

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

LAWRENCE E. JAFFE PENSION PLAN,)
on Behalf of Itself and All Others Similarly)
Situated,)

Plaintiff,)

v.)

HOUSEHOLD INTERNATIONAL, INC.,)
et al.,)

Defendants.)

Case No. 02 C 5893

Judge Jorge L. Alonso

**APPENDIX TO DEFENDANTS' REPLY IN SUPPORT
OF THEIR MOTION TO EXCLUDE THE TESTIMONY
OF PLAINTIFFS' EXPERT PROFESSOR DANIEL R. FISCHER**

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Rebuttal Report of Professor Bradford CornellB

Rebuttal Report of Professor Allen FerrellC

Rebuttal Report of Professor Christopher M. JamesD

EXHIBIT A

1 disclosures or omissions in the various Household statements
2 and disclosures during the relevant period. That's the second
3 column, true value.

4 And the artificial inflation is the number in the
04:13:20 5 last column. And, again, you'll see that it's different from
6 7.97 at the beginning because this calculation doesn't just
7 focus on 14 disclosures. It focuses on all the negative
8 disclosures that came out, particularly after November 15th
9 when the market started to, in a much more systematic way,
04:13:44 10 disbelieve Household's denials that it was engaging in
11 predatory lending and that it was engaging in improperly
12 aggressive accounting.

13 Q. Like your specific disclosure model, does this
14 quantification use statistical methods to account for the
04:14:00 15 market and industry influences on Household's stock prices?

16 A. Yes, it does.

17 Q. And did you also analyze whether company-specific factors
18 unrelated to the alleged fraud can explain Household's stock
19 price decline during this latter part of the relevant period?

04:14:16 20 A. Yes, I did. I looked at that carefully.

21 I noticed that there were a lot of disclosures that
22 had some fraud-related information in it and some other
23 disclose -- and part of the disclosure did not have -- dealt
24 with something other that was fraud related.

04:14:37 25 There were some -- some of those disclosures that had

1 a positive effect, some had a negative effect; but overall it
2 was impossible to conclude that the difference between the
3 true value line and the actual price would have been any
4 different had there been no disclosures about

04:15:02 5 non-fraud-related information during this particular period.

6 Some positive, some negative. They cancel each other out.

7 Q. Okay. Now, reaching your opinion about inflation, did you
8 consider whether investors during the relevant period were
9 fully informed about Household's accounting and lending

04:15:17 10 practices?

11 A. I did.

12 Q. And what did you find?

13 A. I found that they were not fully informed for a number of
14 different reasons.

04:15:25 15 Q. And what were the reasons?

16 A. Well, first, the disclosures coming out criticizing
17 Household's practices didn't come from Household; and if a
18 company is disclosing information about itself, it's one thing
19 for third parties to comment, but it's another thing for the
04:15:46 20 information to come directly from the company itself.

21 Since the company was not disclosing what the
22 analysts and the critics were saying, market participants did
23 not have full information.

24 Q. Okay. So you had your analysts' reaction or commentary,

04:16:03 25 some of -- the Barron's article and the analysts' reports, the

EXHIBIT B

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

LAWRENCE E. JAFFE PENSION PLAN,
On Behalf of Itself and All Others Similarly
Situated,

Plaintiff,

VS.

HOUSEHOLD INTERNATIONAL, INC., et
al.,

Defendants.

Case No. 02-C-5893

Honorable Jorge L. Alonso

EXPERT REBUTTAL REPORT OF PROFESSOR BRADFORD CORNELL

DECEMBER 21, 2015

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I. Qualifications

1. I am currently a Visiting Professor of Financial Economics at the California Institute of Technology (“Caltech”). In this matter, I have previously provided the:

- Affidavit of Bradford Cornell dated October 30, 2008 (my “2008 Affidavit”)
- Affidavit of Bradford Cornell dated October 13, 2011 (my “2011 Affidavit”)
- Expert Report of Bradford Cornell dated October 23, 2015 (my “Initial Report”)

2. My background is described more fully in my curriculum vitae, which is Appendix A of my Initial Report. A list of my publications may also be found in Appendix A of my Initial Report. A list of testimony I have given in deposition or at trial over the past five years, compiled to the best of my knowledge and recollection, may be found in Appendix B of my Initial Report. My testimony subsequent to filing my Initial Report is listed in Appendix C. A list of the additional documents that I have relied upon in forming my opinions in this report is attached as Appendix D.

II. Assignment

3. I have been asked by counsel for Defendants to review and respond to the Second Rebuttal Report of Daniel R. Fischel dated November 23, 2015 (“November 2015 Fischel Report”), which incorporates by reference all of his prior reports in this case.

4. I am being compensated for my work on this matter, including the preparation of this report and any testimony I will render at trial, at my regular hourly rate of \$1,050 per hour and am also being reimbursed for reasonable expenses incurred in connection with such services. I receive compensation from Cornerstone Research based on its collected staff billings for its support of me in this matter. Neither my compensation in this matter nor my compensation from

Cornerstone Research is in any way contingent or based on the content of my opinion or the outcome of this or any other matter.

5. My work on this matter is ongoing. The opinions presented in this report are the result of the information available to me as of the report date. I reserve the right to supplement or modify my opinions if new information comes to light and to respond to any additional report(s) or opinions offered by other experts.

III. Summary of Opinions

6. Prof. Fischel's Leakage Model in this case is without support in the academic literature, including Cornell and Morgan and the other papers to which he cites in the November 2015 Fischel Report. The Leakage Model he presents is unaccepted, inconsistent with established principles of financial economics, and unreliable. Below I provide more detail on each of these conclusions. Their bases are discussed in the sections that follow.

- The academic articles regarding leakage and event studies that Prof. Fischel now cites in addition to Cornell and Morgan do not support his Leakage Model. Indeed, they recognize the problems with measuring the price effect of the relevant event over a long event window like Prof. Fischel's 228-trading-day leakage period—namely, the impact of confounding information entering the public mix of information and affecting the stock price. The limited circumstances in which event windows of more than several days are used do not involve a single firm, but rather are studies involving an average effect across many firms and thus do not present the problems with confounding, firm-specific effect issues. Those papers do not support the use of a lengthy event window to address a single firm and are not applicable to the exercise Prof. Fischel performs.
- As discussed at length in my Initial Report, Cornell and Morgan also recognizes the problem of confounding firm-specific information. For that reason, among others, it does not support Prof. Fischel's application of the leakage model in this case. In a somewhat comparable case discussed in Cornell and Morgan—the WPPSS case, in which the alleged fraud was disclosed over an extended period of time—an ongoing flow of nonfraud-related information was also released during the disclosure period. I was an expert witness retained by the plaintiff bondholders seeking damages in the

WPPSS case, and I did not advocate a leakage model like Prof. Fischel's in that case for that very reason.

- In none of the numerous other securities cases in which I have testified as an expert witness, including many as a plaintiff's expert, have I advocated the leakage model approach discussed in Cornell and Morgan to estimate damages. This is because I have yet to encounter a case in which the conditions for a reliable damages estimate using that approach exist. Those conditions certainly are not met here. Indeed, the compounding error analysis I showed in my Initial Report and which Prof. Fischel did not contest in the November 2015 Fischel Report demonstrates the unreliability of Prof. Fischel's Leakage Model in this case. Moreover, I also understand that the law has been clarified regarding plaintiff's loss causation burden since the publication of Cornell and Morgan in a way that makes the leakage model approach discussed in that paper invalid for the purposes proposed by Prof. Fischel and insufficient for meeting that burden under the conditions in this matter (i.e., an extended purported leakage period during which there was an ongoing flow of firm-specific, nonfraud information disclosed). This makes Prof. Fischel's Leakage Model further unreliable in this case.

IV. The Academic Articles Prof. Fischel Cites Do Not Support His Leakage Model

A. None of the Papers besides Cornell and Morgan Even Mentions a Leakage Model with Such an Extended Leakage Period

7. In footnotes to the November 2015 Fischel Report, Prof. Fischel lists a series of articles that he purports provide support for his Leakage Model in estimating damages in this matter.¹

¹ Footnotes 9, 10, 58, and 68 of the November 2015 Fischel Report cite to Bradford Cornell and R. Gregory Morgan, "Using Finance Theory to Measure Damages in Fraud on the Market Cases," *UCLA Law Review*, Vol. 37, No. 2 (1990) ("Cornell and Morgan"); Gregg A. Jarrell and Annette B. Poulsen, "Stock Trading before the Announcement of Tender Offers: Insider Trading or Market Anticipation?," *Journal of Law, Economics and Organization*, Vol. 5, No. 2 (1989) ("Jarrell and Poulsen"); Paul Malatesta and Rex Thompson, "Partially Anticipated Events: A Model of Stock Price Reactions with an Application to Corporate Acquisitions," *Journal of Financial Economics*, Vol. 14, No. 2 (1985), p. 240; Srinivasan Ragothaman and Bruce O. Bublitz, "An Empirical Analysis of the Impact of Asset Writedown Disclosures on Stockholder Wealth," *Quarterly Journal of Business and Economics*, Vol. 35, No. 3 (Summer 1996) ("Ragothaman and Bublitz"); Madge S. Thorsen et al., "Rediscovering the Economics of Loss Causation," *Journal of Business and Securities Litigation*, Vol. 6 (2006) ("Thorsen et al."); Sanjai Bhagat and Roberta Romano, "Event Studies and the Law: Part II: Empirical Studies of Corporate Law," *American Law and Economics Review*, Vol. 4, No. 2 (Fall 2002) ("Bhagat and Romano"); Glenn N. Pettengill and John M. Clark, "Estimating Expected Returns in an Event Study Framework: Evidence from the Dartboard Column," *Quarterly Journal of Business and Economics*, Vol. 40, No. 3/4 (Summer–Autumn 2001); A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35 (March 1997); Mark L. Mitchell and Jeffrey M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *Business Lawyer*, Vol. 49, No. 2 (February 1994) ("Mitchell and Netter"); David Tabak

While Prof. Fischel is correct that many of these papers discuss the concept of information leakage, none of them advocates or endorses his particular Leakage Model for estimating damages in this matter. Only Cornell and Morgan, which I address below, specifically mentions using a leakage model similar to Prof. Fischel's for estimating damages. The other papers simply recognize that information leakage can occur and that its presence often makes it difficult to accurately measure the impact of information on stock prices. The papers do not suggest that one can simply use a single-firm regression analysis to net out market and industry movements and then assume that all of the remaining residual returns, taken as a whole over an extended period of nearly a year, are the result of leakage, as Prof. Fischel does.

8. Indeed, the papers highlight why such an approach is not accepted in the manner that Prof. Fischel attempts to apply it in this case—specifically, that over longer event windows, confounding information unrelated to the event will enter the public mix of information and affect stock prices and cannot be accounted for appropriately by the model. For example, Ferrell and Saha, which Prof. Fischel cites in his Second Supplemental Report dated September 22, 2015 (“September 2015 Fischel Report”), notes that the “confounding effect problem [will be] exacerbated when using multi-day event windows as the longer the event window the more likely it is that confounding events [will have] occurred.”² Similarly, Mitchell and Netter, which Prof. Fischel cites in the November 2015 Fischel Report, observes that “long event windows may

and Frederick C. Dunbar, “Materiality and Magnitude: Event Studies in the Courtroom” in *Litigation Services Handbook: The Role of the Financial Expert*, 3rd ed., ed. Roman W. Weil et al. (New York: John Wiley & Sons, 2001) (“Tabak and Dunbar”); Daniel Fischel, “Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities,” *The Business Lawyer*, Vol. 38, November 1982 (“Fischel (1982)”).

² Allen Ferrell and Atanu Saha, “The Loss Causation Requirement for Rule 10b-5 Causes-of-Action: The Implication of *Dura Pharmaceuticals v. Broudo*,” *Business Lawyer*, Vol. 63 (November 2007), p. 168.

include noise and information from other events, making it difficult to isolate the impact of the relevant event.”³ On the topic of pre-event leakage in particular, Mitchell and Netter explain:

[I]n many securities fraud cases the relevant information is revealed slowly over time, while during the same period investors receive other, sometimes unrelated, information about the firm(s) in question. In [this] case, it is relatively difficult to choose an appropriate window. The main advice is to carefully identify the exact dates during which the information in question reached the market, and then restrict the window to a short period if possible, generally two or three days around each release of new information.⁴

9. Indeed, the papers to which Prof. Fischel cites attempt to control for confounding information in at least one of two ways. They either advocate short event windows like the papers above, or conduct multi-firm studies. For example, Jarrell and Poulsen examines the share price reactions of 172 firms when investigating the market response to acquisition offers over a 20-day window prior to the offer announcement.⁵ Similarly, Ragothaman and Bultlitz studies 280 firms in its investigation of firm share price reaction to unexpected sales, cost of goods sold, write-down, and expenses announcements in a 90-day window surrounding the announcement.⁶ This research design helps lessen the effect of confounding news because the effect of confounding news will be negative for some firms and positive for others. The expectation is that the effect of confounding news will average to zero over a large number of different firms.

³ Mitchell and Netter, p. 558. Similarly, Bhagat and Romano note the difficulty of determining the correct length of a leakage period (Bhagat and Romano, p. 399). Thorsen et al. note that “[a]s ‘event windows’ are expanded...the power of the statistical inference diminishes. Thus, it is important not to extend an event window beyond the period in which the meaning of the information itself appears to be unfolding in the marketplace.” The authors suggest an event window of “several days” when the researcher believes there is evidence of leakage—much shorter than Prof. Fischel’s 228 day leakage period (Thorsen et al., pp. 111–112). Tabak and Dunbar also note the tradeoff between extending the length of the event window and the ability to attribute stock price movements to the event specifically: “The longer the event window is, the more likely it is to incorporate all of the prior leakage and the market’s ongoing adjustment to the news, but also the more likely it is to pick up other effects unrelated to the event under consideration” (Tabak and Dunbar, p. 8).

⁴ Mitchell and Netter, p. 559.

⁵ Jarrell and Poulsen.

⁶ Ragothaman and Bublitz.

10. Prof. Fischel employs neither technique to address confounding information. Instead, he includes in his event window all 228 days from his first identified Specific Disclosure on November 15, 2001 through his last identified Specific Disclosure on October 11, 2002,⁷ and assumes that any and all deviations of the actual returns from the returns predicted by his single-firm event study are fraud-related.⁸ This is unsupported by academic literature, including the papers he cites in the November 2015 Fischel Report.

B. Cornell and Morgan Explains That Leakage Models like Prof. Fischel's Do Not Adequately Account for Firm-Specific, Nonfraud Information

11. In Cornell and Morgan, we too recognize that leakage may occur and as a result an event study approach might understate damages. We do not, however, endorse moving to the form of leakage model used by Prof. Fischel (which is referred to as a “comparable index model” in the paper) in the presence of confounding information. Indeed, as I stated in my Initial Report, we specifically note that:

The trouble with the comparable index approach...is that it attributes any decline in the security price that is not due to movements in the market or the industry to disclosure of the fraud. If the disclosure of a fraud is associated with the release of other company-specific bad news, the comparable index approach will overestimate true damages.⁹

12. This is why when we discussed in the paper the example of the WPPSS case, in which there was evidence of leakage over a period of years, we said that “it *may* be necessary to use the

⁷ Prof. Fischel purports to find 14 days during his Leakage Period for which he attributes the residual price decline to fraud-related disclosures. Even assuming that the news on these Specific Disclosure days were comparable to the events being studied in the academic literature, the time between these disclosures stretches as long as 103 trading days.

⁸ Prof. Fischel does recognize one exception. He purports that negative firm-specific news on January 11, 2002 was offset by positive firm-specific news just two trading days later—such that the net effect of the firm-specific news was neutral.

⁹ Cornell and Morgan, p. 903.

comparable index approach.”¹⁰ We used the word “may” because we recognized that the leakage model approach discussed in the paper might not be feasible due to the presence of an ongoing flow of nonfraud-related information during the extensive leakage period—the precise potential problem the other papers Prof. Fischel cites associate with longer event windows. Indeed, I served as an expert witness for plaintiffs seeking damages in the WPPSS case, and, after reviewing the facts of the case, determined that the leakage model approach discussed in Cornell and Morgan would not reliably estimate damages for the very reason of an ongoing flow of nonfraud-related information during the event window.

C. The Necessary Conditions to Implement the Leakage Model Approach Are Not Met in This Case

13. In none of the numerous other securities cases in which I have served as an expert witness over the past almost four decades have I ever testified that the leakage model approach discussed in Cornell and Morgan was appropriate to estimate damages. This is because I have yet to encounter a case in which the conditions for a reliable damages estimate using that approach exist. As discussed in my previous reports in this matter and in Cornell and Morgan,¹¹ those threshold conditions are rarely met, and are certainly not met in this case. On the threshold condition of no ongoing flow of nonfraud information alone, Prof. Fischel himself acknowledges that this case does not meet the burden. In his most recent November 2015 Fischel Report, he acknowledged that “[o]n the 171 days [in his leakage period] with no statistically significant price movement, there were in excess of a thousand disclosures about Household (e.g., company statements, news articles, analyst reports, etc.), many of which contain[ed] both fraud related and nonfraud related

¹⁰ Cornell and Morgan, p. 907, emphasis added.

¹¹ Cornell and Morgan, p. 903.

information.”¹² In addition, numerous news articles and analyst reports released during Prof. Fischel’s leakage period containing nonfraud information were identified in the reports of Profs. James and Ferrell, providing further evidence of an ongoing flow of nonfraud information in this matter.¹³ Hence, an ongoing flow of nonfraud information—not unlike the information flow that rendered the leakage model approach inappropriate in the WPPSS case—exists in this matter. Thus, a leakage model like Prof. Fischel’s cannot reliably estimate damages in this matter.

14. Moreover, as the leakage period gets longer, not only does the potential for nonfraud information influencing the stock price increase—as with any model—but also, as I mentioned in my Initial Report, the error in the true value stock price compounds as one calculates that price for earlier dates in the leakage period.¹⁴ Prof. Fischel acknowledged this in the November 2015 Fischel Report when he noted that my Initial Report’s Exhibit 1 “demonstrates leakage within the 95 percent confidence interval [around his true value stock price].”¹⁵ That interval spanned \$24 to \$53 by the beginning of his leakage period.¹⁶ Such a wide interval, which stems from the error compounding during his 228-trading-day leakage period, demonstrates the unreliability of the leakage model in this matter.¹⁷

15. Prof. Fischel further claimed in response that compounding error terms can produce significant errors in measured inflation “for any lengthy window under [the leakage model approach].”¹⁸ I agree. That is why I did not use the leakage model approach in the WPPSS case

¹² November 2015 Fischel Report, ¶119, internal citations omitted.

¹³ Expert Report of Christopher James, October 23, 2015, ¶¶24–57; Expert Report of Allen Ferrell, October 23, 2015, ¶¶56–118.

¹⁴ Initial Report, ¶29.

¹⁵ November 2015 Fischel Report, ¶127, FN 70.

¹⁶ Initial Report, ¶30.

¹⁷ In their introductory econometrics text, Stock and Watson note that sometimes “95% forecast intervals can be so wide that they have limited use in decision making” (James Stock and Mark Watson, *Introduction to Econometrics* (Boston: Pearson Education, 2003), p. 451). This is such a case.

¹⁸ November 2015 Fischel Report, ¶127, FN 70.

nor would I use it in this case where the leakage period is so long. Hence, the compounding error during Prof. Fischel's extended leakage period stands as another reason his Leakage Model cannot reliably estimate damages in this matter.

16. Finally, I also understand that the law has been clarified regarding plaintiff's loss causation burden since the publication of Cornell and Morgan. In particular, the Private Securities Litigation Reform Act was enacted after my paper and in its 2005 *Dura Pharmaceuticals* decision the Supreme Court held that demonstrating an inflated purchase price is insufficient to establish loss causation.¹⁹ Therefore, the suggestion in Cornell and Morgan that plaintiffs can "satisfy their [loss causation] burden by presenting market model evidence [of residual price declines, and thereby] shift the burden to defendants to prove that any part of the market price movement and residual returns resulted from causes unrelated to the fraud" no longer applies.²⁰ Hence, the leakage model approach discussed in Cornell and Morgan is insufficient for establishing recoverable damages under the conditions in this matter (i.e., an extended leakage period during which there was an ongoing flow of firm-specific, nonfraud information disclosed). For this reason too, the Leakage Model Prof. Fischel puts forward in this case is unreliable.

V. Conclusion

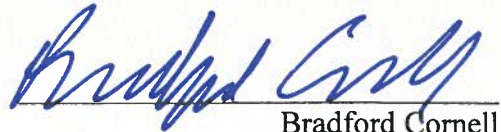
17. In sum, the academic articles Prof. Fischel cites in the September 2015 Fischel Report and November 2015 Fischel Report do not support his Leakage Model. They recognize the problems associated with leakage periods as lengthy as Prof. Fischel's leakage period. Cornell and Morgan recognizes the same and therefore also does not support Prof. Fischel's Leakage Model in this

¹⁹ *Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336 (2005).

²⁰ Cornell and Morgan, p. 916.

case. Nor are the necessary conditions to implement the leakage model met in this case, as I demonstrated in my Initial Report with my compounding error analysis. Moreover, I understand that the law now requires more of plaintiffs than simply putting forward a leakage model like that suggested in Cornell and Morgan. As a result of all of these reasons, Prof. Fischel's inflation estimates based on his Leakage Model are unreliable.

Executed on this 21 day of Dec in 2015 in Pasadena.


Bradford Cornell

Appendix C

**BRADFORD CORNELL
DEPOSITION, TRIAL & ARBITRATION TESTIMONY
SINCE OCTOBER 23, 2015**

Case Name	Date(s)	Testimony Type
ACP Master, Ltd., Aurelius Capital Master, Ltd., and Aurelius Opportunities Fund II, LLC v. Sprint Corporation, Sprint Communications, Inc., Erik Prusch, John W. Stanton, William R. Blessing, Bruce A. Chatterley, Mufit Cinali, Jose A. Collazo, Hossein Eslambolchi, Dennis S. Hersch, Brian P. McAndrews, Kathleen H. Rae, Theodore H. Schell, Jennifer L. Vogel, Slade Gorton, Starburst I, Inc. and Softbank Corp. (ACP Master, Ltd., et al. v. Clearwire Corporation)	November-2015	Deposition Testimony
In re The Boeing Company and Boeing Commercial Space Company v. KB Yuzhnoye; PO Yuzhnoye; Mashinostroitelny Zavod; S.P. Korolev Rocket and Space Corporation; Energia D/B/A Rocket and Space Corporation Energia After S.P. Korolev; Energia Overseas LLC; and Energia Logistics Ltd.	November-2015	Trial Testimony

Appendix D: Materials Relied Upon

<u>Document Title, Bates Numbers, Control Numbers</u>	<u>Document Date</u>
Legal Pleadings	
<i>Dura Pharmaceuticals, Inc. v. Broudo</i> , 544 U.S. 336	2005
Expert Reports	
Second Rebuttal Report of Daniel R. Fischel	November 23, 2015
Expert Report of Christopher James	October 23, 2015
Expert Report of Allen Ferrell	October 23, 2015
Expert Report of Bradford Cornell	October 23, 2015
Academic Literature and Public Press	
Daniel Fischel, "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," <i>The Business Lawyer</i> , Vol. 38	November 1982
Paul Malatesta and Rex Thompson, "Partially Anticipated Events: A Model of Stock Price Reactions with an Application to Corporate Acquisitions," <i>Journal of Financial Economics</i> , Vol. 14, No. 2	1985
Gregg A. Jarrell and Annette B. Poulsen, "Stock Trading before the Announcement of Tender Offers: Insider Trading or Market Anticipation?," <i>Journal of Law, Economics and Organization</i> , Vol. 5, No. 2	1989
Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," <i>Business Lawyer</i> , Vol. 49, No. 2	February 1994
Srinivasan Ragothaman and Bruce O. Bublitz, "An Empirical Analysis of the Impact of Asset Writedown Disclosures on Stockholder Wealth," <i>Quarterly Journal of Business and Economics</i> , Vol. 35, No. 3	1996
A. Craig MacKinlay, "Event Studies in Economics and Finance," <i>Journal of Economic Literature</i> , Vol. 35	1997
David Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom" in <i>Litigation Services Handbook: The Role of the Financial Expert</i> , 3rd ed., ed. Roman W. Weil et al. (New York: John Wiley & Sons)	2001
Glenn N. Pettengill and John M. Clark, "Estimating Expected Returns in an Event Study Framework: Evidence from the Dartboard Column," <i>Quarterly Journal of Business and Economics</i> , Vol. 40, No. 3/4	2001
Sanjai Bhagat and Roberta Romano, "Event Studies and the Law: Part II: Empirical Studies of Corporate Law," <i>American Law and Economics Review</i> , Vol. 4, No. 2 (Fall 2002)	2002
James Stock and Mark Watson, <i>Introduction to Econometrics</i> (Boston: Pearson Education)	2003
Madge S. Thorsen et al., "Rediscovering the Economics of Loss Causation," <i>Journal of Business and Securities Litigation</i> , Vol. 6	2006

Appendix D: Materials Relied Upon

<u>Document Title, Bates Numbers, Control Numbers</u>	<u>Document Date</u>
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Allen Ferrell and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes-of-Action: The Implication of <i>Dura Pharmaceuticals v. Broudo</i> ," <i>Business Lawyer</i> , Vol. 63	November 2007
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All other documents cited in my Initial Report and Exhibits, as well as this report and exhibits.

EXHIBIT C

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I. Qualifications

1. My qualifications are discussed in my Initial Report in this matter.¹ My testimony in the last four years and academic work are summarized on my curriculum vitae, which is attached hereto as Appendix A.

2. I am being compensated at my customary hourly rate of \$1,050 for my work on this matter. I have received the assistance of the staff employed by Cornerstone Research, and I receive compensation from Cornerstone Research based on its collected staff billings for its support of me in this matter. My compensation is not contingent on the outcome of this matter.

II. My Initial Report

3. In my Initial Report, I explained that Professor Fischel's leakage model mechanically attributes any and all deviations from the returns predicted by his regression to the fraud during his 228-day "leakage period" (November 15, 2001–October 11, 2002). My understanding is that the Seventh Circuit in its May 21, 2015 decision held that simply pointing to Household's stock price underperformance relative to a market or industry index, or in combination with Professor Fischel's purported evidence of "a steady stream and extensive amount of incomplete information related to Defendants' alleged fraud,"² is insufficient to justify the use of a leakage model in this matter.³ Rather, a threshold condition for such a methodology to reliably estimate damages is accounting for the effect of significant firm-specific, nonfraud factors that could have affected Household's stock price during Professor Fischel's leakage period.

4. As noted in my Initial Report,⁴ in the initial trial, Professor Fischel testified that he carefully analyzed the effect of "a lot" of firm-specific, nonfraud information and found that positive and negative effects of firm-specific, nonfraud factors during the leakage period "cancel

¹ Expert Report of Professor Allen Ferrell, October 23, 2015 (my "Initial Report" or "Ferrell Initial Report").

² Expert Report of Daniel R. Fischel, August 15, 2007, ¶ 39 ("Fischel Initial Report").

³ *Glickenhau & Co. et al. v. Household International, Inc.*, No. 13-3532 (7th Cir. May 21, 2015) ("Appellate Order"), p. 25 ("As things stand, the record reflects only the expert's general statement that [firm-specific, nonfraud related] information was insignificant. That's not enough.").

⁴ Ferrell Initial Report, ¶ 9.

each other out.”⁵ This testimony was not confined to any particular subset of days during his leakage period but rather was a blanket statement covering the entire leakage period.⁶ I understand that the Seventh Circuit found this testimony to be too conclusory and required that, in order for the leakage model to go to the jury in the new trial, Plaintiffs’ expert must opine that “no firm-specific, nonfraud related information contributed to the decline in stock price during the relevant time period and explain[] in nonconclusory terms the basis for this opinion....”⁷

5. In his Second Supplemental Report, Professor Fischel purports to meet this requirement by looking at just 28 days during his 228-day leakage period.⁸ The various days in the leakage period, including the 28 days discussed in the Second Supplement Report, are shown in **Exhibit 1** and described below based on Professor Fischel’s testimony:

Initial Trial (14 days)

- 14 “purported specific disclosure days”: Professor Fischel testified during the initial trial that there were 14 days on which he was “reasonably confident that the fraud-related disclosure” was responsible for the “statistically significant price movement.” Each of the 14 days was statistically significant according to Professor Fischel.

Second Supplemental Report (28 days)

- 11 “purported leakage days”: Professor Fischel points to 11 days on which he purports to identify “information related to the fraud that is consistent with leakage.” Household experienced a statistically significant decline on each of these days according to Professor Fischel. Importantly, asserting that an observed price decline occurred coincident with “information related to the fraud that is consistent with leakage” is not the same as asserting that the price decline was “caused” by leakage. Tellingly, in contrast to the purported specific disclosure days, Professor Fischel does not opine that he is “reasonably confident that the fraud-related disclosure” was responsible for the “statistically significant price movement.” Accordingly, Professor Fischel has not even purported to establish that fraud-related information released on any of the 11 purported leakage days caused Household’s stock price to decline.
- 15 “purported statistically significant declines with no firm-specific information”: Professor Fischel identifies 15 days with statistically significant stock price declines during his leakage period according to his model; however, he did not find *any* firm-specific information to explain such declines—fraud-related or nonfraud in nature. These are days that Professor Fischel neither asserts that he is “reasonably confident”

⁵ Appellate Order, p. 18.

⁶ Fischel Trial Testimony, April 16, 2009, 2683:17–2684:6.

⁷ Appellate Order, p. 24.

⁸ Second Supplemental Report of Daniel R. Fischel, September 23, 2015 (“Fischel Second Supplemental Report”). Professor Fischel also states in a footnote that he did not find significant firm-specific, nonfraud-related information that could reasonably explain the price movements on the 14 purported specific disclosure days (see footnote 4).

are fraud-related nor that they are “consistent with leakage.” Again, Professor Fischel has not established that fraud-related information released on any of these days caused Household’s stock price to decline.

- 2 “purported cancel out days”: Professor Fischel purports to have found just a single day out of the entire 228-day period on which “negative firm-specific, nonfraud related information could reasonably explain the price decline.”⁹ However, he asserts that “the positive nonfraud information” just two trading days later “‘canceled out’ the negative nonfraud information.”¹⁰

Not analyzed (186 days)

- 186 “unaddressed days”: Apart from his previous general assertions regarding Household’s underperformance relative to an industry index and “a steady stream and extensive amount of incomplete information related to Defendants’ alleged fraud,”¹¹ which the Seventh Circuit has ruled insufficient to justify the use of the leakage model, Professor Fischel offered no analysis in support of the opinion that “no firm-specific, nonfraud related information contributed to the decline in stock price” regarding the remaining 186 days in his leakage period. I note that these 186 unaddressed days can be further decomposed into:
 - 171 days on which Professor Fischel did not find a statistically significant price change (“171 statistically insignificant days”), and
 - 15 additional days on which statistically significant price increases occurred according to Professor Fischel.¹²

6. I document in my Initial Report that Professor Fischel’s attempt to establish that “no firm-specific, nonfraud related information contributed to the decline in stock price during the relevant time period” based on a discussion of just 28 days during a 228-day period—the 11 purported leakage days, the 15 purported statistically significant declines with no firm-specific information, and the 2 purported cancel out days—was conclusory in nature. In addition, consistent with the Seventh Circuit’s explicit instructions for Defendants’ expert to “identify[] some significant, firm-specific, nonfraud related information that could have affected the stock

⁹ Second Supplemental Report, ¶ 6.

¹⁰ Second Supplemental Report, ¶ 8.

¹¹ Fischel Initial Report, ¶ 39.

¹² In my Initial Report, I noted that Professor Fischel had not analyzed the 171 statistically insignificant days or provided any reliable basis for including the Household stock price decline on them in his leakage model (Ferrell Initial Report, ¶¶ 112–118). Here, I am adding to that group of 171 unaddressed days the 15 days on which Professor Fischel’s model identified a statistically significant price increase, which he also does not address. I further note with respect to the 171 statistically insignificant days that Exhibit 90 to the Fischel Second Rebuttal Report now identifies nine days out of the 171 statistically insignificant days on which Professor Fischel purports to identify *both* fraud-related and nonfraud-related information. Identification of this information on these nine days does not demonstrate that “no firm-specific, nonfraud related information contributed to the decline in stock price” during the 186 days not analyzed.

price,”¹³ my Initial Report provides numerous examples of firm-specific, nonfraud information that could have negatively affected Household’s stock price during Professor Fischel’s leakage period. As a result of the analysis contained in my Initial Report, I concluded that my “review of the available market evidence documents the presence of significant firm-specific, nonfraud information” during Professor Fischel’s leakage period.¹⁴ It follows from either (1) Professor Fischel’s failure to provide rigorous nonconclusory analysis of the effect of firm-specific, nonfraud information during his purported 228-day leakage period, or (2) Professor Fischel’s failure to adequately account for the firm-specific, nonfraud information identified in my Initial Report, that Professor Fischel has not come close to satisfying the Seventh Circuit’s requirement that Plaintiffs’ expert opine that “no firm-specific, nonfraud related information contributed to the decline in stock price during the relevant time period and explain[] in nonconclusory terms the basis for this opinion....” Contrary to Professor Fischel’s assertion, I did not conclude in my Initial Report that there are no damages in this matter, although I did (and do) conclude that Professor Fischel has failed to meet the burden of reliably establishing damages caused by the fraud.

III. Assignment and Summary of Opinions

7. I have been asked by counsel for Household to assess Professor Fischel’s Second Rebuttal Report’s response to my Initial Report and whether it properly accounts for significant firm-specific, nonfraud information.¹⁵ The materials relied upon in reaching the opinions expressed in my Initial Report are documented in Appendix B attached thereto. Additional materials that I have relied upon in reaching the opinions expressed in this report are documented in Appendix B attached hereto.

8. Based on my analysis, I conclude that Professor Fischel’s response in his Second Rebuttal Report to my Initial Report is flawed and unreliable. In particular:

¹³ Appellate Order, p. 24. While Professor Fischel repeatedly states in his Second Rebuttal Report that I “only” identified firm-specific, nonfraud information that “could” have negatively affected Household’s stock price (see, e.g., Fischel Second Rebuttal Report, ¶ 3), he ignores that this was the exact question posed by the Seventh Circuit.

¹⁴ Ferrell Initial Report, ¶ 15.c.

¹⁵ Second Rebuttal Report of Daniel R. Fischel, November 23, 2015 (“Fischel Second Rebuttal Report”).

- For the five reasons summarized in ¶ 9 below and elaborated upon in the remainder of this report, Professor Fischel's leakage model is fundamentally flawed and cannot produce a reliable estimate of damages given the facts and circumstances of this case.
- A proper estimate of damages limits inflation to those price declines that, using widely accepted economic principles and techniques, can be reliably attributed to the fraud. In the current matter, and given Professor Fischel's failure to meet the Seventh Circuit's preconditions, this dictates the use of a specific disclosure model—that is, a damages model that limits inflation to the price declines (or portion thereof) on specific days when some corrective information can be reliably shown to have caused Household's stock price decline.
- Professor Fischel offered a specific disclosure model during the initial trial in this matter; however, that model was flawed in that it included stock price declines that cannot be reliably attributed to fraud-related causes.
- An improved specific disclosure model that limits damages to price declines that can be reliably attributed to the fraud results in damages lower than those estimated by Professor Fischel's specific disclosure model. Indeed, I do not believe that Professor Fischel has reliably established damages in this matter, and my own economic analysis shows that inflation does not exceed \$4.19 per share.

9. I conclude that Professor Fischel's leakage model suffers from five fundamental flaws:

- *Academic Literature*: The academic literature does not support Professor Fischel's unique formulation of a leakage model in this matter. The sheer length of Professor Fischel's leakage period, which spans 228 days, is inconsistent with the academic literature that he himself cites.
- *Firm-Specific, Nonfraud Information*: Professor Fischel's leakage model does not account for the firm-specific, nonfraud information released during Professor Fischel's leakage period. Most fundamentally, the Second Rebuttal Report improperly dismisses or ignores the numerous examples of significant firm-specific, nonfraud information that I document in my Initial Report. In particular, the Second Rebuttal Report's generic response that Professor Fischel's regression somehow controls for all significant nonfraud information is contradicted by the economic evidence and misconstrues what an event study regression actually does.
- *Unaddressed Days*: Professor Fischel misunderstands the fundamental gap I identified in my Initial Report with respect to his unaddressed days. Contrary to the assertions in the Second Rebuttal Report, the Second Supplement Report by its own terms leaves entirely unaddressed the potential impact of firm-specific, nonfraud information on the vast majority of days in Professor Fischel's leakage period (186 out of 228 days).
- *28 Days Analyzed*: Professor Fischel fails to demonstrate that fraud-related information caused Household's stock price movement on the 28 days analyzed in the Second Supplemental Report, and his Second Rebuttal Report provides no new support or analysis demonstrating that Household's stock price decline was caused by leakage of the fraud on those days. The Second Rebuttal Report fails to provide any

support attributing fraud-related information to the price declines on the 15 purported statistically significant declines with no firm-specific information days. In addition, the Second Rebuttal Report fails to support attributing the price declines on Professor Fischel's 11 purported leakage days to the fraud. I note again that he tellingly labels these 11 days as "consistent with leakage" rather than days on which he is "reasonably confident" fraud-related information caused the price decline.

- *Flawed Damages Calculations:* Professor Fischel fails to address the basic methodological flaw in his damages analysis I identified in my Initial Report, and misconstrues his own application of his inflation cap. Professor Fischel's leakage model, again contrary to the assertions in the Second Rebuttal Report, clearly and unequivocally calculates damages in excess of the residual price declines Professor Fischel himself attributes to fraud-related information.

10. In short, given the Second Supplemental Report's failure to provide a nonconclusory basis for the conclusion that "no firm-specific, nonfraud related information contributed to the decline in stock price during the relevant time period"¹⁶ and the Second Rebuttal Report's failure to properly "account for that specific information"¹⁷ (which instead dismisses or ignores significant firm-specific nonfraud information), the use of Professor Fischel's leakage model is inappropriate. Given this, I provide a damages analysis that is based on accepted economic principles. This analysis yields inflation per share up to \$4.19. Moreover, attempting to correct Professor Fischel's leakage model using the "simple solution" that he suggests yields numbers comparable to this inflation calculation.

11. I provide the bases for these conclusions below.

IV. Professor Fischel's Leakage Model Is Not an Appropriate Model to Determine Damages in This Matter

A. The Academic Literature Does Not Support Professor Fischel's Unique Formulation of a Leakage Model in This Matter

12. Professor Fischel's implementation of a "leakage model" is not supported by the academic literature, including the literature he himself references in support of his leakage model. The academic literature regarding leakage that Professor Fischel cites discusses the basic principle that leakage of information can occur over time. Indeed, I do not dispute Professor

¹⁶ Appellate Order, p. 24.

¹⁷ Appellate Order, p. 24.

Fischel's claim that the existence of leakage is recognized in the academic literature.¹⁸ The literature does not, however, support Professor Fischel's leakage model.

13. Instead, the literature discusses at length the need to control for confounding information (i.e., firm-specific information unrelated to the event being studied, which in this case would be firm-specific, nonfraud information), which becomes increasingly challenging as the event window expands. In my paper with Atanu Saha, which the May 21, 2015 Seventh Circuit opinion cites when discussing the concept of leakage, I explain:

[T]here can be "leakage" of news about the disclosure before the actual official corrective disclosure.... [But in determining an event window, one must balance] between capturing the full-impact of the disclosure...and avoiding the contamination of confounding events.¹⁹

14. Similarly, the Tabak and Dunbar article cited by Professor Fischel mentions the potential for confounding news to improperly impact the event study estimates, especially during longer event windows, stating:

The longer the event window is, the more likely it is to incorporate all of the prior leakage and the market's ongoing adjustment to the news, but also the more likely it is to pick up other effects unrelated to the event under consideration.²⁰

15. The Mitchell and Netter article, also cited by Professor Fischel, notes the same:

The longer the event window, the more likely the window includes the period during which all the new information about the event is released. The tradeoff, however, is that long event windows may include noise and information from other events, making it difficult to isolate the impact of the relevant event.²¹

¹⁸ Fischel Second Rebuttal Report, ¶ 7.

¹⁹ Allen Ferrell and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes-of-Action: The Implication of *Dura Pharmaceuticals v. Broudo*," *The Business Lawyer*, Vol. 63, November 2007 ("Ferrell and Saha (2007)"), pp.163–186 at 168-170.

²⁰ David Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom" in *Litigation Services Handbook: The Role of the Financial Expert*, 3rd ed., ed. Roman W. Weil et al. (New York: John Wiley & Sons, 2001) ("Tabak and Dunbar (2001)"), ch. 19, p. 4.

²¹ Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer*, Vol. 49, 1994 ("Mitchell and Netter (1994)"), p. 558.

16. Hence, the academic literature Professor Fischel cites in his Second Rebuttal Report emphasizes the importance of controlling for confounding information when conducting an event study, in particular when the event window under study is long.

17. The literature addresses such confounding information in two ways, neither of which Professor Fischel has implemented in his leakage model. The first way is to define the event window over a relatively short time period—usually no more than a few days.²² For example, in my paper cited by the Seventh Circuit, I discuss the possibility of including in the event window “the day prior to the actual corrective disclosure” in addition to the event day when there could have been leakage of information prior to the event.²³ I did not advocate extending the event window over long periods of time. Similarly, Tabak and Dunbar state that “[i]n securities fraud cases...[t]he most recent academic pronouncement expresses support for the shorter, one-day or two-day window....”²⁴ Mitchell and Netter likewise recommend “restrict[ing] the window to a short period, if possible, generally two or three days around each release of new information.”²⁵ And Thorsen et al., in a paper also cited by Professor Fischel, suggest event windows of “several days” when one believes there is prior leakage of information leading up to an event.²⁶

18. Indeed, none of the papers Professor Fischel cites that discusses single-firm event studies advocates an event window of the length of Professor Fischel’s 228-trading-day leakage period window. This is for the simple reason that the academic literature recognizes that over such extended windows, the ability to control for confounding information is severely impaired for a single firm. This is particularly true for a company like Household over the year-long leakage period—a tumultuous period for the economy at large, and for the subprime consumer finance industry in particular, during which even Professor Fischel acknowledges there were thousands of articles containing nonfraud news that would, in an efficient market, be fully reflected in

²² Even when a short event window is used, confounding information is a possibility that needs to be considered and addressed. For example, Ferrell and Saha (2007) states (p. 168): “On a corrective disclosure day, there may be a disclosure event as well as firm-specific news unrelated to the alleged fraud. In that case the estimated abnormal return on that day...measures the combined effect of the disclosure and the unrelated firm-specific news. This confounding effect problem is exacerbated when using multi-day even windows as the longer the event window the more likely it is that confounding events occurred. Potential ways of dealing with this problem include (a) deletion of the confounded days from the event study; and (b) the use of intra-day data.”

²³ Ferrell and Saha (2007), p. 168.

²⁴ Tabak and Dunbar (2001), ch. 19, p. 4.

²⁵ Mitchell and Netter (1994), p. 559.

²⁶ Madge S. Thorsen et al., “Rediscovering the Economics of Loss Causation,” *Journal of Business and Securities Litigation*, Vol. 6, 2006.

Household's stock price.²⁷ A simple regression cannot eliminate the stock price effect of all nonfraud news over such an extended period.

19. Professor Fischel points to some articles that discuss longer event windows (i.e., more than a handful of days). As a primary matter, the purpose of that research generally differs from the purpose of Professor Fischel's leakage model. These multiple-firm studies are designed to test the average impact of certain categories of announcements, such as announcements regarding a merger or changes in a company's state of incorporation, for a sample of firms, rather than to draw conclusions about any particular firm, which is what Professor Fischel's leakage model purports to do.

20. Notably, these articles that discuss longer event windows employ a second critically important methodology to attempt to control for confounding information, which Professor Fischel's leakage model does not enjoy the benefit of: estimating the effect of the event for a large number of firms. The multiple-firm approach is important in controlling for confounding information because the effect of confounding information *across many firms* is positive for some firms, negative for others, and on average, will not tend to bias the results in either direction. For *any one firm*, there is no reason to assume that the positive and negative effects of confounding information cancel out, as Professor Fischel's leakage model does.

21. Examples of papers Professor Fischel cites that employ a multi-firm study include one by Ragothaman and Bultlitz, who examine 280 firms in their study of firms' stock price reactions to unexpected sales, cost of goods sold, write-down, and expenses announcements over a 90-day window surrounding the announcement.²⁸ Similarly, Jarrell and Poulsen investigate the stock price reactions of 172 firms when looking at the market response to acquisition offers over an event window that includes the 20 days prior to the announcement of the offer.²⁹ MacKinlay too includes multiple firms—30—when conducting an event study over a 40-day event window.³⁰ Hence, when the papers Professor Fischel cites employ an event window longer than a few days,

²⁷ Fischel Second Rebuttal Report, ¶ 119.

²⁸ Srinivasan Ragothaman and Bruce O. Bultlitz, "An Empirical Analysis of the Impact of Asset Writedown Disclosures on Stockholder Wealth," *Quarterly Journal of Business and Economics*, Vol. 35, June 1996, pp. 33–39.

²⁹ Gregg A. Jarrell and Annette B. Poulsen, "Stock Trading Before the Announcement of Tender Offers: Insider Trading or Market Anticipation," *Journal of Law, Economics and Organization*, Vol. 5, 1989, pp. 226–230.

³⁰ A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, March 1997, pp. 16–17.

they conduct the study across many firms.³¹ Again, this is central to the design of these event studies because with the benefit of a large number of firms confounding information will not tend to bias the results in either direction (positively or negatively).

22. In the academic literature cited by Professor Fischel, the articles using single-firm event studies (as is the case for Professor Fischel in this matter) identify event windows of “several days” or less. Even in the multi-firm studies, which are distinct from Professor Fischel’s analysis in this case and where confounding information may be accounted for by examining many firms, the papers cited by Professor Fischel use event windows as short as five days.

23. Professor Fischel’s leakage model does not employ either of the two methodologies employed in the literature that he cites—that is, using a narrow event window or conducting a study with multiple firms—to attempt to limit the influence of confounding information in this matter. Instead, as I discussed above, Professor Fischel assumes that any and all deviations in Household’s stock price returns from the returns predicted by his single-firm market model over his 228-trading-day period are due to leakage of fraud-related information. In so doing, he has significantly deviated from the approaches utilized in the academic literature for controlling for confounding information (such as firm-specific, nonfraud information). Thus, his leakage model is not supported by the academic literature.³²

24. Moreover, Professor Fischel makes a further unsubstantiated implicit assumption in his leakage model: the assumption that there could not have been similar “leakage” of firm-specific, nonfraud information over his leakage period just as he assumes to be the case with fraud-related information. That is, Professor Fischel claims that fraud-related information “reach[ed] the

³¹ Additional papers Professor Fischel cites that discuss multi-firm analysis are Bhagat and Romano, which reviews studies of the share price reactions of (1) up to 150 firms during the week that the firms announce changes in their state of incorporation, and (2) 14 to 1,505 firms over as much as a six-day window to announcements regarding corporate takeovers (Sanjai Bhagat and Roberta Romano, “Event Studies and the Law: Part II: Empirical Studies of Corporate Law,” *American Law and Economics Review*, Vol. 4, No. 2, Fall 2002). Similarly, Malatesta et al. study the stock price reactions of 30 firms over a one-year period surrounding an acquisition (Paul Malatesta and Rex Thompson, “Partially Anticipated Events: A Model of Stock Price Reactions with an Application to Corporate Acquisitions,” *Journal of Financial Economics*, Vol. 14, No. 2, 1985). And Pettengill and Clark discuss the reactions of 446 firms and use an event window of 150 days (Glenn N. Pettengill and John M. Clark, “Estimating Expected Returns in an Event Study Framework: Evidence from the Dartboard Column,” *Quarterly Journal of Business and Economics*, Vol. 40, No. 3/4, Summer–Autumn 2001).

³² With respect to the Cornell and Morgan paper, also cited by Professor Fischel, my understanding is that Professor Cornell is addressing his paper as it relates to Professor Fischel’s leakage model in more depth, so I leave a fuller discussion to him. I do note the language in the Cornell and Morgan paper that “[i]f the disclosure of a fraud is associated with the release of other company-specific bad news, the comparable index approach will overestimate the true damages.” Bradford Cornell and R. Gregory Morgan, “Using Finance Theory to Measure Damages in Fraud on the Market Cases,” *UCLA Law Review*, Vol. 37, 1990 (“Cornell and Morgan (1990)”), p. 903.

market gradually through many sources” over time, but he assumes by construction that no firm-specific, nonfraud information did so.³³ The validity of this implicit assumption is undermined by a number of factors, including:

- The analysis in my Initial Report of firm-specific, nonfraud information released throughout Professor Fischel’s leakage period, including on the 171 statistically insignificant days.³⁴
- The analysis in the October 2015 report by Professor James regarding nonfraud news, including macroeconomic and regulatory events that one would expect to disproportionately negatively affect the stock prices of Household and similar firms relative to their effect on Professor Fischel’s broad industry index.³⁵
- Professor Fischel’s own admission in his Second Rebuttal Report that on the 171 statistically insignificant days, “there were in excess of a thousand disclosures about Household (e.g., company statements, news articles, analyst reports, etc.), many of which contain[ed] both fraud related and nonfraud related information.”³⁶ In other words, while his report points to thousands of articles “many of which” contained nonfraud information, his model assumes no nonfraud “leakage” while simultaneously assuming continuous leakage of fraud over the entire 228-day period.

25. In conclusion, the academic literature simply does not provide support for Professor Fischel’s single-firm 228-day leakage model given the importance of accounting for confounding information in this matter (here, firm-specific, nonfraud information) over such a long period of time.

³³ An alternative assumption is also consistent with Professor Fischel’s leakage model construction. Specifically, rather than assuming that no firm-specific, nonfraud information “leaked” into the market during the 228-day leakage period, he could be assuming that there was positive news and negative news on each day that simply cancels out. However, any such assumption is also entirely unsupported. Even assuming that his analysis of the 42 days that he did address in his initial trial testimony and the Second Supplemental Report were adequate to establish that firm-specific, nonfraud information had no net price impact on those days (and he has not, which I discuss in the sections that follow), he has not even attempted to provide support for any assertion that positive and negative news simply canceled out on the 186 unaddressed days.

³⁴ Ferrell Initial Report, ¶¶ 112–118. In his Second Rebuttal Report, Professor Fischel claims that in eight instances the timing of the news articles or analyst reports I identified in my Initial Report was inaccurate. This claim is itself misleading as his instances of inaccurate timing reflect instances where I explicitly stated that the exact time of the news article or analyst report was “not clear” for purposes of my analysis and instances where Professor Fischel does not in fact challenge the timing but rather points to the timing of a *different* news article or analyst report. In any event, this claim ignores the fact that the point of my Initial Report, consistent with the Seventh Circuit’s instructions in this matter, was focused on whether there was firm-specific, nonfraud information during Professor Fischel’s leakage period and not addressed by his leakage model. All of Professor Fischel’s purportedly correct dates fall within his leakage period.

³⁵ Expert Report of Christopher James, October 23, 2015 (“James Initial Report”), ¶¶ 24–57.

³⁶ Fischel Second Rebuttal Report, ¶ 119.

B. Professor Fischel's Leakage Model Does Not Account for the Firm-Specific, Nonfraud Information Released during Professor Fischel's Leakage Period

26. Addressing the question posed by the Seventh Circuit, the scope of my Initial Report was to assess whether there was some significant, firm-specific, nonfraud-related information that could have affected Household's stock price during Professor Fischel's leakage period. As such, in that report, I point to numerous examples of such information and conclude that my "review of the available market evidence documents the presence of significant firm-specific, nonfraud information, which Professor Fischel fails to address, let alone account for, throughout the leakage period."³⁷

27. Professor Fischel's prior testimony in this matter points to a steady stream of nonfraud information. For example, in the initial trial he stated:³⁸

I noticed that there were a lot of disclosures that had some fraud-related information in it and some other...part...[that] dealt with something other [than that which] was fraud related.

There were some...of those disclosures that had a positive effect, some had a negative effect; but overall it was impossible to conclude that the difference between the true value line and the actual price would have been any different had there been no disclosures about non-fraud-related information during this particular period. Some positive, some negative. They cancel each other out.

28. The Seventh Circuit found this "cancel out" discussion to be conclusory. It stated that, for the leakage model to go to the jury, Plaintiffs' expert must opine that "no firm-specific, nonfraud related information contributed to the decline in stock price during the relevant time period and explain[] in nonconclusory terms the basis for this opinion."³⁹ Moreover, consistent with this requirement, I document in my Initial Report that in order to accurately estimate damages for individual shares, for each shareholder, and for the class as a whole one must accurately determine the level of inflation *on each day* during the class period.⁴⁰ Thus, in order to establish that his leakage model reliably estimates damages, Professor Fischel would have to

³⁷ Ferrell Initial Report, ¶ 15.c.

³⁸ Appellate Order, p. 18.

³⁹ Appellate Order, p. 24.

⁴⁰ Ferrell Initial Report, Section XI.

establish that the effect of firm-specific, nonfraud information was neutral *on each day* during the leakage period.

29. Professor Fischel now concludes that there is just a single day during the entire leakage period with negative firm-specific, nonfraud information, and the stock price effect of this information is purportedly cancelled out two trading days later by positive firm-specific, nonfraud information. Even assuming that Professor Fischel were correct about the two days “cancelling out,” his failure to analyze the 186 unaddressed days during the leakage period notwithstanding his recognition that “there were in excess of a thousand disclosures about Household (e.g., company statements, news articles, analyst reports, etc.), many of which contain[ed] both fraud related and nonfraud related information”⁴¹ renders the position that “no firm-specific, nonfraud related information contributed to the decline in stock price during the relevant time period” entirely unreliable.

30. In his Second Rebuttal Report, instead of establishing that no firm-specific, nonfraud information contributed to Household’s stock price decline during his leakage period, Professor Fischel raises three primary objections to the analysis in my Initial Report—each of which fails. Specifically, Professor Fischel incorrectly asserts:

- My analysis “misunderstands” the difference between industry and firm-specific information;
- My analysis mistakenly characterizes as firm-specific, nonfraud information certain disclosures that, according to him, were fraud-related; and
- My analysis ignores certain purportedly positive announcements made by Household regarding its business performance during Professor Fischel’s leakage period.

Below, I discuss each objection in turn.

1. Professor Fischel’s Leakage Model Does Not, and Cannot, Account for the Effect of Any and All Nonfraud News

31. Professor Fischel incorrectly argues that the analysis of firm-specific, nonfraud information that could have affected Household’s stock price on certain days in my Initial Report is flawed in that it “misunderstands the difference between industry information (which is

⁴¹ Fischel Second Rebuttal Report, ¶ 119.

controlled for via regression analysis) and firm-specific information...⁴² As a preliminary matter, it is important to establish what an event study regression analysis like Professor Fischel's does and does not do. Such a regression does estimate the average relationship over a specified period between the dependent and the independent variable(s).⁴³ Here, Professor Fischel's regression measures the average relationship over his "control period" (November 15, 2000–November 14, 2001) between Household and the market and industry, as proxied by the S&P 500 and S&P Financials Indices, respectively. In other words, Professor Fischel's regression "controls for" the average effect on Household's stock of changes in the S&P 500 and the S&P Financials Indices as estimated over his control period.

32. Importantly, "controlling for" market and industry effects through regression analysis is not equivalent to eliminating the stock price effect of anything that can be labeled "market and industry information" (i.e., information that affects not only Household but also some other firms in the market as a whole or firms within its industry disproportionately). For example, suppose a disclosure revealed that the type of subprime lending Household heavily engaged in was going to be significantly less profitable going forward due to adverse legislative changes and, moreover, that these changes would also affect only a handful of other firms that were also substantially engaged in similar subprime lending. The effect that will be "controlled for" from this disclosure in Professor Fischel's regression analysis will be the effect this disclosure regarding subprime lending has on average for all the firms in his broad industry control, that is, the S&P Financials Index—which comprises approximately 80 firms, the vast majority of which are not engaged in subprime lending.⁴⁴ In this scenario Household would be more affected by the disclosure than would be "controlled for" in the regression given the nature of the industry control. This disproportionate impact would show up in the residual or "firm-specific" return in Professor Fischel's regression analysis (a residual which then gets automatically attributed to fraud-related information in his leakage model). Professor Fischel clearly recognizes this. For example, he testified in this matter that an industry event (e.g., a regulatory change) could have a "firm-

⁴² See, e.g., Fischel Second Rebuttal Report, ¶ 6.

⁴³ "[T]he population regression function... is the relationship that holds between Y [the dependent variable] and X [the independent variable] on average over the population." James Stock and Mark Watson, *Introduction to Econometrics* (Boston: Pearson Education, 2003) ("Stock and Watson (2003)"), p. 94.

⁴⁴ Ferrell Initial Report, ¶ 41.

specific” effect on Household if that event had a bigger effect on Household than on the broad industry index. Specifically:

If [Household was] disproportionately affected by -- hypothetically -- a regulatory change, meaning that the regulatory change has a bigger effect on its expected future profitability than for other firms, then the industry index would maybe partially pick up the effect of the change. But there still could be hypothetically a firm specific effect for Household.... [A]s a matter of statistics, is it possible that a regulatory change that affects the entire industry could affect one firm, whether Household or any other firm, disproportionately. So even though you have a control for an industry variable, you still have a firm-specific component to the return.⁴⁵

33. In other words, the decision to label a particular disclosure as “industry information” because the disclosure happens to mention or affect other firms does nothing to address whether the residual price change is being caused by said “industry information.” The labeling of information is a semantical issue; the economic question is whether the information is reflected in the residual given the regression analysis. In the context of Professor Fischel’s regression, one would expect news that disproportionately affects narrower lines of business especially relevant to Household compared to the average effect on firms in the S&P 500 Financials Index—for example, credit card, consumer finance, and subprime customers—to have a firm-specific effect. If this news is nonfraud information, then it follows that Professor Fischel’s leakage model is capturing nonfraud information.

34. My Initial Report documents numerous examples of nonfraud information that could have had a “firm-specific” effect on Household’s stock price in the context of Professor Fischel’s regression analysis. To further elaborate, **Exhibits 2a–2j** provide numerous examples of days on which information was released that was relevant to Household and subsectors of the consumer finance industry, but less relevant to Professor Fischel’s broad industry index as a whole.⁴⁶ The examples show a pronounced effect on firms in the relevant industry subsector compared to the effect on the S&P 500 and S&P Financials Indices, which Professor Fischel uses to estimate his “firm-specific” price effect for Household. These examples provide graphical evidence that, as

⁴⁵ Deposition of Daniel R. Fischel, March 21, 2008 (“Fischel Deposition”), 200:18–201:17.

⁴⁶ **Exhibits 2k and 2l** provide a brief description of the business lines of the five companies I identified as “engaged in substantial subprime lending and/or targeted subprime consumers” in my Initial Report, ¶ 42.

Professor Fischel acknowledged in his deposition testimony, a market or industry event could have had a “firm-specific” effect on Household if that event had had a bigger effect on Household (and other firms more like it) than on the market and industry indices employed in his regression analysis, and thus demonstrate that Professor Fischel’s conclusory dismissal of any “market and industry information” because it has been “controlled for” via his regression analysis is clearly flawed and unreliable.

35. Not only does Professor Fischel’s use of a broad industry index create the possibility that events disproportionately affecting a narrower industry segment relevant to Household *could have* contributed to the “firm-specific” returns that Professor Fischel includes in his estimate of damages—a conclusion sufficient to address the economic question posed by the Seventh Circuit—but additional statistical analysis provides further evidence that it did *in fact* contribute to those “firm-specific” returns.

36. First, altering the regression analysis in ways that better explain the effect of market and industry information changes the conclusion as to whether market and industry events caused Household’s stock price movement on many days during Professor Fischel’s leakage period. In other words, what was previously identified as “firm-specific” (i.e., reflected in the residuals) in Professor Fischel’s regression model in his Initial Report (“Initial Fischel Regression”), and hence deemed fraud-related in the leakage model, is in fact explained by market and industry effects in a better specified regression model (“Corrected Fischel Regression”).⁴⁷ (See **Exhibits 3a and 3b** for a summary of statistically significant price declines on Professor Fischel’s 14 purported specific disclosure days and the 11 purported leakage days utilizing different regression model specifications.)

37. Employing a market model that better explains the effect of market and industry events on Household’s stock price, such as the Corrected Fischel Regression, is an important first step in isolating firm-specific stock price movements. However, simply substituting the results from a better regression model into Professor Fischel’s flawed leakage model is still no cure for the leakage model’s problems. A better-fitting regression helps to isolate the days on which Household’s stock price movements can be reliably attributed to firm-specific information—

⁴⁷ I will discuss in more detail the Corrected Fischel Regression in Section V below when I address the 14 purported specific disclosure days

which can be fraud-related or nonfraud in nature. Professor Fischel's leakage model, which does not utilize that observation regarding firm-specific information but rather simply assumes any and all residual price movements (including those that cannot be reliably attributed to firm-specific information) comprise damages, is not corrected by simply using a better-fitting regression model.

38. Additionally, as discussed above, even well-specified models control only for the average effect of the independent variables over the estimation period and estimate returns with error.⁴⁸ That is why, while regression analysis is an important first step in many analyses of loss causation and damages, the analysis cannot stop there. Additional analysis of the specific information released is required to determine whether a particular disclosure may be reflected in the "firm-specific" component of a company's stock price and whether other confounding firm-specific information was announced. I perform such an exercise in my discussion of an appropriate damages model in Section V.B below.

2. Professor Fischel's Analysis Does Not Account for the Nonfraud Component of Firm-Specific News

39. The Seventh Circuit required Professor Fischel to provide new testimony in nonconclusory terms that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price." In his Second Rebuttal Report, Professor Fischel asserts that certain firm-specific factors—specifically, "liquidity, capital access, and widening bond spread issues"—were linked "directly to the fraud," citing to selected statements by market analysts and Defendants.⁴⁹ Even assuming, as Professor Fischel asserts, that factors such as liquidity, capital access, and bond spreads were affected by the fraud during his leakage period, this does not establish the absence of nonfraud contributions to those factors.

40. In fact, contemporaneous market analysis undermines any such assertions. For example, an analyst quoted by CBS MarketWatch in November 2002 attributed Household's stock price decline to difficulty raising funds in the commercial paper market,⁵⁰ which had historically been

⁴⁸ Stock and Watson (2003), p. 94.

⁴⁹ Fischel Second Rebuttal Report, ¶ 13.

⁵⁰ In introductory corporate finance book explains that "[l]arge well-known companies can bypass the banking system [and thus avoid the fees paid to financial intermediaries] by issuing their own short-term unsecured notes" known as commercial paper, which, in the United States, "has a maximum maturity of nine months, though most paper is for 60

a meaningful source of funds for the Company,⁵¹ in light of rising credit delinquencies. Specifically, the analyst stated, “HI shares have dropped in half over the past six months as concerns grew in the market over HI’s ability to raise funds in the commercial paper market as credit delinquency trends rise in the U.S.”⁵²

41. Not only did Household have difficulties in the commercial paper market, but market analysts also discussed increasing costs of issuing debt (i.e., debt spreads)⁵³ for consumer finance companies during the leakage period. These widening spreads were not specific to Household, undermining any assertion that they were purely fraud-related. For example, an October 8, 2002 *Financial Times* article states that “[c]redit spreads for specialty US finance companies have widened sharply this week as concern grows over their ability to continue accessing the capital markets.”⁵⁴ The report attributes the cause of the widening spreads to nonfraud causes, including “negative sentiment in the corporate bond market as well as investor nervousness over the health of the financial sector” and an economic environment in which consumer spending and demand for credit is slowing.⁵⁵

42. As one analyst pointed out, “[o]ther than negative psychology, the higher spreads only affect the companies to the extent they have to issue term debt in a terrible market.”⁵⁶ Household was among the companies that needed to issue term debt. It was growing rapidly—its assets grew \$15.9 billion from \$85.2 billion as of September 30, 2001 to \$101.1 billion as of September 30, 2002, and its senior and senior subordinated debt grew from \$53.1 billion to \$74.8 billion over the same period.⁵⁷ The Company also had to replace existing debt. For example, one

days or less.” It notes that “[t]he majority of commercial paper is issued by high-grade, nationally known companies.” Further, “[b]ecause investors are reluctant to buy commercial paper that does not have the highest credit rating, companies cannot rely on the commercial paper market to provide them always with the short-term capital they need.” Richard A. Brealey, Stewart C. Myers, and Franklin Allen, *Principles of Corporate Finance*, 10th ed. (New York: McGraw-Hill/Irwin, 2011) (“Brealey, Myers, and Allen (2011)”), p. 781.

⁵¹ Household Form 10-K for the period ending December 31, 2002, pp. 18, 89.

⁵² “HSBC to Buy Household International,” CBS MarketWatch, November 14, 2002, <http://www.marketwatch.com/story/hsbc-to-buy-household-international-for-14-billion>.

⁵³ Brealey, Myers, and Allen (2011), pp. 577 and 579, explains that yield spread represents the extra return that investors demand on corporate bonds over the risk free rate for taking on the possibility of default, and notes that “yield spreads can vary sharply from one year to the next.” It goes on to state that “[t]he main reason is that these [high-yield periods] were periods when profits were poor and defaults more likely.... However, the fluctuations in spreads appear to be too large to be due simply to changing probabilities of default. It seems that there are occasions when investors are particularly reluctant to bear the risk of low-grade bonds and so scurry to the safe haven of government debt.”

⁵⁴ “Finance company spreads widen,” *Financial Times*, October 8, 2002.

⁵⁵ “Finance company spreads widen,” *Financial Times*, October 8, 2002.

⁵⁶ Deutsche Bank, Household International, October 9, 2002, p. 1.

⁵⁷ Household Form 10-Qs for the quarterly periods ended September 30, 2001 and September 30, 2002.

analyst noted, “HI’s credit spreads have widened significantly since early 2002. Given that \$10 billion of term debt (senior and senior subordinated) is coming due in 2003, the potential exists for higher funding costs, and thus net interest margin compression.”⁵⁸

43. In sum, there is ample evidence of nonfraud causes for the firm-specific factors to which Professor Fischel points.

3. Professor Fischel Does Not Prove His Assertion of a Positive Effect of Household’s Business Performance

44. Professor Fischel ignores evidence presented in my Initial Report that the deteriorating credit quality of Household’s loan portfolios reflected significant firm-specific, nonfraud information that could have negatively impacted Household’s stock price during his leakage period. In particular, he claims that certain purportedly “positive announcements Household made during the Leakage Period” somehow demonstrate that “the Company did not disclose negative firm-specific, nonfraud related information about its business performance that can explain its underperformance.”⁵⁹ However, in addition to the fact that Household’s stock price “underperformance” relative to Professor Fischel’s market and industry indices does not prove that fraud-related leakage caused Household’s stock price to decline throughout his leakage period, this claim is flawed for at least two reasons.

45. First, Professor Fischel fails to establish reliably that the examples he cites were in fact viewed positively by the market. In particular, of the eight days to which he points as having a positive announcement from either Household or market commentators, just one had a statistically significant positive residual return according to Professor Fischel’s regression model (July 18, 2002).⁶⁰ Of the remaining, only two had a positive residual return at all, although not statistically significant according to Professor Fischel’s regression model (April 12, 2002 and April 17, 2002). The others had either a negative residual return according to Professor Fischel’s regression model (January 16, 2002, July 17, 2002, and September 22, 2002)—two of which were statistically significant according to Professor Fischel’s regression model (July 17, 2002

⁵⁸ “Household International: 3Q02 Preview & Update,” *JP Morgan*, October 4, 2002.

⁵⁹ Fischel Second Rebuttal Report, ¶ 15.

⁶⁰ Fischel Second Rebuttal Report, ¶¶ 15–16.

and September 22, 2002)—or were outside of his leakage period entirely. Negative residual returns—particularly those that are purportedly statistically significant—hardly establish a net positive market reaction to the announcements Professor Fischel cites. Hence, the examples Professor Fischel cites as positive announcement days do not come close to showing a net positive market reaction to firm-specific, nonfraud information during his leakage period.

46. Second, even if the announcements themselves had been viewed positively by the market—which Professor Fischel’s own model indicates they were not—Professor Fischel ignores that they were made in the context of expectations given in a weakening economic environment. For example, on January 16, 2002, Household stated that “credit indicators weakened only modestly *in a tough economic environment...*”⁶¹ Similarly, on April 17, 2002, the Company stated that its “credit quality performance was well within our expectations *in light of the continued weakness in the economy...*”⁶² The fact that Household exceeded market expectations in this difficult economic environment does not show, as Professor Fischel asserts, that firm-specific, nonfraud factors—such as the effect of the tough environment on Household’s business performance—did not negatively affect Household’s stock price over his leakage period as a whole. Contrary to Professor Fischel’s claims that Household “did not disclose negative firm-specific, nonfraud related information about its business performance that can explain its underperformance,” **Exhibits 4a and 4b** establish that, like Household’s stock price, important credit measures at Household (performing loans and collectible receivables) declined during Professor Fischel’s leakage period. Simply put, if Professor Fischel had established that Household performed well against expectations in a weakening macroeconomic environment, that might result in a price increase immediately following the announcement of such results. However, because the expectations reflect the effect of a steady stream of poor economic news throughout the leakage period, even assuming Household’s announced results beat existing market expectations in light of that poor economic news, such a showing would be insufficient to establish a net positive firm-specific effect over Professor Fischel’s *entire* leakage period. Indeed, the fact that Household’s asset quality declined throughout Professor Fischel’s leakage

⁶¹ “Household Reports Record Quarterly and Full-Year Net Income,” *PR Newswire*, January 16, 2002 (emphasis added).

⁶² “Household Reports Record First Quarter Net Income,” *PR Newswire*, April 17, 2002 (emphasis added).

period as the stock price declined suggests that business results did not have a positive impact over the period.

47. Thus, a lack of statistical significance, focusing on the stock price returns immediately following only six announcements during his leakage period, and ignoring the environment in which the purportedly positive announcements were made invalidate Professor Fischel's assertion that there was a net positive effect of firm-specific, nonfraud information throughout his leakage period. Instead, the evidence suggests that important indicators of Household's business performance did indeed move with Household's stock price downwards during that time period.⁶³

C. Professor Fischel Misunderstands the Fundamental Gap I Identified in My Initial Report with Respect to His Unaddressed Days

48. In my Initial Report, I make a simple point about the scope of the Fischel Second Supplemental Report. I explained:

Professor Fischel's Second Supplemental Report *by its own terms* therefore fails to provide support for the leakage model's inclusion of the cumulative residual stock price decline over the 171 days during the leakage period without statistically significant price changes (summing to \$6.75) and, for the same reason, fails to provide any *additional support* for his trial testimony concerning the impact on these days of firm-specific, nonfraud-related information.⁶⁴

49. Professor Fischel in his Second Supplemental Report explicitly states at the outset that he is confining his attention to statistically significant negative days,⁶⁵ that is, the Second Supplemental Report does not provide additional support for his trial testimony concerning the impact of firm-specific, nonfraud information for the unaddressed days, including the 171 statistically insignificant days. The self-described scope of his report is clearly reflected in the body of his report. Given this failure, Professor Fischel has therefore failed to provide a

⁶³ Moreover, even if there were a net positive effect over his entire leakage period (which Professor Fischel has not established), he does not establish that it was net positive during substantial portions of the period let alone on a day by day basis.

⁶⁴ Ferrell Initial Report, ¶ 17 (emphases added).

⁶⁵ Fischel Second Supplement Report, ¶ 3 (emphases added): "I analyzed whether there were any days on which 'significant, firm-specific, nonfraud related information was released' that could reasonably explain the *statistically significant residual declines* in Household's stock price during the period from November 15, 2001 through October 11, 2002...."

nonconclusory basis in his Second Supplement Report for his opinion that no firm-specific, nonfraud information contributed to the net \$6.75 price decline (which is being claimed as damages) during the 171 statistically insignificant days.⁶⁶

50. Professor Fischel in his Second Rebuttal Report makes three arguments against this simple point. First, Professor Fischel reports that there were a large number of news reports mentioning Household during these days and that one can find articles discussing Household on “SEC’s EDGAR database, LexisNexis, Bloomberg, and Thomson Research’s Investext Investment Research, among other sources.”⁶⁷ How this is responsive to my simple point is unclear.

51. Second, Professor Fischel repeats the argument that fraud-related information provides the necessary explanation for Household’s “underperformance” during this period.⁶⁸ But this argument is also unresponsive as the Seventh Circuit has concluded that Professor Fischel’s claim that Household underperformed certain indices, even when coupled with reports purportedly discussing a negative impact of the fraud, does not provide an adequate basis for Professor Fischel’s trial testimony that Household’s entire price decline is due to fraud-related information rather than firm-specific, nonfraud information.⁶⁹ That is why I stated in my Initial Report that Professor Fischel’s Second Supplemental Report fails to provide the necessary “additional support” for his trial testimony with respect to these days.

⁶⁶ Removing days on which one does not observe a statistically significant stock price movement is consistent with Professor Fischel’s own statements: “When performing event studies, the conventional practice in finance is to test the ‘null hypothesis’ that the residual return is zero against either the alternative hypothesis that the residual return is different from zero, or the alternative hypothesis that the residual has a particular sign (i.e., it is positive, or it is negative). If the null hypothesis cannot be rejected at conventional levels of significance, then the residual returns are not considered to be statistically significant, i.e., they are not considered to be significantly different from zero. Under these circumstances, one concludes that the observed stock return on a particular date can be explained by the independent variable(s) considered in the estimation model (and is not attributable to the firm-specific events which occurred on that date).... In this case, we conducted a one-tailed test of whether the residual return following the Settlement announcement was positive and statistically significant to test the Objectors’ claim that the Settlement was too favorable to Bank of America. A residual stock price decline that is not both positive and statistically significant provides market evidence contradicting the Objectors’ claims that the Settlement resulted in a windfall to Bank of America.” Expert Report of Daniel R. Fischel, *In the matter of the application of The Bank of New York Mellon*, No. 651786/2011, Supreme Court of the State of New York, March 14, 2013, ¶¶ 45–46, available at <http://www.cwrmbssettlement.com/docs/No.%20541.pdf>.

⁶⁷ Fischel Second Rebuttal Report, ¶ 119 and footnote 56.

⁶⁸ Fischel Second Rebuttal Report, ¶ 8.

⁶⁹ This underperformance argument, for instance, was made in his initial report (see, e.g., Fischel Initial Report, ¶ 39) in his rebuttal report (see, e.g., Fischel Second Rebuttal Report, ¶ 5), in his deposition (see, e.g., Fischel Deposition, 139:18–141:8), and in his trial testimony (see, e.g., Fischel Trial Testimony, 2853:25–2854:12).

52. Third, Professor Fischel claims that the net stock price effect would be a positive \$0.31 if one focuses on days on which he has not identified fraud-related disclosures or information “consistent with leakage.”⁷⁰ He arrives at a positive \$0.31 by including the residuals during his leakage period that are positive and statistically significant according to his regression analysis. This is supposedly relevant because excluding all these days “as Professor Ferrell advocates would *increase*, not decrease, [Professor Fischel’s] estimate of inflation.”⁷¹ But nowhere in my Initial Report can one find me advocating this position and with good reason. Such a position would make no sense. As Professor Fischel himself states in his Second Rebuttal Report, “[b]ecause the price movements on these days are not statistically significant [the 171 days], it would not ordinarily be possible...using standard methodology to attribute the price movement on any day or combination of days to any particular cause.”⁷² While Professor Fischel continues to opine that there is “overwhelming evidence” of leakage during these 171 days justifying such an attribution, my simple point remains: Professor Fischel’s Second Supplemental Reports fails to provide the necessary “additional support” for the inclusion of these days beyond what has already been deemed insufficient, Professor Fischel’s own opinion notwithstanding. As for the residuals that are positive and statistically significant according to his regression analysis, Professor Fischel has consistently opined that this positive \$30.12 is due to fraud-related information.⁷³ This is fundamental to his leakage model. He cannot now selectively abandon that position if it turns out that the 171 statistically insignificant days cannot be reliably attributed to fraud-related leakage. The only rationale would be to preserve his overall damages number, which is no rationale at all.

⁷⁰ Fischel Second Rebuttal Report, ¶ 120.

⁷¹ Fischel Second Rebuttal Report, ¶ 120 (emphasis in original).

⁷² Fischel Second Rebuttal Report, ¶ 119.

⁷³ See Fischel Initial Report, ¶¶ 41–42; Fischel Second Rebuttal Report, ¶¶ 119–120 and FN 62; Fischel Trial Testimony, 2683:17–2684:6.

D. Professor Fischel Fails to Demonstrate That Fraud-Related Information Caused Household's Stock Price Changes on the 28 Days Analyzed in the Second Supplemental Report

1. Professor Fischel Misstates and Misconstrues My Opinions with Respect to His Identification of Fraud-Related Information and Information "Consistent with Leakage"

53. Professor Fischel is correct when he repeatedly states that my Initial Report "does not dispute [his] conclusion that fraud related information consistent with leakage was disclosed" on particular days during his leakage period.⁷⁴ However, Professor Fischel is incorrect in suggesting that I therefore agree with his characterization of this information on these days. As was emphasized at the very outset of my Initial Report, and as I have reiterated earlier in this report, my assignment in my Initial Report was focused on the Seventh Circuit's explicit instructions concerning whether there was "some significant, firm-specific, nonfraud related information that could have affected [Household's] stock price."⁷⁵ The fact that I provide numerous examples throughout his leakage period of significant, firm-specific, nonfraud information that could have affected Household's stock price thereby directly addressing the actual question posed by the Seventh Circuit in no way implies that I agree with his characterization of what constitutes "fraud related information" on particular days.

54. Indeed, contrary to Professor Fischel's suggestion, my opinion is that Professor Fischel has failed to reliably establish that the information he identified on his 11 purported leakage days in fact caused Household's residual price movements on those days. As a primary matter, it bears repeating that Professor Fischel's assertion that an observed price decline occurred coincident with "information related to the fraud that is consistent with leakage" is not the same as asserting that the price decline was "caused" by leakage. Professor Fischel does not opine that he is "reasonably confident that the fraud-related disclosure" was responsible for the "statistically significant price movement" on the 11 purported leakage days as he is willing to do for his 14 purported specific disclosure days. Consistent with this lack of confidence that these declines resulted from fraud-related disclosures, my analysis of the information on Professor

⁷⁴ See Fischel Second Rebuttal Report, ¶¶ 19, 23, 42, 58, 64, 79, and 96.

⁷⁵ Ferrell Initial Report, ¶ 14, citing Appellate Order, p. 24.

Fischel's 11 purported leakage days demonstrates evidence of firm-specific, nonfraud information. For example, May 10, 2002 is one of the 11 purported leakage days.⁷⁶ He cites to a May 10, 2002 Bernstein Research report focused on Household as a basis for this opinion. This report discusses at length the fact (as it explains in its opening "Overview" section) that "we expect additional restrictive state laws *to be* enacted. These *will* tend to reduce profitability in subprime lending and make lending to some high-risk segments uneconomic (thereby reducing the size of the addressable market)."⁷⁷ To state the obvious, discussion of future legislative changes that will impact the future profitability of Household's subprime lending business cannot be construed as revealing past misconduct by Household.

55. Similarly, July 17, 2002 is another one of the 11 purported leakage days.⁷⁸ He cites to a July 17, 2002 Fox-Pitt, Kelton report discussing the credit card industry as a basis for this opinion. The report discusses the *future regulatory uncertainty* for all consumer finance lenders following regulators' insistence that Capital One increase its reserves held against credit card loans to individuals with FICO scores of less than 660. The report states that the ramifications of the increased reserves requirement for Capital One "*could lead to lower returns, increased capital intensity, and greater regulatory uncertainty in the future*" and "throws into question the long-term sustainability of the business model."⁷⁹ Again, to state the obvious, discussion of potential future regulatory changes that could affect the long-term profitability of the credit card business model for consumer finance lenders cannot be construed as revealing past misconduct by Household.⁸⁰

56. On a similar note, Professor Fischel is correct when he repeatedly states that my Initial Report "does not dispute that fraud related information caused Household's stock price to decline" on several of his 14 purported specific disclosure days.⁸¹ Again, these statements are irrelevant given the clearly defined scope of my Initial Report which was directly responsive to

⁷⁶ Fischel Second Supplemental Report, ¶ 24.

⁷⁷ "Household International: Legal Risk to Business Model Increasing," *Bernstein Research*, May 10, 2002 (emphasis added).

⁷⁸ Fischel Second Supplemental Report, ¶ 36.

⁷⁹ "Regulatory Uncertainty Causes Big Problems for Consumer Finance Group," *Fox-Pitt, Kelton*, July 17, 2002 (emphasis added).

⁸⁰ See Section IX of my Initial Report for additional examples of firm-specific, nonfraud information disclosed on Professor Fischel's 11 purported leakage days.

⁸¹ See Fischel Second Rebuttal Report, ¶¶ 102, 104, 106, 110, 112, and 114.

the actual question posed by the Seventh Circuit. That being said, I will address Professor Fischel's damages based on his "Quantification Using Specific Disclosures" in Section V below.

2. Professor Fischel's Construction of Alternative Indices Does Not Establish That His Leakage Model Appropriately Accounts for Firm-Specific, Nonfraud Information

57. Professor Fischel constructs indices out of firms mentioned in my Initial Report and those purportedly "singled out" in the October 2015 James Report ("Fischel Alternative Indices").⁸² He asserts that Household underperforms the Fischel Alternative Indices and claims that the observation that his S&P Financials Index fell further than the Fischel Alternative Indices during his leakage period somehow shows that the S&P Financials Index that he "employed in [his] model appropriately captures the effects of macroeconomic conditions on consumer finance firms, including those that Professor Ferrell states were engaged in substantial subprime lending."⁸³

58. As a primary matter, Professor Fischel misstates and misconstrues my Initial Report. The question that Professor Fischel is answering is not one that was asked. I did not claim that, nor did the Seventh Circuit inquire whether, Professor Fischel's leakage model was distorted "by failing to account for" certain industry indices.⁸⁴ I did state that "information that impacts narrower segments of the financial services industry important to Household" is firm-specific in the context of Professor Fischel's regression analysis and pointed to examples of days on which such information could have contributed to the residual price declines that Professor Fischel's

⁸² Professor Fischel identifies areas in the Ferrell Initial Report and James Initial Report in which the reports discuss certain companies that compete with Household, and then Professor Fischel constructs an "Index of Ferrell Report 'Peers'" and an "Index of James Report 'Peers.'" See Fischel Second Rebuttal Report, ¶ 11 and Exhibit 2. The Index of Ferrell Report "Peers" (hereafter referred to as the "CSFB March 2001 Specialty Finance Index") is a value-weighted index comprising the companies other than Household included in Credit Suisse First Boston's Specialty Finance Universe as of March 2, 2001, excluding CIT Group, which was spun off by Tyco International in July 2002. The CSFB March 2001 Specialty Finance Index includes: American Express, AmeriCredit Financial, Capital One, CompuCredit, MBNA, Metris, and Providian, and WFS Financial. See Fischel Second Rebuttal Report, ¶11 and FN 15; Ferrell Initial Report, ¶ 42. The Index of James Report "Peers" (hereafter referred to as the "Consumer Finance Subsector Index") is a value-weighted index comprising companies other than Household included in the consumer finance subsector of the S&P Financials Index. The Consumer Finance Subsector Index includes: American Express, Capital One, MBNA, and Providian. See Fischel Second Rebuttal Report, ¶ 11; James Initial Report, Exhibit 4. Neither the James Initial Report nor the Ferrell Initial Report identifies these companies as Household's only peers, nor do they advocate for the creation of an index of the returns of such companies.

⁸³ Fischel Second Rebuttal Report, ¶ 11.

⁸⁴ Fischel Second Rebuttal Report, ¶ 12.

leakage model attributes to the fraud.⁸⁵ To repeat, the Seventh Circuit explicitly stated that Defendants' expert was to "identify[] some significant, firm-specific, nonfraud related information that could have affected the stock price."⁸⁶ I did *not* assert that employing an alternative regression analysis would be sufficient to appropriately "account for" any and all firm-specific, nonfraud information that Professor Fischel has attempted to label as market and/or industry information. That would be an unreasonable position as no single-firm regression can reliably account for the impact of all disclosures that might affect more than just the particular firm being studied over a 228-day period. Simply estimating average relationships between the firm's stock price and some industry index or indices for a particular period of time, which is what a regression model does, is not designed to capture the impact of every disclosure on that firm along some dimension relevant to its business. As the event window becomes longer, the less likely this is to be true for every disclosure. One therefore cannot simply assume that the impact of all nonfraud disclosures over the entire 228-day period is somehow "controlled for" by simply including an additional industry index in the regression model, such as the Fischel Alternative Indices.

59. Importantly, Household's purported "underperformance" relative to his market and industry indices is central to Professor Fischel's apparent definition of leakage. Specifically, he states in this matter that leakage occurs when "stock price underperformance" is coupled with "the Company's and market participants' attribution of that underperformance to leakage of the fraud."⁸⁷ However, statistical analysis indicates that Household's stock price performance during Professor Fischel's leakage period cannot be reliably distinguished from its predicted performance based on market and industry factors alone. **Exhibit 5** demonstrates that Household's actual stock price during his leakage period falls within the 95% confidence interval of what one would expect given the movements of the market and industry indices. Thus, even setting aside the fact that market participants attributed Household's price decline during his leakage period to factors other than the fraud, Professor Fischel fails to establish "underperformance" given market and industry movements.

⁸⁵ Ferrell Initial Report, ¶ 28.

⁸⁶ Appellate Order, p. 24.

⁸⁷ Fischel Second Rebuttal Report, ¶¶ 8, 119.

60. Moreover, setting aside the statistical analysis and accepting the measure of “underperformance” that Professor Fischel employs in his Second Rebuttal Report, I note that Household was not alone in “underperforming” the S&P Financials Index. Indeed, four of the five companies engaged in substantial subprime lending that Professor Fischel points out in his Second Rebuttal Report underperformed the S&P Financials Index during Professor Fischel’s leakage period. While the S&P Financials Index declined 21%, CompuCredit declined by 33%, Capital One by 44%, AmeriCredit by 72%, and Metris by 91%. By comparison, Household’s stock price declined 54% during Professor Fischel’s leakage period.

61. In addition to analyzing Household’s performance relative to the Fischel Alternative Indices, Professor Fischel also conducts an exercise in which he modifies his initial leakage model to reflect the inclusion of the Fischel Alternative Indices in his regression analysis. He asserts that this exercise establishes that his leakage model was “not ‘significantly distorted’ by failing to account for these additional industry indexes.”⁸⁸ This exercise is irrelevant to the economic question posed by the Seventh Circuit’s instructions. It neither (1) establishes that “no firm-specific, nonfraud related information contributed to the decline in [Household’s] stock price” nor (2) provides an alternative model that appropriately accounts for the firm-specific, nonfraud information, including the information I identified in my Initial Report.⁸⁹ By attempting to recalculate inflation by simply including an additional index in his leakage model, Professor Fischel’s exercise *assumes* that a leakage model is appropriate in this matter rather than establishes such a conclusion. The simple mathematical result of this exercise is meaningless and does nothing to establish that the threshold conditions to using a leakage model have been satisfied.

62. While the Fischel Alternative Indices may not perfectly measure the effect of market and industry news on each day during Professor Fischel’s leakage period, statistical analysis does show that, despite Professor Fischel’s assertions to the contrary, they do more “appropriately capture[] the effects of macroeconomic conditions on consumer finance firms” than does his S&P Financials Index alone.⁹⁰ A scientifically reliable method of testing how well a model

⁸⁸ Fischel Second Rebuttal Report, ¶ 12.

⁸⁹ Appellate Order, p. 24.

⁹⁰ Fischel Second Rebuttal Report, ¶ 11.

explains the effect of macroeconomic and industry effects on a company's stock price is to perform a regression analysis and compare the adjusted R-squared values.⁹¹ Here, such an exercise demonstrates that the addition of the Fischel Alternative Indices better capture the effect of macroeconomic and industry factors during Professor Fischel's leakage period. **Exhibit 6** demonstrates that the adjusted R-squared is higher when adding either of the Fischel Alternative Indices to Professor Fischel's regression analysis. The highest adjusted R-squared is for the regression model that includes the S&P Financials Index and the CSFB March 2001 Specialty Finance Index.

63. Consistent with employing a model that better accounts for market and industry news, the portion of Professor Fischel's inflation "cap" attributable to the 14 days on which Professor Fischel is "reasonably confident" that the price changes were fraud-related *decreases* under the better performing (i.e., higher adjusted R-squared) models. The increase in the inflation "cap" Professor Fischel points to when the Fischel Alternative Indices are included in the regression are a function of the days on which Professor Fischel is not "reasonably confident" of fraud-related causes of their price change, that is, the days on which he simply *assumes* rather than establishes leakage.

64. In sum, Professor Fischel's analyses including the Fischel Alternative Indices fail to answer the economic question posed by the Seventh Circuit. He establishes neither that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price"⁹² nor that his model appropriately accounts for the firm-specific, nonfraud information, including the numerous examples identified in my Initial Report.

E. Professor Fischel Fails to Address the Basic Methodological Flaw in His Damages Analysis I Identified in My Initial Report, and Misconstrues His Own Application of the Inflation Cap

65. In my Initial Report, I identified a basic methodological flaw in Professor Fischel's leakage model—namely, his estimates of inflation exceed his own estimates of the losses

⁹¹ Indeed, one of the papers cited by Professor Fischel (Tabak and Dunbar) states: "In most cases, there are objective measures that can aid in evaluating the [model] choices [e.g. estimation window, event windows, industry index]. For example, as discussed above, comparing the adjusted R-squared from one estimating regression to the next provides information that can help in deciding which better explains the stock price's movements." Tabak and Dunbar (2001), ch. 19, p. 8.

⁹² Appellate Order, p. 24.

suffered by Plaintiffs due to fraud-related information according to Professor Fischel's model, and the inflation "cap" of \$23.94 he applies does not adequately correct for this issue. Professor Fischel does not appropriately respond to this criticism in his Second Rebuttal Report, and his leakage model continues to suffer from this basic methodological flaw. As a result, Professor Fischel's leakage model, as I pointed out in my Initial Report, necessarily reflects nonfraud factors.

66. In response, Professor Fischel claims that I "misconstrue[] the rationale for the cap" because the cap applies to "any day *prior* to the Leakage Period"⁹³ on which the estimated inflation exceeds the cumulative residual price declines during his leakage period. He is wrong. As shown in Professor Fischel's Exhibit 56 to his Initial Report, he applies the cap on 25 of the 228 days (approximately 11% of the days) *during* his leakage period. In fact, in Professor Fischel's Rebuttal Report, he highlighted the fact that his inflation cap reduced estimated inflation on November 15, 2001 and December 5, 2001, both of which are during his leakage period.⁹⁴ Thus, his inflation cap is not merely a method for limiting inflation during the period prior to his leakage period.⁹⁵

V. A Specific Disclosure Model Is the Appropriate Method of Calculating Damages

A. The Appropriate Framework for Assessing Damages

67. For the reasons stated above and in my Initial Report, Professor Fischel's leakage model is fundamentally flawed. Professor Fischel has not established that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price," which, as the Seventh Circuit has recognized, is a necessary condition for establishing that his leakage model

⁹³ Fischel Second Rebuttal Report, ¶ 122 (emphasis in original).

⁹⁴ Fischel Second Rebuttal Report, footnote 6: "To demonstrate that my quantifications of artificial inflation are consistent, Exhibit B presents my daily quantifications but without applying the limitation on the Quantification Including Leakage. As shown on page 14 of this exhibit, prior to employing the constraint, the artificial inflation in both quantifications declines on November 15, 2001 and December 5, 2001." See *also* Fischel Second Rebuttal Report, Exhibit B, p. 14.

⁹⁵ Besides misstating how he uses the inflation cap, even assuming one were to apply the inflation cap solely to the period prior to Professor Fischel's leakage period, this would do nothing to alter the fact that his leakage model necessarily reflects nonfraud factors. My discussion of the cap was to document that it does not fix the underlying problem with the flawed damages calculations of the leakage model. For example, my discussion of his treatment of March 15, 2002 in paragraph 23 of my Initial Report would remain exactly the same if one did not apply the cap during Professor Fischel's leakage period.

reliably estimates damages. Moreover, Professor Fischel has not provided an alternative model that “doesn’t suffer from the same problem,”⁹⁶ that is, the problem of failing to account for firm-specific, nonfraud information affecting Household’s stock price during his leakage period.

68. Ferrell and Saha (2007) outlines the widely accepted analytical framework for measuring fraud-related price declines and assessing damages. Typically, one first conducts a regression analysis to establish whether a company’s stock price movement over an event window, generally one trading day,⁹⁷ can be reliably attributed to firm-specific information (i.e., days with “statistically significant” returns).⁹⁸ Indeed, Professor Fischel himself acknowledges that it would not “ordinarily be possible” to attribute price movements that are not statistically significant “on any day or combination of days to any particular cause” such as the fraud in this matter.⁹⁹

69. While the regression analysis is an important first step, analysis of loss causation and damages does not end with finding a statistically significant price movement. One must determine whether that price movement corresponds to the arrival of fraud-related information. Moreover, even assuming the arrival of fraud-related information, one also needs to determine whether confounding information (i.e., nonfraud information) was disclosed as well during the event window. An event study itself cannot isolate the effect of multiple pieces of news disclosed within the study’s event window. Hence, if two pieces of news, one fraud-related and one nonfraud in nature, arrive simultaneously, the event study itself cannot isolate the effect of the fraud-related component. Additional analysis is required for a financial economist to reliably attribute any or all of the stock price decline to fraud-related news or to apportion the effects among the fraud-related and nonfraud-related components.

70. Applying this framework, which focuses on statistically significant price declines that can be reliably attributed to fraud-related information, it follows that the price declines on the

⁹⁶ Appellate Order, p. 24.

⁹⁷ In this context, an event window of one day is typical. Longer periods can be used, but (as discussed in Section IV.A above) the problem of confounding information increases substantially as the period lengthens.

⁹⁸ Both Professor Fischel and I apply the standard 95% confidence interval used in academic event studies and frequently accepted by courts. See, e.g., *Reference Manual on Scientific Evidence*, 2nd ed. (Federal Judicial Center, 2000), p. 124, internal citations omitted (“In practice, statistical analysts often use certain preset significance levels—typically .05 or .01. The .05 level is the most common in social science, and an analyst who speaks of ‘significant’ results without specifying the threshold probably is using this figure.”).

⁹⁹ Fischel’s Second Rebuttal Report, ¶ 119.

following days in Professor Fischel's leakage period would not be an appropriate basis for calculating damages:

- The 171 statistically insignificant days on which the stock price movement cannot be reliably attributed to *any* firm-specific information.
- The 15 purported statistically significant declines with no firm-specific information on which Professor Fischel did not find *any* firm-specific, fraud-related information to explain the declines and for many of which my own analysis demonstrates potential nonfraud causes (see Initial Report, Section IX.A).
- The 11 purported leakage days on which Professor Fischel is not "reasonably confident" of fraud-related causes for Household's price decline and for which my own analysis demonstrates nonfraud information (see Initial Report, Section IX.A).

71. Once one puts aside the two "purported cancel out days" (which Professor Fischel identifies as nonfraud information days) and the 15 additional days with statistically significant price increases, one is left as a starting point for analysis with the 14 purported specific disclosure days from the leakage period. These are the days that Professor Fischel is "reasonably confident" can be attributed to fraud-related news and are, according to his regression model, statistically significant.

B. Economic Analysis Reveals That Much of the Decline on the 14 Purported Specific Disclosure Days Is Attributable to Nonfraud Causes

72. For the reasons discussed in the preceding section, a reliable damages model would start with Professor Fischel's 14 purported specific disclosure days. Additional economic analysis demonstrates that only a fraction of the declines on a subset of those days is reliably attributed to the fraud. In particular, I show that:

- Correcting Professor Fischel's market model better explains Household's stock price movements.
- A corrected market model demonstrates that price changes on eight of Professor Fischel's 14 purported specific disclosure days are not statistically significant, that is, cannot be reliably attributed to anything other than market and industry effects.
- Due to the presence of confounding information, the price changes on four of the remaining six purported specific disclosure days cannot be reliably attributed to fraud-related information.
- Given that Professor Fischel has not isolated the effect of fraud-related information on those four days, he has not established that there are any damages in this matter given the price changes on the remaining two days, which are net positive.

Conservatively attributing the firm-specific price declines on the four confounded days wholly to fraud-related information (i.e., simply assuming that the price effect of nonfraud information is zero) establishes a ceiling on inflation in this matter—specifically, \$4.19 per share.

1. Correcting Professor Fischel's Estimation Period Better Explains Household's Stock Price Returns

73. Economic analysis clearly establishes that improving upon the market model employed in Professor Fischel's Initial Report (the Initial Fischel Regression) by including a narrower industry index and adjusting the estimation period (the Corrected Fischel Regression), results in a market model that better explains Household's stock price returns. Employing a market model, such as the Corrected Fischel Regression, better measures market and industry effects and is an important first step in insulating fraud-related price changes.

74. The economic evidence demonstrating that the Corrected Fischel Regression represents an improved market model relative to the Initial Fischel Regression is multifold:

- First, my analysis shows that the adjusted R-squared—a measure of how well a regression explains the effect of macroeconomic and industry information—increases when a narrower industry index is included in the market model, as is the case with the Corrected Fischel Regression.
- Second, additional analysis establishes a structural break—that is, a statistically significant change in the relationship between Household's stock price movement and changes in the market and industry indices—between Professor Fischel's estimation period (i.e., his control period) and the period that he is studying (i.e., the “leakage period”).¹⁰⁰ Failing to take account of the changed relationship leads to unreliable conclusions regarding the cause of Household's stock price movement.
- Third, the number of days with statistically significant price declines according to the Initial Fischel Regression on which Professor Fischel could not find any firm-specific information is unusual (15 out of 57 statistically significant days during Professor Fischel's leakage period according to the Initial Fischel Regression, and 15 out of the 28 days Professor Fischel analyzed in his Second Supplemental Report). The Corrected Fischel Regression indicates that price changes on eight of the 15 days for which Professor Fischel cannot find any firm-specific information cannot be reliably distinguished from market and industry effects (see **Exhibit 3b**).

¹⁰⁰ In the context of my corrected damages analysis, I refer to the period between the first purported specific disclosure on November 15, 2001 and the last purported specific disclosure on October 11, 2002 as the “disclosure period.” In his initial testimony, Professor Fischel referred to this period as the “observation window.” In subsequent testimony, he refers to it as the “Leakage Period.” Fischel Initial Report, ¶ 40; Fischel Second Supplemental Report, ¶ 3.

- Fourth, the nature of the news on eight of Professor Fischel's 14 purported specific disclosure days that are no longer statistically significant when the Corrected Fischel Regression is employed is consistent with that regression model's finding of no firm-specific price effect.

a) Including Narrower Industry Indices Improves Model Fit

75. As discussed above, while no regression analysis can perfectly estimate the price impact of market and industry factors on each day during an extended period, widely accepted statistical measures establish that alternative regression analyses better explain Household's stock price movement during Professor Fischel's leakage period than does the Initial Fischel Regression. In particular, as discussed above, the regression analysis performed by Professor Fischel himself in his Second Rebuttal Report, which includes the CSFB March 2001 Specialty Finance Index, better explains (higher adjusted R-squared) Household's stock price movement than the Initial Fischel Regression, which excludes a narrower industry component. In **Exhibit 6**, the "S&P Financials Index" regression—the regression with just the S&P Financials Index as an industry control—is reflected in the first two rows (adjusted R-squares of 0.54 and 0.59, depending on the regression estimation period); the "S&P Financials Index and Consumer Finance Subsector Index" regression model—the model with these two indices as the industry controls—is reflected in the third and fourth rows (adjusted R-squares of 0.60 and 0.66); and finally the "S&P Financials Index and CSFB March 2001 Specialty Finance Index"—the model with these two indices as the industry control—is reflected in the fifth and sixth rows (adjusted R-squares of 0.61 and 0.67).

b) Changing the Regression Model's Estimation Period Improves Model Fit

76. Additionally, correcting the Initial Fischel Regression to account for the change in the relationship between Household's stock price returns and the returns for the market and industry indices better explains Household's stock price movement during the disclosure period than Professor Fischel's initial regression analysis (reflected in **Exhibit 6** in the differences in the adjusted R-squared between Professor Fischel's control period and the disclosure period). Professor Fischel's control period consists of the one-year preceding the first purported specific

disclosure on November 15, 2001 whereas the disclosure period ranges from the first purported specific disclosure on November 15, 2001 to the last purported specific disclosure on October 11, 2002. And in fact, as shown in **Exhibits 7a and 7b**, there is a statistically significant difference between the regression coefficients in Professor Fischel's control period and the disclosure period.¹⁰¹

77. Academic literature and Professor Fischel recognize the importance of choosing an appropriate estimation period that properly captures the relationship between a company's stock price returns and the market and industry index returns. Tabak and Dunbar, one of the papers Professor Fischel cites, explains that the relationship between company returns and market and industry returns can change over time, and accordingly one may need to use data both before and after the disclosure events:

[O]ne would typically like to use an estimation window close to the event *because the relationship between the company's stock and an index changes over time*. Therefore, the closer the estimation window is to the event, the more relevant the estimated relationship will be.... *When multiple events are studied, the estimation window may cover the periods around the event windows, including the period(s) between event windows.*¹⁰²

78. Discussing the same topic, Professor Fischel notes in a published work that the event study analysis will "perform badly" if there is a change in the relationship between the company returns and the market and industry returns:

The [event study] method assumes a particular form of relation between the market and individual stocks that is necessarily an oversimplification. It leaves out some influences, and it will perform badly if there is a sudden change in β or γ , the coefficients relating this stock to others, during the interval in question.¹⁰³

That is precisely what occurs under the regression analysis that Professor Fischel proposes in this matter. As shown in **Exhibit 6**, using Professor Fischel's own regression specification, the

¹⁰¹ In performing my event study regression over the disclosure period, I remove (or "dummy out") the 14 purported specific disclosure days and to be conservative, the 11 purported leakage days.

¹⁰² Tabak and Dunbar (2001), ch. 19, p. 5 (emphasis added).

¹⁰³ Frank Easterbrook and Daniel Fischel, "Optimal Damages in Securities Cases," *University of Chicago Law Review*, Vol. 52, 1985, pp. 611–652 at 628.

coefficient on the S&P 500 Index increases from 0.81 in his control period to 1.46 in the disclosure period, and the coefficient on the S&P Financials Index increases from 1.07 in his control period to 1.27 in the disclosure period. **Exhibit 7a** demonstrates that these changes in the coefficients are statistically significant, indicating that the relationship between Household stock returns and the market and industry returns changed significantly between Professor Fischel's control period and the disclosure period. This has an important implication: the regression should be estimated based on the disclosure period and not on the control period.

79. Professor Fischel recently commented on the importance of choosing an appropriate estimation period. Specifically, Professor Fischel indicates that one should test for alternative specifications of the event study model, including different estimation periods, to confirm that the results are robust to different specifications:

[S]ometimes there are concerns that, for example, the relationship [between a company's stock price returns and the market and industry] changes at some point in time so that some people might say to use one period. Other people might say to use a different period. And the typical way to handle these periods, as I would say I did in my report, is to perform an event study-- to perform the regression analysis which forms the basis of the event study in different ways, to make sure that you're generating results that tend to be consistent across different specifications, as opposed to what you might call a statistical artifact, just the result of one particular specification, but if you change the specification slightly you get a completely different answer. If that happens, then your results are not robust, they're too sensitive to the statistical formulation, and you want to be cautious about the result that you're getting.¹⁰⁴

80. Importantly, changes in the relationship between company returns and the market and industry (sometimes referred to as "breaks" or "structural breaks" in the literature) can occur as a result of a distinct event or can occur gradually over time. A basic econometric text notes:

If such changes, or "breaks," occur, then a regression model that neglects those changes can provide a misleading basis for inference and forecasting.... Breaks can arise either from a discrete change in the population regression coefficients at a distinct date or from a gradual evolution of the coefficients over a longer period of time.... If a break occurs in the population regression function during the

¹⁰⁴ Testimony of Daniel R. Fischel, *In Re United States of America v. Nacchio*, No. 05-c-00545-EWN, 2010 WL 2786837, August 16, 2011, pp. 872:16–873:6.

sample, then the OLS regression estimates over the full sample will estimate a relationship that holds “on average,” in the sense that the estimate combines two different periods. Depending on the location and the size of the break, the “average” regression function can be quite different than the true regression function at the end of the sample, and this leads to poor forecasts.¹⁰⁵

81. One feature of Professor Fischel’s regression analysis is that it identifies a number of statistically significant days that have no firm-specific disclosures associated with them. As I will document in Section V.B.1.c), once the regression model is estimated based on the disclosure period, many of these days are no longer statistically significant. In other words, market and industry movements explain Household’s price movements on these days, rather than firm-specific disclosures.

82. A structural break in the relationship between Household and market and industry indices is consistent with the changing market and industry conditions in the fall of 2001. As discussed in my Initial Report, 2001 and 2002 were part of a tumultuous economic environment. The U.S. economy was in a recession from March 2001 to November 2001 (the start of the disclosure period) and was believed to be at risk for a “double-dip” recession during the disclosure period.¹⁰⁶ Also, during 2001, the Federal Reserve lowered interest rates eleven separate times from 6.5% to 1.75% in an effort to stabilize the economy during the recessionary period, and maintained such low rates throughout 2002.¹⁰⁷ Third, the terrorist attack on September 11, 2001 was a major market event near the end of Professor Fischel’s control period which had macroeconomic implications within the U.S. stock market.¹⁰⁸ Finally, there were numerous changes to the regulatory landscape that affected subprime lenders in particular, including changes to predatory lending laws.¹⁰⁹

¹⁰⁵ Stock and Watson (2003), pp. 467–468.

¹⁰⁶ See, e.g., Ferrell Initial Report, ¶ 44.

¹⁰⁷ “Specialty Finance Quarterly Fourth Quarter 2001,” A.G. Edwards, January 2, 2002, pp. 11–12; Federal Reserve (<https://research.stlouisfed.org/fred2/>).

¹⁰⁸ See, e.g., S.T.M. Straetmans, W.F.C. Verschoor, and C.C.P. Wolff, “Extreme US Stock Market Fluctuations in the Wake of 9/11,” *Journal of Applied Econometrics*, Vol. 23, 2008.

¹⁰⁹ See James Initial Report, ¶¶ 43–57 and Exhibit 14.

c) An Improved Market Model Decreases the Number of Statistically Significant Days with No Purported Firm-Specific News According to Professor Fischel

83. Ferrell and Saha (2007) explains that a statistically significant return “allows the investigator to conclude that the estimated abnormal return...cannot be explained by chance alone and is therefore attributable to firm-specific news.”¹¹⁰ As discussed in my Initial Report, Professor Fischel’s leakage model includes 15 days on which Professor Fischel opines that Household’s stock price decline was statistically significant, but on which he did not find any firm-specific explanation for the decline (fraud or otherwise).¹¹¹ The large number of statistically significant days with no firm-specific news according to Professor Fischel calls into question the adequacy of his event study analysis. As shown in **Exhibit 3b**, my event study analysis demonstrates that using the Corrected Fischel Regression, Household’s stock price returns on eight of these 15 days are no longer statistically significant. The reduction in statistically significant price changes purportedly without any firm-specific news is consistent with the statistical analysis in Section V.B.1.a) and V.B.1.b) above demonstrating that the Corrected Fischel Regression better explains the relationship between Household’s stock price movement and changes in the market and industry indices.

d) News on the Eight Specific Disclosure Days Is Consistent with My Finding That the Returns Cannot Be Reliably Distinguished from Market and Industry Effects

84. When I apply the Corrected Fischel Regression that better explains Household’s stock price movement during the disclosure period, residual returns on eight of Professor Fischel’s 14 purported specific disclosure days cannot be reliably distinguished from market and industry factors alone. That finding is consistent with my review of the information released on each of the days. Below I discuss a few examples.

85. **December 12, 2001.** Professor Fischel asserts that Household’s stock price declined on December 12, 2001 following an analyst report published after market hours on December 11,

¹¹⁰ Ferrell and Saha (2007), p. 167.

¹¹¹ Ferrell Initial Report, ¶¶ 11–12.

2001. Specifically, Legg Mason “issued a report in which its analysts expressed their confusion regarding certain of the disclosures in the Company’s reports concerning its accounting, in particular its re-aging policies.”¹¹² Although Legg Mason issued two reports during trading hours on December 11, 2001, Professor Fischel contends that Legg Mason’s third report, published after market hours, contained new information “directly relevant to Plaintiff’s claims.”¹¹³

86. Not only do the prior reports call into question whether there was new value-relevant information contained in the after-hours Legg Mason report, but my analysis also found evidence of information disproportionately affecting a narrower segment of the financial services industry. Specifically, as discussed in my Initial Report, a *Business Wire* article released on December 12, 2001 discussed increasing credit card charge-off rates and stated that subprime lenders who have yet to manage through a recession will feel the increase in losses more directly.¹¹⁴ As shown in **Exhibit 2a**, although the S&P Financials Index used by Professor Fischel only declined by 0.3% on December 12, 2001, consumer finance firms with a subprime focus like Household declined disproportionately to the broad industry index. Specifically, Capital One declined 3.0%, Provident declined 4.7%, Metris declined 4.8%, and AmeriCredit declined 6.1%, compared with Household’s decline of 4.4%. Thus, there is additional evidence that information disproportionately affecting subprime consumer finance firms could have affected Household’s stock price, and could be accounted for using my event study analysis which better controls for these factors.¹¹⁵

87. In sum, according to my event study analysis, Household’s residual stock price decline of \$1.33 on December 12, 2001 is not statistically significant (see **Exhibit 3a**), and thus there is no reliable basis to conclude that Household’s stock price return on December 12, 2001 is attributable to anything other than market and industry factors. This finding is consistent with: (1) the observation that the information discussed in the after-hours report was similar to that discussed in reports issued during the trading day, and (2) as discussed in my Initial Report,¹¹⁶ the

¹¹² Fischel Initial Report, ¶ 23.

¹¹³ Fischel Rebuttal Report, Appendix, p. 1.

¹¹⁴ Ferrell Initial Report, ¶ 103.

¹¹⁵ I also note that a *Wall Street Journal* article on December 13, 2001 states that American Express declined 2.5% on December 12, 2001 after announcing it was going to miss its fourth-quarter earnings goals. The article discusses that “[o]ther consumer-finance stocks also lost ground, as investors projected American Express’s problems on to the broader sector” including Capital One Financial, MBNA, AmeriCredit, and Household. “Stocks Overcome Early Torpidity As P&G, Toll Brothers See Gains,” *The Wall Street Journal*, December 13, 2001.

¹¹⁶ Ferrell Initial Report, ¶ 103.

fact that the information released on December 12, 2001 would be expected to disproportionately affect a narrower segment of the financial services market than that represented by Professor Fischel's S&P Financials Index.

88. **February 27, 2002.** Professor Fischel asserts that Household's stock price increased on February 27, 2002 following Household's announced expansion of its "Best Practice Initiatives."¹¹⁷ According to my event study analysis, Household's residual stock price increase of \$1.18 on February 27, 2002 is not statistically significant (see **Exhibit 3a**), and thus there is no reliable basis to conclude that Household's stock price return on February 27, 2002 is distinguishable from market and industry factors. This finding is consistent with the observation that the information released on February 27, 2002 would be expected to impact a narrower segment of the financial services industry than that represented by Professor Fischel's broad industry index. Specifically, a *Reuters News* article published on February 27, 2002 noted that "[c]redit card and consumer finance firm shares rallied on Wednesday [February 27, 2002] after Federal Reserve Chairman Alan Greenspan indicated an economic recovery was on its way, but that an interest rate hike was unlikely in the near future."¹¹⁸ Accordingly, it is not surprising that Household's stock price return was not statistically significant when utilizing an event study analysis that better captures the impact of industry information on Household's stock price.¹¹⁹

89. **September 3, 2002.** Professor Fischel asserts that Household's stock price declined on September 3, 2002 following a Bernstein Research report lowering its expectations for Household as the Company's "sales practice reform takes hold."¹²⁰ According to my event study analysis, Household's residual stock price decline of \$0.12 on September 3, 2002 is not statistically significant (see **Exhibit 3a**), and thus there is no reliable basis to conclude that Household's stock price return on September 3, 2002 is distinguishable from market and industry factors. This finding is consistent with information released on September 3, 2002. Specifically, an article in the *Washington Post* noted that "[t]he stock market's major averages all plunged

¹¹⁷ Fischel Initial Report, ¶ 17.

¹¹⁸ "Credit Card Companies Rally on Greenspan," *Reuters News*, February 27, 2002.

¹¹⁹ Professor Fischel has previously commented on the *Reuters News* article discussed above, and contends that he "controlled for and removed market and industry effects on the Company's stock price, such as comments regarding the economy from Federal Reserve Chairman Alan Greenspan, in [his] event study." My finding that Household's stock price return is not statistically significant when employing an event study analysis that better estimates the impact of industry information on Household's stock price is consistent with Professor Fischel's own characterization of this information as industry information given my industry controls. See Fischel Rebuttal Report, Appendix, p. 3.

¹²⁰ Fischel Initial Report, ¶ 20.

about 4 percent today as investors returned from summer vacations [to find a] still-troubled global economy, the possibility of war with Iraq and serious problems facing Citigroup, the nation's largest financial institution,” and that “[f]inancials have been leading the market both up and down, and today Citi helped take all the financials down.”¹²¹ **Exhibit 2g** demonstrates that Household and its consumer finance peers all declined on September 3, 2002. Accordingly, it is not surprising that Household’s stock price return was not statistically significant when utilizing an event study analysis that better captures the impact of industry effects on Household’s stock price.¹²²

2. Confounding Information Remains on Four of the Six Remaining Specific Disclosure Days

90. Employing the Corrected Fischel Regression, which better accounts for market and industry effects, reveals that information on just six of Professor Fischel’s 14 purported specific disclosure days can be reliably attributed to firm-specific information—fraud-related and/or nonfraud in nature.¹²³ Applying the widely accepted analytical framework, the next step for these six days is to examine the nature of the firm-specific information. I found confounding news (i.e., firm-specific, nonfraud information) on four of the remaining six purported specific disclosure days.

91. Given the presence of firm-specific, nonfraud information, only a portion, if any, of the stock price changes on these days are potentially attributable to the alleged fraud and appropriately included in damages. Professor Fischel would need to account for such

¹²¹ “Stocks Slump Across the Board; Major Indexes Off 4% as Fears Linger About Economy, Iraq and Accounting,” *The Washington Post*, September 4, 2002.

¹²² Professor Fischel has previously commented that he “controlled for and removed market and industry effects on the Company’s stock price” on September 3, 2002. My finding that Household’s stock price return is not statistically significant when employing an event study analysis that better estimates the impact of industry information on Household’s stock price is consistent with Professor Fischel’s characterization of this information as market and industry information given my industry controls. See Fischel Rebuttal Report, Appendix, p. 5.

¹²³ While the 11 purported leakage days are not appropriately included in any specific disclosure model because Professor Fischel is not “reasonably confident” that the price declines are attributable to fraud-related causes, and analysis in my Initial Report points to potential nonfraud causes on most of the days, I note that statistical analysis of the price declines using the Corrected Fischel Regression provides additional support for their exclusion. In particular, as shown in **Exhibit 3b**, my event study analysis demonstrates that Household’s stock price returns on eight of the 11 purported leakage days are not statistically significant using the Corrected Fischel Regression, and thus there is no reliable basis to conclude that leakage of fraud-related information caused Household’s stock price to decline on those days. Moreover, **Exhibits 2b, 2c, 2d, and 2e** demonstrate a disproportionate effect of news on a narrower segment of the financial services industry.

information on these days to reliably estimate damages in this matter, and he has not done so. Below I briefly recount the analysis in my Initial Report documenting the presence of firm-specific, nonfraud information that Professor Fischel has failed to appropriately address on these four dates: July 26, 2002, August 14, 2002, August 16, 2002, and September 23, 2002.¹²⁴

a) July 26, 2002

92. In my Initial Report, I identified firm-specific, nonfraud information discussed by Credit Suisse on July 26, 2002. This information included new regulations that affected Capital One and spilled over to Household.¹²⁵ Other regulations issued earlier in the week also affected Household as a subprime lender. In particular, the Federal Financial Institutions Examination Council (“FFIEC”) issued new draft guidelines designed to monitor more tightly specialty credit-card lenders, especially those with increased subprime business.¹²⁶ Bear Stearns noted on July 26, 2002 that the new draft guidelines were “more of a concern” for “the whole industry” and Capital One than Capital One’s memorandum of understanding (“MOU”).¹²⁷ Credit Suisse made a similar observation, stating that “the regulators are carefully reviewing all participants in subprime lending,” not just Capital One.¹²⁸ News articles surrounding the regulations also discussed the regulations’ broad impact on subprime lenders. A public press article remarked:

Federal regulators have proposed that beginning March 31 bank quarterly call reports include data on the number of subprime accounts in an institution’s portfolio under a July 12 filing in the Federal Register. Banks would be required to note whether they target subprime customers, what types of loans they offer to these customers and data on delinquencies.¹²⁹

93. The subprime focus of Household plus its close, “spillover” ties to Capital One led this combination of news to impact the market’s assessment of Household. As such, the news was

¹²⁴ I note that two of the four confounded dates (August 16, 2002 and September 23, 2002) are only significant at the 95% level if a one-tailed test is employed. I discuss the distinction between a one-tailed test and a two-tailed test of statistical significance in my Initial Report (FN 126).

¹²⁵ Ferrell Initial Report, ¶ 104.

¹²⁶ “In Brief: Specialty Firms Win Big in Stock Rally,” *American Banker*, July 30, 2002.

¹²⁷ “Capital One Financial – Attractive; Some light shed on regulatory issues: MOU may be of less concern than new FFIEC guidelines,” *Bear Stearns*, July 26, 2002.

¹²⁸ “Meeting Should Begin to Address Concerns – Pt1,” *Credit Suisse First Boston*, July 26, 2002.

¹²⁹ “Feds will keep subprime data secret at first,” *Cardline*, July 26, 2002.

firm-specific in a way Professor Fischel fails to recognize.¹³⁰ Professor Fischel also fails to properly characterize the news as nonfraud for the reasons discussed in detail above and in my Initial Report.¹³¹ Accordingly, Professor Fischel has not adequately addressed, let alone attempted to address, firm-specific, nonfraud information on July 26, 2002.

b) August 14, 2002

94. Professor Fischel claims that Household's stock price declined on August 14, 2002 following the Company's announced restatement related to MasterCard/Visa co-branding and affinity credit card relationships and a marketing agreement with a third-party credit card marketing company.¹³² Specifically, Professor Fischel contends that the restatement revealed the fraud at Household because it caused market analysts to reassess the profitability of the credit card business and reduce their earnings forecasts and price target.¹³³ In my Initial Report, I identified multiple firm-specific, nonfraud factors cited by analysts in support of their revisions to Household's earnings forecasts and price targets. Specifically, I demonstrated that analysts revised their expectations, at least in part, due to slower loan growth, lower expected whole loan sales, higher funding costs, a difficult economic environment, and regulatory and political scrutiny, and I identified commentary from Fitch that concerns for Household continued to center on Household's portfolio liquidity in times of economic stress.¹³⁴ Professor Fischel's attempt to characterize all this negative firm-specific information as either fraud-related or market and industry information controlled for by his event study analysis is incorrect for the reasons discussed in detail above and in my Initial Report.¹³⁵ Accordingly, Professor Fischel has not adequately addressed, let alone attempted to address, firm-specific, nonfraud information on August 14, 2002.

¹³⁰ I note that two companies included in the CSFB March 2001 Specialty Finance Index with more of a prime customer focus (American Express and MBNA) comprised approximately 81% and 83% of that value-weighted index as of November 14, 2001 and October 11, 2002, respectively (Fischel Second Rebuttal Report).

¹³¹ Fischel Second Rebuttal Report, ¶¶ 52–57, 104–105.

¹³² Fischel Initial Report, ¶ 6.

¹³³ Fischel Initial Report, ¶ 27.

¹³⁴ Ferrell Initial Report, ¶ 105.

¹³⁵ Fischel Second Rebuttal Report, ¶¶ 106–109.

c) August 16, 2002

95. In my Initial Report, I identified firm-specific, nonfraud factors cited by A.G. Edwards on August 16, 2002 in support of its revision to Household's price target and earnings estimates. Specifically, A.G. Edwards reduced its expectations for Household, in part, to reflect lower expectations given the weaker-than-expected macroeconomic environment, its view that there was low market appetite for consumer finance exposure, and uncertainty concerning the timing of an economic recovery.¹³⁶ Professor Fischel's attempt to characterize this information as market and industry information controlled for by his event study analysis is incorrect for the reasons discussed in detail above and in my Initial Report.¹³⁷ Accordingly, Professor Fischel has not adequately addressed, let alone attempted to address, firm-specific, nonfraud information on August 16, 2002.

d) September 23, 2002

96. In my Initial Report, I identified firm-specific, nonfraud factors cited in a September 22, 2002 CIBC analyst report and *Dow Jones Capital Markets* article published on September 23, 2002. Specifically, CIBC revised earnings estimates for 2002 and 2003 "owing primarily to the likelihood of slower refinancing activity as interest rates begin to rise," and discussed other issues impacting its view on Household such as the uncertain market environment, recent troubles at AmeriCredit, and interest rate trends. Similarly, a *Dow Jones Capital Markets* article on September 23, 2002 discussed factors impacting Household, including concerns about AmeriCredit, concerns about companies with high levels of debt and exposure to subprime borrowers, and concerns about the health of the economy.¹³⁸ Professor Fischel's attempt to characterize this information as market and industry information controlled for by his event study analysis is incorrect for the reasons discussed in detail above and in my Initial Report.¹³⁹ Moreover, there is evidence that this information disproportionately affected a narrow segment of the financial services industry. **Exhibit 2h** demonstrates that every consumer finance firm

¹³⁶ Ferrell Initial Report, ¶ 107.

¹³⁷ Fischel Second Rebuttal Report, ¶¶ 110–111.

¹³⁸ Ferrell Initial Report, ¶¶ 109–111.

¹³⁹ Fischel Second Rebuttal Report, ¶¶ 114–117.

identified by Professor Fischel as a Ferrell Report “Peer” declined by more than the S&P Financials Index on September 23, 2002, further demonstrating that Professor Fischel’s analysis does not adequately address the information released on September 23, 2002. Accordingly, Professor Fischel has not adequately addressed, let alone attempted to address, firm-specific, nonfraud information on September 23, 2002.

C. A Damages Analysis Based on Accepted Economic Principles Yields Inflation Per Share Up to \$4.19

97. As discussed above, based on the Corrected Fischel Regression, only six of Professor Fischel’s 14 purported specific disclosure days remain unexplained by market and industry movements. Moreover, I have identified confounding information (i.e., firm-specific, nonfraud information) on four of those six days. The presence of confounding information means that, without additional economic analysis, the fraud-related portion of the price declines on these days (if any) cannot be reliably determined. If Professor Fischel is unable to reliably isolate the portion (if any) of the declines on the four confounded specific disclosure days that is attributable to fraud-related causes, then he has not reliably established damages. The reason is that excluding these four confounded specific disclosure days leaves just two statistically significant specific disclosure days: November 15, 2001 and October 10, 2002. On October 10, 2002 Household’s stock price *increased* \$3.49 in response to positive fraud-related market speculation regarding the settlement.¹⁴⁰ This price increase more than offsets the negative stock price effect of Professor Fischel’s first alleged specific disclosure on November 15, 2001 (-\$2.21).

98. On the other hand, if one ignores the evidence of firm-specific, nonfraud information discussed above and simply assumes that the entire residual price decline on each of the confounded news days—July 26, 2002, August 14, 2002, August 16, 2002, and September 23, 2002—is wholly attributable to the fraud, then the maximum inflation per share is \$4.19. This represents the maximum per-share damages in this matter because it assumes that there is no stock price effect of the confounding information that I identified. See **Exhibit 8**.

¹⁴⁰ Professor Fischel stated that this was “relatively good news as compared with what people were expecting.” Fischel Trial Testimony, April 16, 2009, 2664:18–19.

99. Actual inflation therefore lies between \$0 per share (which assumes Professor Fischel fails to satisfy his burden to reliably isolate the fraud-related price declines on confounded days) and the maximum \$4.19 per share (which conservatively assumes that the price declines on confounded days are wholly fraud-related). One alternative would be to assume that inflation is reliably measured by the first of the purported specific disclosure days: November 15, 2001 (-\$2.21).¹⁴¹ Such an assumption would be the equivalent of attributing nearly two-thirds (64%) of the residual price declines on confounded days to fraud-related news.

100. **Exhibit 8**, and **Exhibit 9** discussed below, provide information regarding the calculation of maximum inflation in this matter. Neither attempts to allocate that inflation among different alleged misrepresentations—an exercise which I understand is plaintiff’s burden to perform. The jury found liability in this matter with respect to 17 misrepresentations beginning on March 23, 2001.¹⁴² Inflation on any given day is defined as the difference between Household’s actual stock price and the price that would have prevailed in a but-for world in which Household had not engaged in disclosure deficiencies. If it were the case that the price declines used to measure the maximum inflation represented Household’s stock price reaction to more information than could and should have been disclosed at, say, the time of the first alleged misrepresentation, then the maximum per-share inflation amount—\$4.19, \$2.21, or \$0, depending on how one treats confounding information—does not accurately measure damages to Plaintiffs who purchased at that time. Similar assessments would need to be made regarding subsequent misrepresentations in order to determine inflation throughout the class period.

VI. Employing Professor Fischel’s “Simple Solution” in an Attempt to Correct His Leakage Model Yields Damages Estimates Comparable to My Alternative Inflation Calculation

101. Professor Fischel maintains that his initial leakage model requires no modification because there is no evidence that firm-specific, nonfraud factors contributed to Household’s

¹⁴¹ According to Professor Fischel, Household’s stock price declined on November 15, 2001 following a California Department of Corporations (“CADC”) press release issued on November 14, 2001, after trading hours, announcing that CADC brought a lawsuit against Household for imposing “excessive and improper fees, penalties, interest and charges in violation of state consumer protection laws.” Fischel Initial Report, ¶ 12. The CADC lawsuit, however, was filed and publicly announced on November 9, 2001. See “Abusive Lending,” *City News Service*, November 9, 2001.

¹⁴² Appellate Order, p. 12.

price decline. As I concluded in my Initial Report, and discussed further above, my review of the available market evidence documents the presence of significant firm-specific, nonfraud information. There is no reliable economic basis to establish that fraud-related information, or “leakage” of previously undisclosed fraud-related information, negatively affected Household’s stock price during Professor Fischel’s leakage period putting aside for the moment the 14 purported specific disclosure days discussed in the preceding section (i.e., days on which Professor Fischel was “reasonably confident” that disclosures of fraud-related information caused Household’s stock price movement).

102. Notwithstanding that Professor Fischel’s leakage model should not be applied given the facts and circumstances in this matter, I note that Professor Fischel purports to offer a “simple solution” for correcting his flawed leakage model, specifically:

[For] any days on which significant firm-specific, nonfraud information affected Household’s stock price there is a simple solution: exclude those days from the Quantification Including Leakage by replacing the predicted return on those days with the actual return. A similar adjustment can be made to the Quantification Using Specific Disclosures by excluding any such days.¹⁴³

103. The suggestion that damages should exclude price movements on days that cannot reliably be attributed to fraud-related information is consistent with the paper I coauthored with Atanu Saha, and that was cited by the Seventh Circuit in its discussion of leakage. I disagree with Professor Fischel to the extent he is suggesting that all days remain in the leakage model unless one affirmatively identifies firm-specific, nonfraud information that caused the price movement. As discussed at length in my Initial Report and above, Professor Fischel has provided no reliable basis for drawing causal inferences regarding Household’s returns on any day during his leakage period putting aside his 14 purported specific disclosure days, and Professor Fischel’s suggestion that leakage must have caused price changes is unsupported. Further, as discussed above, my analysis of Professor Fischel’s 14 purported specific disclosure

¹⁴³ Professor Fischel is incorrect that such a “simple solution” exists for correcting his leakage model. As discussed in Cornell and Morgan (1990), cited by Professor Fischel, the “comparable index approach” that Professor Fischel employs is the “limiting case in which the observation window is expanded to cover the entire class period.” There is no support in Cornell and Morgan (1990), nor am I aware of any other support, for the notion that the comparable index approach can be applied by combining actual and predicted returns on various dates throughout a leakage period. Employing such an approach incorrectly compounds the effect of the days on which “leakage” supposedly occurred. See Cornell and Morgan (1990), p. 906.

days reveals that only six have stock price returns that are reliably distinguishable from market and industry factors, and of those six days, four have firm-specific, nonfraud information that Professor Fischel has not addressed.

104. Attempting to correct Professor Fischel's leakage model by excluding price movements on days that cannot reliably be attributed to fraud-related information, that is, his "simple solution," ultimately results in estimates of inflation consistent with those in my affirmative model based on specific disclosure days discussed above. Specifically, one would adjust Professor Fischel's own leakage model by replacing the predicted return with the actual return on all days except for the statistically significant purported specific disclosure days. **Exhibit 9** demonstrates the inflation estimates that would result from employing Professor Fischel's own leakage model methodology but replacing predicted returns with actual returns for days on which one cannot be "reasonably confident" that the release of fraud-related information caused Household's stock price to decline.

Executed this 21st day of December, 2015

A handwritten signature in black ink, appearing to read "Allen Ferrell", written in a cursive style.

Allen Ferrell

Appendix A

Allen Ferrell

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POSITIONS

Greenfield Professor of Securities Law, Harvard Law School

Member of Editorial Board, Journal of Financial Perspectives

Fellow, Columbia University's Program on the Law and Economics of Capital Markets

Faculty Associate, Kennedy School of Government

Research Associate, European Corporate Governance Institute

Former Member, Board of Economic Advisors to FINRA

EDUCATION

Massachusetts Institute of Technology, Ph.D. in Economics, 2005
Fields in econometrics and finance

Harvard Law School, J.D., 1995, Magna Cum Laude

- Recipient of the *Sears Prize* (award given to the two students with the highest grades)
- Editor, *Harvard Law Review*

Brown University, B.A. and M.A., 1992, Magna Cum Laude

PREVIOUS POSITIONS

Harvard University Fellow
Harvard Law School, 1997

Law Clerk, Justice Anthony M. Kennedy
Supreme Court of the United States; 1996 Term

Law Clerk, Honorable Laurence H. Silberman
United States Court of Appeals for the District of Columbia; 1995 Term

Appendix A

COURSES TAUGHT

Securities Regulation
Securities Litigation
Regulation of Market Structure
Law and Finance
Law and Corporate Finance
Contracts

REFEREE FOR FOLLOWING JOURNALS

American Law and Economics Review
Journal of Corporation Finance
Journal of Financial Perspectives
Journal of Law and Economics
Journal of Law, Economics and Organization
Journal of Legal Studies
Quarterly Journal of Economics

CONSULTING AREAS

Price Impact and Securities Damages, Valuation, Mergers & Acquisitions

Papers

“Socially Responsible Firms,” with Hao Liang and Luc Renneboog, *forthcoming Journal of Financial Economics* (winner of Moskowitz Prize for outstanding quantitative research in socially responsible investing)

“Thirty Years of Shareholder Rights and Stock Returns,” with Martijn Cremers, *revise and resubmit Journal of Financial Economics*

“Thirty Years of Shareholder Rights and Firm Valuation,” with Martijn Cremers, 69 *Journal of Finance* 1167 (2014)

“Rethinking Basic,” with Lucian Bebchuk, 69 *Business Lawyer* 671 (2014)

“Calculating Damages in ERISA Litigation,” with Atanu Saha, 1 *Journal of Financial Perspectives* 93 (2013)

“Forward-casting 10b-5 Damages: A Comparison to other Methods”, with Atanu Saha, 37 *Journal of Corporation Law* 365 (2011)

“Event Study Analysis: Correctly Measuring the Dollar Impact of an Event” with Atanu Saha, Working Paper (2011)

Appendix A

“Legal and Economic Issues in Litigation arising from the 2007-2008 Credit Crisis,” with Jennifer Bethel and Gang Hu, in *PRUDENT LENDING RESTORED: SECURITIZATION AFTER THE MORTGAGE MELTDOWN* (Brookings Institution Press 2009)

“Securities Litigation and the Housing Market Downturn,” with Atanu Saha, 35 *Journal of Corporation Law* 97 (2009)

“The Supreme Court’s 2005-2008 Securities Law Trio: *Dura Pharmaceuticals*, *Tellabs*, and *Stoneridge*,” 9 *Engage* 32 (2009)

“What Matters in Corporate Governance?” with Lucian Bebchuk & Alma Cohen, 22 *Review of Financial Studies* 783 (2009)

“Do Exchanges, CCPs, and CSDs have Market Power?,” in *GOVERNANCE OF FINANCIAL MARKET INFRASTRUCTURE INSTITUTIONS* (editor Ruben Lee) (2009)

“An Asymmetric Payoff-Based Explanation of IPO ‘Underpricing’,” Working Paper, with Atanu Saha

“The Law and Finance of Broker-Dealer Mark-Ups,” commissioned study for NASD using proprietary database (2008)

“Majority Voting” in *REPORT OF THE COMMITTEE ON CAPITAL MARKETS REGULATION* (2008)

“The Loss Causation Requirement for Rule 10B-5 Causes of Action: The Implications of *Dura Pharmaceuticals v. Broudo*,” with Atanu Saha, 63 *BUSINESS LAWYER* 163 (2007)

“Mandated Disclosure and Stock Returns: Evidence from the Over-the-Counter Market,” 36 *Journal of Legal Studies* 1 (June, 2007)

“Policy Issues Raised by Structured Products,” with Jennifer Bethel, in *BROOKINGS – NOMURA PAPERS IN FINANCIAL SERVICES*, Brookings Institution Press, 2007

“The Case for Mandatory Disclosure in Securities Regulation around the World,” 2 *Brooklyn Journal of Business Law* 81 (2007)

“U.S. Securities Regulation in a World of Global Exchanges,” with Reena Aggarwal and Jonathan Katz, in *EXCHANGES: CHALLENGES AND IMPLICATIONS*, Euromoney (2007)

“Shareholder Rights” in *REPORT OF THE COMMITTEE ON CAPITAL MARKETS REGULATION* (2007)

“Creditor Rights: A U.S. Perspective,” 22 *Angler- und Glaubigerschutz bei Handelsgesellschaften* 49 (2006)

Appendix A

"Measuring the Effects of Mandated Disclosure," 1 *Berkeley Business Law Journal* 369 (2004)

"If We Understand the Mechanisms, Why Don't We Understand the Output?," 37 *Journal of Corporation Law* 503 (2003)

"Why European Takeover Law Matters," in REFORMING COMPANY AND TAKEOVER LAW IN EUROPE (Oxford University Press) (2003)

"Does the Evidence Favor State Competition in Corporate Law?," with Alma Cohen & Lucian Bebchuk, 90 *California L. Rev.* 1775 (2002)

"Corporate Charitable Giving," with Victor Brudney, 69 *Univ. Of Chicago Law Review* 1191 (2002)

"A Comment on Electronic versus Floor-Based Securities Trading," *Journal of Institutional and Theoretical Economics* (Spring 2002)

"Much Ado About Order Flow," *Regulation Magazine* (Spring 2002)

"On Takeover Law and Regulatory Competition," with Lucian Bebchuk, 57 *Business Lawyer* 1047 (2002)

"Federal Intervention to Enhance Shareholder Choice," with Lucian Bebchuk, 87 *Virginia Law Review* 993 (2001)

"A New Approach to Regulatory Competition in Takeover Law," with Lucian Bebchuk, 87 *Virginia Law Review* 111 (2001)

"A Proposal for Solving the 'Payment for Order Flow' Problem," 74 *Southern California Law Review* 1027 (2001)

"Federalism and Takeover Law: The Race to Protect Managers from Takeovers," with Lucian Bebchuk, 99 *Columbia L. Rev.* 1168 (1999)

TESTIMONY LAST FOUR YEARS

Fosbre v. Las Vegas Sands Corp., Case No. 2:10-cv-00765-APG-GWF, Expert report and deposition on December 11, 2015

Ambac Assurance v. JPMorgan Investment Management Inc. & Assured Guaranty v. JP Morgan Investment Management, Inc., Index No. 603755/2008, Expert report and deposition on December 2, 2015

In re Barrick Gold Securities, Case No. 1:13-CV-03851, Expert report and deposition on November 23, 2015

Appendix A

In re Puda Coal Securities Inc. et al. Litigation, Case No. 1:11-CV-2598, Expert report and deposition on July 29, 2015

City of Lakeland Employees Pension Plan v. Baxter International, Inc., et al., Case No. 1:10-cv-06016, Expert report and deposition on June 3, 2015

Bruce Sherman v. Bear Stearns Companies Inc. et al, Case No. 08 MDL No. 1963, Expert report and deposition on May 28, 2015

Fosbre v. Las Vegas Sands Corp., Case No. 2:10-cv-00765-APG-GWF, Expert report and deposition on March 25, 2015

City of Lakeland Employees Pension Plan v. Baxter International, Inc., et al., Case No. 1:10-cv-06016, Expert report and deposition on October 17, 2014

Louisiana Municipal Police Employees Retirement System v. Simon Property Group, Inc., Case No. 7764-CS, Expert report and deposition on July 7, 2014

In re Lehman Brothers Securities and ERISA Litigation, Case No. 09 MD 2017, Expert report and deposition on April 24, 2014

SEC v. Moshayedi, Case No. 12-CV-01179-JVS-JPR, Expert report and deposition on July 30, 2013

In re Bank of America Corporation Securities, Derivative and ERISA Litigation, Case No. 09 MDL 2058, Expert report and deposition on July 26, 2013

Schneider v. Primerica Inc., FINRA Case No. 11-04751, Arbitration hearing on March 24-25, 2013

CMMF, LLC v. J.P. Morgan Investment Management, Inc & Ted Ufferfilge, Case No. 09-601924, Trial Testimony in Supreme Court in the State of New York, January 28-29, 2013 and deposition on September 20, 2012

In re Bank of America Corporation Securities, Derivative, & ERISA Litigation, Case No. 09-MDL-2058, Expert reports and deposition on May 22, 2012

Securities and Exchange Commission v. Tambone & Hussey, Case No. 06-CV-10885-NMG, Expert reports and deposition on January 13, 2012

Hayes v. Merrill Lynch, Pierce, Fenner & Smith, Inc., FINRA Case No. 11-00432, Arbitration hearing on January 10, 2012

Appendix B: Materials Relied Upon

<u>Document Title</u>	<u>Document Date</u>
Expert Reports	
Report of Daniel R. Fischel, <i>In the matter of the application of The Bank of New York Mellon, et al.</i>	March 14, 2013
Report of Allen Ferrell, <i>In re: Lawrence E. Jaffe Pension Plan, On Behalf of Itself and All Others Similarly Situated, v. Household International, Inc., et al.</i>	October 23, 2015
Report of Christopher James, <i>In re: Lawrence E. Jaffe Pension Plan, On Behalf of Itself and All Others Similarly Situated, v. Household International, Inc., et al.</i> , and all materials referenced therein	October 23, 2015
Expert Report of Bradford Cornell, <i>In re: Lawrence E. Jaffe Pension Plan, On Behalf of Itself and All Others Similarly Situated, v. Household International, Inc., et al.</i> , and all material referenced therein	October 23, 2015
Second Rebuttal Report of Daniel R. Fischel, <i>In re: Lawrence E. Jaffe Pension Plan, On Behalf of Itself and All Others Similarly Situated, v. Household International, Inc., et al.</i>	November 23, 2015
Academic Articles and Other Reports	
Daniel R. Fischel, "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," 38 Bus. Law.	November 1982
Malatesta et al., "Partially Anticipated Events: a Model of Stock Price Reactions with an Application to Corporate Acquisitions," <i>Journal of Financial Economics</i> , Vol. 14	1985
Frank Easterbrook and Daniel Fischel, "Optimal Damages in Securities Cases," <i>University of Chicago Law Review</i> , Vol. 52	1985
Gregg A. Jarrell and Annette B. Poulsen, "Stock Trading Before the Announcement of Tender Offers: Insider Trading or Market Anticipation," <i>Journal of Law, Economics and Organization</i> , Vol. 5	1989
Bradford Cornell and R. Gregory Morgan, "Using Finance Theory to Measure Damages in Fraud on the Market Cases," <i>UCLA Law Review</i> , Vol. 37	1990
Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," <i>The Business Lawyer</i> , Vol. 49	1994
Srinivasan Ragothaman and Bruce O. Bublitz, "An Empirical Analysis of the Impact of Asset Writedown Disclosures on Stockholder Wealth," <i>Quarterly Journal of Business and Economics</i> , Vol. 35	June 1996
A. Craig MacKinlay, "Event Studies in Economics and Finance," <i>Journal of Economic Literature</i> , Vol. 35	March 1997
<i>Reference Manual on Scientific Evidence</i> , 2nd ed., Federal Judicial Center (2000), p. 124	2000
David Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," <i>Litigation Services Handbook: The Role of the Financial Expert</i> , 3 rd ed., ed. Roman W. Weil et al. (New York: John Wiley & Sons)	2001
Pettengill and Clark, "Estimated Expected Returns in an Event Study Framework: Evidence from the Dartboard Column," <i>Quarterly Journal of Business & Economics</i> , Vol. 40, Nos. 3 and 4	2001

Appendix B: Materials Relied Upon

<u>Document Title</u>	<u>Document Date</u>
Bhagat and Romano, "Event Studies and the Law: Part II: Empirical Studies of Corporate Law," <i>American Law and Economics Review</i> , Vol. 4	2002
James Stock and Mark Watson, <i>Introduction to Econometrics</i> (Boston: Pearson Education), pp. 94, 467–468.	2003
Madge S. Thorsen et al., "Rediscovering the Economics of Loss Causation," <i>Journal of Business and Securities Litigation</i> , Vol. 6	2006
Straetmans, W.F.C. Verschoor, and C.C.P. Wolff, "Extreme US Stock Market Fluctuations in the Wake of 9/11," <i>Journal of Applied Econometrics</i> Vol. 23, pp. 17–42	2008
Brealey, Myers, and Allen, <i>Principles of Corporate Finance</i> , 10 th ed., ("Brealey, Myers, and Allen"), pp. 577, 579, 781	2011

Analyst Reports and Public Press

"Abusive Lending," <i>City News Service</i>	November 9, 2001
"Stocks Overcome Early Torpidity as P&G, Toll Brothers See Gains," <i>The Wall Street Journal</i>	December 13, 2001
"Meeting Should Begin to Address Concerns – Pt1," <i>Credit Suisse First Boston</i>	July 26, 2002
"Capital One Financial — Attractive: Some light shed on regulatory issues: MOU may be of less concern than new FFIEC guidelines," <i>Bear Stearns</i>	July 26, 2002
"In Brief: Specialty Firms Win Big in Stock Rally," <i>American Banker</i>	July 30, 2002

SEC Filings

Form 10-Ks and 10-Qs for Household International for the periods ending September 30, 1999 to December 31, 2003

Form 10-Ks for AmeriCredit, CompuCredit, Metris, and Providian for the periods ending December 31, 2000 to December 31, 2002

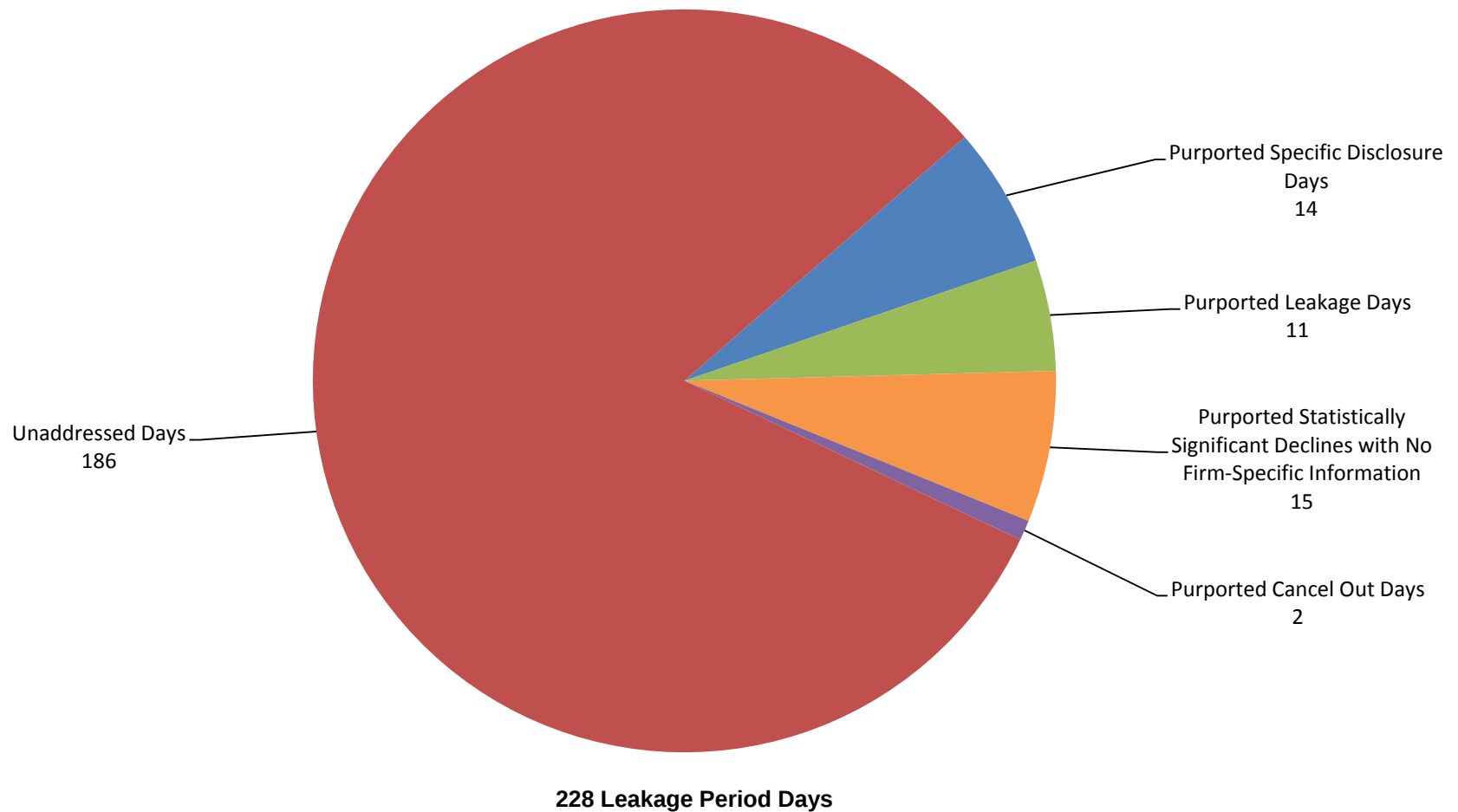
Data Sources

Production for the Second Rebuttal Report of Daniel R. Fischel	11/15/00 – 10/14/02
Bloomberg and CRSP Stock and Index Data	3/23/01 – 10/14/02

All other documents cited in my report and exhibits.

Exhibit 1

Professor Fischel Fails to Address the Vast Majority of Leakage Period Days

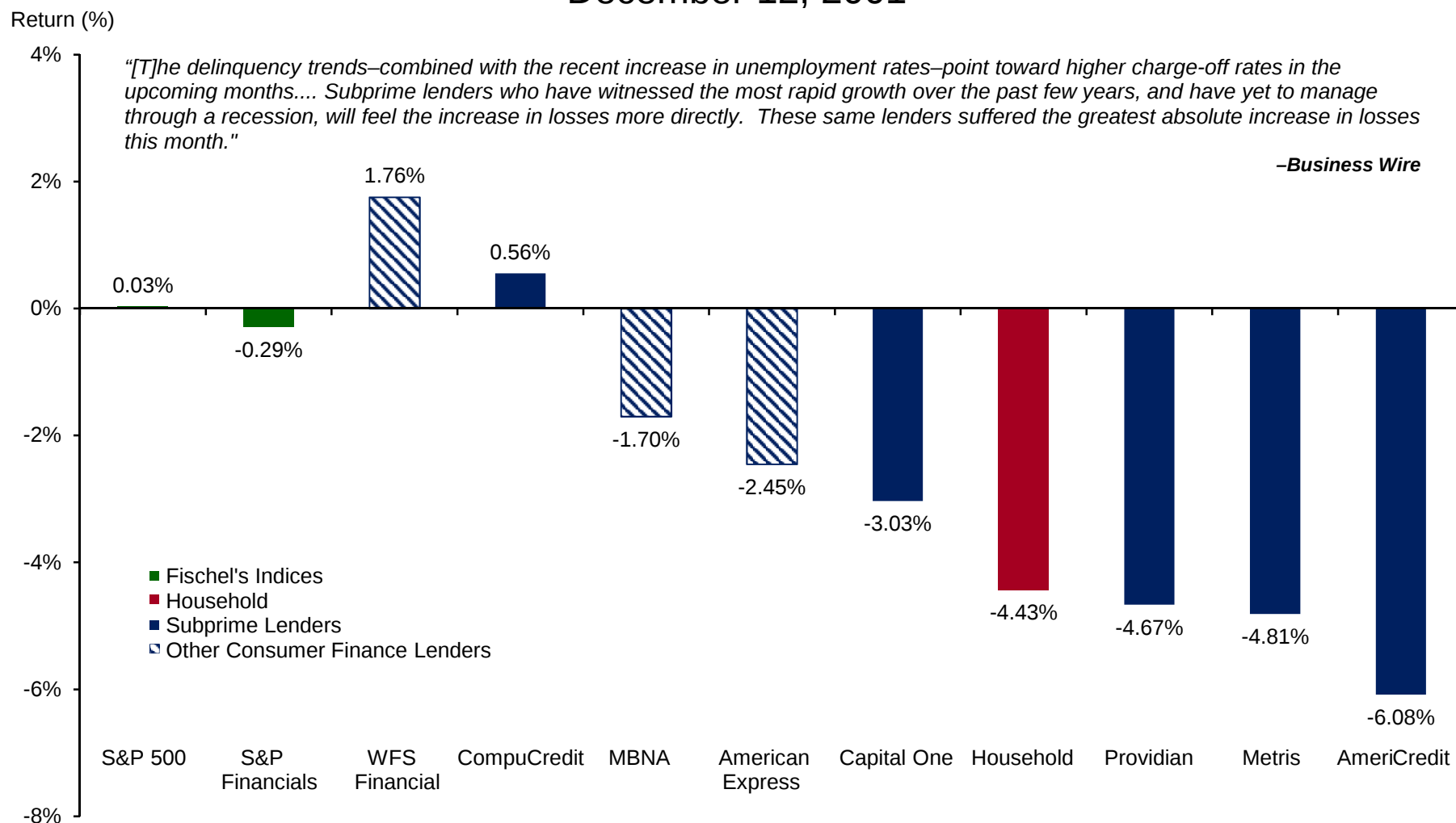


Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Supplemental Report of Daniel R. Fischel, 9/22/15

Exhibit 2a

Business Wire Reports that Worsening Delinquency Trends and an Increase in Unemployment Impact Subprime Companies

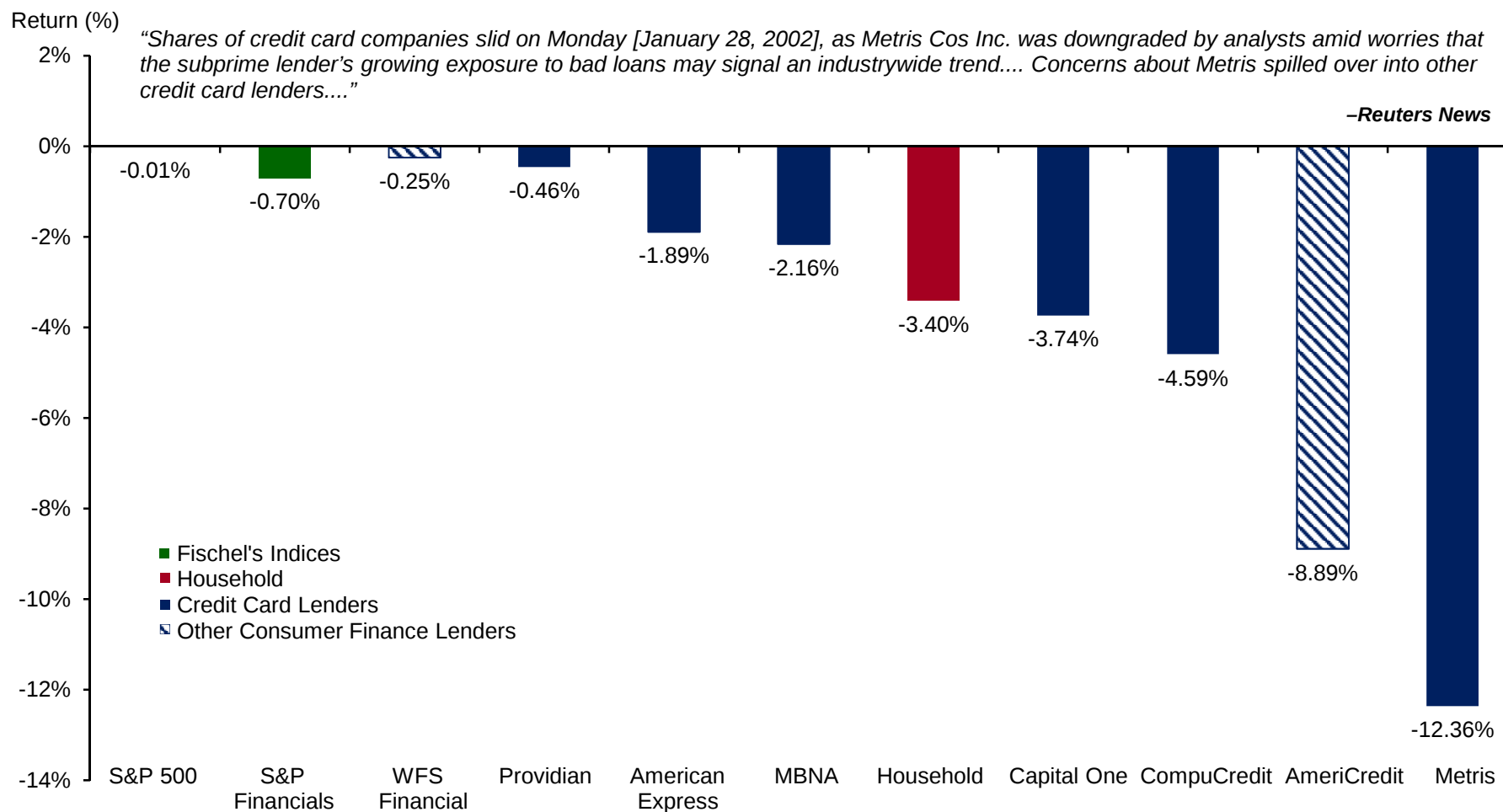
December 12, 2001



Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Credit Card Charge-Offs Increased in October," Business Wire, 12/12/01

Exhibit 2b

Concerns Arise that Metris' Growing Exposure to Bad Loans Signals an Industrywide Trend for Credit Card Lenders, Particularly Subprime Lenders January 28, 2002

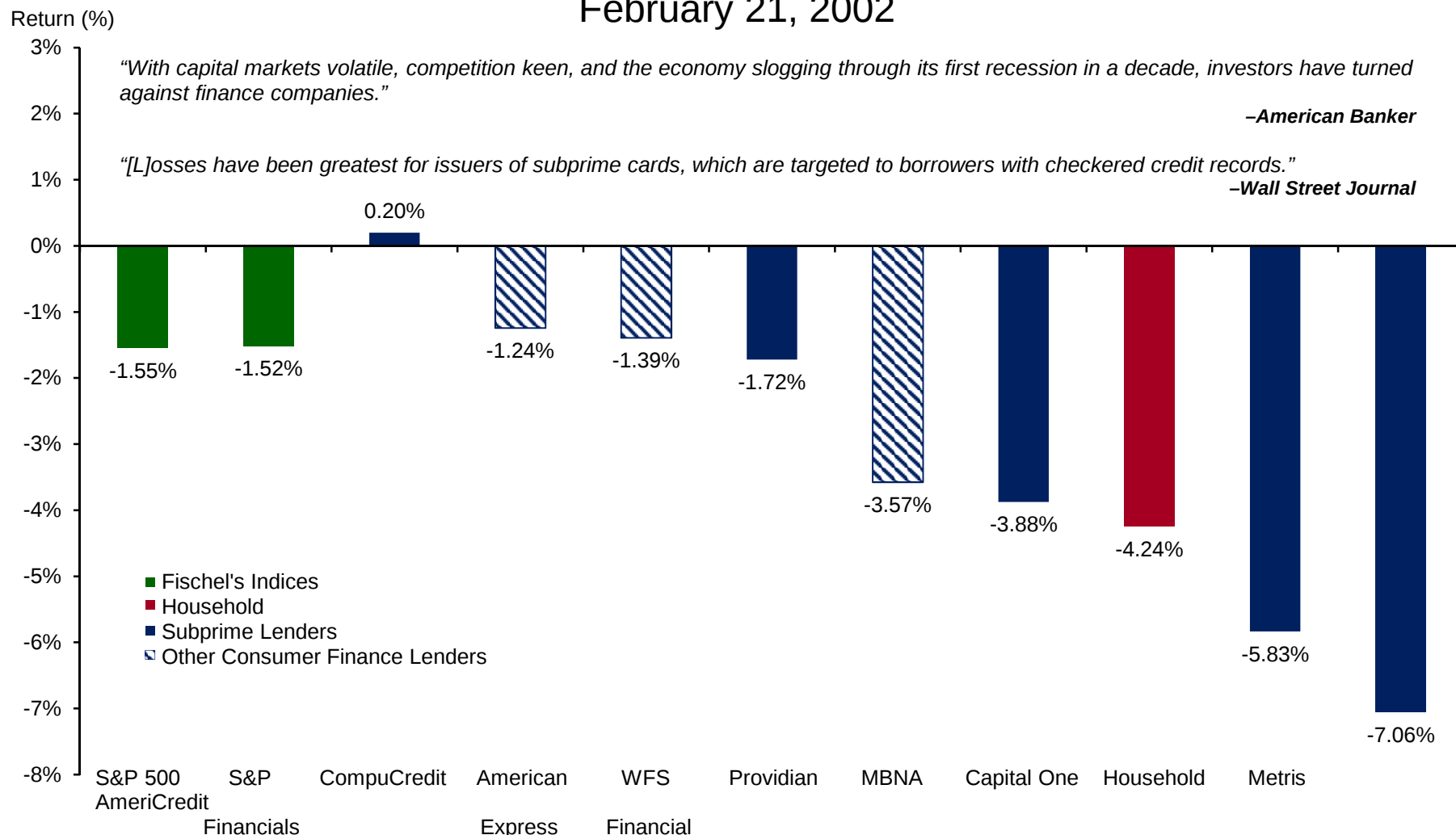


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Credit card stocks fall on Metris, sub-prime worries," Reuters News, 1/28/02

Exhibit 2c

Volatile Market and Slow Economy Disproportionately Affect Subprime Finance Companies

February 21, 2002

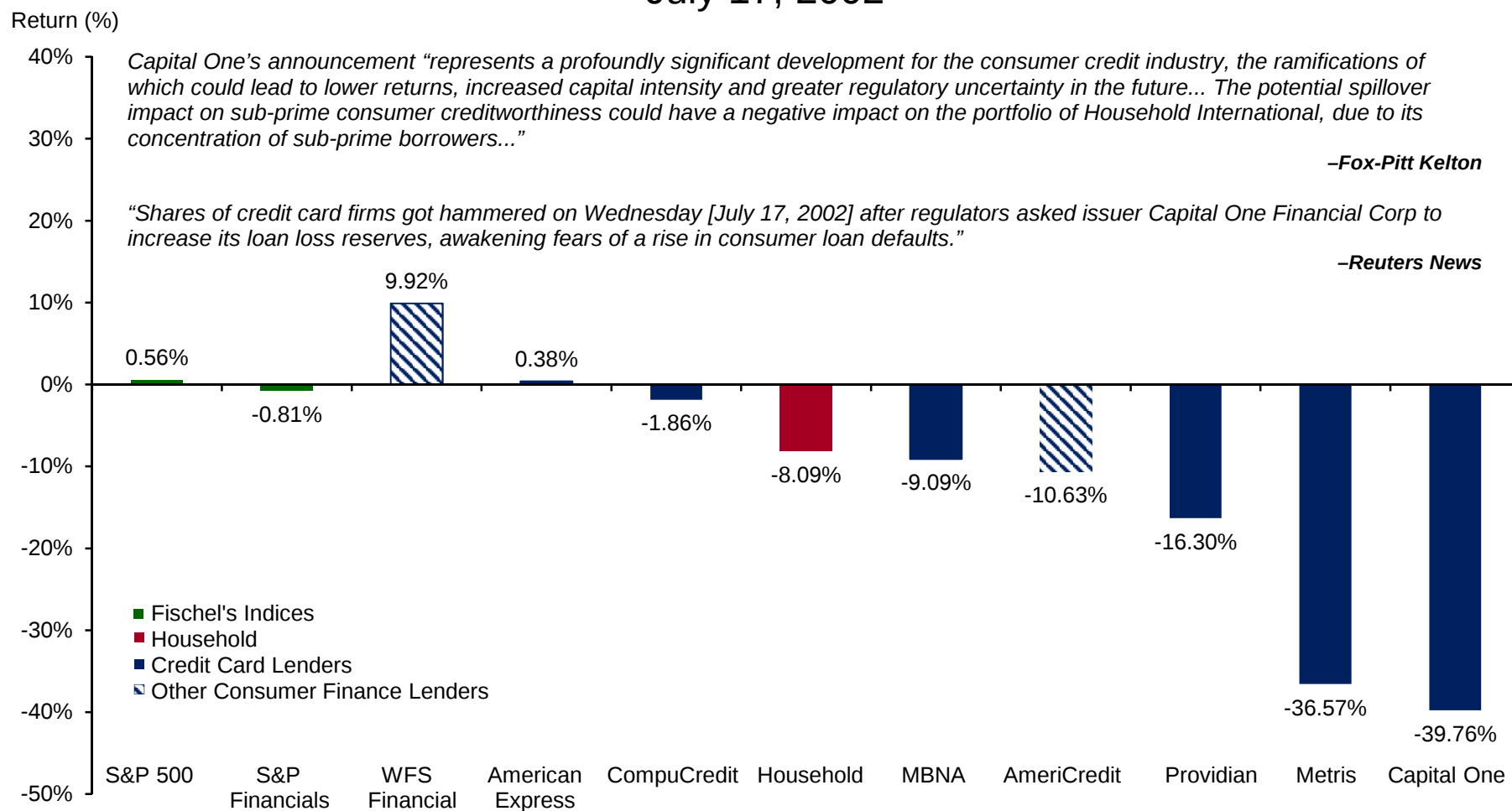


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Consumer Finance Firms' Outlook Bleak, Fitch Says," American Banker, 2/21/02; "Credit-Card Companies Are Raising Their Rates," The Wall Street Journal, 2/21/02

Exhibit 2d

Regulators Impose Higher Reserve and Capital Requirements on Capital One Causing Concern Regarding Subprime Lenders

July 17, 2002

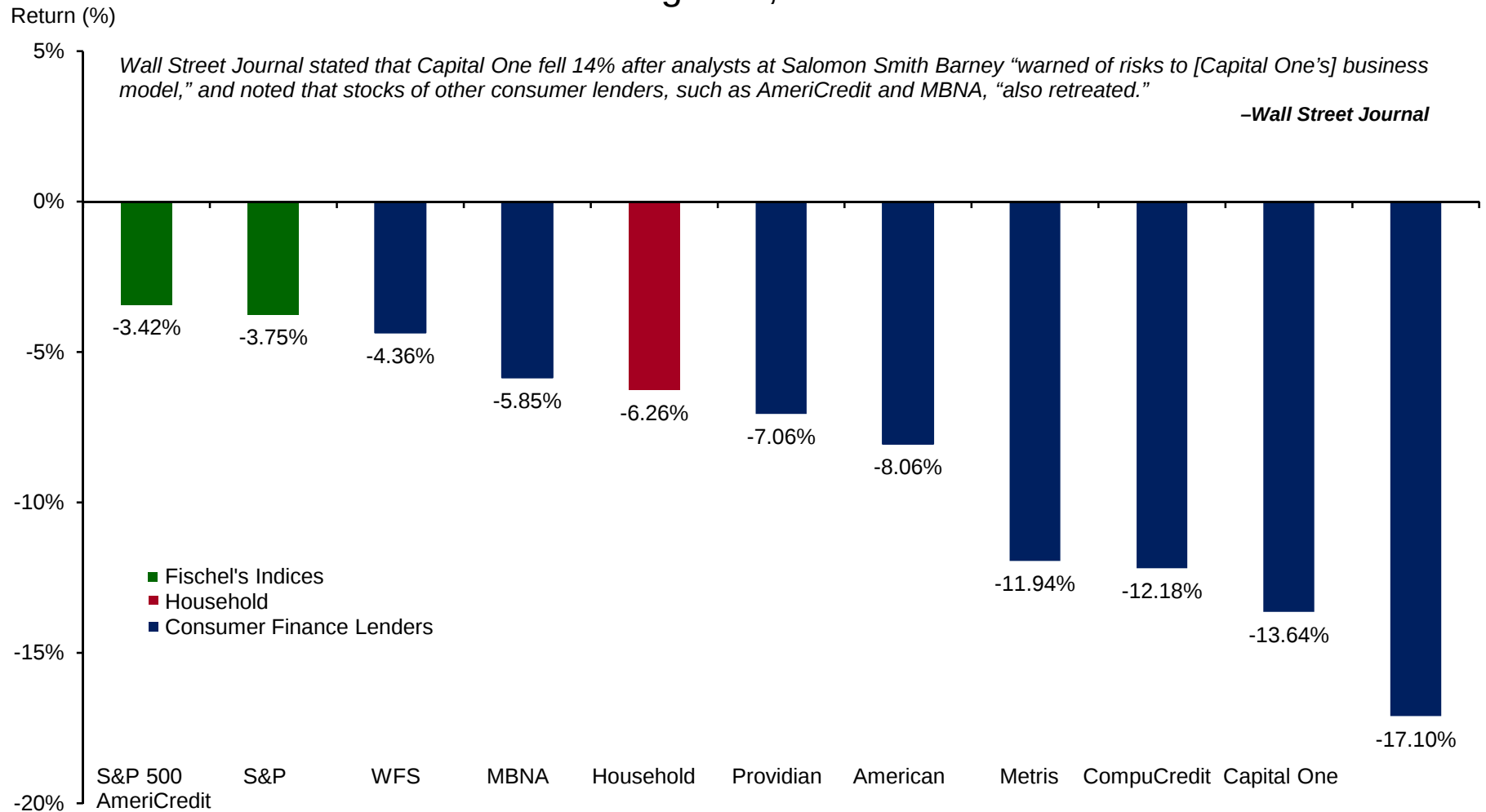


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Regulatory Uncertainty Causes Big Problems For Consumer Finance Group," Fox-Pitt Kelton, 7/17/02; "UPDATE 2-Credit card stocks dive on consumer default fears," Reuters News, 7/17/02

Exhibit 2e

Weak Economic Environment Leads to Increasing Risk for Consumer Lenders

August 5, 2002

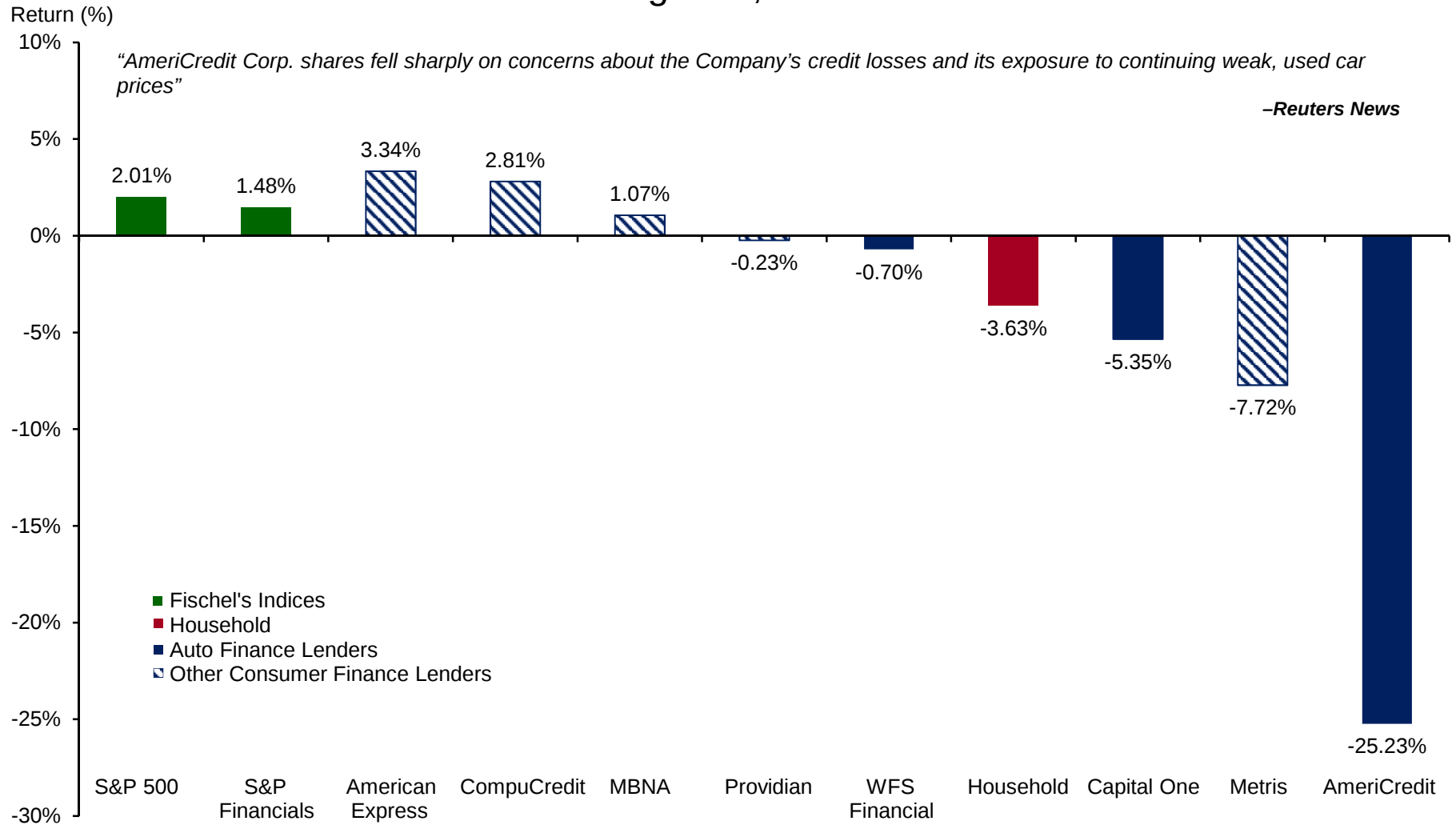


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Cox Communications Falls 19%, Comcast 14% as Market Slides," The Wall Street Journal, 8/6/02

Exhibit 2f

Weak Used Car Prices Impact Auto Finance Companies' Stock Prices

August 7, 2002

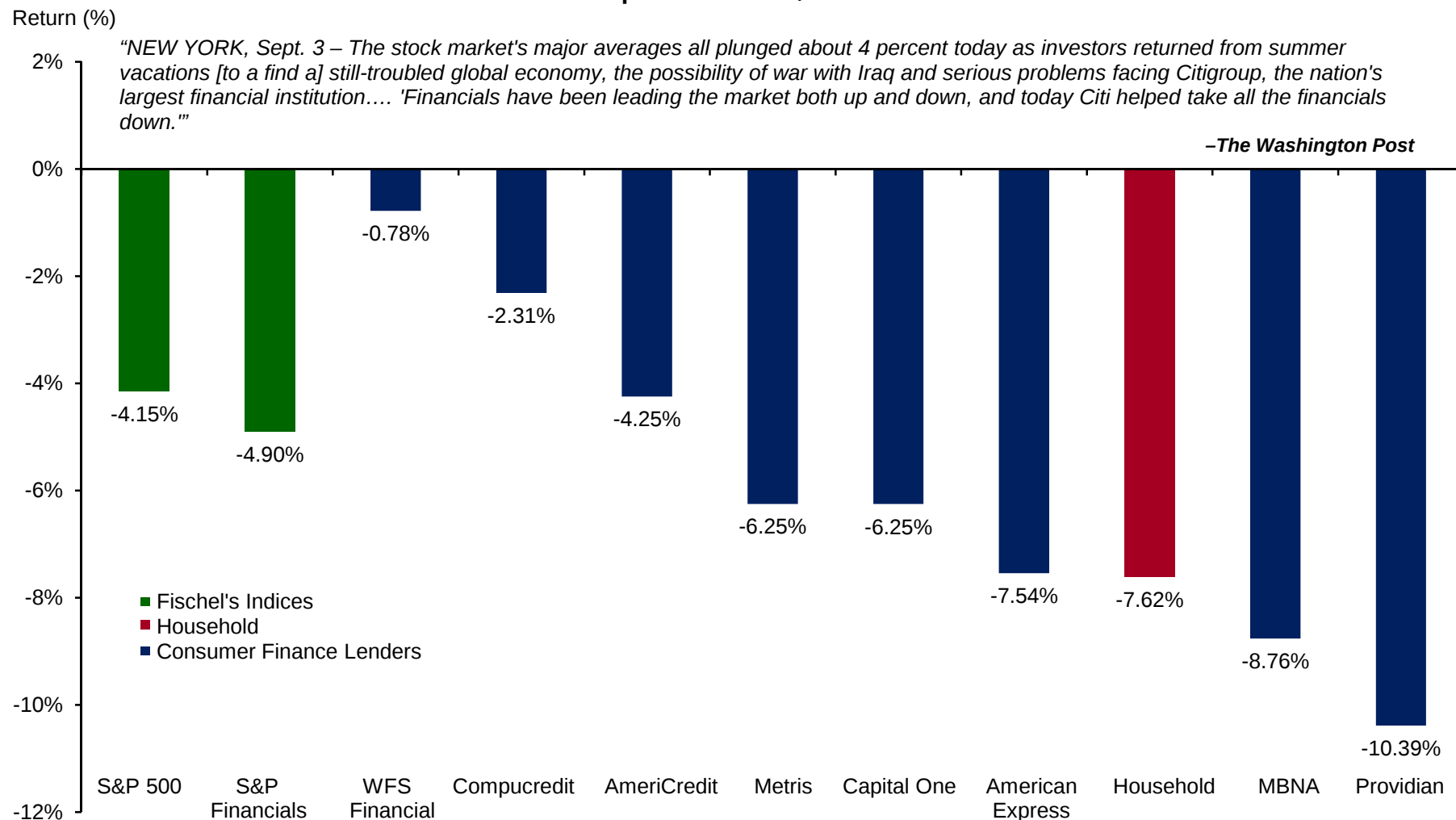


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "AmeriCredit Corp. Shares Fall Sharply On Delinquency Concerns-DJ," Reuters Significant Developments, 8/7/02

Exhibit 2g

Serious Problems Facing Citigroup Impact Financial Sector

September 3, 2002

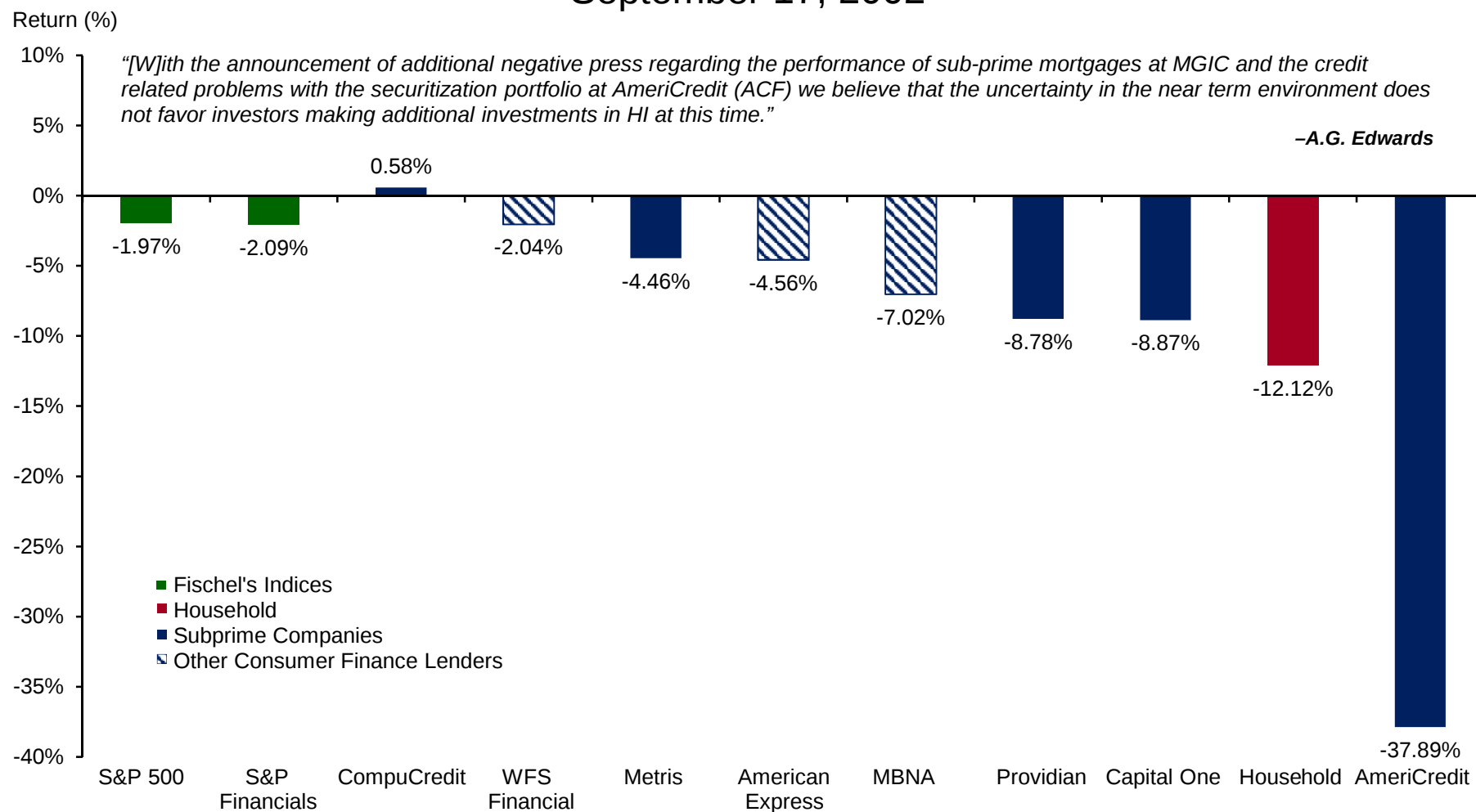


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Stocks Slump Across the Board; Major Indexes Off 4% as Fears Linger About Economy, Iraq and Accounting," The Washington Post, 9/4/02

Exhibit 2h

Negative Press Regarding Subprime Mortgages and Auto Securitizations Impact Subprime Companies

September 17, 2002

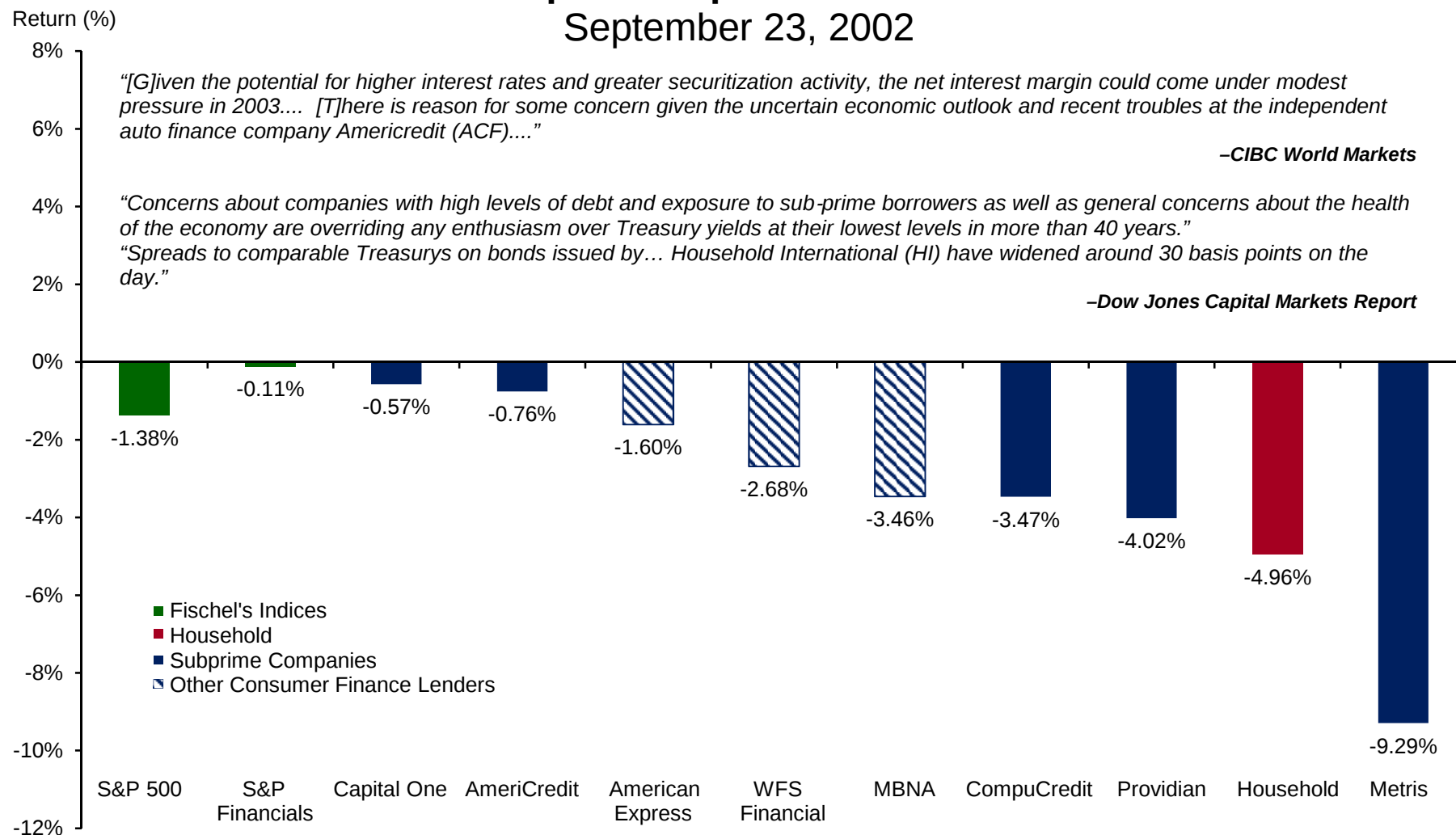


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Lowering Rating on HI to Hold From Buy," A.G. Edwards, 9/18/02

Exhibit 2i

Uncertain Economic Outlook and Concern about Subprime Exposure Impact Subprime Lenders

September 23, 2002

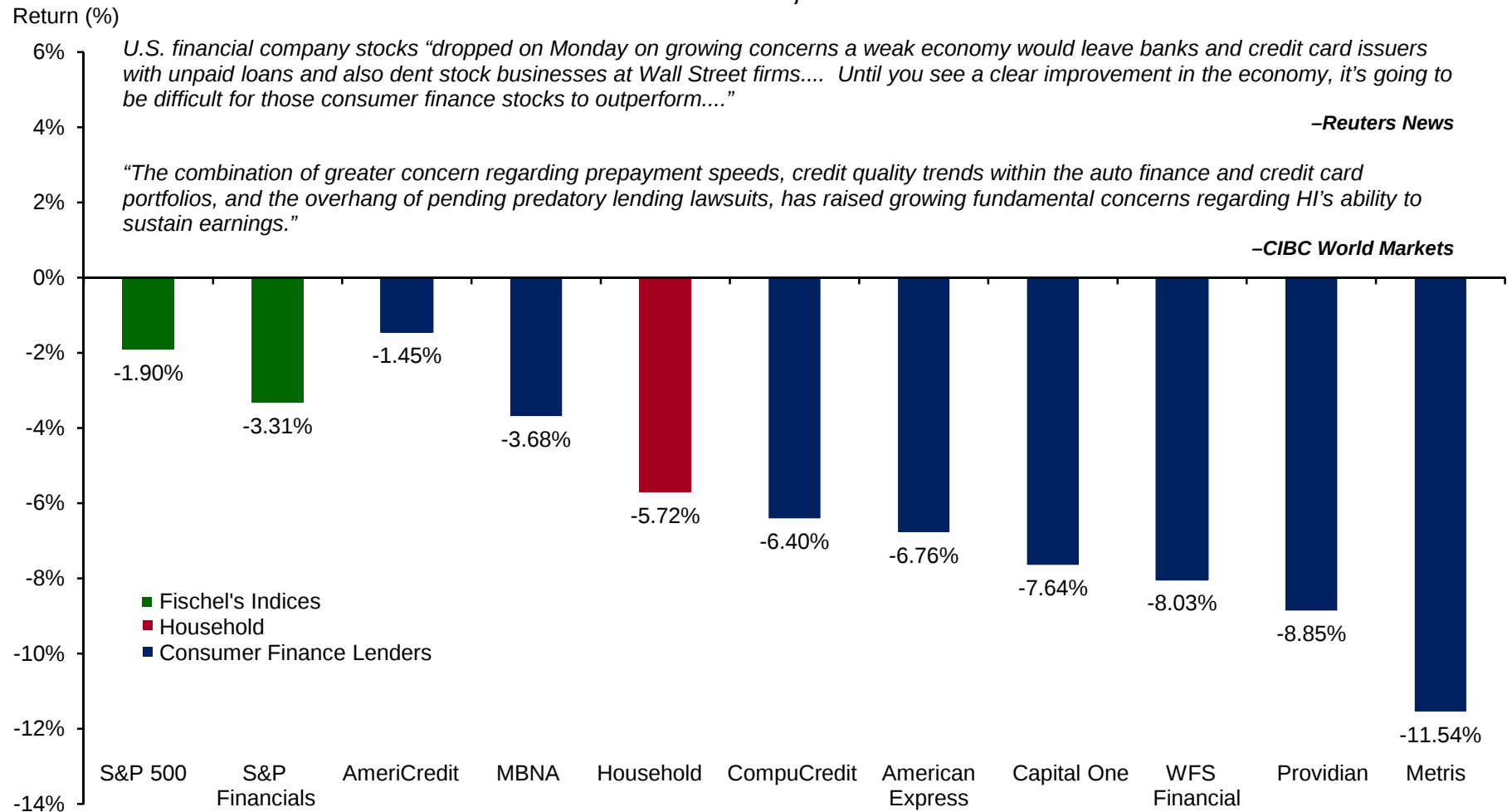


Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Lowering Price Target On Persistent Headline Risk, But Maintaining SP Rating," CIBC World Markets, 9/22/02; "Finance Co. Bonds Slide Despite 41-Yr Low In Tsy Yields," Dow Jones Capital Markets Report, 9/23/02

Exhibit 2j

Concerns about Repayment in a Weak Economy Impact Consumer Finance Companies

October 7, 2002



Source: Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "UPDATE 1-U.S. financial stocks fall in weak economy," Reuters News, 10/7/02; "Downgrading To SU On Downside Risk Related To Fundamentals And Valuation," CIBC World Markets, 10/7/02

Exhibit 2k
Business Lines of Companies with a Subprime
Customer Focus^[1]
2001 – 2002

	Real Estate	Credit Card	Auto Finance	Other Lending
Household	✓	✓	✓	✓
AmeriCredit			✓	
Capital One		✓	✓	✓
CompuCredit		✓		
Metris		✓		
Providian		✓		

Source: Household International Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; Capital One Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; AmeriCredit Forms 10-K for the period ended June 30, 2001 and June 30, 2002; CompuCredit Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; Metris Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; Providian Forms 10-K for the periods ended December 31, 2001 and December 31, 2002

Note:

[1] Includes five companies I identified as "engaged in substantial subprime lending and/or targeted subprime consumers" in my Initial Report that are discussed in Professor Fischel's Second Rebuttal Report.

Exhibit 2I
Detailed Business Lines of Companies with a Subprime Customer Focus^[1]
2001 – 2002

	General Description	Real Estate	Credit Card	Auto Finance	Other Lending
Household	Household offers real estate secured loans, auto finance loans, MasterCard and Visa credit cards, private label credit cards, tax refund anticipation loans, retail installment sales finance loans, other types of unsecured loans, and credit and specialty insurance products.	Real Estate Secured Loans: Consumer lending business originates real estate and personal non-credit card products through its retail branch network, direct mail, telemarketing, strategic alliances, and Internet applications. The mortgage services business originates and purchases real estate secured volume primarily through brokers and correspondents.	MasterCard and Visa Credit Cards: MasterCard and Visa loan volume is generated primarily through direct mail, telemarketing, Internet applications, application displays, promotional activity, mass media advertisements and, merchant relationships sourced through the retail services business. Private Label Credit Card: Private label credit card volume is generated through merchant promotions, application displays, Internet applications, direct mail, and telemarketing.	Auto finance loan volume is generated primarily through dealer relationships from which installment contracts are purchased. Additional auto finance volume is generated through direct lending which includes alliance partner referrals, Internet applications, and direct mail.	This includes tax refund anticipation loans, retail installment sales finance loans, other types of unsecured loans, as well as credit and specialty insurance products. Personal Unsecured Loans (cash loans with no security) are made to customers who do not qualify for a real estate secured or personal homeowner loan. The average personal unsecured loan is approximately \$5,000 and 80 percent of the portfolio is closed-end with terms ranging from 12 to 60 months.
AmeriCredit	The Company and its subsidiaries have been primarily operating in the automobile finance business.			The Company purchases auto finance contracts without recourse from franchised and select independent automobile dealerships and, to a lesser extent, makes loans directly to consumers buying late model used and new vehicles. The Company targets consumers who are typically unable to obtain financing from traditional sources.	

Exhibit 2I
Detailed Business Lines of Companies with a Subprime Customer Focus^[1]
2001 – 2002

	General Description	Real Estate	Credit Card	Auto Finance	Other Lending
Capital One	Capital One's primary business is consumer lending, with a focus on credit card lending but includes other consumer lending activities, such as unsecured installment lending and automobile financing. The Company offers a wide variety of credit card products throughout the United States, and internationally primarily in the United Kingdom and Canada. Capital One also offers various non-card consumer lending products, including automobile financing and installment loan products, through subsidiaries both in the United States and elsewhere. The Company also undertakes some non-lending activities such as taking deposits from customers.		The consumer lending segment is comprised primarily of credit card lending activities in the United States with international segments primarily in the United Kingdom and Canada. Capital One is among the eight largest issuers of Visa and MasterCard credit cards in the United States based on managed credit card loans outstanding as of December 31, 2001. Customized products include both products targeted at a range of consumer credit risk profiles, such as low rate cards and secured cards, as well as products aimed at special consumer interests, such as affinity, cobrand, and young adult cards.	The automobile finance subsidiary, Capital One Auto Finance, acquired in 1998, purchases retail installment contracts secured by automobiles through dealer networks throughout the United States.	On May 21, 2001, the Company acquired AmeriFee Corporation, which provides financing solutions for consumers seeking elective medical and dental procedures. This acquisition, among other things, provides support for the Company's unsecured installment lending business.
CompuCredit	CompuCredit is a credit card company that targets consumers who typically rely more heavily on finance companies and retail store credit cards to meet their credit needs and are less likely to have general-purpose credit cards. Some of these consumers have had delinquencies, a default or a bankruptcy in their credit histories, but have, in the Company's view, demonstrated recovery. Others consumers are establishing or expanding their credit.		The Company markets unsecured general purpose credit cards, including its Aspire brand credit card, through direct mail, television, telemarketing, and the Internet. It relies on the securitization of credit card receivables to fund operations and increase the size of its business. Securitization of credit card receivables is common in the credit card industry.		

Exhibit 2I

Detailed Business Lines of Companies with a Subprime Customer Focus^[1]

2001 – 2002

	General Description	Real Estate	Credit Card	Auto Finance	Other Lending
Metris	The Company issues credit cards through its wholly owned subsidiary, Direct Merchants Credit Card Bank, National Association ("Direct Merchants Banks"), the 10th largest bankcard issuer in the United States. The Company operates in two business segments: consumer lending products, which are primarily unsecured and partially secured credit cards issued by Direct Merchants Bank; and Enhancement Services, which include credit protection, membership clubs, extended service plan, and third-party insurance offered to credit card customers, customers of third parties, and the broad market.		The Company generates income from consumer lending products through interest and other finance charges assessed on outstanding credit card loans, credit card fees (including annual membership, cash advances, overlimit fees, and late fees), interchange fees, and collections and sales on recovery assets.		
Providian	The Company issues credit cards and provides revolving credit and deposit products to customers through its subsidiaries in the United States. In addition to the core credit card business, E-commerce operations include certificates of deposit, money market accounts, credit cards, and GetSmart.com. ^[2] The Company's First Select business purchases and seeks to collect charged-off credit card accounts. The Company intends to de-emphasize these operations and may sell or wind them down in connection with strategic initiatives.		The Company's primary line of business is the credit card business, which generates consumer loans through Visa and MasterCard credit cards. The Company previously included the standard segment (subprime consumers) in its strategic market focus due to the higher rates and fees paid by customers within that segment. However, the standard segment also experienced the highest rates of default and credit losses, particularly in the face of general economic weakness. As a result, the Company suspended all new account marketing to customers in the standard market segment. ^[3]		

Source: Household International Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; Capital One Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; AmeriCredit Forms 10-K for the period ended June 30, 2001 and June 30, 2002; CompuCredit Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; Metris Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; Providian Forms 10-K for the periods ended December 31, 2001 and December 31, 2002

Note:

[1] Includes five companies I identified as "engaged in substantial subprime lending and/or targeted subprime consumers" in my Initial Report that are discussed in Professor Fischel's Second Rebuttal Report.

[2] Getsmart.com is an online marketplace designed to match individual consumers seeking a specific product—such as a credit card, home loan, or auto loan—with lenders offering those products.

[3] Providian historically focused on three market segments: the standard market segment (higher risk and generally underserved customers who might not ordinarily qualify for credit cards, including customers with past credit problems or limited credit history), the middle market segment (customers with credit typically superior to the standard market segment but typically inferior to platinum and prime market segment customers), and the platinum market segment (customers with generally good credit history). The Company previously included the standard segment in its strategic market focus because it offered substantial profit potential due to the higher rates and fees paid by customers within that segment. However, the standard segment also experienced the highest rates of default and credit losses, particularly in the face of general economic weakness. As a result, the Company had suspended all new account marketing to customers in the standard market segment as of December 31, 2001.

Exhibit 3a

Household's Residual Stock Price Changes on Professor Fischel's Specific Disclosure Days

Date	Firm-Specific, Nonfraud Information ^[1]	Initial Fischel Regression ^{[2][3]}		Corrected Fischel Regression ^{[2][4]}	
		Statistically Significant	Residual	Statistically Significant	Residual
11/15/01		✓	(\$1.86)**	✓	(\$2.21)**
12/3/01		✓	(\$1.90)**		
12/5/01		✓	\$1.85**		
12/12/01	✓	✓	(\$2.39)***		
2/27/02	✓	✓	\$1.64**		
7/26/02	✓	✓	(\$2.20)***	✓	(\$1.86)***
8/14/02	✓	✓	(\$0.94)*	✓	(\$1.43)**
8/16/02	✓	✓	(\$1.84)***	✓	(\$1.19)*
8/27/02	✓	✓	(\$1.19)**		
9/3/02		✓	(\$1.21)**		
9/23/02	✓	✓	(\$1.52)***	✓	(\$0.99)*
10/4/02		✓	(\$1.26)***		
10/10/02		✓	\$4.20***	✓	\$3.49***
10/11/02		✓	\$0.68*		
Sum (95% Statistical Significance Using One-Tailed Test):		14	(\$7.97)	6	(\$4.19)

Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Supplemental Report of Daniel R. Fischel, 9/22/15; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Expert Report of Allen Ferrell, 10/23/15

Note:

- [1] Firm-Specific, Nonfraud Information consists of days on which I identified firm-specific, nonfraud information in either my Initial Report or this current report.
- [2] Statistical significance using a one-tailed test is denoted by * at the 5% level ($|t\text{-statistic}| \geq 1.645$), ** at the 2.5% level ($|t\text{-statistic}| \geq 1.960$), and *** at the 0.5% level ($|t\text{-statistic}| \geq 2.576$).
- [3] The regression is a two-factor regression of Household's stock price returns on the S&P 500 Index and the S&P Financials Index during the Fischel Control Period, 11/15/00–11/14/01.
- [4] The regression is a three-factor regression of Household's stock price returns on the S&P 500 Index, the S&P Financials Index, and the CSFB March 2001 Specialty Finance Index over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 purported Specific Disclosure days and, to be conservative, the 11 purported leakage days. The CSFB March 2001 Specialty Finance Index includes Capital One Financial (COF), CompuCredit (CCRT), MBNA Corp. (KRB), Metris Inc. (MXT), Provident Financial (PVN), American Express (AXP), The CIT Group (CIT), Americredit (ACF), and WFS Financial (WFSI). The CIT Group is not included in the index from 6/2/01–7/1/02, as it was not publicly traded during this time.

Exhibit 3b

Household's Residual Stock Price Changes on Professor Fischel's Negative, Statistically Significant Days

Date	Firm-Specific, Nonfraud Information ^[1]	Initial Fischel Regression ^{[2][3]}		Corrected Fischel Regression ^{[2][4]}	
		Statistically Significant	Residual	Statistically Significant	Residual
Purported Leakage Days ^[5]					
1/28/02	✓	✓	(\$1.51)**		
2/6/02	✓	✓	(\$2.44)***		
2/21/02	✓	✓	(\$1.55)**		
5/10/02	✓	✓	(\$1.43)*		
5/15/02		✓	(\$1.29)*		
7/17/02	✓	✓	(\$3.33)***		
7/19/02	✓	✓	(\$1.08)*		
8/5/02	✓	✓	(\$1.22)**		
8/7/02	✓	✓	(\$1.94)***	✓	(\$1.96)***
9/16/02	✓	✓	(\$1.03)**	✓	(\$1.31)**
10/8/02	✓	✓	(\$0.64)**	✓	(\$1.23)***
Sum (90% Statistical Significance Using Two-Tailed Test):		11	(\$17.47)	3	(\$4.49)
Other Negative, Statistically Significant Days ^[6]					
1/11/02	✓	✓	(\$1.72)**		
4/25/02	✓	✓	(\$1.64)*		
4/29/02	✓	✓	(\$2.00)**		
7/1/02	✓	✓	(\$1.20)*	✓	(\$1.62)*
7/9/02		✓	(\$1.36)**		
7/10/02		✓	(\$1.76)***		
7/25/02	✓	✓	(\$1.13)**		
8/9/02		✓	(\$1.02)*	✓	(\$1.34)*
8/13/02		✓	(\$1.10)**		
8/23/02	✓	✓	(\$2.20)***	✓	(\$1.99)***
9/10/02		✓	(\$0.86)*	✓	(\$1.09)*
9/17/02	✓	✓	(\$3.50)***	✓	(\$2.25)***
9/27/02		✓	(\$0.92)**		
10/1/02		✓	(\$1.05)***	✓	(\$1.30)**
10/7/02	✓	✓	(\$0.66)*		
10/9/02		✓	(\$1.65)***	✓	(\$0.99)**
Sum (90% Statistical Significance Using Two-Tailed Test):		16	(\$23.78)	7	(\$10.58)
Cumulative Residual Price Changes on All Statistically Significant Days:			(\$41.25)		(\$15.07)

Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Supplemental Report of Daniel R. Fischel, 9/22/15; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Expert Report of Allen Ferrell, 10/23/15

Note:

- [1] Firm-Specific, Nonfraud Information consists of days on which I identified firm-specific, nonfraud information in either my Initial Report or this current report.
- [2] Statistical significance using a two-tailed test is denoted by * at the 10% level ($|t\text{-statistic}| \geq 1.645$), ** at the 5% level ($|t\text{-statistic}| \geq 1.960$), and *** at the 1% level ($|t\text{-statistic}| \geq 2.576$).
- [3] The regression is a two-factor regression of Household's stock price returns on the S&P 500 Index and the S&P Financials Index during the Fischel Control Period, 11/15/00–11/14/01.
- [4] The regression is a three-factor regression of Household's stock price returns on the S&P 500 Index, the S&P Financials Index, and the CSFB March 2001 Specialty Finance Index over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 purported Specific Disclosure days and, to be conservative, the 11 purported leakage days. The CSFB March 2001 Specialty Finance Index includes Capital One Financial (COF), CompuCredit (CCRT), MBNA Corp. (KRB), Metris Inc. (MXT), Provident Financial (PVN), American Express (AXP), The CIT Group (CIT), Americredit (ACF), and WFS Financial (WFSI). The CIT Group is not included in the index from 6/2/01–7/1/02, as it was not publicly traded during this time.
- [5] Reflects days on which Professor Fischel Purports to identify "information consistent with leakage" in his Second Supplemental Report.
- [6] Reflects 15 days on which Professor Fischel did not identify any firm-specific information, fraud or otherwise, in his Second Supplemental Report, and one day on which Professor Fischel identified firm-specific, nonfraud information that was purportedly "canceled out" two days later.

Exhibit 4a

Household's Stock Price and Performing Loans Percentage

12/31/99 – 12/31/02



Source: Household International Forms 10-Q for the periods ended September 30, 2000 to March 31, 2003; Second Rebuttal Report of Daniel R. Fischel, 11/23/15

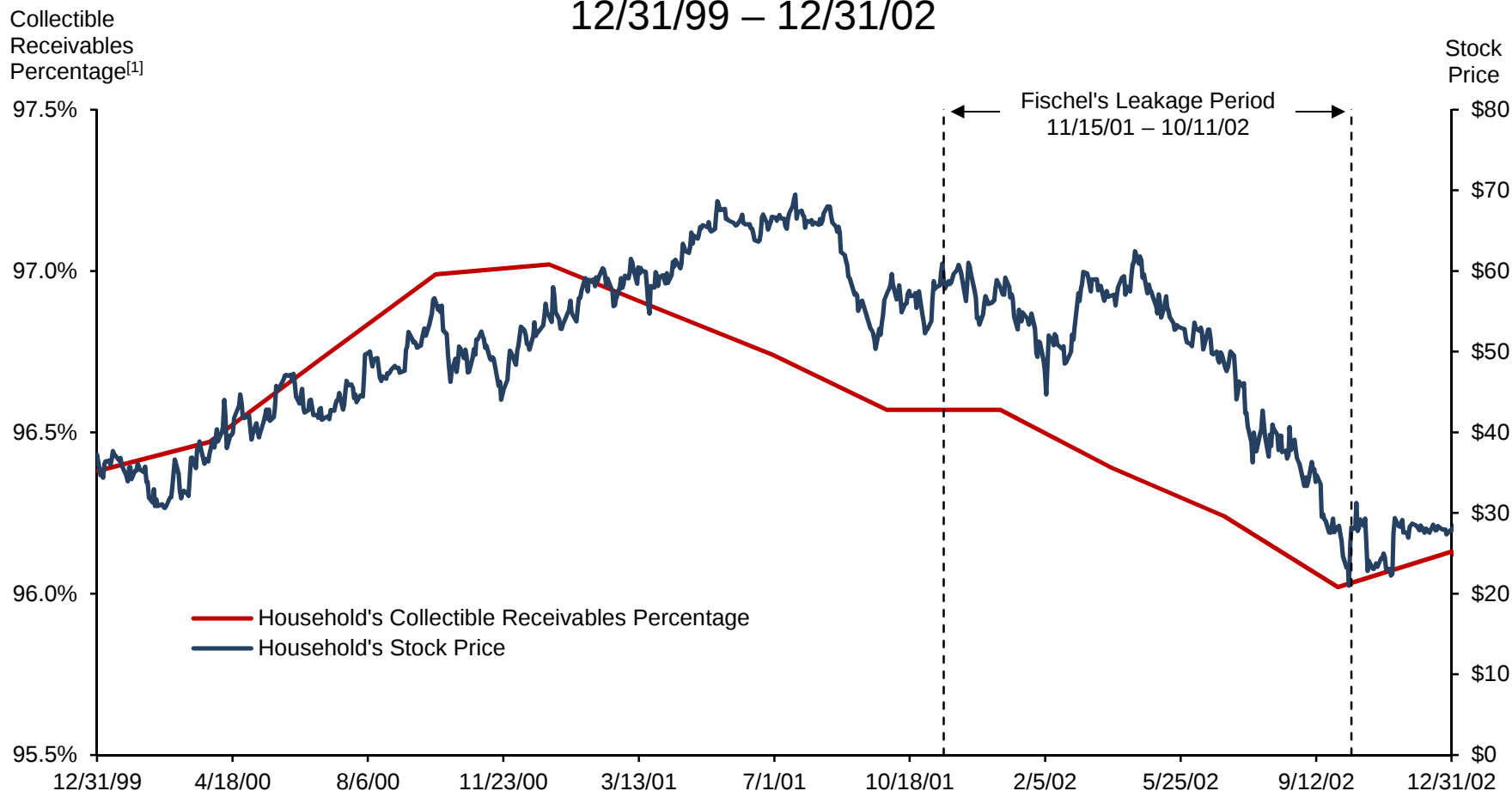
Note:

[1] Performing Loans Percentage represents the total consumer receivables, less two-months-and-over contractual delinquency, as a percentage of consumer receivables under the owned basis, which is consistent with Household's financial statement reporting. These data are reported quarterly in the 10-Qs and are plotted at the end of each quarter.

Exhibit 4b

Household's Stock Price and Collectible Receivables Percentage

12/31/99 – 12/31/02



Source: Household International Forms 10-Q for the periods ended September 30, 2000 to March 31, 2003; Second Rebuttal Report of Daniel R. Fischel, 11/23/15

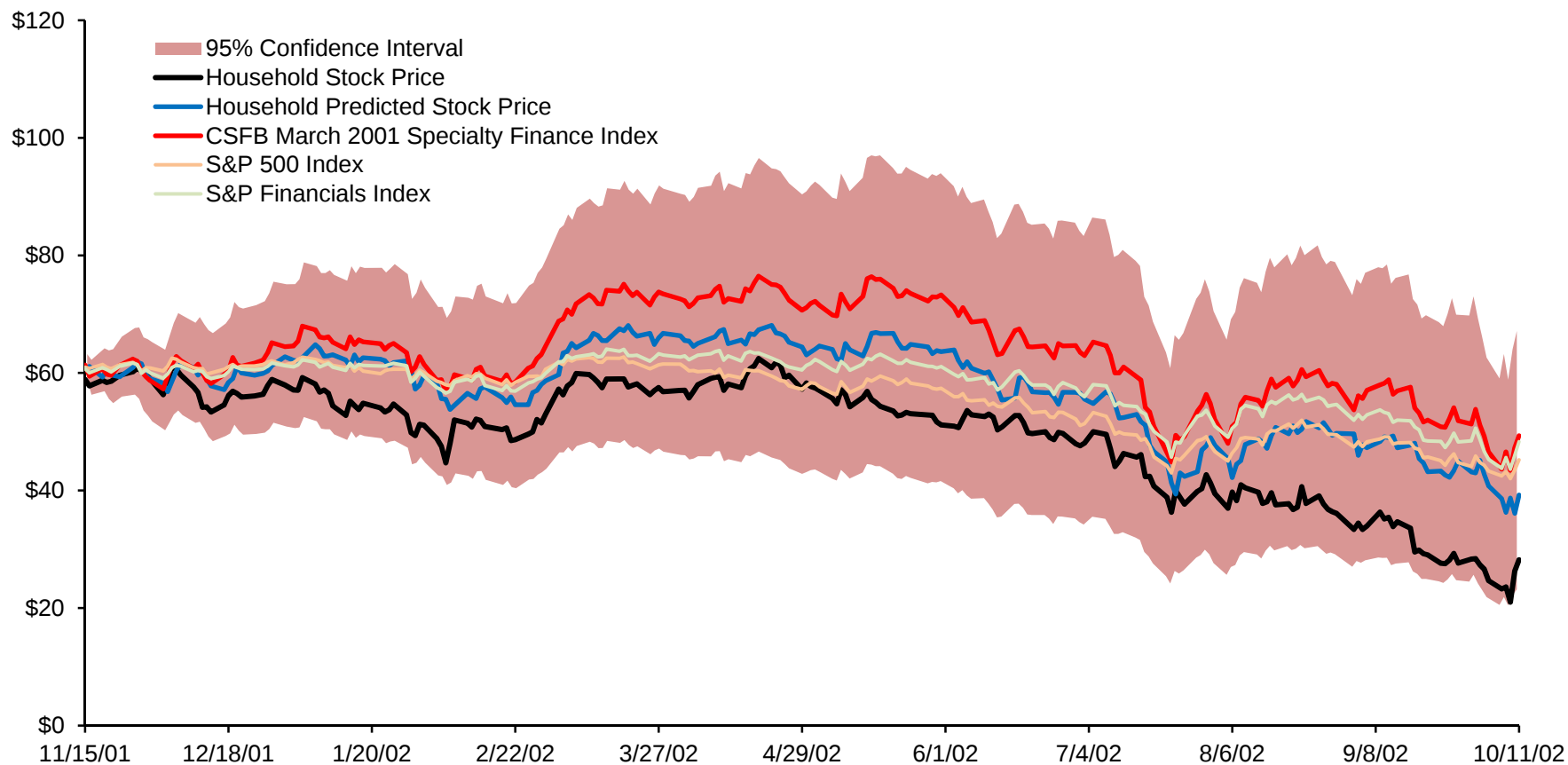
Note:

[1] Collectible Receivables Percentage represents the average annualized consumer receivables, less total net chargeoffs of consumer receivables, as a percentage of the annualized average consumer receivables under the owned basis, which is consistent with Household's financial statement reporting. These data are reported quarterly in the 10-Qs and are plotted at the end of each quarter.

Exhibit 5

Household's Underperformance Throughout Professor Fischel's Leakage Period Cannot Be Reliably Attributed to Firm-Specific Factors^[1]

11/15/01 – 10/11/02



Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Supplemental Report of Daniel R. Fischel, 9/22/15; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Stock, James, and Mark Watson, *Introduction to Econometrics*, 2001, Addison Welsley: New York

Note:

[1] The regression is estimated over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 days Professor Fischel identified as Specific Disclosure days and, to be conservative, the 11 days Professor Fischel found “information consistent with leakage.”

Exhibit 6

Regression Models Containing Alternative Indices Better Capture Market and Industry Effects

Industry Index and Sample Period	Adjusted R ² ^[1]	S&P 500 Index		S&P Financials Index		Narrow Industry Index	
		Coefficient ^[2]	T-stat ^[3]	Coefficient ^[2]	T-stat ^[3]	Coefficient ^[2]	T-stat ^[3]
<i>S&P Financials Index</i>							
Fischel Control Period	0.54	0.81	13.16***	1.07	10.66***	—	—
Disclosure Period ^[4]	0.59	1.46	15.87***	1.27	6.32***	—	—
<i>S&P Financials Index and Consumer Finance Subsector Index^[5]</i>							
Fischel Control Period	0.60	0.81	14.08***	1.07	11.41***	0.34	6.05***
Disclosure Period ^[4]	0.66	1.46	17.40***	1.27	6.93***	0.71	6.44***
<i>S&P Financials Index and CSFB March 2001 Specialty Finance Index^[6]</i>							
Fischel Control Period	0.61	0.81	14.27***	1.07	11.56***	0.38	6.63***
Disclosure Period ^[4]	0.67	1.46	17.64***	1.27	7.03***	0.78	6.94***

Source: Expert Report of Daniel R. Fischel, 8/15/07; Rebuttal Report of Daniel R. Fischel, 2/1/08; Second Supplemental Report of Daniel R. Fischel, 9/22/15; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01

Note:

- [1] An adjusted R² closer to one means that the regressors (in this case, the indices' returns) are better at predicting the values of the dependent variable (Household's returns) in the sample, and an adjusted R² closer to zero means they are worse. Statistics in bold red outperform Professor Fischel's regression model including only the S&P 500 Financials Index as the industry index when conducted over the same estimation period.
- [2] Professor Fischel reports that the coefficient on the S&P 500 Index in his regression analysis is -0.21 instead of the 0.81 I report above. Professor Fischel states in his Rebuttal Report that this is "an artifact" of his two-factor model and that a one-factor model results in a coefficient on the S&P 500 index equal to the 0.81 I report above. In my analysis, I have corrected this "artifact" of Professor Fischel's regression through a statistical technique called orthogonalization. See Fischel Initial Report, Exhibit 49; Fischel Rebuttal Report, ¶ 34.
- [3] Statistical significance using a two-tailed test is represented by * at the 10% level (|t-statistic| >= 1.645), ** at the 5% level (|t-statistic| >= 1.960), and *** at the 1% level (|t-statistic| >= 2.576).
- [4] The regression is estimated over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 purported Specific Disclosure days and, to be conservative, the 11 purported leakage days. If the 11 purported leakage days were included in the regression estimation, the adjusted R² is 0.56 when using the S&P Financials Index only, 0.65 when using the S&P Financials Index and the Consumer Finance Subsector Index, and 0.66 when using the S&P Financials Index and the CSFB March 2001 Specialty Finance Index.
- [5] The Consumer Finance Subsector Index comprises the following four companies: American Express (AXP), Capital One Financial (COF), MBNA Corp. (KRB), and Provident Financial (PVN).
- [6] The CSFB March 2001 Specialty Finance Index includes companies listed in Credit Suisse First Boston's Specialty Finance Universe as of 3/2/01. These companies are Capital One Financial (COF), CompuCredit (CCRT), MBNA Corp. (KRB), Metris Inc. (MXT), Provident Financial (PVN), American Express (AXP), The CIT Group (CIT), AmeriCredit (ACF), and WFS Financial (WFSI). The CIT Group is not included in the index from 6/2/01–7/1/02, as it was not publicly traded during this period.

Exhibit 7a

Test for Structural Break Using the S&P Financials Index between Professor Fischel's Control Period and the Disclosure Period

Regression Model^[1]

Dependent Variable: Household Stock Price Return

Independent Variables: S&P 500 Index Return, S&P Financials Index Return, Disclosure Period Dummy
S&P 500 Index Interaction Term, S&P Financials Interaction Term

Chow Test Results^[2]

F-statistic	7.770
P-value ^[4]	0.000
Structural Break ^[4]	✓

Wald Test Results^[2]

Wald statistic	5.001
P-value ^[3]	0.002
Structural Break ^[4]	✓

Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Rebuttal Report of Daniel R. Fischel, 11/23/15

Note:

[1] The model is a regression of Household's stock price returns on the market and industry indices over Professor Fischel's Control Period and the disclosure period. The regression is estimated over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 purported Specific Disclosure days and, to be conservative, the 11 purported leakage days.

[2] A structural break also exists (F-statistic of 5.570 and the Wald-statistic of 4.407) when comparing the relationship between Household's returns to market and industry returns in the period 11/15/00–9/10/01 to the relationship in the period 9/17/01–10/11/02.

[3] A p-value less than 0.05 indicates a statistically significant structural break.

[4] A structural break also exists if the 11 purported leakage days are included in the regression estimation.

Exhibit 7b

Test for Structural Break Using the S&P Financials Index and the CSFB March 2001 Specialty Finance Index between Professor Fischel's Control Period and the Disclosure Period

Regression Model^[1]

Dependent Variable: Household Stock Price Return

Independent Variables: S&P 500 Index Return, S&P Financials Index Return,
CSFB March 2001 Specialty Finance Index Return, Disclosure Period Dummy,
S&P 500 Index Interaction Term, S&P Financials Interaction Term,
CSFB March 2001 Specialty Finance Index Interaction Term

Chow Test Results^[2]

F-statistic	10.76
P-value ^[3]	0.000
Structural Break ^[4]	✓

Wald Test Results^[2]

Wald statistic	6.498
P-value ^[3]	0.000
Structural Break ^[4]	✓

Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Rebuttal Report of Daniel R. Fischel, 11/23/15

Note:

[1] The model is a regression of Household's stock price returns on the market and industry indices over Professor Fischel's Control Period and the disclosure periods. The regression is estimated over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 purported Specific Disclosure days and, to be conservative, the 11 purported leakage days.

[2] A structural break also exists (F-statistic of 5.706 and the Wald-statistic of 4.132) when comparing the relationship between Household's returns to market and industry returns in the period 11/15/00–9/10/01 to the relationship in the period 9/17/01–10/11/02.

[3] A p-value less than 0.05 indicates a statistically significant structural break.

[4] A structural break also exists if the 11 purported leakage days are included in the regression estimation.

Exhibit 8

Maximum Alleged Inflation Using the Specific Disclosure Model

Date	Professor Fischel's Quantification Using Specific Disclosures	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[1][2]}
11/14/2001	\$7.97	\$4.19
11/15/2001	\$6.11	\$1.99
11/16/2001	\$6.11	\$1.99
11/19/2001	\$6.11	\$1.99
11/20/2001	\$6.11	\$1.99
11/21/2001	\$6.11	\$1.99
11/23/2001	\$6.11	\$1.99
11/26/2001	\$6.11	\$1.99
11/27/2001	\$6.11	\$1.99
11/28/2001	\$6.11	\$1.99
11/29/2001	\$6.11	\$1.99
11/30/2001	\$6.11	\$1.99
12/3/2001	\$4.20	\$1.99
12/4/2001	\$4.20	\$1.99
12/5/2001	\$6.05	\$1.99
12/6/2001	\$6.05	\$1.99
12/7/2001	\$6.05	\$1.99
12/10/2001	\$6.05	\$1.99
12/11/2001	\$6.05	\$1.99
12/12/2001	\$3.66	\$1.99
12/13/2001	\$3.66	\$1.99
12/14/2001	\$3.66	\$1.99
12/17/2001	\$3.66	\$1.99
12/18/2001	\$3.66	\$1.99
12/19/2001	\$3.66	\$1.99
12/20/2001	\$3.66	\$1.99
12/21/2001	\$3.66	\$1.99
12/24/2001	\$3.66	\$1.99
12/26/2001	\$3.66	\$1.99
12/27/2001	\$3.66	\$1.99
12/28/2001	\$3.66	\$1.99
12/31/2001	\$3.66	\$1.99
1/2/2002	\$3.66	\$1.99
1/3/2002	\$3.66	\$1.99
1/4/2002	\$3.66	\$1.99
1/7/2002	\$3.66	\$1.99
1/8/2002	\$3.66	\$1.99
1/9/2002	\$3.66	\$1.99
1/10/2002	\$3.66	\$1.99
1/11/2002	\$3.66	\$1.99

Exhibit 8

Maximum Alleged Inflation Using the Specific Disclosure Model

		Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[1][2]}
Date	Professor Fischel's Quantification Using Specific Disclosures	
1/14/2002	\$3.66	\$1.99
1/15/2002	\$3.66	\$1.99
1/16/2002	\$3.66	\$1.99
1/17/2002	\$3.66	\$1.99
1/18/2002	\$3.66	\$1.99
1/22/2002	\$3.66	\$1.99
1/23/2002	\$3.66	\$1.99
1/24/2002	\$3.66	\$1.99
1/25/2002	\$3.66	\$1.99
1/28/2002	\$3.66	\$1.99
1/29/2002	\$3.66	\$1.99
1/30/2002	\$3.66	\$1.99
1/31/2002	\$3.66	\$1.99
2/1/2002	\$3.66	\$1.99
2/4/2002	\$3.66	\$1.99
2/5/2002	\$3.66	\$1.99
2/6/2002	\$3.66	\$1.99
2/7/2002	\$3.66	\$1.99
2/8/2002	\$3.66	\$1.99
2/11/2002	\$3.66	\$1.99
2/12/2002	\$3.66	\$1.99
2/13/2002	\$3.66	\$1.99
2/14/2002	\$3.66	\$1.99
2/15/2002	\$3.66	\$1.99
2/19/2002	\$3.66	\$1.99
2/20/2002	\$3.66	\$1.99
2/21/2002	\$3.66	\$1.99
2/22/2002	\$3.66	\$1.99
2/25/2002	\$3.66	\$1.99
2/26/2002	\$3.66	\$1.99
2/27/2002	\$5.30	\$1.99
2/28/2002	\$5.30	\$1.99
3/1/2002	\$5.30	\$1.99
3/4/2002	\$5.30	\$1.99
3/5/2002	\$5.30	\$1.99
3/6/2002	\$5.30	\$1.99
3/7/2002	\$5.30	\$1.99
3/8/2002	\$5.30	\$1.99
3/11/2002	\$5.30	\$1.99
3/12/2002	\$5.30	\$1.99

Exhibit 8

Maximum Alleged Inflation Using the Specific Disclosure Model

		Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[1][2]}
Date	Professor Fischel's Quantification Using Specific Disclosures	
3/13/2002	\$5.30	\$1.99
3/14/2002	\$5.30	\$1.99
3/15/2002	\$5.30	\$1.99
3/18/2002	\$5.30	\$1.99
3/19/2002	\$5.30	\$1.99
3/20/2002	\$5.30	\$1.99
3/21/2002	\$5.30	\$1.99
3/22/2002	\$5.30	\$1.99
3/25/2002	\$5.30	\$1.99
3/26/2002	\$5.30	\$1.99
3/27/2002	\$5.30	\$1.99
3/28/2002	\$5.30	\$1.99
4/1/2002	\$5.30	\$1.99
4/2/2002	\$5.30	\$1.99
4/3/2002	\$5.30	\$1.99
4/4/2002	\$5.30	\$1.99
4/5/2002	\$5.30	\$1.99
4/8/2002	\$5.30	\$1.99
4/9/2002	\$5.30	\$1.99
4/10/2002	\$5.30	\$1.99
4/11/2002	\$5.30	\$1.99
4/12/2002	\$5.30	\$1.99
4/15/2002	\$5.30	\$1.99
4/16/2002	\$5.30	\$1.99
4/17/2002	\$5.30	\$1.99
4/18/2002	\$5.30	\$1.99
4/19/2002	\$5.30	\$1.99
4/22/2002	\$5.30	\$1.99
4/23/2002	\$5.30	\$1.99
4/24/2002	\$5.30	\$1.99
4/25/2002	\$5.30	\$1.99
4/26/2002	\$5.30	\$1.99
4/29/2002	\$5.30	\$1.99
4/30/2002	\$5.30	\$1.99
5/1/2002	\$5.30	\$1.99
5/2/2002	\$5.30	\$1.99
5/3/2002	\$5.30	\$1.99
5/6/2002	\$5.30	\$1.99
5/7/2002	\$5.30	\$1.99
5/8/2002	\$5.30	\$1.99

Exhibit 8

Maximum Alleged Inflation Using the Specific Disclosure Model

		Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[1][2]}
Date	Professor Fischel's Quantification Using Specific Disclosures	
5/9/2002	\$5.30	\$1.99
5/10/2002	\$5.30	\$1.99
5/13/2002	\$5.30	\$1.99
5/14/2002	\$5.30	\$1.99
5/15/2002	\$5.30	\$1.99
5/16/2002	\$5.30	\$1.99
5/17/2002	\$5.30	\$1.99
5/20/2002	\$5.30	\$1.99
5/21/2002	\$5.30	\$1.99
5/22/2002	\$5.30	\$1.99
5/23/2002	\$5.30	\$1.99
5/24/2002	\$5.30	\$1.99
5/28/2002	\$5.30	\$1.99
5/29/2002	\$5.30	\$1.99
5/30/2002	\$5.30	\$1.99
5/31/2002	\$5.30	\$1.99
6/3/2002	\$5.30	\$1.99
6/4/2002	\$5.30	\$1.99
6/5/2002	\$5.30	\$1.99
6/6/2002	\$5.30	\$1.99
6/7/2002	\$5.30	\$1.99
6/10/2002	\$5.30	\$1.99
6/11/2002	\$5.30	\$1.99
6/12/2002	\$5.30	\$1.99
6/13/2002	\$5.30	\$1.99
6/14/2002	\$5.30	\$1.99
6/17/2002	\$5.30	\$1.99
6/18/2002	\$5.30	\$1.99
6/19/2002	\$5.30	\$1.99
6/20/2002	\$5.30	\$1.99
6/21/2002	\$5.30	\$1.99
6/24/2002	\$5.30	\$1.99
6/25/2002	\$5.30	\$1.99
6/26/2002	\$5.30	\$1.99
6/27/2002	\$5.30	\$1.99
6/28/2002	\$5.30	\$1.99
7/1/2002	\$5.30	\$1.99
7/2/2002	\$5.30	\$1.99
7/3/2002	\$5.30	\$1.99
7/5/2002	\$5.30	\$1.99

Exhibit 8

Maximum Alleged Inflation Using the Specific Disclosure Model

Date	Professor Fischel's Quantification Using Specific Disclosures	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[1][2]}
7/8/2002	\$5.30	\$1.99
7/9/2002	\$5.30	\$1.99
7/10/2002	\$5.30	\$1.99
7/11/2002	\$5.30	\$1.99
7/12/2002	\$5.30	\$1.99
7/15/2002	\$5.30	\$1.99
7/16/2002	\$5.30	\$1.99
7/17/2002	\$5.30	\$1.99
7/18/2002	\$5.30	\$1.99
7/19/2002	\$5.30	\$1.99
7/22/2002	\$5.30	\$1.99
7/23/2002	\$5.30	\$1.99
7/24/2002	\$5.30	\$1.99
7/25/2002	\$5.30	\$1.99
7/26/2002	\$3.10	\$0.13
7/29/2002	\$3.10	\$0.13
7/30/2002	\$3.10	\$0.13
7/31/2002	\$3.10	\$0.13
8/1/2002	\$3.10	\$0.13
8/2/2002	\$3.10	\$0.13
8/5/2002	\$3.10	\$0.13
8/6/2002	\$3.10	\$0.13
8/7/2002	\$3.10	\$0.13
8/8/2002	\$3.10	\$0.13
8/9/2002	\$3.10	\$0.13
8/12/2002	\$3.10	\$0.13
8/13/2002	\$3.10	\$0.13
8/14/2002	\$2.16	-\$1.31
8/15/2002	\$2.16	-\$1.31
8/16/2002	\$0.32	-\$2.50
8/19/2002	\$0.32	-\$2.50
8/20/2002	\$0.32	-\$2.50
8/21/2002	\$0.32	-\$2.50
8/22/2002	\$0.32	-\$2.50
8/23/2002	\$0.32	-\$2.50
8/26/2002	\$0.32	-\$2.50
8/27/2002	-\$0.88	-\$2.50
8/28/2002	-\$0.88	-\$2.50
8/29/2002	-\$0.88	-\$2.50
8/30/2002	-\$0.88	-\$2.50

Exhibit 8

Maximum Alleged Inflation Using the Specific Disclosure Model

		Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[1][2]}
Date	Professor Fischel's Quantification Using Specific Disclosures	
9/3/2002	-\$2.09	-\$2.50
9/4/2002	-\$2.09	-\$2.50
9/5/2002	-\$2.09	-\$2.50
9/6/2002	-\$2.09	-\$2.50
9/9/2002	-\$2.09	-\$2.50
9/10/2002	-\$2.09	-\$2.50
9/11/2002	-\$2.09	-\$2.50
9/12/2002	-\$2.09	-\$2.50
9/13/2002	-\$2.09	-\$2.50
9/16/2002	-\$2.09	-\$2.50
9/17/2002	-\$2.09	-\$2.50
9/18/2002	-\$2.09	-\$2.50
9/19/2002	-\$2.09	-\$2.50
9/20/2002	-\$2.09	-\$2.50
9/23/2002	-\$3.62	-\$3.49
9/24/2002	-\$3.62	-\$3.49
9/25/2002	-\$3.62	-\$3.49
9/26/2002	-\$3.62	-\$3.49
9/27/2002	-\$3.62	-\$3.49
9/30/2002	-\$3.62	-\$3.49
10/1/2002	-\$3.62	-\$3.49
10/2/2002	-\$3.62	-\$3.49
10/3/2002	-\$3.62	-\$3.49
10/4/2002	-\$4.88	-\$3.49
10/7/2002	-\$4.88	-\$3.49
10/8/2002	-\$4.88	-\$3.49
10/9/2002	-\$4.88	-\$3.49
10/10/2002	-\$0.68	\$0.00
10/11/2002	\$0.00	\$0.00

Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Expert Report of Allen Ferrell, 10/23/15

Note:

- [1] The regression is estimated over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 days Professor Fischel identified as Specific Disclosure days and, to be conservative, the 11 purported leakage days.
- [2] The maximum alleged inflation using the same model but including the residual price change on only 11/15/01 yields a maximum alleged inflation of \$2.21 prior to 11/15/01, and \$0.00 on 11/15/01 and all subsequent days in the Class Period.

Exhibit 9

Maximum Alleged Inflation Using the Leakage Model^[1]

Date	Professor Fischel's Quantification Including Leakage	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[2][3]}
11/14/2001	\$23.94	\$3.08
11/15/2001	\$23.94	\$0.83
11/16/2001	\$23.60	\$0.82
11/19/2001	\$23.94	\$0.83
11/20/2001	\$23.85	\$0.83
11/21/2001	\$23.94	\$0.83
11/23/2001	\$23.94	\$0.84
11/26/2001	\$23.94	\$0.85
11/27/2001	\$23.94	\$0.86
11/28/2001	\$23.94	\$0.85
11/29/2001	\$23.94	\$0.85
11/30/2001	\$23.94	\$0.83
12/3/2001	\$22.59	\$0.80
12/4/2001	\$23.94	\$0.82
12/5/2001	\$23.94	\$0.86
12/6/2001	\$23.94	\$0.86
12/7/2001	\$23.94	\$0.84
12/10/2001	\$23.30	\$0.81
12/11/2001	\$22.20	\$0.80
12/12/2001	\$19.80	\$0.77
12/13/2001	\$20.29	\$0.77
12/14/2001	\$19.64	\$0.75
12/17/2001	\$20.61	\$0.77
12/18/2001	\$21.84	\$0.79
12/19/2001	\$22.04	\$0.80
12/20/2001	\$21.75	\$0.80
12/21/2001	\$21.37	\$0.79
12/24/2001	\$21.60	\$0.79
12/26/2001	\$21.82	\$0.80
12/27/2001	\$23.30	\$0.82
12/28/2001	\$23.94	\$0.84
12/31/2001	\$23.28	\$0.82
1/2/2002	\$22.58	\$0.81
1/3/2002	\$22.41	\$0.81
1/4/2002	\$23.94	\$0.84
1/7/2002	\$23.19	\$0.82
1/8/2002	\$22.29	\$0.81
1/9/2002	\$22.42	\$0.81
1/10/2002	\$21.70	\$0.80
1/11/2002	\$19.85	\$0.77
1/14/2002	\$18.53	\$0.75
1/15/2002	\$20.28	\$0.78
1/16/2002	\$19.87	\$0.77

Exhibit 9

Maximum Alleged Inflation Using the Leakage Model^[1]

Date	Professor Fischel's Quantification Including Leakage	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[2][3]}
1/17/2002	\$18.90	\$0.76
1/18/2002	\$20.03	\$0.78
1/22/2002	\$19.24	\$0.77
1/23/2002	\$18.59	\$0.76
1/24/2002	\$18.86	\$0.76
1/25/2002	\$19.70	\$0.78
1/28/2002	\$18.10	\$0.75
1/29/2002	\$16.58	\$0.71
1/30/2002	\$15.76	\$0.70
1/31/2002	\$17.12	\$0.73
2/1/2002	\$17.34	\$0.73
2/4/2002	\$16.06	\$0.69
2/5/2002	\$14.99	\$0.67
2/6/2002	\$12.47	\$0.63
2/7/2002	\$15.56	\$0.68
2/8/2002	\$18.71	\$0.74
2/11/2002	\$17.94	\$0.73
2/12/2002	\$17.49	\$0.72
2/13/2002	\$18.36	\$0.74
2/14/2002	\$18.04	\$0.74
2/15/2002	\$18.00	\$0.72
2/19/2002	\$17.84	\$0.71
2/20/2002	\$17.72	\$0.72
2/21/2002	\$16.00	\$0.69
2/22/2002	\$16.24	\$0.69
2/25/2002	\$16.45	\$0.70
2/26/2002	\$16.72	\$0.71
2/27/2002	\$18.55	\$0.74
2/28/2002	\$17.81	\$0.73
3/1/2002	\$19.02	\$0.75
3/4/2002	\$22.21	\$0.81
3/5/2002	\$21.17	\$0.80
3/6/2002	\$22.17	\$0.82
3/7/2002	\$23.00	\$0.83
3/8/2002	\$23.94	\$0.85
3/11/2002	\$23.94	\$0.85
3/12/2002	\$23.37	\$0.84
3/13/2002	\$22.86	\$0.83
3/14/2002	\$21.87	\$0.82
3/15/2002	\$22.69	\$0.84
3/18/2002	\$22.93	\$0.84
3/19/2002	\$22.77	\$0.84
3/20/2002	\$21.93	\$0.82

Exhibit 9

Maximum Alleged Inflation Using the Leakage Model^[1]

Date	Professor Fischel's Quantification Including Leakage	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[2][3]}
3/21/2002	\$22.23	\$0.82
3/22/2002	\$22.39	\$0.83
3/25/2002	\$21.06	\$0.80
3/26/2002	\$21.66	\$0.81
3/27/2002	\$21.80	\$0.82
3/28/2002	\$21.25	\$0.81
4/1/2002	\$21.68	\$0.81
4/2/2002	\$21.52	\$0.81
4/3/2002	\$20.53	\$0.79
4/4/2002	\$21.39	\$0.81
4/5/2002	\$22.28	\$0.83
4/8/2002	\$23.24	\$0.84
4/9/2002	\$23.16	\$0.84
4/10/2002	\$23.23	\$0.85
4/11/2002	\$21.73	\$0.81
4/12/2002	\$22.40	\$0.83
4/15/2002	\$22.24	\$0.82
4/16/2002	\$23.65	\$0.85
4/17/2002	\$23.94	\$0.86
4/18/2002	\$23.94	\$0.87
4/19/2002	\$23.94	\$0.89
4/22/2002	\$23.94	\$0.87
4/23/2002	\$23.94	\$0.88
4/24/2002	\$23.94	\$0.87
4/25/2002	\$23.94	\$0.84
4/26/2002	\$23.94	\$0.85
4/29/2002	\$22.70	\$0.82
4/30/2002	\$23.34	\$0.83
5/1/2002	\$22.61	\$0.82
5/2/2002	\$21.92	\$0.82
5/3/2002	\$21.64	\$0.81
5/6/2002	\$21.00	\$0.79
5/7/2002	\$20.25	\$0.78
5/8/2002	\$21.83	\$0.81
5/9/2002	\$21.26	\$0.80
5/10/2002	\$19.64	\$0.77
5/13/2002	\$20.72	\$0.80
5/14/2002	\$21.31	\$0.81
5/15/2002	\$20.03	\$0.79
5/16/2002	\$19.24	\$0.78
5/17/2002	\$18.40	\$0.77
5/20/2002	\$18.19	\$0.76
5/21/2002	\$17.54	\$0.75

Exhibit 9

Maximum Alleged Inflation Using the Leakage Model^[1]

Date	Professor Fischel's Quantification Including Leakage	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[2][3]}
5/22/2002	\$17.74	\$0.75
5/23/2002	\$17.87	\$0.76
5/24/2002	\$17.85	\$0.76
5/28/2002	\$17.98	\$0.75
5/29/2002	\$17.89	\$0.75
5/30/2002	\$16.88	\$0.74
5/31/2002	\$16.26	\$0.73
6/3/2002	\$16.67	\$0.73
6/4/2002	\$16.66	\$0.72
6/5/2002	\$17.91	\$0.74
6/6/2002	\$19.83	\$0.76
6/7/2002	\$19.06	\$0.75
6/10/2002	\$18.58	\$0.75
6/11/2002	\$19.54	\$0.75
6/12/2002	\$18.92	\$0.75
6/13/2002	\$17.44	\$0.72
6/14/2002	\$17.62	\$0.72
6/17/2002	\$18.20	\$0.75
6/18/2002	\$18.08	\$0.75
6/19/2002	\$17.24	\$0.73
6/20/2002	\$16.02	\$0.71
6/21/2002	\$16.16	\$0.71
6/24/2002	\$16.50	\$0.71
6/25/2002	\$15.68	\$0.70
6/26/2002	\$16.25	\$0.70
6/27/2002	\$16.78	\$0.71
6/28/2002	\$16.19	\$0.71
7/1/2002	\$14.84	\$0.69
7/2/2002	\$14.94	\$0.68
7/3/2002	\$15.76	\$0.69
7/5/2002	\$16.69	\$0.72
7/8/2002	\$16.28	\$0.71
7/9/2002	\$14.58	\$0.67
7/10/2002	\$12.48	\$0.63
7/11/2002	\$13.14	\$0.64
7/12/2002	\$14.69	\$0.66
7/15/2002	\$14.17	\$0.65
7/16/2002	\$15.01	\$0.66
7/17/2002	\$11.59	\$0.61
7/18/2002	\$12.56	\$0.61
7/19/2002	\$11.33	\$0.58
7/22/2002	\$10.38	\$0.56
7/23/2002	\$9.30	\$0.52

Exhibit 9

Maximum Alleged Inflation Using the Leakage Model^[1]

Date	Professor Fischel's Quantification Including Leakage	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[2][3]}
7/24/2002	\$11.68	\$0.57
7/25/2002	\$10.57	\$0.56
7/26/2002	\$8.68	-\$1.33
7/29/2002	\$9.19	-\$1.40
7/30/2002	\$9.55	-\$1.42
7/31/2002	\$11.49	-\$1.50
8/1/2002	\$10.63	-\$1.45
8/2/2002	\$9.59	-\$1.39
8/5/2002	\$8.11	-\$1.30
8/6/2002	\$10.06	-\$1.40
8/7/2002	\$8.28	-\$1.35
8/8/2002	\$9.60	-\$1.44
8/9/2002	\$8.73	-\$1.43
8/12/2002	\$8.29	-\$1.40
8/13/2002	\$7.06	-\$1.33
8/14/2002	\$6.39	-\$2.86
8/15/2002	\$7.61	-\$2.97
8/16/2002	\$5.76	-\$4.13
8/19/2002	\$5.22	-\$4.16
8/20/2002	\$4.65	-\$4.05
8/21/2002	\$4.98	-\$4.09
8/22/2002	\$8.14	-\$4.48
8/23/2002	\$5.85	-\$4.16
8/26/2002	\$6.77	-\$4.30
8/27/2002	\$5.58	-\$4.15
8/28/2002	\$5.22	-\$4.05
8/29/2002	\$4.69	-\$4.01
8/30/2002	\$4.33	-\$3.98
9/3/2002	\$2.96	-\$3.67
9/4/2002	\$3.53	-\$3.79
9/5/2002	\$2.87	-\$3.67
9/6/2002	\$3.10	-\$3.74
9/9/2002	\$5.02	-\$4.00
9/10/2002	\$4.16	-\$3.87
9/11/2002	\$4.57	-\$3.90
9/12/2002	\$3.73	-\$3.73
9/13/2002	\$4.35	-\$3.82
9/16/2002	\$3.35	-\$3.70
9/17/2002	-\$0.17	-\$3.25
9/18/2002	\$0.41	-\$3.29
9/19/2002	\$0.73	-\$3.22
9/20/2002	\$0.64	-\$3.20
9/23/2002	-\$0.85	-\$4.16

Exhibit 9

Maximum Alleged Inflation Using the Leakage Model^[1]

Date	Professor Fischel's Quantification Including Leakage	Maximum Using the CSFB March 2001 Specialty Finance Index Regression Model over the Disclosure Period, Including Only Statistically Significant Specific Disclosure Days ^{[2][3]}
9/24/2002	-\$0.35	-\$4.15
9/25/2002	-\$0.24	-\$4.24
9/26/2002	\$0.34	-\$4.45
9/27/2002	-\$0.56	-\$4.20
9/30/2002	-\$0.10	-\$4.30
10/1/2002	-\$1.12	-\$4.32
10/2/2002	-\$1.13	-\$4.15
10/3/2002	-\$0.66	-\$4.04
10/4/2002	-\$1.87	-\$3.75
10/7/2002	-\$2.45	-\$3.53
10/8/2002	-\$3.17	-\$3.58
10/9/2002	-\$4.66	-\$3.19
10/10/2002	-\$0.68	\$0.00
10/11/2002	\$0.00	\$0.00
Inflation "Cap"	\$23.94	\$4.38

Source: Expert Report of Daniel R. Fischel, 8/15/07; Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Credit Suisse First Boston, "Specialty Finance Monthly," 3/2/01; Expert Report of Allen Ferrell, 10/23/15

Note:

- [1] Inflation "Cap" is calculated according to Professor Fischel's methodology, which limits inflation on any day to the cumulative residual price decline during the leakage period.
- [2] The regression is estimated over the disclosure period, which is the period 11/15/01–10/11/02. Excluded from the regression estimation are the 14 days Professor Fischel identified as Specific Disclosure days and, to be conservative, the 11 purported leakage days.
- [3] The maximum alleged inflation using the same model but including the residual price change on only 11/15/01 yields an inflation cap of \$2.26. Inflation on 11/15/01 and all subsequent days in the Class Period is \$0.00.

EXHIBIT D

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

LAWRENCE E. JAFFE PENSION PLAN,
On Behalf of Itself and All Others Similarly
Situated,

Plaintiff,

VS.

HOUSEHOLD INTERNATIONAL, INC., et
al.,

Defendants.

Case No. 02-C-5893

Honorable Jorge L. Alonso

EXPERT REBUTTAL REPORT OF PROFESSOR CHRISTOPHER M. JAMES

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I. Qualifications

1. My qualifications are detailed in my Initial Report¹ in this matter. A copy of my CV and a list of my testimony within the last four years were included as Exhibits 1 and 2 attached thereto.

Subsequent to submitting my Initial Report, I have provided testimony in the following matters:

- *Federal Home Loan Mortgage Corporation v. Deloitte & Touche LLP*, United States District Court Southern District of Florida, Miami Division, Civil Action No. 1:14-cv-23713-UU, deposition.
- *In re: MF Global Holdings Ltd. Investment Litigation* [Case No. 12-MD-2338 (VM)], *Joseph DeAngelis, et al. v. Jon S. Corzine, et al.* [Case No. 11-Civ-7866 (VM)], United States District Court Southern District of New York, Relating to *Sapere CTA Fund, L.P. v. Jon S. Corzine, et al.* [Case No. 11-Civ-9114 (VM)], *Nader Tavakoli, as Litigation Trustee of the MF Global Litigation Trust v. Jon S. Corzine, et al.* [Adv. Pro. No. 13-01333 (MG)], and *U.S. Commodity Futures Trading Commission v. MF Global Holdings Ltd., et al.* [Case No. 11-Civ-7866 (VM) (USCFTC)], deposition.

II. Background and Assignment

2. As noted in my Initial Report, Professor Daniel Fischel's ("Fischel's") Leakage Model "effectively attributes the entirety of Household's residual price change (i.e., its price change after adjusting for market and broad industry effects, proxied by the S&P 500 Index and S&P Financials Index, respectively, as well as the risk-free rate) during the Observation Window to fraud-related information."² The ability of such a model to reliably estimate damages hinges on establishing that all firm-specific price movements were caused by the fraud. The Court ruled that Fischel's prior testimony was insufficient to establish that fact and required him to opine in nonconclusory terms that "no firm-specific, nonfraud related information contributed to the

¹ Expert Report of Professor Christopher M. James dated October 23, 2015 (my "Initial Report"), ¶¶1–6.

² Initial Report, ¶7.

decline in stock price during the relevant time period”³—November 15, 2001 to October 11, 2002 (Fischel’s “Observation Window” or “Leakage Period”). Fischel purported to offer such testimony in his Second Supplemental Report.⁴

3. My Initial Report in this matter responds to the Court’s request to “identify[] some significant, firm-specific, nonfraud related information that could have affected [Household’s] stock price” during the Observation Window.⁵ Specifically, I was asked “to address, based on my experience and expertise with respect to financial institutions and the financial industry, the types of factors important to the market’s evaluation of institutions like Household.”⁶ In particular, I was asked “to address the factors that were especially important with respect to Household as a consumer finance institution serving primarily nonconforming and subprime customers and that may have disproportionately affected Household relative to indices such as the S&P 500 Index or the S&P Financials Index during Fischel’s Observation Window.”⁷ In my Initial Report, I opined that given the economic downturn and regulatory changes affecting financial institutions with subprime customers that occurred during the Observation Window, I would expect companies like Household, with a subprime customer base, to be disproportionately negatively affected relative to companies in Fischel’s broad S&P Financials Index. I also pointed to numerous types of nonfraud information that were released during the Observation Window that could have affected, and based on my industry experience, likely did affect, the stock price of Household and similar subprime lenders more negatively than such information would have

³ Decision by the U.S. Court of Appeals for the Seventh Circuit, May 21, 2015 (“Appellate Order”), p. 24.

⁴ Second Supplemental Report, ¶1.

⁵ Appellate Order, p. 24.

⁶ Initial Report, ¶9.

⁷ Initial Report, ¶9.

affected the stock prices of the broader set of financial institutions represented by the S&P Financials Index.

4. In his Second Rebuttal Report,⁸ Fischel asserts that my analysis is “nothing more than a series of speculations about industry-related developments” that I “mischaracterize[] as firm-specific information.”⁹ Fischel summarily dismisses any characterization of industry news that may have disproportionately affected Household as firm-specific in the context of his model, claiming simply that he has “controlled for” industry information “via regression analysis.”¹⁰ Fischel also argues that I “incorrectly characterize fraud related disclosures as firm-specific disclosures unrelated to the fraud” and “ignore all of the positive announcements Household made during the Leakage Period....”¹¹

5. I have been asked by counsel for Defendants to respond to the assertions regarding my Initial Report discussed in Fischel’s Second Rebuttal Report. A complete list of the documents that I have relied upon in forming the opinions expressed in my Initial Report was attached thereto as Exhibit 3. A list of additional documents that I have relied upon in forming the opinions expressed in this current report are attached hereto as Exhibit 1.

6. In connection with my services, including the preparation of this report and any testimony I will render at trial, I am being compensated at my regular hourly rate of \$950 per hour. I am also being reimbursed for reasonable expenses incurred in connection with such services. None of my compensation is contingent upon the conclusions I reach or on the outcome of this matter. I

⁸ Second Rebuttal Report of Daniel R. Fischel dated November 23, 2015 (“Second Rebuttal Report”).

⁹ Second Rebuttal Report, ¶6.

¹⁰ Second Rebuttal Report, ¶6.

¹¹ Second Rebuttal Report, pp. 8, 10–11.

have been assisted in this matter by staff of Cornerstone Research, who worked under my direction.

7. My work in this matter is ongoing. The opinions presented in this report are the result of the information available to me as of the report date. I reserve the right to supplement or modify my opinions if new information comes to light and to respond to any additional report(s) or opinions offered by other experts.

III. Overview and Summary of Opinions

8. In my Initial Report, I discussed numerous types of nonfraud information that were released during the Observation Window that I would expect to have affected Household's stock price, and that of similar subprime lenders, more negatively than such information would have affected the stock prices of the broader set of financial institutions represented by Fischel's S&P Financials Index. Nothing in Fischel's Second Rebuttal Report causes me to change that opinion. To the contrary, analysis of the subprime lenders and academic literature highlighted in that report bolsters my initial opinion and indicates that subprime lenders, like Household, were disproportionately negatively affected by changes in the macroeconomic and regulatory landscape throughout the Observation Window.

9. In particular, as discussed in Section IV below, consistent with discussion in my Initial Report, analysis of the "Subprime Lenders" identified in Fischel's Second Rebuttal Report shows that shifts in the macroeconomic and regulatory environment *did in fact* disproportionately negatively impact firms like Household relative to Fischel's broad S&P Financials Index. The stock prices of four of the five Subprime Lenders declined more than did his S&P Financials Index. On average, the Subprime Lenders fell 46% during the Observation Window—

performance that is comparable to Household's (53% decline) and far below that of the S&P Financials Index (21% decline).

10. Additionally, my Initial Report (Sections VI and VII) establishes that during the Observation Window there was a steady flow of information that I would expect to disproportionately negatively affect Household relative to the S&P Financials Index—that is, firm-specific nonfraud information in the context of Fischel's analysis. As discussed in Section V below, the academic literature to which Fischel now cites highlights the implications of that continuous flow of information—the market is constantly re-evaluating Household's stock price as macroeconomic and regulatory news, some of which may have a firm-specific effect, trickles in from a wide variety of sources. This observation underscores that inadequacy of Fischel's attempt to establish that “no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period”¹² by examining only 42 days during the Observation Window. Moreover, it underscores the problem with using long event windows (such as Fischel's 228-day Observation Window). Specifically, the longer the event window, the less certainty a financial economist has that he or she is isolating the effect of fraud-related news and not capturing the confounding effect of firm-specific, nonfraud news.

11. Not only does Fischel's Second Rebuttal Report provide evidence that bolsters my initial opinion regarding the negative effect of firm-specific, nonfraud information during the Observation Window, but his attempts to undermine the analysis in my Initial Report are without merit. Fischel raises three primary objections to the analysis in my Initial Report. Each fails, as summarized here and discussed in detail below:

¹² Appellate Order, p. 24.

- First, Fischel erroneously asserts that I incorrectly rely on market and industry factors to explain Household's underperformance. As discussed in Section VI below, his summary dismissal of all market and industry information because it is purportedly "controlled for" by his regression is undermined by his own deposition testimony in this matter, as well as a wide body of academic literature. His failure to carefully consider market and industry news alone renders any opinion that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period"¹³ unreliable.
- Second, he erroneously asserts that I incorrectly characterize firm-specific disclosures regarding liquidity, capital access, and widening bond spreads as unrelated to the fraud when they were in fact fraud-related. As discussed in Section VII below, there is ample evidence of nonfraud causes of these issues. Even assuming that fraud-related factors also contributed, Fischel's failure to isolate nonfraud causes renders any opinion that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period"¹⁴ unreliable.
- Third, Fischel asserts that I "ignore all of the positive announcements Household made during the Leakage Period" and points to certain statements regarding Household's operating results, which he purports "demonstrate that the Company did not disclose negative firm-specific, nonfraud related information about its business performance that can explain its underperformance."¹⁵ Statements indicating favorable performance relative to expectations set in a difficult economic environment do not establish that Household's "business performance" positively affected its stock price over the Observation Window. Indeed, Fischel entirely ignores evidence in my Initial Report that Household's credit quality deteriorated and cost of funds increased notably over the Observation Window. Again, Fischel fails to reliably establish that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period."¹⁶

IV. The Performance of Fischel's Subprime Lenders Indicates a Disproportionately Negative Effect of Macroeconomic and Regulatory Changes on Consumer Finance Companies with a Subprime Focus during the Observation Window

12. In his Second Rebuttal Report, Fischel constructs indices out of certain companies mentioned in my Initial Report and those mentioned in the Initial Ferrell Report¹⁷—the consumer

¹³ Appellate Order, p. 24.

¹⁴ Appellate Order, p. 24.

¹⁵ Second Rebuttal Report, ¶15.

¹⁶ Appellate Order, p. 24.

¹⁷ Expert Report of Allen Ferrell dated October 23, 2015 ("Initial Ferrell Report"), ¶42.

finance subsector of the S&P Financials Index (“S&P Consumer Finance Index”)¹⁸ and the firms in the Credit Suisse First Boston (CSFB) Specialty Finance Universe (“CSFB Index”),¹⁹ respectively. He also points to five firms that Professor Ferrell identified as “having ‘engaged in substantial subprime lending and/or target[ed] subprime [consumers].’”²⁰ Fischel finds that the S&P Consumer Finance and the CSFB Indices declined less than his S&P Financials Index did during the Observation Window. Based on this observation, he concludes that “the peer index...that [he] employed in [his] model appropriately captures the effects of macroeconomic conditions on consumer finance firms,” including those that “were engaged in substantial subprime lending.”²¹

13. Notably, notwithstanding the assertion that he has captured the effect of macroeconomic conditions on consumer finance firms engaged in substantial subprime lending and the fact that he highlights five such companies (the “Subprime Lenders”),²² Fischel does not test Household’s stock price performance relative to an index comprised of that peer set. I constructed such an index (the “Subprime Lenders Index”) and compared its performance to Household’s and that of Fischel’s S&P Financials Index.

14. Indeed, further analysis of the Subprime Lenders using the methodology employed in Exhibit 2 to Fischel’s Second Rebuttal Report indicates that those companies *were in fact*

¹⁸ Fischel creates an index comprising the companies other than Household included in the consumer finance subsector of the S&P Financials Index. The S&P Consumer Finance Index includes: American Express, Capital One, MBNA, and Providian (Second Rebuttal Report, ¶11; Initial Report, Exhibit 4).

¹⁹ Fischel creates an index comprising the companies other than Household included Credit Suisse First Boston’s Specialty Finance Universe as of March 2, 2001, excluding CIT Group, which was spun off by Tyco International in July 2002. The CSFB Index includes: American Express, AmeriCredit Financial, Capital One, CompuCredit, MBNA, Metris, and Providian, and WFS Financial (Second Rebuttal Report, ¶11 and FN 15; Initial Ferrell Report, ¶42).

²⁰ Second Rebuttal Report, ¶11; Initial Ferrell Report, ¶42.

²¹ Second Rebuttal Report, ¶11.

²² The “Subprime Lenders” include AmeriCredit, Capital One, CompuCredit, Metris, and Providian (Second Rebuttal Report, ¶11; Initial Ferrell Report, ¶42).

disproportionately negatively affected relative to Fischel's S&P Financials Index by changes in the macroeconomic and regulatory landscape during the Observation Window. As shown in Exhibit 2a, four of the five Subprime Lenders declined more than the S&P Financials Index over the Observation Window. Moreover, as shown in Exhibit 3a, on average, the Subprime Lenders fell by 46% relative to a 21% decline for Fischel's S&P Financials Index. By comparison, Household's stock price fell 53% during the Observation Window, a change more in line with the average for the Subprime Lenders than with Fischel's S&P Financials Index.²³ As shown on Exhibit 2a, two of the five Subprime Lenders experienced larger percentage declines during the Observation Window than did Household.

15. Moreover, Household decreased less than three of its five subprime peers and less than the average of those peers when the 14 purportedly fraud-related price movement days (Fischel's "Specific Disclosure Days") are excluded (Exhibits 2b and 3b). In particular, Household's stock price fell 50% whereas the Subprime Lenders fell 54% on average.

V. Academic Literature Highlights the Ongoing Stock Price Impact of Firm-Specific, Nonfraud Information throughout the Observation Window

A. My Initial Report Points to a Steady Stream of Information That I Would Expect to Disproportionately Negatively Affect Household's Stock Price

16. Consistent with my findings in the preceding section (i.e., that the stock prices of the Subprime Lenders declined more than the S&P Financials Index during the Observation Window), my Initial Report highlighted specific negative macroeconomic and regulatory trends during the Observation Window that I would expect to have a greater impact on Household's value than on the value of the broad peer set used by Fischel in his analysis, given the nature of

²³ Second Rebuttal Report, ¶11.

the changes and Household's business focus. For example, with respect to macroeconomic trends, my Initial Report (Section VI.B.1; Exhibits 7, 8, and 10) establishes that trends such as increasing unemployment and consumer bankruptcies, falling used car prices,²⁴ and increasing delinquency rates at close peers were important factors that the market used to determine the quality of Household's assets. Subprime loans were affected more negatively than were prime loans by the macroeconomic changes during the Observation Window (Initial Report, Exhibit 15; Exhibit 4). Indeed, delinquency rates and charge-offs at Household increased throughout the Observation Window (Initial Report, Exhibits 5, 6, and 9).

17. My Initial Report (Section VI.B.2) also discusses that trends such as reduced access to the commercial paper market and widening bond spreads for consumer finance companies, particularly those with a subprime focus, increased Household's cost of funds during the Observation Window, negatively impacting its profitability. Indeed, Household's access to commercial paper decreased and bond spreads (a cost of borrowing) increased throughout the Observation Window (Initial Report, Exhibits 11–13).

18. Contemporaneous market analysis indicates a belief that these factors contributed to Household's stock price decline during the Observation Window. For example, an article by CBS MarketWatch dated November 14, 2002 points to precisely these nonfraud causes of Household's extended decline. Specifically, that article states, "HI shares have dropped in half over the past six months as concerns grew in the market over HI's ability to raise funds in the commercial

²⁴ The auto financing business, while a relatively small portion of Household's portfolio, had been a source of recent growth and was a source of particular concern for analysts during the Observation Window (Initial Report, ¶12 and Section VI.B.1). Regarding the importance of unemployment, bankruptcies, and used car prices for that segment in particular, one analyst stated: "As an important caveat, we do not mean to suggest that the current economic downturn is going to leave the auto finance business unscathed. Rather, the glut of used cars on the market has depressed prices, resulting in higher loss severities. For example, Household reported that average loss severities in its auto finance business had increased from 51% in 3Q01 to 57% in 4Q01, thus driving an uptick in losses. With unemployment and bankruptcies still rising, the credit cycle will likely take a toll on auto finance lenders throughout the rest of 2002" (Morgan Stanley, Finance: Specialty, January 25, 2002, p. 3).

paper market as credit delinquency trends rise in the U.S.”²⁵ My Initial Report (Section VI.B) points to additional contemporaneous analyst commentary highlighting a disproportionately negative effect of the factors discussed in ¶¶16 and 17 above on consumer finance companies with a subprime customer focus.

19. In addition to macroeconomic trends that I would expect to have a greater impact on Household’s value than on the value of the broad S&P Financials Index that Fischel used in his analysis, my Initial Report (Section VII.A) highlights regulatory and legislative changes targeting subprime lenders that had negative implications for Household’s prospects. In particular, I discuss increased capital requirements for, and scrutiny of, subprime lenders’ portfolios, as well as changes in “predatory lending” rules.²⁶ As noted in my Initial Report (Section VII.B), evidence demonstrates that market analysts closely followed regulatory and legislative proceedings, and announcements regarding regulatory actions at close peers, in order to assess the impact on Household. Moreover, contemporaneous market analysis again indicates a belief that these factors also contributed to Household’s stock price decline during the Observation Window.

²⁵ “HSBC to Buy Household International,” CBS MarketWatch, November 14, 2002, <http://www.marketwatch.com/story/hsbc-to-buy-household-international-for-14-billion>.

²⁶ As I note in my Initial Report (¶56), “[i]t is important to differentiate the impact of news related to past infractions (which is fraud-related) from the impact of news related to regulatory changes (which is not). The latter, news regarding regulatory changes, is not information that could and should have been disclosed earlier by the Company. Hence, any stock price declines attributable to such news are not due to correction of the fraud.” I further note (FN 84) “that Fischel’s deposition testimony is consistent with my understanding that changes in regulations, which is not something that could have been disclosed earlier by Household, are not corrective of the fraud.” Indeed in his deposition testimony in the matter, Fischel was asked, “[W]hat are some examples of declines that would not be attributable to a claim of fraud in this matter?” He answered, “Any negative event which causes a statistically significant price decline where there is no claim that the negative event should have been disclosed at an earlier point in time...” (Deposition of Daniel R. Fischel, March 21, 2008 (“Fischel Deposition”), 150:8–14).

B. Academic Literature Establishes the Ongoing Price Impact of Such Information and Underscores the Unreliability of Fischel's Extended Observation Window

20. As discussed in the preceding section, information relevant for assessing Household's prospects arrived in a steady stream throughout the Observation Window in the form of data releases from government and industry sources, announcements by peers, and discussion of regulatory and legislative proceedings. The academic literature to which Fischel now cites highlights the implications of the continuous flow of information—the market is constantly re-evaluating Household's stock price as macroeconomic and regulatory news, as well as news specific to Household, trickles in from a wide variety of sources. For example, Ragothaman and Bublitz (1996)²⁷ discusses the fact that the market often does not react negatively to announcements of asset write-downs because the market has already learned of the diminished asset value through other sources over time:

Early writedown studies focus on whether writedown announcements convey information about future cash flows. But the event methodology used in these studies ignores the fact that market agents learn about valuation-relevant events from many sources over a long period of time. Specifying a date when information reaches the market is not always feasible; information can reach the market gradually through many sources.... On the other hand, Johnson (1989) fails to detect a significant price reaction to impairment recognitions in the banking industry and suggests that market agents may have prior information about circumstances that contribute to diminished asset value. Thus, in all prior studies the precise identification of the event date is a problem....²⁸

21. The fact that the market is continuously using information, such as the firm-specific, nonfraud information discussed in Section V.A above, to revalue a company's assets highlights

²⁷ Srinivasan Ragothaman and Bruce O. Bublitz, "An Empirical Analysis of the Impact of Asset Writedown Disclosures on Stockholder Wealth," *Quarterly Journal of Business and Economics* 35, no. 3 (Summer 1996) ("Ragothaman and Bublitz").

²⁸ Ragothaman and Bublitz, p. 33.

the inadequacy of Fischel's attempt to establish that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period"²⁹ by looking only at the 42 days³⁰ on which there were statistically significant price changes according to his regression model. Setting aside the widely accepted observation that residual returns that are not statistically significant cannot be reliably attributed to any firm-specific news, Fischel's attribution of such price changes throughout the Observation Window to firm-specific, fraud-related news as opposed to a firm-specific effect of the above-discussed nonfraud news is entirely unfounded.

22. As discussed in the following section, Fischel has not established that he eliminates the effect of firm-specific, nonfraud factors during the Observation Window through use of his regression model. As such, without detailed analysis of the information that arrived throughout his Observation Window, he cannot reliably establish that his Leakage Model measures the impact of the fraud as opposed to the impact of nonfraud information.

²⁹ Appellate Order, p. 24.

³⁰ The 42 days include 28 days with statistically significant price changes according to Fischel's regression model (27 negative and one positive) that he purported to analyze in his Second Supplemental Report, as well as the 14 "Specific Disclosure" days—that is, the days about which previously Fischel testified that he was "reasonably confident that the fraud-related disclosure" was responsible for the "statistically significant price movement" (Direct Examination of Daniel R. Fischel in Trial Before the Honorable Ronald A. Guzman, *Lawrence E. Jaffe Pension Plan, et al., v. Household International, et al.*, April 16, 2009 ("Fischel Trial Testimony"), 2627:15–23).

VI. The Regression Model Used by Fischel Does Not Account for the Disproportionate, Firm-specific Effect of Nonfraud Information on Household Throughout the Observation Window

A. Market and Industry News Can Have a “Firm-Specific” Effect

23. In his Second Rebuttal Report, Fischel asserts that I “mischaracterize[] as firm-specific information” industry-related developments.³¹ Fischel summarily dismisses any characterization of industry news that may have disproportionately affected Household as firm-specific in the context of his model, claiming simply that he has “controlled for” industry information “via regression analysis.”³²

24. Fischel’s claim is inconsistent with not only the academic literature, as discussed below, but also his own prior testimony in this matter in which he explicitly recognizes that an industry event (in the example, a regulatory change) can have a firm-specific effect, even when one uses an industry index to “control for” the effect of industry events as he has done in his Leakage Model. Specifically, Fischel testified:

If [Household was] disproportionately affected by -- hypothetically -- a regulatory change, meaning that the regulatory change has a bigger effect on its expected future profitability than for other firms, then the industry index would maybe partially pick up the effect of the change. But there still could be hypothetically a firm specific effect for Household.... [A]s a matter of statistics, [it is] possible that a regulatory change that affects the entire industry could affect one firm, whether Household or any other firm, disproportionately. So even though you have a control for an industry variable, you still have a firm specific component to the return....³³

25. What Fischel recognizes in his deposition testimony but fails to acknowledge in his Second Rebuttal Report is that, while an event study such as the one that he has conducted in this

³¹ Second Rebuttal Report, ¶6.

³² Second Rebuttal Report, ¶6.

³³ Fischel Deposition, 200:18–201:17.

matter attempts to control for market and industry factors, it is not capable of correcting for the entire effect of such factors on a specific firm on each day. Specifically, the linear regression technique assumes that the sensitivities of a company's stock return to market and industry information on each day of interest are the same as those estimated over the control period—which are themselves *average* sensitivities over the entire control period. That relationship does not hold on each and every day, including when market or industry news on a particular day affects only some of the companies in the industry index employed. Therefore, what the regression model measures as “firm-specific” returns on each day may in fact include the effect of market and industry events.

26. The observation that market and industry events can have a firm-specific effect is consistent with not only Fischel's prior testimony, but also the academic literature. Indeed, I discuss some of that literature in my Initial Report. Specifically, I discuss my own published research, which I note “is part of a wide body of academic literature that demonstrates clearly that the stock price reaction of financial institutions to macroeconomic factors and regulatory changes is often heterogeneous, with the impact varying based on the business mix and portfolio composition of the institution.”³⁴ The observation in the academic literature that the stock price reaction to a particular event depends on the business and portfolio mix is consistent with an observation that certain events that disproportionately affected consumer finance companies, or companies targeting subprime customers, might have a firm-specific effect in the context of a model that controls for only the effect of those events on the broad portfolio of companies that comprise the S&P Financials Index. Fischel fails to acknowledge, let alone address, this body of research in his Second Rebuttal Report.

³⁴ Initial Report, ¶22.

27. Additional academic literature, beyond that cited in my Initial Report, supports the observation that “controlling for” market and industry news via a linear regression, as Fischel has done, is different than removing the effect of market and industry news from the regression’s “firm-specific” returns, which is what Fischel assumes in his damages model. For example, there is a body of academic research that provides evidence that the sensitivity of a company to its peers’ stock price movements may increase on peer announcement days relative to peer non-announcement days. For example, Patton and Verardo (2012)³⁵ explains the increased sensitivity on announcement days as follows:

Since firms only announce their earnings once per quarter, on the intervening days investors must infer their profitability from other available information. If the earnings processes of different firms contain a common component and an idiosyncratic component, and if different firms announce on different days, then investors can use the earnings announcement of a given firm to revise their expectations about the profitability of nonannouncing firms and of the entire economy in general. This process of learning across firms drives up the covariance of the returns on the announcing stock with other stocks, regardless of whether the announcing firm reveals good or bad news: investors interpret good (bad) news from the announcing firm as partial good (bad) news for other firms, which drives up covariances on announcement days, leading to an increase in the market beta of the announcing stock.³⁶

28. In other words, the co-movement of a company’s stock returns with the stock returns of its peers measured over a control period comprising peer announcement days as well as peer non-announcement days may understate the co-movement on announcement days. The implication of this research in the current matter is that the sensitivity coefficient of Household to its industry peers measured over a control period like Fischel’s, which includes announcement as well as non-announcement days, may understate Household’s sensitivity to its peers on announcement days.

³⁵ Andrew J. Patton and Michela Verardo, “Does Beta Move with News? Firm-Specific Information Flows and Learning about Profitability,” *Review of Financial Studies* 25, no. 9 (2012), pp. 2790–2791 (“Patton and Verardo”).

³⁶ Patton and Verardo, pp. 2790–2791.

As such, Household's estimated "firm-specific" return may include the effect of industry news not captured by the regression model on peer announcement days.

29. Market analysts' observations throughout the Observation Window indicate that Household was particularly sensitive to the announcements of certain peers. For example,

- Reuters News noted that "[s]hares of credit card companies slid on Monday [January 28, 2002], as Metris Cos Inc. was downgraded by analysts amid worries that the subprime lender's growing exposure to bad loans may signal an industrywide trend.... Concerns about Metris spilled over into other credit card lenders, including MBNA Corp.... Shares of No. 2 U.S. consumer finance firm Household International Inc. fell by 4.31 percent to \$52.35. Shares of Capital One Financial Corp., a strong player in the subprime market which is shifting its focus to consumers with better-than-average credit histories, fell by about 4 percent..."³⁷
- An analyst noted that "Household's stock price was down 1.3% yesterday [February 12, 2002], as collateral damage from the sharp sell-off of 6.5% in AmeriCredit."³⁸
- Another reported, "HI shares were under pressure yesterday [July 17, 2002] in sympathy with its consumer finance peers," noting that "[w]e think [Capital One's] bombshell announcement signals an era of lower returns, increased capital intensity, and heightened regulatory oversight for consumer lenders of all types."³⁹
- Following the Capital One announcement, yet another analyst spoke more generally of Household's sensitivity to news regarding select peers: "We have long felt that Household's biggest vulnerability is a competitor's fall from grace. Capital One's announcement a couple of weeks ago that it expects to be subject to greater regulatory scrutiny has spilled over into Household's story."⁴⁰

30. Moreover, as shown in Exhibits 5a, 5b, 5c, and 5d, analysis of the stock price responses of Household and the Subprime Lenders relative to that of Fischel's broad S&P Financials Index on certain days when news particularly relevant to the subprime sector of the market was disclosed also supports the observation that such news may have disproportionately affected Household and the Subprime Lenders and thus had a firm-specific effect in the context of a regression model,

³⁷ "Credit Card Stocks Fall on Metris, Sub-prime Worries" Reuters News, January 28, 2002 (12:19 PM).

³⁸ Bernstein Research, HI: Collateral Damage, February 13, 2002.

³⁹ Fox-Pitt, Kelton, Household International, July 18, 2002.

⁴⁰ Credit Suisse First Boston, Finance Companies Market Flash, July 26, 2002.

particularly one like Fischel's which only attempts to control for the effect of the news on the S&P Financials Index. The analysis provides additional support for the observation that "controlling for" market and industry news via a linear regression as Fischel has done is different than removing the effect of market and industry news from the regression's "firm-specific" returns, which is what Fischel assumes in his damages model. A linear regression does not always accurately account for the effect of market and industry news in calculating "firm-specific" returns.

B. Fischel's Failure to Carefully Consider Market and Industry Information during the Observation Window Renders His Opinion regarding Firm-Specific, Nonfraud Factors Unreliable

31. In sum, regression analysis estimates a company's residual (or "firm-specific") return by accounting for the *average* sensitivity of the company's stock price to market and industry news, as proxied by particular indices, during the estimation period. Because that *estimated average* does not accurately reflect the *actual* sensitivity of the company's stock price to market and industry news on every day during the study period, a portion of the estimated "firm-specific" return may include the effect of market and industry news not accounted for by the model. This phenomenon is not only widely recognized in the academic literature, but also recognized by Fischel in his deposition testimony in this matter.

32. Because the estimated "firm specific" return may reflect the effect of market and industry news, it is important to review the market and industry news, in the context of the regression model being employed, to determine whether that market and industry news may have contributed to the estimated firm-specific return on a given day. Rather than performing this necessary exercise, Fischel (i) summarily dismisses industry news that would be expected to

disproportionately affect a narrow segment of the financial services industry, and thus would be expected to have a firm-specific effect in the context of his model, which employs a very broad industry index; and (ii) simply *assumes* that all estimated firm-specific returns comprise damages. Fischel's unsupported assumption renders his analysis of loss causation and damages entirely unreliable.

33. No single-company linear regression, like the ones that Fischel has employed, can itself reliably estimate the impact of leakage over an extended period during which there was a steady flow of nonfraud news. Indeed, the academic literature to which Fischel cites does not support such an approach.⁴¹

34. Fischel's claim that I incorrectly rely on market and industry factors to explain Household's underperformance is wrong, and his summary dismissal of all market and industry information because it is purportedly "controlled for" by his regression is inappropriate. His failure to carefully consider market and industry news alone renders his opinion that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period"⁴² unreliable.

VII. Fischel Fails to Consider Nonfraud Contributions to Firm-Specific Factors That Negatively Affected Household's Stock Price during the Observation Window

35. Fischel points to selected statements from market analysts and Defendants purportedly discussing fraud-related causes for Household's funding challenges (specifically, decreased

⁴¹ See, e.g. Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *Business Lawyer*, Vol. 49, No. 2 (February 1994), Sanjai Bhagat and Roberta Romano, "Event Studies and the Law: Part II: Empirical Studies of Corporate Law," *American Law and Economics Review*, Vol. 4, No. 2 (Fall 2002); David Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom" in *Litigation Services Handbook: The Role of the Financial Expert*, 3rd ed., ed. Roman W. Weil et al. (New York: John Wiley & Sons, 2001).

⁴² Appellate Order, p. 24.

liquidity, reduced capital market access, and widening bond spreads) that contributed negatively to its stock price performance during the Observation Window.⁴³ However, he ignores nonfraud causes for these same firm-specific factors.

36. As a primary matter, the fact that other consumer lending firms, particularly those with a subprime focus, were facing similar issues undermines any assertion that this was simply a fraud-related phenomenon. For example, Exhibit 6 indicates comparable bond spread increases for Household and other consumer lenders during 2002, and in particular beginning in July 2002. Contemporaneous analyst comment point to widening spreads for consumer finance stock generally. For example: “For consumer finance stocks, debt spreads have widened to unattractive levels, threatening margins.”⁴⁴ Moreover, bond spreads for certain Subprime Lenders experienced an even more dramatic increase than did Household’s bond spreads in late 2002.⁴⁵

37. Widening debt spreads during the Observation Window were particularly problematic for Household. As one analyst noted, “Other than negative psychology, the higher spreads only affect the companies to the extent they have to issue term debt in a terrible market.”⁴⁶ For a number of reasons, Household needed to issue term debt.

38. First, Household was significantly larger than the other Subprime Lenders and thus had larger funding needs. Exhibit 8a shows that Household’s asset size dwarfed that of the other Subprime Lenders at the end of 2001, and Exhibit 8b shows that the Company’s growth exceeded that of all but Capital One during 2002. This scale amplified its need for funds during a difficult

⁴³ Second Supplemental Report, ¶13.

⁴⁴ Deutsche Bank, Household International Inc., November 14, 2002, p. 3.

⁴⁵ For example, Exhibit 7 shows spread increases for Capital One. While there were not sufficient data available on Bloomberg to chart, my analysis of yield data from Metris and AmeriCredit indicated similarly increasing bond spreads.

⁴⁶ Deutsche Bank, Household International, October 9, 2002, p. 1.

time in the debt market, particularly for consumer finance firms with a subprime customer focus.

Analysts contemporaneously discussed issues related to Household's scale, for example:

Is a \$120 billion Subprime Lender Simply Too Big?

Among the questions we are asking ourselves, is "Is Household simply too big as a specialty finance company, particularly a subprime lender, given the market?" The key competitors, including CitiFinancial, American General, Wells Fargo Finance, and GE Capital, are all divisions of larger, more diversified companies, with stronger funding bases. Household would appear to be at a competitive disadvantage, particularly in tough funding markets. If so, then the new capital will not solve all of Household's long term challenges.⁴⁷

From a funding perspective, the transactions supports our thesis that some consumer and commercial finance companies can become "too large to fund". Partnering with a bank makes the most sense, in our opinion, as this alleviates the growth constraints levied by the capital markets. We believe there is a limit to the amount the capital market is willing to fund regardless of balance sheet strength, and in weak markets, the limit falls fast. Household's management believed a target size of \$150 billion in assets would require joining a banking institution even in a healthy market. Household tried to reassure the debt markets when it issued \$900 million of capital two weeks ago.

Spreads narrowed, but were still very wide. With almost \$20 billion to fund next year, even without growth, Household's back was against the wall. For consumer finance stocks, debt spreads have widened to unattractive levels, threatening margins.⁴⁸

39. Second, Household had historically funded itself with a meaningful amount of commercial paper (Exhibit 8c). Commercial paper is a form of short-term borrowing (with maturities of a few days up to 270 days) that companies use to fund their operations.⁴⁹ Household needed to

⁴⁷ Deutsche Bank, Household International Inc., October 25, 2002, p. 3.

⁴⁸ Deutsche Bank Household International Inc., November 14, 2002, p. 2.

⁴⁹ Generally only large and highly-rated companies can access this form of borrowing because it is not collateralized (Ross, Westerfield, and Jaffe, *Corporate Finance* (McGraw-Hill, New York, 2008, p. 789). As I noted in my Initial Report (¶¶16-17), this form of borrowing entails different risks because of its short-term nature and because the market for commercial paper can change markedly depending on macroeconomic factors or other concerns. For example in Exhibit 9, the distinct downward spike in the amount of commercial paper outstanding in the U.S. in September 2001 coincides with the days following the September 11, 2001 terrorist attacks.

frequently access the commercial paper market to obtain funds as their existing commercial paper matured. Just prior to the Observation Window, the market was beginning to learn that the United States was in a recession.⁵⁰ As shown in Exhibit 9, the U.S. commercial paper market shrank dramatically in the summer of 2001 and continued a steady decline throughout the Observation Window. As shown in Exhibit 11 to my Initial Report, Household's commercial paper generally decreased throughout the Observation Window as well—from approximately \$12 billion on December 31, 2001 to less than \$4 billion at the beginning of November 2002. Analysts discussed the margin implications of replacing commercial paper with more costly sources of funds. For example, one analyst noted, "Household saw its margin contract, partly because it extended the maturities on its debt, and reduced commercial paper issuance."⁵¹

40. Third, as shown in Exhibit 8c, senior and senior subordinated debt comprised the bulk of Household's funding. Senior and senior subordinated debt have much longer maturities than commercial paper.⁵² However, Exhibit 10 demonstrates that a significant portion of Household's senior and senior subordinated debt matured during the Observation Window, or shortly thereafter. At the end of 2001, \$10.5 billion (18.5%) of Household's senior and senior subordinated debt was maturing in 2002. At the end of 2002, \$19.7 billion (26.4%) of Household's senior and senior subordinated debt was maturing in 2003.

41. The net result of these forces was that Household was required to participate in a challenging debt market—not only replacing maturing debt and commercial paper, but also funding asset growth. Household's senior and senior subordinated debt increased from \$56.8

⁵⁰ Initial Report, ¶25.

⁵¹ Lehman Brothers, Specialty Finance Quarterly, April 26, 2002, p. 1.

⁵² See, for example, table of senior and senior subordinated debt, Household International 10-K, December 31, 2002, p. 90.

billion (75% of total debt) on December 31, 2001 to \$74.8 billion (91% of total debt) on December 31, 2002, as shown in Exhibit 8c.

42. Analysts expressed concern about the company's reliance on "jittery" debt markets. For example:

- Salomon Smith Barney, August 14, 2002: "In our mind, the biggest risk to the Household story is that jittery debt markets make the company's cost of funding prohibitive or mechanically difficult. Unsecured term debt spreads widened this morning 8/14/02 (by some 20-30 basis points) and over the last several weeks. That said, it appears that the company has ample access to funds for near-term liquidity in the form of its liquidity portfolio, the commercial paper market, ABS market, and the potential for whole loan sales. Thus, we do not believe a funding crisis is imminent, and think it is plausible that the term debt market could settle down in the intermediate term."⁵³
- JPMorgan, October 4, 2002: "HI's credit spreads have widened significantly since early 2002. Given that \$10 billion of term debt (senior and senior subordinated) is coming due in 2003, the potential exists for higher funding costs, and thus net interest margin compression."⁵⁴
- William Blair, October 11, 2002: "Funding and liquidity are priority No. 1 for Household, with roughly \$18 billion in debt rolling over in the next year. Its bond spreads have widened to unprecedented levels this year."⁵⁵
- U.S. Bancorp Piper Jaffray, October 16, 2002: "The wildcard in this area is the credit spreads and certainty of liquidity available to HI in the term debt market and HI's ability to ramp up use of the securitization and retail debt markets in lieu of improving credit spreads. If liquidity and credit spreads normalize, there could be upside to our estimates.... Longer term, we believe it would make sense for HI to become part of a larger financial institution with more stable sources of funds."⁵⁶

43. In sum, even assuming that fraud-related factors contributed to Household's funding challenges, there is evidence that significant nonfraud causes also contributed, including increased cost of debt for Household's peers, particularly for those serving subprime customer bases, and

⁵³ Salomon Smith Barney, Household International, August 14, 2002, p. 3.

⁵⁴ JPMorgan, Household International, October 4, 2002, p. 1.

⁵⁵ William Blair, Household International, October 11, 2002 (HHS 03143178-80 at 79).

⁵⁶ U.S. Bancorp Piper Jaffray, Household International, October 16, 2002, p. 2.

Household's need to raise debt during a difficult time in the market. Fischel's failure to isolate the impact of these nonfraud causes renders his opinion that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period"⁵⁷ unreliable.

VIII. Deterioration in Household's Credit Quality Is Consistent with Household's Stock Price Decline during the Observation Window

44. My Initial Report, as well as analysis of the Subprime Lenders in Section IV above, establishes that macroeconomic conditions were difficult for consumer finance companies, particularly those with a subprime customer focus, like Household. In his Second Rebuttal Report, Fischel points to announcements by Household of positive performance relative to expectations set in this difficult environment⁵⁸ in an attempt to somehow establish that the performance of Household's assets did not contribute negatively to Household's stock price decline during the Observation Window.

45. Contrary to Fischel's indications, however, neither beating expectations that were set in the context of this difficult environment nor management's optimism about its ability to successfully navigate the difficult conditions establishes a net positive effect of operating results on Household's stock price. As a primary matter, Fischel quotes selectively from *PR Newswire* covering Household's press releases rather than analyst reports. Even these press releases

⁵⁷ Appellate Order, p. 24.

⁵⁸ For example, in his Second Rebuttal Report (¶15, emphasis added, ellipses in original), Fischel points to statements such as: "Household's fourth quarter results were simply outstanding ... Receivable and revenue growth exceeded our expectations while *credit indicators weakened only modestly in a tough economic environment*" and "Household turned in a very strong first quarter ... Our credit quality performance was well within our *expectations in light of the continued weakness in the economy.*"

indicated issues with Household's ability to sustain strong performance in light of macroeconomic conditions. For example:

- **January 16, 2002:** "At December 31st, the managed delinquency ratio (60+days) was 4.46 percent, up 3 basis points from 4.43 percent in the third quarter. The managed delinquency ratio was 4.20 percent a year ago. The annualized managed net chargeoff ratio for the fourth quarter was 3.90 percent, up 16 basis points from 3.74 percent in the third quarter. The managed net chargeoff ratio in the year-ago quarter was 3.41 percent.

Managed credit loss reserves increased by \$256 million during the quarter, to \$3.8 billion. Compared to year-end 2000, credit loss reserves were up \$617 million. The ratio of reserves-to-managed receivables was 3.78 percent at December 31, 2001 compared to 3.72 percent at September 30th and 3.65 percent a year earlier."⁵⁹

April 17, 2002: "At March 31st, the managed basis delinquency ratio (60+days) was 4.63 percent, up 17 basis points from 4.46 percent at year-end 2001 and up 38 basis points from 4.25 percent a year ago. The annualized managed basis net chargeoff ratio for the first quarter of 4.09 percent increased 19 basis points from 3.90 percent in the fourth quarter of 2001. The managed basis net charge-off ratio in the year-ago quarter was 3.56 percent. The company monitors trends on a managed basis because the receivables that it securitizes are subjected to underwriting standards comparable to the owned basis portfolio, are serviced by operating personnel without regard to ownership and result in similar credit exposure for the company.

...

Managed basis credit loss reserves totaled \$4.1 billion at March 31st. Managed basis credit loss reserves as a percent of managed basis receivables was 4.10 percent, compared to 3.78 percent at both year-end 2001 and a year ago."⁶⁰

July 17, 2002: "At June 30th, the managed basis delinquency ratio (60+days) was 4.53 percent, down 10 basis points from 4.63 percent at the end of March, led by improvement in the MasterCard/Visa portfolio. The managed basis delinquency ratio was 4.27 percent a year ago. The annualized managed basis net chargeoff ratio for the second quarter of 4.26 percent was 17 basis points higher than the first quarter and 55 basis points higher than a year ago.

...

Managed basis credit loss reserves totaled \$4.4 billion at June 30th. Managed basis

⁵⁹ "Household Reports Record Quarterly and Full-Year Net Income," PR Newswire, January 16, 2002, pp. 2-3 (Fischel Second Rebuttal Report, Exhibit 9).

⁶⁰ "Household Reports Record First Quarter Net Income," PR Newswire, April 17, 2002, p. 3 (Fischel Second Rebuttal Report, Exhibit 10).

credit loss reserves as a percent of managed basis receivables equaled 4.14 percent, up from 4.10 percent at March 31st and 3.78 percent a year ago.”⁶¹

October 16, 2002: “At September 30th, the managed basis delinquency ratio (60+days) was 4.82 percent, compared to 4.53 percent in the second quarter and 4.43 percent a year ago. Higher delinquency in the credit card and real estate secured portfolios drove the increase. The annualized managed basis net charge-off ratio for the third quarter was 4.39 percent, up from 4.26 percent for the second quarter and 3.74 percent for the year-ago quarter.

...

Managed basis credit loss reserves totaled \$4.7 billion at the end of the third quarter. At June 30th, managed basis credit loss reserves were \$4.4 billion and totaled \$3.6 billion at the end of the third quarter of 2001. The managed basis ratio of credit loss reserves to managed receivables equaled 4.36 percent at September 30th, compared to 4.14 percent at June 30th and 3.72 percent a year earlier.”⁶²

46. Indeed, analysis of Household’s operating results indicates that its business performance did suffer. Analysis in my Initial Report demonstrates that the performance of Household’s assets deteriorated throughout the Observation Window. For example, Exhibit 5 to my Initial Report demonstrates that Household’s customer delinquency rate increased from 4.5% for the quarter ending September 30, 2001, which immediately preceded the Observation Window, to 4.9% for the quarter ending September 30, 2002, near the end of the Observation Window. Similarly, Exhibit 6 to my Initial Report shows that Household’s net charge-offs of consumer receivables increased from 3.4% for the quarter ending September 30, 2001 to 4.0% for the quarter ending September 30, 2002. And Exhibit 9 to my Initial Report shows that net charge-offs of consumer receivables for the auto finance segment in particular increased from 3.7% to 5.5% over the same period. Notably Fischel does not address these metrics in his Second Rebuttal Report when he asserts incorrectly that “Household’s business performance cannot explain leakage.”⁶³

⁶¹ “Household Reports Record Second Quarter Results on Strong Receivables Growth,” PR Newswire, July 17, 2002, p. 3 (Fischel Second Rebuttal Report, Exhibit 11).

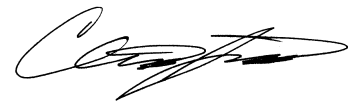
⁶² “Household Reports Operating Net Income of \$1.17 Per Share for the Third Quarter,” PR Newswire, October 16, 2002, p. 3 (Fischel Second Rebuttal Report, Exhibit 12).

⁶³ Second Rebuttal Report, p. 10.

IX. Conclusion

47. In sum, it remains my opinion that there were numerous types of nonfraud information released during Fischel's Observation Window that could have affected, and based on my industry experience, did affect, the stock price of Household and similar subprime lenders more negatively than such information would have affected the stock prices of the broader set of financial institutions represented by the S&P Financials Index. Indeed, analysis of the Subprime Lenders discussed in Fischel's Second Rebuttal Report establishes that shifts in the macroeconomic and regulatory environment *did in fact* disproportionately negatively impact firms like Household relative to his broad S&P Financials Index. Simply performing a regression analysis as Fischel has done is insufficient to establish that "no firm-specific, nonfraud related information contributed to the decline in [Household's] stock price during the relevant time period."⁶⁴ Fischel's failure to reliably establish this renders the damages resulting from application of his Leakage Model entirely speculative.

Executed this 21st day of December in 2015,



Christopher M. James

⁶⁴ Appellate Order, p. 24.

Exhibit 1

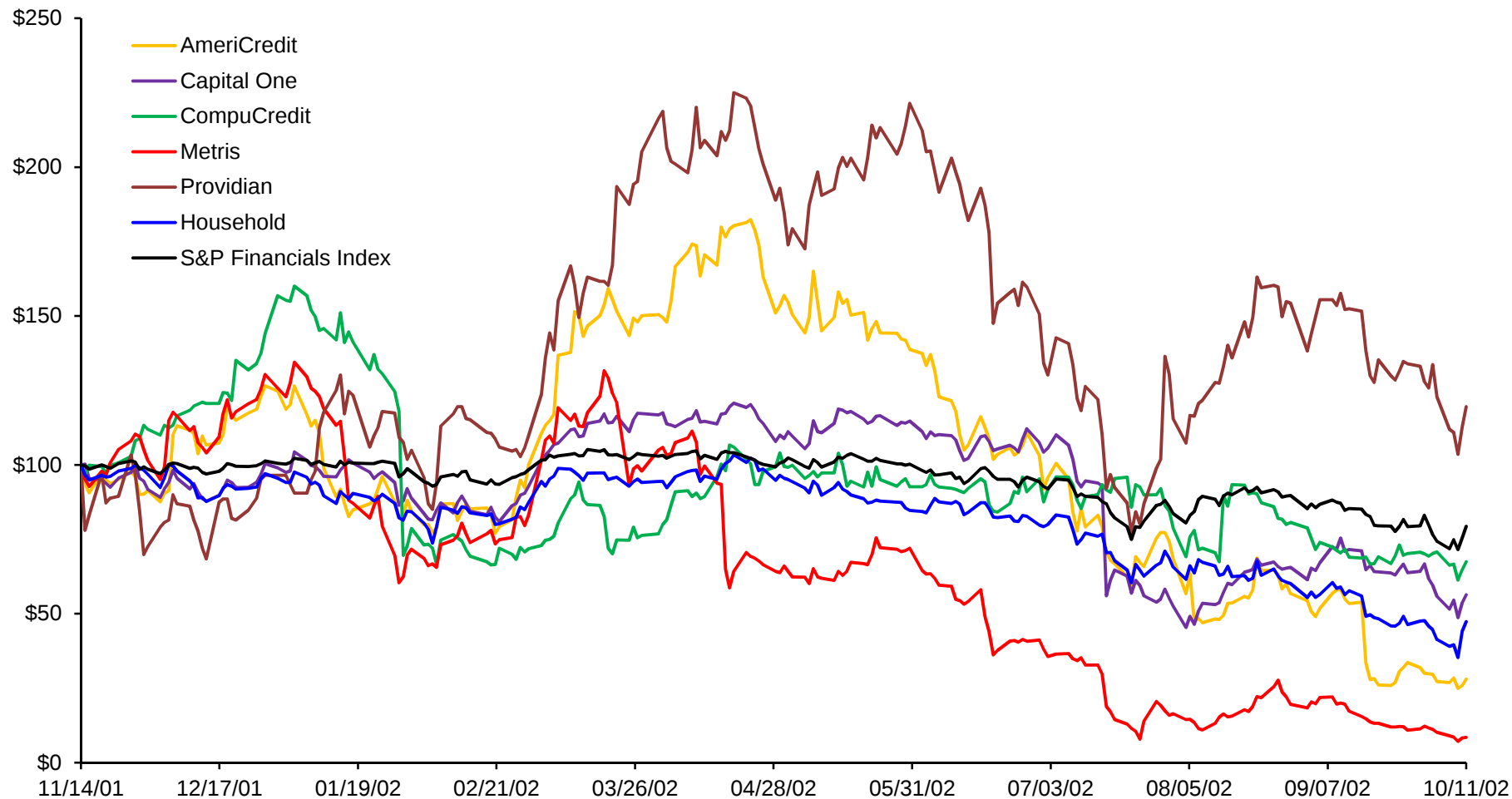
Materials Relied Upon

<u>Document Title, Bates Numbers, Control Numbers</u>	<u>Document Date</u>
Expert Reports	
Expert Report of Professor Christopher M. James, with Appendices and Exhibits	October 23, 2015
Expert Report of Allen Ferrell, with Appendices and Exhibits	October 23, 2015
Second Rebuttal Report of Daniel R. Fischel, with Appendices and Exhibits	November 23, 2015
Academic Literature and Other Reports	
Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," <i>Business Lawyer</i> , Vol. 49, No. 2	1994
Srinivasan Ragothaman and Bruce O. Bublitz, "An Empirical Analysis of the Impact of Asset Writedown Disclosures on Stockholder Wealth," <i>Quarterly Journal of Business and Economics</i> , Vol. 35, No. 3	1996
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Sanjai Bhagat and Roberta Romano, "Event Studies and the Law: Part II: Empirical Studies of Corporate Law," <i>American Law and Economics Review</i> , Vol. 4, No. 2	2002
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"HSBC to buy Household International," <i>MarketWatch</i>	November 14, 2002
SEC Filings	
Capital One, CompuCredit, Metris, and Providian Forms 10-K for the Fiscal Year Ended December 31, 2001 and December 31, 2002	
AmeriCredit 10-Q for Quarterly Period Ended December 31, 2001 and December 31, 2002	
Data Sources	
Bloomberg Bond Data for Capital One	
Federal Reserve Commercial Paper Data	
Fitch Research Prime and Subprime Credit Card Chargeoffs Data	
US Treasury Data	

All other documents cited in my Initial Report and Exhibits, as well as this report and exhibits.

Exhibit 2a

Most of the Subprime Lenders Underperformed the S&P Financials Index over Fischel's Observation Window

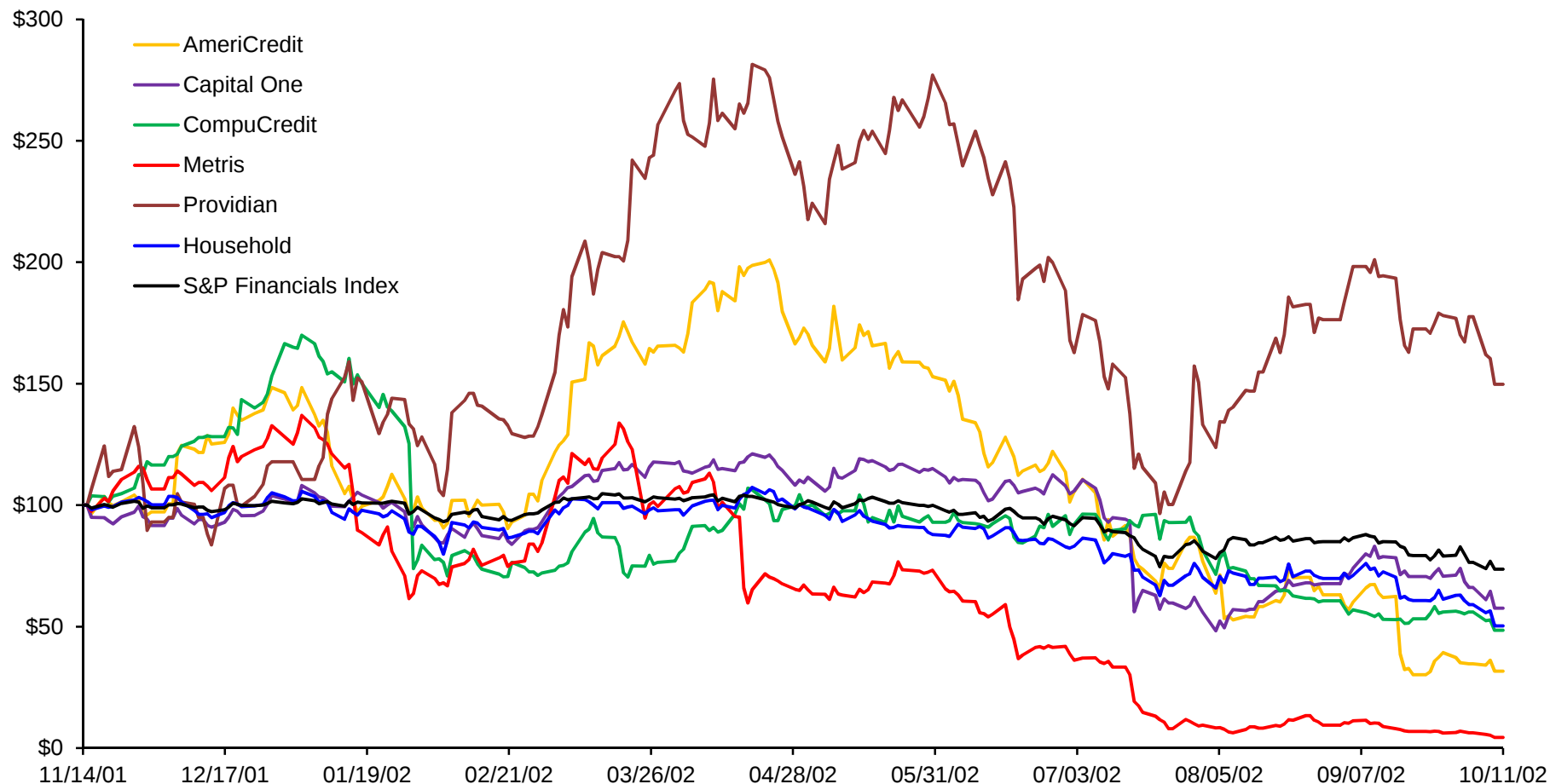


Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Expert Report of Allen Ferrell, 10/23/15

Note: All prices are pegged to \$100 on 11/14/01, the day immediately preceding Fischel's Observation Window. The only member of the Subprime Lenders Index that outperformed the S&P Financials Index over Fischel's Observation Window is Providian, whose stock price dropped 92% over Fischel's Control Period.

Exhibit 2b

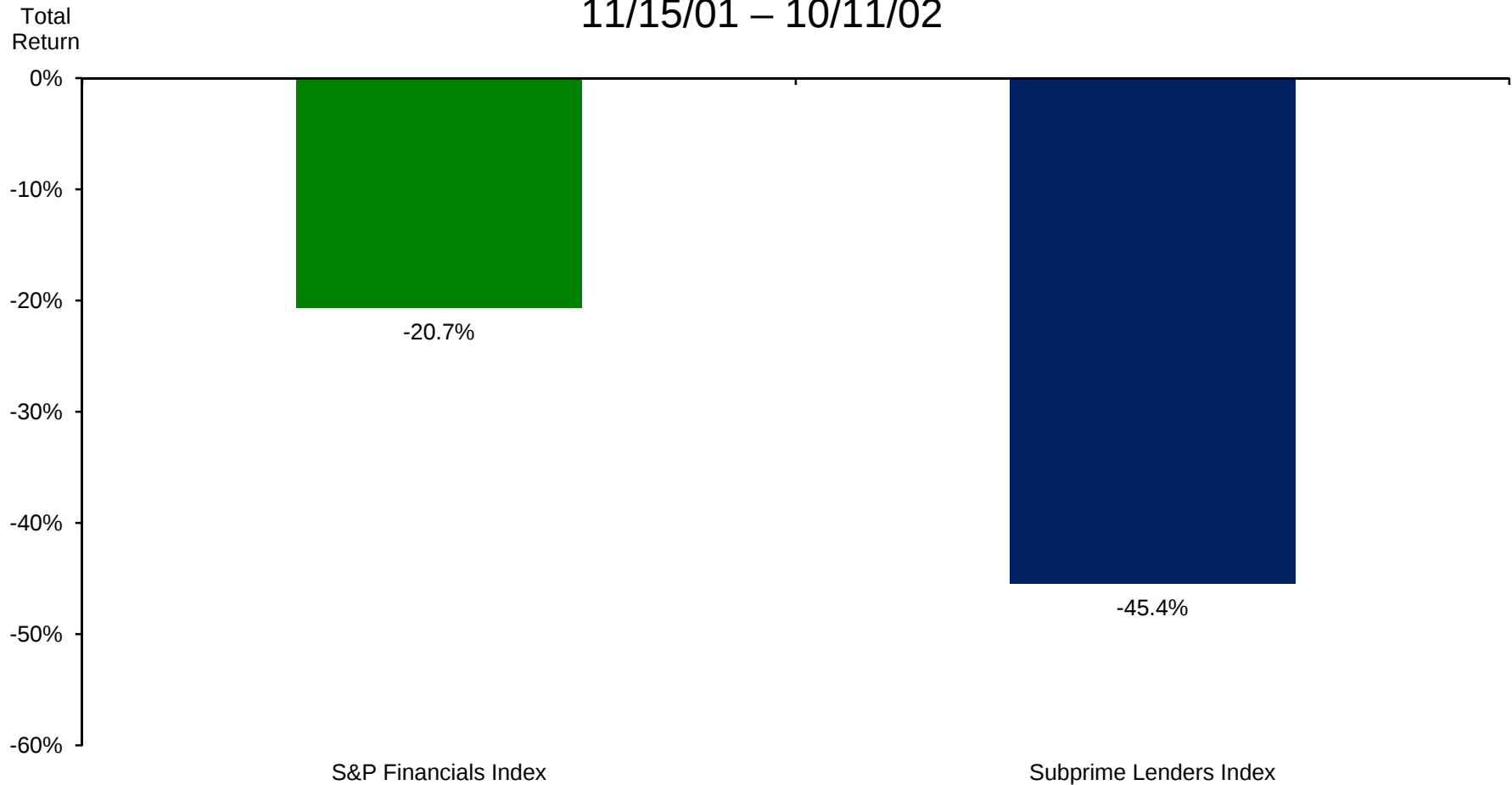
Most of the Subprime Lenders Underperformed the S&P Financials Index over Fischel's "Leakage Days"



Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Expert Report of Allen Ferrell, 10/23/15

Note: "Leakage Days" are days for which Fischel asserts leakage, i.e., the Observation Window excluding his 14 Specific Disclosure Days. A return of zero is assigned to each stock and the S&P Financials Index on the 14 Specific Disclosure Days. All prices are pegged to \$100 on 11/14/01, the day immediately preceding Fischel's Observation Window. The only member of the Subprime Lenders Index that outperformed the S&P Financials Index over Fischel's Observation Window is Providian, whose stock price dropped 92% over Fischel's Control Period.

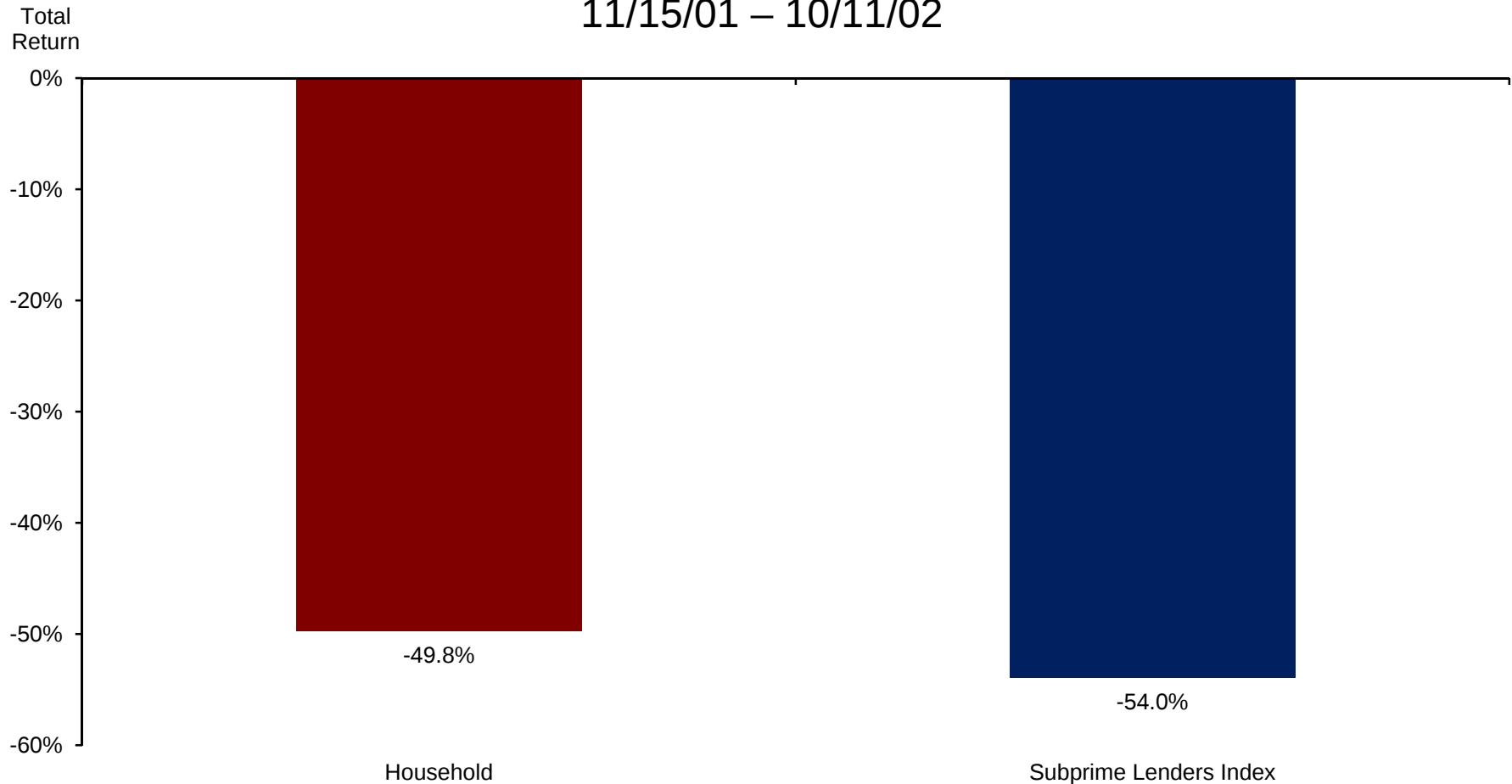
Exhibit 3a
Subprime Lenders Index Underperformed the S&P Financials Index
over Fischel's Observation Window
11/15/01 – 10/11/02



Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Expert Report of Allen Ferrell, 10/23/15

Note: The Subprime Lenders Index is an equal-weighted index comprised of AmeriCredit, Capital One, CompuCredit, Metris, and Providian.

Exhibit 3b
Household Performed Similarly to Subprime Lenders over
Fischel's "Leakage Days"
11/15/01 – 10/11/02

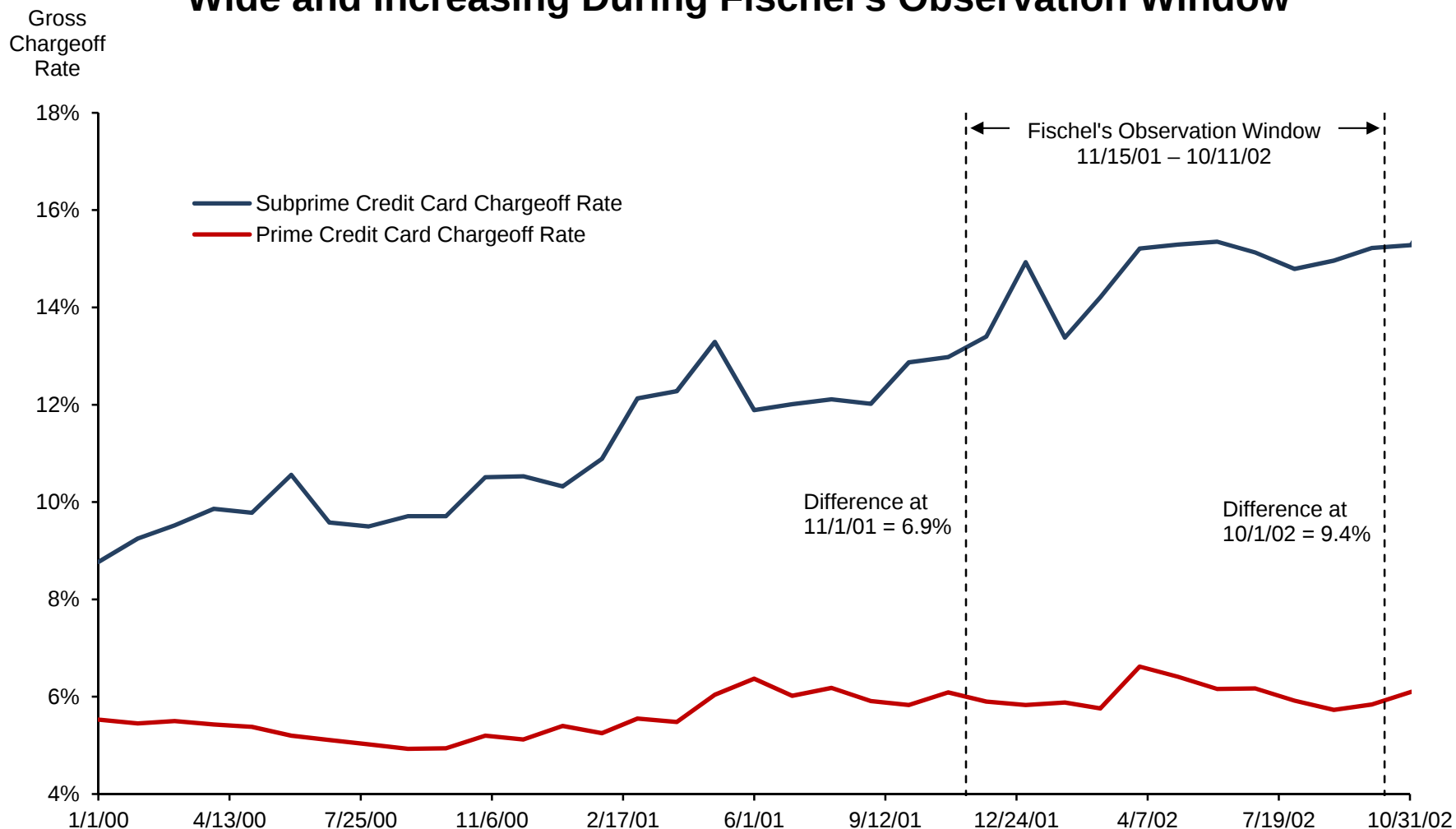


Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; Expert Report of Allen Ferrell, 10/23/15

Note: The Subprime Lenders Index is an equal-weighted index comprised of AmeriCredit, Capital One, CompuCredit, Metris, and Providian. "Leakage Days" are days for which Fischel asserts leakage, i.e., the Observation Window excluding his 14 Specific Disclosure Days. A return of zero is assigned to each stock and the S&P 500 Financial Index on the 14 Specific Disclosure Days.

Exhibit 4

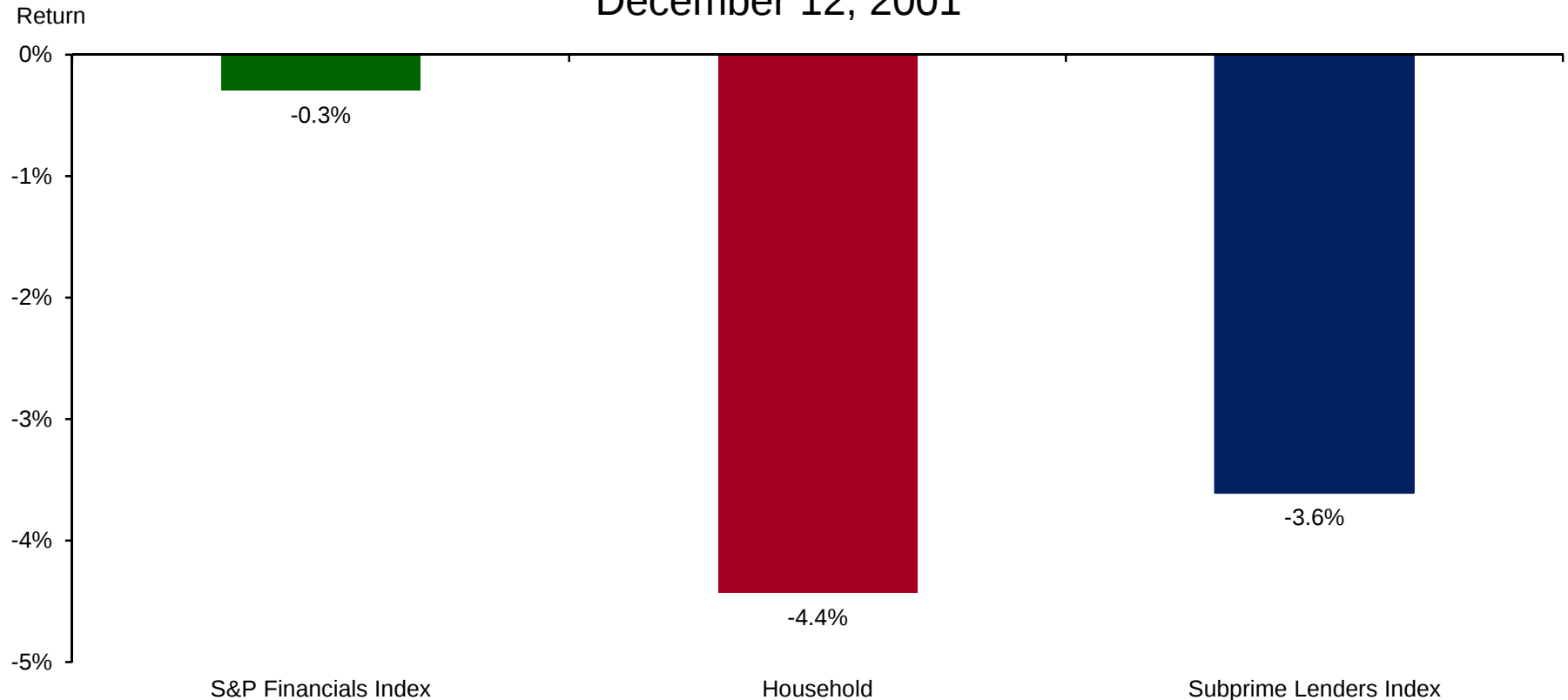
The Difference Between Prime and Subprime Credit Card Performance was Wide and Increasing During Fischel's Observation Window



Source: Fitch Research

Note: Data include securitized loans only. Gross chargeoff rate data are released on the first day of every month.

Exhibit 5a
Delinquency and Unemployment Data
Indicate Higher Losses for Subprime Lenders
December 12, 2001

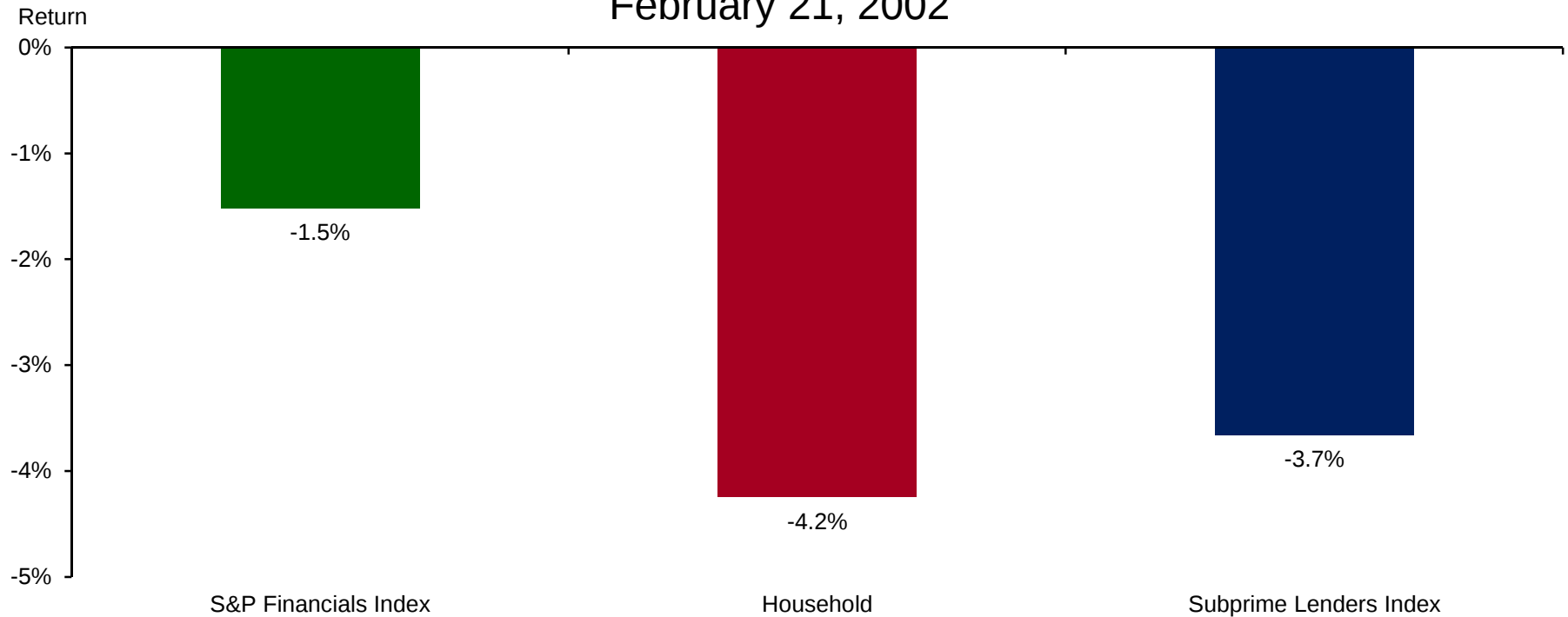


Business Wire: "[T]he delinquency trends—combined with the recent increase in unemployment rates—point toward higher charge-off rates in the upcoming months.... Subprime lenders who have witnessed the most rapid growth over the past few years, and have yet to manage through a recession, will feel the increase in losses more directly. These same lenders suffered the greatest absolute increase in losses this month."

Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Credit Card Charge-Offs Increased in October," Business Wire, 12/12/01

Note: The Subprime Lenders Index is an equal-weighted index comprised of AmeriCredit, Capital One, CompuCredit, Metris, and Providian.

Exhibit 5b
Volatile Market and Slow Economy
Disproportionately Affect Subprime Lenders
February 21, 2002



American Banker: "With capital markets volatile, competition keen, and the economy slogging through its first recession in a decade, investors have turned against finance companies."

Wall Street Journal: "[L]osses have been greatest for issuers of subprime cards, which are targeted to borrowers with checkered credit records."

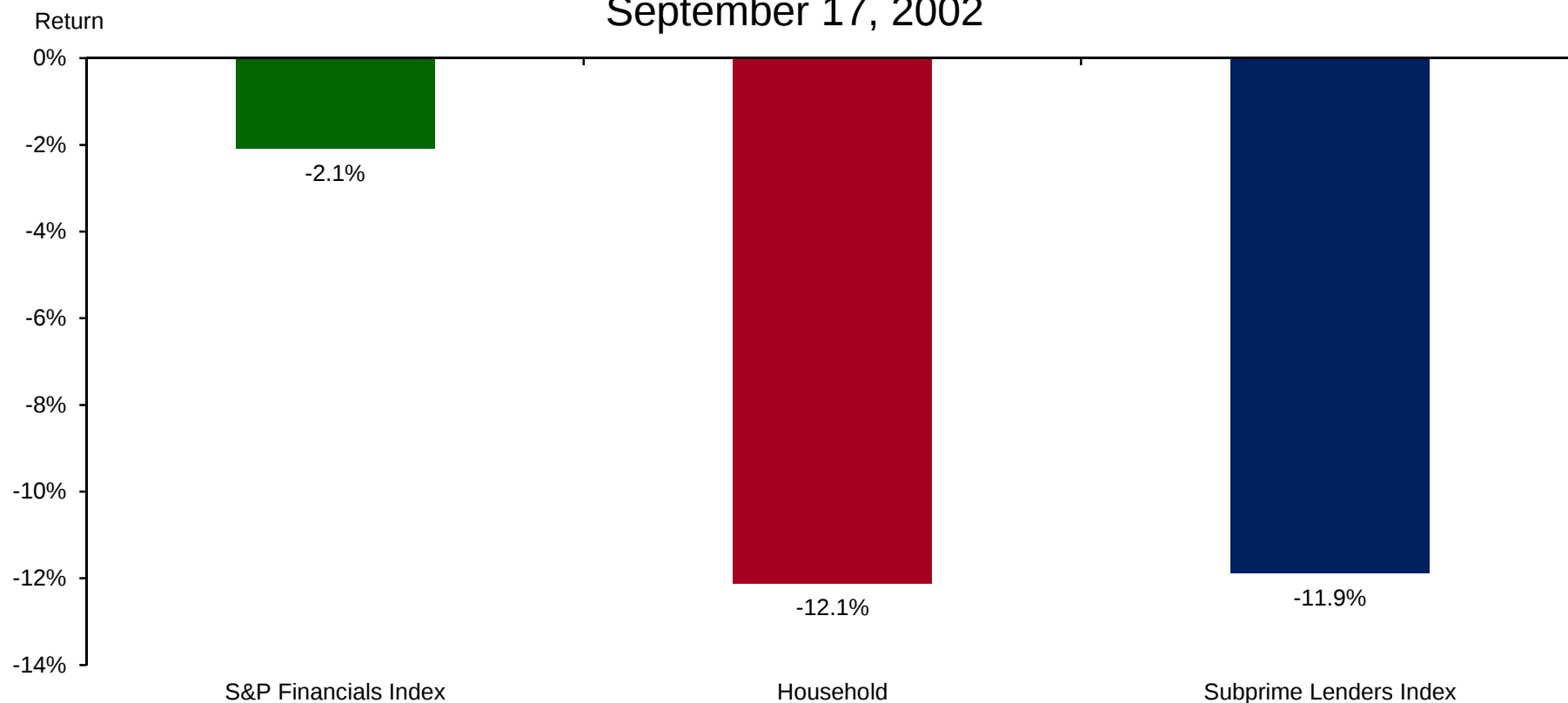
Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Consumer Finance Firms' Outlook Bleak, Fitch Says," American Banker, 2/21/02; "Credit-Card Companies Are Raising Rates," The Wall Street Journal, 2/21/02

Note: The Subprime Lenders Index is an equal-weighted index comprised of AmeriCredit, Capital One, CompuCredit, Metris, and Providian.

Exhibit 5c

Poor Performances of Subprime Mortgages and Auto Securitization Impact Subprime Lenders

September 17, 2002



A.G. Edwards: "[W]ith the announcement of additional negative press regarding the performance of sub-prime mortgages at MGIC and the credit related problems with the securitization portfolio at AmeriCredit (ACF) we believe that the uncertainty in the near term environment does not favor investors making additional investments in HI at this time."

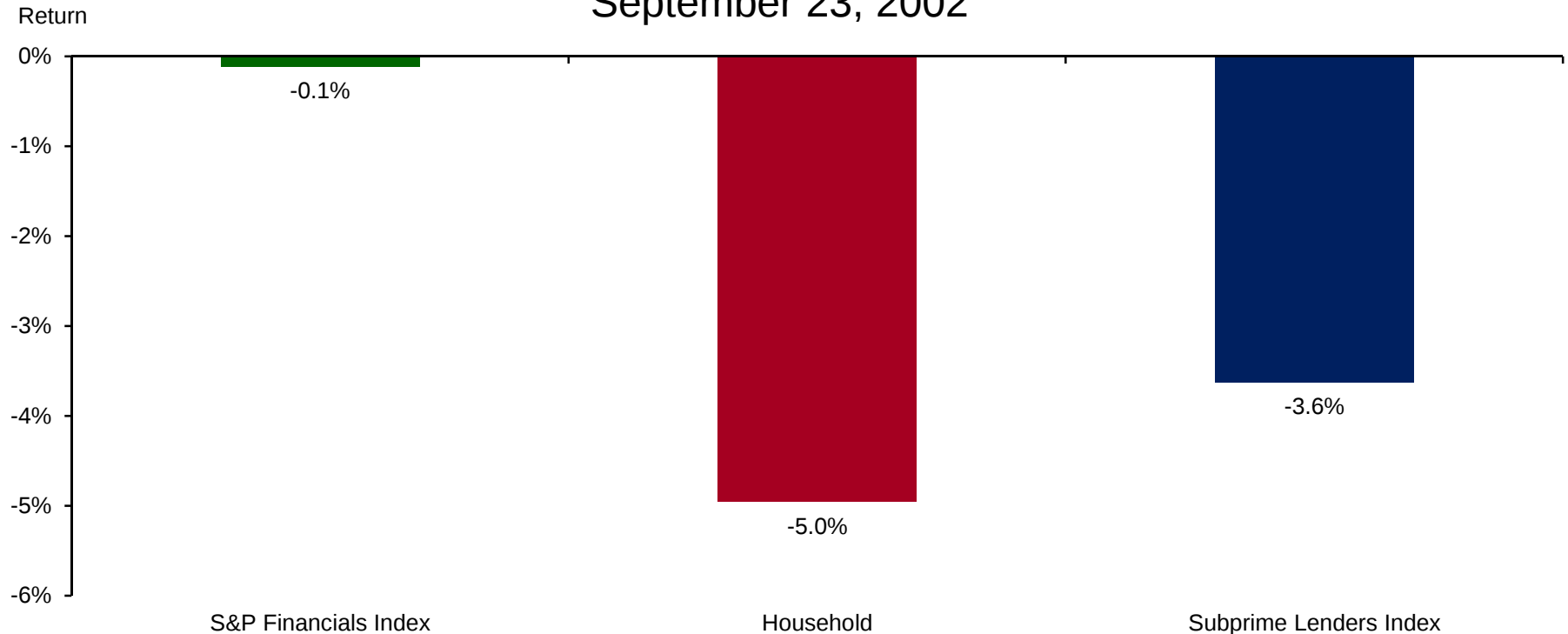
Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Lowering Rating on HI to Hold From Buy," A.G. Edwards, 9/18/02

Note: The Subprime Lenders Index is an equal-weighted index comprised of AmeriCredit, Capital One, CompuCredit, Metris, and Providian.

Exhibit 5d

Concerns about Exposure to Subprime Borrowers and the Health of the Economy Disproportionately Affect Subprime Lenders

September 23, 2002



Dow Jones Capital Markets Report: "Concerns about companies with high levels of debt and exposure to sub-prime borrowers as well as general concerns about the health of the economy are overriding any enthusiasm over Treasury yields at their lowest levels in more than 40 years.... Spreads to comparable Treasury's on bonds issued by... Household International (HI) have widened around 30 basis points on the day."

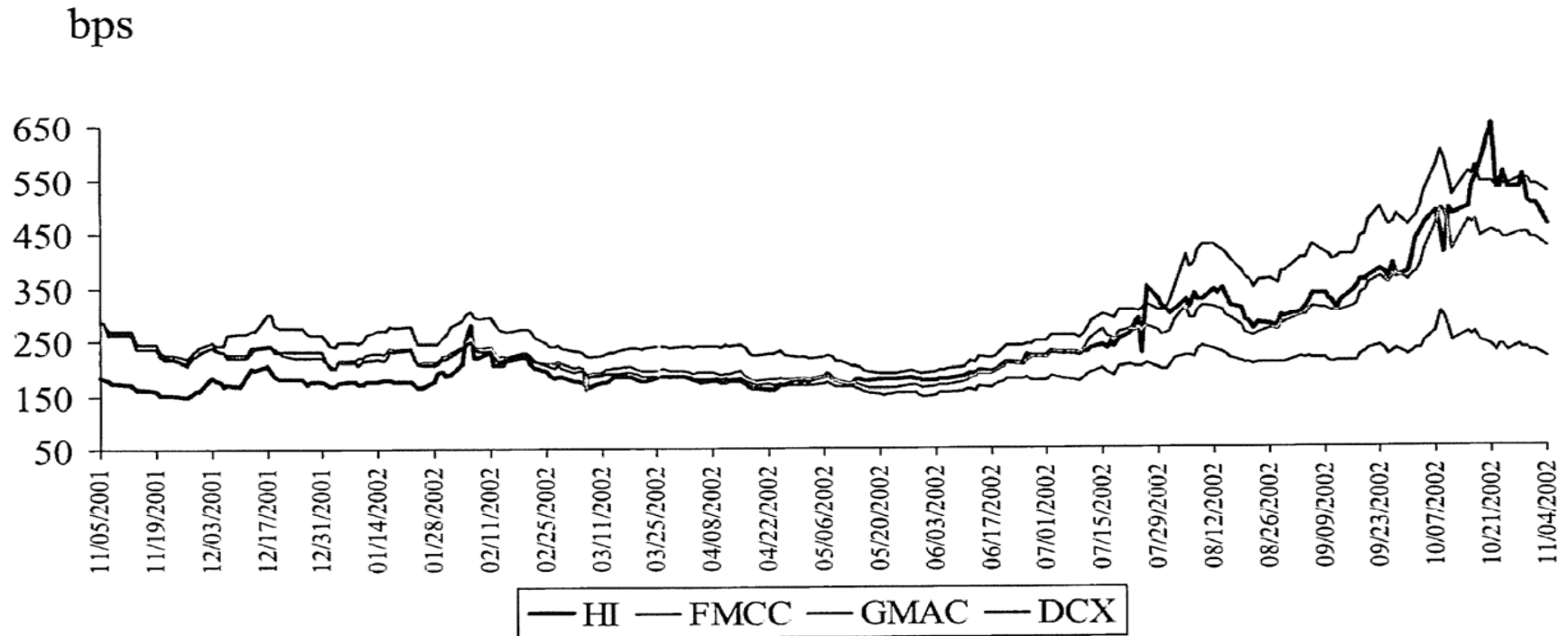
Source: Second Rebuttal Report of Daniel R. Fischel, 11/23/15; "Lowering Price Target On Persistent Headline Risk, But Maintaining SP Rating," CIBC World Markets, 9/22/02; "Finance Co. Bonds Slide Despite 41-Yr Low In Tsy Yields," Dow Jones Capital Markets Report, 9/23/02

Note: The Subprime Lenders Index is an equal-weighted index comprised of AmeriCredit, Capital One, CompuCredit, Metris, and Providian.

Exhibit 6

Historical 10-year Credit Spreads

11/05/01 – 11/04/02

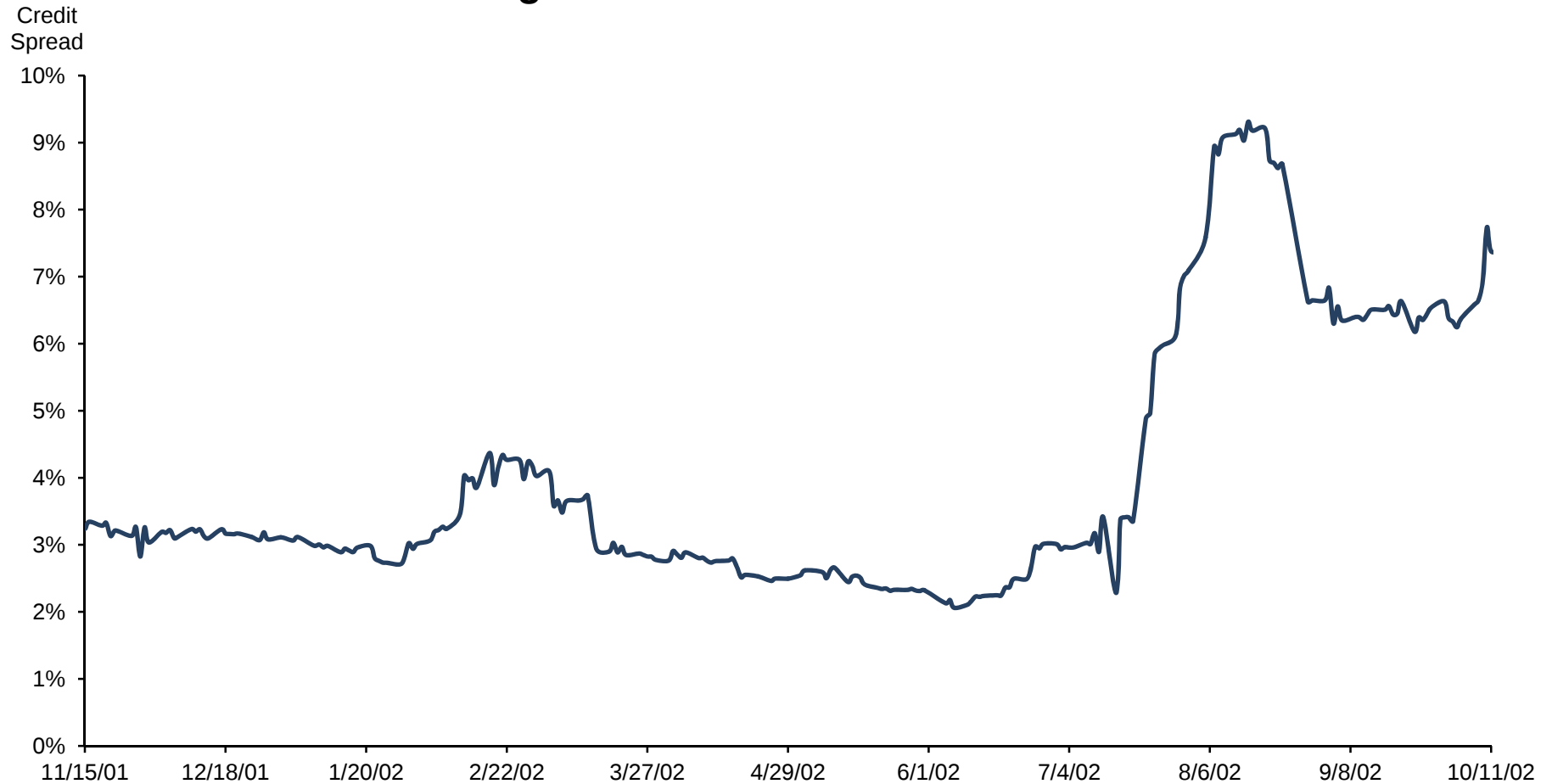


Source: HHS 03181300

Note: Tickers in chart represent Household, Freddie Mac, General Motors Acceptance Corporation, and DaimlerChrysler.

Exhibit 7

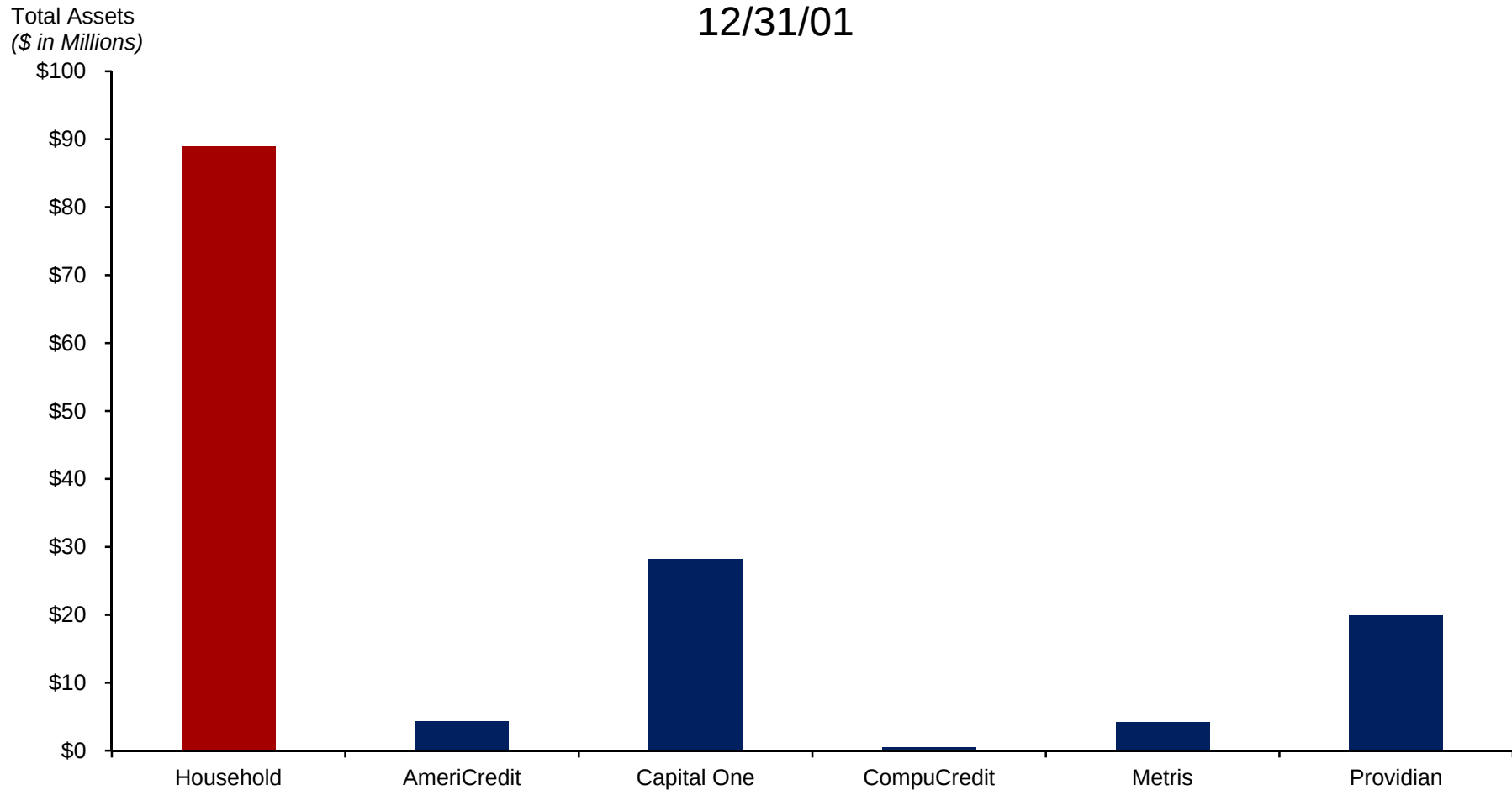
Capital One's 5-Year Credit Spread Increased Dramatically During Fischel's Observation Window



Source: *Bloomberg*; Board of Governors of the Federal Reserve System; Second Rebuttal Report of Daniel R. Fischel, 11/23/15

Note: Credit Spread represents the difference between the yield to maturity on a Capital One bond (CUSIP: 14040EER9) maturing approximately 4 years from the beginning of Fischel's Observation Window, and the 5-Year Treasury rate. Credit spread is calculated on a daily basis when daily yield to maturity is available for the Capital One bond.

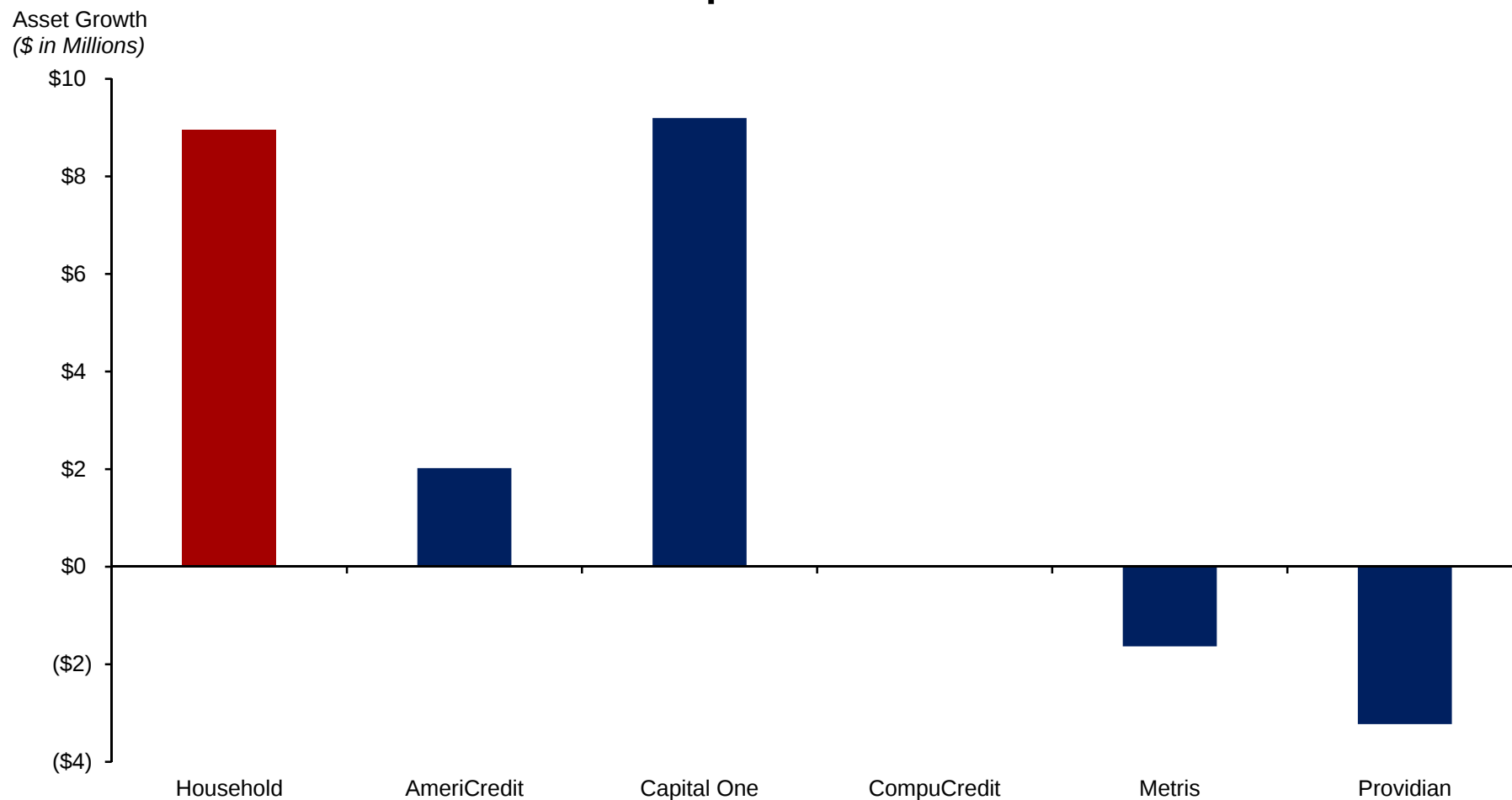
Exhibit 8a
Household's Asset Base Was Much Larger
Than Other Subprime Lenders' Asset Bases
12/31/01



Source: Household International, Capital One, CompuCredit, Metris, and Providian Forms 10-K for the period ended December 31, 2001; AmeriCredit Form 10-Q for the period ended December 31, 2001.

Exhibit 8b

Household's Asset Growth over 2002 Was Much Larger Than Most Other Subprime Lenders' Asset Growth



Source: Household International, Capital One, CompuCredit, Metris, and Providian Forms 10-K for the periods ended December 31, 2001 and December 31, 2002; AmeriCredit Forms 10-Q for the periods ended December 31, 2001 and December 31, 2002.

Note: Over 2002, the change in CompuCredit's total assets was -\$17,542.

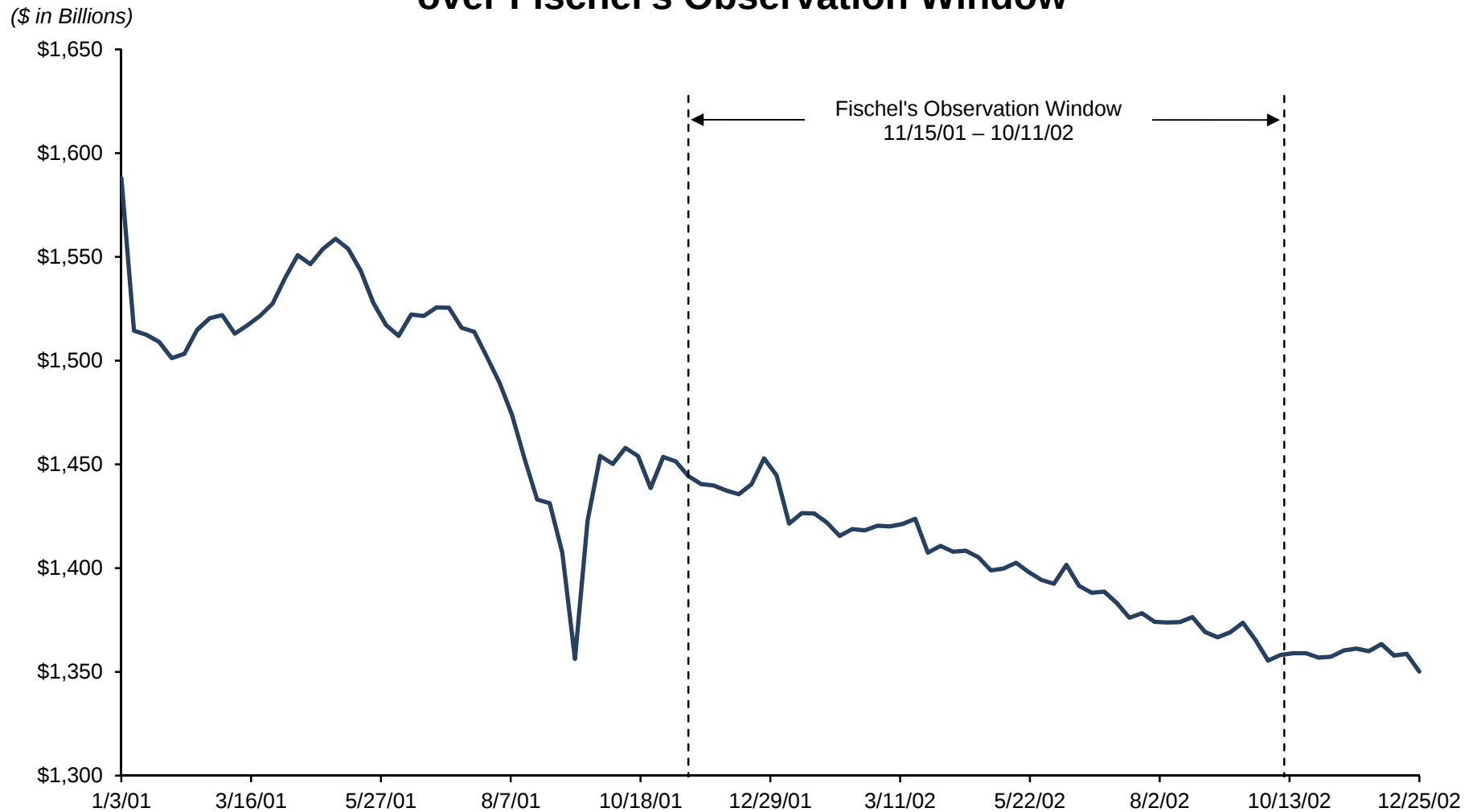
Exhibit 8c
Composition of Household's Debt
2001 – 2002
(\$ in Millions)

	2001		2002	
	Amount	% of Total Debt	Amount	% of Total Debt
Total Assets	\$88,911		\$97,861	
Debt:				
Deposits	\$6,562	9%	\$821	1%
Commercial Paper	\$9,141	12%	\$4,605	6%
Bank and Other Borrowings	\$2,883	4%	\$1,523	2%
Senior and Senior Subordinated Debt	\$56,824	75%	\$74,776	91%
Total Debt	\$75,410	100%	\$81,726	100%

Source: Household International Forms 10-K for the periods ended December 31, 2001 and December 31, 2002

Exhibit 9

U.S. Commercial Paper Outstanding Decreased Substantially over Fischel's Observation Window



Source: Board of Governors of the Federal Reserve System (US); Second Rebuttal Report of Daniel R. Fischel, 11/23/15

Note: The data reported are computed weekly and seasonally-adjusted.

Exhibit 10
Maturity Profile of Household's Outstanding
Senior and Senior Subordinated Debt
2001 – 2002
(\$ in Millions)

<i>As of 12/31/01</i>	Amount	% of Total
2002	10,492.5	18.5%
2003	9,980.0	17.6%
2004	5,800.9	10.2%
2005	5,970.0	10.5%
2006	6,652.0	11.7%
Thereafter	17,928.2	31.6%
Total	56,823.6	100.0%

<i>As of 12/31/02</i>	Amount	% of Total
2003	19,724.3	26.4%
2004	8,690.6	11.6%
2005	9,039.1	12.1%
2006	6,090.8	8.1%
2007	6,607.5	8.8%
Thereafter	24,623.9	32.9%
Total	74,776.2	100.0%

Source: Household International Forms 10-K for the periods ended
December 31, 2001 and December 31, 2002