Daubert challenges to financial experts:

A ten-year study of trends and outcomes 2000–2009

PricewaterhouseCoopers

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Overview

Daubert criteria are applicable 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, not merely testimony relating to science.

2009 marked the 10th anniversary of the Kumho Tire decision. This crisis management study analyzes post–Kumho Tire (2000–2009) challenges to financial expert witnesses under the *Daubert* standards. The study looks at 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 the challenges to provide insight into the reasons experts were challenged and excluded; and it categorizes the causes of exclusions in the context of Federal Rules of Evidence Rule 702, "Testimony by Experts," focusing on the qualifications of the experts and the relevance and reliability of the expert testimony. The study also summarizes some of the financial, statistical, economic, and valuation methods that courts have found inadmissible.

Trends

1. Challenges to all expert witnesses rise, but success rates remain steady.

The US Supreme Court's ruling in Kumho Tire Co. v. Carmichael took the *Daubert* criteria for the admissibility of expert scientific testimony and extended it to include all expert testimony proffered in federal courts. Subsequently, many state courts also adopted the *Daubert* standard. Our study of published court opinions examined 5,262 *Daubert* challenges to expert witnesses of all types in federal and state courts during 2000–2009. Overall, we observed the following trends:

- Since the Kumho Tire opinion in 1999, the number of challenges to expert witnesses of all types has been increasing rapidly, rising from 253 in 2000 to a record 869 in 2009. Specifically, the number of challenges to expert witnesses has risen from 704 in 2007 to 712 in 2008 and 869 in 2009 (see Figure 1).

- In 2009, 389 expert testimonies were excluded in whole or in part as the result of *Daubert* challenges—up from 322 in 2007 and 305 in 2008 (see Figure 2).

- Of all the expert testimony challenged during 2000–2009, 45 percent was excluded in whole or in part, and 50 percent was admitted (see Figure 3).

- The percentage of all experts excluded in whole or in part returned to 45 percent in 2009, equal to the 2007 exclusion rate, after a drop to 43 percent in 2008. The percentage of successful challenges has remained relatively consistent over the past 10 years, with the highest percentage (50 percent) in 2003 and the lowest (41 percent) in 2002 (see Figure 4).

Figure 1: *Daubert* challenges to expert witnesses of all types, 2000–2009

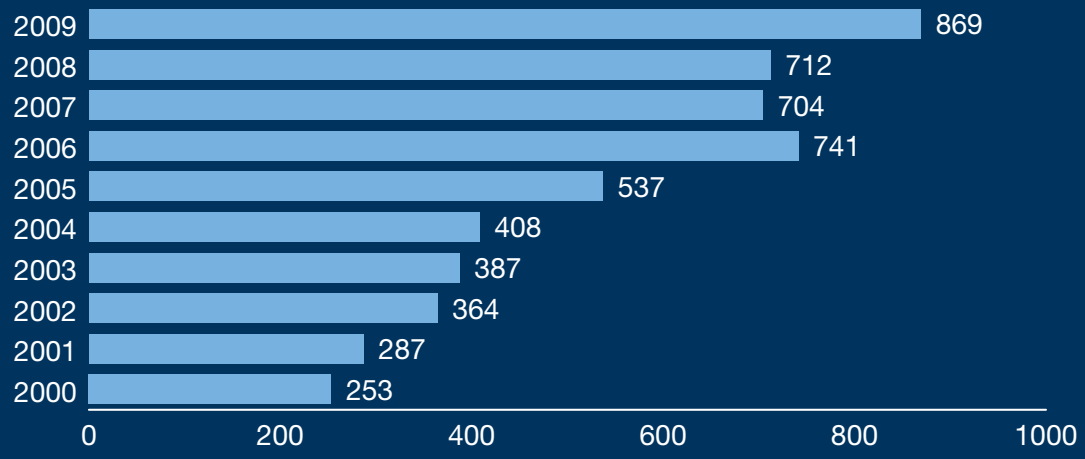


Figure 2: Total *Daubert* exclusions to expert witnesses of all types, 2000–2009

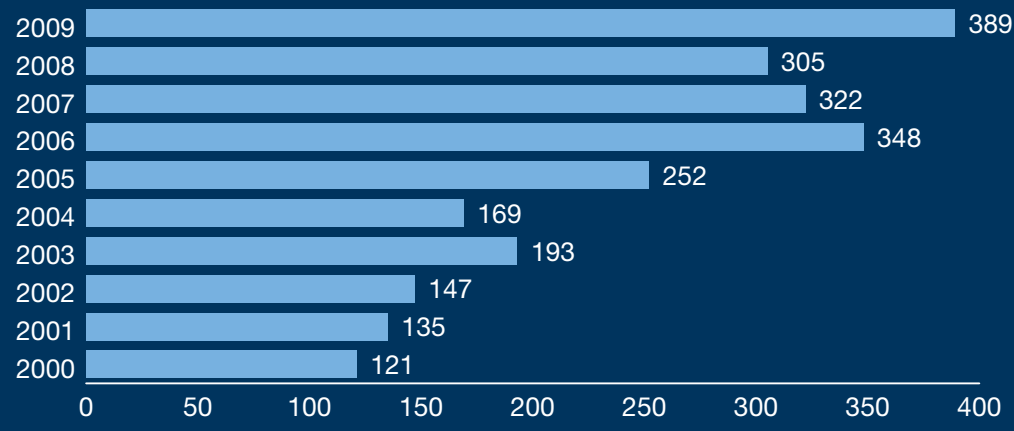


Figure 3: Outcome of *Daubert* challenges to expert witnesses of all types, 2000–2009

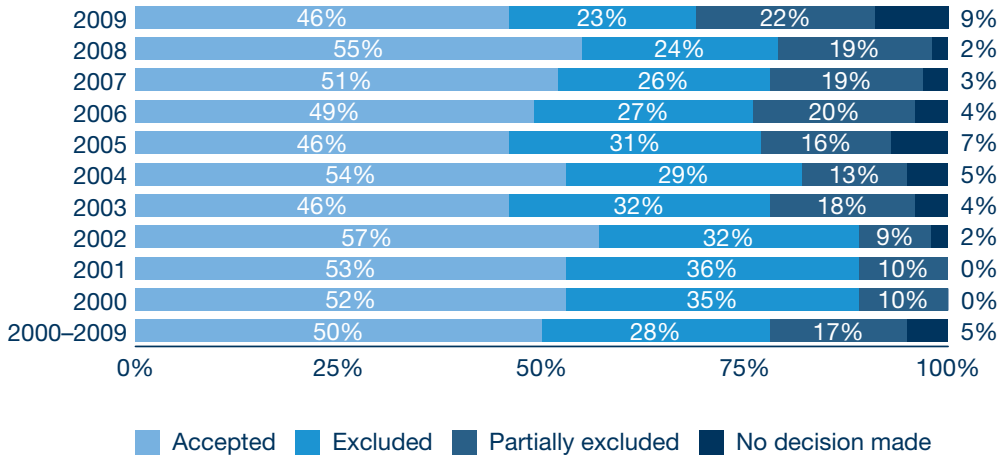
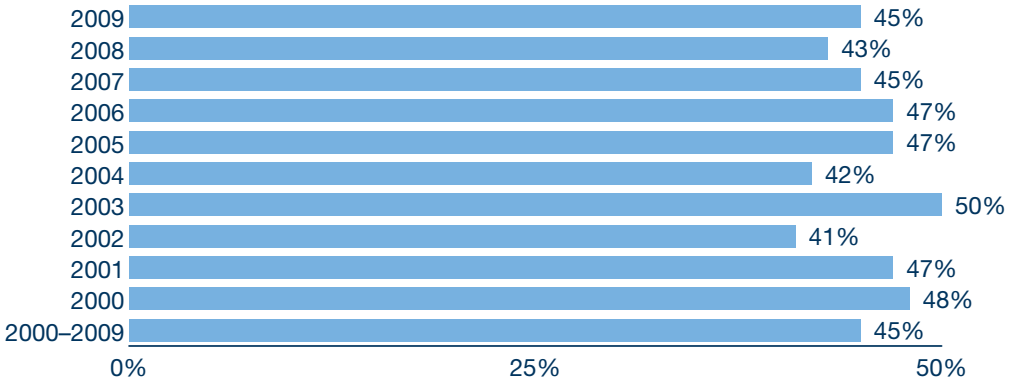


Figure 4: Success rate of *Daubert* challenges to expert witnesses of all types, 2000–2009



2. Challenges to financial expert witnesses rise, but success rates remain steady.

The remaining sections of this study are devoted to challenges to financial expert witnesses. Of the 5,262 *Daubert* challenges for 2000–2009 identified in our study, 958 were targeted to financial expert witnesses.

- The number of *Daubert* challenges to financial expert witnesses has been rising every year since 2001. In 2009, 168 financial experts were challenged, representing an increase of 8 percent over 2008, which had an increase of 34 percent over 2007 (see Figure 5).

- In 2009 and 2008, the testimony of 75 and 61 financial experts, respectively, was excluded in whole or in part (see Figure 6).

- Of all the financial experts challenged during 2000–2009, 28 percent were completely excluded, 17 percent were partially excluded, and 52 percent were admitted (see Figure 7). This breakdown is nearly identical to the outcome of challenges to experts of all types (see Figure 3 compared to Figure 7).

- The percentage of successful challenges has varied widely over the past 10 years, with a low of 29 percent in 2002 and a high of 59 percent in 2005. In 2009 and 2008, respectively, 44 percent and 40 percent of all challenges to a financial expert were successful at excluding the expert's testimony in whole or in part, each year slightly below the 10-year average of 45 percent (see Figure 8).

10-year highlight:

During 2000–2009, 45 percent of all challenges to financial expert witnesses were successful at excluding the expert's testimony in whole or in part.

Figure 5: *Daubert* challenges to financial expert witnesses, 2000–2009

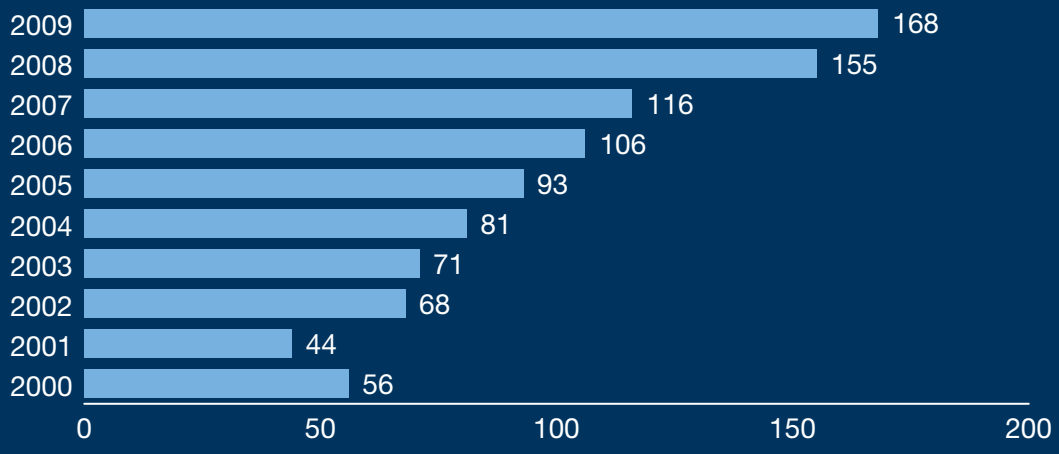


Figure 6: Successful number of *Daubert* challenges to financial expert witnesses, 2000–2009

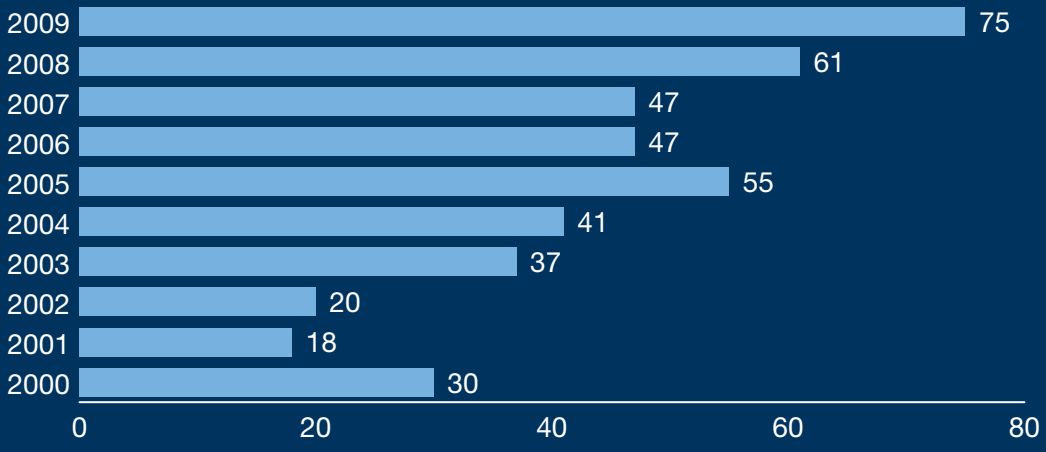


Figure 7: Outcome of *Daubert* challenges to financial expert witnesses, 2000–2009

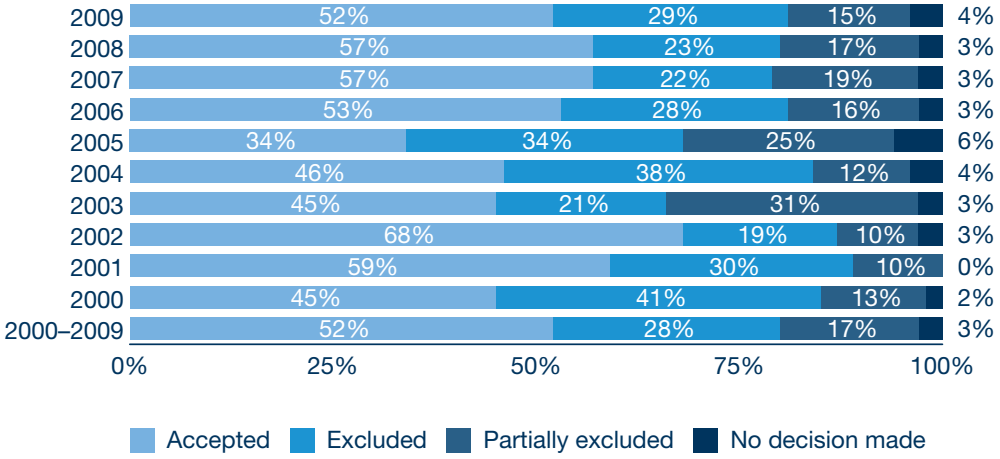
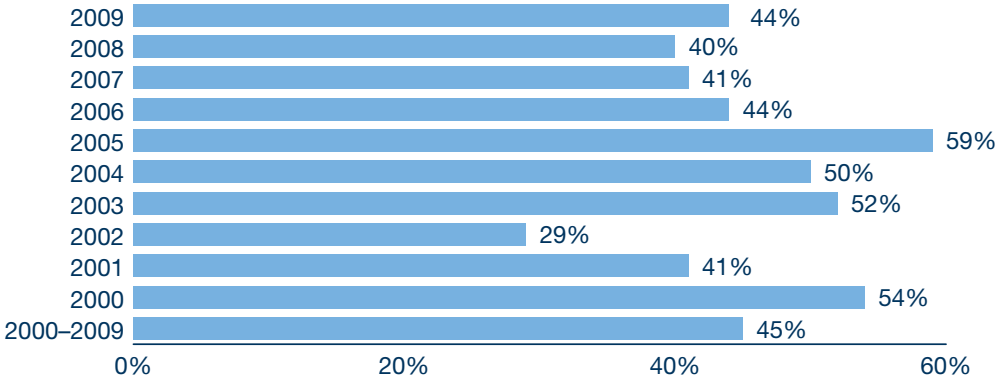


Figure 8: Success rate of *Daubert* challenges to financial expert witnesses, 2000–2009



3. Five federal circuits adjudicate the majority 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 12 federal circuits opine on a supermajority of all *Daubert* challenges to financial expert witnesses. Some states also have 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:

- The success rate of challenges varied widely by jurisdiction. During 2000–2009, 65 percent of the financial expert witness testimony challenged under *Daubert* in the 10th Circuit was excluded in whole or in part, the highest success rate for exclusions among all federal circuits. By contrast, the First Circuit excluded only 33 percent of the challenged financial expert witnesses, the lowest success rate among all circuits (see Figure 9).

- *Daubert* challenges to financial expert witnesses were concentrated in the Second, Third, Fifth, Sixth, and Seventh circuits, which heard nearly 58 percent of all challenges during 2000–2009. The Second Circuit alone accounted for 15 percent of the total challenges to financial experts (see Figure 10).

- In 2008, the 7th Circuit ranked 10th among federal circuits in the number of expert exclusions, but in 2009 ranked second as expert exclusions increased more than in any other circuit in any other year (see Figure 10).

10-year highlight:

Success rates vary widely by jurisdiction. They were highest in the 10th Circuit, where 65 percent of financial expert witness testimony challenged under *Daubert* was excluded in whole or part from 2000–2009.

Figure 9: Success rate of *Daubert* challenges to financial expert witnesses, by jurisdiction, 2000-2009

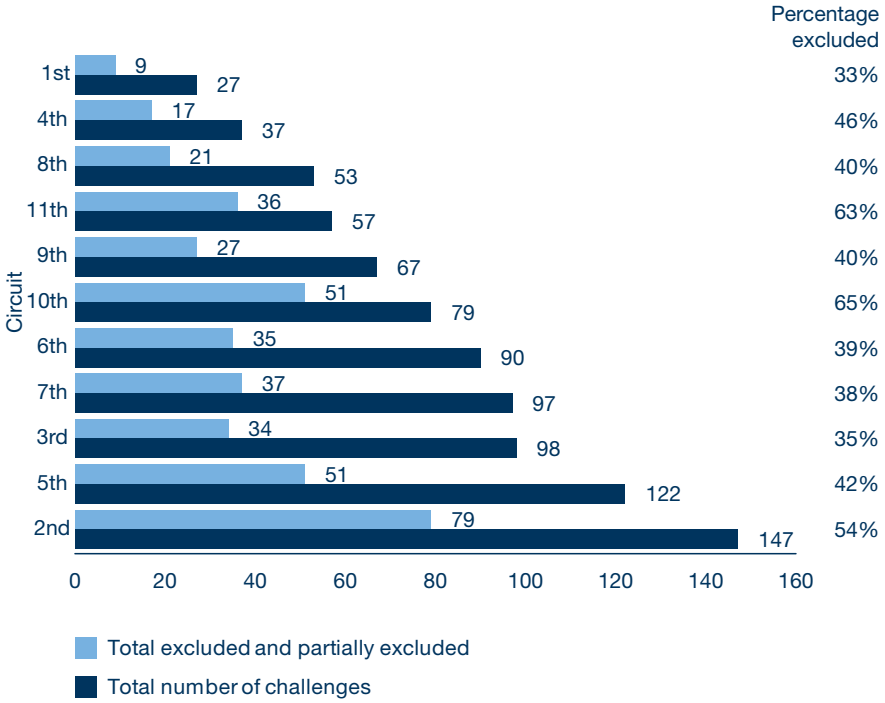


Figure 10: *Daubert* challenges to financial expert witnesses, by year and jurisdiction, 2000–2009

Jurisdiction	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2000–2009	Percent
2nd Circuit	9	7	9	17	16	20	27	8	19	15	147	15%
5th Circuit	8	2	8	5	5	10	4	21	33	26	122	13%
3rd Circuit	2	4	4	4	10	7	19	13	22	13	98	10%
7th Circuit	7	5	13	3	6	15	8	14	2	24	97	10%
6th Circuit	1	3	12	11	7	3	6	13	17	17	90	9%
10th Circuit	5	5	0	1	7	3	13	13	16	16	79	8%
9th Circuit	1	2	2	4	5	7	7	7	15	17	67	7%
8th Circuit	4	3	5	8	8	4	5	8	2	6	53	6%
11th Circuit	5	2	1	0	2	5	10	4	11	17	57	6%
4th Circuit	3	2	3	3	1	1	3	11	3	7	37	4%
1st Circuit	2	2	2	3	4	3	1	2	5	3	27	3%
DC Circuit	0	1	1	0	1	5	0	0	0	0	8	1%
Other federal & state courts	9	6	8	12	9	10	3	2	10	7	76	8%
Total	56	44	68	71	81	93	106	116	155	168	958	100%

4. Plaintiffs' 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 five of the last six years.

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

- Plaintiff-side financial experts were challenged much more frequently than defendant-side financial experts. Among all challenges to financial experts during 2000–2009, 70 percent targeted the plaintiff-side expert (see Figure 11).
- On an annual basis, the outcome of challenges varies greatly, with the success rate of challenges ranging from 36 percent to 58 percent for plaintiff-side financial experts and 11 percent to 70 percent for defendant-side financial experts (see Figure 12).
- In 2000–2003 and 2008, challenges to plaintiff-side financial experts had a higher success rate than challenges to defendant-side financial experts. The reverse was true in 2004–2007 and 2009. In 2009 specifically, 39 percent of plaintiff-side financial experts were completely or partially excluded from testifying once challenged, versus 58 percent of defendant-side financial experts (see Figure 12).

10-year highlight:

Challenges to plaintiff-side financial expert witnesses were 70 percent of all challenges; but defendant-side financial experts were excluded more frequently.

Figure 11: *Daubert* challenges to financial expert witnesses, plaintiff-side vs. defendant side, 2000–2009

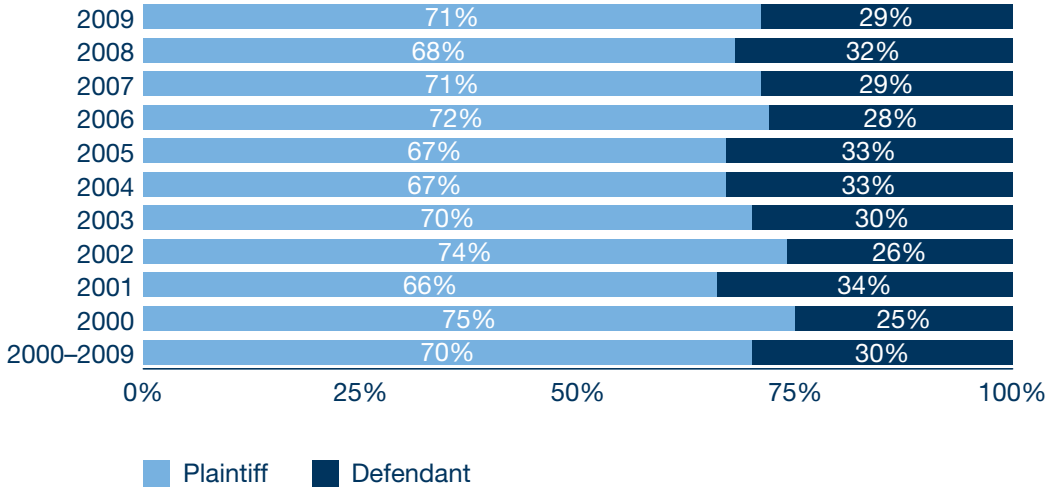
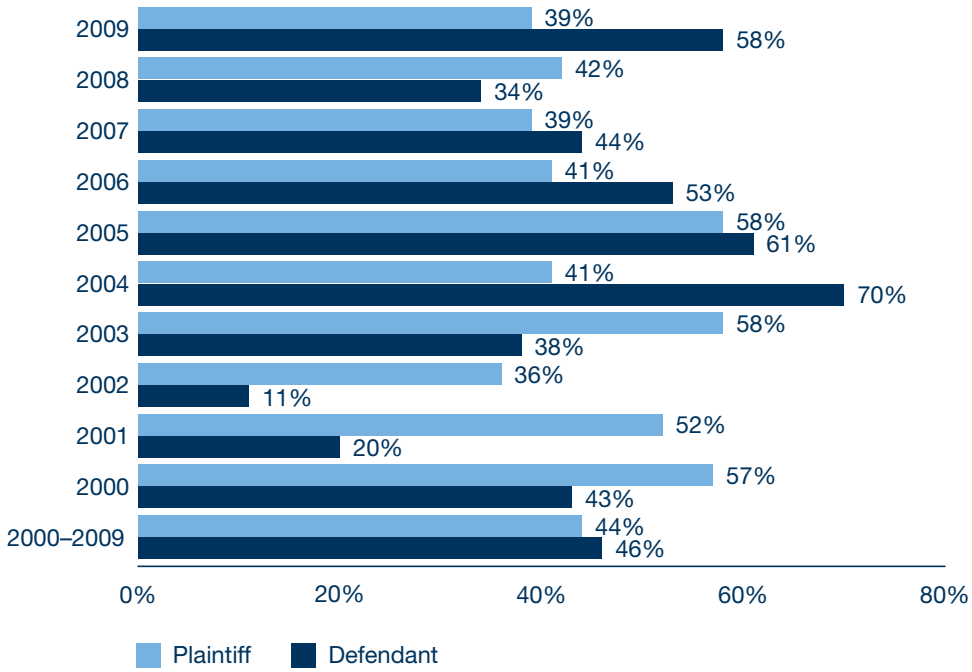


Figure 12: Success rate of *Daubert* challenges to financial expert witnesses, plaintiff side vs. defendant side, 2000–2009



5. Economists, accountants, and appraisers are the more frequently challenged financial expert witnesses and the ones more likely to survive being excluded.

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 experts targeted. We observed the following:

- Economists, accountants, and appraisers were the more frequently challenged financial expert witnesses, accounting for 23 percent, 21 percent, and 8 percent of all financial expert challenges, respectively, during 2000–2009 (see Figure 13). This trend is likely due to the fact that economists, accountants, and appraisers were engaged more frequently as financial expert witnesses.

- Although more frequently challenged, economists, accountants, and appraisers were more likely to survive a *Daubert* challenge than other financial expert witnesses. During 2000–2009, the success rate of challenges to other financial expert witnesses (51 percent) was higher than that of challenges to economists (40 percent), accountants (40 percent), and appraisers (39 percent) (see Figure 14).

- Appraisers were excluded much less frequently in 2009 compared with their 10-year average. Conversely, economists were excluded more frequently (see Figure 14).

10-year highlight:

Challenges to economists, accountants, and appraisers accounted for 52 percent of all challenges to financial expert witnesses.

Figure 13: *Daubert* challenges to financial expert witnesses, by expert type, 2000–2009

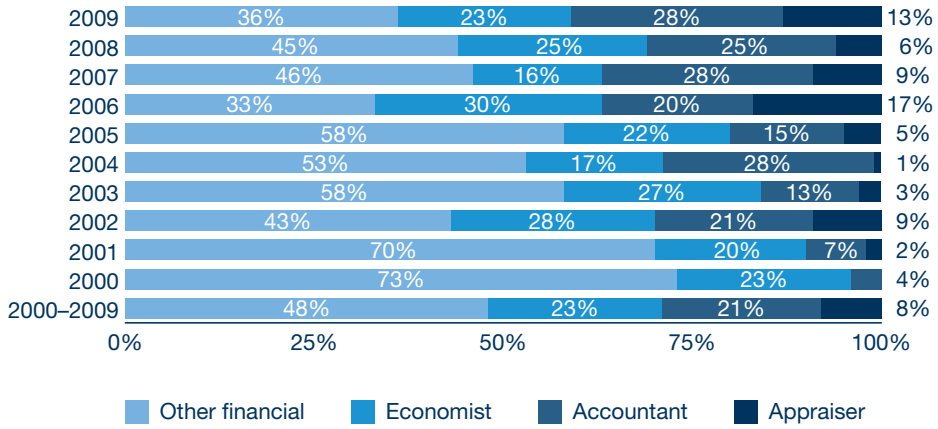
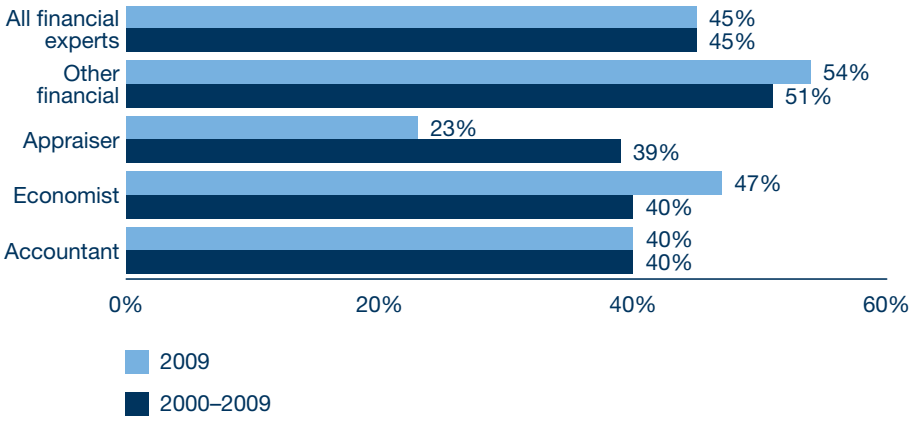


Figure 14: Success rate of *Daubert* challenges to financial expert witnesses, by expert type, 2000–2009



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 have *Daubert* challenges than others.

- During 2000–2009, challenges to financial expert witnesses occurred most frequently in disputes involving a breach of contract or fiduciary duty (see Figure 15).
- During 2000–2009, challenged financial expert witnesses experienced marginally higher rates of exclusion in matters involving fraud or intellectual property. In contrast, challenges to financial expert witnesses had somewhat lower success rates in disputes involving a breach of contract or fiduciary duty, antitrust, or discrimination. The data does not indicate significantly different exclusion success rates for most cases (see Figure 16).

10-year highlight:

Financial experts in fraud or intellectual property disputes during 2000-2009 were excluded in whole or in part more often than other types of experts.

Figure 15: *Daubert* challenges to financial expert witness, by case type, 2000–2009

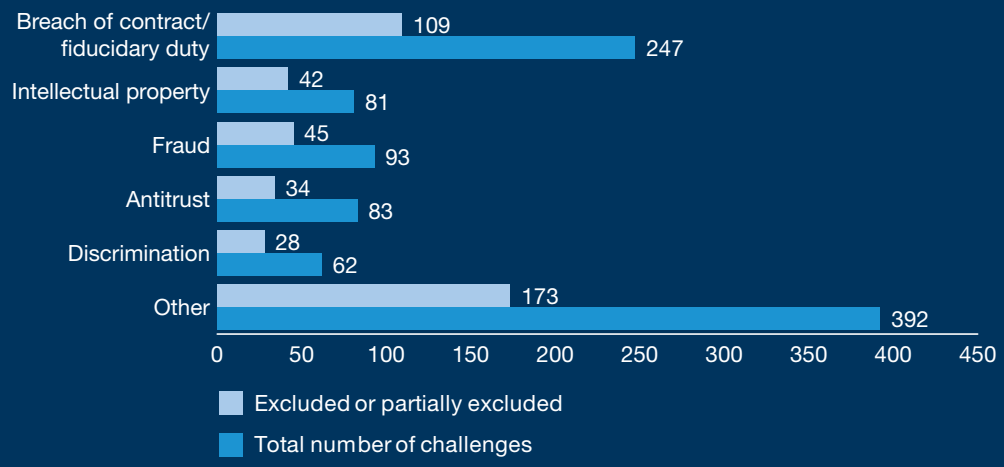
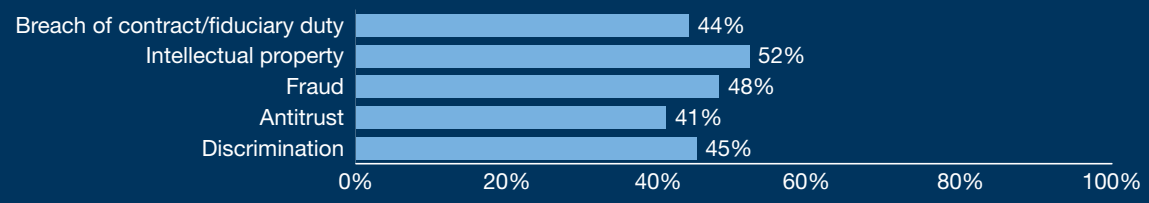


Figure 16: Success rate of *Daubert* challenges to financial expert witness, by case type, 2000–2009



7. For the 10th 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," has a focus 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 through 2009, lack of reliability was the leading cause of a financial expert opinion being excluded in whole or in part, followed by lack of relevance, then lack of qualifications. During the past 10 years, of the 431 *Daubert* challenges that resulted in full or partial exclusion of financial experts' testimony, lack of reliability was a cause in 294 instances, lack of relevance in 177 instances, and lack of qualifications in 86 instances. Other factors, such as missed deadlines, accounted for 12 exclusions in whole or in part (see Figure 17).

- A growing number of exclusions are related to the relevance of the financial expert testimony. If we assume that the expert is addressing the topic area requested by counsel, this type of exclusion speaks more to the suitability of the task assignment from counsel than the execution by the financial expert.

- Lack of reliability was a cause in 63 percent of the exclusions of financial expert testimony in 2009 and 68 percent of the exclusions for 2000 through 2009 (see Figure 18).

- Financial expert testimony was often excluded because of a failure to meet multiple *Daubert* criteria. Over the past 10 years, of the 431 occasions in which expert testimony was excluded in whole or in part, 129 exclusions (30 percent) resulted from failure to meet two or more criteria. Of these, the most common combination was lack of relevance and reliability, which accounted for 68 full or partial exclusions (16 percent) (see Figure 17 and Figure 18).

10-year highlight:

Lack of reliability was a cause in nearly 7 out of 10 exclusions of financial expert testimony.

Figure 17: Exclusions of financial expert testimony, by exclusion reason, 2000–2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2000–2009
Total partially or fully excluded financial experts	30	18	20	37	41	55	47	47	61	75	431
Breakdown by exclusion reason											
Reliability	25	15	15	28	31	39	37	27	30	47	294
Relevance	22	10	7	14	10	26	10	18	26	34	177
Qualifications	6	3	9	1	8	9	12	18	11	9	86
Other (missed deadline)	1	-	-	2	1	2	1	1	3	1	12
Further breakdown of reliability											
Facts/data											
Quantity	17	8	13	7	3	3	2	-	1	-	54
Validity	16	12	14	20	15	31	31	16	15	25	195
Methods/principles											
Testability	14	7	4	8	8	6	5	8	5	3	68
Peer review	10	6	8	2	-	3	4	2	4	4	43
Rate of error	8	6	5	14	9	3	3	1	2	1	52
General acceptance	10	9	8	7	17	10	13	17	12	10	113
Further breakdown of qualifications											
Education	6	1	4	1	5	3	5	4	1	1	31
Knowledge	5	2	7	1	4	5	7	8	6	4	49
Skill	5	2	6	1	2	1	3	1	-	-	21
Training	3	2	6	-	2	3	2	2	2	2	24
Experience	5	3	9	1	6	6	8	14	3	4	59
Breakdown of exclusions resulting from failure to meet two or more criteria											
Reliability & relevance	12	6	2	8	1	11	3	3	7	15	68
Qualifications & reliability	2	2	4	-	6	4	3	4	4	4	33
Qualifications, reliability & relevance	4	-	3	-	1	2	3	3	1	-	17
Qualifications & relevance	-	-	-	-	-	2	1	3	-	-	6
Missed deadline, relevance & reliability	1	-	-	-	-	-	-	-	-	-	1
Missed deadline & reliability	-	-	-	-	-	-	-	1	-	1	2
Missed deadline & qualifications	-	-	-	1	-	-	-	-	1	-	2
Missed deadline, reliability & qualifications	-	-	-	-	-	-	-	-	-	-	-
Exclusions resulting from failure to meet two or more criteria	19	8	9	9	8	19	10	14	13	20	129

Figure 18: Percentage of exclusions of financial expert testimony, by exclusion reason, 2000–2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2000–2009
Total partially or fully excluded financial experts	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Breakdown by exclusion reason											
Reliability	83%	83%	75%	76%	76%	71%	79%	57%	49%	63%	68%
Relevance	73%	56%	35%	38%	24%	47%	21%	38%	43%	45%	41%
Qualifications	20%	17%	45%	3%	20%	16%	26%	38%	18%	12%	20%
Other (missed deadline)	3%	0%	0%	5%	2%	4%	2%	2%	5%	1%	3%
Further breakdown of reliability											
Facts/data											
Quantity	57%	44%	65%	19%	7%	5%	4%	0%	2%	0%	13%
Validity	53%	67%	70%	54%	37%	56%	66%	34%	25%	33%	45%
Methods/principles											
Testability	47%	39%	20%	22%	20%	11%	11%	17%	8%	4%	16%
Peer review	33%	33%	40%	5%	0%	5%	9%	4%	7%	5%	10%
Rate of error	27%	33%	25%	38%	22%	5%	6%	2%	3%	1%	12%
General acceptance	33%	50%	40%	19%	41%	18%	28%	36%	20%	13%	26%
Further breakdown of qualifications											
Education	20%	6%	20%	3%	12%	5%	11%	9%	2%	1%	7%
Knowledge	17%	11%	35%	3%	10%	9%	15%	17%	10%	5%	11%
Skill	17%	11%	30%	3%	5%	2%	6%	2%	0%	0%	5%
Training	10%	11%	30%	0%	5%	5%	4%	4%	3%	3%	6%
Experience	17%	17%	45%	3%	15%	11%	17%	30%	5%	5%	14%
Breakdown of exclusions resulting from failure to meet two or more criteria											
Reliability & relevance	40%	33%	10%	22%	2%	20%	6%	6%	11%	20%	16%
Qualifications & reliability	7%	11%	20%	0%	15%	7%	6%	9%	7%	5%	8%
Qualifications, reliability & relevance	13%	0%	15%	0%	2%	4%	6%	6%	2%	0%	4%
Qualifications & relevance	0%	0%	0%	0%	0%	4%	2%	6%	0%	0%	2%
Missed deadline, relevance & reliability	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Missed deadline & reliability	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%
Missed deadline & qualifications	0%	0%	0%	3%	0%	0%	0%	0%	2%	0%	0%
Exclusions resulting from failure to meet two or more criteria	63%	44%	45%	24%	20%	35%	21%	30%	21%	27%	30%

8. 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 as follows several examples where one or more courts found fault with the approach taken under the *Daubert* standard of reliability, whether for established or novel methodology.

- **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 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. (US ex rel. Loughren v. UnumProvident Corp., 2009 WL 530575)

10-year highlight:

Methodological flaws more often than novel approaches result in the inadmissibility of expert testimony.

- **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 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 percent 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 percent 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 that produces 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)

Methodology

We searched written court opinions issued between January 1, 2000, and December 31, 2009 (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 3,469 federal and state cases during 2000–2009 that involved 5,262 *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 during 2000–2009, 958 *Daubert* challenges were addressed to financial experts. 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 the success rate of *Daubert* challenges or similar phrases is mentioned, "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.

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