

Extreme Stock Market Performers, Part I: Expect Some Drawdowns

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Summary

Even those long-term shareholders who were rewarded with the greatest cumulative returns endured large price declines over shorter intervals. I study shareholder wealth creation for all publicly-listed U.S. common stocks during each of the seven decades since 1950. Focusing on the 100 most successful stock/decades in terms of shareholder wealth creation, I document even *within* the highly successful decade, shareholders experienced drawdowns that lasted an average of 10 months and involved an average loss of 32.5%. During the immediately preceding decade, drawdowns for these highly successful stocks lasted an average of 22 months and involved an average cumulative loss of 51.6%.

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Extreme Stock Market Performers Part I: Expect Some Drawdowns

Investments in publicly-traded U.S. stocks improved the wealth of shareholders by over \$47 trillion dollars between 1926 and 2019, as compared to a benchmark where investors instead earned Treasury-bill returns.¹ However, this extraordinary improvement in shareholder wealth was concentrated in relatively few stocks. Just eighty-three firms (0.32% of total) accounted for half, and five firms (0.02% of the total) accounted for 11.9%, of net shareholder wealth improvement during this 94-year period. This note is the first in a series intended to shed light on the characteristics of the firms that generated extreme positive (and extreme negative) shareholder outcomes in the each of the seven decades since 1950.²

In particular, this note emphasizes the fact that even the investments that created the most wealth for shareholders during a given decade experienced very substantive reversals along the way. I measure and report on maximum “drawdowns”, i.e. the smallest accumulated peak-to-trough shareholder return (inclusive of any dividends) between any two month-end dates, for each stock within each decade.³ While the academic literature has paid little attention to

¹ See Bessembinder (2020). Wealth creation for each stock is computed based on expression (3) in Bessembinder (2018), relying on monthly data from the Center for Research in Security Prices (CRSP) database, and is measured as of December 31, 2019. Wealth creation aggregated across companies is similar to a value-weighted return, except that it is measured in dollar terms and explicitly allows for cash flows to or from investors in aggregate, including new share issuances, share repurchases, and the fact that dividends are not (in aggregate) reinvested in the stock market.

² This series begins with data from the 1950s, because the accounting data required to define several firm characteristics is most often not available for earlier periods. Some firms (e.g. Alphabet) issued multiple classes of common stock. For these firms I compute wealth creation for each class of common stock, and then sum the resulting wealth creation figures across classes within the firm. In all cases, wealth creation is measured as of December 31, 2019.

³ When measuring drawdowns for firms with multiple share classes I focus on the value-weighted return across share-classes.

drawdowns, investment professionals often consider potential drawdowns as an important measure of investment risk.⁴

Apple, Inc. provides a striking example. In Bessembinder (2020) I document that Apple generated \$1.64 trillion in shareholder wealth between January 1981 and December 2019, more than any other publicly-traded US firm since 1926. Of this total, \$1.47 trillion accrued during the most recent 2010-2019 decade.⁵ Yet, on no less than three occasions, Apple shareholders experienced drawdowns that exceeded 70%. These included a drawdown of 74.0% from May 1983 to August 1985, a drawdown of 79.7% from February 1992 to December 1997, and a drawdown of 79.2% from March 2000 to March 2003. Within the last of these, Apple experienced a drawdown of 75.6% during the short four-month period August 2000 to December 2000. Figure 1 (depicting Apple share prices from December 1980 to December 2019) and Figure 2 (depicting Apple share prices from December 1998 to June 2003) illustrate the contrast between Apple's positive long-term share performance and a drawdown experienced by Apple shareholders over a shorter horizon.

Amazon's history is also instructive. Between June 1997 and December 2019 equity investments in Amazon improved shareholder wealth by \$865 billion, which is the fourth highest total among the 26,168 firms that appear in the CRSP common stock database since 1926.⁶ Of this total, \$632 billion accrued during the most recent decade. Yet, between February 2000 and September 2001 Amazon shareholders experienced a drawdown of 91.3%. That is, although

⁴ See, for example, Van Hemert, Ganz, Harvey, Rattray, Martin, and Yawitch (2020), who assess the extent to which fund manager drawdowns can be forecast.

⁵ Apple's IPO occurred on December 12, 1980. However, Apple first appears in the CRSP monthly database in January 1981. More broadly, as the wealth creation computations described here rely on the CRSP monthly stock return data, they exclude any pre-IPO outcomes, as well as outcomes between the IPO date and the end of the month during which the IPO occurred.

⁶ See Bessembinder (2019). Permco 20678 (now known as Exxon Mobile) has been included since 1926 and is one of the three firms that have created more shareholder wealth than Amazon.

Amazon clearly comprises one of the most successful long-term stock market investments in history, an investor who purchased Amazon at the end of February 2000 would have seen their initial investment drop, at one point, to less than nine cents on the dollar.⁷ Figure 3 (depicting Amazon share prices from May 1997 to December 2019) and Figure 4 (depicting Amazon share prices from December 1998 to December 2001) illustrate the contrast between Amazon's positive long-term share performance and a drawdown experienced by Amazon shareholders over a shorter horizon.

Tables 1 and 2 provide more systematic evidence regarding the drawdowns experienced by investors in firms whose stocks turned out to be excellent investments. In particular, I report on the one hundred firm/decades with the largest amount of shareholder wealth created. Some firms appear on the list more than once. For example, Microsoft created \$1.075 trillion in shareholder wealth during the most recent (2010-2019) decade, which is the second highest firm/decade total (behind only Apple's 2010-2019 outcome) and \$776 billion in shareholder wealth during the 1990-1999 decade.⁸ Exxon Mobile appears 31st on the list with wealth creation of \$201 billion during the 1990-1999 decade, 33rd on the list with wealth creation of \$198 billion during the 2000-2009 decade, and 63rd on the list with wealth creation of \$143 billion during the 1950-59 decade. While 56 of the 100 entries pertain to the most recent decade, General Motors, Du Pont, Exxon Mobile, AT&T Corporation, General Electric, and IBM all appear for wealth created during the 1950-59 decade.

⁷ I focus here on drawdowns that occurred within a *calendar* decade. Drawdowns that crossed calendar decades were even larger in some cases. For example, the drawdown for Amazon investors from March 1999 to September 2001 was 93.1%.

⁸ On the downside, Microsoft's wealth creation during the intervening 2000-2009 decade was -\$448 billion.

Table 1 also reports, for each firm and decade listed, the largest drawdown that occurred within the *same* decade. For example, even though Apple is atop the list with wealth creation of \$1.47 trillion during the most recent decade, Apple shareholders endured a 39.5% drawdown between September 2012 and June 2013. The largest drawdown that occurred within the same decade as a top-100 outcome also involves Apple. During the decade 2000 to 2009, Apple created \$164 billion in shareholder wealth, which is 47th on the list. However, from March 2000 to March 2003 Apple shareholders experienced a 79.2% drawdown. Similarly, Dell, Inc., shareholders experienced a 65.4% drawdown between December 1992 and September 1993, even though Dell created \$183 billion in shareholder wealth during the 1990-1999 decade, 37th on the list. On average, shareholders endured a drawdown of 32.5% even within the one hundred highly successful decade outcomes listed on Table 1.

The first four columns of Table 2 repeat data from Table 1 for convenience, while the remaining columns of Table 2 report on the maximum drawdowns that occurred during the decade that *preceded* the decade of outstanding stock performance. For example, while Microsoft created \$1.08 trillion in shareholder wealth during the most recent decade, Microsoft shareholders were subject to a 63.3% drawdown during the prior decade, from March 2000 to February 2009. Citigroup generated shareholder wealth of \$137 billion during the most recent decade (69th on the list), but Citigroup shareholders endured a 97.0% drawdown from December 2006 to February 2009 of the prior decade. EMC Corporation generated shareholder wealth of \$149 billion during the 1990-1999 decade (56th on the list), but had an 87.5% drawdown from August 1987 to December 1989 of the prior decade. On average, the 100 most successful company/decades in terms of shareholder wealth creation were associated with a drawdown of 51.6% during the prior decade.

The central lesson of this note can be stated succinctly. The most successful company investments in terms of wealth created for shareholders at the decade horizon also involved very substantial peak-to-trough drawdowns. Even those investments that are the most successful at long horizons typically involve painful losses over shorter horizons.

References

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Bessembinder, Hendrik, 2018, "Do Stocks Outperform Treasury Bills?" *Journal of Financial Economics*, 129, 440-457. The pre-publication document can be downloaded at <https://ssrn.com/abstract=2900447>.

Van Hemert, O., M. Ganz, C. Harvey, S. Rattray, E. Martin, and D. Yawitch, 2020, "Drawdowns", available for download at <https://ssrn.com/abstract=3583864>.

Figure 1: Apple End-of-Month Share Price,
Adjusted for Dividends and Splits,
December 1980 to December 2019

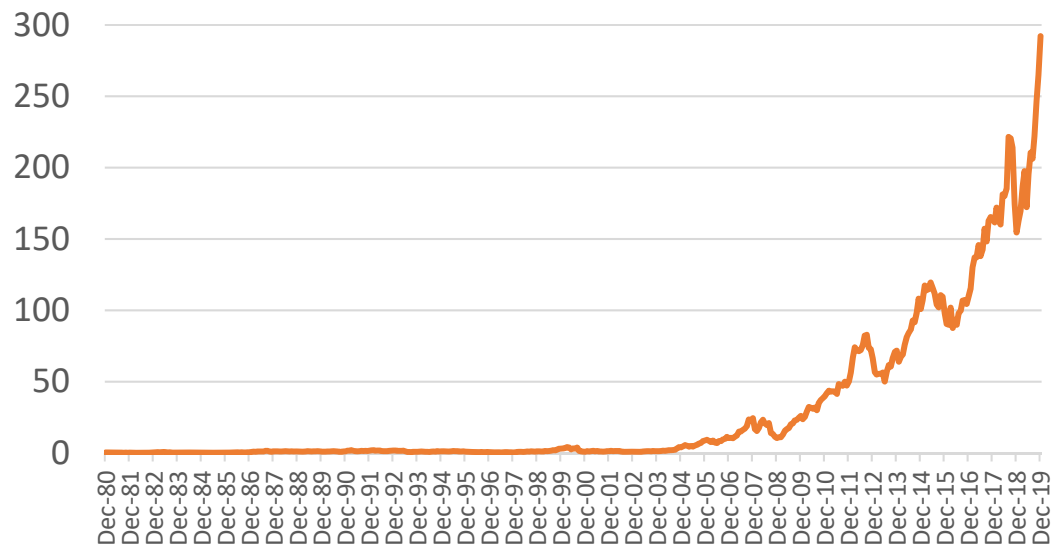


Figure 2: Apple End-of-Month Share Price,
Adjusted for Dividends and Splits,
December 1999 to June 2003

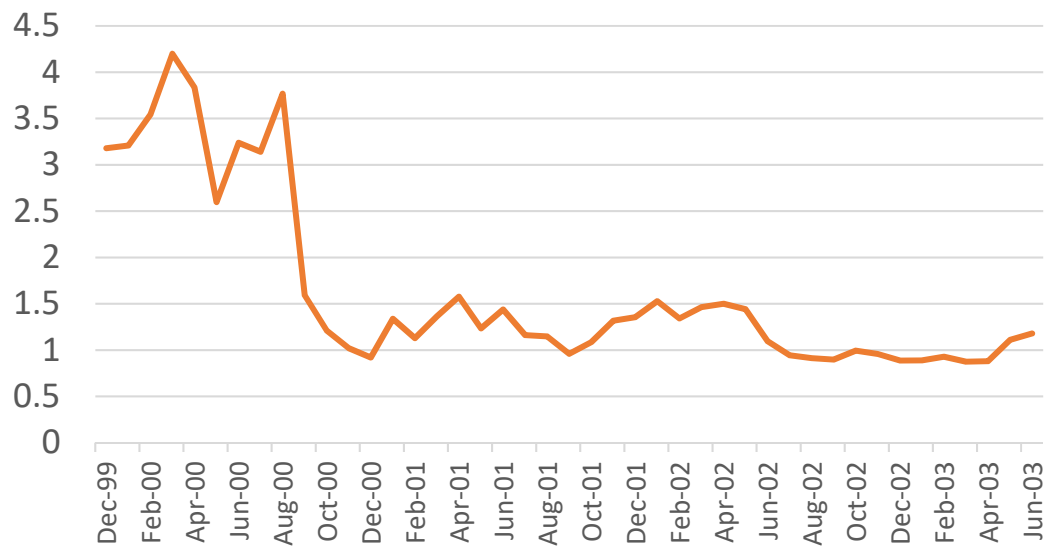


Figure 3: Amazon End-of-Month Share Price,
May 1997 to December 2019

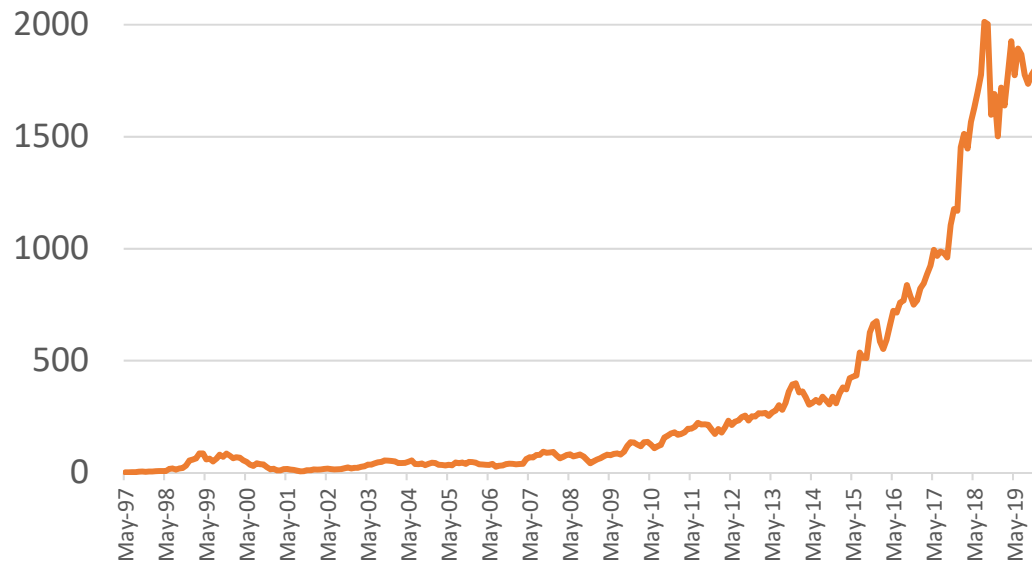


Figure 4: Amazon End-of-Month Share Price,
December 1998 to December 2001



Table 1: Maximum Same-Decade Drawdowns for the 100 Firm/Decades with the Largest Shareholder Wealth Creation

Largest Wealth Creation by Firm and Decade				Maxium Drawdown Same Decade			
Company	PERMCO	Decade	Wealth Created (\$ Millions)	Percent Drawdown	Drawdown Start	Drawdown End	Drawdown Duration (Months)
APPLE INC	7	2010-2019	1,468,299.2	39.52%	Sep-12	Jun-13	9
MICROSOFT CORP	8048	2010-2019	1,075,941.3	24.26%	Apr-10	Jun-10	2
AMAZON COM INC	15473	2010-2019	812,648.1	25.38%	Aug-18	Dec-18	4
MICROSOFT CORP	8048	1990-1999	775,840.1	20.54%	Nov-92	Jul-93	8
GENERAL ELECTRIC CO	20792	1990-1999	633,240.0	26.77%	Jul-90	Oct-90	3
ALPHABET INC	45483	2010-2019	629,046.9	21.54%	Mar-10	Jun-10	3
CISCO SYSTEMS INC	10486	1990-1999	454,917.9	43.05%	Feb-94	Jul-94	5
JPMORGAN CHASE & CO	20436	2010-2019	393,859.8	34.74%	Feb-11	Sep-11	7
FACEBOOK INC	54084	2010-2019	390,801.1	41.93%	Jun-12	Aug-12	2
BERKSHIRE HATHAWAY INC DEL	540	2010-2019	385,069.7	18.64%	Feb-11	Sep-11	7
WALMART INC	21880	1990-1999	379,036.8	36.19%	Jan-93	Jan-96	36
INTEL CORP	2367	1990-1999	362,579.3	31.09%	May-90	Sep-90	4
VISA INC	52983	2010-2019	319,330.7	23.95%	Mar-10	Aug-10	5
JOHNSON & JOHNSON	21018	2010-2019	296,952.4	13.18%	Dec-17	May-18	5
MASTERCARD INC	50700	2010-2019	296,690.2	21.80%	Mar-10	Aug-10	5
INTERNATIONAL BUSINESS MACHS COR	20990	1960-1969	290,573.6	42.00%	Oct-61	Jun-62	8
UNITEDHEALTH GROUP INC	7267	2010-2019	275,053.9	21.75%	Nov-18	Sep-19	10
HOME DEPOT INC	5085	2010-2019	267,248.5	19.69%	Apr-10	Aug-10	4
WALMART INC	21880	2010-2019	253,525.7	32.92%	Nov-14	Oct-15	11
LUCENT TECHNOLOGIES INC	31614	1990-1999	238,288.6	25.03%	Jul-98	Sep-98	2
INTEL CORP	2367	2010-2019	230,253.0	29.10%	Apr-12	Nov-12	7
GENERAL MOTORS CORP	20799	1950-1959	229,791.7	24.43%	Aug-56	Dec-57	16
PROCTER & GAMBLE CO	21446	2010-2019	228,694.7	20.49%	Dec-14	Aug-15	8
BANK OF AMERICA CORP	3151	2010-2019	220,584.3	69.31%	Mar-10	Nov-11	20
DISNEY WALT CO	20587	2010-2019	215,815.5	31.05%	Feb-11	Sep-11	7
PFIZER INC	21394	2010-2019	214,023.7	21.88%	Jan-10	Jun-10	5
ORACLE CORP	8045	1990-1999	213,996.0	76.76%	Jun-90	Oct-90	4
INTERNATIONAL BUSINESS MACHS COR	20990	1990-1999	209,529.0	63.19%	Feb-91	Sep-93	31
COMCAST CORP NEW	43613	2010-2019	205,421.3	26.24%	Jan-18	May-18	4
ALTRIA GROUP INC	21398	2000-2009	203,411.2	44.08%	May-02	Mar-03	10
EXXON MOBIL CORP	20678	1990-1999	200,861.8	12.70%	Jan-94	Jun-94	5
MERCK & CO INC NEW	21188	2010-2019	199,583.8	17.50%	May-15	Sep-15	4
EXXON MOBIL CORP	20678	2000-2009	198,381.7	27.09%	Dec-07	Apr-09	16
WELLS FARGO & CO NEW	21305	2010-2019	196,761.3	29.21%	Jan-18	May-19	16
HOME DEPOT INC	5085	1990-1999	195,887.5	27.19%	May-90	Oct-90	5
TIME WARNER INC NEW	11412	1990-1999	192,345.2	57.62%	Apr-96	Oct-96	6
DELL INC	9833	1990-1999	183,111.2	65.36%	Dec-92	Sep-93	9
MERCK & CO INC NEW	21188	1990-1999	182,660.4	43.27%	Dec-91	Apr-94	28
A T & T INC	21645	2010-2019	180,844.2	25.38%	Jul-16	Dec-18	29
VERIZON COMMUNICATIONS INC	20288	2010-2019	177,701.7	16.43%	Jul-16	Jun-17	11
BOEING CO	20315	2010-2019	173,094.3	24.67%	Feb-19	Dec-19	10
COCA COLA CO	20468	1990-1999	169,858.2	42.82%	Jun-98	Sep-99	15
COCA COLA CO	20468	2010-2019	169,223.5	11.04%	Nov-14	Jun-15	7
AMERICAN INTERNATIONAL GROUP INC	137	1990-1999	168,780.9	23.10%	Jul-98	Aug-98	1
PROCTER & GAMBLE CO	21446	1990-1999	168,556.1	21.61%	Jun-98	Sep-98	3
NORTEL NETWORKS CORP NEW	21301	1990-1999	165,590.3	50.21%	Mar-98	Sep-98	6
APPLE INC	7	2000-2009	163,927.8	79.18%	Mar-00	Mar-03	36
PFIZER INC	21394	1990-1999	163,173.7	32.19%	Dec-91	Mar-94	27
CITIGROUP INC	20483	1990-1999	161,448.3	46.43%	Jun-90	Oct-90	4
SUN MICROSYSTEMS INC	8021	1990-1999	160,979.2	52.94%	Jun-90	Oct-90	4

Table 1 (Cont): Maximum Same-Decade Drawdowns for the 100 Firm/Decades with the Largest Shareholder Wealth Creation

Largest Wealth Creation by Firm and Decade				Maxium Drawdown Same Decade			
Company	PERMCO	Decade	Wealth Created (\$ Millions)	Percent Drawdown	Drawdown Start	Drawdown End	Drawdown Duration (Months)
DU PONT E I DE NEMOURS & CO	20606	1950-1959	160,335.5	20.73%	Mar-56	Feb-57	11
CHEVRON CORP NEW	20440	2010-2019	158,937.1	36.39%	Jun-14	Sep-15	15
AMGEN INC	216	2010-2019	150,704.4	21.26%	Jul-15	Sep-15	2
CISCO SYSTEMS INC	10486	2010-2019	149,882.3	42.03%	Apr-10	Sep-11	17
PEPSICO INC	21384	2010-2019	149,365.3	15.47%	Jan-18	Apr-18	3
E M C CORP MA	8093	1990-1999	149,005.3	48.94%	Apr-91	Sep-91	5
QUALCOMM INC	11253	1990-1999	146,371.3	61.33%	Sep-93	Jun-94	9
EXXON MOBIL CORP	20678	1980-1989	145,977.9	31.85%	Nov-80	Jul-82	20
ADOBE INC	8476	2010-2019	143,150.3	31.67%	Mar-10	Sep-11	18
UNION PACIFIC CORP	21810	2010-2019	142,984.5	39.02%	Feb-15	Jan-16	11
EXXON MOBIL CORP	20678	1950-1959	142,928.6	25.45%	Jul-57	Feb-58	7
ORACLE CORP	8045	2010-2019	142,481.8	28.40%	Apr-11	Dec-11	8
A T & T CORP	20103	1990-1999	141,136.0	28.01%	May-90	Dec-90	7
JOHNSON & JOHNSON	21018	1990-1999	140,011.6	34.36%	Dec-91	Jul-93	19
H P INC	20908	1990-1999	139,763.9	45.26%	May-90	Oct-90	5
BRISTOL MYERS SQUIBB CO	20331	1990-1999	139,632.8	35.12%	Dec-91	Mar-94	27
YAHOO INC	14521	1990-1999	138,359.3	39.29%	May-96	Dec-96	7
ABBOTT LABORATORIES	20017	2010-2019	137,023.7	24.41%	Jul-15	Jan-16	6
CITIGROUP INC	20483	2010-2019	136,601.3	46.83%	Jan-11	Sep-11	8
NETFLIX INC	43145	2010-2019	134,294.7	79.90%	May-11	Sep-12	16
EXXON MOBIL CORP	20678	2010-2019	133,727.2	23.88%	Apr-14	Sep-15	17
A T & T CORP	20103	1950-1959	132,438.8	5.91%	Apr-59	Nov-59	7
LILLY ELI & CO	21102	2010-2019	126,475.0	18.08%	Dec-15	Nov-16	11
HONEYWELL INTERNATIONAL INC	22168	2010-2019	126,068.5	27.38%	Apr-11	Sep-11	5
NVIDIA CORP	16382	2010-2019	125,387.1	52.45%	Sep-18	Dec-18	3
GENERAL ELECTRIC CO	20792	1950-1959	121,532.4	14.40%	Jul-56	Jan-57	6
NIKE INC	3194	2010-2019	121,337.8	23.45%	Nov-15	Nov-16	12
ACCENTURE PLC IRELAND	41871	2010-2019	118,123.0	16.38%	Sep-18	Dec-18	3
TEXAS INSTRUMENTS INC	21737	2010-2019	118,018.0	25.91%	Apr-11	Aug-11	4
LOCKHEED MARTIN CORP	21110	2010-2019	117,139.1	24.30%	Jan-18	Dec-18	11
COSTCO WHOLESALE CORP NEW	7882	2010-2019	117,009.8	13.06%	Sep-18	Dec-18	3
ABBVIE INC	54287	2010-2019	114,549.8	38.82%	Feb-18	Aug-19	18
BROADCOM INC	53196	2010-2019	112,111.0	23.48%	Jun-11	Dec-11	6
WORLDCOM INC GA NEW	61	1990-1999	111,294.5	36.36%	Jan-94	Jun-94	5
THERMO FISHER SCIENTIFIC INC	4557	2010-2019	108,930.0	31.29%	May-11	Dec-11	7
ALTRIA GROUP INC	21398	2010-2019	105,700.3	38.18%	May-17	Sep-19	28
GENERAL MOTORS CORP	20799	1960-1969	103,085.2	36.48%	Oct-65	Dec-66	14
STARBUCKS CORP	11592	2010-2019	102,360.5	21.63%	May-17	Jun-18	13
MOTOROLA SOLUTIONS INC	21230	1990-1999	102,220.0	46.15%	Jul-97	Aug-98	13
INTERNATIONAL BUSINESS MACHS COR	20990	1950-1959	102,041.3	18.45%	May-50	Jul-50	2
GENERAL ELECTRIC CO	20792	1980-1989	101,798.6	33.97%	Aug-87	Mar-88	7
NEXTERA ENERGY INC	20684	2010-2019	100,979.5	11.10%	Jun-16	Nov-16	5
LOWES COMPANIES INC	2709	2010-2019	100,853.6	26.85%	Apr-10	Sep-11	17
DANAHER CORP	20557	2010-2019	99,899.1	24.00%	Apr-11	Sep-11	5
MEDTRONIC PLC	2850	2010-2019	98,952.7	29.40%	Mar-10	Aug-10	5
A T & T CORP	20103	1980-1989	98,586.1	23.80%	Sep-87	Aug-88	11
TEXAS INSTRUMENTS INC	21737	1990-1999	96,786.5	45.16%	Sep-95	Jul-96	10
SALESFORCE COM INC	45288	2010-2019	95,914.2	33.36%	May-11	Dec-11	7
TWENTY FIRST CENTURY FOX INC	21287	2010-2019	93,283.2	33.90%	Dec-14	Sep-16	21
BRISTOL MYERS SQUIBB CO	20331	2010-2019	92,619.7	35.02%	Jul-16	Jul-19	36

Table 2: Maximum Prior-Decade Drawdowns for the 100 Firm/Decades with the Largest Shareholder Wealth Creation

Largest Wealth Creation by Firm and Decade				Maxium Drawdown Prior Decade			
Company	PERMCO	Decade	Wealth Created (\$ Millions)	Percent Drawdown	Drawdown Start	Drawdown End	Drawdown Duration (Months)
APPLE INC	7	2010-2019	1,468,299.2	79.18%	Mar-00	Mar-03	36
MICROSOFT CORP	8048	2010-2019	1,075,941.3	63.34%	Mar-00	Feb-09	107
AMAZON COM INC	15473	2010-2019	812,648.1	91.33%	Feb-00	Sep-01	19
MICROSOFT CORP	8048	1990-1999	775,840.1	32.45%	Sep-87	Nov-87	2
GENERAL ELECTRIC CO	20792	1990-1999	633,240.0	33.97%	Aug-87	Mar-88	7
ALPHABET INC	45483	2010-2019	629,046.9	58.56%	Oct-07	Nov-08	13
CISCO SYSTEMS INC	10486	1990-1999	454,917.9				
JPMORGAN CHASE & CO	20436	2010-2019	393,859.8	64.49%	Mar-00	Sep-02	30
FACEBOOK INC	54084	2010-2019	390,801.1				
BERKSHIRE HATHAWAY INC DEL	540	2010-2019	385,069.7	44.93%	Dec-07	Feb-09	14
WALMART INC	21880	1990-1999	379,036.8	40.74%	Aug-87	Nov-87	3
INTEL CORP	2367	1990-1999	362,579.3	56.55%	Dec-83	Jul-86	31
VISA INC	52983	2010-2019	319,330.7	42.66%	May-08	Jan-09	8
JOHNSON & JOHNSON	21018	2010-2019	296,952.4	27.79%	Aug-08	Feb-09	6
MASTERCARD INC	50700	2010-2019	296,690.2	55.89%	May-08	Jan-09	8
INTERNATIONAL BUSINESS MACHS COR	20990	1960-1969	290,573.6	18.45%	May-50	Jul-50	2
UNITEDHEALTH GROUP INC	7267	2010-2019	275,053.9	68.32%	Dec-05	Feb-09	38
HOME DEPOT INC	5085	2010-2019	267,248.5	67.17%	Mar-00	Jan-03	34
WALMART INC	21880	2010-2019	253,525.7	27.10%	Feb-02	Sep-05	43
LUCENT TECHNOLOGIES INC	31614	1990-1999	238,288.6				
INTEL CORP	2367	2010-2019	230,253.0	81.34%	Aug-00	Sep-02	25
GENERAL MOTORS CORP	20799	1950-1959	229,791.7				
PROCTER & GAMBLE CO	21446	2010-2019	228,694.7	44.09%	Jan-00	Mar-00	2
BANK OF AMERICA CORP	3151	2010-2019	220,584.3	91.61%	Nov-06	Feb-09	27
DISNEY WALT CO	20587	2010-2019	215,815.5	64.53%	Apr-00	Sep-02	29
PFIZER INC	21394	2010-2019	214,023.7	66.26%	Jun-00	Feb-09	104
ORACLE CORP	8045	1990-1999	213,996.0	43.00%	Apr-86	Sep-86	5
INTERNATIONAL BUSINESS MACHS COR	20990	1990-1999	209,529.0	38.80%	Aug-87	Dec-89	28
COMCAST CORP NEW	43613	2010-2019	205,421.3	55.80%	Jan-07	Feb-09	25
ALTRIA GROUP INC	21398	2000-2009	203,411.2	56.07%	Nov-98	Dec-99	13
EXXON MOBIL CORP	20678	1990-1999	200,861.8	31.85%	Nov-80	Jul-82	20
MERCK & CO INC NEW	21188	2010-2019	199,583.8	64.90%	Dec-00	Nov-04	47
EXXON MOBIL CORP	20678	2000-2009	198,381.7	12.70%	Jan-94	Jun-94	5
WELLS FARGO & CO NEW	21305	2010-2019	196,761.3	66.46%	Sep-08	Feb-09	5
HOME DEPOT INC	5085	1990-1999	195,887.5	62.07%	Sep-83	Oct-85	25
TIME WARNER INC NEW	11412	1990-1999	192,345.2				
DELL INC	9833	1990-1999	183,111.2	53.68%	Oct-88	Dec-89	14
MERCK & CO INC NEW	21188	1990-1999	182,660.4	29.89%	May-81	Jun-82	13
A T & T INC	21645	2010-2019	180,844.2	63.41%	Oct-00	Sep-02	23
VERIZON COMMUNICATIONS INC	20288	2010-2019	177,701.7	52.03%	Jan-00	Sep-02	32
BOEING CO	20315	2010-2019	173,094.3	68.77%	Sep-07	Feb-09	17
COCA COLA CO	20468	1990-1999	169,858.2	25.93%	Aug-87	Nov-87	3
COCA COLA CO	20468	2010-2019	169,223.5	33.72%	Nov-00	Feb-03	27
AMERICAN INTERNATIONAL GROUP INC	137	1990-1999	168,780.9	35.58%	Aug-87	Apr-88	8
PROCTER & GAMBLE CO	21446	1990-1999	168,556.1	24.94%	Aug-87	Aug-88	12
NORTEL NETWORKS CORP NEW	21301	1990-1999	165,590.3	42.82%	Nov-83	Jan-86	26
APPLE INC	7	2000-2009	163,927.8	79.65%	Feb-92	Dec-97	70
PFIZER INC	21394	1990-1999	163,173.7	36.95%	Jul-87	Nov-87	4
CITIGROUP INC	20483	1990-1999	161,448.3	35.69%	Sep-87	Nov-87	2
SUN MICROSYSTEMS INC	8021	1990-1999	160,979.2	37.07%	May-87	Nov-88	18

Table 2 (Cont.): Maximum Prior-Decade Drawdowns for the 100 Firm/Decades with the Largest Shareholder Wealth Creation

Largest Wealth Creation by Firm and Decade				Maxium Drawdown Prior Decade			
Company	PERMCO	Decade	Wealth Created (\$ Millions)	Percent Drawdown	Drawdown Start	Drawdown End	Drawdown Duration (Months)
DU PONT E I DE NEMOURS & CO	20606	1950-1959	160,335.5				
CHEVRON CORP NEW	20440	2010-2019	158,937.1	37.14%	May-08	Feb-09	9
AMGEN INC	216	2010-2019	150,704.4	48.38%	Nov-05	Mar-08	28
CISCO SYSTEMS INC	10486	2010-2019	149,882.3	86.44%	Mar-00	Sep-02	30
PEPSICO INC	21384	2010-2019	149,365.3	35.70%	Nov-07	Feb-09	15
E M C CORP MA	8093	1990-1999	149,005.3	87.50%	Aug-87	Dec-89	28
QUALCOMM INC	11253	1990-1999	146,371.3				
EXXON MOBIL CORP	20678	1980-1989	145,977.9	35.86%	Jun-73	Sep-74	15
ADOBE INC	8476	2010-2019	143,150.3	75.31%	Sep-00	Sep-02	24
UNION PACIFIC CORP	21810	2010-2019	142,984.5	54.72%	Aug-08	Feb-09	6
EXXON MOBIL CORP	20678	1950-1959	142,928.6				
ORACLE CORP	8045	2010-2019	142,481.8	82.71%	Aug-00	Sep-02	25
A T & T CORP	20103	1990-1999	141,136.0	23.80%	Sep-87	Aug-88	11
JOHNSON & JOHNSON	21018	1990-1999	140,011.6	39.48%	Apr-83	Jul-84	15
H P INC	20908	1990-1999	139,763.9	35.28%	Sep-87	Nov-87	2
BRISTOL MYERS SQUIBB CO	20331	1990-1999	139,632.8	25.28%	Aug-87	Nov-87	3
YAHOO INC	14521	1990-1999	138,359.3				
ABBOTT LABORATORIES	20017	2010-2019	137,023.7	36.91%	Jan-02	Feb-03	13
CITIGROUP INC	20483	2010-2019	136,601.3	97.01%	Dec-06	Feb-09	26
NETFLIX INC	43145	2010-2019	134,294.7	74.20%	Jan-04	Oct-04	9
EXXON MOBIL CORP	20678	2010-2019	133,727.2	27.09%	Dec-07	Apr-09	16
A T & T CORP	20103	1950-1959	132,438.8				
LILLY ELI & CO	21102	2010-2019	126,475.0	64.43%	Jul-00	Feb-09	103
HONEYWELL INTERNATIONAL INC	22168	2010-2019	126,068.5	59.43%	Apr-00	Sep-02	29
NVIDIA CORP	16382	2010-2019	125,387.1	87.20%	Dec-01	Sep-02	9
GENERAL ELECTRIC CO	20792	1950-1959	121,532.4				
NIKE INC	3194	2010-2019	121,337.8	38.51%	May-08	Feb-09	9
ACCENTURE PLC IRELAND	41871	2010-2019	118,123.0	46.95%	Dec-01	Sep-02	9
TEXAS INSTRUMENTS INC	21737	2010-2019	118,018.0	82.12%	Feb-00	Sep-02	31
LOCKHEED MARTIN CORP	21110	2010-2019	117,139.1	44.91%	Aug-08	Feb-09	6
COSTCO WHOLESALE CORP NEW	7882	2010-2019	117,009.8	48.10%	Apr-00	Dec-02	32
ABBVIE INC	54287	2010-2019	114,549.8				
BROADCOM INC	53196	2010-2019	112,111.0	12.13%	Sep-09	Oct-09	1
WORLDCOM INC GA NEW	61	1990-1999	111,294.5	86.67%	Jun-81	Jul-85	49
THERMO FISHER SCIENTIFIC INC	4557	2010-2019	108,930.0	43.74%	Aug-08	Dec-08	4
ALTRIA GROUP INC	21398	2010-2019	105,700.3	44.08%	May-02	Mar-03	10
GENERAL MOTORS CORP	20799	1960-1969	103,085.2	24.43%	Aug-56	Dec-57	16
STARBUCKS CORP	11592	2010-2019	102,360.5	76.35%	Jun-06	Nov-08	29
MOTOROLA SOLUTIONS INC	21230	1990-1999	102,220.0	45.42%	Sep-87	Nov-88	14
INTERNATIONAL BUSINESS MACHS COR	20990	1950-1959	102,041.3				
GENERAL ELECTRIC CO	20792	1980-1989	101,798.6	54.84%	Dec-72	Sep-74	21
NEXTERA ENERGY INC	20684	2010-2019	100,979.5	32.30%	Nov-07	Feb-09	15
LOWES COMPANIES INC	2709	2010-2019	100,853.6	52.01%	Feb-06	Feb-09	36
DANAHER CORP	20557	2010-2019	99,899.1	42.05%	Dec-07	Feb-09	14
MEDTRONIC PLC	2850	2010-2019	98,952.7	47.88%	Dec-00	Mar-09	99
A T & T CORP	20103	1980-1989	98,586.1	19.59%	Mar-70	Jun-70	3
TEXAS INSTRUMENTS INC	21737	1990-1999	96,786.5	55.91%	Sep-87	Oct-89	25
SALESFORCE COM INC	45288	2010-2019	95,914.2	63.20%	May-08	Jan-09	8
TWENTY FIRST CENTURY FOX INC	21287	2010-2019	93,283.2	75.24%	Jan-07	Feb-09	25
BRISTOL MYERS SQUIBB CO	20331	2010-2019	92,619.7	67.73%	Dec-00	Mar-03	27