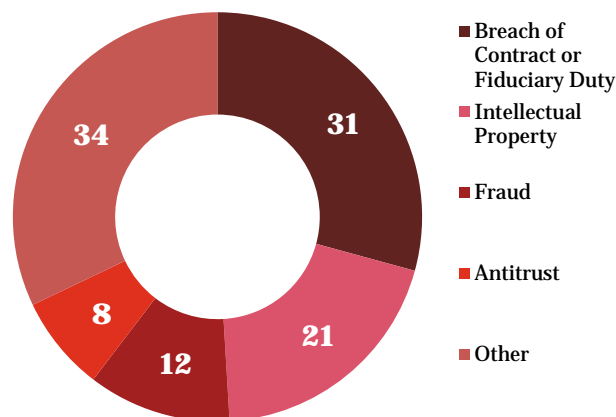
**Figure 2: Success rate of *Daubert* challenges to financial expert witnesses, by expert type**



***Economists and accountants were the most frequently challenged financial expert witnesses during the first six months of 2013 (see Figure 2).***

***During the first six months of 2013, challenges to financial expert witnesses occurred most frequently in disputes involving a breach of contract or fiduciary duty (see Figure 3).<sup>2</sup>***

**Figure 3: Success rate of *Daubert* challenges to financial expert witnesses, by case type**



<sup>1</sup> The *Daubert* study analyzes post-*Kumho Tire* challenges to financial expert witnesses under the *Daubert* standards. Because the study is limited to written opinions in federal and state courts, the related results should not be presumed to apply to all financial expert challenges, including those resolved by motion or those decisions that do not specifically reference *Kumho Tire*. Please see our annual *Daubert* study for a more detailed explanation of the methodology used in the study.

<sup>2</sup> "Other" case types involve foreclosure disputes, personal injury, bankruptcy, torts to land, product liability, libel/slander, discrimination, deceptive marketing, land condemnation, Fair Labor Standards Act, other statutory actions, personal property damage, Uniform Condemnation Procedures Act, tax disputes, criminal actions, wrongful death, environmental issues, and RICO matters.



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## Highlighted Cases

We have highlighted certain cases with judgment dates within the first six months of 2013. These cases discuss two instances where courts found flaws in methodologies employed by financial experts, one instance of a financial expert's inadequate qualifications, and one instance of a financial expert's unreliability due to his unfamiliarity with the details of his assumptions.

### Incorrect application of methodology

In a fraud litigation, three financial experts retained by the plaintiff and one financial expert retained by the defendant were partially excluded. The defendant's expert, retained to provide testimony regarding damages, was partially excluded because of his error in calculating out-of-pocket damages. The court found that the approach used by the expert would "change the methodology... by permitting a hindsight revision" regarding what the plaintiff knew when making securities purchases. (*Crown Cork & Seal Co., Inc. Master Retirement Trust v. Credit Suisse First Boston Corp.*, 12-CV-05803-JLG, 12-CV-07263-JLG, 12-CV-05804-JLG, 12-CV-07264-JLG, 12-CV-05805-JLG March 12, 2013.)

### Misuse of accepted methodology

In a case involving patent infringement, the plaintiff retained an economist as a financial expert to establish damages attributable to the defendant's alleged infringement. The expert applied two different damage models, a reasonable royalty rate based on a hypothetical negotiation and the Nash Bargaining Solution. The court acknowledged that the expert did not attempt to remove non-infringing elements from the sales figures in calculating his royalty base. The court excluded the expert's opinion related to the reasonable royalty, determining that this method was a "poor substitute" for limiting the royalty base to "infringing products or components." The court accepted the expert's opinion related to the Nash Bargaining Solution. (*VirnetX Inc. v. Cisco Systems, Inc.*, 6:10-CV-417, March 1, 2013.)

### Inadequate qualifications prove unreliable

In a class-action litigation related to an alleged price-fixing conspiracy, the plaintiff's expert, a law and economics professor, provided testimony regarding the defendants' conduct as it related to antitrust actions. The defendant argued that the expert simply provided his legal opinion with no economic expertise applied. The court found that the plaintiff's expert was not qualified to rebut the economic testimony of the defendant's expert. The court further noted that the plaintiff expert's "status as a law professor" likely would mislead the jury in understanding that the expert was giving a "strictly economic and not legal opinion." (*In re Titanium Dioxide Antitrust Litigation*, CIV.A. RDB-10-0318, May 1, 2013.)

### Unfamiliarity with supporting documents

In a patent infringement case, the plaintiff's damages expert, a Certified Public Accountant who was also Certified in Financial Forensics, was retained to provide testimony regarding lost profits for the alleged infringement of multiple patents. In preparing his expert opinion, the expert delegated and relied upon the work of his staff. In the deposition of the expert, the court found the expert to be unfamiliar with the supporting documents and other details of his assumptions. The court determined the expert's analysis "failed to withstand the basic test of reliability" referring to an expert's obligation to know and understand the support used in determining the expert's opinion. (*Masimo Corp. v. Philips Electronics North America Corp.*, CA 09-80-LPS-MPT, May 20, 2013.)

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## **About Lewis Wiener**

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Lewis Wiener, a corporate defense attorney with more than 25 years of trial and advocacy experience, represents banks, credit card companies, consumer finance companies, insurance companies and related entities and individuals in state and federal court litigation throughout the United States. Head of Sutherland's Financial Services Litigation Team and a member of the firm's executive committee, Lew's extensive civil litigation and trial experience includes serving as class action defense counsel, arbitration counsel, conducting large internal investigations, handling complex litigation matters and defending entities in connection with investigations and enforcement actions brought by government agencies. He also represents clients in eminent domain/inverse condemnation, environmental and land-use litigation before state and federal trial and appellate courts.

A former trial lawyer with the U.S. Department of Justice, Lew draws on his experience representing executive branch agencies to represent clients in court and to advise clients on regulatory, compliance and enforcement matters at the federal and state level. While at the Department of Justice, Lew was twice recognized by the Attorney General for special achievement in the handling of significant litigation matters on behalf of the United States, and he was lead government counsel in the largest class action ever filed against the United States. Lew also serves as pro bono partner for Sutherland's Washington, D.C. office.

### **Practices / Industries**

- Litigation
- Class Action Defense
- Financial Services Litigation
- Complex Business Litigation
- U.S. Court of Federal Claims
- Appellate
- White Collar Defense
- Environmental
- Construction
- Director & Officer Liability
- Insurance
- Consumer Financial Services
- Crisis Management

### **Education**

- J.D., American University Washington College of Law, Managing Editor, American University Journal of International Law and Policy
- B.A., cum laude, State University of New York at Albany