Property-Casualty Insurance

PaineWebber

Berkshire Hathaway

The Ultimate Conglomerate Discount

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PaineWebber

Berkshire Hathaway:

The Ultimate Conglomerate Discount

We have initiated research coverage on Berkshire Hathaway Inc. with an Attractive rating. Berkshire Hathaway is a company that often appears to receive the ultimate conglomerate discount: Investors overlook the company's successful operating businesses, valuing the company as a closed-end fund. In this report, we present three alternative ways to value Berkshire Hathaway that suggest that a premium to book value is appropriate, as for any operating enterprise with a long history of consistent profitable growth. Since its early days, Berkshire's first-choice use of capital has been to own 100% of an operating business it finds attractive, rather than to own only part of such a company through a public equity investment. Today, we view the company as *primarily* an operating company that also has a sizeable investment portfolio.

- Berkshire Hathaway directly employs 45,000 people around the world, in businesses ranging from aircraft fractional ownership sales to vacuum cleaner manufacturing.
- Berkshire's 1997 pro forma operating revenues of $17.4 billion would rank 75th in the *Fortune* 500. Its operating earnings of $1.518 billion, excluding investment gains, would rank 54th.
- Berkshire is primarily a property-casualty insurer. Seventy-nine percent of both its $18.6 billion total pro forma revenues and its $1.5 billion operating earnings are derived from insurance.
- Berkshire's insurance operations are the fourth largest in the U.S. based on premiums, the largest based on surplus and the second largest based on market capitalization. By themselves, the insurance operations would rank 100th in the *Fortune* 500 based on 1997 pro forma revenues and 67th based on 1997 earnings.
- Berkshire's noninsurance operations, by themselves, and excluding all earnings from dividends and interest, would rank 391st in the *Fortune* 500 based on 1997 pro forma revenues and 243rd based on 1997 earnings.

In this report, we review Berkshire's business from four different perspectives—based on the sources of its market capitalization; from an operating segment perspective; as a capital allocating machine; and as an acquirer, manager and builder of well-run businesses with a "virtuous circle" of competitive advantages. As a stock, BRK's performance has been superb. It has underperformed the S&P 500 in only four of the past 33 years. The compounding effect of this outperformance has been even more impressive: $10,000 invested in BRK in 1965 would have been worth $51 million on December 31, 1998, compared to $132,990 for the S&P.

Our valuation work reviews Berkshire's valuation extensively using three methods—a "float-based" valuation, a book value-based valuation and an earnings-based valuation. We have provided sensitivity information so that readers can adjust our assumptions if they so choose. We believe that the intrinsic value of BRK today, using conservative assumptions, is $91,000-97,000 per share. Valuing the equity securities in Berkshire's portfolio at a significant discount to their market valuations would reduce this number to $67,000-92,000 (depending on the degree of discount). Therefore, we view BRK's price as including a significant margin of safety at its current valuation.

Finally, in this report, we discuss the operating businesses of Berkshire in some detail, particularly the insurance businesses, which we believe are more difficult for investors to understand. We also review the aviation businesses, including the recently acquired Executive Jet, which we expect will be the other key driver of Berkshire's growth.

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Cover art: Courtesy of Berkshire Hathaway Inc.

Overview

We have initiated research coverage on Berkshire Hathaway Inc. with an Attractive rating. Berkshire is a company that often seems to receive the ultimate conglomerate discount: Investors overlook the company's successful operating businesses, valuing the company as a closed-end fund. In this report, we present three alternative ways to value BRK that suggest that a premium to book value is appropriate, as it would be for any operating enterprise with a long history of consistent profitable growth.

Our discussions with investors have convinced us that many people are students of (or self-appointed experts on) Berkshire Hathaway. Our goal is not to win a contest of "BRK Trivial Pursuit"—on that, we concede defeat. Rather, we bring the perspective of an insurance analyst to Berkshire Hathaway for the first time. If we can help investors understand this important American corporation and contribute to the body of thought on BRK valuation, our purpose is served. Consider the following:

- Berkshire Hathaway directly employs 45,000 people around the world, in businesses ranging from aircraft fractional ownership sales to vacuum cleaner manufacturing.
- Berkshire's 1997 pro forma operating revenues of $17.4 billion would rank 75th in the Fortune 500. Its operating earnings of $1.518 billion, excluding investment gains, would rank 54th. Estimated 1999 cash operating earnings are $1.945 billion excluding investment gains—suggesting that Berkshire is one of the largest companies in the world in terms of economic earnings.

Exhibit 1

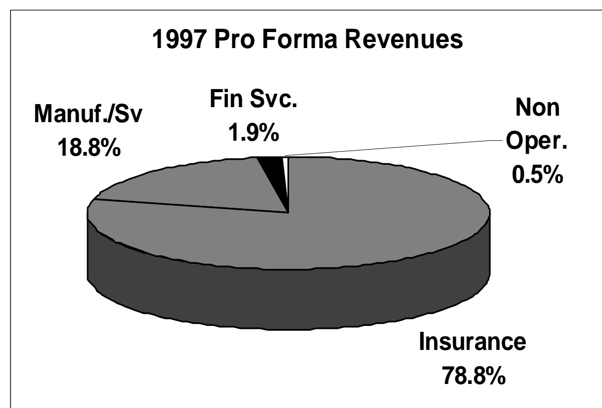
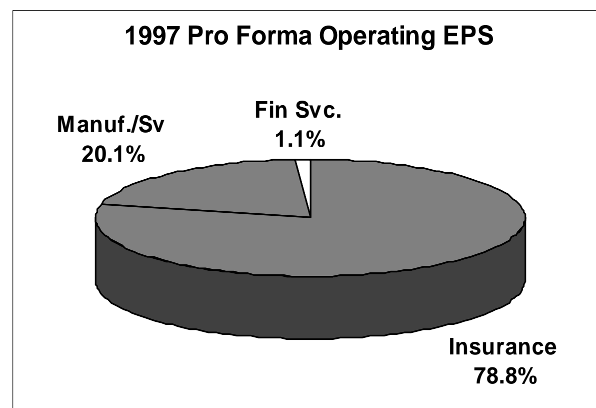


Exhibit 2



Source: Company financial information and PaineWebber estimates.

- Berkshire is primarily a property-casualty insurer. Seventy-nine percent of both its total $18.6 billion pro forma revenues and its $1.5 billion pro forma operating earnings are derived from insurance.
- Berkshire's insurance operations are the fourth largest in the U.S. based on premiums, the largest based on surplus and the second largest based on market capitalization. By themselves, the insurance operations would rank 100th in the *Fortune* 500 based on pro forma revenues and 67th based on earnings. Also, because all of its businesses have been acquired, on an economic earnings basis, excluding goodwill, Berkshire would rank higher.
- **GEICO** is the seventh-largest auto insurer in the U.S. and the 18th-largest insurer overall. We expect it to grow policies in force by 20% this year, more than quadruple the industry growth rate. GEICO alone would rank 227th in the *Fortune* 500 based on 1997 earnings.
- **General Re** is the largest direct-writing reinsurer in the U.S. based on premiums and surplus and the third-largest reinsurer in the world. General Re directly and indirectly owns approximately 82% of Cologne Re, a major European-based reinsurer, and also has other important insurance operations, such as General Star Indemnity, a large excess and surplus lines insurer; Genesis Insurance, an alternative

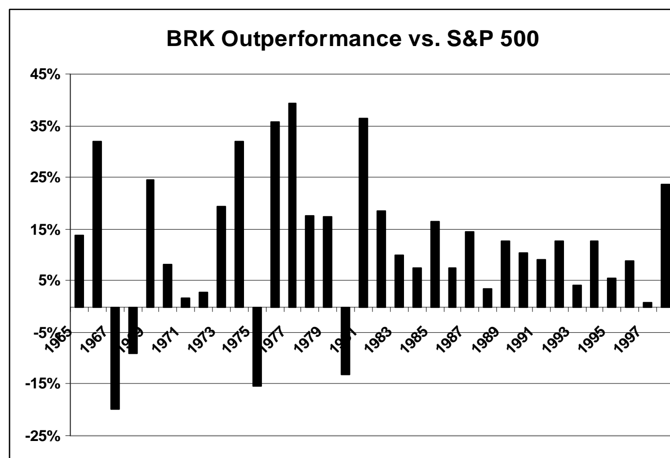
markets subsidiary; D.P. Mann, a newly acquired Lloyd's managing agency; investment services provider New England Asset Management; and U.S. Aviation Underwriters, a prominent aviation underwriting manager.

- Berkshire's insurance operations other than GEICO and General Re are also significant. In particular, **National Indemnity**, which wrote nearly $1 billion of premium in 1997 under Ajit Jain's stewardship, is the most prominent underwriter of "super cat" or high-layer excess catastrophe reinsurance products, as well as structured settlements and other products for which a high claims-paying rating, large amounts of capital, and a willingness to accept significant volatility are a competitive advantage.
- Berkshire's noninsurance operations, by themselves, and excluding all earnings from dividends and interest, would rank 391st in the *Fortune* 500 based on 1997 revenues and 243rd based on 1997 earnings.
- Berkshire Hathaway was named one of *Fortune* magazine's "10 Most Admired Companies in the U.S. and the World" in 1998.

As a stock, Berkshire Hathaway's performance has been superb. Berkshire stock rose 52.2% in 1998, versus 28.6% for the S&P, outperforming the index by 2,360 basis points.

The stock has underperformed the S&P in only four of the past 33 years and has never had a down year. The compounding effect of this outperformance has been even more impressive: $10,000 invested in Berkshire in 1965 would have been worth $51 million on December 31, 1998, compared to $132,990 if the money had been invested in the S&P.

Exhibit 3



Source: Company financial information and PaineWebber estimates.

The reason for this relative outperformance is straightforward: Berkshire has earned it through exceptionally strong, consistent growth.

Exhibit 4

Compound Annual Growth Rate in:				
	5 Years	10 Years	20 Years	30 Years
Book Value per Share	26.9%	26.3%	27.5%	25.1%
Net Earnings per Share	34.1%	22.4%	21.9%	27.2%
Operating Earnings per Share	28.1%	20.8%	22.5%	24.2%

Source: Company financial information and PaineWebber estimates.

Because Berkshire Hathaway is an unusual company and possibly the most-talked-about and the least-understood company in the world, this report takes a different approach. We assume that our readers know something of the background of the company and are familiar with Warren Buffett and Charlie Munger, although management's background and the history of the business are discussed briefly later in this report.

We look at Berkshire Hathaway from four basic perspectives: market capitalization; operating segments; as a capital allocating machine; and as an acquirer, manager and builder of well-run businesses with a "virtuous circle" of sustainable competitive advantages. But first, a couple of brief but necessary digressions.

Our approach to following the stock

In keeping with our view that BRK is most suitable for long-term, value-oriented investors, we are publishing valuation information but not establishing a specific price target on the stock. From a long-term perspective, we believe that BRK merits an Attractive rating today because it is trading at less than our view of intrinsic value.

We will downgrade or upgrade the stock should it become significantly over- or undervalued versus our opinion of intrinsic value. However, we do not plan to make rating changes frequently absent a significant change in valuation. We stress that our estimate of intrinsic value has not been endorsed by anyone at Berkshire Hathaway. In fact, we hope that readers will consider our valuation work more of a framework and "toolkit" to stimulate their own thought processes, rather than an attempt to dictate how the stock should be valued.

Second, we will publish annual estimates of operating earnings (excluding realized investment gains and losses) because this is a convention followed by Wall Street. However, an important part of Berkshire's insurance strategy is to accept significant short-term earnings volatility in exchange for superior long-term returns. Further, major changes in asset allocation may occur at any time. These changes could have a significant impact on investment income, as potential capital appreciation is traded off against cash yield and/or operating earnings from acquired businesses.

Therefore, we do not consider short-term estimates of operating earnings to be significant (a three- to five-year measurement period would be more meaningful). We do not plan to focus on deviations from earnings estimates in our research. By the same token, we are not publishing quarterly estimates, as we believe that they are simply not an appropriate measure of performance for this company.

What will Berkshire Hathaway do next?

We don't know. Please don't ask. We do not plan to question management on this subject, nor are we trying to "read the tea leaves" from any other source. Therefore, we have absolutely no insight into what Warren Buffett and Charlie Munger might be planning to buy or sell. When we want to know where the market is going or what stocks are attractive, we defer to PaineWebber's own market strategist, Ed Kerschner, or its individual industry analysts. In short, we are covering Berkshire Hathaway for its own sake, not as a way to invest in other stocks.

Berkshire Hathaway—from a market capitalization perspective

A simple way to look at Berkshire is to allocate its market capitalization to two major elements of the business—operations and equity investments—as shown in the following exhibit. Of Berkshire's total market capitalization of $105.8 billion at December 31, 1998, approximately $29 billion is composed of Berkshire's major equity investments (net of our estimate of half the deferred tax liability on unrealized gains[1]). This portion is the darker shaded area in the following exhibit. The remaining 72.5% of the market capitalization relates to the operating activities of the company, primarily insurance. Viewing Berkshire in this light, it is difficult to characterize it as a de facto closed-end fund.

This exhibit also highlights a point on BRK stock trading patterns. In early 1998, Coca-Cola's and Gillette's stocks were hit hard due to concerns over slowing growth in Asia. Berkshire declined 26% from its weekly high in July to its weekly low in September. To understand the source of the decline, we constructed a weighted index of Berkshire's major equities and compared it to BRK's trading pattern. The index declined by almost 30% from its weekly high (in April) to its weekly low (in September).

However, as the following exhibit indicates, these equities are only about one-quarter of Berkshire's market value. Therefore, we don't believe that the stock would track the index so closely if it behaved rationally. In fact, we believe that it should be valued based on the company's long-term operating fundamentals.

There are other reasons that we believe Berkshire stock should not be considered equivalent to a closed-end fund that trades in proportion to the equities it owns.

- Berkshire has access to investment opportunities that aren't available to a fund manager. For example, the company can buy 100% of another business. And, as discussed later in this report, Berkshire is the "investor of first resort"—many good investment ideas go to Omaha first, before anyone else gets a crack at them.
- Berkshire has free cash flow from its operating businesses to invest, as well as the leverage of the insurance businesses. This is an important distinction between Berkshire and any other investment fund, which is dependent on the public markets and new capital from outside investors for investable funds.

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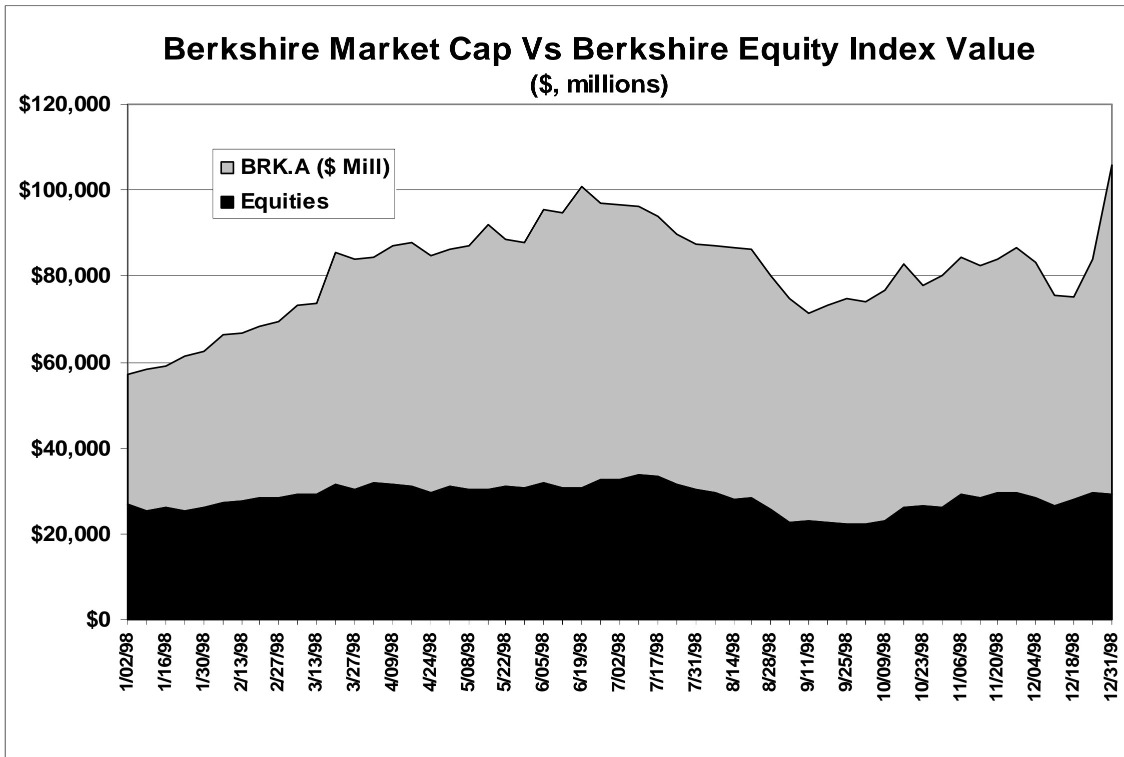
[1] To adjust for the impact on present value of the very low turnover of Berkshire's equity portfolio.

- Berkshire is one of the few investors that would still have access to capital during a market decline. Others, including mutual funds, might like to take advantage of the same situation, but most likely would not have access to investable capital under these circumstances. In fact, some asset managers would be liquidating investments to cover withdrawals. No matter what happens to the equity markets, Berkshire is not subject to the liquidity issues that many fund managers face. And with its triple-A credit rating, it can actually leverage up to maximize its ability to invest at a very low cost of capital. This makes the stock a hedge on a bear market.

Exhibit 5



Source: Company financial information and PaineWebber estimates.

Berkshire Hathaway—from an operating segment perspective

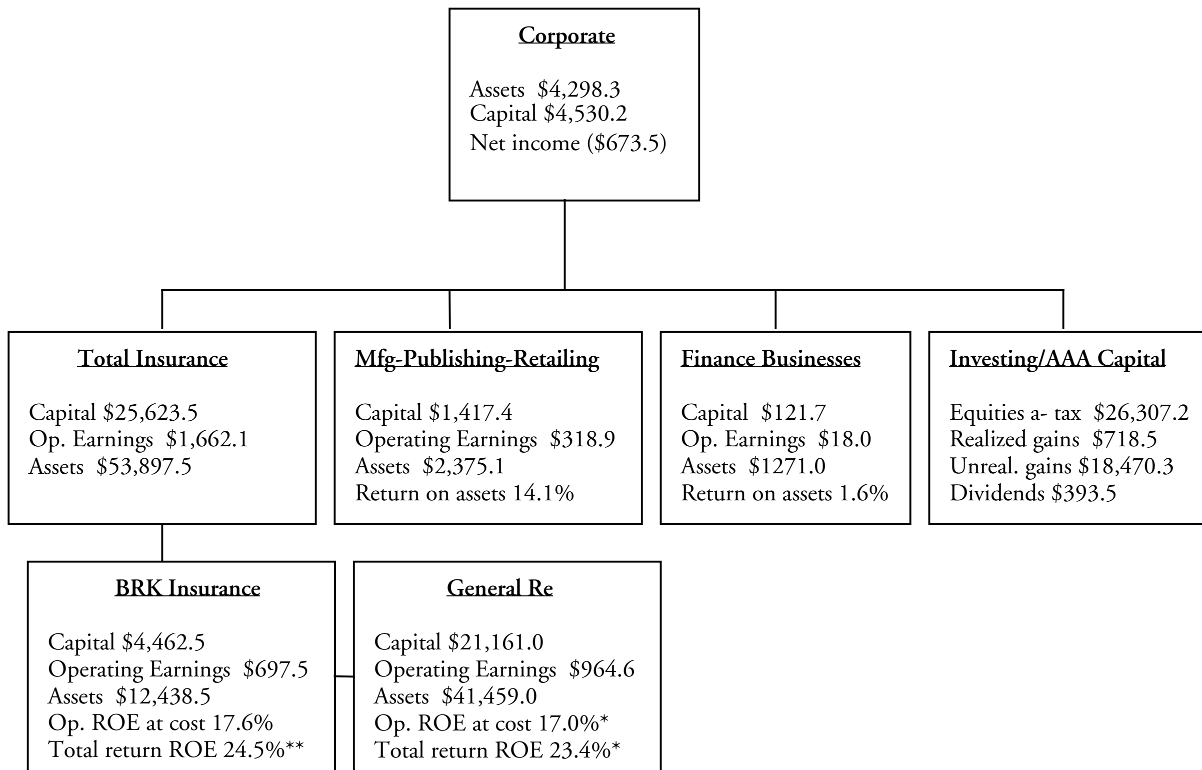
Investors often seemingly default to thinking of Berkshire as a couple of really smart guys investing a bunch of money in equities. The company is frequently referred to as a proxy for a closed-end fund.

When we analyze Berkshire, we see a conglomerate—a collection of wholly owned operating businesses, along with minority positions in other well-managed companies.

Unlike most conglomerates, however, there is no attempt to create "synergies" between different pieces of the business. And each company that Berkshire invests in must meet stringent criteria (discussed later). The following schematic of Berkshire is our interpretation based on year-end 1997 numbers, pro forma for General Re (dollars are in billions):

> When asked which part he would keep if Berkshire were split into two parts—marketable securities and insurance and other private businesses: "That's an easy question for me. I'd choose the operating businesses any time—because they're more fun. I have a good time with the investments, too. But I like being involved with real people in the businesses where they're a cohesive unit that can grow over time."
>
> —Warren Buffett, 1998 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

Exhibit 6



* Historical excluding goodwill from Berkshire acquisition.

** Five-year average.

Note: Operating earnings do not sum to total because corporate net income includes corporate operating expenses.

Source: Company financial information and PaineWebber estimates.

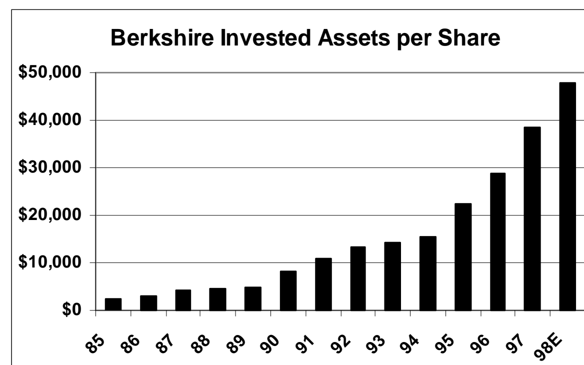
Insurance predominates

Even before adding General Re to the mix, earnings from insurance dominated Berkshire Hathaway. Now, 79% of earnings (1997 pro forma) are derived from insurance, excluding realized and unrealized investment gains. The insurance segment also provides the investing "float," which is a form of low-cost leverage for Berkshire. We discuss Berkshire's insurance businesses in more detail later in this report. Note that our presentation above pushes down insurance-related goodwill to that segment.

The "investing" segment

The schematic above allocates Berkshire's assets, liabilities and earnings into four segments (rather than the three segments the company presents). We add an investing segment because the insurance operation is overcapitalized versus peers and its returns are difficult to ascertain on a "stand-alone" basis. In keeping with our concept of "virtual capital," discussed later in this report, we have presented the assets and earnings that we consider to be available for underwriting but not currently in use as part of an investing segment. The capital we have allocated to insurance is approximately equal to the fixed-income investments (which is coincidental) and is what we believe the company would need to carry if it operated as a stand-alone company (not the maximum or optimum leverage, but what we think a rating agency might be comfortable with for a company at the A level).

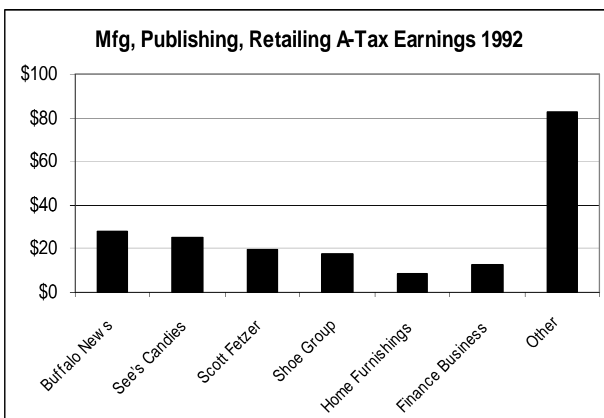
Exhibit 7



Source: Company financial information and PaineWebber estimates.

Ratings impact—By creating an investing segment we in effect allocate the triple-A rating, along with the related capital that supports the rating, to that segment. This suggests an interesting way to look at Berkshire—no other triple-A insurer is able to invest its "face" capital to earn the returns that Berkshire does. Any other company with a triple-A rating would have to invest primarily in high-grade bonds that would not earn an equity hurdle rate. This was part of the stated motivation behind General Re's merger with Berkshire. The ability to invest the capital required to support the triple-A rating in a manner that produces an equity return is, from our perspective, a very important part of the underpinnings of Berkshire.

Exhibit 8



Source: Company financial information and PaineWebber estimates.

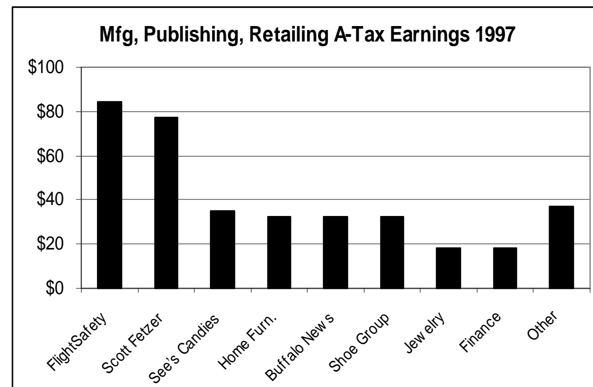
Manufacturing, Publishing and Retailing

This segment has changed significantly in the past five years. In 1992, after-tax earnings from six businesses—See's Candies, *The Buffalo News*, Scott Fetzer, home furnishings, the finance business and the Shoe Group—in total were only about 35% greater than all of the other wholly owned businesses combined (for which Berkshire did not provide any specific financial information).

By 1997, Berkshire had acquired FlightSafety and the "other" segment had shrunk, as World Book and Kirby were reclassified with Scott Fetzer. (As a result, the businesses listed separately below earn about ten times the amount contributed by the other wholly owned businesses not listed separately.)

Total operating earnings of this segment have compounded by more than 62% annually in dollar terms (excluding goodwill amortization and shares issued in acquisitions). Not shown in the following exhibit, because they will not be reported until 1998 full-year numbers are presented in the annual report, are International Dairy Queen (acquired in January 1998), which earned $56.8 million pretax in fiscal 1996, and Executive Jet (acquired in July 1998).

Exhibit 9



Source: Company financial information and PaineWebber estimates.

FlightSafety, the world's largest aviation training company, is Berkshire's biggest noninsurance business; in 1998, Berkshire purchased Executive Jet, the company that originated and dominates the fractional aircraft leasing business. Together, we believe that these aviation services businesses will lead Berkshire's noninsurance operations. Both Flight Safety and Executive Jet possess attributes that Berkshire finds most attractive in its wholly owned businesses: enormous economies of scale, strong cash flow and a market dominance so overwhelming that competitors are deterred from entering the business.

The aviation businesses—flying into the future

> When asked how best to assess intrinsic value relative to book value today: "You should focus on our aviation businesses."
>
> —Warren Buffett, September 16, 1998, Special Shareholders' Meeting

FlightSafety. Purchased in 1997 for $1.5 billion in stock and cash, FlightSafety was Berkshire's largest acquisition before General Re. The company provides high-technology training to operators of aircraft and ships using sophisticated simulators and training devices for airlines, corporations and governmental customers. The single most important individual business, other than insurance, in 1997, FlightSafety represented 28% of Berkshire's after-tax earnings (excluding interest and goodwill amortization) from noninsurance businesses. Its 1997 net income of $84.4 million was comparable to FlightSafety's $84.5 million 1995 net income.

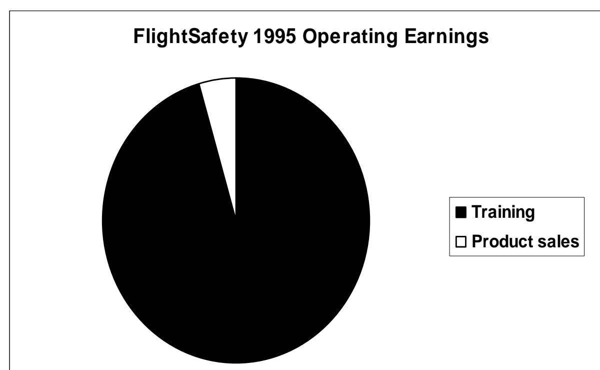
FlightSafety was founded in 1951 by Al Ueltschi, a pilot who mortgaged his house to start the flight training company. FlightSafety went public in 1968 and was acquired by Berkshire through a match suggested by a Berkshire shareholder. FlightSafety operates training programs for Airbus, Bell Helicopter, Boeing, British Aerospace, Raytheon, Sikorsky, Learjet, Lockheed, Cessna, Gulfstream and various other types of aircraft. The company has a $200 million training venture with Boeing.

> FlightSafety's corporate objective: "To satisfy the most rigorous airline training demands, and to do so for less than the cost a carrier would incur operating its own in-house training department. Once they analyze the cost-effectiveness of our service, we anticipate more new and existing carriers will invite us to handle their training as well. We believe the outsourcing of crew training will become standard practice among airlines in the future…"
>
> —President A.L. Ueltschi, FlightSafety 1995 Annual Report to Shareholders

The company has a typical Berkshire Hathaway "moat"—approximately 90% market share, very long term (e.g., ten-to 15-year) contracts with its major customers, heavy capital expenditure requirements that are a barrier to entry for start-up competitors, and the additional barriers to entry of advanced technology and market reputation. FlightSafety is able to provide the best-quality training—something that aircraft fleet owners can't afford to scrimp on—at a competitive price due to its economies of scale (including the advantage of building its own simulators and training equipment). Like Executive Jet, FlightSafety's customers often abandon their own training operations to buy from FlightSafety and obtain better quality at a lower price.

Due to its 36%-plus margins, FlightSafety is a cash generator, notwithstanding its capital expenditures, as shown in the following exhibit. From 1992 to 1995, FlightSafety redistributed more than $200 million to shareholders through dividends and share repurchases. FlightSafety is almost the ideal Berkshire business, given its dominant market share, high cash flow and insulation from competition.

Exhibit 10



Source: Company financial information and PaineWebber estimates.

Exhibit 11

FlightSafety Operating Results Prior to Acquisition

($, millions)	1995	1994	1993
Training revenues	$307.1	$271.7	$244.8
% change	13.0%	11.0%	2.2%
Product sales	$18.7	$29.6	$52.3
% change	-36.6%	-43.5%	34.1%
Gross margin on:			
Training	36.3%	37.3%	36.1%
Product sales	28.5%	19.5%	24.6%
Net income	$84.5	$74.5	$66.4
% change	13.5%	12.1%	-19.3%
Cash flows	$140.5	$118.4	$105.4
Per BRK 1996 share	$116.61	$98.20	$87.46
Capital expenditures	$90.0	$64.4	$64.0
% of cash flows	64.0%	54.4%	60.7%
Share repurch./div.	$45.7	$43.1	$106.6
% of cash flows	50.8%	66.8%	166.6%
Total	114.8%	121.3%	227.3%
Equp./facilities, net	$509.8	$470.1	$453.4
% change	8.5%	3.7%	4.5%

Source: Company financial information and PaineWebber estimates.

Executive Jet. Berkshire acquired Executive Jet in August 1998 for $725 million. Executive Jet has many of the same characteristics as FlightSafety. It is the world's leading marketer of fractional ownership in aircraft, with an approximately 75% market share. Executive Jet's customers buy shares in an Executive Jet (paying in advance) and incur fees to maintain and fly the aircraft. The aircraft is sold at the same retail price that customers would otherwise pay, yet the customers obtain many advantages:

- An Executive Jet can be reserved anywhere in the country on six hours' notice. Customers do not have to worry about where their plane is located at any point in time;

- Customers only "buy what they need"—there's no reason to carry the cost of a whole plane if only one-quarter or one-eighth is required. They also avoid tying up capital in an aircraft. And customers can change their ownership percentage from year to year as their needs dictate;
- Customers can "trade up" or down to different models of aircraft as their needs change without having to handle remarketing old planes; and
- Customers avoid the administrative burden and cost of maintenance, hiring, training and scheduling, and are assured of well-trained pilots and crew.

The fractional ownership industry was invented by Executive Jet's CEO, Richard Santulli. The value proposition of the business is customer service (scheduling, crew professionalism, consistently on-time service) at an attractive value. The financial outcome of fractional ownership is compelling: Buying Executive Jet shares eliminates the customer's remarketing risk, avoids tying up capital in an aircraft and reduces cost because customers buy only the shares they need (based on the hours the customer *occupies* the plane).

Executive Jet has 140 aircraft under management currently and is buying at least 45 new aircraft each year, as many as it can get. The company had total orders outstanding of 129 in 1997 worth $2.6 billion, representing 31% of all corporate jets ordered in the year. Since 1997, the company has significantly increased its orders outstanding. Executive Jet's sales of corporate aircraft represented 9% of all worldwide aircraft deliveries in 1997.

Executive Jet is the largest customer for certain aircraft (for example, it is Gulfstream's largest distributor). We expect the company to produce revenues of $1 billion or more in 1998, compared with $900 million in 1997. Aircraft sales revenues are growing, but will gradually represent a smaller share of the total as the base of customers builds, because each customer provides flight revenue (hourly flight charges and monthly maintenance fees).

In addition, existing customers buy a share in a new plane every 3.5 years, on average, so the company would have continued sales even without adding new customers. Management evaluates the success of the business based on customers added and lost. Since its inception in 1987, the company has lost only a handful of its more than 1,000 customers—generally due to the customer's financial problems. Existing customers refer 75% of the company's new sales.

We believe that Executive Jet resembles Gillette. Selling the aircraft is like selling a razor, while the maintenance and flight fees are the "blades." The company charges a fair price for the aircraft, but over the long term, it makes more money selling the blades. In effect, Executive Jet's business gives Berkshire an annuity-like cash flow for decades to come.

Looked at another way, EJ is yet another classic Berkshire "moat" business with scale economies; the cost of starting up a new global network of leased aircraft would be prohibitive ("hundreds of millions of losses incurred," according to Warren Buffett). Executive Jet's only competitors are two aircraft manufacturers, Raytheon and Bombardier. These manufacturers offer only one brand of aircraft and are generally more focused on converting fractional customers to buyers of whole planes, which affects their marketing and service approach. Executive Jet is also the single largest nonmilitary customer of four of the five leading corporate jet manufacturers—which gives it buying power, resulting in commensurately attractive terms, enhancing its margins.

The company differs from Berkshire's other wholly owned businesses in one important respect. Executive Jet is a high-growth business. Based on annual additions to the aircraft fleet, Executive Jet is growing in excess of 30% per year. The company has begun to enter Europe, will eventually move into Latin America and Asia, and plans to link the continents together with a network of supersonic aircraft. From the customers' perspective, the cost advantage of fractional ownership increases with the more expensive aircraft. For example, a quarter share in a supersonic plane costs the same as a full share of a Hawker, a great trade-off for corporate customers that do business on many continents.

Together with GEICO, we expect Executive Jet to be the main driver of organic growth in the next few years. The major risk and growth constraint is building service capabilities to match the growth. Other risks are modest. The company is already past the point of scale where a competitor could be a serious threat, has good cancellation terms with its vendors, and in a recession could grow as owners of aircraft "downsize" to fractional ownership, even if its own customers reduce their shares.

Berkshire's other businesses

Berkshire owns many other businesses that generally are either the low-cost, large-scale providers in their industry (Borsheim's, the Nebraska Furniture Mart), or a good brand with pricing power (See's, *The Buffalo News*). See's was the first business that Berkshire "paid up" for (a total of $25 million), proving to Messrs. Buffett and Munger the importance of brand and pricing power. We visited Borsheim's and the Furniture Mart, meeting

Borsheim's president, Susan Jacques, and Irv Blumkin, one of the Blumkin family members who run the Furniture Mart. The size and scope of these businesses are almost overwhelming.

Borsheim's was bought by Berkshire in 1989 from a member of the Blumkin family, founders of the Nebraska Furniture Mart. The largest jewelry store in the U.S. other than Tiffany's New York store, Borsheim's uses its cost advantage to discount heavily and operates through mail order. The enormous selection, high quality and uniqueness of its products make a trip to Omaha worthwhile for anyone considering buying a serious piece of jewelry[2]. For smaller items, or to make things convenient, Borsheim's will ship a selection to you at no charge. Just return what you don't want, and they'll bill you for what you keep.

The Furniture Mart is the flagship of the home furnishings segment, which also includes R.C. Willey Home Furnishings and Star Furniture Co. The Furniture Mart is more like a small city than a store, currently occupying 72 acres and scheduled to expand. Walking through the carpet section of the warehouse is enough exercise for an average person in a day. Visiting the grandfather clock department is like strolling through a forest of clocks.

The Mart has extended its geographic reach to the point that anyone within a few hours' drive of Omaha can justify a trip if they are shopping for electronics, appliances or home furnishings. In addition to these items, you can carpet, tile and paint your house using products from the Mart. Basically, once you buy a house, almost everything else you need for it can be acquired at a discount from Berkshire Hathaway—total one-stop shopping[3].

International Dairy Queen. In October 1997, Berkshire agreed to buy International Dairy Queen for $585 million. The purchase price was slightly skewed to encourage IDQ shareholders to accept cash; nevertheless, more than half of them chose BRK stock instead—a wise decision considering that the transaction closed January 7, 1998. Dairy Queen is unlike McDonald's in that the company owns little real estate. Franchisee fees from the company's approximately 5,800 stores are the "annuity-equivalent"—another cash business with a loyal customer base. Dairy Queen had fiscal 1996 pretax income of $56.8 million, comparable in size to See's Candies.

[2]A personal note: Despite its unusual and beautiful array of merchandise and our first-hand experience of Borsheim's excellent service, visiting Borsheim's was the only disappointing experience we had in researching Berkshire Hathaway, as I discovered how much I had overpaid for a watch my husband received for Christmas last year.

[3]The Furniture Mart's founder, Rose Blumkin, illustrated one of Messrs. Buffett and Munger's points about the need to consider even remote risks when she quit the company to form a competitor following a dispute over the management of the carpet department. By the time Ms. Blumkin returned to Berkshire at the age of 99, the company made her sign a noncompete clause.

Berkshire's two "problem businesses" are World Book and the Shoe Group[4]. The former isn't the business it used to be, as its home sales of new books have eroded due to the rise of the personal computer and the Internet, and the latter, despite a strong brand and a profitable history, has seen its earnings decimated by foreign competition.

The Shoe Group joins a list of Berkshire's occasional mistakes, which include, according to management, 1) passing up some investing opportunities that should have been seized; 2) early investments in "cigar butts" and such capital-intensive businesses as the Berkshire Hathaway textile mill; 3) a deviation from style (e.g., investing in US Air preferred) that did not work out; and 4) Salomon Brothers, which ultimately worked out as an investment but which cost Warren Buffett untold time and energy in the process.

In this report, we will not be discussing the other noninsurance businesses, such as See's Candies, Kirby Vacuum and *The Buffalo News*, any further. Most of these excellent, profitable businesses individually just clear Berkshire's minimum earnings threshold for acquisitions ($25 million). Their performance is discussed each year in the annual report and the only detailed information available beyond that is their pre- and after-tax earnings excluding goodwill amortization and interest. In total, these businesses represent about 18% of Berkshire's 1997 operating earnings[5], a percentage that will decline with the purchase of General Re.

> "[A set of the] World Book is worth $600, except somebody figured out how to do it for a quarter."
> —Warren Buffett, September 16, 1998

Corporate segment. We have placed the remaining assets, earnings and capital in a "corporate" segment that is composed primarily of debt, noninsurance goodwill, noninsurance investments, shareholder contributions and administrative costs. The pushdown of insurance goodwill and the placement of debt at the corporate level results in minimal corporate "capital." The diversity of Berkshire's businesses does not lend itself to pushing down debt to the operating level for presentation purposes. We could add the corporate segment to the investing segment to eliminate this problem, but the debt is clearly also financing other operations, and we prefer to show investments separately.

[4]Dexter Shoe was acquired in 1993 for $420 million in stock; Berkshire's normal aversion to stock acquisitions must have been compounded by this. The company also owns H.H. Brown and Lowell Shoes.

[5]Without allocating goodwill amortization and interest expense.

Berkshire Hathaway—a capital allocating machine

Conceptually, we believe that Berkshire Hathaway is a business that generates and reinvests capital at a consistently higher return than investors normally receive. In fact, it could be argued that Warren Buffett refined the concept of Economic Value-Added (EVA) before Stern Stewart came along[6].

> "The strange thing—it's a real contradiction—is that if a business is earning a given amount of money and everything else is equal, the less it has in assets, the more it's worth. You won't get that in an accounting book."
>
> "The really desirable business is the one that doesn't take any money to operate because it's already proven that money will not enable anyone to get a position within the business. Those are the great businesses."
>
> "You don't need any money whatsoever in a fabulous business."
>
> —Warren Buffett, guest lecture at Stanford Business School (April 18, 1990)

The concept behind EVA is that an investment must be charged for the capital it uses: Mr. Buffett learned this early, with the Berkshire Hathaway textile mill, although he continued to operate the mill for many years because it did not consume cash, and out of respect for its workers, management and tradition, he rationed capital rather than indiscriminately putting money into a business that could never cover its cost of capital. Since then, every business that Berkshire has acquired has been rationalized from a capital standpoint and any excess capital has been sent elsewhere where it could be more productive, raising returns.

> "Value investing and growth investing are one and the same. Growth is part of value. Part of the same equation. Returns on incremental capital are the key."
>
> —Warren Buffett, 1986 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

Today, Berkshire is a collection of many businesses that generate capital at an appropriate return, such as See's Candies, along with others that consume capital but that are generating positive EVA (such as FlightSafety and Executive Jet). Capital that cannot be invested by buying 100% of a business that generates positive EVA and meets other Berkshire investing criteria is put to work elsewhere.

> "The business is wonderful if it gives you more and more money every year without putting up anything —or very little. And we have some businesses like that. A business is also wonderful if it takes money, but where the rate at which you reinvest the money is very satisfactory. The worst business of all is the one that grows a lot, where you're forced to grow just to stay in the game at all and where you're reinvesting the capital at a very low rate of return. And sometimes people are in those businesses without knowing it."
>
> —Warren Buffett, 1998 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

Nor is the basic concept behind EVA forgotten in the company's minority equity positions. We believe that it is not a coincidence that Coca-Cola, Gillette, American Express and Disney all produce sizeable positive EVA as calculated by Stern Stewart, according to a November 9, 1998, *Fortune* article. According to Stern Stewart, however, Buffett's financial services investments do not fare so well on an EVA scale[7].

To illustrate the way capital is used at Berkshire, we used Berkshire's segment data to estimate the amount of earnings generated by each segment that was reinvested in the business. The following table shows the results. The method we used is very imprecise. For example, we estimated the amount reinvested by analyzing the change in capital excluding dividends and changes in investment values; there may be other changes (e.g., related to acquisitions) for which we were unable able to account.

However, as a general guide, we think that this method is reasonable and that it shows clearly that most of the businesses' operating earnings are not reinvested in the businesses but used by the parent company in other ways, contrary to most companies' practice of retaining earnings.

[6] For convenience, we are using the term EVA, although Berkshire management uses its own words (which were developed many years ago) to describe its capital management approach.

[7] However, as we have noted in previous research, we believe that Stern Stewart's method for calculating EVA for financial services, and, in particular, insurance companies, needs a substantial amount of refinement before it can be considered credible. Companies that are weather sensitive cannot be analyzed meaningfully using this method, and companies that systematically understate claim reserves and overstate book value will score favorably, even though economically that is the wrong answer. The method is biased against insurers that invest for total return, as well as against companies that write longer-tailed lines of business and carry large loss reserve positions. Confirming these problems, unlike other industries, there is a strikingly low correlation between MVA (market value-added) and EVA in property-casualty insurance, even though the two should track each other.

Exhibit 12

Berkshire's reinvestment into business units

	1989	1990	1991	1992	1993	1994	1995	1996	1997
Insurance Group									
Net Earnings	$347.1	$279.1	$281.8	$270.7	$704.2	$324.3	$546.7	$2,223.9	$1,683.3
Change in Equity	$1,833.1	$428.8	$1,892.1	$1,231.6	$1,132.2	$1,348.8	$5,339.7	$3,369.5	$8,564.2
Dividends	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Reinvested amount	$125.6	$141.0	$72.9	($324.2)	$503.7	($783.6)	$1,562.4	($2,869.0)	$143.3
Change in invest. value	$2,626.9	$442.8	$2,798.7	$2,393.6	$967.0	$3,280.6	$5,811.2	$9,597.7	$12,955.3
Oper. Unit Sharehol. Equity	$4,949.7	$5,378.6	$7,270.7	$8,502.3	$9,634.5	$10,956.7	$16,296.4	$19,665.9	$28,230.1
Oper. Unit ROE (GAAP)	*8.6%*	*5.4%*	*4.5%*	*3.4%*	*7.8%*	*3.1%*	*4.0%*	*12.4%*	*7.0%*
Reinv. amt. as % of Equity	*3.1%*	*2.7%*	*1.2%*	*-4.1%*	*5.6%*	*-7.6%*	*11.5%*	*-16.0%*	*0.6%*
Manufacturing, Publishing & Retailing									
Net Earnings	$120.9	$127.5	$127.6	$149.4	$164.3	$208.7	$201.2	$234.2	$318.9
Change in Equity	$27.9	$46.6	$106.6	$59.2	$179.8	$58.9	$198.2	$434.5	$149.0
Dividends	$93.0	$80.9	$21.0	$90.2	($15.5)	$149.8	$3.0	($200.3)	$169.9
Reinvested amount	$27.9	$46.6	$106.6	$59.2	$179.8	$58.9	$198.2	$434.5	$149.0
Operating Unit Assets	$526.8	$555.8	$679.0	$741.1	$949.3	$1,033.4	$1,455.0	$2,164.0	$2,375.1
Oper. Unit ROA	*24.2%*	*23.6%*	*20.7%*	*21.0%*	*19.4%*	*21.1%*	*16.2%*	*12.9%*	*14.1%*
Oper. Unit Sharehol. Equity	*$236.7*	*$283.3*	*$389.9*	*$449.1*	*$628.9*	*$687.8*	*$886.0*	*$1,320.5*	*$1,469.5*
Oper. Unit ROE (GAAP)	*54.3%*	*49.0%*	*37.9%*	*35.6%*	*30.5%*	*31.7%*	*25.6%*	*21.2%*	*22.9%*
Reinv. amt. as % of Equity	*12.5%*	*17.9%*	*31.7%*	*14.1%*	*33.4%*	*8.9%*	*25.2%*	*39.4%*	*10.7%*
Finance Business									
Net Earnings	$10.6	$11.0	$18.5	$12.7	$14.7	$14.6	$12.6	$14.9	$18.0
Change in Equity	($13.7)	$1.0	$9.6	$3.1	($61.8)	$2.2	$2.2	$0.0	$57.8
Dividends	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Reinvested amount	$6.2	$9.8	($37.5)	$51.7	($330.8)	$85.5	$8.4	($138.5)	($90.7)
Change in invest. value	($30.5)	($13.5)	$72.4	($74.8)	$413.8	($128.2)	($9.5)	$213.0	$228.5
Operating Unit Assets	$553.6	$549.0	$562.9	$519.2	$889.7	$735.8	$780.7	$1,003.9	$1,271.0
Oper. Unit ROA	*1.9%*	*2.0%*	*3.3%*	*2.3%*	*2.1%*	*1.8%*	*1.7%*	*1.7%*	*1.6%*
Oper. Unit Sharehol. Equity	*$81.1*	*$82.0*	*$91.6*	*$94.7*	*$32.9*	*$61.7*	*$63.9*	*$63.9*	*$121.7*
Oper. Unit ROE (GAAP)	*12.1%*	*13.5%*	*21.3%*	*13.6%*	*23.0%*	*30.9%*	*20.1%*	*23.3%*	*19.4%*
Reinv. amt. as % of Equity	*7.0%*	*12.0%*	*-43.2%*	*55.5%*	*-518.4%*	*180.8%*	*13.3%*	*-216.7%*	*-97.8%*
Non-Operating Activities									
Net Earnings	($31.2)	($23.5)	$12.0	($26.7)	($194.6)	($52.8)	($35.3)	$15.6	($118.6)
Change in Equity	($315.9)	($103.8)	$108.2	$234.9	$334.7	$53.6	($132.7)	$2,475.8	($620.7)
Dividends									
Reinvested amount	($372.3)	($273.1)	$171.7	$289.6	$291.0	($51.8)	$19.2	$1,863.8	($226.0)
Change in invest. value	$86.8	$260.5	($97.7)	($84.1)	$67.3	$162.1	($233.7)	$941.6	($607.3)
Oper. Unit Sharehol. Equity	Neg	Neg	Neg	Neg	$314.4	$368.0	$235.3	$2,711.1	$2,090.4
Oper. Unit ROE (GAAP)	*NM*	*NM*	*NM*	*NM*	*-61.9%*	*-15.5%*	*-11.7%*	*1.1%*	*-4.9%*
Reinv. amt. as % of Equity	*N/M*	*N/M*	*N/M*	*N/M*	*92.5%*	*-15.2%*	*6.4%*	*126.5%*	*-9.4%*
Total Reinvested amount	($212.6)	($75.8)	$313.8	$76.2	$643.6	($690.9)	$1,788.2	($709.2)	($24.4)

Source: Company financial information and PaineWebber estimates.

Berkshire Hathaway—the "virtuous circle"

While Berkshire's track record is indisputable, what investors want to know is whether and how it can be sustained (note that Berkshire itself warns that historical returns are not sustainable, but that outperformance *relative to the market* is sustainable).

The sustainability of Berkshire's performance is not an academic question because this is one of the direct inputs to valuing the stock. We believe that the drivers of performance can, to a large degree, be identified and evaluated; the genius of Messrs. Buffett and Munger has been to design a system that continuously generates shareholder value and institutionalizes it. In doing so, they've created a "virtuous circle" in which past good decisions beget opportunities for future good decisions.

> "I've heard Warren say since very early in his life that the difference between a good business and a bad business is that a good business throws up one easy decision after another, whereas a bad business gives you horrible choices—decisions that are extremely hard to make…One way to determine which is the good business and which is the bad one is to see which one is throwing management bloopers—pleasant, no-brainer decisions—time after time after time."
>
> —Charles Munger, 1998 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

We've used the concept of the "virtuous circle" often before because it applies so well to the insurance business: an insurance company with a cost or underwriting advantage and good management that avoids major mistakes, which frees management and capital to capture opportunities at the appropriate point in this cyclical industry. This begets larger marginal gains during the more positive points in the cycle, positioning the company for further outperformance during more competitive periods.

Here are some of the performance elements that we consider most relevant to create the "virtuous circle" of Berkshire Hathaway. Some of these are unique, and therefore, should be key investment considerations for the stock:

Partnership. We always consider management and its attitude the single most important attribute of investing in an insurance company. Berkshire management views its shareholders as partners in every sense of the word. Senior management receives only modest salaries, and by far the bulk of its net worth is invested in the company. There are no stock option plans or other employee benefits to dilute shareholder value. Mr. Buffett has stated that 99% of his net worth is invested directly in the company. Messrs. Buffett and Munger share in any losses directly in proportion to the other shareholders.

Shareholder buy-in. Management has invested enormous time and energy in outlining its philosophy consistently and clearly. Further, Berkshire has honored its commitment to shareholders by living up to the principles it has espoused, and management is candid in admitting its infrequent mistakes[8]. As a result, the company has unparalleled shareholder loyalty and is able to act in its *long-term* best interests with great flexibility. We believe that this gives Berkshire a competitive advantage in acquisitions because it can make long-term-oriented decisions that the companies it has acquired could not under the constraints of public ownership.

Clarity and focus. Every person, in every unit of Berkshire Hathaway, is clearly focused on the single goal of increasing shareholder value. With a few notable exceptions since discarded that were lessons for management, Berkshire has invested only in extremely focused companies that run a competitive, high-quality business. Once Berkshire acquires a company, all incentives thereafter are aligned to focus on improving operations and nothing else. Operating managers have no role in Berkshire's overall corporate strategy or capital allocation; cross-unit synergies are neither required nor encouraged (the See's candy cart at the Nebraska Furniture Mart notwithstanding). There are no distractions at Berkshire Hathaway. Everyone understands his or her mission and gets on with business.

> Speaking of himself as the employer of Rose Blumkin, founder of the Nebraska Furniture Mart: "I mean any guy who'll have a 95-year-old woman work for him seven days a week has no shame at all."
>
> —Warren Buffett, as quoted in *Outstanding Investor Digest*, April 18, 1990

Simplicity. Over the years, management has spent considerable time defining what it does *not* want to invest in, and the kinds of businesses it does *not* want to own. Messrs. Buffett and Munger are willing to pass on potentially great ideas that don't fit these criteria, because they are confident that there are enough great ideas within the universe of investments they are interested in and able to understand. The trade-off is more time to spend on what matters. They also don't believe very many ideas are worth acting on. This philosophy

[8] "Buffett's genius was largely a genius of character—of patience, discipline, and rationality…In this sense, Buffett's character and career unfolded as a sort of public tutorial on investing and on American business."—Roger Lowenstein, introduction to *Buffett—The Making of an American Capitalist.*

reduces risk from a Berkshire shareholder's standpoint as well as raising the probability that investments Berkshire does make will succeed.

> "What we do is simple, although it's not necessarily easy. The checklist going through our mind isn't very complicated. Knowing what you don't know is important. Sometimes that's not easy. Seeing the future is impossible in many cases, in our view, and difficult in others. But sometimes it's relatively easy. And those are the ones that we're looking for."
>
> —Warren Buffett, 1998 Annual Shareholder's Meeting, as quoted in *Outstanding Investor Digest.*
>
> On active, high-turnover equity investing: "Extra care in thinking is not all good but also introduces extra error…most good things have undesired 'side effects,' and thinking is no exception."
>
> —Charles Munger, Speech to the Foundation Financial Officers Group, October 14, 1998

Margin of safety. Most of the time, the margin of safety is described as a significant "haircut" on the value of an investment—a discount that is supposed to cover the contingency that an investor's expectations about performance are wrong. However, we believe that Berkshire *also* looks at risk in another way, using probability distributions. To qualify as an investment, the probability distribution must be normal or skewed in Berkshire's favor. Thus, if there is an unquantifiable "tail" on the negative side of the distribution, management will not take that risk, even if the positive end of the distribution—the potential reward—is *overwhelmingly* in its favor. Every potential loss must be *quantifiable* and *understandable*—not leveraged or subject to significant unknown exogenous events. Berkshire looks for the "earthquake risk" in every business.

We believe that this is why management avoids investing based on quantitative models, eschews hedged derivatives strategies, charges premium rates for its riskier businesses such as super-catastrophe reinsurance, and puts finite limits on its aggregate exposures to events such as earthquakes. Therefore, each individual business or asset owned by Berkshire, *individually*, has a low probability of loss of principal if owned over a reasonable time period. This attribute is unusual among insurers, which are generally more leveraged than investors realize and have difficulty earning returns commensurate with the risk they are taking.

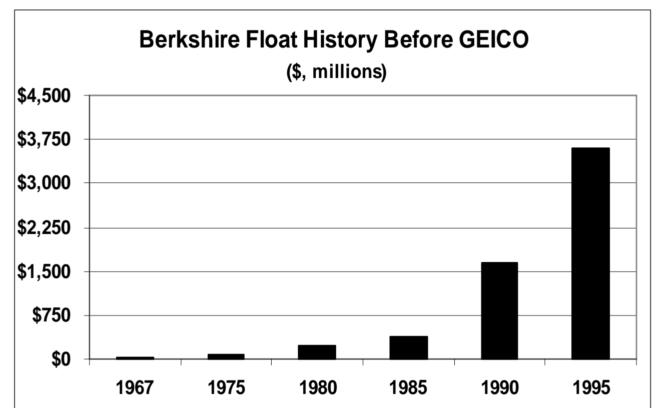
> "A small chance of distress or disgrace cannot, in our view, be offset by a large chance of extra returns. If your actions are sensible, you are certain to get good results; in most such cases, leverage just moves things along faster. Charlie and I have never been in a big hurry: We enjoy the process far more than the proceeds—though we have lived with those also."
>
> —Warren Buffett, 1989 annual report

In addition, we believe that Berkshire considers the management of the businesses it owns to provide an extra margin of safety. Messrs. Buffett and Munger have commented frequently that they only wish to invest in companies with managements of high integrity whose word they can believe and whose financial reports can be relied upon to contain only inadvertent errors.

Capital allocation. Every dime of capital is invested against a stringent set of criteria. When possible, Berkshire would prefer to buy more of what it already owns at a good price. New investments require a higher margin of safety. Businesses are expected to produce high returns and to generate excess capital for Berkshire to deploy if their cash flows cannot be redeployed in the business at a high return.

Cost of capital. Berkshire not only has a triple-A rating, which reduces its cost of debt capital, and a low cost of equity capital, but the company has access to a substantial and increasing amount of low-cost insurance "float"—funds owed to others but invested for Berkshire"—that further reduces the company's effective cost of capital by providing an additional source of very low-cost (actually, negative cost) leverage.

Exhibit 13



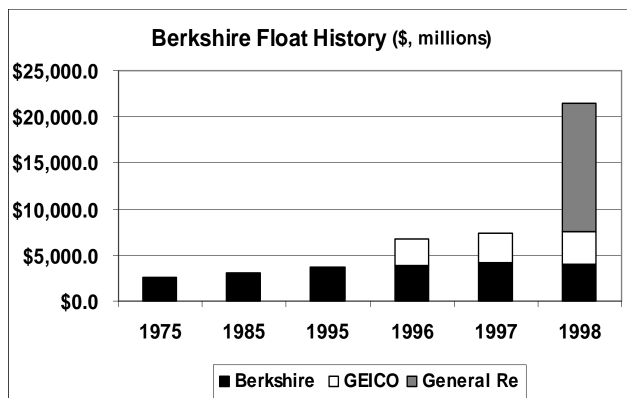
Source: Company financial information and PaineWebber estimates.

The preceding chart shows Berkshire's float growth before it acquired GEICO. Berkshire's float compounded at 22.5% per year from 1968 through 1997. Following are GEICO and General Re's float, overlaid

on the previous numbers. The acquisition of GEICO almost doubled Berkshire's float at one stroke. The acquisition of General Re will almost triple it.

Placing these large chunks of float in perspective on a percentage basis, they raise the average growth rate over the entire 29-year period to 33.6%. The cost of acquiring this float was slightly higher than the float created internally by Berkshire (due to the purchase premium paid for GEICO and General Re); these additional costs are captured in the goodwill paid for these companies.

Exhibit 14



Source: Company financial information and PaineWebber estimates.

Unlimited investment universe. Berkshire is the only insurer with an unlimited investment universe and maximum flexibility to allocate capital. Thanks to its track record of superb investing and superior capitalization, the Nebraska insurance department, the rating agencies and investors give Berkshire Hathaway investing latitude not granted to any other insurer. This enables Berkshire to invest for an equity return any capital that it is not using in the insurance business, eliminating the "burden" of subpar returns on excess capital. Because no competitor has, or could develop in a reasonable time horizon, an investment record similar to Berkshire's, we believe that this is an overwhelming and practically permanent competitive advantage.

Virtual capital. Along with the unlimited investment universe goes "virtual capital." The typical insurer is required to support its claim reserves primarily with investment-grade fixed-income securities. In addition, as a practical matter, the typical insurer must maintain more capital at any point in time than it is likely to require for the volume of business it is writing. Needless to say, it is difficult for an insurer to earn an equity return on its capital under these circumstances[9].

Berkshire, on the other hand, can invest all of its capital in whatever it chooses. All of the insurance operations' capital is available to earn an equity return for Berkshire Hathaway.

"Investor of first resort." Berkshire has made itself the "investor of first resort" for business owners who want to run the operating side of their companies without interference while freeing themselves from capital-raising, capital allocating and investor relations. Berkshire is the ideal acquirer for the truly dedicated hands-on operating manager. As such, the company has first pick of investment opportunities that are never shown to anyone else.

In addition, Berkshire's ability to instantly commit capital to ideas—no committee process or elaborate prospectus required—means that good investment ideas go to Omaha first. We believe that: 1) Berkshire generally approaches businesses it wants to buy only once, and 2) no one ever gets a better price from Berkshire the second time around. This also gives the company a strong advantage in buying businesses.

Long-term orientation. Very few companies have shareholders with a truly long-term orientation. Therefore, companies must "manage" earnings and occasionally make uneconomic decisions to avoid disappointing investors' short-term expectations.

Berkshire is the only company we are aware of whose shareholders have a completely long-term orientation. This gives the company flexibility that its competitors do not have—which we believe is a significant advantage. Management itself always takes the long view, never compromising the long-term best interests of Berkshire shareholders for short-term gains.

The "super cat" business is the best example of this—other participants in that business set up public companies whose capital was dedicated to catastrophe reinsurance. This took away the ability to allocate capital flexibly and forced these companies to diversify when the cycle inevitably headed downward. But Berkshire can use the capital elsewhere, and so need only accept business on its own terms.

> "Investing is the greatest business in the world because you never have to swing. You stand at the plate; the pitcher throws you General Motors at 47! U.S. Steel at 39! And nobody calls a strike on you. There's no penalty except opportunity. All day you wait for the pitch you like; then, when the fielders are asleep, you step up and hit it."
>
> —Warren Buffett quoted in *Forbes*, November 1, 1974

[9] The insurer must either underwrite at a sufficient profit (something that rarely happens these days), or at margins that result in an economically attractive return measured against the average claims payout pattern of its reserve liabilities. The industry's overall return on capital is about 7%, well below the cost of capital and the level of risk assumed.

Competitive advantages. Berkshire's noninsurance businesses are expected to have some sort of "moat," or competitive advantage, that will sustain them against competition for as long as possible. In the case of passive investments, this is normally a franchise brand (e.g., Coca-Cola, Gillette, American Express). However, wholly owned subsidiaries also normally have some sort of overwhelming market share or cost advantage.

"Making Warren proud." Warren Buffett has often stated that his job is to tap dance into work every morning, allocate capital and find reasons for people who are independently wealthy to work incredibly hard for the shareholders of Berkshire Hathaway. How he does this has never been clear. We noticed, however, that every manager of every business we spoke to mentioned, without prompting, their desire to "make Warren proud"—to show him that he made the right decision when he invested in that business or that person—and their pleasure in doing so. Something about Warren Buffett elicits this response in people.

Our model—earnings and book value growth assumptions

While we do not believe that short-term earnings estimates are meaningful for a company like Berkshire Hathaway, we are projecting annual operating earnings (excluding realized investment gains and losses) for comparative purposes and to assist in compounding book value per share. Using the following major assumptions for 1999 and 2000 operating earnings, we project short-term earnings growth of 15.6% per share in 1999 and 24.4% per share in 2000 (compared with the average 22% historical rate). Cash operating earnings per share are estimated to grow 35.2% in 1999 and 19.0% in 2000.

1/20/99 price $64,500 NYSE—BRK.A

Market Cap.:	$97,524M	**52-wk. High:**	$84,000
Shares Out.:	1.512M	**52-wk. Low:**	$48,000
Float %:	68%	**Avg. Dly. Vol.:**	0.571K

FY End: December	**1998E**	**1999E**	**2000E**
FY Oper. EPS*	$863.27	$997.88	$1,241.59
Oper. EPS (ex gw)	$949.19	$1,283.73	$1,527.44

*Operating EPS exclude realized capital gains and losses.

- Noninsurance businesses grow by approximately 10%;
- GEICO grows premiums 18% per year with a combined ratio of 95.7% in 1999 (2.7 points higher than the 1998 estimate) and 96.2% in 2000. One point of the increase relates primarily to higher advertising costs, while the remainder reflects declining industry pricing.
- We maintain our former model on General Re, except that we assume the following: 1) approximately $150 million of retrocessional premium is recaptured annually; 2) premiums grow faster—5%—for the next two years, better than the industry overall due to the company's ability to accept larger and more diverse risks; 3) approximately $2 billion of General Re's $5 billion equity portfolio is invested in fixed-income securities with relatively short maturities (we assume that the remainder, although initially transferred to short-term fixed-income securities, will be deployed to equities fairly quickly—a more conservative assumption from an operating earnings standpoint); 4) the effective tax rate on the investment portfolio declines, on average, by 100 basis points over two years as the company shifts into more municipal securities; and 5) the loss ratio rises by one point from our previous assumption to reflect the conversion of option incentive programs to cash programs. Of these assumptions, the premium growth assumption has almost no impact on earnings, but the investing and tax assumptions have a significant impact.

Weighted-average Class A equivalent shares outstanding of 1.5152 million.

In estimating the growth of book value, we assume that the equity market increases in value by 5% per year, including reinvested dividends, for the next two years (consistent with the PaineWebber investment strategy group's view and as opposed to our own long-term assumption of 10% per year) and that Berkshire outperforms by 500 basis points. Adding this increment as well as reinvested earnings and the 10% market value increase related to approximately $1 billion per year of incremental float yields book value growth of 10.4% in 1999 and 7.7% in 2000. Over the long term, we expect book value to compound at approximately 15% in periods when the equity markets grow by 10% and Berkshire Hathaway has a higher asset allocation to equities.

Concentrated investing

The importance of concentrated equity investing to Berkshire Hathaway's success as an insurance company cannot be overstated. For example, consider the following table comparing return on invested assets and relative size for the property-casualty industry:

Exhibit 15

Investment Returns and Premiums, Year-End 1997

	% of Industry's Equity Inv.	Market Share, NPW	Equities/ Surplus	Net Inv. Yield	Total Return on Inv. Assets
Berkshire Hathaway	23.4%	1.7%	85.0%	2.6%	21.8%
Top 10 Insurers	62.1%	32.0%	65.0%	5.2%	12.3%
Other 1100 Insurers	37.9%	68.0%	29.0%	6.1%	7.7%
Total Industry	100.0%	100.0%	44.0%	5.8%	9.2%

Source: A.M. Best.

Berkshire Hathaway wrote 1.7% of the industry's total premiums and yet owned, at year-end 1997, almost 24% of the total equities held by the property-casualty industry. These equities represented about 85% of Berkshire's insurance subsidiaries' policyholders' surplus compared to 44% for the average property-casualty insurer.

Because of the high concentration in equities relative to fixed-income securities, Berkshire's statutory investment yield was only 2.6% compared with 5.8% for the industry. However, the impact on total returns more than offset this. Berkshire achieved a total return of 21.8% on its invested assets, compared with an average of 9.2% for the industry. Further, Berkshire has achieved similar returns throughout its history—not just during equity bull markets.

> "Our experience in shifting from savings and loan operation to ownership of Freddie Mac shares tends to confirm a long-held notion that being prepared, on a few occasions in a lifetime, to act promptly in scale in doing some simple and logical thing will often dramatically improve the financial results of that lifetime. A few major opportunities, clearly recognizable as such, will usually come to one who continuously searches and waits, with a curious mind, loving diagnosis involving multiple variables. And then all that is required is a willingness to bet heavily when the odds are extremely favorable, using resources available as a result of prudence and patience in the past."
>
> —Charles Munger, Wesco Financial Corp. 1998 Annual Report to Shareholders

One unusual feature of Berkshire Hathaway is the degree of concentration in its equity portfolio. Berkshire is not the only insurer with a similar investment approach (Cincinnati Financial had 127% of its shareholders' equity invested in a concentrated portfolio of equities at September 30, 1998, and Reliance Group for the past few years has compounded its tangible book value at a much faster pace than the industry through a similar strategy, which, however, is no longer being followed). However, we believe that Berkshire has done the clearest job of 1) achieving consistent returns over an extended period, and 2) obtaining shareholder, rating agency and regulatory buy-in. We consider this buy-in an important part of Berkshire's franchise, as it gives the company unparalleled flexibility compared to other insurers.

> "Diversification serves as protection against ignorance. If you want to make sure that nothing bad happens to you relative to the market, you should own everything…But if you know how to value businesses, it's crazy to own 50 stocks or 40 stocks or 30 stocks, probably—because there aren't that many wonderful businesses understandable to a single human being in all likelihood."
>
> —Warren Buffett, 1996 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

The mystery of "intrinsic value"

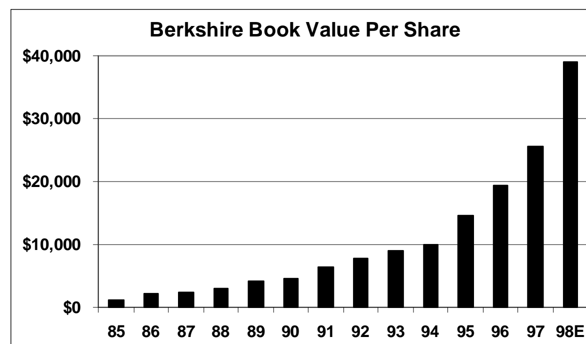
Investors have historically struggled to assess the intrinsic value of Berkshire Hathaway. Management intentionally does not provide a valuation, although Messrs. Buffett and Munger have provided quantitative information and have given a number of suggestions over the years to help investors derive their own valuation.

> On why Berkshire doesn't publish intrinsic value: "First, we don't know the exact intrinsic value—although we can make an informed guess within a range…The hardest value to figure by far is that of our insurance business[10]. That doesn't mean it isn't valuable. It just means that it's hard to assess—although it might have a bigger effect on the valuation of Berkshire than See's Candies or World Book…In the 1960s, there was only one company that I know of which announced its fair value regularly. And that was Webb and Knapp, which Bill Zeckendorf ran. In every annual report, he listed to several decimal places exactly what he thought the company was worth. And it was always a lot more than it was selling for. And that practice continued until it went into bankruptcy. We were thinking of shorting their stock at $1. But as one of our friends [Marshall Weinberg] pointed out, it was too much like jumping off a pancake…People who tend to do that—people who have a proclivity for announcing how valuable their stock is—are, I think, people who you ought to be very cautious of."
>
> —Warren Buffett, 1991 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

In fact, the only statements Messrs. Buffett and Munger have made about where their stock should trade is that they would like it to be aligned with intrinsic value—neither significantly higher nor significantly lower. And, occasionally, they have indicated whether they believe the stock was valued roughly in that range. Some investors have pegged Berkshire's intrinsic value to its book value (treating book value as a proxy for the net asset value of a closed-end fund) and assigned any excess to a "Buffett premium" that is often attributed to mystique.

Messrs. Buffett and Munger have stated that they do not believe that book value is related to intrinsic value except that *growth* in book value should occur at about the same rate as *growth* in intrinsic value. The fact that book value is related to intrinsic value, however, does not preclude the stock from trading at a premium to book value. The reason that growth in book value can be used as a proxy for growth in intrinsic value is that Berkshire is consistently able to reinvest its capital at a high return (in other words, it has consistently high EVA). Therefore, the value of Berkshire theoretically grows directly in proportion to the capital invested in the business. However, most businesses that, like Berkshire, have produced consistent favorable returns on capital trade at a premium over book value to reflect the expectation that owners will share a growing pool of future earnings.

Exhibit 16



Source: Company financial information and PaineWebber estimates.

Our view of Berkshire's intrinsic value

Our own view of Berkshire's intrinsic value is that it consists of the sum of the values of Berkshire's insurance and noninsurance operations, as described below. We do not value Berkshire's assets separately, as a "mutual fund"-oriented analysis would. Rather, we value the investment portfolio as part of the insurance company. We have used a float-based valuation, which we believe is the most reasonable method for valuing Berkshire Hathaway. For those who prefer purely a book value or earnings-oriented method, we've included those also.

Because many investors have their own views about Berkshire's valuation, in the following section, we provide not only details about our reasoning but enough sensitivity information for investors to adjust the valuation to suit their own growth and other assumptions.

Float-based valuation

Traditionally, insurance analysts value companies by estimating earnings and projecting future book values, and assigning premiums to earnings and book value based on relative returns on equity. Analysts also implicitly discount for the volatility of earnings and for the risk that actual book value may be less than stated book value (because of reserve shortfalls). Our own method includes two additional elements: 1) a premium for insurers that invest for total return, and 2) cash earnings—we do not charge for goodwill amortization, which we consider noneconomic in nature. However, we also add accumulated amortization back to book value, so that in calculating return on capital, a business that has made acquisitions must meet a higher (and more realistic) hurdle rate—cash return on original invested capital.

[10] Our note: this remark was made before the company purchased GEICO and General Re, both of which are more valuable as well as easier to value.

In valuing Berkshire, we also have another tool at our disposal—float

What is float? Float is simply the amount of money that an insurance company holds on behalf of its claimants. The insurer earns investment income on the float until it pays the claim. In that sense, float can be considered equivalent to debt. Like debt, float provides the enterprise with capital with which to earn money and carries a financing cost. Unlike debt, however, float is never "repaid," as long as the insurer does not shrink. In that sense, float is not a liability, yet it is carried as such on the balance sheet. For an insurer that can obtain float at a reasonable cost and hold it in perpetuity, float is really an asset, not a liability.

> "[If] I were offered $7 billion for [$7 billion of] float and did not have to pay tax on the gain, but would thereafter have to stay out of the insurance business forever—a perpetual noncompete in any kind of insurance—would I accept that? The answer is no. That's not because I'd rather have $7 billion of float than have $7 billion of free money. It's because I expect the $7 billion to grow."
>
> —Warren Buffett, 1996 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

The spread between the money earned on this asset and the cost of obtaining the float determines the value of the float. However, unlike debt, the cost of float is uncertain. The amount of float is also variable. Float can grow, and the growth rate is hard to predict. The valuation of float is complicated by these uncertainties as well as a third one—the extra tax burden that acquiring float through a corporate entity entails. These complications are discussed further below. At a minimum, however, if float is acquired and held at a cost less than the risk-free interest rate, it is self-evident that a dollar of float has a positive value.

Why don't insurance analysts normally value float? Insurance analysts typically do not assign an explicit value to float, even though float is the major source of future earnings for most insurance companies. Most insurance stocks trade at a premium over book value, and implicitly, it is understood that a large part of this premium relates to the value of float. Indeed, there is a strong correlation between the spread on float and the premium over book value that an insurance stock receives. Companies with equivalent growth rates that have historically acquired float at a high cost relative to the investment earnings on float (e.g., CNA) or created uncertainty regarding the cost of float by frequently strengthening reserves, tend to trade at lower premiums to book value. Companies that have *consistently* produced float at a low cost tend to trade at high premiums to book value (e.g., AIG, General Re).

> "Float per se is not a blessing. We can show you many insurance companies who thought it was wonderful to generate float. And they lost so much money in underwriting that they'd have been better off if they'd never heard of the insurance business. The job is to get it and get it in increasing quantities, but, above all, to get it cheap. And that's what we work at."
>
> —Warren Buffett, 1996 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

The analysts' problem is that very, very few insurers have produced float at a low cost for the *extended* period of time necessary to reduce the uncertainty regarding the cost of float to an acceptable level. The Bermuda companies ACE Ltd. and XL Capital provide interesting examples. Their historical cost of float is very low. However, both companies were formed in the mid-1980s, and this is not enough history to use an explicit "float method" to value the stocks, particularly in light of more recent diversification efforts. Over time, however, we believe that if these companies are able to maintain their impressive underwriting results, they should be able to command a very sizeable premium over other insurance stocks.

Why can we value Berkshire's float? Before it acquired GEICO, valuing Berkshire Hathaway using a float method was possible, but we would likely not have used that method because of our inability to gain comfort on the value of float given the company's business mix.

- GEICO, however, has for more than two decades produced float consistently at a very low cost. Further, the source of its low cost of float is traceable to the company's expense advantage, which we believe is sustainable. Therefore, we think that valuing GEICO on a float method is reasonable.

- National Indemnity and Berkshire's other insurance operations have, over the years, produced a significant amount of float (more than half of Berkshire's float before buying General Re) through their long-tailed businesses, such as workers' compensation, structured settlements, excess of loss reinsurance contracts and finite reinsurance.

- General Re has underwritten at a combined ratio of just over 100% consistently for the past 50 years. There is little question that General Re can be valued using a float method. In addition, incorporating General Re into Berkshire Hathaway essentially triples the company's float.

Accordingly, we believe that it is no longer possible to understand and value Berkshire *without* considering the value of the company's float.

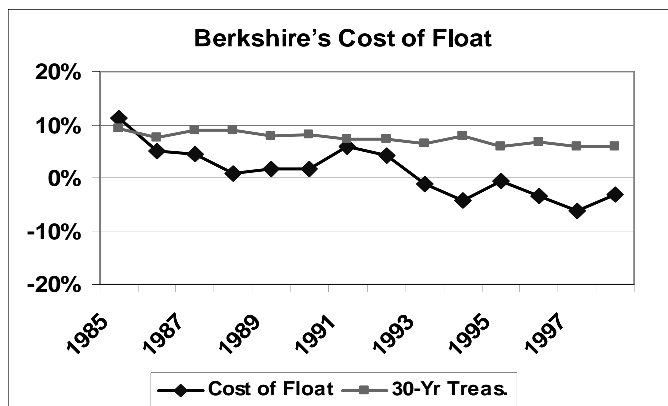
Before presenting our valuation of Berkshire Hathaway's float, a conceptual description of the underlying financial concepts and mathematics may be useful.

> "If you could see our float for the next 20 years and you could make an estimate as to the amount and the cost of it, and you took the difference between its cost and the returns available on governments, you could discount it back to a net present value."
> —Warren Buffett, 1992 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

Beginning with the simplest conceptual example, an investor should be willing to pay up to the risk-free rate to use float for one year. The investor would, for example, be willing to pay up to $5 to borrow $100 and invest it at 5%.

Moving on, an investor should be willing to pay up to the amount of the float itself for the ability to invest the float at the risk-free rate in perpetuity. For example, an investor would pay up to $100 for the right to invest $100 at the risk-free rate forever. At this breakeven point, the earnings foregone on the $100 paid would exactly offset the earnings on the borrowed amount. Applying this from an insurance investor's perspective, an insurer in effect has the ability to invest in perpetuity—or close enough so as to be irrelevant mathematically—as long as the insurer does not shrink or liquidate.

Exhibit 17



Source: Company financial information and PaineWebber estimates.

Now come the three complications. The first relates to the cost of float. What if the investor must occasionally pay an additional fee above the risk-free rate in order to use the float? The valuation would obviously be net of that cost. The extra "fee" is the result of a higher combined ratio that increases the cost of float above the risk-free rate, and for most insurance companies, the uncertainty of this extra "fee" means that a value cannot be placed on the float. It is reasonable to value float only if the company has demonstrated that the cost of its float is predictable and lower than the amount it could earn on the float at a risk-free rate. In the case of Berkshire Hathaway, this test has been met. Our valuation formula incorporates an anticipated long-term average charge for the cost of float.

The second complication is the growth of float. An investor would pay more for an amount of float that is likely to grow in the future because the investment earnings would increase every year. However, estimating the future growth of float can be difficult for most companies in the cyclical insurance industry. Further, in a perpetuity calculation, historical growth rates will lead to an unrealistically high, if not outlandish, valuation. To address this, we have performed a three-step calculation, shown in the following exhibit. For the first five years, we estimate that Berkshire's float will grow by 15% per year. This is 75% of the rate of estimated premium growth, which is how GEICO's float has historically developed[11]. For the next five years, we assume that Berkshire's float will grow by 11.25%, or 75% of a 15% premium growth rate. We assume that General Re's float will grow by 5% per year for ten years as it captures synergies related to Berkshire.

To test the reasonableness of the first assumption, we projected GEICO's market share in 2008 using these growth rates and assuming that the U.S. auto insurance market grows by 4% per year. In 2008, GEICO would have a 13.5% share of the market, slightly larger than Allstate currently and within the range we expect for GEICO over that time period. General Re's float would be approximately two-thirds larger than it is today. Mr. Buffett has stated that he expects General Re to double in size over ten to 15 years. We use float as a proxy for size because we believe that Berkshire values the growth of float rather than the growth of premiums and "incents" management accordingly.

[11] We are assuming that, given its exceptional growth rate, GEICO will come to represent the majority of Berkshire's insurance operations other than General Re. However, through 1995, before it acquired GEICO, Berkshire's own insurance float grew at a compounded rate of 21.0% per year. While this historical rate is not sustainable, Berkshire should be able to grow its float much faster than the insurance industry overall.

The third complication relates to taxation. In order to generate float, Berkshire must operate through an insurance company, an incorporated entity that results in double taxation on shareholders' capital. Mr. Buffett has commented that the cost of these corporate taxes to a Berkshire holder is about 100 basis points of float. In a valuation, this cost should be charged to the capital that generates the float—the insurance operations.

Our methodology for calculating float-based valuation. After estimating float after ten years, we compute minimum estimated investment income on the float (the risk-free rate less expected underwriting loss or cost of float) and then capitalize that income at the difference between the risk-free rate and the expected growth rate for year 11 and thereafter. After ten years, we have assumed that GEICO's float grows at 1.0% over estimated GDP and that General Re's float grows at estimated GDP of 3%.

Note that in the calculation shown below, we are assuming that General Re's float costs 1% per year more than its long-term historical average. Management has estimated that the cost of converting General Re's stock option program to a cash program will add about one point to underwriting results.

In addition, we are assuming that GEICO/Berkshire underwrites at a 100% combined ratio. Realistically, however, the auto and super-catastrophe businesses must be underwritten at a long-term profit.

To the value of float we add tangible book value, 50% of Berkshire's estimated year-end deferred tax liability (to reflect the fact that, under the company's low-turnover policy, the time value of this liability is less than its nominal value) and the value of Berkshire's noninsurance business (using a market P/E ratio of 26.5x on 1999 First Call consensus earnings, as discussed below).

Noninsurance operations. Berkshire is involved in everything from aviation training to furniture retailing. Some of these businesses have strong growth potential, whereas others are high-return on equity businesses that generate more cash than needed for internal growth and throw off excess capital for Berkshire to invest. These businesses, in total, had 1997 revenues of $3,735 million. Over the past ten years, these businesses have grown their operating earnings by 20.8% per share, excluding all income from investments. Over 20 years and 30 years, the performance was slightly better. Taken together, their earnings would rank 243rd in the *Fortune* 500. What would you be willing to pay for a *Fortune* 500 company whose earnings grow at a more than 20% rate sustainably?

Applying a 20% growth rate using a dividend discount model results in an absurd valuation because, theoretically, Berkshire would eventually grow to be larger than the entire U.S. gross domestic product. If we assume that Berkshire can grow in perpetuity at 50 basis points less than its cost of capital, we derive a value of more than $31 billion—equivalent to a price-to-earnings ratio of 100x. Obviously, the public market would not pay that (unless, perhaps, we renamed the company e-Berkshire.com).

For our comparison, we use a market multiple on 1999 estimated earnings, which gives us a value of $9.0 billion. However, considering that the S&P 500's earnings are growing at a much slower pace than Berkshire's have historically, these businesses should receive a premium to a market multiple, and so this is probably the low end of the correct valuation. Fundamentally, the high growth rate is because all of the businesses have a high return on equity, and any excess capital continues to be reinvested at a positive EVA. (Since the S&P multiple is a weighted average of all S&P index companies' valuations, a top-tier company would usually receive a higher valuation than the average.)

Sensitivity to assumptions and what we didn't assume. Some of our assumptions were conservative. A sensitivity analysis is provided so that readers can adjust the valuation in either direction.

GEICO underwriting. GEICO's statutory combined ratio has averaged 96.5% for the past ten years, a period encompassing a higher interest rate environment that included many years in which GEICO wrote less profitable lines of business, such as homeowners' insurance. During this time, the company was operated by different management and without the support of Berkshire. We believe that GEICO's results would have been better had the company operated under present conditions.

Nevertheless, we have used a 100% combined ratio assumption, in part because near-term auto insurance market conditions are becoming more competitive and in part because at GEICO's growth rate, acquisition costs of new business burden the combined ratio as the mix shifts in favor of new policies. However, over the long term, we would be surprised if GEICO ran at a combined ratio this high. No credit for this wider "spread" is given in the calculation.

Other Berkshire underwriting. In general, we believe that, because Berkshire's own underwriting (excluding GEICO) has historically been more profitable than we are assuming, the 100% combined ratio used in determining the spread on float is conservative. Each 1% change in Berkshire Hathaway's total cost of float (including GEICO) is worth $8,423 per share.

General Re underwriting. While General Re has historically underwritten at a combined ratio just over breakeven, most of the float was generated during periods of much higher interest rates and inflation, which especially affect the combined ratios of long-tail reinsurers. In today's interest rate environment (or in a 6.5% rate environment), we would expect the average combined ratio to be lower than the historical average ratio.

We are also assuming that the combined ratio will rise by one point due to the cost of the new incentive plan, but in fact, the opposite may occur. As part of Berkshire, General Re should gradually migrate to higher-layer excess reinsurance transactions, which should carry better underwriting margins.

Each 1% change in the cost of General Re's float is worth an additional $4,562 per share, as noted below.

Investing. We are not giving any credit to Berkshire for its investing skill.

- Our 6.5% investment rate is the estimated long-term Treasury yield, not an equity return[12].
- In addition, Berkshire has traditionally outperformed the equity markets.

Each additional 100 basis points of spread on float is worth approximately $12,983 per Berkshire share, as noted below.

Value of noninsurance businesses. Each additional multiple of estimated 1999 earnings from the noninsurance businesses (excluding interest and dividends) is worth $224 per Berkshire share.

Growth. Each additional percentage point of growth for both companies combined *in the first ten years* is worth an additional $14,201 per share.

There are some special, important considerations to changing the growth rate of float *after* the first ten years:

- The impact of a 0.5% increase in Berkshire's float growth rate (including GEICO, but excluding General Re) after ten years to perpetuity (i.e., from 1.0% over GDP to 1.5% over GDP) is $30,881 per BRK share.
- The impact of a 0.5% increase in General Re's float growth rate (i.e., from 3.0% to 3.5%) after ten years to perpetuity is $4,561 per BRK share. A 1% increase in General Re's float growth rate (to 4.0%) after ten years in perpetuity is $12,771 per BRK share.

The formulas used to calculate these two sensitivity assumptions are nonlinear, and, therefore, the values for a 0.5% change, for example, cannot be doubled to ascertain the impact of a 1% change. In addition, the closer the growth rate comes to the risk-free rate, the less reliable the estimate of value becomes because each fractional variation in the rate has a huge impact on the resulting value.

As the growth rate approaches the risk-free rate, the theoretical values approach infinity—"trees can't grow to the sky." [13] Because of the basic limitations of economics, we do not recommend adding more than 0.5% to the Berkshire growth rate and 1% to the General Re growth rate.

After ten years, the growth rates shown in our example are the ones with which we are the most comfortable. The main reason we are assuming that Berkshire can grow slightly faster than the GDP, apart from the underlying prospects of the business, is that Berkshire has other growth alternatives if our assumptions for those businesses prove wrong. However, the magnitude of the difference between the value of General Re's float and the value of Berkshire's float simply due to a 1% difference in the perpetuity growth rate after ten years should caution investors that Berkshire is not a "static" enterprise—when one of its operating companies reaches its natural limits to growth, it continues at an appropriate return on equity, but excess capital generated is used to invest in other businesses with better growth prospects. Therefore, we believe that Berkshire is closer to the definition of a perpetual growth business than the average company, even though such a business doesn't literally exist.

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[12] While this is higher than the current risk-free rate, we do not believe that the current rate is representative of a long-term average expected rate. In addition, a compensating factor is present because the average "spread" between the investing and the risk-free rates that we are using for both companies is well below historical averages, which were developed during periods of higher inflation and interest rates.

[13] "There are many ways by which [an investor] can allow for an eventual decline in the current rate of growth [of a growth stock], all of which entail major forecasting problems…With growth stocks, the uncritical use of conventional discount formulas is particularly likely to be hazardous, for…growth stocks represent the ultimate in investments of long duration."—*Growth Stocks and the Petersburg Paradox*, David Durand, *Journal of Finance*, September 1957.

Exhibit 18

Estimated Value of BRK -- Float Method				
		Estimated Float		
		BRK	GRN	Total
	12/31/98	$7,800.0	$16,000.0	$23,800.0
	1999	$8,970.0	$16,800.0	$25,770.0
	2000	$10,315.5	$17,640.0	$27,955.5
	2001	$11,862.8	$18,522.0	$30,384.8
	2002	$13,642.2	$19,448.1	$33,090.3
	2003	$15,688.6	$20,420.5	$36,109.1
	2004	$17,453.55	$21,441.5	$38,895.0
	2005	$19,417.08	$22,513.6	$41,930.6
	2006	$21,601.50	$23,639.3	$45,240.7
	2007	$24,031.67	$24,821.2	$48,852.9
Est. float after ten years(1)	**2008**	$26,735.23	$26,062.3	$52,797.5
Investment return (2)		6.5%	6.5%	
Cost of float (3)		0.0%	2.0%	
Spread = (2) - (3)		6.5%	4.5%	
Tax burden		1.0%	1.0%	
After tax spread on float (4)		5.5%	3.5%	
Income on float/year 11 = (1) * (4)		$1,470.4	$912.2	$2,382.6
Discount rate		5.3%	5.3%	
Growth rate		4.0%	3.0%	
Capitalization factor (5)		1.3%	2.3%	
Value of float -- end of yr 10 = (4)/(5)		$117,635.0	$40,541.3	$158,176.3
Present value @ RFR		$70,186.38	$24,188.79	$94,375.2
Insurance capital				$42,895.1
Less: Estimated GRN goodwill				($13,000.0)
Plus: 50% of deferred tax liability				$5,000.0
Value of noninsurance businesses @ 26.5X Earnings				$8,992.8
Total Value				**$138,263.1**
Per Share				**$91,253**

Sensitivity Per Share to Assumptions:	
1% Change in Growth Rate of Float (1st Ten Years) =	$14,201
1% Change in Cost of BRK Float =	$8,423
1% Change in Cost of GRN Float =	$4,562
1% Investing Performance Over Risk Free Rate =	$12,983

Source: Company financial information and PaineWebber estimates.

Exhibit 19
Book value-based valuation

Comparison of Selected Publicly Traded Companies to Berkshire Hathaway (as of 1998 Q3)

Company		Op. ROE at cost	Ttl Return ROE at mkt	Tangible BVPS	Tangible BVPS ex URGL	Cash Op. ROE (ex Goodwill)	Ttl Return ROE (ex Goodwill)	Price / Book 12/31/98	
Berkshire Hathaway	BRK			$27,828	$14,956	10.6%	24.5%	2.8 X	(1)
Amer. Intl. Group	AIG	14.9%	15.8%	$24	$22	14.9%	15.8%	3.9 X	
Allstate	ALL	20.8%	22.2%	$20	$15	20.8%	22.2%	1.9 X	
Cincinnati Financial	CINF	11.8%	19.2%	$29	$12	11.8%	19.2%	1.3 X	
General Re	GRN	16.5%	18.5%	$102	$69	16.8%	18.8%	1.8 X	(2)
Progressive	PGR	20.0%	22.9%	$33	$33	20.1%	23.0%	5.1 X	
XL Capital Ltd.	XL	12.2%	18.6%	$27	$27	12.7%	19.1%	1.8 X	
Average		16.0%	19.5%	$39	$30	16.2%	19.7%	2.6 X	

(1) Berkshire's Cash Operating ROE (ex GW) and Total Return ROE (ex GW) are based on 1993-1997 averages and PW goodwill estimates.
(2) General Re's stock price is as of 12/21/98.
Source: Company financial data and PaineWebber estimates.

Although simplistic, book value is a common yardstick of value for insurance investors and is especially appropriate for Berkshire, in our opinion, given the conservatism of its reserves relative to the industry. Warren Buffett has commented that there is nothing magical about book value and he does not consider it a useful valuation measure. However, insurance investors tend to use it as the most common starting point of valuation because the earnings power of insurance companies is so subject to manipulation and difficult to ascertain.

As noted earlier, most insurance stocks trade at a premium over book value. Normally, the size of the premium is highly correlated to the company's return on equity. As noted earlier, we believe that the ability to generate float consistently at a low cost is a major factor in determining this premium. However, companies that can do this normally achieve a high return on capital as long as they manage their capital appropriately. Therefore, the distinction is essentially immaterial.

With that background, Berkshire can be assessed using a book value method in comparison to other insurance companies. Any comparison is obviously flawed in that there are no true comparables to Berkshire—with its insurance and investing track record and its higher-valued noninsurance businesses[14]. However, we believe that lack of comparability would understate, rather than overstate, the value of Berkshire.

We believe that AIG is the best comparable based on its management talent, significant concentration of ownership by management, long successful track record, positive business momentum and global opportunities. However, there are significant differences between AIG and Berkshire.

There are other companies that resemble Berkshire in certain respects. Although Berkshire has more capital than it is currently using for underwriting, most insurance companies also are carrying substantial excess capital. For example, Cincinnati Financial strongly resembles Berkshire due to its investment portfolio, which is concentrated in a handful of equities that represent, in aggregate, more than 100% of its entire market capitalization (interestingly, Cincinnati has never been viewed as a closed-end mutual fund like Berkshire).

> "There's another kind of advantage to scale. In some businesses, the very nature of things is to sort of cascade toward the overwhelming dominance of one firm…it tends to cascade to a winner-take-all situation. And these advantages of scale are so great, for example, that when Jack Welch came into General Electric, he just said, 'To hell with it. We're either going to be #1 or #2 in every field we're in or we're going to be out.'…That was a very tough-minded thing to do, but I think it was a very correct decision if you're thinking about maximizing shareholder wealth."
>
> —Charles Munger, lecture at University of Southern California, 1994, as quoted in *Outstanding Investor Digest.*

The preceding exhibit is a comparison table of price-to-book value relationships for Berkshire Hathaway and other property-casualty insurers (including General Re just prior to the acquisition).

[14] The comparison is even more difficult because, having acquired General Re, Berkshire itself now owns two of the finest franchises in the industry, in our assessment. This has interesting implications for valuing other insurance stocks.

We believe that AIG is the best comparable based on its management talent, significant concentration of ownership by management, long successful track record, positive business momentum and global opportunities. As shown in the preceding table, high returns on equity are positively correlated with high price-to-book value relationships. Because its return on capital is consistently the highest in the group, we believe that Berkshire should receive a premium over book value at the high end of the range of insurers.

The following table shows three ways of viewing Berkshire's "book value": tangible book value, GAAP book value (which includes goodwill), and tangible book value plus insurance "float." We have highlighted the values that we consider most reasonable.

- We believe that Berkshire should trade at the highest end of the range of values of tangible book value, because tangible book value understates the value of Berkshire by ignoring its valuable insurance "float" and giving no credit for goodwill, which, in Berkshire's case, certainly has value. A value of 300% of tangible book value, as shown in the preceding table, is, in our view, the minimum reasonable valuation.
- We believe that the stock should, at a minimum, be valued in the middle of the range based on GAAP book value, which includes goodwill but places no value on float.
- Finally, we would, at a minimum, value Berkshire at the lower end of the range based on tangible book value *plus* float. This valuation provides a margin of safety on the float. However, recall that in our float-based valuation, we estimated that a dollar of float was worth *more* than its nominal value

A valuation that incorporates both float and goodwill is not included because there is an element of redundancy between these two. Most of Berkshire's pro forma goodwill relates to the insurance operations of General Re and GEICO and reflects their float.

Exhibit 20

Book Value Method:	Book Value	Price/Book			
		200%	250%	300%	Average
Estimated tangible book/share	$27,828	$55,656	$69,570	$83,484	$69,570
Plus goodwill/share	$11,214				
Estimated GAAP book/share	$39,042	$78,085	$97,606	$117,127	$97,606
Float/share	$15,741				
Tangible book plus float/share	$43,569	$87,137	$108,922	$130,706	$108,922
Average of highlighted values:			**$89,409**		
Average of all methods:					**$92,033**

Source: Company financial information and PaineWebber estimates.

Earnings-based valuation

Our third valuation method looks at Berkshire's earnings including its share of the "look-through earnings" of its investees. In 1997, Berkshire's major investees reported "look-through earnings" of $638 million after taxes (excluding look-through earnings for Travelers Corp., which we have omitted, as we believe that Travelers will not be included in 1998 and 1999).

The following table illustrates a low and high estimate of value based on earnings. We have valued Berkshire's noninsurance earnings at a P/E multiple range between 26.5x and 30x estimated 1999 earnings. We have divided the insurance operations between GEICO, which should receive a premium valuation, and the other operations. We value GEICO at between $12.8 billion and $14.5 billion, which we think is a reasonable premium relative to its nearest comparable, Progressive. The other insurance operations are valued at between $23 billion and $26 billion. By way of comparison, General Re's market capitalization was $18 billion pre-acquisition, and the takeout value based on the announced purchase price was $22 billion.[15]

Included in our valuation is an increment for the incremental total-return investing performance of Berkshire Hathaway in excess of a market return. This is equivalent to forecasting the impact of outperformance on average long-term capital gains. Some insurance companies have practiced total-return investing very successfully over the years and have created sizeable incremental shareholder value through their equity portfolios. We use total return returns on equity in our valuation analysis to capture the

[15] We did not hear anyone commenting that the price was overly generous.

value created this way. Other companies invest purely for yield, and we value these companies without any incremental investing element.

In the following table, we have applied a low of 400 basis points over the S&P 500 and a high of 700 basis points above the S&P 500 to our expected value of the company's equity portfolio at year-end. For comparison, Berkshire outperformed the market by an average of 6.4% over the past five years, 8.0% over the past ten years, 10.7% over the past 20 years and 11.8% over the past 30 years. While outperformance becomes more difficult with the company's increasing size, General Re's float should help significantly in overcoming this disadvantage.

We are using a market multiple for the total-return investing increment. Mathematically, the present value of an earnings stream that can grow 700 basis points faster than the equity market earnings suggests a P/E ratio of 46.3x. While this may sound amazing, it simply reflects the power of compounding. While we do not believe that our outperformance assumptions are unrealistic given Berkshire's track record, using a market price-to-earnings ratio adds an element of conservatism.

Exhibit 21

Earnings-Based Valuation		---------Low Estimate of Value----------			----------High Estimate of Value---------		
	1999 Earnings	P/E	Value	Per Share	P/E	Value	Per Share
Noninsurance earnings	$496.8	26.5	$13,166.5	$8,689.7	30	$14,905.4	$9,837.44
GEICO	$485.0	26.5	$12,852.5	$8,482.5	30	$14,550.0	$9,602.85
Other insurance earnings	$1,448.2	16	$23,171.4	$15,292.9	18	$26,067.9	$17,204.53
Berkshire cash operating earnings	$1,945.1	19	$36,337.9	$23,982.7	21	$40,973.3	$27,041.97
Look-through earnings	$748.3	26.5	$19,830.0	$13,087.6	40	$29,932.0	$19,754.81
Investing incremental value	$1,665.16	26.5	$44,126.7	$29,123.2	26.5	$76,055.0	$50,195.52
Total	$4,358.52		$100,294.6	$66,193.4		$146,960.3	$96,992.30

Source: Company data and PaineWebber estimates.

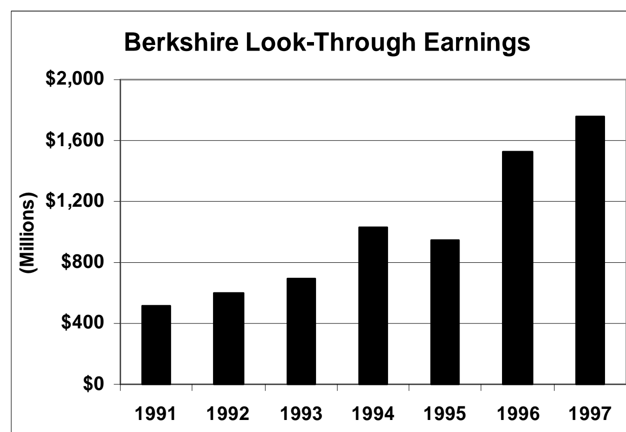
Look-through earnings

A final element of the earnings valuation relates to look-through earnings. A look-through earnings valuation is applied when Berkshire owns less than 20% of a company and, therefore, does not account for its investment on the equity method. Under the equity method, Berkshire would pick up its share of the earnings. However, under the cost method used for investees of less than 20%, Berkshire only recognizes dividends received. This is particularly disadvantageous for investments in companies that retain most of their earnings for reinvestment or that distribute them through share repurchase rather than dividends. Putting a price-to-earnings ratio on look-through earnings is a reasonable way of calculating this increment of Berkshire's value.

Accounting principles use the 20% threshold to distinguish between investors that have significant influence over the investee and those that do not. A company that owns a small portion of many companies in a diversified portfolio clearly should not take credit for its share of those operating earnings. However, the large equity investments are fundamental to Berkshire's operating strategy, and Berkshire often has board representation as well. We believe that it's fair to say that Berkshire has a degree of influence over the activities of its investees. Therefore, in valuing the stock, we give credit for "look-through earnings."

The following graph illustrates the recent history of "look-through earnings"—with two caveats: 1) 1995 "look-through earnings" were not disclosed and have been estimated by PaineWebber; and 2) Berkshire has not always included every large investment, so the number is not perfectly consistent from year to year. Nevertheless, the general trend is apparent.

Exhibit 22



Source: Company financial information and PaineWebber estimates.

We have used a range of valuations on look-through earnings of 25-40x First Call consensus look-through earnings for Berkshire's investees. The companies that Berkshire owns tend to trade at valuations above the market. We believe that the market is capturing something that the earnings method does not—the franchise value of these companies and the length of time over which their stable, profitable growth is anticipated to continue.

The difference in the low estimate of values shown in the earnings method previously and the book value- and float-based valuations essentially boils down to the fact that Berkshire's equity investments are not valued at their market prices in the low-end, earnings-based valuation. Berkshire generally does not trade at a price that significantly discounts the value of its publicly held equities. Therefore, we believe that the low end of the earnings-based valuation highlights a current market inefficiency. The stock should be attractive right now to investors that want to buy BRK shares at a price discounted to the actual trading multiples of its equity portfolio.

"I think the multiples of technology stocks should be quite a bit lower than the multiples of stocks like Coke and Gillette because they're subject to changes in the rules."—Microsoft CEO Bill Gates, "Buffett and Gates on Success," January 17, 1999, Public Broadcasting System.

Exhibit 23

Look-through earnings

	BRK's Share of Undistributed Earnings ($ Mill)										
Company	**1999E**	**1998E**	**1997**	**1996**	**1995**	**1994**	**1993**	**1992**	**1991**	**1990**	**1989**
McDonalds *				$38.0							
Wells Fargo	$98.6	$67.3	$103.0	$84.0	$77.2	$73.0	$53.0	$16.0	($17.0)		
Amex	$225.2	$193.5	$161.0	$132.0	$109.3	$25.0	$16.0				
Freddie Mac	$142.7	$115.8	$86.0	$77.0	$14.0	$47.0	$41.0	$29.0	$15.0		
Washington Post	$33.7	$29.9	$30.0	$27.0	$19.8	$18.0	$15.0	$11.0	$10.0		
Disney **	$44.6	$44.6	$65.0	$50.0	$80.0	$85.0	$83.0	$70.0	$61.0		
Coke	$180.0	$160.0	$216.0	$180.0	$75.0	$116.0	$94.0	$82.0	$69.0		
Gillette	$89.3	$71.0	$82.0	$73.0	$32.8	$51.0	$44.0	$38.0	$23.0		
GEICO					$118.2	$63.0	$76.0	$34.0	$69.0		
PNC Bank						$10.0					
Gannett						$4.0					
Guinness PLC								$7.0			
General Dynamics								$11.0			
Total	$814.1	$682.1	$743.0	$661.0	$408.1	$492.0	$422.0	$298.0	$230.0	$254.9	$232.7
14%	($115.0)	($96.3)	($104.9)	($92.5)	($57.1)	($68.4)	($59.1)	($42.0)	($30.0)	($35.7)	($32.6)
Earnings	$1,516.1	$1,072.7	$1,292.0	$954.0	$600.2	$606.0	$478.0	$348.0	$316.0	$370.7	$299.9
Total	$2,215.2	$1,658.5	$1,930.1	$1,522.5	$951.1	$1,029.6	$840.9	$604.0	$516.0	$590.0	$500.0
% Change	34%	-14%	27%	60%	-8%	22%	39%	17%	-13%	18%	
amortization	($433.1)	($106.8)	($83.1)	($61.7)	($16.3)	($12.9)	($12.1)	($5.3)	$4.5	$3.3	$3.3
Cash earnings	$2,648.3	$1,765.3	$2,013.2	$1,584.2	$967.4	$1,042.5	$853.1	$609.3	$511.5	$586.7	$496.7
% Change	50%	-12%	27%	64%	-7%	22%	40%	19%	-13%	18%	
Avg. Shares	1.515	1.515	1.234	1.232	1.194	1.176	1.156	1.146	1.146	1.146	1.146
Look Through EPS	$1,462.02	$1,094.59	$1,563.93	$1,235.52	$796.92	$875.71	$727.29	$526.82	$450.09	$514.64	$436.13
(%)	34%	-30%	27%	55%	-9%	20%	38%	17%	-13%	18%	
Undist. BRK EPS	$461.42	$386.63	$517.04	$461.32	$294.04	$360.29	$313.88	$223.29	$174.45	$191.25	$174.54
(%)	19%	-25%	12%	57%	-18%	15%	41%	28%	-9%	10%	

* Not included in Look Through Earnings in 1997
** For 1995 and prior periods, Disney is represented by Cap Cities ABC

Source: Company financial information First Call, Bloomberg Data.

Berkshire Hathaway's insurance operations

Berkshire Hathaway's insurance businesses include GEICO; its direct auto operation; the super-catastrophe reinsurance business run by National Indemnity; and other operations that include commercial trucking, bus risks, prize indemnification, inland marine cargo, unusual or large property-casualty risks, crime and professional liability (through Kansas Bankers Surety), workers' compensation (through Cypress Insurance), structured settlements, credit insurance (through Central States Indemnity), accident and health insurance, and other types of reinsurance. National Indemnity also writes standard commercial lines in several states through the "Homestate Businesses." National Indemnity markets its products through 90 general agents.

Exhibit 24

Berkshire 1997 Market Share by Line

	NWP	Market Sh.
Credit A&H	$25.9	9.0%
Reinsurance	$820.2	7.0%
Auto liability	$2,228.9	3.1%
Auto physical damage	$1,292.1	2.7%
Other	$249.4	N/M
Total	$4,616.6	1.6%

Source: Statutory financial data and PaineWebber estimates.

Measured by premiums, GEICO is by far the most important of Berkshire's insurance businesses. However, in recent years, the super-catastrophe business has been a disproportionate contributor to earnings, as actual loss ratios fell short of long-term expected levels.

One business that is difficult to categorize is Berkshire Hathaway's reinsurance operations. National Indemnity assumed $836.0 million of reinsurance in 1997 (statutory written premiums). Of this, 55.6% was assumed from Berkshire's six largest clients, including third-ranked General Re. The nature of this business varies. Some is super-catastrophe, some is high-layer excess reinsurance, and some is financially oriented. The loss of General Re's business, which is expected to occur over time, has no impact on Berkshire Hathaway in total because General Re will simply retain the premiums.

Exhibit 25

Composition of BRK's Insurance Business

Earned Premiums	1995	1996	1997
GEICO	-	$3,091.6	$3,481.8
Property cat	$260.0	$268.0	$309.9
Other	$697.5	$758.2	$969.4
	$957.5	$4,117.8	$4,761.1
Percent Change			
GEICO			12.6%
Property cat		3.1%	15.6%
Other		8.7%	27.9%
		N/M	15.6%
Business Mix			
GEICO		75.1%	73.1%
Property cat	27.2%	6.5%	6.5%
Other	72.8%	18.4%	20.4%
	100.0%	100.0%	100.0%

Source: Company financial information and PaineWebber estimates.

The other large contracts may serve different objectives for the buyer; for example, the Farmers contract was originally entered into to reduce the company's operational leverage. This contract nonrenewed in 1998 because the company's operating leverage had been reduced sufficiently to permit Farmers to retain this business. Thus, Berkshire's reinsurance premiums may vary significantly each year.

Some of the other large contracts are with General Re's competitors, and their future volume of business may be affected by the transaction; however, reinsurers generally work with Berkshire in part because National Indemnity is the only appropriate source of capacity for the reinsurers' unique needs. In addition, some of the contracts may have a large finite element in which the earnings on the float are largely passed along to the client. Therefore, the economics of the contract may not correspond to premium volume.

Exhibit 26

Reinsurance Premiums Assumed

	1997	% of Ttl	1996	% of Ttl	% Change
Farmers Insurance Exchange	$183.9	22.0%	$184.2	26.8%	-0.1%
American Re	$97.7	11.7%	$97.1	14.1%	0.6%
General Re	$90.0	10.8%	$68.5	10.0%	31.4%
Employers Re	$54.8	6.6%	$59.0	8.6%	-7.1%
Munich Re	$29.8	3.6%	$39.0	5.7%	-23.6%
Lloyd's of London	$8.8	1.1%	$34.0	4.9%	-74.1%
Other	$370.9	44.4%	$206.6	30.0%	79.5%
Total	$836.0	100.0%	$688.3	100.0%	21.4%

Source: Statutory data and PaineWebber estimates.

Why insurance?

Property-casualty insurance is neither an exciting, nor a dynamic, nor a growing business. In fact, it is an industry with significant overcapacity that is in serious trouble right now. Yet Berkshire has just increased its exposure to this business significantly. Apart from the obvious reasons—including 1) an attractive price for a sterling asset for which the equity market was unwilling to pay full value, and 2) the ability to generate more float—why would Berkshire do this?

> "[I]t's not at all clear that if American managements were all dramatically better that returns on equity would be much better…One of the secrets of life is weak competition."
>
> "I get into the details of some of our businesses more just because I've worked with the person running things a long time and I enjoy it. For example, Ajit [Jain, who runs National Indemnity] and I talk nearly every night about reinsurance. And I'm not improving the quality of his decisions at all. But it's an interesting game and I like hearing about it and he doesn't mind talking about it."
>
> —Warren Buffett, 1998 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

We believe the answer is that certain extremely well-managed insurance companies have achieved consistently attractive returns despite (or perhaps because of) the otherwise uninspiring characteristics of the business. And a well-run company generates, rather than consumes, capital—which is always attractive to Berkshire.

In addition, insurance is characterized by lack of transparency of pricing and margin information, and the frequent presence of naïve capital and subpar management. These factors depress profitability but also make insurance ideal for applying game theory. In insurance, one player can win at others' expense even when the "game" collectively does not produce a winning hand. Curiously, the same companies usually manage to do this year after year while others never succeed in doing so.

Few things are harder than fixing an underperforming insurer, while a high-performing insurer has an embedded "culture of profitability" that is hard to break—the "virtuous circle" again. These characteristics play to Berkshire Hathaway's strengths. For example, the companies that Berkshire owns have advantages—cost and great service, in the case of GEICO, and intellectual capital, risk appetite and financial capital, in the case of the reinsurance business—that enable these companies to outperform the industry.

Will Berkshire buy more insurers?

In light of Berkshire's acquisition of General Re and Warren Buffett's continued interest in the insurance industry, many have asked whether Berkshire might buy other insurance companies. In general, we are not planning to speculate on what Berkshire might or might not buy. However, for the record, we do have some general observations about the insurance industry. We believe that there are only a few other insurance franchises that Berkshire Hathaway would be willing to own, and we doubt that any such acquisitions will appear on the horizon soon. Two obvious candidates in the past—which have never been acquirable—were State Farm and USAA. Unfortunately, we consider it unlikely that USAA would ever convert to stock and sell itself.

With the possible exception of lightning striking USAA's management and creating an opportunity, now that Berkshire owns GEICO, we do not believe that it would acquire another personal lines company.

And there are few other insurers that we believe would meet Berkshire's characteristic of generating float consistently at a very low cost. AIG is too large, and not for sale. Chubb might be considered a candidate, but we believe that some company other than Berkshire would be willing to pay more for Chubb's franchise. In general, we won't spend time in our coverage speculating about what Berkshire might buy. For the time being, the most likely answer is, "nothing."

> On USAA's customer loyalty: "USAA is a church."
>
> —Warren Buffett, November 24, 1998

GEICO: Shifting into high gear

GEICO is the seventh-largest auto insurer in the U.S. by premiums, with a 1997 overall market share of 3.1%, comparable to that of USAA and Progressive. In 1998, we expect GEICO's share to rise to about 3.5%. And based on its higher growth rate, we expect that, by 1999, GEICO will become the fifth-largest auto insurer and the largest direct writer (a direct writer sells directly to the insured without using an agent) in the United States. Further, given its unique strategy, our projections suggest that, by 2008, GEICO could be one of the three-largest auto insurers in the country.

Exhibit 27

Auto Insurance Market Share 1997				
Company	Physical Damage	Liability	Total	% of Industry
State Farm	$9,351	$14,816	$24,167	21.5%
Allstate	$5,542	$8,465	$14,007	12.4%
Farmers	$2,092	$4,193	$6,285	5.6%
Nationwide	$1,593	$2,823	$4,416	3.9%
USAA	$1,433	$2,194	$3,627	3.2%
Progressive	$833	$2,764	$3,597	3.2%
Berkshire-Hathaway	$1,271	$2,229	$3,500	3.1%
American Family	$826	$1,213	$2,039	1.8%
Liberty Mutual	$708	$1,260	$1,968	1.7%
Travelers	$644	$1,305	$1,948	1.7%
Industry	$41,960	$70,635	$112,595	100.0%

Source: Company financial information, A.M. Best, and PaineWebber estimates.

Since its acquisition by Berkshire Hathaway, GEICO has developed from an outstanding insurance company to an extraordinary company, in our opinion. GEICO ranks 279th in the *Fortune* 500 based on 1997 premiums (excluding investment revenues). By itself, we would value GEICO at a minimum of 28x estimated 1998 statutory earnings, or $12 billion ($8,100 per BRK share). This compares to a current market capitalization of more than $11 billion for Progressive Insurance, GEICO's closest public comparable.

We believe that Progressive ordinarily should receive a lower valuation than GEICO because 1) it is primarily an agency writer that is in the process of developing a more valuable, GEICO-like direct distribution channel; 2) its return-on-capital constraints will prevent it from growing as quickly over the course of a cycle (see the discussion that follows); and 3) Progressive is primarily a nonstandard auto insurer, an attractive business that nevertheless commands a lower franchise premium than the preferred and standard lines that comprise significantly larger markets.

We think the story of Berkshire Hathaway's involvement with GEICO is fascinating: GEICO was the first stock that Warren Buffett ever personally bought while studying under Ben Graham[16] in 1951 (after his famous visit with Lorimer Davidson at the company's headquarters). In 1976, Mr. Buffett acquired a substantial stake in GEICO when it was on the brink of insolvency after underpricing its products during earlier years.

GEICO was formed in 1936 by Leo Goodwin, an accountant for USAA, who targeted U.S. government employees, emulating USAA's strategy of marketing to military officers. GEICO reported 35 profitable years after it first made money, until 1970, when federal wage and price controls and no-fault insurance rocked the company.

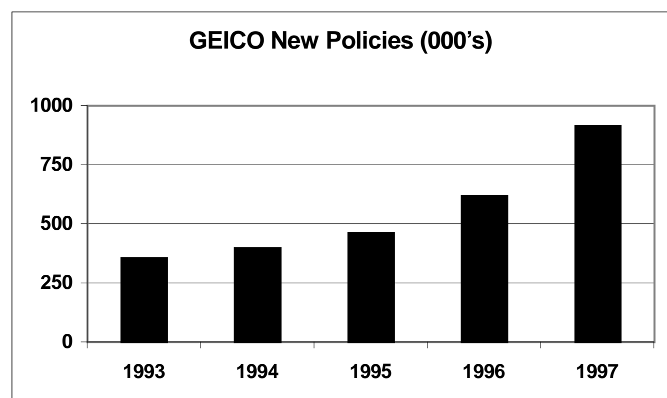
Inaccurate reserving led the company to price its product inadequately, and GEICO lost $85 million in 1975. The board fired incumbent management, and new CEO Jack Byrne moved swiftly to save the company from insolvency by raising rates by almost 50%, cutting costs and reunderwriting its business.

After meeting with Jack Byrne, Mr. Buffett began buying stock in the open market. He also interceded with the District of Columbia insurance commissioner to give GEICO more time before shutting it down and participated in a reinsurance program that GEICO needed to stay in business.

As part of the recapitalization, Jack Byrne retained Salomon Brothers to underwrite a $76 million equity offering. Berkshire bought 25% of the offering at $9.20 per share, adding further to its GEICO ownership.

GEICO returned to profitability after 1976. Attracted by its low cost structure, direct distribution and the potential of its auto business, Berkshire retained its investment. By 1995, Berkshire's share of GEICO had risen to 51% of GEICO through GEICO share repurchases, but Berkshire did not consider the company a controlled investment because of a standstill agreement with District of Columbia regulators.

Exhibit 28



Source: Company financial information and PaineWebber estimates.

After surviving its "near-death experience," GEICO regained its status as a fine auto insurer with superior margins and growth rates. GEICO had always been an innovator, first buying auto repair shops in 1941, and after World War II, targeting veterans and capitalizing on the baby boom. However, GEICO did not exploit the opportunities available in the auto insurance industry in the 1980s. The company's internal culture shunned a growth strategy, as management feared a repeat of the 1970s.

[16] Who was chairman of the company at the time.

In 1995, new CEO Tony Nicely began executing a more focused strategy under which nonproductive lines of business were discarded and GEICO "put the pedal to the metal," beginning to truly explore its potential as a direct writer.

In early 1996, responding to these changes, Berkshire acquired the remainder of GEICO, and the company continued to move toward a more growth-oriented strategy. Whereas GEICO had been growing net written premiums about 3.8% faster than the industry during 1988-94, from 1995 to 1998 (estimated), GEICO's growth advantage widened to 10.7%. And GEICO's sequential premium growth rate has increased every year since 1995.

Exhibit 29

GEICO Written Premium Growth vs. Industry

					------Average------	
	1995	**1996**	**1997**	**1998E**	**1988-94**	**1995-98**
GEICO	12.8%	13.7%	16.9%	20.0%	9.8%	15.8%
Auto Insurers -- Total	5.3%	5.6%	5.4%	4.0%	6.0%	5.1%
Difference	7.4%	8.0%	11.4%	16.0%	3.8%	10.7%

Source: Company financial information, A.M. Best, and PaineWebber estimates.

Direct writers: Poised for additional market penetration

The direct writer's share of the industry's premiums has not increased significantly in the past five years, primarily because the other major direct writer, USAA, has not grown during that time. Although direct sales have been part of the auto landscape since the 1930s, until recently, they were focused either on affinity groups, such as former military officers or government employees (USAA and GEICO), or tightly within a geographic area (20th Century). Therefore, the true potential size of the direct market in the U.S. is unknown. However, the current market penetration of around 10% appears to leave significant room for growth.

There are only two major direct writers (GEICO and USAA), and neither attempted to grow aggressively until GEICO began the effort in 1996.

In some other countries, such as the U.K., direct marketing commands a far larger share.

The appeal of direct marketing is the significant savings it provides the consumer. While many customers are willing to pay more for access to a personal agent, intuitively the percentage of these customers cannot be the current 90%, or anywhere close to it.

We believe that the post-baby boom generation is increasingly comfortable taking responsibility for its own buying decisions and places a higher value on fast service, convenience and independence, as embodied in such phenomena as Internet shopping. The percentage of customers receptive to direct marketing is likely to grow through demographics.

As shown in the following table, direct writers have been achieving better combined ratios than the average large personal lines company despite the large discounts they are able to award (we include Horace Mann as a direct writer, as its agents market to a customer base that is similar to an affinity group, like USAA).

"I think it's becoming increasingly clear that there's a real separation in the market between direct writers and agency writers, and that gap is really widening… It's our judgment right now…that auto within the wholesale market is no longer an efficient operation to run for anyone…In the past year, the nature of the nonstandard personal automobile insurance business changed and we can't play profitably under the new rules of the game in most of the country [due to direct writers' ability to expand market share with big technology investments and lower prices]."

—Jon Saltzman, CEO of Penn-America Group, in describing his decision to withdraw from the non-standard auto market, as quoted in *BestWeek* on January 11, 1999.

Exhibit 30

PP Auto Liability Combined Ratios by Year				
	1994	1995	1996	1997
Direct Writers	103.6%	94.1%	89.8%	90.8%
Captive Agency Writers	104.7%	101.1%	98.4%	100.8%
Independent Agency Writers	97.9%	105.3%	103.4%	101.5%
All Companies	100.2%	102.5%	100.2%	99.5%
Direct Writers:				
20th Century Insurance Group	113.0%	88.5%	89.8%	79.3%
GEICO	99.3%	97.5%	91.3%	95.7%
Horace Mann Insurance Group	99.6%	97.1%	84.7%	86.8%
USAA	102.6%	93.1%	93.3%	101.3%

Source: Statutory financial information and PaineWebber estimates.

The reason is the very competitive expense structures of these companies, as shown below. Independent agency writers are no longer able to offset their high expenses with better loss experience. Significantly, GEICO and 20th Century's expense ratios are also burdened by heavy marketing costs, which are driving these companies' high growth rates. For example, we estimate that GEICO spent about three points on its combined ratio in 1998 on advertising. At a growth rate more typical of the industry, these companies' expense advantage would be even wider.

Exhibit 31

PP Auto Liability Expense Ratios by Year				
	1994	1995	1996	1997
Direct Writers	13.2%	13.3%	13.5%	13.9%
Captive Agency Writers	20.5%	20.3%	20.4%	21.7%
Independent Agency Writers	26.7%	26.9%	25.0%	25.0%
All Companies	23.1%	23.2%	22.2%	22.5%
Direct Writers:				
20th Century Insurance Group	8.4%	9.6%	10.0%	9.8%
GEICO	14.1%	13.7%	13.9%	14.8%
Horace Mann Insurance Group	19.4%	19.9%	19.2%	19.3%
USAA	11.0%	10.1%	10.9%	11.8%

Note: Expense ratios exclude policyholder dividends.
Source: Statutory financial information and PaineWebber estimates.

GEICO: The Borsheim's of the auto insurance business

GEICO's strategy since Berkshire Hathaway bought the remainder of the company is unique among the direct writers and, in fact, the industry. We view GEICO as the Borsheim's of the auto insurance industry. Like Borsheim's, Berkshire's jewelry operation, the company uses its low cost structure and economies of scale to attract a growing share of business to market nationally. Through this low-cost strategy, Borsheim's has grown to become what management believes is the second-largest jeweler in the U.S. operating out of a single location.

Under current management, GEICO's strategy was clarified and refined so that management would not be distracted by the urge to diversify or change focus according to the whims of the equity market or the insurance cycle.

GEICO's compensation program was modified to focus on the key value drivers and to reinforce and reward the achievement of the right results. We do not believe that any other public insurer would or could imitate this program, for reasons that we will explain. And there is no indication that any nonpublic company is motivated to do so either.

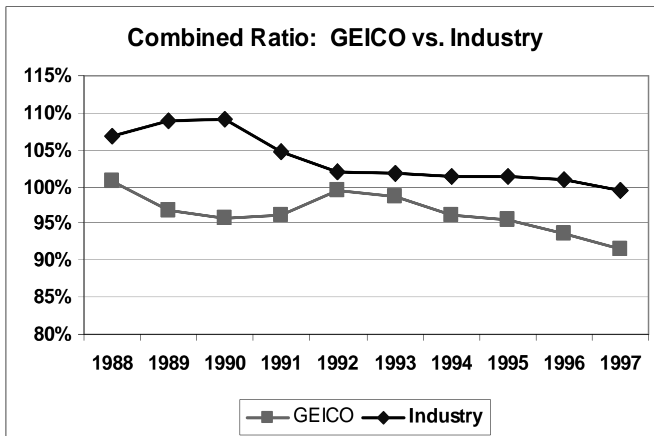
GEICO pays its management according to the growth rate achieved and profitability of seasoned business. Embedded in this strategy are several subtle concepts.

- Only the profitability of seasoned businesses is measured. Therefore, management can spend as much as it chooses on marketing and first-year loss costs without any impact on compensation. A public company would not do this due to shareholder constraints.

- Management is heavily "incented" to grow and build the franchise value inherent in scale. The compensation program enables GEICO to grow despite the cyclical pressures of a competitive industry.
- Seasoned business must be more profitable than the industry average. This means that management must not only grow its call centers to handle increased new application volume but also must build its service capabilities commensurate with the growth of renewal business. We believe that servicing constraints are the principal limit on growth.

During the past decade, GEICO's combined ratio has averaged 7.2 points better than the industry's and has been less than five points better in only two years, 1992 and 1993—before the compensation program was changed.

Exhibit 32



Source: Company financial information and PaineWebber estimates.

While auto insurance is a commodity business that does not have brand pricing power like the soft drink business, name recognition does convey a degree of franchise value. Other things being equal, customers will prefer to purchase from a familiar brand with a favorable image.

GEICO's growth strategy is succeeding at a time when the rest of the industry is encountering difficulty in achieving growth. For example, GEICO grew its policies in-force (PIF) at 19% for the first eight months of 1998, and management has said that growth should be 20% for the full year. By interpolation, GEICO would have to have grown units by approximately 22% in the fourth quarter for that to be true. In addition, management noted that it expects growth to be sustained or to accelerate from the present level.

> "Coca-Cola…will often make needed investments in order to build up the bottling infrastructure and rapidly capitalize on [new] markets…And you know that you've go to do 'em. You have a wonderful business. You want to spread it worldwide. You want to capitalize on it as quickly and fully as possible. If you wish, you can make a return on investment calculation. But as far as I'm concerned, it's a waste of time—because you're going to do it anyway. You know you want to dominate those markets over time."
>
> —Warren Buffett, 1998 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

Despite the accelerating growth, we understand that "hit ratios" (policies bound as a percentage of incoming calls) are unchanged, customer complaint ratios are unchanged, and renewal and loss ratios (aged based on policies of comparable persistency) are unchanged. This suggests that the quality of the new business is comparable to that of GEICO's existing book. In addition, we independently surveyed state insurance departments, including most of GEICO's largest states, and noted that the company's complaint ratios are consistently among the lowest in the industry.

Because its quality standards are being maintained, we expect GEICO's marketing budget to increase again in 1999. Further, as long as the company follows this strategy (and it would be unlike Berkshire to change the strategy), we think there is no reason why growth cannot continue for some time. Given the company's cost advantage, we expect that its increased marketing efforts should translate into in-force growth that can be sustained at the current level.

For example, if GEICO could grow its PIF by approximately 20% per year for the next five years, and by 15% for the succeeding five years, assuming the industry's PIF grow by 4% per year, the company would have a 13.5% market share in ten years. While this is aggressive, we do not think that it is unreasonable considering GEICO's unique strategy. Moreover, it is consistent with Warren Buffett's comments about the company, and would be about a point larger than Allstate's current share. That would hypothetically make GEICO the second-largest auto insurer in the United States.

Exhibit 33

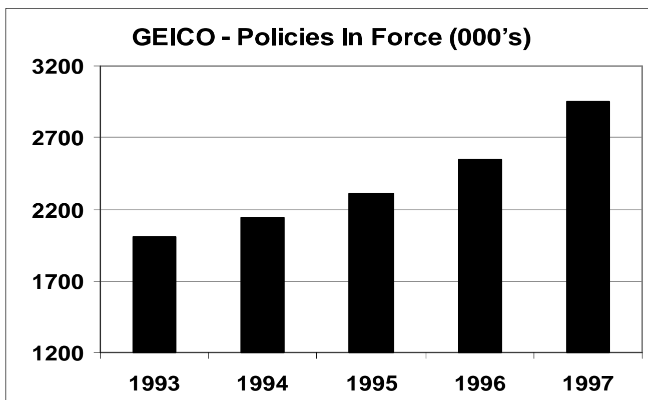
GEICO Policy Statistics					
(in thousands)	**1993**	**1994**	**1995**	**1996**	**1997**
New policies	354.882	396.217	461.608	617.669	913.176
Preferred growth	N/A	N/A	N/A	0.073	0.128
Nonstandard/std. growth	N/A	N/A	N/A	0.335	0.366
Policies in force	2011.055	2147.549	2310.037	2543.699	2949.439

Source: Company financial information, A.M. Best, and PaineWebber estimates.

We expect that GEICO will have ended the year 1998 having added well over a million policies to its books and that it will have more than 3.5 million policies in force.

Nonstandard and standard market growth, which the company began to focus on in the mid-1990s, should continue to be higher than preferred growth, as GEICO already captures a large portion of the preferred market.

Exhibit 34



Source: Company financial information and PaineWebber estimates.

We should note that PIF growth is not the same as premium growth because rate changes affect the latter. Currently, rates are declining, as insurers rebate some of their recent unusually favorable experience to policy-holders. Thus, in the near term, premium growth should lag PIF growth. PIF growth is the more important statistic, as it determines GEICO's long-term market penetration. Over the course of a cycle, premium growth roughly equals PIF growth plus inflation.

> "Last year, the industry recorded profits that were far better than it anticipated or can sustain. Intensified competition will soon squeeze margins very significantly. But this is a development we welcome: Long term, a tough market helps the low-cost operator, which is what we are and intend to remain."
>
> —Warren Buffett, 1997 Annual Report.

As shown in the following table, GEICO's growth is derived from geographic expansion into new states as well as increased penetration in its largest states. For example, of GEICO's top-ten states in 1997, only four had five-year compound growth rates higher than GEICO's average.

However, two of those four—New York and Florida—are GEICO's largest markets and are targeted for continued growth. In 1997, GEICO grew 14.4% in New York and 20.7% in Florida. Its fastest-growing states last year, however, were North Carolina (59.5%), Wisconsin (34.0%), Arizona (37.9%) and Minnesota (34.9%), where the base of initial premiums is smaller.

Exhibit 35

GEICO Top States and Growth, 1991 to 1997					
	1991	**% of Total**	**1997**	**% of Total**	**CAGR**
New York	$376.0	19.4%	$763.8	21.8%	15.2%
Florida	$252.4	13.0%	$554.2	15.8%	17.0%
Maryland	$222.5	11.5%	$347.4	9.9%	9.3%
Virginia	$180.9	9.3%	$261.0	7.5%	7.6%
Texas	$140.5	7.2%	$187.4	5.4%	5.9%
California	$105.4	5.4%	$160.6	4.6%	8.8%
Connecticut	$79.8	4.1%	$125.9	3.6%	9.5%
Georgia	$94.3	4.9%	$128.7	3.7%	6.4%
Louisiana	$43.8	2.3%	$88.6	2.5%	15.1%
Illinois	$22.0	1.1%	$59.1	1.7%	21.9%
Total	$1,940.5	100.0%	$3,498.6	100.0%	12.5%

Source: Statutory data and PaineWebber estimates.

What about homeowners' insurance?

GEICO does not issue homeowners' policies directly, having an arrangement in which it refers customers to Travelers. Homeowners' insurance tends to be a "social good" that consumers feel entitled to buy at a cheap price.

Unfortunately, due to the buildup of coastal exposures in the past few decades, some parts of the country would be uninsurable if a premium that reflected the real risk were charged. Increasingly, consumers in other, less risky areas are unwilling to subsidize this growing pool of customers —leaving the insurers holding the bag. GEICO exited the business when it recognized that money could not be made in homeowners' insurance.

> "Many casualty companies, as they write homeowners' insurance, can now figure out that if we had something like Hurricane Andrew multiplied by four—which could easily happen…their losses would be more than many of them could handle…And having gotten into that dumb position, those casualty companies have a terrible time because they can't just say, 'Oops, I changed my mind…' The minute they do that, the insurance commissioners say, 'Gee, I'm a representative of the populace. And I don't care about your risks. I don't want angry, worried homeowners screaming at me.' So the insurance commissioners tend to behave in a grossly unfair way and take care of the perceived interests of the policyholders regardless of how unfair it is for the insurance company. So unless you're willing to leave the state entirely, it's very, very hard for these insurers to stop writing the insurance once they've made the error [of entering the homeowners' market]."
>
> —Charles Munger, 1994 Wesco Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

From a business standpoint, however, many customers like to buy homeowners' and auto insurance from the same carrier, and these tend to be profitable customers. Therefore, it is desirable to be able to offer both products.

Using Travelers, however, makes GEICO dependent on another company's pricing and appetite for the business—and a competitor to boot[17].

At GEICO's current market share, the Travelers arrangement does not appear disadvantageous to growth. But at some point in the future, GEICO may have to make the difficult choice to enter the homeowners' market. Mr. Buffett has indicated that he would be willing to go back into the homeowners' market under the right circumstances. Berkshire currently has more than 400,000 homeowners' customers referred to Travelers—about 15% of customers want this product. If it needs to reenter the homeowners' market, GEICO could end the referral program.

We believe that this issue will not be critical for the company until GEICO's market share is at least double its current level; implicitly, our valuation model does not require the company to become a homeowners' insurer in the near term.

GEICO's float

As the following table shows, GEICO's float has grown by an average of 10.8% per year for the past decade, a rate that should accelerate as the company's premium growth continues to ramp up. In addition, GEICO's float has been produced at a negative cost, with the company achieving an average underwriting profit of 3.5% over this period, a significant positive spread over Treasury yields. Therefore, even though the auto insurance business is short-tail in nature, generating relatively little float per dollar of premium, GEICO's above-average growth and consistently low cost of float have made it a superior generator of value.

However, even as GEICO's float has grown, its significance to Berkshire has diminished. Whenever Berkshire has made acquisitions that involved a stock element, the average GEICO float per BRK share has declined.

Yet low-cost float and its powerful ability to leverage Berkshire's capital is an important economic element of Berkshire's impressive returns. We believe that this is one reason that Berkshire was interested in acquiring General Re, with its huge reservoir of float.

As shown below, GEICO's float currently represents about 42% of Berkshire's total float. The acquisition of General Re will roughly triple the total Berkshire float.

Exhibit 36

GEICO Float and Cost of Float

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Average
Estimated float ($, millions)	$1,462.7	$1,582.0	$1,717.7	$1,916.2	$2,132.6	$2,291.6	$2,480.2	$2,717.4	$2,871.9	$3,091.9	
Growth rate	30.1%	8.2%	8.6%	11.6%	11.3%	7.5%	8.2%	9.6%	5.7%	7.7%	10.8%
Cost of float	0.7%	-3.1%	-4.2%	-3.8%	-0.5%	-1.3%	-3.9%	-4.4%	-6.4%	-8.4%	-3.5%
GEICO float per BRK share	$1,276	$1,380	$1,499	$1,672	$1,856	$1,945	$2,106	$2,307	$2,331	$2,509	
								-4.4%	-6.4%	-8.4%	-9.6%
BRK Float	$1,497.7	$1,541.0	$1,630.0	$2,070.0	$2,510.0	$2,624.7	$3,056.6	$3,607.2	$6,702.0	$7,300.0	
% Change		2.9%	5.8%	27.0%	21.3%	4.6%	16.5%	18.0%	6.2%	8.9%	16.6%
GEICO % of Total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	42.9%	42.4%	

Source: Company financial information, A.M. Best, and PaineWebber estimates.

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17 When GEICO had its near-death experience in 1976, the company was almost bailed out by reinsurance until State Farm and Travelers (then under different management) pulled out of the arrangement. Many insurers try to avoid becoming overly dependent on reinsurance or similar arrangements because it can leave them vulnerable at critical times.

Super-catastrophe reinsurance

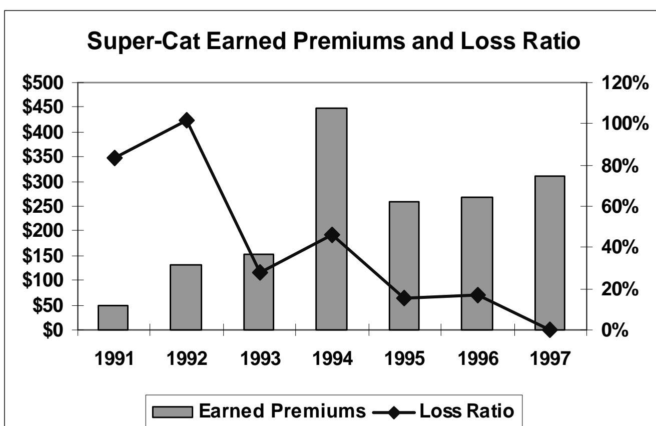
Berkshire Hathaway's National Indemnity is the leading market for high-excess reinsurance against catastrophic events. The company addresses the commodity nature of the product by selling to customers who are attracted by its exceptionally large capacity and unsurpassed claims-paying rating. This necessarily means that Berkshire does not participate in the more competitive, commoditized transactions and allows its volume to fluctuate significantly according to the opportunities available.

> "If you feel like you have to invest every day, you're going to make a lot of mistakes. It isn't that kind of a business. You have to wait for the fat pitch. And insurance is similar."
>
> —Warren Buffett, 1996 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

National Indemnity will put up to $1 billion at risk pretax on any single catastrophic event (a limit we expect to rise now that Berkshire has both a larger risk portfolio and a larger capital base after acquiring General Re). In 1994, its peak year, Berkshire earned $447 million of super-cat premiums and captured an underwriting profit of $240 million. In 1997, volume was much lower—$309.9 million—as competition has increased substantially in this business, but extremely favorable worldwide weather conditions led to a $283 million underwriting profit.

Berkshire does not allocate expenses by product line and, therefore, we do not know the combined ratio or the underwriting profit on the super-catastrophe business. However, assuming that the line runs an expense ratio of no more than 15% (which is probably high), we estimate that Berkshire would have produced an average combined ratio of around 55% since 1991, including 1992, when Hurricane Andrew resulted in a loss ratio of 101.5%.

Exhibit 37



Source: Company financial information and PaineWebber estimates.

Berkshire even made an underwriting profit in 1994, when it suffered large Northridge earthquake losses. Of course, this is considerably better than the long-term average expected result. Using these same assumptions, cumulative pretax underwriting profits since 1991 would be more than $865 million, worth an estimated $371.75 per BRK share, without considering the impact on investment returns of accumulating an additional $865 million to invest.

Despite a slight increase in 1997, we expect the volume of super-catastrophe business to continue to decline for some time due to competition. The market is still softening, and even participants that are less stringent in price discipline than Berkshire are withdrawing from certain parts of the market. A major loss event has not occurred since the Northridge earthquake in 1994. In addition, while the product is credit sensitive, in a soft market, the bid spread for a high claims-paying rating narrows. Thus, Berkshire finds it more difficult to achieve an appropriate premium for its willingness to risk large losses and its creditworthiness.

> "[W]e are not spreading risk as insurers typically do—we are concentrating it."
>
> —Warren Buffett, 1991 Annual Report to Shareholders.

Finally, State Farm, another triple-A company, recently set up a $3 billion reinsurance facility in conjunction with Renaissance Re in Bermuda. This facility would write up to $500 million per occurrence of top-layer excess catastrophe reinsurance for non-U.S. markets, and compete directly with Berkshire. The stated strategy from State Farm's perspective is to diversify its business and to leverage its capital. While the facility certainly does the latter, its impact on diversification is less obvious. Potential losses would certainly be diversified, but the facility can provide only enough premium to have an immaterial impact on premium diversification while exposing State Farm to great incremental catastrophe risk.

Our estimate of marginal return on capital for State Farm, even considering that it is capitalizing its risk with letters of credit and stop loss reinsurance (thereby avoiding having to put up actual money and lower its investment yields) is less than 1.5%. In other words, State Farm is putting nearly $3 billion of capital at risk to earn an extra 100-150 basis points on its policyholders' capital. Unlike a public company, State Farm's management can do this because State Farm has no hurdle return on capital to earn, and is using "other people's money"—money that belongs to its policyholders.

> "[W]e are always available, given prices that we believe are adequate, to write huge volumes of almost any type of property-casualty insurance… [o]f course, when others are panting to do business we are also available—but at such times, we often find ourselves priced above the market. In effect, we supply insurance buyers and brokers with a large reservoir of standby capacity."
>
> "One of the largest family-owned insurance brokers in the country is headed by a fellow who has long been a shareholder of Berkshire…Naturally, he does the best he can for his clients. And, just as naturally, when the insurance market softened dramatically in 1987 he found prices at other insurers lower than we were willing to offer. His reaction was, first, to place all of his business elsewhere, and second, to buy more stock in Berkshire. Had we been really competitive, he said, we would have gotten his insurance business but he would not have bought our stock."
>
> —Warren Buffett, 1987 Annual Report to Shareholders.

Over a long period, we expect demand for excess catastrophe products to increase. Global weather patterns are expected to produce above-average losses for the next two decades, and increasing economic development around the world will raise insured values, adding to the long-term demand for this product. Cyclical pricing pressure will eventually ease, especially in the higher layers in which Berkshire specializes, as losses return to normal. However, in the near term, we expect National Indemnity's business to shrink except in the event of a major catastrophe.

We do expect Berkshire to continue as a market leader due to its unsurpassed capitalization, longstanding and committed presence in the market, and ability to make quick underwriting decisions. The efforts of investment banks to securitize this risk are also a potential source of competition, but the long lead times and the high cost of securitization to date have prevented development of a robust securitization market, and capital providers in the securitization market have never been tested with real losses. In addition, General Re's client relationships may provide a stable source of business for National Indemnity.

General Re: No longer your father's reinsurance company

> In answer to a shareholder question about expansion into other insurance businesses: "We're willing to think about a variety of things in insurance. But we find that most of them make no sense. Over the next ten to 15 years, we'll do other things. It's bound to happen. But I can't tell you what they'll be. The biggest single thing we'll do in terms of value, though, probably, is GEICO. We'll do other things. But who knows what they might be?"
>
> —Warren Buffett, 1998 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.* (Six weeks later, Berkshire announced that it was buying General Re.)

Although it has perhaps the most traditional culture of the major U.S. reinsurers, General Re is no longer "your father's reinsurance company." With the advantages it gains as part of Berkshire Hathaway, the company is strategically well positioned to respond to and to capture the changing opportunities available in the new global reinsurance market. The company's mission statement does not refer to reinsurance, stating instead that the company aims to be "the first-choice provider of risk assessment and risk transfer solutions for our clients."

General Re's underwriting culture is perhaps unmatched among reinsurers, and we believe that its long track record of superior returns speaks for itself. It is one of the few insurance companies that has demonstrated underwriting and management integrity, two key things that Berkshire focuses on in owning insurance companies. As shown in the following table, the consistency of General Re's results is surprising given the inherent volatility of the property-casualty industry and the fact that reinsurers are in the business of absorbing excess volatility from the primary insurers that are their clients.

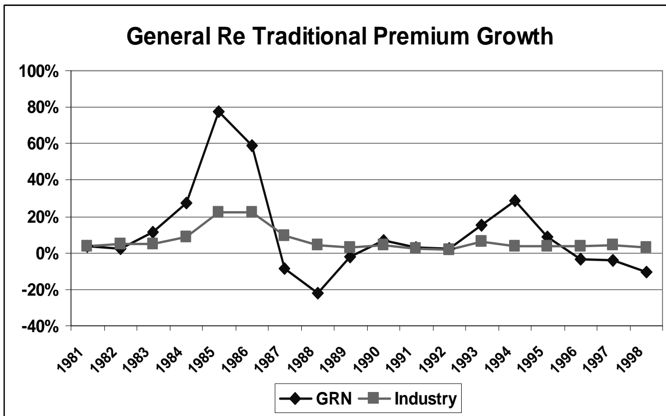
Exhibit 38

General Re Growth

	5 Years	10 Years	20 Years	30 Years	40 Years	50 Years
Average combined ratio	101.0%	101.4%	102.8%	102.2%	101.3%	100.4%
CAGR, Invested assets/share	19.6%	16.2%	16.9%	16.3%	14.8%	13.6%
CAGR, Book value/share	16.1%	14.9%	16.3%	16.1%	14.5%	13.5%
CAGR, Net premiums/share	22.7%	10.7%	12.6%	13.6%	13.2%	11.7%

Source: Company financial information and PaineWebber estimates.

Exhibit 39



Source: Company financial information and PaineWebber estimates.

One interesting feature that should be pointed out in the preceding table is that premium revenues are the most variable item. Reinsurers make their money from investing and from controlling underwriting results. While premium growth provides fuel for future investment earnings, significant year-over-year variations do not have much impact on the reinsurer's results over the long term.

However, fluctuations in the combined ratio are another matter. The domestic combined ratio has been averaging just under 100% while the international combined ratio is running at just over 102%, a level that General Re's management has committed to bring into line with the domestic results over time, as the international reinsurance markets move to excess or nonproportional reinsurance.

General Re is known for its expertise in excess casualty reinsurance and globally for its facultative (individual risk) franchise: General Re is the preeminent writer of facultative reinsurance and one of a handful of companies that has adequate scale in this extremely technical business.

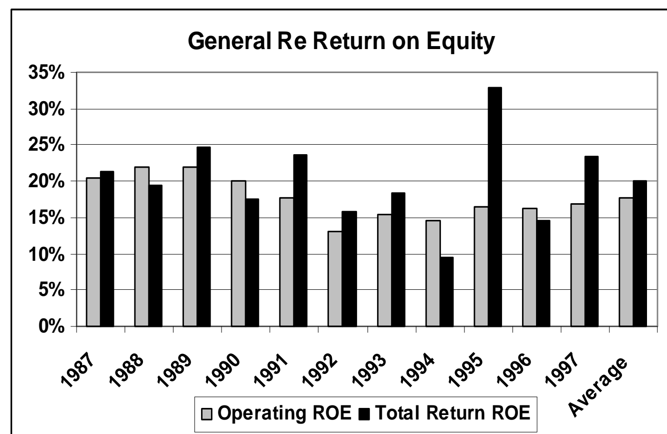
The company is the largest domestic reinsurer, selling through a captive marketing force to a client base principally made up of a smaller, regional clientele that uses the company's underwriting and consultative expertise. General Re also owns General Star Indemnity, the fourth-largest excess and surplus lines writer in the U.S., and Genesis Insurance, which provides alternative markets services. Finally, General Re owns General Re Financial Products, a wholesale derivatives dealer; Herbert Clough, a reinsurance broker; aviation risk manager U.S. Aviation Underwriters; and specialized investment services provider New England Asset Management.

Approximately 45% of the company's premiums are from international sources, including the premiums of General Re's 82% investee Cologne Re, the oldest reinsurer in the world and a major international reinsurer based in Cologne, Germany. General Re acquired a majority stake in Cologne Re in 1994, giving it a major international presence for the first time. General Re's strategy in Europe is to capitalize on the growing casualty market and the migration away from traditional, low-margin proportional products toward excess forms of reinsurance, including facultative products. The company now operates in more than 30 countries.

Another strategic benefit of investing in Cologne Re was the company's major life and health insurance operation, which we estimate will produce $1.3 billion of premium in 1998.

General Re's returns on capital have outperformed the industry by a wide margin and are extremely attractive for an insurance company. Finally, the company brings approximately $16 billion of float to its merger with Berkshire—a form of low-cost leverage for Berkshire.

Exhibit 40



Source: Company financial information and PaineWebber estimates.

Berkshire Hathaway and General Re: A made-to-order merger

In announcing the General Re transaction, Warren Buffett cited "synergies," a term he rarely uses and indeed has pointed out is sometimes used by managements to justify overpaying for acquisitions. But, in our opinion, there is no doubt that the General Re transaction creates very real synergies. As Mr. Buffett commented at the press conference when the deal was announced, "We are creating Fort Knox." We believe that this is an excellent description of the result of the transaction. And who wouldn't want to own a piece of Fort Knox?

> "We should be number one by a significant margin in the world reinsurance market in ten to 15 years."—Warren Buffett, September 16, 1998
>
> "The General Re purchase is Berkshire's watershed event in all its fabled history since its early days as a struggling textile mill."
>
> —Andrew Kilpatrick, Of Permanent Value: The Story of Warren Buffett (1998 edition).

Berkshire Hathaway and General Re are stronger together then either could ever be apart. Berkshire can do things with General Re's business that General Re, as a stand-alone company, could not. At the same time, General Re brings important and unique assets to Berkshire Hathaway. Finally, the companies share a common culture in many respects, particularly in their strong focus on underwriting integrity and capital management.

Exhibit 41

General Re and Berkshire Hathaway: The Synergies Are Enormous

	GRN	BRK
BRK can do things GRN can't:		
	Has excess capital vs. today's needs	World's best capital allocator
	"Conservative" investing focus	Can allocate capital without constraint
	Can't underwrite mega-risks	Mega-risk transfer for mega-profits
	Must buy retrocessional cover	No longer needed; increases earnings
	Cannot manage to lowest tax rate	Can manage to lowest tax rate
	Must focus on quarterly volatility	Investors not sensitive to volatility
	Rating agency capital constraints	Now removed
And BRK gains significant assets:		
	Generates float at a low cost	Can put it to work at at a higher return
	Exceptionally strong client franchise	No overlap; loves to buy franchise
	Mostly long tail casualty reinsurance	Direct auto and cat reinsurance
	Enormous float added to BRK	Loves float
	Strong base of intellectual capital	Concentrated, at the reinsurance level
	Owns major E&S writer	No overlap, high ROE business
	Only acquirable global reinsurer	Acquires unique asset
	Captive distribution system	High value vs. BRK broker system
	World's best facultative franchise	Another unique asset
The companies share a common culture		
	Underwriting-centered culture	Excels at pricing unusual risks
	Total return investing focus	The ultimate in total return
	Preference for direct distribution	GEICO--premier direct auto insurer
	Businesslike and nonpromotional	Just like Buffett himself, and BRK

Source: PaineWebber.

A review of the synergies

Excess capital. General Re had more capital than it needed, and Berkshire is able to deploy capital through acquisitions of other businesses as well as equity purchases.

"Conservative" investing focus. Like all property-casualty companies, General Re was effectively required to invest most of the investments supporting its operations in high-grade fixed-income investments. However, as part of Berkshire, all of the capital not underlying the company's claim reserves will over time be redeployed and allocated to equities as Warren Buffett and Charlie Munger see fit. And its capital will be in the form of "virtual capital"—invested to earn equity returns—if it isn't being used in the reinsurance business.

Can underwrite mega-risks. General Re's investors expected it to meet smooth quarterly operating earnings trends, even though the reinsurance business inherently involves assuming volatile risks from clients. Berkshire has no such constraint.

Elimination of retrocessional protection. As a public company, General Re needed to dampen quarterly earnings volatility by using retrocessional reinsurance. Based on the company's total outstanding ceded losses to reinsurers of approximately $2 billion, we estimate the lost investment income from this practice, after taxes, to be

about $100 million per year, or $1.25 per share in 1998. By eliminating retrocessions, General Re will retain more premiums, which will provide yet more float to be invested by Berkshire Hathaway.

Tax advantages. General Re had no diversified, stable source of earnings other than reinsurance, and thus had to invest in a certain level of taxable securities to shield against alternative minimum taxes in the event of a spike in loss ratios. Because the company will now be part of Berkshire's consolidated tax filing, this constraint is removed. In addition, a larger proportion of the capital can be invested in equities, which compound on a tax-deferred basis.

Earnings volatility. General Re can take on and retain larger risks because it is no longer constrained by the issue of quarterly and annual earnings volatility.

Rating agency capital constraints. General Re will now have unlimited access to capital, freeing it of the need to maintain "face capital" to support its triple-A ratings debt and claims-paying ratings.

Focus. General Re's management will be able to focus on the key strategic goals of growing its business and producing float at a low cost. Other distractions, ranging from Wall Street earnings expectations to rating agencies to Securities and Exchange Commission (SEC) reporting to the need to use excess capital, have been removed. And with the investing function moved to Berkshire, management and employees can focus exclusively on underwriting integrity and client relationships. Watching what the revised incentive plan at GEICO has accomplished for that company suggests that this change in focus will be very positive for General Re.

Free cash flow. General Re is currently bringing in about $1 billion of operating cash flow each year that was formerly being redistributed to shareholders through dividends and share repurchases. The ability to generate cash flow in the form of insurance float, even at a modest rate given the current competitive reinsurance market conditions, is a benefit to Berkshire. If the price Berkshire paid for General Re is evaluated against cash flows, Berkshire is starting out with an initial cash "yield" of 6.8% without any synergies. And this yield will grow over time as the company's premium base rises.

Exceptional client franchise. General Re has more than 1,000 domestic clients, most of which have been with the company for years, if not decades.

Mostly casualty reinsurance. Unlike Berkshire's reinsurance business, which is primarily "super-cat," or short-tail, focused, General Re writes mostly casualty reinsurance, especially in the United States. The expertise in the casualty business is a franchise for the few with successful track records. In addition, casualty reinsurance has a long tail of claims payout that maximizes float generation.

Enormous float. Acquiring General Re roughly tripled Berkshire's float, adding more than $16 billion to total investable float. Further, General Re business has a longer reserve tail that Berkshire's, so that float builds faster as a percentage of premium growth. Thus, General Re can build float at a faster growth rate than a shorter-tail business could.

Intellectual capital. General Re is the leader in reinsurance technology and has positioned itself for emerging risk transfer solutions by acquiring expertise in the derivatives business and making a substantial commitment to integrated risk management technology through its New England Asset Management operation.

Captive distribution. Customers who "buy direct" are the most profitable and have high persistency of business. These clients belong to the reinsurer, not a broker who may shop the business to other reinsurers at any time. While the distinction between distribution platforms is becoming less clear and most reinsurers are now accepting business from brokers, the highest-value asset in the acquisition other than float is General Re's client relationships and its distribution system.

Recent actions: D.P. Mann

In the fall of 1998, General Re announced the acquisition of D.P. Mann, one of the most successful and last remaining independent managing agents at Lloyd's of London. We believe that the transaction primarily signifies General Re's need to have a more unified and important platform in London, the world's third-largest reinsurance market. Previously, General Re had operated several companies in London, but had no "banner" company identity and no presence at Lloyd's, the heart of the market. We are not reading too much into the fact that D.P. Mann is a broker market company because business at Lloyd's is done only through brokers, and if one wishes to play in the very large Lloyd's market, one must work through these intermediaries.

> "I think it's fair to say that Lloyd's problems have helped us. Because Lloyd's had a terrific reputation, it was the first stop, and usually the last stop for all kinds of large and unusual risks 20 years ago. And the fact that they've lost some of their luster since this has helped us…Berkshire probably possesses more capital than all of Lloyd's put together."
>
> —Warren Buffett, 1996 Annual Shareholders' Meeting, as quoted in *Outstanding Investor Digest.*

Why did Berkshire buy General Re?

Some observers have suggested that Berkshire bought General Re in order to diversify its portfolio away from bonds, because Warren Buffett believes that past equity gains cannot be replicated. We believe that it would be hard to find a riskier and more expensive way to diversify an investment portfolio than spending $22 billion to buy a property-casualty insurer. However, mathematically, the transaction does shift Berkshire's portfolio away from bonds, and Mr. Buffett's concern over equity valuations and the difficulty of reinvesting an increasing asset base are well documented, and have been well documented for decades.

> "My opinion is that the Dow is quite unlikely to compound for any important length of time at the rate it has during the past seven years and, as mentioned earlier, I believe our margin over the Dow cannot be maintained at its level to date."
> —January 18, 1964, Buffett Partnership Ltd. annual letter to partners
>
> "A decent rate (better we have an indecent rate) of compound—plus the addition of substantial new money has brought our beginning capital this year to $43,645,000…Several times in the past, I have raised the question whether increasing amounts of capital would harm our investment performance…I now feel that we are much closer to the point where increased size may prove disadvantageous."
> —January 20, 1966, Buffett Partnership Ltd. annual letter to partners

Despite the short-term impact of the investment on the Berkshire portfolio, over the long term, buying General Re will significantly increase Berkshire's ultimate exposure to equities and actually adds to its reinvestment problem (larger and larger investments must be made to produce the same incremental return, narrowing the range of possible investment alternatives). Since management entered into this decision with its eyes open, we view this acquisition as a fundamentally optimistic view of the universe of investment opportunities. Here's why:

- General Re is overcapitalized, and all of this newly acquired excess capital must be redeployed into higher-return activities by Berkshire.
- In addition, General Re will be generating substantial new capital in the form of both earnings and insurance "float," which Berkshire must reinvest in the future. Management's enthusiasm for float is undimmed.
- Berkshire's invested assets per share are increased under the transaction from $38,586 at the end of 1997 to our estimate of more than $50,000 at the end of 1998.
- Fixed-income securities are only a temporary alternative for the investment of excess capital. To achieve equity returns, Berkshire eventually must find alternative investments.

Nevertheless, we do not believe that Berkshire is under any pressure to add to its equity portfolio, for several reasons. First, Messrs. Buffett and Munger are simply never pressured by anything, period.

In addition, their preferred first-choice use of capital is to buy 100% of an operating business, not part of a publicly held company. Mr. Buffett has stated that he believes that there are plenty of opportunities, in the long term, and that he is going "elephant hunting" with his capital.

Third, in the long term, Berkshire's performance is achieved by making an occasional major decision, not by constantly trading to marginally outperform the market. Therefore, if some time passes before the capital is used, that would not necessarily have any impact on the company's long-term performance.

Risks of General Re

When asked if he had any worries about the business, the management, the competition or the cycle, Mr. Buffett indicated that he did not. However, General Re has a global derivatives business, which is subject to systemic risk due to its proximity to the world's credit and payment systems. On the other hand, General Re Financial Products came through the fall 1997 Asian crisis and the summer 1998 hedge fund crisis with flying colors.

The transition from General Re's option plan and the retention of key employees is also a risk. Options were an important part of the General Re culture, but Berkshire uses different incentive programs. The restructuring of employee compensation will be important both to maintaining the franchise and "incenting" employees in the right direction to achieve Berkshire's goals, the growth of float and achieving a low cost of float.

Third, General Re is increasingly faced with the difficult choice of reconciling its captive distribution system with the business opportunities that can only be accessed through other distribution channels, such as brokers. Achieving growth and responding to buyers' preferences for different methods of distribution may ultimately result in the company allowing alternative distribution channels to access the company in a broader sense than currently[18]. However, under any circumstances, we expect direct

[18] General Re has experimented with the broker channel in the past: It once owned a broker market reinsurer, North Star Re, which was never as profitable as General Re and ultimately was sold to W.R. Berkley in 1994; in 1993, the company successfully founded a Bermuda catastrophe reinsurer, Tempest Re, which marketed through brokers and which eventually was sold to ACE Limited.

distribution to remain the predominant marketing method because the franchise value it creates is greater than any other method. GEICO uses 100% captive distribution, and Berkshire Hathaway prefers having direct access to its end-user customers whenever possible.

Finally, General Re's strategy is to extend its reach into the international markets as they become more sophisticated buyers of reinsurance, transitioning to the excess products that are the company's forte. General Re bought Cologne Re in 1994, and while no apparent problems have developed, due to the soft reinsurance market and the limited amount of time that has passed, it is too soon to evaluate the success of this merger. Executing the international strategy successfully is a risk to the General Re acquisition.

Management and management succession

> On when he will retire: "About five to ten years after I die."
> —Warren Buffett, as quoted in *Forbes*, October 19, 1992.

While not a pleasant subject, this issue comes up frequently, even though Mr. Buffett is five years younger than Hank Greenberg, head of American International Group. To get the most important point out of the way: If Warren Buffett met an untimely end tomorrow, Berkshire stock would go down, irrespective of the impact on intrinsic value. There is simply no denying this fact.

Since we don't know who will run Berkshire 25 years from now, investors should consider that when they invest. However, growth assumptions, as embodied in our valuation, do not include any "Buffett premium" and suggest that the stock is significantly undervalued. Further, two of our valuation parameters do not project future investment outperformance, and the third, earnings-based approach assumes outperformance at a lower level than has been achieved historically.

Mr. Buffett has stated that he will not retire and that his role will be divided after his death: with one person in charge of investments and the allocation of capital and another in charge of operations: "someone overseeing—but not meddling in it too much—making sure you have the right managers and that you're treating them fairly." We believe that Lou Simpson is likely to be responsible for investing based on the fact that he currently is the only person at Berkshire who is allowed to invest (at GEICO) and that Warren Buffett has highlighted this fact, and his excellent performance, in the shareholder letters and annual meetings.

The only person we are aware of at Berkshire who must have an insight into capital allocation decisions (other than Charles Munger) is Ajit Jain, who runs National Indemnity. That is because every decision to enter into a National Indemnity reinsurance contract requires an allocation of capital *over a specified period of time,* as opposed to an equity investment that can be liquidated. Therefore, an understanding of the alternative uses of capital that would be foregone during that time is required. We would not be surprised to see his role in the organization expand at some point.

Who will manage the operations is more difficult to assess given the compartmentalization that takes place at Berkshire, and the lack of cross-training among managers. Messrs. Buffett and Munger have stated (at the 1996 shareholders' meeting, for example) that this person is already within the organization. Berkshire is blessed with a number of exceptional operating managers.

S&P index

Berkshire is not in the S&P 500 index. Based on the size and quality characteristics described in this report, it seems obvious to us that it should be included and, in fact, the S&P's chief economist has stated that S&P's only concern with respect to Berkshire is the liquidity of the B shares upon index rebalancing. We believe that this concern will prove to be minimal once the appropriate calculations are made following the General Re merger. In addition, over time, the pool of B shares is growing as As are split into Bs and fractional As used in acquisitions are paid in Bs.

Over the long term, we believe that stocks trade to intrinsic value and, therefore, the index issue is not important over the course of many years of ownership. However, there are two factors that we believe are of interest to investors:

- Institutions wishing to outperform the index might have an easier time if they owned BRK, a large, liquid stock that has historically beaten the index.
- We think it is inevitable that Berkshire Hathaway will be included at some point. To the extent that a premium will be captured at that time, we would just as soon buy the stock in advance.

Berkshire A and B Shares

Each Berkshire A share can be exchanged for 30 B shares. However, B shares cannot be reconstituted back into As. The other differences between the B shares and the A shares, other than the exchange ratio of 30 to 1, are the following:

- The B shares have only 1/200th of a voting right, lower than their economic value.
- The B shares also do not participate in Berkshire Hathaway's charitable contribution program, in which A shareholders may designate charities to which Berkshire contributes.
- We do not believe that Berkshire will ever split its A shares. However, in order to prevent another episode in which "Berkshire unit trusts" might be threatened, we believe that the B shares might eventually be split. There can't be any assurance of this, however.

A brief history of Berkshire Hathaway and its management

Warren Buffett was a business prodigy before he became an investing prodigy, and we attribute much of Berkshire's success to his considerable skills as a business manager. At age five, he sold Chiclets at a stand in front of his house. By age six, Mr. Buffett had expanded his career by buying six-packs of Coca-Cola for a quarter and selling each can for a nickel. Possibly the most precocious manager of a paper route the world has ever seen, at age 14 he operated five delivery routes, dropping off as many as 500 papers a day [19]. His lifelong interest in newspapers and media later spawned ownership of *The Buffalo News* and an investment in the Washington Post Corporation as well as Cap Cities/ABC (now Disney). Mr. Buffett bought his first stock—Cities Service—at age 11. By age 14, in 1945, he had saved $1,200 from his endeavors, which he invested in Nebraska farmland.

After obtaining a business degree from Columbia University studying under Ben Graham, Mr. Buffett headed back to Omaha to work for his father's brokerage firm. The first stock he sold was GEICO. He also taught a class in "Investment Principles" at the University of Omaha before returning to New York to fulfill his dream of working at Graham-Newman, Ben Graham's investment firm.

After Graham's retirement, Mr. Buffett returned to Omaha and began organizing investment partnerships with money contributed by his family and friends as well as capital raised from others. In 1961, Mr. Buffett bought his first company outright—Dempster Mill Manufacturing, a windmill company that Buffett managed to turn around by hiring a talented operating manager, Harry Bottle. The windmill business still remains the subject of jokes by Buffett about the "cigar butt" style of investing in businesses with just one "puff" of value left in them. By 1962, the Buffett partnerships' track record had grown so impressive that Mr. Buffett merged his five partnerships into one, renamed Buffett Partnership, Ltd., with a minimum investment of $100,000.

Today, Mr. Buffett tap-dances to work every morning, thinks about how Berkshire should allocate its ever-growing capital and investable float, and works on keeping his operating managers, three-quarters of whom are worth over $100 million, excited enough about their jobs to come to work every morning and give 110% to Berkshire Hathaway.

Mr. Buffett's partner, Charles Munger, is a multifaceted businessman: As well as being the name partner of the Los Angeles law firm Munger, Tolles, & Olson, LLP, he is chief executive officer of Wesco Financial and runs a legal publishing firm, Daily Journal Corporation, in addition to his role as vice chairman of Berkshire. An Omaha native, Mr. Munger received a law degree from Harvard without bothering to finish his undergraduate degree along the way. Messrs. Buffett and Munger were introduced by one of the Buffett Partnership investors and immediately began to team up on ideas.

In 1929, several textile operations believed to be founded as early as 1806 were combined and renamed Berkshire Fine Spinning Associates, Inc. In the 1930s, Berkshire Fine Spinning accounted for about one-quarter of the country's fine textile production and used approximately 1% of the entire electric output of New England. While not very profitable in the earlier part of the 20th century, World War II revived the company's prospects, and it remained profitable for some years after the war.

The company continued to operate until 1955, when Hathaway Manufacturing Co., a New Bedford manufacturer of textiles, was merged into Berkshire Fine Spinning to form Berkshire Hathaway Inc. Hathaway was founded in 1888 by Horatio Hathaway. The company

[19] Most of the material in this section is from Roger Lowenstein, *Buffett—The Making of an American Capitalist* and from Berkshire Hathaway annual reports and other published materials.

had Hetty Green, the famous miser and "Witch of Wall Street," as one of its original shareholders.

Despite its 10,000 employees and nearly 6 million square feet of plant, Berkshire Hathaway produced a weak financial record[20]. During the nine years following the merger, Berkshire's shareholders' equity declined from $51.4 million to $22.1 million due to a $10.1 million cumulative operating loss, payment of almost $7 million of dividends and share repurchases of approximately $13.1 million. The company's assets were cut in half. Eighty percent of the mill workers from the time of the merger were let go.

In 1962, Warren Buffet applied the "cigar butt" theory to Berkshire Hathaway and bought a controlling interest. He promoted Ken Chace to manage the company and managed to improve its performance. And in 1967, on Mr. Buffett's insight that a business that generates capital is better than a business than consumes it, Berkshire Hathaway Inc. acquired Omaha insurer National Indemnity Co. for $8.6 million.

In 1966, with the stock market soaring, the Berkshire Partnership, Ltd., was closed to new investors. In 1967, as the "Go Go" years continued, the Partnership lowered its investment target: formerly it sought to outperform the market by 1,000 basis points a year. Now the goal would be 500 basis points. Nevertheless, by the end of the year, the Partnership had beaten the Dow by 1,700 basis points. In 1968, the Partnership beat the Dow by an even more impressive 5,000 basis points. But in 1969, as Mr. Buffett became increasingly convinced that he could not invest successfully amid a stratospheric market, the Partnership was liquidated, keeping only two of its investments: Diversified Retailing and Berkshire Hathaway.

By 1973, the stock market had collapsed, and Berkshire Hathaway began using its capital to scoop up stocks at bargain prices. The rest is history.

Risk factors

Management succession. We have discussed this issue in detail above.

Equity market. Long term, the equity market should provide more attractive after-tax compound returns for Berkshire's capital than fixed-income investments. However, in any period, there may be volatility, and investors should keep this in mind when considering their time horizons on the stock.

Auto regulation. Currently, the auto insurance industry is experiencing a relatively benign regulatory environment. However, at times, state legislatures become redistributionist and attempt to limit auto insurers' profits in order to become popular with voters. There is always some state in which this is an issue; what would be a major risk is a national trend, a major movement in an important state, or a serious federal initiative that would have the effect of limiting profits.

Inflation. The insurance industry suffers from inflation, as it cannot reprice the product quickly enough to cover its rising costs and the rising cost of claims for policies it sold earlier. Berkshire is better positioned than most companies because of its alternatives for using capital and its ability to invest in equities. However, inflation is a risk to any insurer.

Insurance market conditions. The property-casualty industry is involved in a prolonged soft cycle, and Berkshire may experience slower growth or depressed earnings as a result. Over the course of a cycle, we do not believe that this places BRK shareholders at a disadvantage because such periods always end in the withdrawal of capacity and the opportunity to capture excess returns. However, again, potential investors need to consider their time horizon, as the industry is in a down cycle.

Integration of General Re. Retention of key employees at General Re is important to the success of the merger. One member of senior management has left the company to join another insurer. We do expect some turnover, as is natural with any merger, but we believe that it is critical for Berkshire to retain the important employees. One key to retaining these employees will be the new incentive plan, which has not yet been announced.

Competition in the auto market. The auto market is beginning to experience rate decreases that presage a period of intensified competition and reduced profitability. Because of the short-tail nature of the business, down cycles in auto tend to be more self-limiting than in other areas of insurance. However, the business has become concentrated among very large companies with plenty of capital to burn. Similar to the cyclical concerns addressed above, over the course of a cycle, GEICO should emerge a winner, as its weaker competitors fall by the wayside. But there is an impact on the investing time horizon.

Capital markets convergence. A developing market for securitization could depress General Re's and National Indemnity's growth opportunities. To date, this has been more talk than action, and for the more difficult and risky products that these companies favor, securitization actually

[20] In 1954, Nicholas Brady, later U.S. Secretary of the Treasury, and nephew of the mill's owner, Howard Chace, wrote his senior thesis at Harvard on the business's prospects and, as a result, sold his stock.

costs more than reinsurance and is more cumbersome and less timely to execute.

Additional information is available upon request.

Prices of companies mentioned as of 1/19/99:

Ace Limited ACL $30 15/16
American International Group AIG $101 1/16
American Express Co. AXP $100 1/2
The Allstate Corporation ALL $38 3/16
Boeing Cp BA $33 7/16
British Aerospace[1] 4.255 pounds
Berkshire Hathaway BRK.A $65,600
Chubb Corporation CB $59 5/8
Cincinnati Financial Corporation CINF $36 1/4
The Coca-Cola Companies KO $64 1/8
Federal National Mortgage Corporation[2]-Freddie Mac FRE $59 1/8
Gannett Company GCI $65 1/2
General Electric[3] GE $101 7/16
General Dynamics Corporation GD $55 15/16
Gulfstream Aerospace Corporation GAC $54 3/4
Gillette G $51 1/4
Horace Mann Educators Corporation HMN $26 15/16
Lockheed Martin Corporation LMT $39 1/8
McDonalds Corporation[2] MCD $79 3/16
Penn-America Group Incorporated PNG $9 1/4
PNC Bank Corporation PNC $49 1/8
Progressive Corporation PGR $162 3/8
Raytheon Company RTN $56 15/16
Reliance Group Holdings Incorporated REL $12 5/16
Travelers Property-Casualty Corporation TAP $29 13/16
20th Century Industries TW $21 5/16
Walt Disney Company DIS $36 1/2
Washington Post Company WPO $579
Wells Fargo & Company[2] WFC $36 13/16
Wesco Financial Corporation WSC $338
W.R. Berkley BKLY $31 1/2
XL Capital Ltd. XL $62 ¾

[1] These securities can only be offered in such states as may be legally permissible.

[2] PaineWebber Incorporated has acted in an investment banking capacity for this company.

[3] General Electric owns over 20% of the outstanding stock of PaineWebber Group and has a representative on the board. General Electric has agreed to certain voting limitations. PaineWebber group is the parent of PaineWebber Incorporated.

Exhibit 42

BERKSHIRE HATHAWAY
Earnings Model

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net written premium--Insurance	$218.8	$169.7	$139.1	$135.5	$132.4	$208.4	$225.7	$247.2	$3,389.7	$3,896.9	$4,676.3	$5,518.0	$6,511.3
change	-47.0%	-22.5%	-18.0%	-2.6%	-2.3%	57.4%	8.3%	9.5%	1271.2%	15.0%	20.0%	18.0%	18.0%
Net written premium--P/C Reinsurance	$265.9	$126.4	$435.2	$667.0	$607.2	$528.7	$689.8	$777.0	$715.5	$955.4	$750.0	$6,400.4	$6,720.4
change	-21.5%	-52.4%	244.2%	53.3%	-9.0%	-12.9%	30.5%	12.6%	-7.9%	33.5%	-21.5%	753.4%	5.0%
Net written premium--Life/Health Reins.	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$1,451.7	$1,524.3
change	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%
Earned premium	$584.2	$394.3	$591.5	$776.4	$664.3	$650.7	$923.2	$957.5	$4,117.8	$4,761.1	$5,283.0	$12,586.2	$13,858.9
change	-29.2%	-32.5%	50.0%	31.3%	-14.4%	-2.0%	41.9%	3.7%	330.1%	15.6%	11.0%	138.2%	10.1%
Paid losses	$360.6	$359.7	-$365.6	$18.3	$594.9	$844.6	$269.9	$289.8	$2,791.6	$3,012.0	$3,698.1	$8,810.4	$9,701.2
Reserve change	$82.8	-$48.4	$899.8	$808.8	$92.8	-$393.9	$298.1	$322.2	$297.9	$408.1	$238.9	$484.3	$580.8
Expenses	$152.0	$107.4	$84.0	$68.9	$85.6	$170.0	$228.9	$325.9	$797.6	$879.6	$1,028.8	$3,303.2	$3,602.9
Underwriting p/l	($11.1)	($24.4)	($26.7)	($119.6)	($109.0)	$30.0	$129.0	$19.6	$230.7	$461.4	$317.2	($11.7)	($26.1)
Loss ratio	75.9%	78.9%	90.3%	106.5%	103.5%	69.3%	61.5%	63.9%	75.0%	71.8%	74.5%	73.8%	74.2%
Expense ratio	26.0%	27.2%	14.2%	8.9%	12.9%	26.1%	24.8%	34.0%	19.4%	18.5%	19.5%	26.2%	26.0%
Combined ratio	101.9%	106.2%	104.5%	115.4%	116.4%	95.4%	86.0%	98.0%	94.4%	90.3%	94.0%	100.1%	100.2%
Net invest. income--insurance	$231.3	$243.6	$327.0	$331.8	$355.1	$375.4	$418.2	$575.8	$712.1	$872.9	$950.0	$2,822.7	$3,198.2
change	51.7%	5.3%	34.2%	1.5%	7.0%	5.7%	11.4%	37.7%	23.7%	22.6%	8.8%	197.1%	13.3%
A-tax NII/share	$174.9	$189.0	$249.3	$251.2	$266.7	$276.9	$296.5	$413.3	$489.1	$570.9	$580.6	$1,368.4	$1,604.2
change	44.5%	8.1%	31.9%	0.8%	6.2%	3.8%	7.1%	39.4%	18.3%	16.7%	1.7%	135.7%	17.2%
GRFP a-tax earnings												$56.5	$62.1
change													10.0%
Insurance p-tax earnings	$220.2	$219.2	$300.3	$212.2	$246.1	$405.4	$547.2	$595.4	$900.2	$1,291.4	$1,222.2	$2,441.0	$2,802.1
change	126.9%	-0.4%	37.0%	-29.3%	16.0%	64.7%	35.0%	8.8%	51.2%	43.5%	-5.4%	99.7%	14.8%
Sales/service revenues p-tax	$1,345.1	$1,468.5	$1,586.2	$1,656.4	$1,783.9	$1,920.7	$2,270.1	$2,640.0	$2,765.3	$3,287.2	$4,391.0	$4,830.1	$5,313.1
change	6.6%	9.2%	8.0%	4.4%	7.7%	7.7%	18.2%	16.3%	4.7%	18.9%	33.6%	10.0%	10.0%
Pretax margin	14.0%	13.1%	12.8%	11.7%	12.8%	13.4%	13.8%	11.4%	12.7%	14.7%	12.3%	11.0%	11.2%
A-tax earnings	$120.8	$123.0	$130.1	$124.0	$146.4	$164.4	$203.1	$195.3	$227.8	$314.3	$318.5	$345.4	$386.8
change	7.8%	1.8%	5.8%	-4.7%	18.1%	12.2%	23.6%	-3.9%	16.6%	38.0%	1.3%	8.4%	12.0%
Finance operations earnings	$13.5	$12.7	$13.5	$20.7	$21.6	$23.2	$22.1	$26.6	$25.3	$31.8	$48.0	$52.8	$58.1
Interest expense	($70.3)	($77.6)	($112.7)	($121.8)	($124.5)	($56.5)	($60.1)	($59.3)	($99.7)	($111.9)	($91.1)	($112.0)	($112.0)
Income taxes	($140.8)	($159.3)	($112.0)	($142.1)	($138.1)	($420.7)	($158.7)	($276.2)	($1,196.8)	($897.7)	($1,346.6)	($1,019.2)	($1,059.6)
Other income/expense	($16.7)	($40.9)	($44.7)	$0.7	$26.5	($27.9)	($7.4)	($9.9)	$7.5	$29.2	($18.5)	$0.0	($0.4)
Minority interest	($3.6)	($4.0)	($0.2)	($0.2)	($0.2)	($0.6)	($0.8)	($7.0)	($7.3)	($8.4)	($8.0)	($87.6)	($87.6)
Net income	$399.3	$447.5	$394.1	$439.9	$407.3	$688.1	$494.8	$794.9	$2,488.6	$1,901.6	$2,521.8	$1,512.0	$1,881.2
Realized gains/losses	$131.7	$223.8	$34.0	$192.5	$89.9	$546.4	-$177.2	$194.1	$2,484.1	$1,106.3	$2,229.4	$0.0	$0.0
Accounting change/extraordinary	$0.0	$0.0	$0.0	$0.0	$0.0	-$71.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Operating income	$313.7	$299.9	$370.8	$316.0	$348.0	$478.0	$606.0	$600.2	$954.0	$1,292.0	$1,072.7	$1,512.0	$1,881.2
Net income/share	$348.23	$390.01	$343.74	$383.72	$355.26	$595.14	$420.12	$669.61	$2,064.79	$1,542.01	$2,029.44	$997.88	$1,241.59
Realized g(l)/share	$114.84	$195.07	$10.08	$57.08	$26.67	$472.58	($150.43)	$163.51	$2,061.05	$897.10	$1,794.11	$0.00	$0.00
Accounting change/extraordinary	$0	$0	$0	$0	$0	($61)	$0	$0	$0	$0	$0	$0	$0
Operating/share	***$273.58***	***$261.38***	***$323.38***	***$275.64***	***$303.55***	***$413.41***	***$514.54***	***$505.60***	***$791.53***	***$1,047.69***	***$863.27***	***$997.88***	***$1,241.59***
change		-4.5%	23.7%	-14.8%	10.1%	36.2%	24.5%	-1.7%	56.6%	32.4%	-17.6%	15.6%	24.4%
Cash Operating EPS	***$275.96***	***$264.28***	***$326.26***	***$279.54***	***$308.18***	***$423.91***	***$524.83***	***$555.59***	***$844.48***	***$1,114.44***	***$949.19***	***$1,283.73***	***$1,527.43***
change		*-4.2%*	*23.5%*	*-14.3%*	*10.2%*	*37.6%*	*23.8%*	*5.9%*	*52.0%*	*32.0%*	*-14.8%*	*35.2%*	*19.0%*
Cash Net EPS	***$350.60***	***$392.90***	***$346.62***	***$387.62***	***$359.89***	***$605.63***	***$430.41***	***$719.60***	***$2,117.73***	***$1,608.76***	***$2,115.36***	***$1,283.73***	***$1,527.43***
change		12.1%	-11.8%	11.8%	-7.2%	68.3%	-28.9%	67.2%	194.3%	-24.0%	31.5%	-39.3%	19.0%
Weighted avge. shares	1.147	1.147	1.146	1.146	1.146	1.156	1.178	1.187	1.205	1.233	1.243	1.515	1.515

Source: Company financial information and PaineWebber estimates.

Exhibit 43

BERKSHIRE HATHAWAY
Balance Sheet and Other Information

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Shareholders' equity	$3,410.1	$4,925.6	$5,287.5	$7,379.9	$8,896.3	$10,428.4	$11,874.9	$17,217.1	$23,426.3	$31,455.2	$59,157.0	$65,286.3	$70,307.4
change	20.0%	44.4%	7.3%	39.6%	20.5%	17.2%	13.9%	45.0%	36.1%	34.3%	88.1%	10.4%	7.7%
Book value per share	$2,975.00	$4,296.00	$4,612.00	$6,437.00	$7,745.00	$9,019.19	$10,082.68	$14,503.47	$19,436.77	$25,507.14	$39,042.37	$43,088.27	$46,402.19
change	20.1%	44.4%	7.4%	39.6%	20.3%	16.5%	11.8%	43.8%	34.0%	31.2%	53.1%	10.4%	7.7%
BRK stock price	$4,700	$8,675	$6,675	$9,050	$11,750	$16,325	$20,400	$32,100	$34,100	$46,000	$70,000		
Appreciation	20.1%	44.4%	7.4%	39.6%	20.3%	14.3%	13.9%	43.1%	31.8%	34.1%	52.2%		
S&P 500 with reinvested dividends	$661	$870	$843	$1,100	$1,183	$1,303	$1,319	$1,815	$2,232	$2,976	$3,835		
Appreciation	16.6%	31.7%	-3.1%	30.5%	7.6%	10.1%	1.3%	37.6%	23.0%	33.4%	28.6%		
BRK differential	$4,039	$7,805	$5,832	$7,950	$10,567	$15,022	$19,081	$30,285	$31,868	$43,024	$66,165		
BVPS ex goodwill amortization	$2,972.62	$4,293.10	$4,609.12	$6,433.09	$7,740.38	$9,008.89	$10,072.39	$14,453.09	$19,384.98	$25,440.34	$38,971.91	$42,802.42	$46,116
change	21.4%	44.4%	7.4%	39.6%	20.3%	16.4%	11.8%	43.5%	34.1%	31.2%	53.2%	9.8%	7.7%
Tangible book value/share	$2,873	4,175.44	4,613.83	6,283.52	7,562.60	8,455.71	9,696.67	12,671.11	16,486.98	23,038.19	27,828.01	32,120.69	46,401.42
change	21.2%	45.3%	10.5%	36.2%	20.4%	11.8%	14.7%	30.7%	30.1%	39.7%	20.8%	15.4%	44.5%
Outstanding shares	1.146	1.146	1.146	1.146	1.149	1.178	1.178	1.178	1.232	1.232	1.515	1.515	1.515
change	-0.1%	0.0%	0.0%	0.0%	0.3%	2.5%	0.0%	0.0%	4.6%	0.0%	23.0%	0.0%	0.0%
Insurance "float"	$1,497.7	$1,541.0	$1,630.0	$2,070.0	$2,510.0	$2,624.7	$3,056.6	$3,607.2	$6,702.0	$7,300.0	$23,800.0		
change	18.2%	2.9%	5.8%	27.0%	21.3%	4.6%	16.5%	18.0%	85.8%	8.9%	226.0%		
Per share	$1,306.23	$1,343.09	$1,421.73	$1,805.59	$2,189.38	$2,270.02	$2,595.29	$3,038.66	$5,560.64	$5,919.60	$19,153.14		
Underwriting gain/loss	($11.1)	($24.4)	($26.7)	($119.6)	($109.0)	$30.0	$129.0	$19.6	$230.7	$461.4	$317.2		
Cost of float	0.7%	1.6%	1.6%	5.8%	4.3%	-1.1%	-4.2%	-0.5%	-3.4%	-6.3%	-1.3%		
Insurance reserves[1] (net)	$1,198.9	$1,150.5	$2,050.3	$2,859.1	$2,951.9	$2,558.0	$2,856.1	$3,178.3	$3,476.2	$6,096.3	$6,335.2	$20,219.5	$20,800.4
change	7.4%	-4.0%	78.2%	39.4%	3.2%	-13.3%	11.7%	11.3%	9.4%	75.4%	3.9%	219.2%	2.9%
Per share	$1,046.18	$1,003.95	$1,789.09	$2,494.85	$2,569.10	$2,171.48	$2,425.05	$2,698.62	$2,821.02	$4,947.31	$4,181.10	$13,344.46	$13,727.81
Invested assets at cost	$3,115.7	$4,815.4	$5,616.5	$6,354.9	$7,375.3	$8,569.5	$8,732.6	$10,288.3	$16,634.1	$19,132.1			
change	0.4%	54.6%	16.6%	13.1%	16.1%	16.2%	1.9%	17.8%	61.7%	15.0%			
Per share	$2,718.72	$4,201.90	$4,900.98	$5,545.31	$6,418.86	$7,274.61	$7,414.65	$8,735.56	$13,499.02	$15,526.21			
change	0.5%	54.6%	16.6%	13.1%	15.8%	13.3%	1.9%	17.8%	54.5%	15.0%			
Invested assets at market	$5,152.1	$5,586.1	$9,272.6	$12,630.7	$15,319.8	$16,766.0	$18,354.5	$26,362.0	$35,537.3	$47,547.9			
change	7.3%	8.4%	66.0%	36.2%	21.3%	9.4%	9.5%	43.6%	34.8%	33.8%			
Per share	$4,495.70	$4,874.42	$8,091.29	$11,021.55	$13,333.18	$14,232.56	$15,584.38	$22,383.36	$28,839.48	$38,586.40			
change	7.4%	8.4%	66.0%	36.2%	21.0%	6.7%	9.5%	43.6%	28.8%	33.8%			
Deferred taxes on unrealized gains	$548.5	$1,100.8	$1,085.3	$1,944.3	$2,503.5	$2,848.7	$3,381.3	$5,717.1	$6,620.6	$9,940.5			
Per share	$478.60	$960.54	$947.07	$1,696.61	$2,178.89	$2,418.24	$2,871.01	$4,854.26	$5,372.80	$8,066.98			
Debt	$480.0	$1,007.5	$1,239.4	$1,255.1	$1,299.8	$972.4	$810.7	$1,061.7	$1,944.4	$2,266.7			
Debt/total capital	12.3%	17.0%	19.0%	14.5%	12.7%	8.5%	6.4%	5.8%	7.7%	6.7%			

[1] 1995 includes $2,212 GEICO reserves transferred in; 1998 includes est. $13,400 GRN reserves transferred in

Source: Company financial information and PaineWebber estimates.

Exhibit 44

BERKSHIRE HATHAWAY
Consolidated Operating Statistics

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Operating earnings ex inv. income	$13.2	($18.6)	($60.7)	($94.7)	($55.6)	$78.8	$167.8	$38.2	$223.1	$436.6
change	-218.0%	-241.0%	226.7%	56.0%	-41.3%	-241.7%	113.0%	-77.2%	483.5%	95.7%
Points paid	61.7%	91.2%	-61.8%	2.4%	89.6%	129.8%	29.2%	30.3%	67.8%	63.3%
Points reserved	14.2%	-12.3%	152.1%	104.2%	14.0%	-60.5%	32.3%	33.7%	7.2%	8.6%
Total calendar loss ratio	75.9%	78.9%	90.3%	106.5%	103.5%	69.3%	61.5%	63.9%	75.0%	71.8%
Development (points)	-9.74	-9.66	-4.19	-3.75	5.70	2.54	8.74	7.73	-11.91	-13.58
Accident year loss ratio	85.6%	88.6%	94.5%	110.3%	97.8%	66.7%	52.8%	56.2%	86.9%	85.4%
Expense ratio	26.0%	27.2%	14.2%	8.9%	12.9%	26.1%	24.8%	34.0%	19.4%	18.5%
Accident year combined ratio	111.6%	115.8%	108.7%	119.2%	110.7%	92.8%	77.3%	90.2%	106.3%	103.9%
Paid/incurred losses	81.3%	115.6%	-68.4%	2.2%	86.5%	187.4%	47.5%	47.4%	90.4%	88.1%
Reserved/incurred losses	18.7%	-15.6%	168.4%	97.8%	13.5%	-87.4%	52.5%	52.6%	9.6%	11.9%
Investment income/share	$264.47	$280.47	$379.21	$362.17	$356.69	$355.76	$382.35	$523.38	$659.38	$760.42
change	32.0%	6.1%	35.2%	-4.5%	-1.5%	-0.3%	7.5%	36.9%	26.0%	15.3%
Estimated yield (at cost)	10.1%	6.9%	8.0%	6.7%	5.7%	4.9%	5.2%	6.1%	4.9%	5.0%
change basis points	31.8%	-31.8%	16.5%	-16.0%	-16.0%	-13.9%	7.3%	17.1%	-20.2%	2.1%
Operating cash flow	$363.9	$330.2	$522.6	$709.2	$997.2	$726.2	$929.1	$1,127.9	$1,260.0	$2,335.6
Per share	$317.36	$287.80	$455.80	$618.59	$869.81	$628.04	$788.88	$950.13	$1,045.42	$1,893.95
change	-40.0%	-9.3%	58.4%	35.7%	40.6%	-27.8%	25.6%	20.4%	10.0%	81.2%
Cash earnings	$316.4	$303.2	$374.1	$320.5	$353.3	$490.1	$618.1	$659.5	$1,017.8	$1,374.3
change	44.8%	-4.2%	23.4%	-14.3%	10.2%	38.7%	26.1%	6.7%	54.3%	35.0%
Cash ROE at cost-- operating ex NII						1.7%	3.1%	0.6%	2.3%	3.6%
change							80.5%	-82.3%	314.0%	55.7%
Cash ROE at market -- operating ex NII						57.9%	8.8%	30.3%	17.6%	26.1%
Cash ROE at cost						10.7%	11.5%	9.5%	10.4%	11.2%
change							6.9%	-17.1%	9.5%	7.4%
Cash ROE at market						62.2%	12.8%	34.5%	21.5%	29.5%
change							-79.4%	169.6%	-37.8%	37.6%
Investing value added										
GAAP ROE at cost-- operating ex NII						1.47%	2.92%	-0.31%	1.66%	2.94%
change							98.2%	-110.6%	-637.1%	77.4%
GAAP ROE at market -- operating ex N						58.0%	8.7%	30.0%	17.4%	26.0%
change							-85.0%	244.8%	-42.1%	49.8%
GAAP ROE at cost						10.6%	11.4%	8.8%	9.9%	10.7%
change							7.6%	-22.8%	13.1%	8.0%
GAAP ROE at market						62.3%	12.7%	34.3%	21.3%	29.5%
change							-79.5%	169.1%	-37.9%	38.3%
Insurance leverage:										
Invested assets/shareholders' equity	151.1%	113.4%	175.4%	171.1%	172.2%	160.8%	154.6%	153.1%	151.7%	151.2%
change	-10.6%	-24.9%	54.6%	-2.4%	0.6%	-6.6%	-3.9%	-0.9%	-0.9%	-0.4%
Reserves/shareholders' equity	35.2%	23.4%	38.8%	38.7%	33.2%	24.5%	24.1%	18.5%	14.8%	19.4%
change	-10.5%	-33.6%	66.0%	-0.1%	-14.4%	-26.1%	-1.9%	-23.2%	-19.6%	30.6%
"Float"/"float" + shareholders' equity	30.5%	23.8%	23.6%	21.9%	22.0%	20.1%	20.5%	17.3%	22.2%	18.8%
change	-1.0%	-21.9%	-1.1%	-7.0%	0.5%	-8.6%	1.8%	-15.4%	28.4%	-15.3%
Price/book value	158.0%	201.9%	144.7%	140.6%	151.7%	181.0%	202.3%	221.3%	175.4%	180.3%
Price/book value ex GW amortization	158.1%	202.1%	144.8%	140.7%	151.8%	181.2%	202.6%	222.2%	176.0%	180.9%
Price/tangible book value	163.6%	207.8%	144.7%	144.0%	155.4%	193.1%	210.4%	253.3%	206.8%	199.7%
Price/book value + float	109.8%	153.8%	110.6%	109.8%	118.3%	144.6%	160.9%	183.0%	136.4%	146.4%
Price/book value + float ex GW	109.9%	153.9%	110.7%	109.9%	118.3%	144.8%	161.1%	183.6%	136.8%	146.8%
Price/tangible book value + float	112.5%	157.2%	110.6%	111.9%	120.5%	152.2%	166.0%	204.3%	154.7%	158.9%

Source: Company financial information and PaineWebber estimates.

Exhibit 45

BERKSHIRE HATHAWAY
Property-Casualty Segment Information--Underwriting

Insurance	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Net written premiums	$218.8	$169.7	$139.1	$135.5	$132.4	$208.4	$225.7	$247.2	$3,389.7	$3,896.9	$4,676.3	$5,518.0	$6,511.3
Net written premium growth YOY	-47.0%	-22.5%	-18.0%	-2.6%	-2.3%	57.4%	8.3%	9.5%	1271.2%	15.0%	20.0%	18.0%	18.0%
Incurred losses	$196.2	$125.9	$102.0	$95.2	$98.0	$99.8	$88.4	$90.0	$2,516.6	$2,744.3	$3,228.0	$3,795.9	$4,508.3
Expenses	$78.7	$58.8	$51.5	$48.3	$46.8	$95.8	$98.1	$109.3	$605.2	$716.6	$813.5	$1,012.1	$1,197.2
Underwriting P/L	$17.5	$4.2	$0.5	($2.5)	$8.0	$12.7	$48.3	$40.6	$238.5	$333.6	$262.5	$141.0	$134.3
Loss ratio	67.1%	66.6%	66.2%	67.5%	64.1%	47.9%	37.6%	37.5%	74.9%	72.3%	75.0%	76.7%	77.2%
Expense ratio	25.1%	25.7%	33.4%	34.3%	30.6%	46.0%	41.8%	45.6%	18.0%	18.9%	18.9%	20.5%	20.5%
Combined ratio	92.2%	92.4%	99.7%	101.8%	94.8%	93.9%	79.4%	83.1%	92.9%	91.2%	93.9%	97.2%	97.7%
Each pt. =	$3.31	$2.23	$3.35	$4.40	$3.77	$3.66	$5.10	$5.24	$22.21	$25.10	$27.63	$53.99	$59.45
Reinsurance													
Net written premiums-- P/C	$265.9	$126.4	$435.2	$667.0	$607.2	$528.7	$689.8	$777.0	$715.5	$955.4	$750.0	$6,400.4	$6,720.4
Net written premium growth YOY	-47.0%	-22.5%	-18.0%	-2.6%	-2.3%	57.4%	8.3%	9.5%	1271.2%	15.0%	20.0%	18.0%	18.0%
Incurred losses	$247.2	$185.4	$432.2	$731.9	$589.7	$350.9	$479.6	$522.0	$572.9	$675.8	$704.9	$5,498.8	$5,773.8
Expenses	$73.3	$48.6	$32.5	$20.6	$38.8	$74.2	$130.8	$216.6	$192.4	$163.0	$215.4	$2,291.2	$2,405.7
Underwriting P/L	($28.5)	($28.6)	($27.2)	($117.1)	($117.0)	$17.3	$80.7	($21.0)	($7.8)	$127.8	$58.7	($152.7)	($160.4)
Loss ratio	84.7%	90.3%	98.8%	115.2%	115.3%	79.3%	69.7%	72.7%	75.6%	69.9%	72.0%	72.0%	72.0%
Expense ratio	25.1%	23.7%	7.4%	3.2%	7.6%	16.8%	19.0%	30.2%	25.4%	16.9%	22.0%	30.0%	30.0%
Combined ratio	109.8%	113.9%	106.2%	118.4%	122.9%	96.1%	88.7%	102.9%	101.0%	86.8%	94.0%	102.0%	102.0%
Each pt. =	$1.65	$1.16	$2.48	$3.60	$2.90	$2.49	$3.80	$3.93	$4.09	$5.09	$5.12	$32.76	$34.40
Combined ratio ex struct. Settlement	99.5%	98.2%	-88.2%	120.7%	110.9%	81.6%	77.3%	92.4%	91.3%	89.0%	94.9%	102.0%	102.0%
Cat Business Only:													
Earned premium				$48.0	$130.0	$152.0	$447.0	$260.0	$268.0	$309.9			
Underwriting profit (loss)				$8.0	($2.0)	$110.0	$240.0	$152.1	$167.0	$283.0			
Combined ratio				83.3%	101.5%	27.6%	46.3%	41.5%	37.7%	8.7%			
Loss Ratio				83.3%	101.5%	27.6%	46.3%	15.2%	17.1%	0.0%			

Source: Company financial information and PaineWebber estimates.

Exhibit 45 continued

GEICO Only (Statutory Data)

Property-Casualty Segment Information--Underwriting

Insurance	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Gross written	$1,292.7	$1,618.3	$1,724.9	$1,969.1	$2,168.0	$2,044.5	$2,530.5	$2,821.8	$3,096.9	$3,554.7
change	-12.0%	25.2%	6.6%	14.2%	10.1%	-5.7%	23.8%	11.5%	9.7%	14.8%
Net written	$1,258.5	$1,592.0	$1,698.5	$1,940.6	$2,135.4	$2,031.9	$2,512.2	$2,815.7	$3,080.3	$3,538.4
change	-11.5%	26.5%	6.7%	14.3%	10.0%	-4.8%	23.6%	12.1%	9.4%	14.9%
Earned	$1,475.4	$1,556.2	$1,652.6	$1,859.0	$2,007.4	$2,190.5	$2,440.6	$2,746.9	$3,049.8	$3,431.8
Points paid	74.2%	78.0%	75.9%	71.1%	76.5%	75.0%	75.6%	74.0%	74.5%	71.3%
Points reserved	9.1%	3.6%	4.7%	7.8%	8.0%	6.7%	6.1%	7.9%	5.2%	5.7%
Points expenses	14.8%	15.6%	15.6%	18.0%	15.9%	15.8%	14.8%	14.0%	14.1%	15.1%
Combined ratio	100.7%	96.9%	95.8%	96.2%	99.5%	98.7%	96.1%	95.6%	93.6%	91.6%
Investment income a-tax	$112.0	$131.6	$112.9	$124.9	$138.7	$136.6	$149.7	$166.9	$185.5	$176.7
Operating income	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$171.4	$280.7
Reserves	$1,258.3	$1,314.8	$1,392.6	$1,537.9	$1,697.5	$1,844.6	$1,992.9	$2,210.0	$2,368.1	$2,562.8
Per BRK share	$1,098	$1,147	$1,215	$1,342	$1,477	$1,566	$1,692	$1,876	$1,922	$2,080
"Float"	$1,462.7	$1,582.0	$1,717.7	$1,916.2	$2,132.6	$2,291.6	$2,480.2	$2,717.4	$2,871.9	$3,091.9
Per BRK share								$2,307	$2,331	$2,509
Cost of "float"								-4.4%	-6.4%	-8.4%
New policies						354.882	396.217	461.608	617.669	913.176
change							11.6%	16.5%	33.8%	47.8%
Policies in force						2,011.055	2,147.549	2,310.037	2,543.699	2,949.439
change							6.8%	7.6%	10.1%	16.0%
Preferred growth in force									7.3%	12.8%
Nonstandard/standard growth in force									33.5%	36.6%

Source: Company financial information and PaineWebber estimates.

Exhibit 46

BERKSHIRE HATHAWAY
Sources of Earnings and "Look-Through" Earnings
page 1

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Insurance underwriting	$11.4	$2.8	$0.3	($1.6)	$5.2	$8.3	$31.4	$26.4	$155.0	$216.8
Reinsurance underwriting	($18.6)	($18.6)	($17.7)	($76.1)	($76.1)	$11.2	$52.5	($13.7)	($5.1)	$83.1
Investment income	$150.3	$158.3	$212.6	$215.7	$230.8	$244.0	$271.8	$374.3	$462.9	$567.4
Other operations:										
Aviation services									$1.9	$84.4
Scott Fetzer manufacturing	$17.6	$20.0	$18.5	$15.9	$19.9	$23.8	$24.9	$21.2	$81.6	$77.3
Candy operations	$19.7	$20.6	$23.9	$25.6	$25.5	$24.4	$28.2	$29.8	$30.8	$35.0
Home furnishings	$9.1	$8.4	$8.5	$7.0	$8.1	$10.4	$8.7	$16.7	$24.8	$32.2
Buffalo News	$25.5	$27.8	$26.0	$21.8	$28.2	$29.7	$31.7	$27.3	$29.5	$32.7
Shoe group				$8.7	$17.3	$28.6	$55.8	$37.5	$41.0	$32.2
Jewelry								$19.1	$16.1	$18.3
Finance business					$12.7	$14.7	$14.6	$12.6	$14.9	$18.0
Interest/goodwill/purchase acct.		($10.0)	($71.9)	($72.7)	($80.9)	($55.6)	($63.3)	($65.3)	($135.6)	($174.0)
Other			$101.6	$101.6	$82.4	$60.9	$74.4	$72.3	$42.2	$37.0
Operating earnings	***$313.7***	***$299.9***	***$370.8***	***$316.0***	***$348.0***	***$478.0***	***$606.0***	***$600.2***	***$954.0***	***$1,292.0***
Realized gains/losses	$131.7	$223.8	$34.0	$192.5	$89.9	$546.4	($177.2)	$194.1	$2,484.1	$1,106.3
Net earnings	***$399.3***	***$447.5***	***$394.1***	***$439.9***	***$407.3***	***$688.1***	***$494.8***	***$794.9***	***$2,488.6***	***$1,901.6***
American Express						$16.0	$25.0	$109.3	$132.0	$161.0
Coca Cola				$70.0	$83.0	$94.0	$116.0	$75.0	$180.0	$216.0
McDonald's									$38.0	
Freddie Mac				$15.0	$29.0	$41.0	$47.0	$14.0	$77.0	$86.0
Gillette				$23.0	$38.0	$44.0	$51.0	$32.8	$73.0	$82.0
Washington Post				$10.0	$11.0	$15.0	$18.0	$19.8	$27.0	$30.0
Wells Fargo				($17.0)	$16.0	$53.0	$73.0	$77.2	$84.0	$103.0
GEICO				$69.0	$34.0	$76.0	$63.0	$118.2		
Cap Cities/ABC/Disney				$61.0	$70.0	$83.0	$85.0	$80.0	$50.0	$65.0
Other					$18.0					
Imputed tax				($30.0)	($42.0)	($59.0)	($68.0)	($45.9)	($93.0)	($105.0)
Total "look-through" earnings				***$516.00***	***$604.00***	***$841.00***	***$1,030.00***	***$882.34***	***$1,522.00***	***$1,930.00***
% change					**17.1%**	**39.2%**	**22.5%**	**-14.3%**	**72.5%**	**26.8%**

Source: Company financial information and PaineWebber estimates.

Exhibit 46 continued

BERKSHIRE HATHAWAY
Sources of Earnings and "Look-Through" Earnings
Page 2

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Percent of Total										
Insurance underwriting				-0.5%	1.3%	1.5%	4.7%	4.6%	15.7%	17.3%
Reinsurance underwriting				-22.7%	-19.4%	2.1%	7.8%	-2.4%	-0.5%	6.6%
Investment income				64.3%	58.8%	44.6%	40.6%	65.3%	46.8%	45.2%
Other operations:										
Aviation services									0.1%	4.4%
Scott Fetzer manufacturing				3.1%	3.3%	2.8%	2.4%	2.4%	5.4%	4.0%
Candy operations				5.0%	4.2%	2.9%	2.7%	3.4%	2.0%	1.8%
Home furnishings				1.4%	1.3%	1.2%	0.8%	1.9%	1.6%	1.7%
Buffalo News				4.2%	4.7%	3.5%	3.1%	3.1%	1.9%	1.7%
Shoe group				1.7%	2.9%	3.4%	5.4%	4.3%	2.7%	1.7%
Jewelry								2.2%	1.1%	0.9%
Finance business					2.1%	1.7%	1.4%	1.4%	1.0%	0.9%
Interest/goodwill/purch. acct.				-14.1%	-13.4%	-6.6%	-6.1%	-7.4%	-8.9%	-9.0%
Other				19.7%	13.6%	7.2%	7.2%	8.2%	2.8%	1.9%
Operating earnings				***61.2%***	***57.6%***	***56.8%***	***58.8%***	***68.0%***	***62.7%***	***66.9%***
Realized gains/losses				37.3%	14.9%	65.0%	-17.2%	22.0%	163.2%	57.3%
Net earnings				***85.3%***	***67.4%***	***81.8%***	***48.0%***	***90.1%***	***163.5%***	***98.5%***
American Express						1.9%	2.4%	12.4%	8.7%	8.3%
Coca Cola				13.6%	13.7%	11.2%	11.3%	8.5%	11.8%	11.2%
McDonald's									2.5%	
Freddie Mac				2.9%	4.8%	4.9%	4.6%	1.6%	5.1%	4.5%
Gillette				4.5%	6.3%	5.2%	5.0%	3.7%	4.8%	4.2%
Washington Post				1.9%	1.8%	1.8%	1.7%	2.2%	1.8%	1.6%
Wells Fargo				-3.3%	2.6%	6.3%	7.1%	8.8%	5.5%	5.3%
GEICO				13.4%	5.6%	9.0%	6.1%	13.4%		
Cap Cities/ABC/Disney				11.8%	11.6%	9.9%	8.3%	9.1%	3.3%	3.4%
Other					3.0%					
Imputed tax				-5.8%	-7.0%	-7.0%	-6.6%	-5.2%	-6.1%	-5.4%
Total "look-through" earnings				***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Source: Company financial information and PaineWebber estimates.

Exhibit 47

BERKSHIRE HATHAWAY
Investments Page 1

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Assets at cost										
Cash	$265.1	$205.1	$247.0	$762.0	$1,192.4	$1,817.6	$273.9	$2,703.8	$1,339.8	$1,002.4
Bonds	$415.3	$1,437.6	$1,126.8	$979.4	$734.0	$1,397.8	$1,805.5	$832.5	$5,558.0	$8,348.7
Preferred	$700.0	$1,358.0	$1,358.0	$1,358.5	$1,368.6	$1,058.0	$745.7	$682.5	$584.3	$764.3
Equities	$1,735.2	$1,814.7	$2,884.7	$3,255.0	$4,080.3	$4,296.1	$5,907.5	$6,069.5	$9,152.0	$9,016.7
Total	$3,115.7	$4,815.4	$5,616.5	$6,354.9	$7,375.3	$8,569.5	$8,732.6	$10,288.3	$16,634.1	$19,132.1
Assets at market										
Cash	$265.1	$205.1	$247.0	$762.0	$1,192.4	$1,817.6	$273.9	$2,703.8	$1,339.8	$1,002.4
Bonds	$564.1	($1,358.0)	$1,188.3	$1,160.7	$824.0	$1,373.8	$1,820.7	$590.2	$5,591.0	$9,018.1
Preferred*	$700.0	$1,358.0	$1,358.0	$1,247.5	$1,344.3	$1,058.0	$699.0	$833.0	$855.9	$1,279.7
Equities	$3,622.9	$5,381.0	$6,479.3	$9,460.5	$11,959.2	$12,516.6	$15,560.9	$22,235.0	$27,750.6	$36,247.7
Total	$5,152.1	$5,586.1	$9,272.6	$12,630.7	$15,319.8	$16,766.0	$18,354.5	$26,362.0	$35,537.3	$47,547.9
Mark to market:										
Bonds	($148.8)	$2,795.6	($61.5)	($181.3)	$90.0	($24.0)	$15.2	($242.3)	$33.0	$669.4
Preferred	$0.0	$0.0	$0.0	$111.0	($24.3)	$0.0	($46.7)	$150.5	$271.6	$1,279.7
Equities	$1,887.7	$3,566.3	$3,594.6	$6,205.5	$7,878.9	$8,220.5	$9,653.4	$16,165.5	$18,598.6	$27,231.0
Total	$1,738.9	$6,361.9	$3,533.1	$6,135.2	$7,944.6	$8,196.5	$9,621.9	$16,073.7	$18,903.2	$28,415.8
% Change at Cost										
Cash	14.3%	-22.6%	20.4%	208.4%	56.5%	52.4%	-84.9%	887.2%	-50.4%	-25.2%
Bonds	-69.7%	246.1%	-21.6%	-13.1%	-25.1%	90.4%	29.2%	-53.9%	567.6%	50.2%
Preferred	0.0%	94.0%	0.0%	0.0%	0.7%	-22.7%	-29.5%	-8.5%	-14.4%	30.8%
Equities	52.4%	48.5%	20.4%	46.0%	26.4%	-64.1%	37.5%	276.4%	357.2%	296.1%
Total	0.4%	54.6%	16.6%	13.1%	16.1%	16.2%	1.9%	17.8%	61.7%	15.0%
% Change at Market										
Cash	14.3%	-22.6%	20.4%	208.4%	56.5%	52.4%	-84.9%	887.2%	-50.4%	-25.2%
Bonds	-62.2%	-340.7%	-187.5%	-2.3%	-29.0%	66.7%	32.5%	-67.6%	847.3%	61.3%
Preferred	0.0%	94.0%	0.0%	-8.1%	7.8%	-21.3%	-33.9%	19.2%	2.7%	49.5%
Equities	117.3%	4.6%	59.0%	12.8%	25.4%	5.3%	24.3%	42.9%	24.8%	30.6%
Total	7.3%	8.4%	66.0%	36.2%	21.3%	9.4%	9.5%	43.6%	34.8%	33.8%
Asset Mix at Cost										
Cash	8.5%	4.3%	4.4%	12.0%	16.2%	21.2%	3.1%	26.3%	0.0%	0.0%
Bonds	13.3%	29.9%	20.1%	15.4%	10.0%	16.3%	20.7%	8.1%	33.4%	43.6%
Preferred	22.5%	28.2%	24.2%	21.4%	18.6%	12.3%	8.5%	6.6%	3.5%	4.0%
Equities	55.7%	37.7%	51.4%	51.2%	55.3%	50.1%	178.2%	216.1%	55.0%	47.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Asset Mix at Market										
Cash	5.1%	3.7%	2.7%	6.0%	7.8%	10.8%	1.5%	10.3%	3.8%	2.1%
Bonds	10.9%	-24.3%	12.8%	9.2%	5.4%	8.2%	9.9%	2.2%	15.7%	19.0%
Preferred	13.6%	24.3%	14.6%	9.9%	8.8%	6.3%	3.8%	3.2%	2.4%	2.7%
Equities	70.3%	96.3%	69.9%	74.9%	78.1%	74.7%	84.8%	84.3%	78.1%	76.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Net investment income**	$231.3	$243.6	$327.0	$331.8	$355.1	$375.4	$419.4	$501.6	$726.2	$882.3
Effective yield	4.6%	4.5%	4.4%	3.0%	2.5%	2.3%	2.4%	2.2%	2.3%	2.1%

* 1994 includes writedown of USAir and Salomon preferred totaling $268M

** 1995 includes equity in earnings of GEICO; 1997 includes catchup preferred dividend of approx. $32M from USAir

Source: Company financial data and PaineWebber estimates.

Exhibit 47 continued

BERKSHIRE HATHAWAY
Investments Page 2 -- Equities

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Significant Disclosed Equities at Cost:										
American Express	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$723.9	$1,392.7	$1,392.7	$1,392.7
Coca Cola	$592.5	$1,023.9	$1,023.9	$1,023.9	$1,023.9	$1,023.9	$1,298.9	$1,298.9	$1,298.9	$1,298.9
Gillette	$0.0	$0.0	$600.0	$600.0	$600.0	$600.0	$600.0	$600.0	$600.0	$600.0
Freddie Mac	$71.7	$71.7	$71.7	N/A	$414.3	$307.5	$270.5	$260.1	$449.7	$329.4
Cap Cities/ABC/Disney	$517.5	$517.5	$517.5	$517.5	$517.5	$345.0	$345.0	$345.0	$1,533.2	$381.2
GEICO	$45.7	$45.7	$45.7	$45.7	$45.7	$45.7	$45.7	$1,175.8	$0.0	$0.0
McDonald's	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$1,265.3	$0.0
Washington Post	$9.7	$9.7	$9.7	$9.7	$9.7	$9.7	$9.7	$0.0	$0.0	$10.6
Wells Fargo	$0.0	$0.0	$289.4	N/A	$381.0	$423.7	$423.7	$423.7	$553.9	$412.6
All Others	$288.0	$217.8	$398.4	$1,067.8	$1,893.2	$1,848.1	$1,865.7	$1,680.0	$3,323.6	$2,781.5
Total	$569.8	$1,814.7	$0.0	$3,255.0	$4,080.3	$4,296.1	$5,583.1	$7,176.2	$9,152.0	$7,206.9
Significant Disclosed Equities at Market:										
American Express	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$818.9	$2,046.3	$2,794.4	$4,414.0
Coca Cola	$632.4	$1,803.8	$2,171.6	$3,747.7	$3,911.1	$4,168.0	$5,150.0	$7,425.0	$10,525.0	$13,338.0
Gillette	$0.0	$0.0	$720.0	$1,347.0	$1,365.0	$1,431.0	$1,797.0	$2,502.0	$3,732.0	$4,821.0
Freddie Mac	$121.2	$161.1	$117.0	N/A	$783.5	$681.0	$644.4	$1,044.0	$1,772.8	$2,683.0
Cap Cities/ABC/Disney	$1,086.8	$1,692.4	$1,377.4	$1,300.5	$1,523.3	$1,239.0	$1,705.0	$2,467.5	$1,716.8	$2,134.8
GEICO	$849.4	$1,044.6	$1,110.6	$1,363.2	$2,226.3	$1,759.6	$1,678.3	$1,175.8	$0.0	$0.0
McDonald's	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$1,368.4	$0.0
Washington Post	$364.1	$486.4	$342.1	$336.1	$397.0	$440.1	$419.0	$0.0	$0.0	$840.6
Wells Fargo	$0.0	$0.0	$289.4	N/A	$485.6	$878.6	$984.7	$1,466.9	$1,966.9	$2,270.9
All Others	$569.0	$353.8	$468.3	$1,702.2	$1,267.5	$1,942.8	$2,039.2	$2,890.1	$3,874.3	$5,745.8
Total	$3,622.9	$5,381.0	$6,479.2	$9,460.5	$11,959.2	$12,540.2	$15,236.5	$21,017.6	$27,750.6	$36,248.0
Mark to Market:										
American Express	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$95.0	$653.6	$1,401.7	$3,021.3
Coca Cola	$39.9	$779.9	$1,147.6	$2,723.8	$2,887.2	$3,144.1	$3,851.1	$6,126.1	$9,226.1	$12,039.1
Gillette	$0.0	$0.0	$120.0	$747.0	$765.0	$831.0	$1,197.0	$1,902.0	$3,132.0	$4,221.0
Freddie Mac	$49.5	$89.4	$45.3	$0.0	$369.3	$373.5	$374.0	$783.9	$1,323.1	$2,353.6
Cap Cities/ABC/Disney	$569.3	$1,174.9	$859.9	$783.0	$1,005.8	$894.0	$1,360.0	$2,122.5	$183.6	$1,753.6
GEICO	$803.7	$998.9	$1,064.8	$1,317.4	$2,180.5	$1,713.9	$1,632.5	$0.0	$0.0	$0.0
McDonald's	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$103.1	$0.0
Washington Post	$354.4	$476.6	$332.4	$326.3	$387.2	$430.4	$409.3	$0.0	$0.0	$830.0
Wells Fargo	$0.0	$0.0	($0.1)	$0.0	$104.6	$454.9	$561.0	$1,043.2	$1,413.0	$1,858.3
All Others	$281.0	$136.0	$69.9	$634.3	($625.7)	$94.8	$173.5	$1,210.1	$550.7	$2,964.3
Total	$3,053.2	$3,566.3	$6,479.2	$6,205.5	$7,878.9	$8,244.1	$9,653.4	$13,841.4	$18,598.6	$29,041.1
% of Total Investments:										
American Express	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	7.8%	7.9%	9.3%
Coca Cola	12.3%	32.3%	23.4%	29.7%	25.5%	24.9%	28.1%	28.2%	29.6%	28.1%
Gillette	0.0%	0.0%	7.8%	10.7%	8.9%	8.5%	9.8%	9.5%	10.5%	10.1%
Freddie Mac	2.4%	2.9%	1.3%	0.0%	5.1%	4.1%	3.5%	4.0%	5.0%	5.6%
Cap Cities/ABC/Disney	21.1%	30.3%	14.9%	10.3%	9.9%	28.8%	28.9%	9.4%	4.8%	4.5%
GEICO	16.5%	18.7%	12.0%	10.8%	14.5%	41.0%	28.4%	4.5%	N/A	N/A
McDonald's	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%
Washington Post	7.1%	8.7%	3.7%	2.7%	2.6%	2.6%	2.3%	0.0%	0.0%	1.8%
Wells Fargo	0.0%	0.0%	3.1%	0.0%	3.2%	5.2%	5.4%	5.6%	5.5%	4.8%
All Others	11.0%	6.3%	5.1%	13.5%	8.3%	11.6%	11.1%	11.0%	10.9%	12.1%
Total	70.3%	96.3%	69.9%	74.9%	78.1%	74.8%	83.0%	79.7%	78.1%	76.2%

Source: Company financial information and PaineWebber estimates.

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