

**IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

IN RE GENWORTH FINANCIAL, INC.
SECURITIES LITIGATION

No. 14-CV-02392 (AKH)

DECLARATION OF STEVEN P.
FEINSTEIN, PH.D., CFA IN SUPPORT OF
PLAINTIFFS' MOTION FOR CLASS
CERTIFICATION

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I. SCOPE OF PROJECT AND DECLARATION

1. I was asked by Robbins Geller Rudman & Dowd LLP and Labaton Sucharow LLP, Lead Counsel for Plaintiffs, to determine whether the common stock of Genworth Financial, Inc. (“Genworth” or the “Company”) traded in an efficient market during the period from 3 November 2011 to 17 April 2012 (the “Class Period”).
2. In addition, I have been asked to opine on whether damages in this matter can be computed using a common methodology for all Class members in connection with their claims under Section 10(b) of the Securities Exchange Act of 1934 (the “Exchange Act”) and U.S. Securities & Exchange Commission (“SEC”) Rule 10b-5 adopted thereunder (collectively, “Section 10(b)").
3. Toward these ends, I analyzed the market for Genworth common stock, the price behavior of the stock, and the factors that are generally accepted to be indicative of market efficiency. I examined Company press releases, conference call transcripts, equity analyst reports, news articles, SEC filings, security prices, trading volume, the performance of the overall stock market, and the performance of Genworth’s peer group, as well as other pertinent data and documents. I also read Plaintiffs’ Second Amended Class Action Complaint (the “Complaint”) dated 17 April 2015, and considered the allegations therein. Exhibit-1 lists the documents I considered in preparing this declaration and arriving at the opinions expressed herein.
4. This declaration presents my methodology, findings, and conclusions.
5. I reserve the right to amend, refine, or modify my opinion and declaration, including in the event any additional information or analyses become available.

II. CREDENTIALS

6. I am an Associate Professor of Finance at Babson College, and the founder and president of Crowninshield Financial Research, Inc., a financial economics consulting firm.
7. I hold a Ph.D. in Economics from Yale University, a Master of Philosophy degree in Economics from Yale University, a Master of Arts in Economics from Yale University, and a Bachelor of Arts degree in Economics from Pomona College. I also hold the Chartered Financial Analyst (“CFA”) designation, granted by the CFA Institute.
8. At Babson College, I have taught undergraduate and MBA level courses in Capital Markets, Investments, Equity Analysis, Fixed Income Analysis, Financial Management, Risk Management, Quantitative Methods, and Security Valuation. I have also taught executive courses on investments and corporate financial management for numerous corporations. Other courses I have taught are listed in my curriculum vitae, which is attached as Exhibit-2.
9. At Babson College, I have held the Chair in Applied Investments and served as the Director of the Stephen D. Cutler Investment Management Center, a research and education center dedicated to the study and teaching of investments and capital markets.
10. Prior to my joining the faculty at Babson College, I taught finance at Boston University. Previously, I was an Economist at the Federal Reserve Bank of Atlanta where my primary responsibilities were to monitor financial markets, analyze proposed regulation, and advise the Bank President in preparation for his participation in meetings of the Federal Open Market Committee – the government body responsible for monetary policy in the United States.
11. I have published extensively in the field of finance. My finance articles have appeared in the *Atlanta Federal Reserve Bank Economic Review*, *Derivatives Quarterly*, *Derivatives Weekly*, *The Engineering Economist*, *The Journal of Risk*, *The American Bankruptcy Institute Journal*, *The Journal of Financial Planning*, *The Journal of Forensic Economics*, *Managerial Finance*, *Risk Management*, and *Primus*. I am the author of *Finance and Accounting for Project Management*, published by the American Management Association. I wrote two chapters in the book *The Portable MBA in Finance and Accounting* – one on corporate financial planning and the other on risk management. I have presented research at the annual conventions of the American Finance Association,

the Academy of Financial Services, the Multinational Finance Society, the Financial Management Association, the Taxpayers Against Fraud Education Fund Conference, and the International Conference on Applied Business Research. Co-authored papers of mine have been presented at the Eastern Finance Association meetings and the Midwestern Finance Association meetings. A list of all the publications I authored in the previous ten years can be found in my curriculum vitae, which is attached as Exhibit-2.

12. I have been selected to review papers for numerous finance journals and conferences, and I have reviewed finance textbook manuscripts for Prentice-Hall, Elsevier, Blackwell, and Southwestern Publishing. I have been quoted on matters relating to finance and investments in *The Wall Street Journal*, *The Washington Post*, *The New York Times*, *The Financial Times*, *The Boston Globe*, and *Bloomberg News*, and my research relating to financial analysis and valuation has been discussed in *The Wall Street Journal*, *Bond Buyer*, and *Grant's Municipal Bond Observer*.
13. I am a member of the American Finance Association, the Financial Management Association, the North American Case Research Association, the National Association of Forensic Economics, the CFA Institute, and the Boston Security Analysts Society, where I have served as a member of the education committee and ethics subcommittee. I served on the Fixed Income Specialization Examination Committee of the CFA Institute.
14. The CFA designation is the premier credential for financial analysts worldwide. In order to receive this credential, applicants must pass a series of three exams covering such topics as economics, equity analysis, financial valuation, business analysis, quantitative methods, investment analysis, portfolio management, risk management, financial accounting, and ethical and professional standards. For over ten years I taught in the Boston University CFA Review Program and the Boston Security Analysts Society CFA Review Program – two of the leading review programs that prepared candidates for the CFA exams. In both of these programs I taught candidates at the most advanced level.
15. In addition to my teaching, research, CFA, and academic community responsibilities, I practice extensively as a financial consultant. Past clients include the United States Securities and Exchange Commission, the Internal Revenue Service, the Attorney General of the State of Illinois, and the National Association of Securities Dealers. As a financial consultant, I have conducted analyses and presented opinions related to markets,

valuation, and damages in over 70 cases. Exhibit-3 lists my prior testimony appearances over the past four years.

16. I am the sole owner of the consulting firm Crowninshield Financial Research, which receives compensation for the work performed by me and the analysts who assist me on this case. My firm is being compensated at a rate of \$750 per hour for my work. My compensation is neither contingent on my findings nor on the outcome of this matter.

III. CONCLUSIONS

17. Genworth common stock traded in an efficient market over the course of the Class Period. Genworth common stock satisfied the factors set forth in *Cammer v. Bloom*, 711 F. Supp. 1264, 1273 (D.N.J. 1989) and *Krogman v. Sterritt*, 202 F.R.D. 467 (N.D. Tex. 2001), which, consistent with financial economic principles and empirical research, indicate market efficiency.
18. Genworth common stock exhibited a statistically significant price decline in response to new information on the disclosure event date, as described herein. Additional statistical tests examining the behavior of Genworth common stock on earnings announcement dates further indicate that Genworth common stock responded to new, Company-specific information throughout the Class Period. This empirical analysis demonstrates that there was a cause and effect relationship between the release of new, Company-specific information and movements in Genworth's common stock price, which not only indicates market efficiency, but demonstrates the essence of market efficiency.
19. Based on the foregoing, I conclude that Genworth common stock traded in an efficient market over the course of the Class Period.
20. Damages in this matter can be computed using a common methodology for each of the claims alleged on behalf of the Class, respectively.

IV. FACTUAL BACKGROUND

A. About the Company

21. Prior to and throughout the Class Period, Genworth was primarily in the business of insurance, insurance-related activities, and financial services.¹ Beginning in Q4 2011, Genworth reorganized its business into three divisions: 1) Insurance and Wealth Management, 2) Mortgage Insurance (“MI”), and 3) Corporate and Runoff.² The MI division was comprised of two business segments, International MI and U.S. Mortgage Insurance (“USMI”).³
22. According to the Company, the International MI segment provided mortgage insurance products and related services in Canada, Australia, Mexico, and Europe.⁴ The USMI segment provided private mortgage insurance throughout the United States.⁵
23. For the fiscal year (“FY”) ended 31 December 2011, the International MI segment comprised 8.5% of the Company’s total assets.⁶ For the same period, the International MI segment reported net operating income of \$332 million, of which the Australian MI business accounted for \$200 million, or 60.2%, of the segment’s total operating net income.⁷

¹ Genworth Financial, Inc., Form 10-K for the Fiscal Year Ended 31 December 2011, filed 27 February 2012, p. 4.

² Id.

³ Id.

⁴ Id., p. 15.

⁵ Id., p. 21.

⁶ Id., p. 15 and p. 93.

⁷ Id., p. 15.

24. Genworth, as a holding company, generated no revenues but received quarterly dividends from its subsidiaries.⁸ The proceeds from Genworth's subsidiaries are the Company's principal source of cash for operating and tax-related expenses, as well as debt repayment.⁹ In FY 2011, Genworth received \$478 million in dividends from its subsidiaries,¹⁰ of which the Australian MI business segment accounted for \$125 million, or 26.2%.¹¹
25. Throughout the Class Period, Genworth common stock was listed and traded on the New York Stock Exchange ("NYSE") under the ticker symbol GNW. As of the close of trading on 2 November 2011, the last trading day before the Class Period began, Genworth's market capitalization (the aggregate value of all outstanding common shares) stood at \$3.03 billion,¹² according to share price data obtained from the Center for Research in Security Prices ("CRSP"), a reliable data source that is widely used by academic researchers and investment professionals. The Company's market capitalization climbed to a Class Period peak of \$4.69 billion on 21 February 2012. By 18 April 2012, the first trading day after the Class Period, the Company's market capitalization had fallen to \$2.88 billion. The decline in market capitalization from the peak during the Class Period to the first trading day after the Class Period was \$1.80 billion, representing a loss of 38.5% of the Company's equity value.¹³

V. EFFICIENT MARKET DEFINED

26. The definition of market efficiency set forth by Judge Alfred J. Lechner, Jr. in the 1989 *Cammer v. Bloom* decision is often cited as a legal authority on the meaning of market efficiency and is consistent with the definition of informational efficiency generally accepted by the academic finance community:

⁸ Id., p. 42.

⁹ Id.

¹⁰ Id., p. 194.

¹¹ "Initiating with a BUY and \$11 Price Target; Mortgage Unit Concerns Mask Value, Optionality," by Mark Palmer, BTIG, analyst report, 11 April 2012, p. 6.

¹² Shares outstanding data obtained from Company SEC filings.

¹³ Apparent mathematical discrepancy due to rounding.

“As relevant here, courts have permitted a rebuttable presumption of reliance in the case of securities traded in ‘efficient markets’ (*i.e.*, markets which are so active and followed that material information disclosed by a company is expected to be reflected in the stock price).”
Cammer v. Bloom Opinion, 711 F. Supp. 1264, 1273 (D.N.J. 1989).

27. Judge Lechner also cited the definitions offered by commentators Alan R. Bromberg and Lewis D. Lowenfels, and by finance professor Eugene Fama:

“An efficient market is one which rapidly reflects new information in price.”
Alan Bromberg & Lewis Lowenfels, *Securities Fraud and Commodities Fraud*, §8.6 (Aug. 1988); *see also Cammer*, 711 F. Supp. at 1276.

“A market in which prices always ‘fully reflect’ available information is called ‘efficient.’”
“Efficient Capital Markets: A Review of Theory and Empirical Work,” by Eugene Fama, *Journal of Finance*, 1970, cited in *Cammer*, 711 F. Supp. at 1280.

28. Professor Fama elaborated on and refined his definition in a *Halliburton II* amici curiae that he co-authored:

“But economists do not generally disagree about whether market prices respond to new material information. In particular, there is little doubt that the stock price will increase reasonably promptly after favorable news about a company is released and decline after unfavorable news. Our conclusion that prices generally move reasonably promptly in the predicted direction in response to unexpected material public information (favorable or unfavorable) is perfectly consistent with the view that there are sometimes anomalies in the way markets process information and that bubbles can exist.”
Brief of Financial Economists as Amici Curiae in Support of Respondents, *Halliburton Co. and David Lesar v., Erica P. John Fund, Inc., FKA Archdiocese of Milwaukee Supporting Fund, Inc.*, 5 February 2014, p. 3 (emphasis in original).

29. The Supreme Court in the *Basic v. Levinson* decision focused on the same important characteristic at the heart of these definitions of market efficiency:

“The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company’s stock is determined by the available material information regarding the company and its business”

Basic v. Levinson, 485 U.S. 224, 243, 108 S. Ct. 978, 988-89, 99 L. Ed. 2d 194 (1988); see also *Cammer*, 711 F. Supp. at 1276.

30. The 2013 *Amgen* decision defined market efficiency similarly:

“The fraud-on-the market premise is that the price of a security traded in an efficient market will reflect all publicly available information about a company”

Amgen Inc. v. Conn. Ret. Plans & Trust Funds, *U.S.*, 133 S. Ct. 1184, 1190 (2013), 185 L. Ed. 2d 308 (2013).

31. In its recent *Halliburton II* decision, the Supreme Court addressed the cause and effect relationship at the center of market efficiency thusly:

“Even the foremost critics of the efficient-capital-markets hypothesis acknowledge that public information generally affects stock prices. . . . Debates about the precise *degree* to which stock prices accurately reflect public information are thus largely beside the point. ‘That the . . . price [of a stock] may be inaccurate does not detract from the fact that false statements affect it, and cause loss,’ which is ‘all that *Basic* requires.’”

Halliburton Co. v. Erica P. John Fund, Inc., 134 S. Ct. 2398, 2410, 189 L. Ed. 339 (2014) (“*Halliburton II*”) (emphasis in original).

32. An efficient market, as defined by *Cammer*, *Basic*, *Amgen*, Bromberg and Lowenfels, and Fama, is a market in which available information is rapidly incorporated into the price of a security such that the trading price reflects all available information. As these cases and *Halliburton II* recognized, market efficiency is relevant to a securities case as it addresses the question of whether false information (*e.g.*, in the form of an alleged misrepresentation or omission) would likely have impacted the prices at which investors bought and sold, and which was therefore relied upon.

A. The *Cammer* Factors

33. The *Cammer* opinion lays out five factors that would indicate the market for a security is efficient. As described below, economic rationales support each factor as an indicator of market efficiency. The five factors are: 1) trading volume, 2) coverage by securities analysts, 3) number of market makers, 4) eligibility for S-3 registration, and 5) empirical evidence that the security price reacts to new, company-specific information.
34. Empirical research has confirmed that volume, number of market makers, and analyst coverage are indicative of market efficiency:

“Consistent with the efficiency indicators used recently by the courts, the inefficient firms have lower mean trading volume, fewer market makers, lower analyst following, and lower institutional ownership (number and percentage) than efficient firms.”
“**The Fraud-on-the-Market Theory and the Indicators of Common Stocks’ Efficiency,**” by Brad M. Barber, Paul A. Griffin, and Baruch Lev, *Journal of Corporation Law*, 1994, p. 302.

35. Barber, et al., also found that high institutional ownership was indicative of market efficiency.
36. With respect to the empirical factor, Barber, et al. used empirical tests as the standard for market efficiency by which to judge the probative value of the other variables. Consequently, they acknowledge the importance of the empirical factor.
37. Consistent with financial economic theory and empirical research, the language used by the *Cammer* court describes the factors not as five *necessary* factors, but rather as indicative of the degree to which the market for a security is expected to be efficient:

“There are several different characteristics pertaining to the markets for individual stocks which are probative of the degree to which the purchase price of a stock should reflect material company disclosures.”
Cammer, 711 F. Supp. at 1283.

38. The *Cammer* opinion describes the nature of the five factors as follows:

“There are several types of facts which, if alleged, might give rise to an inference that Coated Sales traded in an efficient market. It is useful to set forth an explanation of how the existence of such facts would cause the

understanding that disclosed company information (or misinformation) would be reflected in the company's stock price, the underpinning of the fraud on the market theory. *Peil, supra*, 806 F.2d at 1160.”
Id. at 1285-86 (footnote omitted).

“First, plaintiffs could have alleged there existed an average weekly trading volume during the class period in excess of a certain number of shares.”
Id. at 1286.

“Second, it would be persuasive to allege a significant number of securities analysts followed and reported on a company's stock during the class period.”
Id.

“Third, it could be alleged the stock had numerous market makers.”
Id.

“Fourth, as discussed it would be helpful to allege the company was entitled to file an S-3 Registration in connection with public offerings...”
Id. at 1287.

“Finally, it would be helpful to a plaintiff seeking to allege an efficient market to allege empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.”
Id.

“As previously noted, one of the most convincing ways to demonstrate efficiency would be to illustrate, over time, a cause and effect relationship between company disclosures and resulting movements in stock price.”
Id. at 1291.

B. The *Krogman* Factors

39. In addition to the five *Cammer* factors that indicate market efficiency, the district court in *Krogman v. Sterritt*, 202 F.R.D. 467 (N.D.Tex. 2001), and the Fifth Circuit Court of Appeals in *Unger v. Amedisys*, 401 F.3d 316 (5th Cir. 2005), concluded that three additional factors were also indicative of market efficiency.
40. These additional factors, the *Krogman* factors, are: 1) the company's market capitalization, 2) the stock's float, and 3) the typical bid-ask spread.

41. Market capitalization is the total value of all outstanding shares. It equals the number of shares outstanding times the price per share. Reasonably, the larger the market capitalization, the more prominent and well known the company will be. Larger companies tend to attract more analyst and news media coverage, and gain the attention of greater numbers of investors, including very large institutional investors. All of these characteristics, which accompany a large market capitalization, promote market efficiency.
42. The stock's float is the number of shares outstanding, less shares held by insiders and affiliated corporate entities. It is generally the number of shares available for trading by outside investors in the open market. Float is highly correlated with market capitalization, but it focuses on the shares available for trading rather than all outstanding shares. Stocks with large levels of float tend to trade more actively, attract more analyst and news media coverage, and garner the attention of greater numbers of investors, including large institutional investors. All of these characteristics, which accompany a high float level, promote market efficiency.
43. The bid-ask spread is the difference between the price at which market makers are offering to buy a security and the price at which they are offering the security for sale. If a security is actively traded and information about the security is readily available, the bid-ask spread will tend to be narrow. Moreover, a narrow bid-ask spread makes trading in the security less costly for investors, and thereby tends to attract greater interest, greater coverage, and greater volume, which in turn are factors that are generally considered to promote market efficiency.

VI. EFFICIENCY OF THE MARKET FOR GENWORTH COMMON STOCK

44. To assess whether the market for Genworth common stock was efficient during the Class Period, I analyzed the market for, and behavior of, Genworth common stock, focusing on the factors that are generally accepted to be indicative of market efficiency for a publicly-traded security.

A. Trading Volume

45. Throughout the Class Period, Genworth common stock traded regularly and actively. On average, 9.37 million shares changed hands daily.¹⁴ Genworth's common stock trading data is presented in Exhibit-4.
46. In addition to average daily trading volume, another volume metric to consider in determining market efficiency is the percentage of outstanding shares that turn over each week. During the Class Period, the average weekly trading volume of Genworth common stock was approximately 46.8 million shares, or 9.54% of shares outstanding.¹⁵ This level of trading activity is above levels accepted by courts as being indicative of market efficiency for common stock.¹⁶ In the case of the common stock of Coated Sales, Inc., the *Cammer* court cited the conclusion of Alan R. Bromberg and Lewis D. Lowenfels that "weekly trading of 2% or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; 1% would justify a substantial presumption."¹⁷ The trading volume for Genworth common stock during the Class Period was over four times the threshold for a strong presumption of market efficiency.
47. Both in terms of average daily trading volume and also on the basis of the percentage of outstanding shares traded weekly, the market for Genworth common stock was very active. Consistent with the *Cammer* opinion, economic theory, and empirical research, the active trading volume in Genworth common stock is strong evidence of the efficiency of the market for Genworth common stock over the course of the Class Period.

¹⁴ Data obtained from CRSP.

¹⁵ Estimated by averaging the ratio of the daily trading volume to the number of shares outstanding, and multiplying by 5 (the number of trading days in a typical week).

¹⁶ *Cammer*, 711 F. Supp. at 1286.

¹⁷ *Id.*, at 1293.

B. Analyst Coverage and Other Avenues of Information Dissemination

1. Analyst Coverage

48. Securities analysts disseminate and interpret information about the companies they cover. They conduct research and provide valuation opinions, helping market participants acquire relevant information and understand the implications of that information for valuation and investment decisions. Consequently, securities analysts facilitate the flow of information and the digestion of information within the marketplace. These functions promote market efficiency.
49. Genworth was the subject of active analyst coverage during the Class Period. From the Thomson Research database and CapitalIQ, I obtained analyst reports on Genworth during the Class Period: BTIG, Credit Suisse, JPMorgan, Morgan Stanley, Sandler O'Neill, Scotiabank, UBS, Standard & Poor's, and Wells Fargo.
50. Transcripts of Genworth's conference calls conducted during the Class Period reveal that equity analysts at two additional sell-side investment banking firms followed Genworth: Goldman Sachs, and Keefe Bruyette & Woods. According to the transcripts, the investment management firm Dowling & Partners also participated on the conference calls.
51. Consequently, at least 12 different firms covered Genworth during the Class Period.
52. Coverage by 12 analysts is considered broad coverage. Barber, et al., [1994] found that coverage by one or two analysts strengthened the presumption of efficiency for a publicly-traded stock.¹⁸ Consistent with the *Cammer* opinion, financial economic principles, and published empirical research, the coverage of Genworth by professional securities analysts is evidence of the efficiency of the market for Genworth common stock during the Class Period.

¹⁸ "The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency," by Brad M. Barber, Paul A. Griffin, and Baruch Lev, *Journal of Corporation Law*, 1994.

2. Institutional Ownership and Buy-Side Analysis

53. FactSet Research Systems (“FactSet”) provides data on institutional ownership of Genworth common stock. The data are compiled from the Form 13-F filings that major investment institutions are required to submit to the SEC. Major institutions are defined as firms or individuals that exercise investment discretion over the assets of others in excess of \$100 million. Large investment firms generally employ financial analysts who conduct their own research on the stocks they buy. According to the FactSet data, at least 413 major institutions owned Genworth common stock during the Class Period.¹⁹ This fact further supports a finding that the market for Genworth common stock was an efficient market during the Class Period.

3. News Coverage

54. The news media also facilitate the flow of material information to the marketplace, thereby promoting market efficiency. In the case of Genworth, such coverage was extensive. A Factiva database search established that at least 326 articles were published about the Company during the Class Period.²⁰

55. The articles obtained from Factiva include published news articles and press releases. Information also emerged throughout the Class Period in the form of SEC filings, conference calls, and presentations.

56. During the Class Period, therefore, information about Genworth was readily available to market participants as there was a consistent flow of news provided by news media, analysts, and various other sources. This extensive news coverage is further evidence of the efficiency of the market for Genworth stock.

¹⁹ According to filings that reported holdings, there were 413 institutions that held shares of Genworth common stock as of 31 December 2011 and 31 March 2012. There may have been additional institutions that held Genworth common stock during the Class Period, though not on the quarterly reporting dates.

²⁰ Based on a Factiva search in “*Dow Jones Newswires Or Press Release Wires Or Reuters Newswires Or The Wall Street Journal - All sources Or Major News and Business Sources All Sources*” for articles published during the Class Period where “Genworth Financial, Inc. Or Genworth Financial Mortgage Insurance Pty Limited Or Genworth MI Canada Inc.” was the “Company” search field parameter.

57. Genworth was not an obscure company, escaping the notice of analysts and investors. Rather, the Company was large, well known, widely covered, and widely held. These facts strongly support a finding that the market for Genworth common stock was efficient during the Class Period.

C. Market Makers and Listing on the New York Stock Exchange

58. The number of market makers is one of the factors the *Cammer* court determined indicates market efficiency. Market makers are financial intermediaries who trade in a particular security, standing ready to buy and sell with individual investors, institutions, and other market makers. A large number of market makers implies that many market participants are trading that particular stock, which generally results in a high degree of liquidity and a narrower bid-ask spread. With a large number of market makers, it is generally easy for investors to execute trades in a timely fashion and with reasonable transaction costs.
59. The subject company in the *Cammer* case, Coated Sales, Inc., was listed on the NASDAQ, an electronic exchange consisting of multiple competing market makers, using electronic systems to make quotes and effect trades.
60. The *Cammer* court's understanding that the market-making infrastructure of a stock market is indicative of its efficiency, or lack thereof, makes the fact that Genworth common stock traded on the venerable New York Stock Exchange during the Class Period highly relevant. The NYSE is one of the most renowned, most liquid, and most efficient forums for trading stocks in the world. Stocks on the NYSE are traded under the supervision of a lead market maker or "Designated Market Maker" ("DMM"), formerly known as a specialist.²¹ DMMs are responsible for maintaining a fair and orderly market for each security to which they are assigned.²²

²¹ "Fact Sheet; Designated Market Makers," NYSE Euronext, 2012.

²² "Organization and Functioning of Securities Markets," by Frank Reilly and Keith Brown, in *Equity and Fixed Income CFA Program Curriculum*, vol. 5, Pearson Custom Publishing, 2008.

61. In fact, citing Bromberg and Lowenfels, the *Cammer* court explicitly acknowledged the importance of an NYSE listing and the implications of such a listing for market efficiency.

“We think that, at a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System.”

Cammer, 711 F. Supp. at 1292 (quoting Bromberg & Lowenfels, *Securities Fraud and Commodities Fraud*, §8.6 (1988)).

62. At the time of the *Cammer* opinion the NYSE and NASDAQ were distinctly separate exchanges. NASDAQ market makers did not make markets for NYSE-listed stocks such as Genworth. However, since that time, the stock markets have evolved dramatically. Beginning in April 2005, NASDAQ enabled trading in most NYSE-listed stocks through its market maker structure.²³ This NASDAQ market making activity is in addition to the principal market for listed stocks on the NYSE.
63. During the Class Period, there were at least 123 market makers for Genworth common stock, including such well known firms as: Barclays Capital, Goldman Sachs, JPMorgan, Morgan Stanley, and Merrill Lynch.²⁴
64. The facts that it traded on the NYSE and had a large number of market makers are strong evidence that Genworth common stock traded in an efficient market throughout the Class Period. Genworth’s listing on the NYSE gave its stock access to a highly developed network of brokers, with its market overseen by the NYSE DMM. These facts are compelling evidence of the efficiency of the market for Genworth common stock.

D. S-3 Registration Eligibility

65. A company is eligible for S-3 registration when, among other things, it has filed Exchange Act reports for a specified length of time and has outstanding float above a certain sizable value. At the time of the *Cammer* opinion, the conditions for S-3

²³ “Nasdaq To Enable Customers To Trade NYSE Stocks,” *Reuters*, March 28, 2005.

²⁴ Market maker data obtained from Bloomberg.

registration were that a company had filed financial reports with the SEC for 36 months, and had outstanding float over \$150 million held by non-affiliates, or \$100 million of such float coupled with annual trading volume exceeding 3 million shares.

66. In 1992, the SEC changed its requirements for S-3 registration eligibility to 12 months of filings and at least \$75 million of float. Since 2007, the SEC has allowed companies with less than \$75 million of float to file an S-3 registration so long as the company has been filing financial reports for at least a year, has “a class of common equity securities listed and registered on a national securities exchange, and the issuers do not sell more than the equivalent of one-third of their public float in primary offerings over any period of 12 calendar months.”²⁵ Despite the fact that the \$75 million requirement has been loosened, courts continue to focus on the \$75 million benchmark when analyzing this *Cammer* factor.²⁶
67. The *Cammer* court noted that S-3 registration eligibility is indicative of market efficiency because the filing requirement ensures that financial data are available to market participants, and the “public float” requirement indicates that many market participants would have examined the information.²⁷

“Proposed Form S-3 recognizes the applicability of the efficient market theory to the registration statement framework with respect to those registrants which usually provide high quality corporate reports, including Exchange Act reports, and whose corporate information is broadly disseminated, because such companies are widely followed by professional analysts and investors in the market place. Because of the foregoing observations made by the SEC, the existence of Form S-3 status is an important factor weighing in favor of a finding that a market is efficient.”
Cammer, 711 F. Supp. at 1284-85.

“The ‘public float’ aspect of the Form S-3 requirements ensures that enough investors have in fact read the previously filed document.”
Id. at 1285.

²⁵ “Revisions To The Eligibility Requirements For Primary Securities Offerings On Forms S-3 And F-3,” SEC Release No. 33-8878, 19 December 2007.

²⁶ See, e.g., *Vinh Nguyen v. Radiant Pharm. Corp.*, 287 F.R.D. 563, 573 (C.D. Cal. 2012).

²⁷ *Cammer*, 711 F. Supp. at 1284-85.

“Again, it is the number of shares traded and value of shares outstanding that involve the facts which imply efficiency.”

Id. at 1287.

1. Float

68. A company’s float is the number or value of shares that can potentially trade freely in the marketplace. It is generally defined as the number or value of outstanding shares, minus insider holdings and shares owned by affiliated corporate entities.²⁸
69. I computed Genworth’s common stock float using data on shares outstanding and insider holdings presented in the Company’s SEC filings, and stock price data obtained from CRSP.²⁹
70. Genworth common stock float averaged \$3.75 billion during the Class Period, far exceeding the level required for S-3 registration. During the Class Period, Genworth’s float ranged between \$2.61 billion and \$4.67 billion, always exceeding the minimum requirement for S-3 registration eligibility.

2. Financial Filings

71. Genworth regularly filed financial reports with the SEC throughout the Class Period. The financial information in the SEC filings, supplemented by information provided by analysts and news coverage, provided investors with access to financial information about the Company on a continuous basis.
72. S-3 registration eligibility indicates company characteristics associated with market efficiency, in particular characteristics of size, transparency, and the availability of relevant financial information. Genworth possessed those particular characteristics throughout the Class Period and satisfied the conditions for S-3 registration eligibility.

²⁸ For a discussion of the generally accepted definitions of shares outstanding and float, see “Float Adjustment Methodology,” *S&P Dow Jones Indices*, July 2012.

²⁹ Share data obtained from SEC filings.

73. Not only was Genworth eligible for S-3 registration during the Class Period, but the Company did file an S-3 Registration statement on 13 June 2012, just following the end of the Class Period.³⁰ Consistent with the *Cammer* opinion, Genworth's eligibility to file an S-3 registration is evidence of the efficiency of the market for Genworth common stock during the Class Period.

E. *Krogman* Factors

74. In addition to evaluating market efficiency using the *Cammer* factors, I examined Genworth common stock and its market with respect to the three additional *Krogman* factors.

1. Market Capitalization

75. During the Class Period, Genworth's market capitalization averaged \$3.76 billion, putting Genworth in the 2nd decile of U.S. companies by size – meaning that Genworth was larger than at least 80% of all other publicly-traded companies in the U.S.³¹

76. Consistent with the *Krogman* court's opinion, Genworth's large market capitalization throughout the Class Period is further evidence of the efficiency of the market for Genworth common stock.

2. Float

77. As mentioned above, Genworth common stock float averaged \$3.75 billion during the Class Period. While float excludes shares held by insiders and affiliated corporate entities, Genworth's float was still larger than the total market capitalization of at least 80% of all other publicly-traded companies in the U.S.³² The size of Genworth's float indicates it satisfies the second *Krogman* factor for market efficiency.

³⁰ Genworth Financial, Inc., Form S-3ASR, filed 13 June 2012.

³¹ This calculation is based on averaged month-end data from CRSP for 30 November 2011 through 31 March 2012, I grouped public companies into deciles, so that the 1st decile contains the largest 10% of all public companies listed on the NYSE, AMEX, NASDAQ, and NYSE ARCA, while the 10th decile contains the smallest 10%.

³² This calculation is based upon averaged month-end data from CRSP for 30 November 2011 through 31 March 2012.

78. Float can also be analyzed as a percentage of total shares outstanding, as well as in absolute share and value terms. On average during the Class Period, there were 488.6 million shares in Genworth's float and 491.1 million shares outstanding, resulting in an average float of 99.5% of shares outstanding.
79. Genworth's substantial float is indicative of the efficiency of the market for its common stock during the Class Period.

3. Bid-Ask Spread

80. I obtained data on daily closing bid and ask quotes for Genworth common stock during the Class Period from CRSP.
81. I measured the percentage bid-ask spread as the difference between the bid and ask quotes, divided by the average of the bid and ask quotes, which is the standard way of measuring percentage bid-ask spreads in the finance literature. Exhibit-4 presents Genworth's bid-ask spread data.
82. The average bid-ask spread for Genworth common stock over the course of the Class Period was 0.13%. By comparison, the average month-end bid-ask spread over the course of the Class Period for all stocks in the CRSP database was 0.73%.³³
83. Genworth's bid-ask spreads were therefore substantially narrower than the mean level among all other CRSP stocks – which comprises stocks traded on the NYSE, AMEX, NASDAQ, and NYSE ARCA.
84. In dollar terms, Genworth's bid-ask spread during the Class Period averaged \$0.01 per share. For all stocks in the CRSP database, the average bid-ask spread during the Class Period was \$0.07 per share.
85. The average bid-ask spread in the market for Genworth stock over the course of the Class Period was well below the typical bid-ask spreads exhibited by other publicly-traded stocks in the United States. Genworth's narrow bid-ask spread supports a conclusion of market efficiency.

³³ This calculation is based upon month-end data from CRSP for 30 November 2011 through 31 March 2012.

VII. EMPIRICAL EVIDENCE OF GENWORTH STOCK MARKET EFFICIENCY

86. Of the five *Cammer* factors, the empirical factor was cited by the *Cammer* court as “one of the most convincing ways to demonstrate efficiency”:

“As previously noted, one of the most convincing ways to demonstrate efficiency would be to illustrate over time, a cause and effect relationship between company disclosures and resulting movements in stock price.”
Cammer, 711 F. Supp. at 1291.

87. The special importance the *Cammer* court placed on the empirical factor is justified by economic principles, as the empirical factor focuses on the essence of market efficiency whereas the other four factors are indicators that signal market efficiency.

A. Event Study Test of Market Efficiency

88. The event study is the paramount tool for testing market efficiency, as renowned financial economist and Nobel laureate Eugene Fama attests:

“The cleanest evidence on market-efficiency comes from event studies, especially event studies on daily returns. When an information event can be dated precisely and the event has a large effect on prices, the way one abstracts from expected returns to measure abnormal daily returns is a second-order consideration. As a result, event studies give a clear picture of the speed of adjustment of prices to information.”
“Efficient Capital Markets: II,” by Eugene F. Fama, *Journal of Finance*, 1991, p. 1607.

89. Event study analysis is one of the most commonly used analytic methodologies employed by finance researchers. Campbell, Lo, and MacKinlay [1997] present an excellent description and examples of the methodology and write about how it is generally accepted and widely used in academic research.³⁴ Crew, et al., [2012] write about how the methodology is generally accepted and widely used in forensic applications.³⁵
90. An event study measures how much a stock price rises or falls in response to new, company-specific information. Statistical regression analysis determines how much of a stock price change is explained by market and peer group factors, rather than company-specific information, so that those influences can be statistically factored out. The portion of a stock price change that cannot be attributable to market and peer group factors is called the residual stock price movement or “residual return.” The event study isolates the residual return and also tests whether the residual return can reasonably be explained as merely a random fluctuation.
91. If the stock return over an event period is statistically significant, it indicates that the stock price movement cannot be attributed to market and peer group factors, or to random volatility, but rather was caused by new, company-specific information. Such proof of a cause and effect relationship between the dissemination of information and a reaction in the stock price establishes market efficiency.

1. A Caveat About Non-Significant Stock Price Movements

92. It is important to note that an event study tests the joint hypothesis that the security trades in an efficient market and that the valuation impact of the information disseminated on the event date is of such a large magnitude as to exceed the threshold for statistical significance. A finding of statistical significance indicates market efficiency, but a finding of non-significance does not necessarily establish inefficiency as a modest non-significant stock price reaction may be the efficient stock price reaction to a particular disclosure.

³⁴ Chapter 4 of *The Econometrics of Financial Markets*, by John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, Princeton University Press, 1997.

³⁵ “Federal Securities Acts and Areas of Expert Analysis,” by Nicholas I. Crew, et al., in Chapter 24 of the *Litigation Services Handbook; The Role of the Financial Expert*, 5th ed., edited by Roman L. Weil, Daniel G. Lentz, and David P. Hoffman, John Wiley & Sons, Inc., 2012.

93. For example, if a company reports earnings that are in line with the expectations of analysts and investors, even though the announcement would be important, the mix of information may not have changed sufficiently on that date to elicit a statistically significant stock price reaction. Similarly, if a misrepresentation is made alongside countervailing confounding news that impacts the stock price in the opposite direction, one might not reasonably expect this mix of new information to cause a statistically significant stock price reaction. In these examples, a modest stock price movement or even no movement at all may be the efficient stock price reaction. In such cases, the event study finding that the stock return was non-significant would not indicate inefficiency. In fact, in such cases, the non-significant stock price movement would show that the stock is behaving as it should in an efficient market.
94. Similarly, when a company deceives analysts and investors by concealing important information, the effect of the concealment would generally not be a significant stock price movement at the time of the concealment and over its duration. The concealment would maintain the mix of information as it previously was, such that the price reaction would be a maintenance of the price level where it previously was.
95. Therefore, ideal candidate events for inclusion in a market efficiency event study are events on which company-specific information was released that is new, unexpected, not confounded by countervailing news, and is of such import as to reasonably be expected to elicit a stock price reaction over the threshold for statistical significance.

2. Selection of Earnings Announcement Events

96. I performed an event study on earnings announcements during the period from 15 April 2011 through 17 April 2012 (“Examination Period”) – i.e., the full year that included the Class Period. A company’s financial results are among the most important considerations to investors assessing the value of its stock.³⁶

³⁶ For example, see: Beaver [1968], Ball and Brown [1968], Ball [1978], Watts [1978], Patell and Wolfson [1984], and Ball and Kothari [1991]) have specifically examined stock price movements caused by earnings announcements, and concur that earnings announcements are unusually important information events generally.

“No other figure in the financial statements receives more attention by the investment community than earnings per share. The relationship between accounting earnings and security prices is probably the single most important relationship in security analysis, and its prominence is reflected in the attention given to price-earnings ratios.”

Financial Reporting an Accounting Revolution, 3rd ed., by William H. Beaver, 1998, p. 38.

“Analysts, investors, senior executives, and boards of directors consider earnings the single most important item in the financial reports issued by publicly held firms.”

“Earnings Management to Exceed Thresholds,” by Francois Degeorge, Jayendu Patel, and Richard Zeckhauser, *Journal of Business*, 1999, p. 1.

97. However, not every earnings announcement contains new, unexpected, highly valuation impactful information. Moreover, because of the high threshold for statistical significance, and because the information disseminated in an earnings announcement sometimes may appropriately have only a moderate valuation impact, the new information may be economically significant without being statistically significant. Consequently, not every earnings announcement should be expected to elicit a statistically significant stock price reaction.
98. Earnings announcements took place on the following dates during the Examination Period: 3 May 2011, 20 July 2011, 28 July 2011, 3 November 2011, and 2 February 2012.³⁷ I reviewed news media and analyst reports published around these five dates to determine whether the information in each earnings announcement was new valuation-relevant information that could reasonably be expected to cause the Company’s stock price to move by a statistically significant amount. The news on the five earnings announcement event dates comprised the following information:

a. 4 May 2011

³⁷ Because the announcements on 3 May 2011, 20 July 2011, 28 July 2011, 3 November 2011, and 2 February 2012 were each after the close of trading, for each of these events the trading day on which the new information would impact Genworth stock price would have been 4 May 2011, 21 July 2011, 29 July 2011, 4 November 2011, and 3 February 2012, respectively. Consequently, for testing purposes, the event dates are 4 May 2011, 21 July 2011, 29 July 2011, 4 November 2011, and 3 February 2012.

99. On 3 May 2011, after the close of trading, Genworth announced financial results for Q1 2011 (quarter ended 31 March 2011) and held a conference call with investors the following day.³⁸ The Company reported net operating income of \$98 million, or \$0.20 per diluted share.³⁹
100. Some analysts noted that the Company's operating income was in line with consensus, while others described the Company's results as mixed.

"Bottom line, the quarter was mixed with continued good results in International MI, stronger results in Retirement and Protection, and somewhat worse than expected results in US MI. On the positive side, we note that this was the first quarter out of the past 4 quarters where GNW reported results near consensus, as results from 2Q 10 onwards have missed consensus views by wide margins."

"1Q11: Slightly Improved US MI Results, But Not Yet at an Inflection Point," by Thomas Gallagher and Sarah Miller, Credit Suisse, analyst report, 4 May 2011, p. 1.

"GNW reported 1Q11 operating EPS of \$0.20 vs our est of \$0.21 and in-line with consensus. Results generally outperformed expectations in Retirement and Int'l, offset by lower earnings in US MI and Corporate. Numerous small one-timers net out to about a \$0.03 drag, putting core EPS at a relatively solid \$0.23."

"In-line EPS Against Low Expectations," by Mark Finkelstein, et al., Macquarie, analyst report, 4 May 2011, p. 1.

"In the meantime, Q1/11 results showed modest progress toward stabilization, coming in at \$0.20 per share, in line with our estimate and \$0.01 better than consensus. 'Core' EPS of \$0.23 excludes unusual items."
"Q1/11 EPS of \$0.20 in Line; Now What?" by Joanne Smith, Scotiabank, analyst report, 4 May 2011, p. 2.

"Genworth 1Q11 earnings were below our estimate, but overall business trends were better than anticipated. Our fundamental outlook remains negative, and we could get more cautious on the stock if housing trends remain poor or GNW's valuation discount to the group narrows. EPS close

³⁸ "Genworth Financial Announces First Quarter 2011 Results," *PR Newswire*, Company press release, 3 May 2011, 4:10 PM; "GNW – Q1 2011 Earnings Call," *Factset: callstreet*, 4 May 2011.

³⁹ "Genworth Financial Announces First Quarter 2011 Results," *PR Newswire*, Company press release, 3 May 2011, 4:10 PM.

to consensus, below our estimate. GNW reported 1Q11 operating EPS of \$0.20. Excluding unusual items, GNW would have earned \$0.22, below our \$0.27 forecast but above consensus of \$0.21.”

“Lack of Bad News is Good News; Neutral,” by Jimmy Bhullar, et al., JPMorgan, analyst report, 4 May 2011, p. 1.

b. 21 July 2011

101. On 20 July 2011, after the close of trading, Genworth announced preliminary financial results for Q2 2011.⁴⁰ For the quarter, the Company expected to report an operating loss of between \$70 million and \$90 million, or \$0.14 to \$0.18 per share.⁴¹ Genworth attributed the expected loss to an increase in reserves in its USMI business of approximately \$300 million.⁴² Genworth’s preannounced earnings were well below analyst consensus estimates of a profit of \$0.25 per share.⁴³
102. Analysts noted that while a reserve increase in the Company’s USMI business was not entirely unexpected, the extent of the increase was worse than expectations.

“The loss was driven by a \$300mm reserve strengthening in US MI that resulted in a \$250-255mm operating loss in the segment, worse than our \$81mm loss assumption. While the directional weakness was not unexpected, the decline in cure rates and aging of inventory language used by the company suggest that the reason for the charge was more based on assumptions being too optimistic (i.e. the accounting for reserves was not conservative enough) versus it being a result of a sharp deterioration in the housing environment.”

“2Q11 Preannouncement,” by Thomas Gallagher, Credit Suisse, analyst report, 20 July 2011, p. 1.

⁴⁰ “Genworth Announces Preliminary Second Quarter 2011 Results; Strengthens U.S. Mortgage Insurance Reserves by \$300 Million,” *PR Newswire*, Company press release, 20 July 2011, 4:15 PM.

⁴¹ *Id.*

⁴² *Id.*

⁴³ “Correct: Genworth Warns Of 2Q Loss On Mortgage-Insurer Charge,” *Dow Jones Newswires*, 20 July 2011.

“We believe GNW must take decisive action as the long-awaited stabilization of the U.S. MI business remains elusive, and the piecemeal approach to capital enhancement has not worked. We expect weakness in the stock and recommend avoiding it until the dust settles and an end to this situation is in sight. We have further lowered our 1-yr price target to \$7.”
“More U.S. MI Charges Lead to Loss in Q2/11,” by Joanne Smith, Scotiabank, analyst report, 21 July 2011, p. 1.

“GNW pre-announced a 2Q11 operating loss of \$0.14 to \$0.18 per share versus our EPS estimate of \$0.28. The loss was driven by a \$300 million reserve charge in U.S. mortgage insurance (\$0.40 per share after taxes).
“U.S. MI Charge Drives 2Q11 Miss, Outlook Cautious,” by Jimmy Bhullar, et al., JPMorgan, analyst report, 20 July 2011, p. 1.

c. 29 July 2011

103. On 28 July 2011, after the close of trading, Genworth reported Q2 2011 financial results, including a net operating loss of \$74 million, or \$0.15 per diluted share.⁴⁴ The Company’s results were in line with analysts’ expectations.⁴⁵
104. The following day, the Company held a conference call with investors. On the conference call, Genworth’s CEO Michael Frazier announced that Company was “working actively to accelerate plans to return capital to shareholders and enhance shareholder value.”⁴⁶ Various news reports attributed the stock price increase to this new development.

“Shares of financial services company Genworth Financial Inc. jumped 6 percent Friday after the company’s CEO said executives are exploring plans to break up the company. ... Chief Executive Officer Michael Frazier told analysts during a conference call Friday morning that Genworth executives hadn’t decided yet whether to split the company, but they were doing the planning work necessary for breakup. Frazier said a split could reward shareholders.”
“Genworth Financial Shares Jump as CEO Outlines Plans to Break Up the Company,” *Associated Press*, 29 July 2011.

⁴⁴ “Genworth Financial Announces Second Quarter 2011 Results,” *PR Newswire*, Company press release, 28 July 2011, 4:07 PM.

⁴⁵ “Genworth Posts 2Q Loss, Dragged Down by Results from Mortgage Insurance Business,” *Associated Press*, 28 July 2011.

⁴⁶ “GNW – Q2 2011 Earnings Call,” *Factset: callstreet*, 29 July 2011, p. 3.

“Mortgage insurer Genworth Financial is taking steps to possibly split up the company, its Chief Executive Michael Fraizer said on a post-earnings conference call. Genworth shares were up 6 percent on Friday afternoon after the insurer spoke of potentially splitting up the company and said it was advancing its share buy-back plan to 2012 from 2013-14.”

“UPDATE 1-Genworth CEO Hints at Split of Company,” *Reuters*, 29 July 2011.

“Shares of Genworth Financial Inc. rose Friday after CEO Michael Fraizer said the company was readying itself for a possible split. In a conference call with investors, Fraizer said the split would not take place in the near term because the financial services company’s capital structures, ongoing recovery and market conditions. But he said the company is continuing to take steps for a possible split as those factors change.”

“Genworth Prepares for Possible Split; Shares Rise,” *Associated Press*, 29 July 2011.

“Genworth Financial Inc. (GNW) is taking steps to prepare for a possible split of the company, Chief Executive Michael Fraizer said. Such a split, if it occurs, won’t happen soon, Fraizer told investors on a conference call Friday. But with the company’s shares trading significantly below book value, Fraizer said the market ‘dramatically undervalues our underlying business platforms and their potential. We fully intend to unlock that value.’ Genworth shares jumped 9.6% to \$8.57 Friday as the conference call concluded. ... The separation of the company’s mortgage insurance operations from its life insurance and wealth-management businesses is something that some vocal analysts and investors have pushed for months.”

“Genworth: Repurchases ‘Compelling Investment’ At Current Valuation,” *Dow Jones Newswires*, 29 July 2011.

d. 4 November 2011

105. On 3 November 2011, after the close of trading, Genworth reported financial results for Q3 2011 (quarter ended 30 September 2011) and held a conference call with investors the following day.⁴⁷ Genworth’s Q3 2011 operating income of \$0.21 per share was ahead of analyst consensus estimates of \$0.18 per share.⁴⁸

⁴⁷ “Genworth Financial Announces Third Quarter 2011 Results,” *PR Newswire*, Company press release, 3 November 2011, 4:25 PM; “GNW – Q3 2011 Earnings Call,” *Factset: callstreet*, 4 November 2011.

⁴⁸ “Quick Comment: 3Q11 Earnings First Glance,” by Nigel Dally and Hayley Locker, Morgan Stanley, analyst report, 3 November 2011, p. 1.

106. The Company also announced its plan to spin-off a minority stake in its Australian MI business via an IPO scheduled for Q2 2012. The spin-off was part of the Company's plan to unlock shareholder value.⁴⁹
107. Though analysts were positively surprised by the Company's financial results, some analysts remained wary of the Company's deteriorating capital position.

“While the improved results will come as a relief, capital deterioration remains a key concern for us.”

“**Quick Comment: 3Q11 Earnings First Glance,**” by Nigel Dally and Hayley Locker, Morgan Stanley, analyst report, 3 November 2011, p. 1.

108. However, on the conference call, the Company provided clarity and reassured analysts that it was on track to improve its capital position.

“[Andrew S. Kligerman, UBS analyst]: So, it sounds like no new capital may be needed in the next year or so. Is that the way we should take that?”

[Michael D. Fraizer, CEO]: I think I was pretty clear in my comments about how to think about it.”

“**GNW – Q3 2011 Earnings Call,**” *FactSet: callstreet*, 4 November 2011, p. 12.

“[Jeffrey R. Schuman, Keefe, Bruyette & Woods analyst]: I have a question for you on the capital levels at the Life company. In terms – you mentioned in terms of getting to a point where you’ll be able to pay out dividends on a regular basis. I was wondering does the new business that you’re writing put a strain on that?”

[Patrick B. Kelleher, EVP]: We have profitability coming off the in-force, we have new business, which, for some product lines produces some amount of strain, for other product lines there is really not much, like for example, fixed annuities does not produce much strain. And what we’re doing is we’re using reinsurance in such a way that we are building future earnings capacity and using the block transactions to increase the current

⁴⁹ “Genworth Financial Announces Third Quarter 2011 Results,” *PR Newswire*, Company press release, 3 November 2011, 4:25 PM.

unassigned surplus positions to target levels, so that not only can we come back to regular ordinary dividends in 2013, but that going forward, in '14, '15, '16, business that we put on the books is sufficient to sustain that level of ordinary dividend capacity.”
Id., p. 18.

e. 3 February 2012

109. On 2 February 2012, after the close of trading, Genworth reported financial results for Q4 2011 and FY 2011.⁵⁰ For the quarter the Company also reported net operating income of \$86 million, or \$0.17 per diluted share.⁵¹ While the Company’s operating income missed analyst consensus estimates by \$0.02 per share, analysts believed that the improvement in the Company’s capital position and commitment to unlocking shareholder value more than offset the slight miss in operating income.

“Earnings modestly below, capital above: Genworth reported 4Q11 operating EPS of \$0.17, below our estimate of \$0.20 and the consensus of \$0.19. Our preliminary estimate of core EPS is \$0.18. However, at the stock’s current level, *we believe capital matters more, where the results came in ahead of expectations* — hold-co cash was above, positive surprise in life RBC, and less deterioration in domestic MI risk-to-capital than we expected. ... Soft earnings quarter for the company, *but capital improvement matters more, leading us to expect the stock to rally on the back of the results.*”

“Quick Comment: 4Q11 Earnings First Glance,” by Nigel Dally and Hayley Locker, Morgan Stanley, analyst report, 2 February 2012, p. 1 (emphasis added).

“GNW’s key messages sounded, in tone, less like triage and more of restructuring or restoring businesses that were in need of major overhaul or have been through the wringer of the worst of the financial crisis. The surge in the stock price is, in our view, recognition that it is moving from the ‘state of emergency’ stage to the ‘reparation’ stage of the company’s lifecycle, deserving a modestly higher valuation.”

“Sounds Like They Have a Plan, But...,” by Jeff Flynn and Joanne Smith, Scotiabank, analyst report, 3 February 2012, p. 1.

⁵⁰ “Genworth Financial Announces Fourth Quarter 2011 Results,” *PR Newswire*, Company press release, 2 February 2012, 4:10 PM.

⁵¹ *Id.*

“On its conference calls this morning (GNW had two separate calls), the company discussed several levers to unlock shareholder value. Options include repositioning, repricing, changing the business mix, selling businesses, and managing capital. Not much seems to be off the table. While not exactly operating from a position of strength, we think Genworth is in a position to execute on some of the options discussed on the call. We think GNW’s price movement reflects this growing possibility.”

“**Genworth Earnings,**” by John Hall, Wells Fargo, analyst report, 3 February 2012, p. 1.

“Bottom Line: We continue to view Genworth as a relatively high risk, restructuring story, with the key debate revolving around the fundamental outlook and required capital support for its problematic mortgage insurance operations. While the earnings results this quarter were relatively soft, we believe this was more than offset by generally solid capital trends, which came in ahead of our expectations.”

“**Soft Earnings, but Solid Capital Progress,**” by Nigel Dally and Hayley Locker, Morgan Stanley, analyst report, 3 February 2012, p. 1.

110. Of the earnings announcements made during the Examination Period, all but the 3 May 2011 announcement provided decidedly positive or negative news that would be expected to move the Genworth stock price in one direction or the other by a potentially significant amount. Given the total mix of information on 3 May 2011, one would not reasonably expect, *ex ante*, the earnings announcement to elicit a statistically significant stock price reaction. As such, a non-significant stock price reaction would be consistent with market efficiency.

3. Selection of Allegation-Related Events

111. Not only did the *Cammer* court single out the empirical factor as “one of the most convincing ways to demonstrate efficiency,” but it also recognized the special importance of the specific information allegedly misrepresented that is the subject of the litigation:

“The central question under the fraud on the market theory is whether the stock price, *at the time a plaintiff effected a trade*, reflected the ‘misinformation’ alleged to have been disseminated.”
Cammer, 711 F. Supp. at 1282 (emphasis in original).

112. By focusing an event study on the disclosure of information related to the allegations in the Complaint, one is able to ascertain whether the market for Genworth stock was efficient, not only generally, but also with respect to the particular information at issue in this case. Consequently, the empirical behavior of Genworth common stock following such disclosure is important for determining whether the market for the Company's common stock was efficient for purposes of the fraud-on-the-market principle.
113. A fully comprehensive identification of all dates on which disclosures of new, Company-specific information related to the alleged misrepresentations and omissions is beyond the scope of this declaration. However, a review of publicly-reported news and events during the Class Period and a review of the Complaint identify one disclosure event on which new, Company-specific information related to the alleged misrepresentations and omissions was disseminated, which, based on valuation principles, would reasonably be expected to elicit a stock price reaction over the threshold for statistical significance. Applying these objective criteria (disclosure of allegation-related information; information of such magnitude as to be reasonably expected to elicit a significant stock price reaction if the market is efficient) identifies the event that is most suitable for a market efficiency event study in this matter.
114. Using these criteria, I identified 18 April 2012 as an event that is appropriate for inclusion in the event study. On 17 April 2012, after the close of trading, as a result of "recent business performance in Australia," Genworth announced that it would delay the initial public offering ("IPO") of its Australian MI business.⁵²

4. Isolating the Impact of Company-Specific Information

115. Event study analysis determines how much of the Company's stock return following each of the events was driven by Company-specific information as opposed to market and peer group factors.

⁵² "Genworth Financial Announces New Timing For Planned Minority Initial Public Offering (IPO) of Australian Mortgage Insurance Business," *PR Newswire*, Company press release, 17 April 2012, 4:51 PM.

116. The method, which is generally accepted and widely used in econometric modeling, involves running a regression to determine how the price of Genworth common stock typically behaved in relation to the overall stock market and its peer group, and then using the regression model to determine how much of each event day's actual price return is explained by the market and peer group factors ("the explained return").
117. The explained return is then subtracted from the actual return, to isolate the residual return, which is the stock's return after controlling for market and peer group effects.
118. I ran a regression modeling the return of Genworth common stock as a function of: 1) a constant term, 2) the returns of the overall stock market, and 3) a peer group index return.
119. For the overall stock market factor I used the CRSP NYSE/AMEX/NASDAQ/ARCA value-weighted index (the "Market Index"), which is a generally accepted and widely used measure of the overall stock market performance. The Market Index appropriately incorporates payment of dividends by the constituent companies.
120. For the peer group factor, I used the same collection of companies that Genworth identified as representative of its peers. In its Form 10-K, Genworth compared its performance to the S&P 500 Insurance Index (the "Peer Index").⁵³
121. Genworth's stock prices, trading volume, and returns are shown in Exhibit-4. Market Index and Peer Index data are presented in Exhibit-5.
122. I ran the regression on daily returns covering the entire Examination Period. I used dummy variables to control for potentially abnormal returns on earnings announcement dates. Using dummy variables to control for potentially important events in the Examination Period, especially when those dates are the subject of the event study analysis, so that the model parameters properly reflect typical stock price movements, is a widely used and generally accepted methodology, as noted in the academic and finance literature.⁵⁴

⁵³ Genworth Financial, Inc., Form 10-K for the Fiscal Year Ended 31 December 2011, filed 27 February 2012, p. 91.

⁵⁴ See: "Event Studies with a Contaminated Estimation Period," by Nihat Aktas, Eric de Bodt, and Jean-Gabriel Cousin, *Journal of Corporate Finance*, 2007; "Measuring the Effects of Regulation with Stock Price Data," by John J. Binder, *The RAND Journal of Economics*, 1985; "Intervention Analysis with Applications to Economic and Environmental Problems," by G. E. P. Box and G. C. Tiao, *Journal of the American Statistical Association*, 1975; "Testing for Market Efficiency: A Comparison of the Cumulative Average Residual Methodology and Intervention Analysis," by David F. Larcker, Lawrence A. Gordon and George E. Pinches, *Journal of Financial & Quantitative Analysis*, 1980; "Measuring Abnormal Performance: The Event Parameter Approach Using Joint Generalized Least

123. The choice of using one full year ending on the last day of the Class Period for the regression estimation period is a widely used and generally accepted methodology in event study analysis.

“Three general choices for the placement of an estimation window are before the event window, surrounding the event window, and after the event window.”

“Materiality and Magnitude: Event Studies in the Courtroom,” by David I. Tabak and Frederick C. Dunbar in *Litigation Services Handbook, The Role of the Financial Expert*, 3rd ed., edited by Roman L. Weil, Michael J. Wagner, and Peter B. Frank, John Wiley & Sons, Inc., 2001, p. 19.5.

124. All returns used in the regression are logarithmic returns – that is, the natural logarithm of the ratio of the current day’s closing price plus dividends to the previous day’s closing price. Logarithmic returns are commonly used in event studies and equity analysis. Analysts and researchers generally use logarithmic returns instead of percent price changes because of various computational advantages.⁵⁵
125. The regression results are presented in Exhibit-6.
126. I computed the explained portion of the Genworth common stock return on each event date by adding: 1) the estimated regression intercept term, 2) the respective day’s Market Index return multiplied by the Market Index coefficient estimated by the regression, and 3) the respective day’s Peer Index return multiplied by the regression’s Peer Index coefficient.
127. I then computed the residual return for each event date by subtracting the explained return from the actual return.

5. t-Test

128. For each event, a statistical test called a *t*-test was conducted to determine whether the residual return of Genworth common stock was statistically significant. Statistical significance means that the event return after controlling for the market and peer group

Squares,” by Paul H. Malatesta, *The Journal of Financial and Quantitative Analysis*, 1986; “Conditioning the Return-Generating Process on Firm-Specific Events: A Discussion of Event Study Methods,” by Rex Thompson, *The Journal of Financial and Quantitative Analysis*, 1985.

⁵⁵ The Appendix presents the mathematical formula for the logarithmic return and a discussion of the measure.

effects was of such large magnitude that it cannot be explained by random volatility, but alternatively must have been caused by new, Company-specific information. A *t*-test compares the residual return on an event date to the typical residual return exhibited over the regression estimation period. If the event date residual return is far greater (positively or negatively) than the typical residual return, the *t*-test indicates that the residual return is statistically significant.⁵⁶

129. The results of the event study are presented below and summarized in Exhibit-7.

B. Event Study Results

130. The stock price responses on four of the five earnings announcement days were statistically significant, as was the stock price decline on the disclosure event. The one earnings announcement event on which the stock price reaction was not statistically significant (4 May 2011), was appropriately so and consistent with market efficiency, as the earnings announced that day were in line with the market's prior expectations and was coupled with other information that was a mix of good and bad news.

1. Event Study Results: 4 May 2011

131. On 3 May 2011, after the close of trading, Genworth reported financial results for Q1 2011.⁵⁷ As discussed above, announced earnings were in line with expectations, and the other news disseminated was mixed.

132. On 4 May 2011, Genworth stock declined 0.91% (on a logarithmic return basis). The Market Index return on that date was -0.80% and the Peer Index return was -0.86%. Based on the regression model, the explained portion of the return on Genworth stock was -1.95%. The difference between the actual return of -0.91% and the explained return of -1.95% is a residual return of 1.04%. This residual return is associated with a *t*-statistic

⁵⁶ The test is called the *t*-test because it involves the computation of a *t*-statistic, which is the event day residual return divided by the standard deviation of residual returns from the control period, *i.e.*, the regression estimation data comprising all other days. If the absolute value of the *t*-statistic is greater than the critical *t*-statistic value (1.96 for large samples), the likelihood that the residual return could have been caused by random volatility alone is less than 5%, which is generally accepted to be so unlikely that the random volatility explanation can be rejected, and the stock return for that day is deemed statistically significant.

⁵⁷ "Genworth Financial Announces First Quarter 2011 Results," *PR Newswire*, Company press release, 3 May 2011, 4:10 PM.

value of 0.53, which indicates that the residual return is not statistically significant at the 95% confidence level.

133. As explained above, given the total mix of information available to the market on 4 May 2011, the absence of a statistically significant return is consistent with market efficiency.

2. Event Study Results: 21 July 2011

134. On 20 July 2011, after the close of trading, Genworth reported preliminary financial results for Q2 2011.⁵⁸ As discussed above, the news was negative.
135. On 21 July 2011, Genworth stock declined 14.28% (on a logarithmic return basis). The Market Index return on that date was 1.22% and the Peer Index return was 1.65%. Based on the regression model, the explained portion of the return on Genworth stock was 2.77%. The difference between the actual return of -14.28% and the explained return of 2.77% is a residual return of -17.05%.
136. A residual return of -17.05% is an unusually large one-day decline for Genworth common stock. That residual return is associated with a *t*-statistic value of -8.70, which indicates that the residual return was too severe to have been a random fluctuation. The likelihood of obtaining a residual return of this magnitude and associated *t*-statistic given that particular explanation (random volatility) is virtually nil. Therefore, the stock return is deemed statistically significant.

3. Event Study Results: 29 July 2011

137. On 28 July 2011, after the close of trading, Genworth reported financial results for Q2 2011 and held a conference call with investors the following day.⁵⁹ As described above, the news was positive.
138. On 29 July 2011, Genworth stock increased 6.20% (on a logarithmic return basis). The Market Index return on that date was -0.56% and the Peer Index return was -0.08%. Based on the regression model, the explained portion of the return on Genworth stock

⁵⁸ “Genworth Announces Preliminary Second Quarter 2011 Results; Strengthens U.S. Mortgage Insurance Reserves by \$300 Million,” *PR Newswire*, Company press release, 20 July 2011, 4:15 PM.

⁵⁹ “Genworth Financial Announces Second Quarter 2011 Results,” *PR Newswire*, Company press release, 28 July 2011, 4:07 PM.

was -0.71%. The difference between the actual return of 6.20% and the explained return of -0.71% is a residual return of 6.91%.

139. A residual return of 6.91% an unusually large one-day increase for Genworth common stock. That residual return is associated with a *t*-statistic value of 3.52, which indicates that the residual return was too severe to have been a random fluctuation. The likelihood of obtaining a residual return of this magnitude and associated *t*-statistic given that particular explanation is virtually nil. Therefore, the stock return is deemed statistically significant.

4. Event Study Results: 4 November 2011

140. On 3 November 2011, after the close of trading, Genworth reported financial results for Q3 2011 and held a conference call with investors the following day.⁶⁰ As described above, the news was positive.
141. On 4 November 2011, Genworth stock increased 15.46% (on a logarithmic return basis). The Market Index return on that date was -0.56% and the Peer Index return was -1.06%. Based on the regression model, the explained portion of the return on Genworth stock was -2.08%. The difference between the actual return of 15.46% and the explained return of -2.08% is a residual return of 17.54%.
142. A residual return of 17.54% is an unusually large one-day increase for Genworth common stock. That residual return is associated with a *t*-statistic value of 8.95, which indicates that the residual return was too severe to have been a random fluctuation. The likelihood of obtaining a residual return of this magnitude and associated *t*-statistic given that particular explanation is virtually nil. Therefore, the stock return is deemed statistically significant.

⁶⁰ “Genworth Financial Announces Third Quarter 2011 Results,” *PR Newswire*, Company press release, 3 November 2011, 4:25 PM.

5. Event Study Results: 3 February 2012

143. On 2 February 2012, after the close of trading, Genworth reported financial results for Q4 2011 and held a conference call with investors the following day.⁶¹ As described above, the news was positive.
144. On 3 February 2012, Genworth stock increased 13.15% (on a logarithmic return basis). The Market Index return was 1.46%, and the Peer Index return was 1.97%. Based on the regression model, the explained portion of the return on Genworth stock was 3.36%. The difference between the actual return of 13.15% and the explained return of 3.36% is a residual return of 9.79%.
145. A residual return of 9.79% is an unusually large one-day increase for Genworth common stock. That residual return is associated with a *t*-statistic value of 5.00, which indicates that the residual return was too severe to have been merely a random fluctuation. The likelihood of obtaining a residual return of this magnitude and associated *t*-statistic given that particular explanation is virtually nil. Therefore, the stock return is deemed statistically significant.

6. Event Study Results: 18 April 2012 (Disclosure Event)

146. On 17 April 2012, after the close of trading, Genworth announced that, as a result of “recent business performance in Australia,” it would delay the IPO of its Australian Mortgage Insurance Business until “early 2013.”⁶²
147. Analysts noted their disappointment with the Company’s announcement, for example:

“News of sharply deteriorating fundamentals in its Australian operation driving the delay in the planned IPO of a minority stake in these operations is a significant negative, both in terms of the earnings profile and capital position of the company.”
“**One Step Forward, Two Steps Back,**” by Nigel Dally and Hayley Locker, Morgan Stanley, analyst report, 18 April 2012, p. 1.

⁶¹ “Genworth Financial Announces Fourth Quarter 2011 Results,” *PR Newswire*, Company press release, 2 February 2012, 4:10 PM.

⁶² “Genworth Financial Announces New Timing For Planned Minority Initial Public Offering (IPO) of Australian Mortgage Insurance Business,” *PR Newswire*, Company press release, 17 April 2012, 4:51 PM.

“The 1Q12 loss in the Australia MI business is a significant negative and raises questions about the unit’s earnings power. Management indicated the Australia unit will report a ‘modest’ loss in the first quarter as a result of lenders accelerating the pace of processing late-stage delinquencies through to foreclosure. In addition, loss severity was worse than expected, raising questions about reserve adequacy. ... Delay in the timing of the IPO reduces near-term capital flexibility and is a negative for sentiment.”

“Australia MI Loss Increases Uncertainty about GNW’s Earnings Power – ALERT,”
by Jimmy Bhullar, et al., JPMorgan, 17 April 2012, p. 1.

“Clearly, valuation of the Australian operations will be impacted by the 1Q12 operating loss. The Australian operations have never experienced a loss before. At the moment, we expect GNW will continue to pursue a minority IPO offering, but the potential impact to valuation may delay the offering beyond 2Q13. A decline in valuation will affect capital returned to GNW’s holdco by any potential offering. ... We are lowering our 2012 operating EPS estimate to \$1.19 from \$1.30 to reflect the losses in the Australian mortgage insurance operations.”

“Shares Likely to be Volatile after Australia MI Loss & Changing of IPO Timing,”
by Edward Shields, et al., Sandler O’Neill, analyst report, 18 April 2012, p. 1.

148. On 18 April 2012, Genworth stock declined 27.14% (on a logarithmic return basis). The Market Index return was -0.40%, and the Peer Index return was -1.23%. Based on the regression model, the explained portion of the return on Genworth stock was -2.22%. The difference between the actual return of -27.14% and the explained return of -2.22% is a residual return of -24.92%.
149. A residual return of -24.92% is an unusually large one-day decline for Genworth common stock. That residual return is associated with a *t*-statistic value of -12.72, which indicates that the residual return was too severe to have been merely a random fluctuation. The likelihood of obtaining a residual return of this magnitude and associated *t*-statistic given that particular explanation is virtually nil. Therefore, the stock return is deemed statistically significant.

7. Event Study Summary

150. The event study conducted on earnings announcements during the Examination Period shows that there was a cause and effect relationship between new, unexpected information and significant reactions in the market price of Genworth stock.

151. The event study shows that for the disclosure event there was a strongly statistically significant price reaction to new, Company-specific news. This finding proves not only that the market for Genworth stock was efficient, but also that it was efficient specifically with respect to the information at issue in this case.
152. The event study conducted on the disclosure event, discussed herein, is essentially a controlled experiment that allows one to observe the market's valuation of the stock with and without the information at issue. Prior to an event, the stock is valued in the marketplace without the new information. After the event, the stock is valued with the newly-released information. The significant stock price change elicited by the allegation-related disclosure reflects the effect of that information.

C. Additional Tests of Market Efficiency – Examining Earnings Announcement Event Dates Collectively

153. In addition to assessing market efficiency by observing whether the stock price reacted appropriately on important news event dates individually, one can also test for market efficiency by assessing collectively whether the stock generally moves more on days with greater information flow than on more typical days with less news. That is, if the stock price movements are generally greater among a collection of news days than among all other non- or lesser-news days, this result would establish that there is a cause and effect relationship between the flow of information and stock price movements, which indicates market efficiency.
 1. High Frequency of Statistically Significant Price Movements on Earnings Announcement Dates
154. A cause and effect relationship between the release of information and reaction in the stock price is evident if there is a higher frequency of statistically significant events within a sample of dates on which there was a greater flow of new information, as compared to the ordinary frequency of statistically significant events within the control sample of typical days.

155. Specifically, in this case, if the frequency of significant price movements is statistically significantly greater for earnings announcement days than for ordinary days, the finding would indicate that the Genworth stock price responds to the higher information flow on the event dates, demonstrating market efficiency.
156. By construction, approximately 5% of ordinary non-event dates during the Examination Period have stock price movements of such magnitude as to appear to be statistically significant. By contrast, 4 of the 5 earnings announcement event dates, 80%, exhibited statistical significance. This difference in frequencies is meaningful, significant, and indicates market efficiency.
157. Under this hypothesis that stock does not behave any differently on earnings announcement event dates than on ordinary days, there would be only a 5% probability that any such individual event would elicit a statistically significant stock price reaction at the 95% confidence level. Under the hypothesis that the stock behaves no differently on event dates than on ordinary days, the probability that 4 of 5 such events would be statistically significant is less than 1 in 33,000. This probability is assessed using a binomial distribution, computing the likelihood of 4 out of 5 positive results (of individual statistical significance) where a positive result has a probability of 5% and a negative result has a probability of 95%.⁶³
158. The result that 4 of the 5 earnings announcement events were statistically significant would have a probability of less than 0.003% if the market were not efficient such that the stock price movements on these days were caused by random volatility alone, rather than as efficient reactions to new information.
159. Therefore, based on the finding that 4 of the 5 event dates were indeed statistically significant, we can conclude that Genworth's stock did respond to the news disseminated on earnings announcement dates, demonstrating market efficiency throughout the Examination Period, which included the Class Period.

⁶³ For more explanation about this test and computation, see for example, *Introduction to Mathematical Statistics*, by Robert V. Hogg, Joseph W. McKean, and Allen T. Craig, 6th Edition, Pearson Prentice Hall, 2005, pp. 133-134.

2. F-Test and Ansari-Bradley Test Conducted on Earnings Announcements

160. Announcements of financial results sometimes constitute unexpected good news and sometimes constitute unexpected bad news. In an efficient market, the stock would rise after unexpected good news and fall after unexpected bad news, absent confounding countervailing news. Therefore, there would be a wider dispersion of returns on earnings announcement dates, as compared to ordinary days, as long as some of the earnings announcements contained some unexpected good or bad news.
161. It follows that if the dispersion of Genworth stock returns on earnings announcement days was significantly greater than the dispersion of Genworth stock returns on all other days in the Examination Period, this finding would further demonstrate that the stock price reacted to news over the course of the Examination Period (which includes the Class Period), which establishes market efficiency. I ran an F-test and Ansari-Bradley test to determine whether this is the case. These tests focus on return dispersion.
162. I ran both tests on the residual returns for Genworth common stock, that is, the computed portion of the stock returns remaining after controlling for the impact of market and peer group effects. Running the tests on residual returns focuses the tests more precisely on the effects of Company-specific information on the Company stock price.

a. F-Test

163. The sample standard deviation of the earnings announcement days' residual returns was 13.01%. The sample standard deviation of all other days' returns was 1.95%. Clearly, the earnings announcement days' sample standard deviation was far greater than the sample standard deviation for all other days – over six times greater.
164. An F-test assesses whether the difference between the two sample standard deviations is statistically significant, or alternatively, a potentially random result. The F-statistic for these two samples is 44.4, which is greater than the 95% confidence level critical F-statistic value of 2.4 (with 4 and 247 degrees of freedom), indicating that the difference in sample standard deviations is statistically significant and meaningful.
165. The F-test finds that the dispersion of earnings announcement days' returns is significantly greater than the dispersion of returns for all other days. This result

demonstrates that the price of Genworth common stock moved more on earnings announcement days than on other days. This statistical result indicates that there was a cause and effect relationship between the release of new, Company-specific information and reactions in the Genworth common stock price, which therefore establishes that Genworth common stock traded in an efficient market.

b. Ansari-Bradley Test

166. The Ansari-Bradley test is another test that determines whether or not two data samples have significantly different dispersions, which, as discussed above, when applied to a sample of earnings announcement dates, in comparison to all other dates, would indicate market efficiency. The Ansari-Bradley test is a well-regarded and generally accepted test for comparing sample dispersions and is presented and described in numerous authoritative textbooks.⁶⁴
167. Applied to the earnings announcement returns and the sample of all other returns observed during the Examination Period, the Ansari-Bradley test, like the F-test, finds with an extremely high degree of statistical certainty that the dispersion of earnings announcement event returns was significantly greater than the dispersion of returns on all other days. The Ansari-Bradley C-statistic for the two samples of Genworth stock residual returns is 2.02, which is greater than the critical C-statistic threshold of 1.65 for statistical significance at the 95% confidence level.⁶⁵ This result is further proof that the price of Genworth common stock moved more on earnings announcement days than on other days during the Examination Period and the Class Period.

⁶⁴ For example: *Practical Nonparametric Statistics*, 2nd edition, by J.W. Conover, John Wiley & Sons, 1980; *Applied Nonparametric Statistics*, by Wayne W. Daniel, Houghton Mifflin, 1978; *Nonparametric Statistical Methods*, by Wolfe Hollander, John Wiley & Sons, 1973; *Beyond ANOVA: Basics of Applied Statistics*, by Rupert, G. Miller, Jr., John Wiley & Sons, 1986; and *Biostatistical Analysis*, 3rd edition, by Jerrold H. Zar, Prentice-Hall, 1996.

⁶⁵ The Ansari-Bradley critical C-statistic threshold of 1.65 indicates statistical significance at the 95% confidence level for a one-tailed test. Here the critical test statistic is for a one-tailed test because the question at issue is whether event dates have *greater* volatility than non-events.

168. This statistical test result indicates that there was a cause and effect relationship between the release of new, Company-specific information and reactions in the Genworth common stock price, which therefore establishes that Genworth common stock traded in an efficient market during the Class Period.

VIII. PER SHARE DAMAGE METHODOLOGY

169. Plaintiffs' counsel asked me to opine on whether per share out-of-pocket damages could be measured for each Class member under Section 10(b) of the Exchange Act using a common methodology for all Class members.

1. Section 10(b) Per Share Damage Methodology

170. Assuming a Plaintiffs verdict on the allegations of fraud, Section 10(b) per share damages can be measured as follows:

- i. First, valuation tools, which would include event study analysis such as that described herein, and potentially other empirical analyses if necessary, would be used to establish that the disclosure(s), correcting the alleged misrepresentations and omissions, caused the price of Genworth common stock to fall. This analysis, after controlling for potentially non-fraud-related information, would establish that the alleged misrepresentations and omissions had caused the stock price to be artificially inflated, and that the corrective disclosure(s) caused the inflation to dissipate, in turn causing investor losses. This analysis would apply on a Class-wide basis.
- ii. Second, an inflation ribbon would be constructed, using generally accepted empirical analysis and valuation tools, indicating how much artificial inflation caused by the alleged misrepresentations and omissions was in the price of Genworth common stock on each day during the Class Period. An inflation ribbon is a time series of the difference between the actual stock price observed in the marketplace, and the estimated price that the stock would have traded at each day had there been full disclosure from the outset of the Class Period. Construction of the inflation ribbon generally employs

event study analysis, combined with widely used and generally accepted valuation tools and models. The inflation ribbon is often constructed by working chronologically backwards from the final corrective disclosure to the start of the Class Period, accounting for alleged fraud-related residual price declines as they occurred. Inflation prior to a corrective disclosure that dissipated inflation is greater than the inflation afterward by the amount of inflation that dissipated. This analysis would also apply on a Class-wide basis.

- iii. Third, the measure of per share damages generally applied in Section 10(b) cases is the reduction in the inflation ribbon over an investor's holding period (the economic/inflation loss). That is, for each Class member, per share damages would be calculated as the difference between the inflation on the date shares were purchased and the inflation on the date those same shares were subsequently sold. Per share damages are limited, however, to be no greater than the decline in share price over the holding period, which is the investment loss actually sustained. Pursuant to the Private Securities Litigation Reform Act of 1995 (the "PSLRA") (15 U.S.C. § 78u-4(e)), for any shares sold during the 90-day period after the end of the Class Period, per share damages would be calculated as the lesser of the reduction in the dollar inflation over the investor's holding period (the economic/inflation loss), or the decline in the stock price (the investment loss), where the terminal stock price is deemed to be the average price from the final corrective disclosure date to the sale date. Also pursuant to the PSLRA, for any shares held 90 days or more beyond the final corrective disclosure, damages would equal the lesser of the reduction in the dollar inflation over the investor's holding period (the economic/inflation loss) or the decline in the stock price (the investment loss), where the terminal stock price is

deemed to be the average price over the 90 days following the final corrective disclosure. The calculation of each Class member's damages would be a mechanical arithmetical exercise, conducted the same way for all Class members, applying the results of the Class-wide analyses described above to each Class member's trading data.

171. Consequently, each Class member's per share damages under Section 10(b) can be computed in the same way, common to all Class members, using readily available daily pricing information, in accordance with widely used and generally accepted methodologies and the PSLRA.
172. I have not yet been asked to calculate damages for any of the claims alleged on behalf of the class, and such calculations will likely depend, in part, on the completion of discovery. However, the methodology described above is generally accepted and widely used for calculating damages under Section 10(b) consistently on a Class-wide basis in securities class actions.

IX. SUMMARY

173. Genworth common stock traded on the NYSE where trading was facilitated by a Designated Market Maker. The Company was covered by numerous analysts. Institutional ownership of Genworth stock was widespread. Trading was active. Market capitalization and float were high. During the Class Period, Genworth made timely filings with the SEC and financial information about the Company was readily available to investors and analysts. The stock's bid-ask spread was narrow.
174. Not only did the market for Genworth common stock satisfy the *Cammer* and *Krogman* factors that indicate market efficiency, but it also satisfied the empirical *Cammer* factor, which demonstrates the essence of market efficiency.
175. The event studies proved that there was a cause and effect relationship between new, Company-specific information and movements in the Genworth stock price. Dispersion tests focusing on earnings announcements provided further proof that the stock price reacted to the flow of information – the essence of market efficiency.

176. Given these facts, I conclude that Genworth common stock traded in an efficient market over the course of the Class Period.
177. Damages for Class members' claims under Section 10(b) of the Exchange Act can be measured pursuant to a common methodology for each Class member.

X. LIMITING FACTORS AND OTHER ASSUMPTIONS

178. This declaration is furnished solely for the purpose of court proceedings in the above referenced matter and may not be used or referred to for any other purpose. The analysis and opinions contained in this declaration are based on information available as of the date of this declaration. I reserve the right to supplement or amend this declaration, including in the event additional information becomes available.

I swear under penalty of perjury that the above is true and correct. Executed 28 January 2016 at Wellesley, Massachusetts.


Steven P. Feinstein, Ph.D., CFA

XI. APPENDIX: LOGARITHMIC RETURNS

A1-1. Logarithmic returns, rather than percent change returns are commonly used in stock return regressions and event study analysis and were used in the regression modeling here. The formula for a logarithmic return is:

$$R_t = \ln\left(\frac{P_t + d_t}{P_{t-1}}\right)$$

where:

R_t is the logarithmic return on day t;
 P_t is the stock price at the end of day t;
 P_{t-1} is the stock price from the previous day, day t-1;
 d_t is the dividend on day t, if any.

A1-2. The formula for converting a logarithmic return into a dollar return is:

$$DR_t = P_{t-1} \cdot (e^{R_t} - 1)$$

where:

DR_t is the dollar return on day t;
 P_{t-1} is the stock price from the previous day, day t-1;
 e is natural e (approximately 2.7);
 R_t is the logarithmic return on day t.

A1-3. If a stock falls from \$20 to \$18, the percent change in price is -10%, equal to the \$2 decline divided by the original \$20 price. The logarithmic return, however, is -10.54%, equal to $\ln(\$18/\$20)$.

A1-4. The logarithmic return relates a price change to an average of the original, final, and intervening prices over the course of a price decline. As such, for large price declines, it is possible for a logarithmic price decline to exceed 100%, since the price decline may be greater than the average of the beginning and ending prices.

A1-5. An attractive feature of a logarithmic return is that it can be decomposed into contributing factors linearly. That is, the portion of a logarithmic return caused by company-specific information is isolated by subtracting from the total logarithmic return the portion of the total return caused by market and peer group factors.

Exhibit-1

Documents and Other Information Reviewed and Relied Upon

CASE DOCUMENTS

- Second Amended Class Action Complaint, dated 17 April 2015.

NEWS ARTICLES/PRESS RELEASES

- Factiva news articles (1,226) from 1 April 2011 to 31 July 2012, downloaded using the following search parameters: Sources Field: *Dow Jones Newswires*, Major News and Business Publications, Press Release Wires, *Reuters Newswires*, *Wall Street Journal* – All Sources; Company: Genworth Financial, Inc. Or Genworth Financial Mortgage Insurance Pty Limited Or Genworth MI Canada Inc.; All Subjects; All Industries; All Regions.
- “Genworth Financial Announces First Quarter 2011 Results,” *PR Newswire*, Company press release, 3 May 2011, 4:10 PM.
- “Correct: Genworth Warns Of 2Q Loss On Mortgage-Insurer Charge,” *Dow Jones Newswires*, 20 July 2011.
- “Genworth Announces Preliminary Second Quarter 2011 Results; Strengthens U.S. Mortgage Insurance Reserves by \$300 Million,” *PR Newswire*, Company press release, 20 July 2011, 4:15 PM.
- “Genworth Financial Announces Second Quarter 2011 Results,” *PR Newswire*, Company press release, 28 July 2011, 4:07 PM.
- “Genworth Posts 2Q Loss, Dragged Down by Results from Mortgage Insurance Business,” *Associated Press*, 28 July 2011.
- “Genworth Financial Announces Third Quarter 2011 Results,” *PR Newswire*, Company press release, 3 November 2011, 4:25 PM.
- “Genworth Financial Shares Jump as CEO Outlines Plans to Break Up the Company,” *Associated Press*, 29 July 2011.
- “Genworth: Repurchases ‘Compelling Investment’ At Current Valuation,” *Dow Jones Newswires*, 29 July 2011.
- “UPDATE 1-Genworth CEO Hints at Split of Company,” *Reuters*, 29 July 2011.
- “Genworth Prepares for Possible Split; Shares Rise,” *Associated Press*, 29 July 2011.
- “Genworth Financial Announces Fourth Quarter 2011 Results,” *PR Newswire*, Company press release, 2 February 2012, 4:10 PM.
- “Genworth Financial Announces New Timing For Planned Minority Initial Public Offering (IPO) of Australian Mortgage Insurance Business,” *PR Newswire*, Company press release, 17 April 2012, 4:51 PM.

Exhibit-1

Documents and Other Information Reviewed and Relied Upon

ANALYST REPORTS

- JPMorgan, 19 April 2011.
- JPMorgan, 25 April 2011.
- Deutsche Bank, 3 May 2011.
- Morgan Stanley, 3 May 2011.
- UBS Research, 3 May 2011.
- Wells Fargo, 3 May 2011.
- Credit Suisse, 4 May 2011.
- JPMorgan, 4 May 2011.
- Macquarie Research, 4 May 2011.
- Morgan Stanley, 4 May 2011.
- Scotiabank, 4 May 2011.
- Wells Fargo, 5 May 2011.
- UBS Research, 10 May 2011.
- Keefe, Bruyette, & Woods, Inc., 24 May 2011.
- Deutsche Bank, 13 June 2011.
- UBS Research, 7 July 2011.
- Credit Suisse, 20 July 2011.
- Deutsche Bank, 20 July 2011.
- JPMorgan, 20 July 2011.
- Morgan Stanley, 20 July 2011.
- UBS Research, 20 July 2011.
- Scotiabank, 21 July 2011.
- Wells Fargo, 21 July 2011.
- Credit Suisse, 28 July 2011.
- Deutsche Bank, 28 July 2011.
- Wells Fargo, 28 July 2011.
- JPMorgan, 29 July 2011.
- Morgan Stanley, 29 July 2011.
- Scotiabank, 29 July 2011.
- UBS Research, 29 July 2011.
- Credit Suisse, 10 August 2011.
- Keefe, Bruyette, & Woods, Inc., 3 November 2011.
- Morgan Stanley, 3 November 2011.
- UBS Research, 3 November 2011.
- Credit Suisse, 4 November 2011.
- JPMorgan, 4 November 2011.
- Morgan Stanley, 4 November 2011.

Exhibit-1

Documents and Other Information Reviewed and Relied Upon

- Scotiabank, 4 November 2011.
- Keefe, Bruyette, & Woods, Inc., 10 November 2011.
- Credit Suisse, 29 November 2011.
- Sandler O'Neill & Partners, 8 December 2011.
- Sandler O'Neill & Partners, 22 December 2011.
- Wells Fargo, 25 January 2012.
- Morgan Stanley, 2 February 2012.
- Sandler O'Neill & Partners, 2 February 2012.
- UBS Research, 2 February 2012.
- Credit Suisse, 3 February 2012.
- JPMorgan, 3 February 2012.
- Morgan Stanley, 3 February 2012.
- Scotiabank, 3 February 2012.
- Scotiabank, 3 February 2012.
- Wells Fargo, 3 February 2012.
- Credit Suisse, 6 February 2012.
- Keefe, Bruyette, & Woods, Inc., 12 February 2012.
- Sandler O'Neill & Partners, 13 February 2012.
- S&P Capital IQ, 15 February 2012.
- BTIG, 11 April 2012.
- Sandler O'Neill & Partners, 11 April 2012.
- JPMorgan, 17 April 2012.
- Keefe, Bruyette, & Woods, Inc., 17 April 2012.
- BTIG, 18 April 2012.
- Credit Suisse, 18 April 2012.
- Morgan Stanley, 18 April 2012.
- Sandler O'Neill & Partners, 18 April 2012.
- Wells Fargo, 18 April 2012.
- S&P Capital IQ, 18 April 2012.
- Morgan Stanley, 30 April 2012.
- Credit Suisse, 1 May 2012.
- Credit Suisse, 1 May 2012.
- Keefe, Bruyette, & Woods, Inc., 1 May 2012.
- Morgan Stanley, 1 May 2012.
- Sandler O'Neill & Partners, 1 May 2012.
- UBS Research, 1 May 2012.
- Wells Fargo, 1 May 2012.
- BTIG, 2 May 2012.
- JPMorgan, 2 May 2012.

Exhibit-1

Documents and Other Information Reviewed and Relied Upon

- Morgan Stanley, 2 May 2012.
- Scotiabank, 2 May 2012.
- Wells Fargo, 2 May 2012.
- Sandler O'Neill & Partners, 3 May 2012.
- Keefe, Bruyette, & Woods, Inc., 4 May 2012.
- S&P Capital IQ, 3 May 2012.
- Credit Suisse, 15 May 2012.
- Morgan Stanley, 21 June 2012.
- Sandler O'Neill & Partners, 11 July 2012.
- UBS Research, 17 July 2012.
- Keefe, Bruyette, & Woods, Inc., 31 July 2012.
- Morgan Stanley, 31 July 2012.
- Sandler O'Neill & Partners, 31 July 2012.
- UBS Research, 31 July 2012.

SEC FILINGS

- Genworth Financial, Inc., Form 8-K, filed 2 February 2011.
- Genworth Financial, Inc., Form 10-K for the Fiscal Year Ended 31 December 2010, filed 25 February 2011.
- Genworth Financial, Inc., Form 8-K, filed 18 March 2011.
- Genworth Financial, Inc., Form 424B2, filed 22 March 2011.
- Genworth Financial, Inc., Form 424B2, filed 23 March 2011.
- Genworth Financial, Inc., Form FWP, filed 23 March 2011.
- Genworth Financial, Inc., Form 8-K, filed 25 March 2011.
- Genworth Financial Mortgage Insurance Pty Ltd Form 8-K, filed 29 March 2011.
- Genworth Financial, Inc., Form DEF 14A, filed 4 April 2011.
- Genworth Financial, Inc., Form 8-K, filed 3 May 2011.
- Genworth Financial Mortgage Insurance Pty Ltd Form 10-Q for the Quarter Ended 31 March 2011, filed 4 May 2011.
- Genworth Financial Mortgage Insurance Pty Ltd Form 8-K, filed 11 May 2011.
- Genworth Financial, Inc., Form 8-K, filed 20 May 2011.
- Genworth Financial, Inc., Form 8-K, filed 1 June 2011.
- Genworth Financial, Inc., Form 11-K for the Fiscal Year Ended 31 December 2010, filed 20 June 2011.
- Genworth Financial, Inc., Form 8-K, filed 20 July 2011.
- Genworth Financial, Inc., Form 8-K, filed 28 July 2011.
- Genworth Financial, Inc., Form 10-Q for the Quarter Ended 30 June 2011, filed 2 August 2011.

Exhibit-1

Documents and Other Information Reviewed and Relied Upon

- Genworth Financial Mortgage Insurance Pty Ltd Form 8-K, filed 9 August 2011.
- Genworth Financial, Inc., Form 8-K, filed 15 September 2011.
- Genworth Financial, Inc., Form 8-K, filed 6 October 2011.
- Genworth Financial, Inc., Form 8-K, filed 3 November 2011.
- Genworth Financial, Inc., Form 10-Q for the Quarter Ended 30 September 2011, filed 7 November 2011.
- Genworth Financial Mortgage Insurance Pty Ltd Form 8-K, filed 17 November 2011.
- Genworth Financial, Inc., Form 8-K, filed 30 January 2012.
- Genworth Financial, Inc., Form 8-K, filed 2 February 2012.
- Genworth Financial, Inc., Form 10-K for the Fiscal Year Ended 31 December 2011, filed 27 February 2012.
- Genworth Financial, Inc., Form 424B2, filed 8 March 2012.
- Genworth Financial, Inc., Form FWP, filed 8 March 2012.
- Genworth Financial, Inc., Form 424B2, filed 9 March 2012.
- Genworth Financial, Inc., Form 8-K, filed 13 March 2012.
- Genworth Financial, Inc., Form 8-K, filed 16 March 2012.
- Genworth Financial Mortgage Insurance Pty Ltd Form 8-K, filed 30 March 2012.
- Genworth Financial, Inc., Form DEF 14A, filed 4 April 2012.
- Genworth Financial, Inc., Form DEFA14A, filed 3 May 2012.
- Genworth Financial, Inc., Form 10-Q for the Quarter Ended 31 March 2012, filed 4 May 2012.
- Genworth Financial, Inc., Form S-8, filed 23 May 2012.
- Genworth Financial, Inc., Form S-3ASR, filed 13 June 2012.
- Genworth Financial, Inc., Form 11-K for the Fiscal Year Ended 31 December 2011, filed 25 June 2012.
- Genworth Financial, Inc., Form 10-Q for the Quarter Ended 30 June 2012, filed 3 August 2012.
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CONFERENCE CALLS

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- “GNW – Q3 2011 Earnings Call,” *Factset: callstreet*, 4 November 2011.
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DATA AND DATABASES

- Bloomberg
- Capital IQ
- CRSP (Center for Research in Security Prices)
- EDGAR
- Factiva
- FactSet
- Thomson Research

LEGAL CASES

- *Basic, Inc. v. Levinson*, 485 U.S. (1988).
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Documents and Other Information Reviewed and Relied Upon

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- *Amgen Inc., et al. v. Connecticut Retirement Plans*, 133 S. Ct. 1184, 1190 (2013).
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OTHER

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- “Fact Sheet; Designated Market Makers,” NYSE Euronext, 2012.
- “Float Adjustment Methodology,” *S&P Dow Jones Indices*, July 2012.
- “Brief of Financial Economists as Amici Curiae in Support of Respondents,” *Halliburton Co. and David Lesar v., Erica P. John Fund, Inc.*, FKA Archdiocese of Milwaukee Supporting Fund, Inc., 5 February 2014.
- Any other documents and data cited in the report.

Exhibit-2
Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

Babson College
Finance Division
Babson Park, MA 02457
781-239-5275
Feinstein@Babson.edu

EDUCATION

- 1989 YALE UNIVERSITY
Ph.D. in Economics (Concentration in Finance)
- 1986 YALE UNIVERSITY
M.Phil. in Economics
- 1983 YALE UNIVERSITY
M.A. in Economics
- 1981 POMONA COLLEGE
B.A. in Economics (Phi Beta Kappa, *cum laude*)

TEACHING EXPERIENCE

- 1996 - present BABSON COLLEGE
Babson Park, MA
Full-time Faculty, Finance Division
Associate Professor (2000-present)
Donald P. Babson Chair in Applied Investments (2002-2010)
Faculty Director of the Babson College Fund (2002-2009)
Director of the Stephen D. Cutler Investment Management Center
(2002-2007)
Assistant Professor (1996-2000)
- 1990 - 1995 BOSTON UNIVERSITY SCHOOL OF MANAGEMENT
Boston, MA
Full-time Faculty, Department of Finance
- 1993 - 1994 WASHINGTON UNIVERSITY, OLIN SCHOOL OF BUSINESS
St. Louis, MO
Visiting Assistant Professor, Department of Finance

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Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

BUSINESS EXPERIENCE

- 2008 - present CROWNINSHIELD FINANCIAL RESEARCH, INC.
Wellesley, MA
President and Senior Expert
- 1996 - 2008 THE MICHEL-SHAKED GROUP
Boston, MA
Senior Expert (2001 - 2008)
Affiliated Expert (1996 - 2001)
- 1987 - 1990 FEDERAL RESERVE BANK OF ATLANTA
Economist

PROFESSIONAL DESIGNATIONS

- 1998 Awarded the Chartered Financial Analyst designation by the Association for Investment Management and Research.

RESEARCH AWARDS

- 1999 Greater Boston Real Estate Board/Real Estate Finance Association – Research Grant and Featured Speaker at Real Estate Finance Association Meetings.

PAPERS AND PUBLICATIONS

“Underestimation of Securities Fraud Aggregate Damages Due to Inter-Fund Trades.” (with Gang Hu, Mark Marcus, and Zann Ali) *Journal of Forensic Economics*, September 2013, Vol. 24, No. 2, 161-173.

“Lehman Equity Research Tipping: Evidence in the Stock Price Data,” Working paper, March 2010. Cited in *New York Times* May 19, 2012, and made available on the *New York Times* website.

“Distortion in Corporate Valuation: Implications of Capital Structure Changes” (with Allen Michel and Jacob Oded) *Managerial Finance*, 2011, Vol. 37(8), 681-696.

“Market Signals of Investment Unsuitability” (with Alexander Liss and Steven Achatz) Law360.com, June 3, 2010. Available from <http://www.law360.com/articles/170690>.

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Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

“Planning Capital Expenditure,” in *The Portable MBA in Financing and Accounting*, J. L. Livingstone and T. Grossman, editors, New York: Wiley, 3rd edition 2001, and 4th edition 2009.

“Financial Management of Risks,” in *The Portable MBA in Financing and Accounting*, J. L. Livingstone and T. Grossman, editors, New York: Wiley, 2nd edition 1997, 3rd edition 2001, and 4th edition 2009.

“Fraud-on-the-Market Theory: Is a Market Efficient?” (with Allen Michel and Israel Shaked) *American Bankruptcy Institute Journal*, May 2005.

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A Future for Real Estate Futures: Potential Applications of Derivatives in Real Estate Investment and Finance (with Linda Stoller). Monograph. Boston: Real Estate Finance Association / Greater Boston Real Estate Board, May 2000.

“The Risk Budget: Using Your Human Resources,” (with John Marthinsen and John Edmunds) *Risk Management*, April 2000.

“Scenario Learning: A Powerful Tool for the 21st Century Planner,” (with Jeffrey Ellis and Dennis Stearns) *The Journal of Financial Planning*, April 2000.

“Protecting Future Product Liability Claimants in the Case of Bankruptcy,” (with Allen Michel and Israel Shaked) *American Bankruptcy Institute Journal*, January 2000.

“Measuring Risk with the Bodie Put When Stocks Exhibit Mean Reversion,” *The Journal of Risk*, Vol. 1, No. 3, 1999.

“Just-in-Time Mathematics: Integrating the Teaching of Finance Theory and Mathematics,” (with Gordon Prichett) *Primus*, Vol. IX, No. 2, June 1999.

Atlanta Park Medical Center v. Hamlin Asset Management. (with Natalie Taylor). Babson Case Collection, Harvard Business School Press, 1998.

Exhibit-2
Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

“Dealing with Delta,” *Derivatives Week*, VII, No. 44, November 2, 1998.

“Expected Return in Option Pricing: A Non-Mathematical Explanation,” *Derivatives Week*, VII, No. 35, August 31, 1998.

“When Hedges Fail: The Put Paradox and its Solution,” *Derivatives Quarterly*, Vol. 4, No. 2, Winter 1997.

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“International Investing,” in *Irwin’s Directory of Emerging Market Brokerages*. New York: Irwin, 1996.

“The Hull and White Implied Volatility.” Boston University Working Paper #92-51, 1992.

“Immunizing Against Interest Rate Risk Using the Macaulay Duration Statistic: An Assessment,” (with Don Smith) in *Financial Systems and Risk Management*, the proceedings of the US-Japan Forum on Financial Strategy in the 1990s, sponsored by Osaka Foundation of International Exchange and Boston University, August 1991.

“Covered Call Options: A Proposal to Ease LDC Debt,” (with Peter Abken) *Federal Reserve Bank of Atlanta Economic Review*, March/April 1990. Reprinted in *Financial Derivatives: New Instruments and Their Uses*. Atlanta: Federal Reserve Bank.

“Forecasting Stock-Market Volatility Using Options on Index Futures,” *Federal Reserve Bank of Atlanta Economic Review*, May/June 1989. Reprinted in *Financial Derivatives: New Instruments and Their Uses*. Atlanta: Federal Reserve Bank.

“The Black-Scholes Formula is Nearly Linear in Sigma for At-the-Money Options; Therefore Implied Volatilities from At-the-Money Options are Virtually Unbiased.” Federal Reserve Bank of Atlanta Working Paper #88-9, December 1988.

“The Effect of the ‘Triple Witching Hour’ on Stock Market Volatility,” (with William Goetzmann) *Federal Reserve Bank of Atlanta Economic Review*, September/October 1988. Reprinted in *Financial Derivatives: New Instruments and Their Uses*. Atlanta: Federal Reserve Bank.

“Stock Market Volatility,” *Federal Reserve Bank of Atlanta Economic Review*, November/December 1987.

Exhibit-2
Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

Book review of *In Who's Interest: International Banking and American Foreign Policy*, by Benjamin J. Cohen, Yale University Press, in *Federal Reserve Bank Of Atlanta Economic Review*, Summer 1987.

PRESENTATIONS

“Determining the Defendant's Ability to Pay,” at Taxpayers Against Fraud Education Fund Conference, October 2010.

“The Computation of Damages in Securities Fraud Cases,” at the Grant and Eisenhower Institutional Investor Conference, December 2002.

“The Role of the Financial Expert in Complex Litigation,” at the Financial Management Association Conference, October 2000.

“Entrepreneurial Incentives and Resource Allocation Among Corporate Venturing Initiatives,” (with Joel Shulman and U. Srinivasa Rangan), Babson Entrepreneurship Research Conference, May 2000.

“Application of Real Options in Purchasing Strategies,” (with Juan Orozco), presented at the International Applied Business Research Conference, March 2000.

“A Future for Real Estate Futures,” (with Linda Stoller) at the Fairfield County chapter of the Real Estate Finance Association, November 1999, and at the Greater Boston Real Estate Board, November 2000.

“Atlanta Park Medical Center v. Hamlin Asset Management,” (with Natalie Taylor) at the 1999 convention of the North American Case Research Association.

“Using Future Worlds™ in the Financial Planning Process,” (with Jeffrey Ellis) at the Institute of Certified Financial Planners Masters Retreat, October 1999.

“Toward a Better Understanding of Real Options: A Weighted Average Discount Rate Approach,” at the 1999 Financial Management Association Conference, the 1999 European Financial Management Association Conference, and the 1999 Multinational Finance Society Conference.

“Just-In-Time Mathematics: Integrating the Teaching of Finance Theory and Mathematics,” (with Gordon Prichett) at the 1999 Financial Management Association Conference.

“Alternative Dow Investments for the Individual Investor: Diamonds, Synthetics, and the Real Thing,” at the 1999 Academy of Financial Services Convention.

Exhibit-2
Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

“Evidence of Yield Burning in Municipal Refundings” at Financial Management Association Convention, October 1997; Government Finance Officers Association, 1997; and Northeast Regional Convention of the National Association of State Treasurers, 1997.

“Teaching the Strong-Form Efficient Market Hypothesis” at Conference on Classroom Experiments in the Teaching of Economics at University of Virginia, September 1995.

“Efficient Consolidation of Implied Standard Deviations,” (with Shaikh Hamid) at Midwest Finance Association, March 1995.

“A Test of Intertemporal Averaging of Implied Volatilities,” (with Shaikh Hamid) at Eastern Finance Association, April 1995.

“Taking Advantage of Volatility: Non-linear Forecasting and Options Strategies,” (with Hassan Ahmed) at Chicago Board of Trade / Chicago Board Options Exchange Conference on Risk Management, February 1992.

“Immunizing Against Interest Rate Risk Using the Macaulay Duration Statistic: An Assessment,” (with Don Smith) at Japan-U.S. Conference on Financial Strategies in the 1990s, Osaka, Japan, August 1991.

“The Hull and White Implied Volatility,” at American Finance Association Convention, December 1990.

REVIEWED ARTICLES AND BOOKS FOR:

Harvard Business School Publishing
Elsevier
Journal of Economic Education
Journal of Forensic Economics
Journal of Risk
Financial Review
North American Case Research Association
Financial Management
Journal of Business
Journal of Money, Credit and Banking
Quarterly Review of Economics and Finance
Blackwell
Prentice Hall
Southwestern Publishing

Exhibit-2
Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

COURSES TAUGHT

Capital Markets
Mod B: Decision Making and Applications, Finance stream (MBA)
Financial Reporting and Corporate Finance (MBA)
Valuation (MBA)
Investments (MBA and Executive)
Equity Markets (MBA)
Fixed Income Analysis (Undergraduate and MBA)
Babson College Fund (Undergraduate and MBA)
Options and Futures (Undergraduate)
Advanced Derivative Securities (MBA)
Corporate Finance (MBA and Executive)
Financial Management (MBA)
Risk Management (MBA)
Corporate Financial Strategy (MBA)
Integrated Management (Undergraduate)
Cross-Functional Management (Integrated curriculum, Undergraduate)
Continuous-Time Finance (Doctoral)
Portfolio Theory / Management Information Systems (Executive)
Quantitative Methods for Investment Management (Undergraduate and MBA)
Introduction to Derivative Securities (Executive)
International Finance (Executive)

TEACHING AWARDS

Reid Teaching Award, Washington University, Olin School of Business, 1993-94.

SELECT LIST OF MEDIA CITATIONS

“Is Insider Trading Part of the Fabric?” by Gretchen Morgenson, *The New York Times*, May 19, 2012.

“Bankers Rigging Municipal Contract Bids Admit to Cover-Up Lies,” by William Selway and Martin Z. Braun, *Bloomberg Markets Magazine*, November 24, 2010.

“Hospital Move Presents Buy-Out Groups with New Risks,” by Francesco Guerra, Christopher Bowe, and Rebecca Knight, *Financial Times*, July 15, 2006.

“Funds of Knowledge Add Value,” by Rebecca Knight, *Financial Times*, March 12, 2006.

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Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

“City’s Financial Picture Worse Than Ever, Sanders Says,” by Matthew T. Hall, *San Diego Union-Tribune*, January 7, 2006.

“Downer: Stock Market Takes Another Dive,” by John Chesto, *Boston Herald*, July 23, 2002.

“Banks, Developers, Are Main Beneficiaries,” [editorial column] by Steven Feinstein, *The Boston Globe*, March 31, 2002, p. C4.

“Washington Investing: What Michael Saylor is Really Worth,” by Jerry Knight, *The Washington Post*, March 6, 2000.

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“Top Banks Plan Bailout for Fund,” by Andrew Fraser, Associated Press, September 24, 1998.

“Clarion Call to the Small Investor,” by Jo-Ann Johnston, *The Boston Globe*, March 4, 1998.

“L.A. Authority Study Shows Rampant Yield Burning Abuse,” by Michael Stanton, *The Bond Buyer*, April 22, 1997.

“Dispute Over Yield Burning Dominates GFOA Session,” by Michael Stanton, *The Bond Buyer*, January 29, 1997.

“Men Behaving Badly (Yield Burning),” *Grants Municipal Bond Observer*, January 24, 1997.

“Municipal Bond Dealers Face Scrutiny,” by Peter Truell, *The New York Times*, December 17, 1996.

“Iowa Market Takes Stock of Presidential Candidates,” by Stanley W. Angrist, *The Wall Street Journal*, August 28, 1995.

“Looking for Clues in Options Prices,” by Sylvia Nasar, *The New York Times*, July 18, 1991.

Exhibit-2
Curriculum Vitae
Steven P. Feinstein, Ph.D., CFA

“For Fed, A New Set of Tea Leaves,” by Sylvia Nasar, *The New York Times*, July 5, 1991.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Finance Association
Boston Security Analysts Society
Chartered Financial Analyst Institute
Financial Management Association
Foundation for Advancement of Research in Financial Economics (founding member)
National Association of Forensic Economics
North American Case Research Association

Exhibit-3
Steven P. Feinstein, Ph.D., CFA
Testimony in the Last Four Years

State of New Jersey, Department of Treasury, Division of Investment on behalf of Common Pension Fund A, vs. Merrill Lynch & Co., and Bank of America Corporation
Docket No. L-3855-09
Superior Court of New Jersey
Law Division
Hudson County
Deposition Testimony
June 2012

Jan Buettgen, et al. vs. Katherine J. Harless, et al.
United States District Court
Northern District of Texas
Dallas Division
Civil Action No. 3:09-cv-00791-K
Deposition Testimony
August 2012

DJ Mortgage, LLC, and John F. Smithgall vs. Synovus Bank d/b/a Bank of North Georgia
Superior Court for the County of Fulton
State of Georgia
Civil Action no. 11-cv-205000
Deposition Testimony
September 2012

Carlos Munoz, et al. vs. China Expert Technology, Inc.; PKF New York, Certified Public Accountants, A Professional Corporation; PKF Hong Kong, Certified Public Accountants; And BDO McCade Lo Limited Certified Public Accountants
United States District Court
Southern District of New York
Civil Action no. 07-cv-10531 (AKH)
Deposition Testimony
March 2013

In Re American International Group, Inc. 2008 Securities Litigation
United States District Court
Southern District of New York
Civil Action no. 08-CV-4772-LTS
Deposition Testimony
July 2011 and February 2012
Testimony at Evidentiary Hearing
April 2013 and May 2013

Exhibit-3
Steven P. Feinstein, Ph.D., CFA
Testimony in the Last Four Years

Christopher Cohan, et al., vs. KPMG LLP
Court of Fulton County
State of Georgia
Civil Action no. 12EV0114325G
June 2013

Landmen Partners Inc. et al. vs. The Blackstone Group L.P., et al.
United States District Court
Southern District of New York
Civil Action no. 08-cv-03601-HB
Deposition Testimony
May 2013 and August 2013

Louis Pagnotti, Inc. et al., vs. Deloitte & Touche, LLP,
In the Court of Common Pleas of Luzerne County
Case No. 557 C of 2003
Deposition Testimony
October 2013

In Re IndyMac Mortgage-Backed Securities Litigation
Civil Action No. 1:09-cv-04583-LAK
United States District Court
Southern District of New York
Deposition Testimony
October 2013

Anwar, et al., v. Fairfield Greenwich Limited, et al.
Civil Action No. 09-cv-0118 (VM)
United States District Court
Southern District of New York
Deposition Testimony
February 2014

In Re Symbol Technologies, Inc. Securities Litigation
Civil Action No. 05-cv-3923-DRH
United States District Court
Eastern District of New York
Deposition Testimony
June 2014

Exhibit-3
Steven P. Feinstein, Ph.D., CFA
Testimony in the Last Four Years

In Re Groupon, Inc. Securities Litigation
Civil Action No. 12-cv-2450
United States District Court
Northern District of Illinois
Deposition Testimony
February 2014
Testimony at Evidentiary Hearing
September 2014

Mary K. Jones, et al., vs. Pfizer Inc., et al.
United States District Court
Southern District of New York
Civil Action no. 10-cv-03864-AKH
Deposition Testimony
January 2012 and October 2014

In Re Questcor Pharmaceuticals, Inc. Securities Litigation
Civil Action No. 12-cv-01623-DMG
United States District Court
Central District of California
Deposition Testimony
October 2014

In Re Longtop Financial Technologies, Ltd. Securities Litigation
Civil Action No. 11-cv-3658-SAS
United States District Court
Southern District of New York
Trial Testimony
November 2014

In Re Delcath Systems, Inc. Securities Litigation
Civil Action No. 13 Civ. 3116 (LGS)
United States District Court
Southern District of New York
Deposition Testimony
December 2014

In Re Prudential Financial, Inc. Securities Litigation
Civil Action No. 2:12-cv-05275-SDW-MCA
United States District Court
District of New Jersey
Deposition Testimony
January 2015

Exhibit-3
Steven P. Feinstein, Ph.D., CFA
Testimony in the Last Four Years

In Re Walter Energy, Inc. Securities Litigation
Civil Action No. 2:12-cv-00281-VEH
United States District Court
Northern District of Alabama
Deposition Testimony
January 2014 and March 2015

In Re CVS Caremark Corporation Securities Litigation
Civil Action No. 1:09-cv-00554-S-DLM
United States District Court
District of Rhode Island
Deposition Testimony
March 2015

In Re JPMorgan Chase & Co. Securities Litigation
Civil Action No. 1:12-cv-03852-GBD
United States District Court
Southern District of New York
Deposition Testimony
March 2015

In Re Baxter International Inc., et al. Securities Litigation
Civil Action No. 1:10-cv-06016
United States District Court
Northern District of Illinois Eastern Division
Deposition Testimony
November 2014 and May 2015

In Re Goldman, Sachs & Co., et al. Securities Litigation
Civil Action No. 10 Civ. 4429 (MGC)
United States District Court
Southern District of New York
Deposition Testimony
June 2015

In Re United States of America, et al. v. Frank Kurnik and Pharmerica Corp., et al.
Case No. 3:11-cv-1464-JFA
United States District Court
District South Carolina
Deposition Testimony
June 2015

Exhibit-3
Steven P. Feinstein, Ph.D., CFA
Testimony in the Last Four Years

In Re HCA Holdings, Inc., Securities Litigation
Civil Action No. 3:11-cv-01033
United States District Court
Middle District of Tennessee
Nashville Division
Deposition Testimony
June 2015

In Re Claude A. Reese, et al. v. Robert A. Malone, et al.
Civil Action No. C08-1008 MJP
United States District Court
Western District of Washington at Seattle
Deposition Testimony
June 2015

In Re Bridgepoint Education, Inc. Securities Litigation
Civil Action No. 3:12-cv-01737-JM-JLB
United States District Court
Southern District of California
Deposition Testimony
July 2015

In Re Dana Corporation, et al. Securities Litigation
Civil Action No. 3:05-cv-07393-JGC
United States District Court
Northern District of Ohio
Deposition Testimony
June 2015 and August 2015

In Re Las Vegas Sands Corp. Securities Litigation
Civil Action No. 2:10-cv-00765-KJD-LRL
United States District Court
District of Nevada
Deposition Testimony
March 2015 and December 2015

In Re Groupon, Inc. Securities Litigation
Civil Action No. 12-cv-2450
United States District Court
Northern District of Illinois
Deposition Testimony
December 2015

Exhibit-3
Steven P. Feinstein, Ph.D., CFA
Testimony in the Last Four Years

In Re: Petrobras Securities Litigation
Case No. 14-cv-9662 (JSR)
United States District Court
Southern District of New York
Deposition Testimony
October 2015 and December 2015
Testimony at Evidentiary Hearing
December 2015

In Re Symbol Technologies, Inc. Securities Litigation
Civil Action No. 05-cv-3923-DRH
United States District Court
Eastern District of New York
Deposition Testimony
January 2016

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
4/14/2011	\$12.26	\$12.25	\$12.26	4,726,700	
4/15/2011	\$12.26	\$12.25	\$12.26	4,313,300	0.00%
4/18/2011	\$11.95	\$11.95	\$11.96	4,245,100	-2.56%
4/19/2011	\$11.84	\$11.84	\$11.85	3,929,600	-0.92%
4/20/2011	\$12.04	\$12.03	\$12.04	4,164,200	1.68%
4/21/2011	\$12.02	\$12.01	\$12.02	3,508,000	-0.17%
4/25/2011	\$11.99	\$11.99	\$12.00	2,577,200	-0.25%
4/26/2011	\$12.30	\$12.29	\$12.30	2,703,200	2.55%
4/27/2011	\$12.20	\$12.19	\$12.20	5,036,500	-0.82%
4/28/2011	\$12.25	\$12.24	\$12.25	9,800,400	0.41%
4/29/2011	\$12.19	\$12.19	\$12.21	4,442,300	-0.49%
5/2/2011	\$12.52	\$12.51	\$12.52	5,776,500	2.67%
5/3/2011	\$12.18	\$12.19	\$12.20	6,923,200	-2.75%
5/4/2011	\$12.07	\$12.06	\$12.07	7,643,900	-0.91%
5/5/2011	\$11.63	\$11.64	\$11.65	7,119,300	-3.71%
5/6/2011	\$11.47	\$11.48	\$11.49	9,842,500	-1.39%
5/9/2011	\$11.44	\$11.42	\$11.43	6,703,400	-0.26%
5/10/2011	\$11.25	\$11.24	\$11.25	10,616,500	-1.67%
5/11/2011	\$11.45	\$11.45	\$11.46	10,802,800	1.76%
5/12/2011	\$11.52	\$11.50	\$11.51	5,251,600	0.61%
5/13/2011	\$11.22	\$11.22	\$11.23	6,179,700	-2.64%
5/16/2011	\$11.21	\$11.22	\$11.23	4,538,500	-0.09%
5/17/2011	\$11.20	\$11.19	\$11.20	5,104,700	-0.09%
5/18/2011	\$11.24	\$11.22	\$11.23	3,820,600	0.36%
5/19/2011	\$11.37	\$11.36	\$11.37	5,209,000	1.15%
5/20/2011	\$11.12	\$11.12	\$11.13	6,057,800	-2.22%
5/23/2011	\$10.95	\$10.95	\$10.96	4,003,300	-1.54%
5/24/2011	\$11.01	\$11.00	\$11.01	4,699,300	0.55%
5/25/2011	\$10.95	\$10.93	\$10.94	4,259,700	-0.55%
5/26/2011	\$11.07	\$11.07	\$11.08	4,546,500	1.09%
5/27/2011	\$11.09	\$11.07	\$11.08	2,794,100	0.18%
5/31/2011	\$11.11	\$11.12	\$11.13	5,615,000	0.18%
6/1/2011	\$10.63	\$10.63	\$10.64	5,939,700	-4.42%
6/2/2011	\$11.05	\$11.04	\$11.05	13,333,200	3.88%
6/3/2011	\$10.73	\$10.72	\$10.73	5,670,600	-2.94%
6/6/2011	\$10.44	\$10.44	\$10.45	6,124,900	-2.74%
6/7/2011	\$10.59	\$10.58	\$10.59	10,042,400	1.43%
6/8/2011	\$10.46	\$10.44	\$10.45	11,023,900	-1.24%

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
6/9/2011	\$10.47	\$10.46	\$10.47	4,820,400	0.10%
6/10/2011	\$10.10	\$10.09	\$10.10	8,777,300	-3.60%
6/13/2011	\$10.24	\$10.24	\$10.25	6,114,900	1.38%
6/14/2011	\$10.34	\$10.34	\$10.35	5,593,500	0.97%
6/15/2011	\$9.89	\$9.89	\$9.90	6,937,200	-4.45%
6/16/2011	\$9.92	\$9.91	\$9.92	8,077,700	0.30%
6/17/2011	\$10.20	\$10.19	\$10.20	5,491,800	2.78%
6/20/2011	\$10.20	\$10.19	\$10.20	3,659,500	0.00%
6/21/2011	\$10.42	\$10.42	\$10.43	6,898,900	2.13%
6/22/2011	\$10.38	\$10.38	\$10.39	5,393,100	-0.38%
6/23/2011	\$10.10	\$10.10	\$10.11	7,096,400	-2.73%
6/24/2011	\$9.95	\$9.95	\$9.96	5,225,700	-1.50%
6/27/2011	\$9.98	\$9.98	\$9.99	3,904,700	0.30%
6/28/2011	\$9.99	\$9.98	\$9.99	3,409,500	0.10%
6/29/2011	\$10.20	\$10.20	\$10.21	5,406,900	2.08%
6/30/2011	\$10.28	\$10.27	\$10.28	4,726,200	0.78%
7/1/2011	\$10.56	\$10.55	\$10.56	3,591,600	2.69%
7/5/2011	\$10.28	\$10.28	\$10.29	5,069,900	-2.69%
7/6/2011	\$10.46	\$10.46	\$10.47	5,266,800	1.74%
7/7/2011	\$10.68	\$10.69	\$10.70	5,620,100	2.08%
7/8/2011	\$10.48	\$10.49	\$10.50	4,285,000	-1.89%
7/11/2011	\$9.81	\$9.81	\$9.82	8,650,000	-6.61%
7/12/2011	\$9.71	\$9.72	\$9.73	9,199,700	-1.02%
7/13/2011	\$9.79	\$9.80	\$9.81	7,418,600	0.82%
7/14/2011	\$9.75	\$9.73	\$9.74	11,055,900	-0.41%
7/15/2011	\$9.81	\$9.81	\$9.82	6,712,200	0.61%
7/18/2011	\$9.06	\$9.05	\$9.06	11,496,100	-7.95%
7/19/2011	\$9.50	\$9.49	\$9.50	13,591,600	4.74%
7/20/2011	\$9.47	\$9.47	\$9.48	5,557,700	-0.32%
7/21/2011	\$8.21	\$8.20	\$8.21	34,184,900	-14.28%
7/22/2011	\$8.93	\$8.92	\$8.93	14,983,400	8.41%
7/25/2011	\$8.47	\$8.47	\$8.48	13,189,100	-5.29%
7/26/2011	\$8.40	\$8.39	\$8.40	9,132,500	-0.83%
7/27/2011	\$7.95	\$7.96	\$7.97	10,650,000	-5.51%
7/28/2011	\$7.82	\$7.83	\$7.84	7,767,300	-1.65%
7/29/2011	\$8.32	\$8.31	\$8.32	21,694,000	6.20%
8/1/2011	\$8.04	\$8.02	\$8.03	11,845,500	-3.42%
8/2/2011	\$7.60	\$7.60	\$7.61	8,917,200	-5.63%

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
8/3/2011	\$7.83	\$7.83	\$7.84	11,155,400	2.98%
8/4/2011	\$7.02	\$6.99	\$7.00	20,485,800	-10.92%
8/5/2011	\$6.78	\$6.77	\$6.78	13,890,800	-3.48%
8/8/2011	\$5.63	\$5.63	\$5.64	28,348,200	-18.59%
8/9/2011	\$6.44	\$6.43	\$6.44	22,628,100	13.44%
8/10/2011	\$5.78	\$5.75	\$5.76	18,137,500	-10.81%
8/11/2011	\$6.41	\$6.40	\$6.41	12,985,700	10.35%
8/12/2011	\$6.40	\$6.38	\$6.39	12,898,300	-0.16%
8/15/2011	\$6.67	\$6.68	\$6.69	9,112,400	4.13%
8/16/2011	\$6.45	\$6.45	\$6.46	10,962,700	-3.35%
8/17/2011	\$6.68	\$6.67	\$6.68	8,518,300	3.50%
8/18/2011	\$6.32	\$6.32	\$6.33	13,614,100	-5.54%
8/19/2011	\$6.25	\$6.25	\$6.26	10,932,400	-1.11%
8/22/2011	\$6.16	\$6.17	\$6.18	8,554,100	-1.45%
8/23/2011	\$6.14	\$6.13	\$6.14	9,408,900	-0.33%
8/24/2011	\$6.55	\$6.53	\$6.54	7,460,400	6.46%
8/25/2011	\$6.31	\$6.31	\$6.32	9,405,100	-3.73%
8/26/2011	\$6.51	\$6.49	\$6.50	6,359,000	3.12%
8/29/2011	\$7.03	\$7.01	\$7.02	5,379,800	7.68%
8/30/2011	\$6.91	\$6.91	\$6.92	7,188,700	-1.72%
8/31/2011	\$6.93	\$6.92	\$6.93	6,680,000	0.29%
9/1/2011	\$6.62	\$6.63	\$6.64	5,594,600	-4.58%
9/2/2011	\$6.39	\$6.38	\$6.39	8,390,900	-3.54%
9/6/2011	\$6.04	\$6.04	\$6.05	8,554,000	-5.63%
9/7/2011	\$6.52	\$6.53	\$6.54	9,133,600	7.65%
9/8/2011	\$6.11	\$6.11	\$6.12	8,422,000	-6.49%
9/9/2011	\$5.82	\$5.82	\$5.83	11,467,700	-4.86%
9/12/2011	\$5.82	\$5.82	\$5.83	14,260,300	0.00%
9/13/2011	\$5.86	\$5.85	\$5.86	8,194,500	0.68%
9/14/2011	\$5.95	\$5.93	\$5.94	9,299,300	1.52%
9/15/2011	\$6.13	\$6.14	\$6.15	9,994,300	2.98%
9/16/2011	\$6.16	\$6.15	\$6.16	7,797,300	0.49%
9/19/2011	\$5.89	\$5.89	\$5.90	7,125,900	-4.48%
9/20/2011	\$5.71	\$5.71	\$5.72	6,327,200	-3.10%
9/21/2011	\$5.35	\$5.34	\$5.35	7,877,000	-6.51%
9/22/2011	\$4.92	\$4.91	\$4.92	15,600,300	-8.38%
9/23/2011	\$5.09	\$5.07	\$5.08	7,230,200	3.40%
9/26/2011	\$5.33	\$5.32	\$5.33	8,953,500	4.61%

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
9/27/2011	\$5.61	\$5.61	\$5.62	12,231,400	5.12%
9/28/2011	\$5.57	\$5.56	\$5.57	11,730,300	-0.81%
9/29/2011	\$6.00	\$5.99	\$6.00	11,434,400	7.53%
9/30/2011	\$5.74	\$5.74	\$5.75	8,365,100	-4.43%
10/3/2011	\$5.29	\$5.28	\$5.29	9,242,300	-8.16%
10/4/2011	\$5.32	\$5.31	\$5.32	12,711,200	0.57%
10/5/2011	\$5.34	\$5.34	\$5.35	10,531,000	0.38%
10/6/2011	\$5.51	\$5.50	\$5.51	11,866,200	3.13%
10/7/2011	\$5.13	\$5.13	\$5.14	9,948,300	-7.15%
10/10/2011	\$5.45	\$5.44	\$5.45	7,836,200	6.05%
10/11/2011	\$5.62	\$5.62	\$5.63	11,618,700	3.07%
10/12/2011	\$5.89	\$5.87	\$5.88	11,288,500	4.69%
10/13/2011	\$5.56	\$5.56	\$5.57	10,498,900	-5.77%
10/14/2011	\$5.87	\$5.85	\$5.86	11,264,500	5.43%
10/17/2011	\$5.59	\$5.59	\$5.60	9,471,600	-4.89%
10/18/2011	\$6.09	\$6.08	\$6.09	11,915,500	8.57%
10/19/2011	\$5.80	\$5.80	\$5.81	11,082,600	-4.88%
10/20/2011	\$5.86	\$5.86	\$5.87	8,814,100	1.03%
10/21/2011	\$6.00	\$5.99	\$6.00	9,645,700	2.36%
10/24/2011	\$6.35	\$6.34	\$6.35	12,123,200	5.67%
10/25/2011	\$5.73	\$5.74	\$5.75	11,095,300	-10.27%
10/26/2011	\$6.15	\$6.15	\$6.16	13,380,600	7.07%
10/27/2011	\$6.84	\$6.83	\$6.84	18,790,800	10.63%
10/28/2011	\$6.85	\$6.85	\$6.86	10,044,200	0.15%
10/31/2011	\$6.38	\$6.38	\$6.39	9,358,900	-7.11%
11/1/2011	\$5.84	\$5.84	\$5.85	15,877,400	-8.84%
11/2/2011	\$6.17	\$6.17	\$6.18	8,687,200	5.50%
11/3/2011	\$6.16	\$6.15	\$6.16	13,021,300	-0.16%
11/4/2011	\$7.19	\$7.19	\$7.20	25,060,900	15.46%
11/7/2011	\$6.98	\$6.98	\$6.99	16,335,500	-2.96%
11/8/2011	\$7.16	\$7.16	\$7.17	12,042,300	2.55%
11/9/2011	\$6.56	\$6.57	\$6.58	14,117,300	-8.75%
11/10/2011	\$6.55	\$6.54	\$6.55	9,586,200	-0.15%
11/11/2011	\$6.95	\$6.94	\$6.95	10,315,200	5.93%
11/14/2011	\$6.73	\$6.74	\$6.75	6,753,700	-3.22%
11/15/2011	\$6.60	\$6.58	\$6.59	10,826,700	-1.95%
11/16/2011	\$6.31	\$6.30	\$6.31	11,858,100	-4.49%
11/17/2011	\$6.10	\$6.09	\$6.10	12,161,700	-3.38%

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
11/18/2011	\$6.09	\$6.08	\$6.09	7,563,800	-0.16%
11/21/2011	\$5.78	\$5.78	\$5.79	12,481,800	-5.22%
11/22/2011	\$5.69	\$5.69	\$5.70	7,137,500	-1.57%
11/23/2011	\$5.35	\$5.35	\$5.36	10,065,000	-6.16%
11/25/2011	\$5.39	\$5.38	\$5.39	3,315,100	0.74%
11/28/2011	\$6.07	\$6.07	\$6.08	13,577,700	11.88%
11/29/2011	\$6.14	\$6.14	\$6.15	10,649,700	1.15%
11/30/2011	\$6.59	\$6.58	\$6.59	10,983,700	7.07%
12/1/2011	\$6.54	\$6.55	\$6.56	7,151,100	-0.76%
12/2/2011	\$6.47	\$6.47	\$6.48	9,411,300	-1.08%
12/5/2011	\$6.71	\$6.70	\$6.71	9,808,900	3.64%
12/6/2011	\$6.73	\$6.73	\$6.74	7,556,700	0.30%
12/7/2011	\$6.93	\$6.92	\$6.93	7,400,400	2.93%
12/8/2011	\$6.54	\$6.54	\$6.55	11,555,600	-5.79%
12/9/2011	\$6.75	\$6.73	\$6.74	7,808,000	3.16%
12/12/2011	\$6.43	\$6.43	\$6.44	7,277,200	-4.86%
12/13/2011	\$6.29	\$6.30	\$6.31	9,208,100	-2.20%
12/14/2011	\$6.22	\$6.21	\$6.22	11,053,300	-1.12%
12/15/2011	\$6.26	\$6.24	\$6.25	6,064,800	0.64%
12/16/2011	\$6.26	\$6.24	\$6.25	6,992,100	0.00%
12/19/2011	\$5.75	\$5.74	\$5.75	10,585,700	-8.50%
12/20/2011	\$6.00	\$6.00	\$6.01	10,886,000	4.26%
12/21/2011	\$6.00	\$6.01	\$6.02	13,112,300	0.00%
12/22/2011	\$6.34	\$6.33	\$6.34	12,445,700	5.51%
12/23/2011	\$6.46	\$6.45	\$6.46	3,744,400	1.88%
12/27/2011	\$6.39	\$6.39	\$6.40	4,130,200	-1.09%
12/28/2011	\$6.29	\$6.29	\$6.30	4,943,200	-1.58%
12/29/2011	\$6.45	\$6.44	\$6.45	4,606,900	2.51%
12/30/2011	\$6.55	\$6.54	\$6.55	5,226,500	1.54%
1/3/2012	\$6.84	\$6.83	\$6.84	9,126,400	4.33%
1/4/2012	\$6.75	\$6.74	\$6.75	6,298,000	-1.32%
1/5/2012	\$6.96	\$6.95	\$6.96	8,273,200	3.06%
1/6/2012	\$6.77	\$6.75	\$6.76	6,729,300	-2.77%
1/9/2012	\$6.77	\$6.78	\$6.79	3,884,500	0.00%
1/10/2012	\$7.27	\$7.26	\$7.27	8,636,900	7.13%
1/11/2012	\$7.80	\$7.79	\$7.80	11,939,900	7.04%
1/12/2012	\$7.72	\$7.71	\$7.72	9,770,900	-1.03%
1/13/2012	\$7.51	\$7.51	\$7.52	8,574,600	-2.76%

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
1/17/2012	\$7.53	\$7.52	\$7.53	6,921,600	0.27%
1/18/2012	\$7.82	\$7.82	\$7.83	8,089,800	3.78%
1/19/2012	\$8.17	\$8.16	\$8.17	10,713,100	4.38%
1/20/2012	\$8.24	\$8.23	\$8.24	8,147,300	0.85%
1/23/2012	\$8.22	\$8.20	\$8.21	6,240,400	-0.24%
1/24/2012	\$8.24	\$8.23	\$8.24	6,520,500	0.24%
1/25/2012	\$8.06	\$8.06	\$8.07	11,290,600	-2.21%
1/26/2012	\$7.80	\$7.80	\$7.81	10,632,900	-3.28%
1/27/2012	\$7.83	\$7.83	\$7.84	12,102,200	0.38%
1/30/2012	\$7.65	\$7.66	\$7.67	8,089,600	-2.33%
1/31/2012	\$7.71	\$7.71	\$7.72	7,267,500	0.78%
2/1/2012	\$7.99	\$7.99	\$8.00	8,486,800	3.57%
2/2/2012	\$8.04	\$8.03	\$8.04	7,584,800	0.62%
2/3/2012	\$9.17	\$9.16	\$9.17	29,104,900	13.15%
2/6/2012	\$8.94	\$8.93	\$8.94	12,270,100	-2.54%
2/7/2012	\$8.95	\$8.94	\$8.95	7,556,700	0.11%
2/8/2012	\$8.90	\$8.88	\$8.89	8,679,600	-0.56%
2/9/2012	\$8.91	\$8.89	\$8.90	16,513,200	0.11%
2/10/2012	\$8.74	\$8.73	\$8.74	9,980,300	-1.98%
2/13/2012	\$9.04	\$9.04	\$9.05	11,098,200	3.43%
2/14/2012	\$8.88	\$8.87	\$8.88	8,956,900	-1.79%
2/15/2012	\$8.82	\$8.82	\$8.83	7,607,200	-0.68%
2/16/2012	\$9.03	\$9.02	\$9.03	10,018,600	2.35%
2/17/2012	\$9.22	\$9.22	\$9.23	10,884,800	2.08%
2/21/2012	\$9.54	\$9.54	\$9.55	14,337,400	3.41%
2/22/2012	\$9.20	\$9.19	\$9.20	7,474,500	-3.63%
2/23/2012	\$9.34	\$9.33	\$9.34	6,735,700	1.51%
2/24/2012	\$9.14	\$9.14	\$9.15	5,310,300	-2.16%
2/27/2012	\$9.03	\$9.03	\$9.04	8,070,700	-1.21%
2/28/2012	\$8.96	\$8.96	\$8.97	6,403,300	-0.78%
2/29/2012	\$9.09	\$9.09	\$9.10	8,951,500	1.44%
3/1/2012	\$9.10	\$9.10	\$9.11	8,426,000	0.11%
3/2/2012	\$8.96	\$8.95	\$8.96	7,053,100	-1.55%
3/5/2012	\$8.91	\$8.91	\$8.92	6,626,200	-0.56%
3/6/2012	\$8.57	\$8.56	\$8.57	6,926,500	-3.95%
3/7/2012	\$8.68	\$8.68	\$8.69	6,104,300	1.33%
3/8/2012	\$8.91	\$8.90	\$8.91	11,292,300	2.62%
3/9/2012	\$8.90	\$8.89	\$8.90	10,925,400	-0.11%

Exhibit-4**Genworth Stock Prices, Volume, and Returns**

14 April 2011 through 18 April 2012

Date	Genworth Closing Price	Genworth Closing Bid	Genworth Closing Ask	Genworth Trading Volume	Genworth Logarithmic Return
3/12/2012	\$8.81	\$8.80	\$8.81	5,250,100	-1.02%
3/13/2012	\$9.04	\$9.03	\$9.04	12,704,700	2.58%
3/14/2012	\$8.90	\$8.89	\$8.90	8,940,100	-1.56%
3/15/2012	\$9.32	\$9.30	\$9.31	11,216,800	4.61%
3/16/2012	\$9.15	\$9.13	\$9.14	8,651,200	-1.84%
3/19/2012	\$9.15	\$9.15	\$9.16	7,269,600	0.00%
3/20/2012	\$9.08	\$9.07	\$9.08	6,951,700	-0.77%
3/21/2012	\$8.88	\$8.88	\$8.89	11,317,800	-2.23%
3/22/2012	\$8.74	\$8.73	\$8.74	11,061,500	-1.59%
3/23/2012	\$8.71	\$8.70	\$8.71	9,952,000	-0.34%
3/26/2012	\$8.80	\$8.80	\$8.81	10,083,300	1.03%
3/27/2012	\$8.74	\$8.72	\$8.73	7,432,000	-0.68%
3/28/2012	\$8.65	\$8.64	\$8.65	8,736,600	-1.04%
3/29/2012	\$8.45	\$8.45	\$8.46	8,190,900	-2.34%
3/30/2012	\$8.32	\$8.30	\$8.31	10,536,500	-1.55%
4/2/2012	\$8.38	\$8.37	\$8.38	7,936,100	0.72%
4/3/2012	\$8.17	\$8.15	\$8.16	13,353,200	-2.54%
4/4/2012	\$8.02	\$8.02	\$8.03	10,394,500	-1.85%
4/5/2012	\$8.05	\$8.03	\$8.04	7,204,800	0.37%
4/9/2012	\$7.69	\$7.68	\$7.69	7,776,500	-4.58%
4/10/2012	\$7.31	\$7.30	\$7.31	11,145,000	-5.07%
4/11/2012	\$7.54	\$7.53	\$7.54	11,563,600	3.10%
4/12/2012	\$7.85	\$7.84	\$7.85	8,539,600	4.03%
4/13/2012	\$7.65	\$7.64	\$7.65	9,336,700	-2.58%
4/16/2012	\$7.62	\$7.61	\$7.62	6,474,400	-0.39%
4/17/2012	\$7.70	\$7.70	\$7.71	5,227,800	1.04%
4/18/2012	\$5.87	\$5.86	\$5.87	75,351,300	-27.14%

Source: CRSP.

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
4/14/2011	1000.00		243.17	
4/15/2011	1003.96	0.40%	243.92	0.31%
4/18/2011	992.31	-1.17%	240.91	-1.24%
4/19/2011	997.98	0.57%	240.48	-0.18%
4/20/2011	1012.22	1.42%	243.85	1.39%
4/21/2011	1018.16	0.59%	246.64	1.14%
4/25/2011	1016.28	-0.18%	246.35	-0.12%
4/26/2011	1024.56	0.81%	247.84	0.60%
4/27/2011	1030.88	0.61%	249.51	0.67%
4/28/2011	1033.91	0.29%	253.72	1.67%
4/29/2011	1037.13	0.31%	253.64	-0.03%
5/2/2011	1033.43	-0.36%	252.09	-0.61%
5/3/2011	1026.57	-0.67%	252.14	0.02%
5/4/2011	1018.40	-0.80%	249.97	-0.86%
5/5/2011	1008.78	-0.95%	245.89	-1.65%
5/6/2011	1013.42	0.46%	247.23	0.54%
5/9/2011	1019.65	0.61%	247.31	0.03%
5/10/2011	1028.28	0.84%	249.48	0.87%
5/11/2011	1015.70	-1.23%	247.16	-0.93%
5/12/2011	1019.80	0.40%	248.64	0.60%
5/13/2011	1010.72	-0.89%	245.15	-1.41%
5/16/2011	1003.69	-0.70%	245.20	0.02%
5/17/2011	1003.06	-0.06%	244.78	-0.17%
5/18/2011	1013.82	1.07%	245.73	0.39%
5/19/2011	1016.20	0.23%	246.29	0.23%
5/20/2011	1009.30	-0.68%	243.73	-1.04%
5/23/2011	996.18	-1.31%	240.50	-1.33%
5/24/2011	995.79	-0.04%	239.58	-0.38%
5/25/2011	1000.85	0.51%	240.29	0.30%
5/26/2011	1006.17	0.53%	241.37	0.45%
5/27/2011	1011.32	0.51%	241.21	-0.07%
5/31/2011	1021.72	1.02%	243.14	0.80%
6/1/2011	998.15	-2.33%	236.91	-2.60%
6/2/2011	997.52	-0.06%	237.76	0.36%
6/3/2011	988.26	-0.93%	235.40	-1.00%
6/6/2011	975.96	-1.25%	232.51	-1.24%
6/7/2011	976.23	0.03%	232.05	-0.20%
6/8/2011	970.41	-0.60%	230.06	-0.86%

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
6/9/2011	977.63	0.74%	232.02	0.85%
6/10/2011	963.87	-1.42%	228.81	-1.39%
6/13/2011	963.00	-0.09%	229.63	0.36%
6/14/2011	976.35	1.38%	231.95	1.01%
6/15/2011	959.46	-1.74%	225.79	-2.69%
6/16/2011	959.36	-0.01%	227.80	0.89%
6/17/2011	961.43	0.22%	229.39	0.70%
6/20/2011	966.57	0.53%	230.39	0.43%
6/21/2011	981.93	1.58%	233.44	1.32%
6/22/2011	976.55	-0.55%	231.69	-0.75%
6/23/2011	974.03	-0.26%	230.41	-0.55%
6/24/2011	963.74	-1.06%	229.19	-0.53%
6/27/2011	971.52	0.80%	230.80	0.70%
6/28/2011	984.82	1.36%	233.13	1.00%
6/29/2011	993.41	0.87%	236.96	1.63%
6/30/2011	1003.05	0.97%	238.29	0.56%
7/1/2011	1016.56	1.34%	241.07	1.16%
7/5/2011	1016.55	-0.00%	238.43	-1.10%
7/6/2011	1017.71	0.11%	237.40	-0.43%
7/7/2011	1028.52	1.06%	241.23	1.60%
7/8/2011	1022.01	-0.63%	238.32	-1.21%
7/11/2011	1002.25	-1.95%	232.22	-2.59%
7/12/2011	998.43	-0.38%	232.53	0.13%
7/13/2011	1003.43	0.50%	233.48	0.41%
7/14/2011	995.36	-0.81%	231.66	-0.78%
7/15/2011	1001.50	0.62%	230.32	-0.58%
7/18/2011	992.02	-0.95%	226.55	-1.65%
7/19/2011	1008.05	1.60%	228.91	1.04%
7/20/2011	1008.10	0.01%	229.53	0.27%
7/21/2011	1020.45	1.22%	233.35	1.65%
7/22/2011	1021.92	0.14%	232.99	-0.15%
7/25/2011	1015.51	-0.63%	230.36	-1.14%
7/26/2011	1010.90	-0.45%	229.85	-0.22%
7/27/2011	989.03	-2.19%	226.40	-1.51%
7/28/2011	986.13	-0.29%	226.52	0.05%
7/29/2011	980.60	-0.56%	226.35	-0.08%
8/1/2011	977.06	-0.36%	225.80	-0.24%
8/2/2011	952.01	-2.60%	221.06	-2.12%

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
8/3/2011	956.73	0.49%	223.08	0.91%
8/4/2011	908.55	-5.17%	213.28	-4.49%
8/5/2011	904.21	-0.48%	211.33	-0.92%
8/8/2011	842.12	-7.11%	194.13	-8.49%
8/9/2011	885.25	4.99%	209.86	7.79%
8/10/2011	851.12	-3.93%	194.83	-7.43%
8/11/2011	889.63	4.43%	207.24	6.18%
8/12/2011	893.87	0.48%	205.54	-0.82%
8/15/2011	914.28	2.26%	210.54	2.40%
8/16/2011	904.32	-1.10%	207.73	-1.34%
8/17/2011	905.08	0.08%	208.74	0.49%
8/18/2011	864.07	-4.64%	198.77	-4.89%
8/19/2011	850.80	-1.55%	195.76	-1.53%
8/22/2011	850.83	0.00%	194.62	-0.58%
8/23/2011	879.54	3.32%	199.76	2.61%
8/24/2011	889.70	1.15%	203.35	1.78%
8/25/2011	875.55	-1.60%	198.31	-2.51%
8/26/2011	889.94	1.63%	200.27	0.98%
8/29/2011	916.30	2.92%	209.94	4.72%
8/30/2011	919.75	0.38%	208.34	-0.77%
8/31/2011	924.43	0.51%	210.59	1.07%
9/1/2011	913.22	-1.22%	206.18	-2.12%
9/2/2011	890.73	-2.49%	199.30	-3.39%
9/6/2011	883.49	-0.82%	195.55	-1.90%
9/7/2011	909.23	2.87%	204.62	4.53%
9/8/2011	899.35	-1.09%	200.37	-2.10%
9/9/2011	875.44	-2.69%	195.46	-2.48%
9/12/2011	879.07	0.41%	198.08	1.33%
9/13/2011	888.56	1.07%	198.18	0.05%
9/14/2011	899.92	1.27%	200.02	0.92%
9/15/2011	913.84	1.53%	204.68	2.30%
9/16/2011	917.09	0.36%	206.37	0.82%
9/19/2011	907.06	-1.10%	201.28	-2.50%
9/20/2011	903.34	-0.41%	200.83	-0.22%
9/21/2011	876.76	-2.99%	191.25	-4.89%
9/22/2011	846.61	-3.50%	186.37	-2.58%
9/23/2011	851.48	0.57%	186.69	0.17%
9/26/2011	869.86	2.14%	196.57	5.16%

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
9/27/2011	881.03	1.28%	198.46	0.96%
9/28/2011	860.16	-2.40%	193.79	-2.38%
9/29/2011	867.23	0.82%	200.55	3.43%
9/30/2011	845.88	-2.49%	195.45	-2.58%
10/3/2011	818.88	-3.24%	188.87	-3.42%
10/4/2011	838.22	2.33%	195.78	3.59%
10/5/2011	854.69	1.95%	199.99	2.13%
10/6/2011	872.25	2.03%	203.43	1.71%
10/7/2011	862.73	-1.10%	197.06	-3.18%
10/10/2011	892.28	3.37%	205.29	4.09%
10/11/2011	893.23	0.11%	204.67	-0.30%
10/12/2011	903.76	1.17%	208.99	2.09%
10/13/2011	901.10	-0.29%	206.51	-1.19%
10/14/2011	917.08	1.76%	209.78	1.57%
10/17/2011	897.96	-2.11%	203.39	-3.09%
10/18/2011	916.62	2.06%	211.58	3.95%
10/19/2011	903.65	-1.43%	209.99	-0.75%
10/20/2011	907.15	0.39%	214.52	2.13%
10/21/2011	924.62	1.91%	221.30	3.11%
10/24/2011	940.12	1.66%	223.57	1.02%
10/25/2011	921.49	-2.00%	217.08	-2.95%
10/26/2011	932.08	1.14%	222.67	2.54%
10/27/2011	965.83	3.56%	232.68	4.40%
10/28/2011	966.08	0.03%	231.13	-0.67%
10/31/2011	942.28	-2.49%	223.82	-3.21%
11/1/2011	915.33	-2.90%	215.35	-3.86%
11/2/2011	930.96	1.69%	221.49	2.81%
11/3/2011	948.82	1.90%	223.97	1.11%
11/4/2011	943.55	-0.56%	221.60	-1.06%
11/7/2011	948.18	0.49%	222.23	0.28%
11/8/2011	958.81	1.11%	225.37	1.40%
11/9/2011	922.53	-3.86%	216.18	-4.16%
11/10/2011	929.37	0.74%	218.18	0.92%
11/11/2011	947.74	1.96%	222.09	1.78%
11/14/2011	938.86	-0.94%	219.07	-1.37%
11/15/2011	943.12	0.45%	219.20	0.06%
11/16/2011	928.89	-1.52%	215.06	-1.91%
11/17/2011	912.91	-1.74%	211.49	-1.67%

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
11/18/2011	912.64	-0.03%	213.10	0.76%
11/21/2011	895.62	-1.88%	208.86	-2.01%
11/22/2011	892.10	-0.39%	207.54	-0.63%
11/23/2011	871.37	-2.35%	201.86	-2.77%
11/25/2011	868.21	-0.36%	202.22	0.18%
11/28/2011	894.69	3.01%	208.82	3.21%
11/29/2011	896.72	0.23%	208.35	-0.23%
11/30/2011	936.07	4.29%	220.20	5.53%
12/1/2011	933.94	-0.23%	218.02	-0.99%
12/2/2011	934.03	0.01%	218.06	0.02%
12/5/2011	943.64	1.02%	221.15	1.41%
12/6/2011	944.00	0.04%	222.21	0.48%
12/7/2011	945.81	0.19%	223.49	0.57%
12/8/2011	924.19	-2.31%	216.61	-3.13%
12/9/2011	940.57	1.76%	219.82	1.47%
12/12/2011	925.96	-1.57%	215.40	-2.03%
12/13/2011	915.56	-1.13%	213.03	-1.11%
12/14/2011	903.90	-1.28%	213.01	-0.01%
12/15/2011	907.28	0.37%	212.65	-0.17%
12/16/2011	911.79	0.49%	212.69	0.02%
12/19/2011	900.25	-1.27%	208.67	-1.91%
12/20/2011	927.28	2.96%	215.33	3.14%
12/21/2011	929.16	0.20%	216.96	0.75%
12/22/2011	937.44	0.89%	219.47	1.15%
12/23/2011	944.80	0.78%	221.36	0.86%
12/27/2011	944.82	0.00%	220.74	-0.28%
12/28/2011	931.94	-1.37%	218.06	-1.22%
12/29/2011	941.98	1.07%	220.38	1.06%
12/30/2011	939.55	-0.26%	218.97	-0.64%
1/3/2012	954.72	1.60%	222.72	1.70%
1/4/2012	954.30	-0.04%	220.87	-0.83%
1/5/2012	957.09	0.29%	222.38	0.68%
1/6/2012	954.31	-0.29%	221.17	-0.55%
1/9/2012	956.99	0.28%	221.37	0.09%
1/10/2012	966.97	1.04%	225.49	1.84%
1/11/2012	967.89	0.10%	227.14	0.73%
1/12/2012	970.83	0.30%	228.25	0.49%
1/13/2012	965.68	-0.53%	226.14	-0.93%

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
1/17/2012	969.45	0.39%	226.22	0.04%
1/18/2012	981.37	1.22%	229.58	1.47%
1/19/2012	986.84	0.56%	232.05	1.07%
1/20/2012	987.71	0.09%	234.11	0.88%
1/23/2012	989.30	0.16%	233.42	-0.30%
1/24/2012	988.50	-0.08%	232.06	-0.58%
1/25/2012	998.35	0.99%	233.12	0.46%
1/26/2012	993.45	-0.49%	230.88	-0.97%
1/27/2012	994.14	0.07%	230.90	0.01%
1/30/2012	990.44	-0.37%	229.65	-0.54%
1/31/2012	990.36	-0.01%	229.45	-0.09%
2/1/2012	1001.43	1.11%	233.00	1.54%
2/2/2012	1003.27	0.18%	233.72	0.31%
2/3/2012	1017.98	1.46%	238.37	1.97%
2/6/2012	1016.97	-0.10%	237.11	-0.53%
2/7/2012	1018.39	0.14%	237.80	0.29%
2/8/2012	1020.62	0.22%	238.17	0.16%
2/9/2012	1021.64	0.10%	237.26	-0.38%
2/10/2012	1013.08	-0.84%	235.17	-0.88%
2/13/2012	1020.61	0.74%	237.58	1.02%
2/14/2012	1019.03	-0.15%	236.12	-0.62%
2/15/2012	1014.73	-0.42%	235.15	-0.41%
2/16/2012	1027.37	1.24%	237.94	1.18%
2/17/2012	1028.80	0.14%	239.33	0.58%
2/21/2012	1028.96	0.02%	239.67	0.14%
2/22/2012	1025.74	-0.31%	236.93	-1.15%
2/23/2012	1031.58	0.57%	238.66	0.73%
2/24/2012	1033.13	0.15%	238.45	-0.09%
2/27/2012	1033.97	0.08%	238.66	0.09%
2/28/2012	1036.98	0.29%	238.00	-0.28%
2/29/2012	1031.09	-0.57%	236.92	-0.45%
3/1/2012	1038.11	0.68%	238.59	0.70%
3/2/2012	1033.00	-0.49%	237.11	-0.62%
3/5/2012	1028.30	-0.46%	238.71	0.67%
3/6/2012	1010.43	-1.75%	233.91	-2.03%
3/7/2012	1018.46	0.79%	235.35	0.61%
3/8/2012	1029.52	1.08%	236.04	0.29%
3/9/2012	1034.14	0.45%	237.62	0.67%

Exhibit-5**Market Index and Peer Index Returns**

14 April 2011 through 18 April 2012

Date	Market Index Level^[1]	Market Index Return^[2]	Peer Index Level^[3]	Peer Index Return
3/12/2012	1032.73	-0.14%	237.14	-0.20%
3/13/2012	1050.91	1.75%	242.50	2.24%
3/14/2012	1046.79	-0.39%	241.14	-0.56%
3/15/2012	1053.61	0.65%	244.22	1.27%
3/16/2012	1055.02	0.13%	243.19	-0.42%
3/19/2012	1059.23	0.40%	244.29	0.45%
3/20/2012	1054.46	-0.45%	244.57	0.11%
3/21/2012	1053.28	-0.11%	243.42	-0.47%
3/22/2012	1044.75	-0.81%	240.33	-1.28%
3/23/2012	1049.42	0.45%	241.71	0.57%
3/26/2012	1064.07	1.39%	245.53	1.57%
3/27/2012	1060.18	-0.37%	244.09	-0.59%
3/28/2012	1054.33	-0.55%	244.31	0.09%
3/29/2012	1052.33	-0.19%	242.42	-0.78%
3/30/2012	1055.86	0.33%	243.34	0.38%
4/2/2012	1064.36	0.80%	245.87	1.03%
4/3/2012	1059.63	-0.45%	244.14	-0.71%
4/4/2012	1047.12	-1.19%	242.58	-0.64%
4/5/2012	1046.28	-0.08%	242.04	-0.22%
4/9/2012	1034.39	-1.14%	237.85	-1.75%
4/10/2012	1015.76	-1.82%	233.78	-1.73%
4/11/2012	1024.40	0.85%	235.98	0.94%
4/12/2012	1039.85	1.50%	240.15	1.75%
4/13/2012	1026.97	-1.25%	236.06	-1.72%
4/16/2012	1026.37	-0.06%	237.93	0.79%
4/17/2012	1041.71	1.48%	241.13	1.34%
4/18/2012	1037.51	-0.40%	238.18	-1.23%

Notes:

[1] Market Index Level set at 1000 on 14 April 2011.

[2] Market Index data obtained from CRSP.

[2] Peer Index data obtained from Bloomberg, ticker "SPTR5INS" and field "TOT_RETURN_INDEX_NET_DVDS."

Exhibit-6**Genworth Common Stock Regression Results**

Estimation Period: 15 April 2011 through 17 April 2012

Regression Statistics			
R Squared		0.800	
Adjusted R Squared		0.795	
Standard Error		1.96%	
Observations		253	

	Coefficients	Standard Error	t- statistic
Intercept	-0.26%	0.12%	-2.10
Market Index	0.610	0.238	2.57
Peer Index	1.388	0.187	7.44
4 May 2011	1.04%	1.96%	0.53
21 July 2011	-17.05%	1.97%	-8.67
29 July 2011	6.91%	1.97%	3.51
4 November 2011	17.54%	1.97%	8.92
3 February 2012	9.79%	1.97%	4.98

Exhibit-7**Genworth Common Stock Event Study Results****Allegation-Related Event**

Date	Genworth Closing Price	Genworth Prior Day Closing Price	Genworth Return	Market Index Return	Peer Index Return	Genworth Explained Return	Genworth Residual Return	t -statistic
18 April 2012	\$5.87	\$7.70	-27.14%	-0.40%	-1.23%	-2.22%	-24.92%	-12.72

Earnings Announcement Events

Date	Genworth Closing Price	Genworth Prior Day Closing Price	Genworth Return	Market Index Return	Peer Index Return	Genworth Explained Return	Genworth Residual Return	t -statistic
4 May 2011	\$12.07	\$12.18	-0.91%	-0.80%	-0.86%	-1.95%	1.04%	0.53
21 July 2011	\$8.21	\$9.47	-14.28%	1.22%	1.65%	2.77%	-17.05%	-8.70
29 July 2011	\$8.32	\$7.82	6.20%	-0.56%	-0.08%	-0.71%	6.91%	3.52
4 November 2011	\$7.19	\$6.16	15.46%	-0.56%	-1.06%	-2.08%	17.54%	8.95
3 February 2012	\$9.17	\$8.04	13.15%	1.46%	1.97%	3.36%	9.79%	5.00

CERTIFICATE OF SERVICE

I hereby certify that on January 29, 2016, I authorized the electronic filing of the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the e-mail addresses denoted on the attached Electronic Mail Notice List, and I hereby certify that I caused to be mailed the foregoing document or paper via the United States Postal Service to the non-CM/ECF participants indicated on the attached Manual Notice List.

I certify under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on January 29, 2016.

s/ DOUGLAS R. BRITTON
DOUGLAS R. BRITTON

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