

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1989 was \$1.515 billion, or 44.4%. Over the last 25 years (that is, since present management took over) our per-share book value has grown from \$19.46 to \$4,296.01, or at a rate of 23.8% compounded annually.

What counts, however, is intrinsic value - the figure indicating what all of our constituent businesses are rationally worth. With perfect foresight, this number can be calculated by taking all future cash flows of a business - in and out - and discounting them at prevailing interest rates. So valued, all businesses, from manufacturers of buggy whips to operators of cellular phones, become economic equals.

Back when Berkshire's book value was \$19.46, intrinsic value was somewhat less because the book value was entirely tied up in a textile business not worth the figure at which it was carried. Now most of our businesses are worth far more than their carrying values. This agreeable evolution from a discount to a premium means that Berkshire's intrinsic business value has compounded at a rate that somewhat exceeds our 23.8% annual growth in book value.

The rear-view mirror is one thing; the windshield is another. A large portion of our book value is represented by equity securities that, with minor exceptions, are carried on our balance sheet at current market values. At yearend these securities were valued at higher prices, relative to their own intrinsic business values, than has been the case in the past. One reason is the buoyant 1989 stock market. More important, the virtues of these businesses have been widely recognized. Whereas once their stock prices were inappropriately low, they are not now.

We will keep most of our major holdings, regardless of how they are priced relative to intrinsic business value. This 'til-death-do-us-part attitude, combined with the full prices these holdings command, means that they cannot be expected to push up Berkshire's value in the future as sharply as in the past. In other words, our performance to date has benefited from a double-dip: (1) the exceptional gains in intrinsic value that our portfolio companies have achieved; (2) the additional bonus we realized as the market appropriately "corrected" the prices of these companies, raising their valuations in relation to those of the average business. We will continue to benefit from good gains in business value that we feel confident our portfolio companies will make. But our "catch-up" rewards have been realized, which means we'll have to settle for a single-dip in the future.

We face another obstacle: In a finite world, high growth rates must self-destruct. If the base from which the growth is taking place is tiny, this law may not operate for a time. But when the base balloons, the party ends: A high growth rate eventually forges its own anchor.

Carl Sagan has entertainingly described this phenomenon, musing about the destiny of bacteria that reproduce by dividing into two every 15 minutes. Says Sagan: "That means four doublings an hour, and 96 doublings a day. Although a bacterium weighs only about a trillionth of a gram, its descendants, after a day of wild asexual abandon, will collectively weigh as much as a mountain...in two days, more than the sun - and before very long, everything in the universe will be made of bacteria." Not to worry, says Sagan: Some obstacle always impedes this kind of

exponential growth. "The bugs run out of food, or they poison each other, or they are shy about reproducing in public."

Even on bad days, Charlie Munger (Berkshire's Vice Chairman and my partner) and I do not think of Berkshire as a bacterium. Nor, to our unending sorrow, have we found a way to double its net worth every 15 minutes. Furthermore, we are not the least bit shy about reproducing - financially - in public. Nevertheless, Sagan's observations apply. From Berkshire's present base of \$4.9 billion in net worth, we will find it much more difficult to average 15% annual growth in book value than we did to average 23.8% from the \$22 million we began with.

Taxes

Our 1989 gain of \$1.5 billion was achieved after we took a charge of about \$712 million for income taxes. In addition, Berkshire's share of the income taxes paid by its five major investees totaled about \$175 million.

Of this year's tax charge, about \$172 million will be paid currently; the remainder, \$540 million, is deferred. Almost all of the deferred portion relates to the 1989 increase in unrealized profits in our common stock holdings. Against this increase, we have reserved a 34% tax.

We also carry reserves at that rate against all unrealized profits generated in 1987 and 1988. But, as we explained last year, the unrealized gains we amassed before 1987 - about \$1.2 billion - carry reserves booked at the 28% tax rate that then prevailed.

A new accounting rule is likely to be adopted that will require companies to reserve against all gains at the current tax rate, whatever it may be. With the rate at 34%, such a rule would increase our deferred tax liability, and decrease our net worth, by about \$71 million - the result of raising the reserve on our pre-1987 gain by six percentage points. Because the proposed rule has sparked widespread controversy and its final form is unclear, we have not yet made this change.

As you can see from our balance sheet on page 27, we would owe taxes of more than \$1.1 billion were we to sell all of our securities at year-end market values. Is this \$1.1 billion liability equal, or even similar, to a \$1.1 billion liability payable to a trade creditor 15 days after the end of the year? Obviously not - despite the fact that both items have exactly the same effect on audited net worth, reducing it by \$1.1 billion.

On the other hand, is this liability for deferred taxes a meaningless accounting fiction because its payment can be triggered only by the sale of stocks that, in very large part, we have no intention of selling? Again, the answer is no.

In economic terms, the liability resembles an interest-free loan from the U.S. Treasury that comes due only at our election (unless, of course, Congress moves to tax gains before they are realized). This "loan" is peculiar in other respects as well: It can be used only to finance the ownership of the particular, appreciated stocks and it fluctuates in size - daily as market prices change and periodically if tax rates change. In effect, this deferred tax liability is equivalent to a very large transfer tax that is payable only if we elect to move from one asset to another. Indeed, we sold some relatively small holdings in 1989, incurring about \$76 million of "transfer" tax on \$224 million of gains.

Because of the way the tax law works, the Rip Van Winkle style of investing that we favor - if successful - has an

important mathematical edge over a more frenzied approach. Let's look at an extreme comparison.

Imagine that Berkshire had only \$1, which we put in a security that doubled by yearend and was then sold. Imagine further that we used the after-tax proceeds to repeat this process in each of the next 19 years, scoring a double each time. At the end of the 20 years, the 34% capital gains tax that we would have paid on the profits from each sale would have delivered about \$13,000 to the government and we would be left with about \$25,250. Not bad. If, however, we made a single fantastic investment that *itself* doubled 20 times during the 20 years, our dollar would grow to \$1,048,576. Were we then to cash out, we would pay a 34% tax of roughly \$356,500 and be left with about \$692,000.

The sole reason for this staggering difference in results would be the timing of tax payments. Interestingly, the government would gain from Scenario 2 in exactly the same 27:1 ratio as we - taking in taxes of \$356,500 vs. \$13,000 - though, admittedly, it would have to wait for its money.

We have not, we should stress, adopted our strategy favoring long-term investment commitments because of these mathematics. Indeed, it is possible we could earn greater after-tax returns by moving rather frequently from one investment to another. Many years ago, that's exactly what Charlie and I did.

Now we would rather stay put, even if that means slightly lower returns. Our reason is simple: We have found splendid business relationships to be so rare and so enjoyable that we want to retain all we develop. This decision is particularly easy for us because we feel that these relationships will produce good - though perhaps not optimal - financial results. Considering that, we think it makes little sense for us to give up time with people we know to be interesting and admirable for time with others we do not know and who are likely to have human qualities far closer to average. That would be akin to marrying for money - a mistake under most circumstances, insanity if one is already rich.

Sources of Reported Earnings

The table below shows the major sources of Berkshire's reported earnings. In this presentation, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. I've explained in past reports why this form of presentation seems to us to be more useful to investors and managers than one utilizing generally accepted accounting principles (GAAP), which require purchase-price adjustments to be made on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Further information about these businesses is given in the Business Segment section on pages 37-39, and in the Management's Discussion section on pages 40-44. In these sections you also will find our segment earnings reported on a GAAP basis. For information on Wesco's businesses, I urge you to read Charlie Munger's letter, which starts on page 54. In addition, we have reprinted on page 71 Charlie's May 30, 1989 letter to the U. S. League of Savings Institutions, which conveyed our disgust with its policies and our consequent decision to resign.

(000s omitted)

	<i>Pre-Tax Earnings</i>		<i>Berkshire's Share of Net Earnings (after taxes and minority interests)</i>	
	<i>1989</i>	<i>1988</i>	<i>1989</i>	<i>1988</i>
Operating Earnings:				
Insurance Group:				
Underwriting	\$(24,400)	\$(11,081)	\$(12,259)	\$ (1,045)
Net Investment Income ...	243,599	231,250	213,642	197,779
Buffalo News	46,047	42,429	27,771	25,462
Fechheimer	12,621	14,152	6,789	7,720
Kirby	26,114	26,891	16,803	17,842
Nebraska Furniture Mart ...	17,070	18,439	8,441	9,099
Scott Fetzer				
Manufacturing Group	33,165	28,542	19,996	17,640
See's Candies	34,235	32,473	20,626	19,671
Wesco - other than Insurance	13,008	16,133	9,810	10,650
World Book	25,583	27,890	16,372	18,021
Amortization of Goodwill ..	(3,387)	(2,806)	(3,372)	(2,806)
Other Purchase-Price				
Accounting Charges	(5,740)	(6,342)	(6,668)	(7,340)
Interest Expense*	(42,389)	(35,613)	(27,098)	(23,212)
Shareholder-Designated				
Contributions	(5,867)	(4,966)	(3,814)	(3,217)
Other	23,755	41,059	12,863	27,177
Operating Earnings	393,414	418,450	299,902	313,441
Sales of Securities	223,810	131,671	147,575	85,829
Total Earnings - All Entities	\$617,224	\$550,121	\$447,477	\$399,270

**Excludes interest expense of Scott Fetzer Financial Group and Mutual Savings & Loan.*

We refer you also to pages 45-51, where we have rearranged Berkshire's financial data into four segments. These correspond to the way Charlie and I think about the business and should help you calculate Berkshire's intrinsic value. Shown on these pages are balance sheets and earnings statements for: (1) our insurance operations, with their major investment positions itemized; (2) our manufacturing, publishing and retailing businesses, leaving aside certain non-operating assets and purchase-price accounting adjustments; (3) our subsidiaries engaged in finance-type operations, which are Mutual Savings and Scott Fetzer Financial; and (4) an all-other category that includes the non-operating assets (primarily marketable securities) held by the companies in segment (2), all purchase price accounting adjustments, and various assets and debts of the Wesco and Berkshire parent companies.

If you combine the earnings and net worths of these four segments, you will derive totals matching those shown on our GAAP statements. However, I want to emphasize that this four-category presentation does not fall within the purview of our auditors, who in no way bless it.

In addition to our reported earnings, we also benefit from significant earnings of investees that standard accounting rules do not permit us to report. On page 15, we list five major investees from which we received dividends in 1989 of about \$45 million, after taxes. However, our share of the *retained* earnings of these investees totaled about \$212 million last year, not counting large capital gains realized by GEICO and Coca-Cola. If this \$212 million had been distributed to us, our own operating earnings, after the payment of additional taxes, would have been

close to \$500 million rather than the \$300 million shown in the table.

The question you must decide is whether these undistributed earnings are as valuable to us as those we report. We believe they are - and even think they may be more valuable. The reason for this a-bird-in-the-bush-may-be-worth-two-in-the-hand conclusion is that earnings retained by these investees will be deployed by talented, owner-oriented managers who sometimes have better uses for these funds in their own businesses than we would have in ours. I would not make such a generous assessment of most managements, but it is appropriate in these cases.

In our view, Berkshire's fundamental earning power is best measured by a "look-through" approach, in which we append our share of the operating earnings retained by our investees to our own reported operating earnings, excluding capital gains in both instances. For our intrinsic business value to grow at an average of 15% per year, our "look-through" earnings must grow at about the same pace. We'll need plenty of help from our present investees, and also need to add a new one from time to time, in order to reach this 15% goal.

Non-Insurance Operations

In the past, we have labeled our major manufacturing, publishing and retail operations "The Sainted Seven." With our acquisition of Borsheim's early in 1989, the challenge was to find a new title both alliterative and appropriate. We failed: Let's call the group "The Sainted Seven Plus One."

This divine assemblage - Borsheim's, The Buffalo News, Fechheimer Bros., Kirby, Nebraska Furniture Mart, Scott Fetzer Manufacturing Group, See's Candies, World Book - is a collection of businesses with economic characteristics that range from good to superb. Its managers range from superb to superb.

Most of these managers have no need to work for a living; they show up at the ballpark because they like to hit home runs. And that's exactly what they do. Their combined financial statements (including those of some smaller operations), shown on page 49, illustrate just how outstanding their performance is. On an historical accounting basis, after-tax earnings of these operations were 57% on average equity capital. Moreover, this return was achieved with no net leverage: Cash equivalents have matched funded debt. When I call off the names of our managers - the Blumkin, Friedman and Heldman families, Chuck Huggins, Stan Lipsey, and Ralph Schey - I feel the same glow that Miller Huggins must have experienced when he announced the lineup of his 1927 New York Yankees.

Let's take a look, business by business:

- o In its first year with Berkshire, Borsheim's met all expectations. Sales rose significantly and are now considerably better than twice what they were four years ago when the company moved to its present location. In the six years prior to the move, sales had also doubled. Ike Friedman, Borsheim's managing genius - and I mean that - has only one speed: fast-forward.

If you haven't been there, you've never seen a jewelry store like Borsheim's. Because of the huge volume it does at one location, the store can maintain an enormous selection across all price ranges. For the same reason, it can hold its expense ratio to about one-third that prevailing at jewelry stores offering comparable merchandise. The store's tight control of expenses, accompanied by its unusual buying power, enable it to offer

prices far lower than those of other jewelers. These prices, in turn, generate even more volume, and so the circle goes 'round and 'round. The end result is store traffic as high as 4,000 people on seasonally-busy days.

Ike Friedman is not only a superb businessman and a great showman but also a man of integrity. We bought the business without an audit, and all of our surprises have been on the plus side. "If you don't know jewelry, know your jeweler" makes sense whether you are buying the whole business or a tiny diamond.

A story will illustrate why I enjoy Ike so much: Every two years I'm part of an informal group that gathers to have fun and explore a few subjects. Last September, meeting at Bishop's Lodge in Santa Fe, we asked Ike, his wife Roz, and his son Alan to come by and educate us on jewels and the jewelry business.

Ike decided to dazzle the group, so he brought from Omaha about \$20 million of particularly fancy merchandise. I was somewhat apprehensive - Bishop's Lodge is no Fort Knox - and I mentioned my concern to Ike at our opening party the evening before his presentation. Ike took me aside. "See that safe?" he said. "This afternoon we changed the combination and now even the hotel management doesn't know what it is." I breathed easier. Ike went on: "See those two big fellows with guns on their hips? They'll be guarding the safe all night." I now was ready to rejoin the party. But Ike leaned closer: "And besides, Warren," he confided, "the jewels aren't in the safe."

How can we miss with a fellow like that - particularly when he comes equipped with a talented and energetic family, Alan, Marvin Cohn, and Don Yale.

o At See's Candies we had an 8% increase in pounds sold, even though 1988 was itself a record year. Included in the 1989 performance were excellent same-store poundage gains, our first in many years.

Advertising played an important role in this outstanding performance. We increased total advertising expenditures from \$4 million to \$5 million and also got copy from our agency, Hal Riney & Partners, Inc., that was 100% on the money in conveying the qualities that make See's special.

In our media businesses, such as the Buffalo News, we sell advertising. In other businesses, such as See's, we are buyers. When we buy, we practice exactly what we preach when we sell. At See's, we more than tripled our expenditures on newspaper advertising last year, to the highest percentage of sales that I can remember. The payoff was terrific, and we thank both Hal Riney and the power of well-directed newspaper advertising for this result.

See's splendid performances have become routine. But there is nothing routine about the management of Chuck Huggins: His daily involvement with all aspects of production and sales imparts a quality-and-service message to the thousands of employees we need to produce and distribute over 27 million pounds of candy annually. In a company with 225 shops and a massive mail order and phone business, it is no small trick to run things so that virtually every customer leaves happy. Chuck makes it look easy.

o The Nebraska Furniture Mart had record sales and excellent earnings in 1989, but there was one sad note. Mrs. B - Rose Blumkin, who started the company 52 years ago with \$500 - quit in May, after disagreeing with other members of the Blumkin family/management about the remodeling and operation of the carpet department.

Mrs. B probably has made more smart business decisions than any living American, but in this particular case I believe the other members of the family were entirely correct: Over the past three years, while the store's other departments increased sales by 24%, carpet sales declined by 17% (but not because of any lack of sales ability by Mrs. B, who has always personally sold far more merchandise than any other salesperson in the store).

You will be pleased to know that Mrs. B continues to make Horatio Alger's heroes look like victims of tired blood. At age 96 she has started a new business selling - what else? - carpet and furniture. And as always, she works seven days a week.

At the Mart Louie, Ron, and Irv Blumkin continue to propel what is by far the largest and most successful home furnishings store in the country. They are outstanding merchants, outstanding managers, and a joy to be associated with. One reading on their acumen: In the fourth quarter of 1989, the carpet department registered a 75.3% consumer share in the Omaha market, up from 67.7% a year earlier and over six times that of its nearest competitor.

NFM and Borsheim's follow precisely the same formula for success: (1) unparalleled depth and breadth of merchandise at one location; (2) the lowest operating costs in the business; (3) the shrewdest of buying, made possible in part by the huge volumes purchased; (4) gross margins, and therefore prices, far below competitors'; and (5) friendly personalized service with family members on hand at all times.

Another plug for newspapers: NFM increased its lineage in the local paper by over 20% in 1989 - off a record 1988 - and remains the paper's largest ROP advertiser by far. (ROP advertising is the kind printed in the paper, as opposed to that in preprinted inserts.) To my knowledge, Omaha is the only city in which a home furnishings store is the advertising leader. Many retailers cut space purchases in 1989; our experience at See's and NFM would indicate they made a major mistake.

o The Buffalo News continued to star in 1989 in three important ways: First, among major metropolitan papers, both daily and Sunday, the News is number one in household penetration - the percentage of local households that purchase it each day. Second, in "news hole" - the portion of the paper devoted to news - the paper stood at 50.1% in 1989 vs. 49.5% in 1988, a level again making it more news-rich than any comparable American paper. Third, in a year that saw profits slip at many major papers, the News set its seventh consecutive profit record.

To some extent, these three factors are related, though obviously a high-percentage news hole, by itself, reduces profits significantly. A large and intelligently-utilized news hole, however, attracts a wide spectrum of readers and thereby boosts penetration. High penetration, in turn, makes a newspaper particularly valuable to retailers since it allows them to talk to the entire community through a single "megaphone." A low-penetration paper is a far less compelling purchase for many advertisers and will eventually suffer in both ad rates and profits.

It should be emphasized that our excellent penetration is neither an accident nor automatic. The population of Erie County, home territory of the News, has been falling - from 1,113,000 in 1970 to 1,015,000 in 1980 to an estimated 966,000 in 1988. Circulation figures tell a different story. In 1975, shortly before we started our Sunday edition, the Courier-Express, a long-established Buffalo paper, was selling 207,500 Sunday copies in Erie County. Last year - with population at least 5% lower -

the News sold an average of 292,700 copies. I believe that in no other major Sunday market has there been anything close to that increase in penetration.

When this kind of gain is made - and when a paper attains an unequaled degree of acceptance in its home town - someone is doing something right. In this case major credit clearly belongs to Murray Light, our long-time editor who daily creates an informative, useful, and interesting product. Credit should go also to the Circulation and Production Departments: A paper that is frequently late, because of production problems or distribution weaknesses, will lose customers, no matter how strong its editorial content.

Stan Lipsey, publisher of the News, has produced profits fully up to the strength of our product. I believe Stan's managerial skills deliver at least five extra percentage points in profit margin compared to the earnings that would be achieved by an average manager given the same circumstances. That is an amazing performance, and one that could only be produced by a talented manager who knows - and cares - about every nut and bolt of the business.

Stan's knowledge and talents, it should be emphasized, extend to the editorial product. His early years in the business were spent on the news side and he played a key role in developing and editing a series of stories that in 1972 won a Pulitzer Prize for the Sun Newspaper of Omaha. Stan and I have worked together for over 20 years, through some bad times as well as good, and I could not ask for a better partner.

o At Fechheimer, the Heldman clan - Bob, George, Gary, Roger and Fred - continue their extraordinary performance. Profits in 1989 were down somewhat because of problems the business experienced in integrating a major 1988 acquisition. These problems will be ironed out in time. Meanwhile, return on invested capital at Fechheimer remains splendid.

Like all of our managers, the Heldmans have an exceptional command of the details of their business. At last year's annual meeting I mentioned that when a prisoner enters San Quentin, Bob and George probably know his shirt size. That's only a slight exaggeration: No matter what area of the country is being discussed, they know exactly what is going on with major customers and with the competition.

Though we purchased Fechheimer four years ago, Charlie and I have never visited any of its plants or the home office in Cincinnati. We're much like the lonesome Maytag repairman: The Heldman managerial product is so good that a service call is never needed.

o Ralph Schey continues to do a superb job in managing our largest group - World Book, Kirby, and the Scott Fetzer Manufacturing Companies. Aggregate earnings of these businesses have increased every year since our purchase and returns on invested capital continue to be exceptional. Ralph is running an enterprise large enough, were it standing alone, to be on the Fortune 500. And he's running it in a fashion that would put him high in the top decile, measured by return on equity.

For some years, World Book has operated out of a single location in Chicago's Merchandise Mart. Anticipating the imminent expiration of its lease, the business is now decentralizing into four locations. The expenses of this transition are significant; nevertheless profits in 1989 held up well. It will be another year before costs of the move are fully behind us.

Kirby's business was particularly strong last year,

featuring large gains in export sales. International business has more than doubled in the last two years and quintupled in the past four; its share of unit sales has risen from 5% to 20%. Our largest capital expenditures in 1989 were at Kirby, in preparation for a major model change in 1990.

Ralph's operations contribute about 40% of the total earnings of the non-insurance group whose results are shown on page 49. When we bought Scott Fetzer at the start of 1986, our acquisition of Ralph as a manager was fully as important as our acquisition of the businesses. In addition to generating extraordinary earnings, Ralph also manages capital extremely well. These abilities have produced funds for Berkshire that, in turn, have allowed us to make many other profitable commitments.

And that completes our answer to the 1927 Yankees.

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the property-casualty insurance industry:

	<i>Yearly Change in Premiums Written (%)</i>	<i>Statutory Combined Ratio After Policyholder Dividends</i>	<i>Yearly Change in Incurred Losses (%)</i>	<i>Inflation Rate Measured by GNP Deflator (%)</i>
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1981	3.8	106.0	6.5	9.6
1982	3.7	109.6	8.4	6.5
1983	5.0	112.0	6.8	3.8
1984	8.5	118.0	16.9	3.8
1985	22.1	116.3	16.1	3.0
1986	22.2	108.0	13.5	2.6
1987	9.4	104.6	7.8	3.1
1988	4.4	105.4	5.5	3.3
1989 (Est.)	2.1	110.4	8.7	4.2

Source: A.M. Best Co.

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. When the investment income that an insurer earns from holding policyholders' funds ("the float") is taken into account, a combined ratio in the 107-111 range typically produces an overall breakeven result, exclusive of earnings on the funds provided by shareholders.

For the reasons laid out in previous reports, we expect the industry's incurred losses to grow by about 10% annually, even in years when general inflation runs considerably lower. (Actually, over the last 25 years, incurred losses have grown at a still faster rate, 11%.) If premium growth meanwhile materially lags that 10% rate, underwriting losses will mount, though the industry's tendency to underreserve when business turns bad may obscure their size for a time.

Last year we said the climb in the combined ratio was "almost certain to continue - and probably will accelerate - for at least two more years." This year we will not predict acceleration, but otherwise must repeat last year's forecast. Premium growth is running far below the 10% required annually. Remember also that a 10% rate would only stabilize the combined ratio, not bring it down.

The increase in the combined ratio in 1989 was a little more than we had expected because catastrophes (led by Hurricane Hugo) were unusually severe. These abnormalities probably accounted for about two points of the increase. If 1990 is more of a "normal" year, the combined ratio should rise only minimally from the catastrophe-swollen base of 1989. In 1991, though, the ratio is apt to climb by a greater degree.

Commentators frequently discuss the "underwriting cycle" and speculate about its next turn. If that term is used to connote rhythmic qualities, it is in our view a misnomer that leads to faulty thinking about the industry's fundamental economics.

The term was appropriate some decades ago when the industry and regulators cooperated to conduct the business in cartel fashion. At that time, the combined ratio fluctuated rhythmically for two reasons, both related to lags. First, data from the past were analyzed and then used to set new "corrected" rates, which were subsequently put into effect by virtually all insurers. Second, the fact that almost all policies were then issued for a one-to three-year term - which meant that it took a considerable time for mispriced policies to expire - delayed the impact of new rates on revenues. These two lagged responses made combined ratios behave much like alternating current. Meanwhile, the absence of significant price competition guaranteed that industry profits, averaged out over the cycle, would be satisfactory.

The cartel period is long gone. Now the industry has hundreds of participants selling a commodity-like product at independently-established prices. Such a configuration - whether the product being sold is steel or insurance policies - is certain to cause subnormal profitability in all circumstances but one: a shortage of usable capacity. Just how often these periods occur and how long they last determines the average profitability of the industry in question.

In most industries, capacity is described in physical terms. In the insurance world, however, capacity is customarily described in financial terms; that is, it's considered appropriate for a company to write no more than X dollars of business if it has Y dollars of net worth. In practice, however, constraints of this sort have proven ineffective. Regulators, insurance brokers, and customers are all slow to discipline companies that strain their resources. They also acquiesce when companies grossly overstate their true capital. Hence, a company can write a great deal of business with very little capital if it is so inclined. At bottom, therefore, the amount of industry capacity at any particular moment primarily depends on the mental state of insurance managers.

All this understood, it is not very difficult to prognosticate the industry's profits. Good profits will be realized only when there is a shortage of capacity. Shortages will occur only when insurers are frightened. That happens rarely - and most assuredly is not happening now.

Some analysts have argued that the more onerous taxes recently imposed on the insurance industry and 1989's catastrophes - Hurricane Hugo and the California earthquake - will cause prices to strengthen significantly. We disagree. These adversities have not destroyed the eagerness of insurers to write business at present prices. Therefore, premium volume won't grow by 10% in 1990, which means the negative underwriting trend will not reverse.

The industry will meantime say it needs higher prices to achieve profitability matching that of the average American business. Of course it does. So does the steel business. But

needs and desires have nothing to do with the long-term profitability of industries. Instead, economic fundamentals determine the outcome. Insurance profitability will improve only when virtually all insurers are turning away business *despite* higher prices. And we're a long way from that point.

Berkshire's premium volume may drop to \$150 million or so in 1990 (from a high of \$1 billion in 1986), partly because our traditional business continues to shrink and partly because the contract under which we received 7% of the business of Fireman's Fund expired last August. Whatever the size of the drop, it will not disturb us. We have no interest in writing insurance that carries a mathematical expectation of loss; we experience enough disappointments doing transactions we believe to carry an expectation of profit.

However, our appetite for appropriately-priced business is ample, as one tale from 1989 will tell. It concerns "CAT covers," which are reinsurance contracts that primary insurance companies (and also reinsurers themselves) buy to protect themselves against a single catastrophe, such as a tornado or hurricane, that produces losses from a large number of policies. In these contracts, the primary insurer might retain the loss from a single event up to a maximum of, say, \$10 million, buying various layers of reinsurance above that level. When losses exceed the retained amount, the reinsurer typically pays 95% of the excess up to its contractual limit, with the primary insurer paying the remainder. (By requiring the primary insurer to keep 5% of each layer, the reinsurer leaves him with a financial stake in each loss settlement and guards against his throwing away the reinsurer's money.)

CAT covers are usually one-year policies that also provide for one automatic reinstatement, which requires a primary insurer whose coverage has been exhausted by a catastrophe to buy a second cover for the balance of the year in question by paying another premium. This provision protects the primary company from being "bare" for even a brief period after a first catastrophic event. The duration of "an event" is usually limited by contract to any span of 72 hours designated by the primary company. Under this definition, a wide-spread storm, causing damage for three days, will be classified as a single event if it arises from a single climatic cause. If the storm lasts four days, however, the primary company will file a claim carving out the 72 consecutive hours during which it suffered the greatest damage. Losses that occurred outside that period will be treated as arising from a separate event.

In 1989, two unusual things happened. First, Hurricane Hugo generated \$4 billion or more of insured loss, at a pace, however, that caused the vast damage in the Carolinas to occur slightly more than 72 hours after the equally severe damage in the Caribbean. Second, the California earthquake hit within weeks, causing insured damage that was difficult to estimate, even well after the event. Slammed by these two - or possibly three - major catastrophes, some primary insurers, and also many reinsurers that had themselves bought CAT protection, either used up their automatic second cover or became uncertain as to whether they had done so.

At that point sellers of CAT policies had lost a huge amount of money - perhaps twice because of the reinstatements - and not taken in much in premiums. Depending upon many variables, a CAT premium might generally have run 3% to 15% of the amount of protection purchased. For some years, we've thought premiums of that kind inadequate and have stayed away from the business.

But because the 1989 disasters left many insurers either actually or possibly bare, and also left most CAT writers licking

their wounds, there was an immediate shortage after the earthquake of much-needed catastrophe coverage. Prices instantly became attractive, particularly for the reinsurance that CAT writers themselves buy. Just as instantly, Berkshire Hathaway offered to write up to \$250 million of catastrophe coverage, advertising that proposition in trade publications. Though we did not write all the business we sought, we did in a busy ten days book a substantial amount.

Our willingness to put such a huge sum on the line for a loss that could occur tomorrow sets us apart from any reinsurer in the world. There are, of course, companies that sometimes write \$250 million or even far more of catastrophe coverage. But they do so only when they can, in turn, reinsure a large percentage of the business with other companies. When they can't "lay off" in size, they disappear from the market.

Berkshire's policy, conversely, is to retain the business we write rather than lay it off. When rates carry an expectation of profit, we want to assume as much risk as is prudent. And in our case, that's a lot.

We will accept more reinsurance risk for our own account than any other company because of two factors: (1) by the standards of regulatory accounting, we have a net worth in our insurance companies of about \$6 billion - the second highest amount in the United States; and (2) we simply don't care what earnings we report quarterly, or even annually, just as long as the decisions leading to those earnings (or losses) were reached intelligently.

Obviously, if we write \$250 million of catastrophe coverage and retain it all ourselves, there is some probability that we will lose the full \$250 million in a single quarter. That probability is low, but it is not zero. If we had a loss of that magnitude, our after-tax cost would be about \$165 million. Though that is far more than Berkshire normally earns in a quarter, the damage would be a blow only to our pride, not to our well-being.

This posture is one few insurance managements will assume. Typically, they are willing to write scads of business on terms that almost guarantee them mediocre returns on equity. But they do not want to expose themselves to an embarrassing single-quarter loss, even if the managerial strategy that causes the loss promises, over time, to produce superior results. I can understand their thinking: What is best for their owners is not necessarily best for the managers. Fortunately Charlie and I have both total job security and financial interests that are identical with those of our shareholders. We are willing to *look* foolish as long as we don't feel we have *acted* foolishly.

Our method of operation, incidentally, makes us a stabilizing force in the industry. We add huge capacity when capacity is short and we become less competitive only when capacity is abundant. Of course, we don't follow this policy in the interest of stabilization - we follow it because we believe it to be the most sensible and profitable course of action. Nevertheless, our behavior steadies the market. In this case, Adam Smith's invisible hand works as advertised.

Currently, we hold an exceptional amount of float compared to premium volume. This circumstance should produce quite favorable insurance results for us during the next few years as it did in 1989. Our underwriting losses should be tolerable and our investment income from policyholder funds large. This pleasant situation, however, will gradually deteriorate as our float runs off.

At some point, however, there will be an opportunity for us

to write large amounts of profitable business. Mike Goldberg and his management team of Rod Eldred, Dinos Iordanou, Ajit Jain, Phil Urban, and Don Wurster continue to position us well for this eventuality.

Marketable Securities

In selecting marketable securities for our insurance companies, we generally choose among five major categories: (1) long-term common stock investments, (2) medium-term fixed income securities, (3) long-term fixed income securities, (4) short-term cash equivalents, and (5) short-term arbitrage commitments.

We have no particular bias when it comes to choosing from these categories; we just continuously search among them for the highest after-tax returns as measured by "mathematical expectation," limiting ourselves always to investment alternatives we think we understand. Our criteria have nothing to do with maximizing immediately reportable earnings; our goal, rather, is to maximize eventual net worth.

Below we list our common stock holdings having a value of over \$100 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	12/31/89	
		Cost	Market
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		(000s omitted)	
3,000,000	Capital Cities/ABC, Inc.	\$ 517,500	\$1,692,375
23,350,000	The Coca-Cola Co.	1,023,920	1,803,787
2,400,000	Federal Home Loan Mortgage Corp.	71,729	161,100
6,850,000	GEICO Corp.	45,713	1,044,625
1,727,765	The Washington Post Company	9,731	486,366

This list of companies is the same as last year's and in only one case has the number of shares changed: Our holdings of Coca-Cola increased from 14,172,500 shares at the end of 1988 to 23,350,000.

This Coca-Cola investment provides yet another example of the incredible speed with which your Chairman responds to investment opportunities, no matter how obscure or well-disguised they may be. I believe I had my first Coca-Cola in either 1935 or 1936. Of a certainty, it was in 1936 that I started buying Cokes at the rate of six for 25 cents from Buffett & Son, the family grocery store, to sell around the neighborhood for 5 cents each. In this excursion into high-margin retailing, I duly observed the extraordinary consumer attractiveness and commercial possibilities of the product.

I continued to note these qualities for the next 52 years as Coke blanketed the world. During this period, however, I carefully avoided buying even a single share, instead allocating major portions of my net worth to street railway companies, windmill manufacturers, anthracite producers, textile businesses, trading-stamp issuers, and the like. (If you think I'm making this up, I can supply the names.) Only in the summer of 1988 did my brain finally establish contact with my eyes.

What I then perceived was both clear and fascinating. After drifting somewhat in the 1970's, Coca-Cola had in 1981 become a new company with the move of Roberto Goizueta to CEO. Roberto, along with Don Keough, once my across-the-street neighbor in Omaha, first rethought and focused the company's policies and then energetically carried them out. What was already the world's most ubiquitous product gained new momentum, with sales overseas virtually exploding.

Through a truly rare blend of marketing and financial skills, Roberto has maximized both the growth of his product and the rewards that this growth brings to shareholders. Normally, the CEO of a consumer products company, drawing on his natural inclinations or experience, will cause either marketing or finance to dominate the business at the expense of the other discipline. With Roberto, the mesh of marketing and finance is perfect and the result is a shareholder's dream.

Of course, we should have started buying Coke much earlier, soon after Roberto and Don began running things. In fact, if I had been thinking straight I would have persuaded my grandfather to sell the grocery store back in 1936 and put all of the proceeds into Coca-Cola stock. I've learned my lesson: My response time to the next glaringly attractive idea will be slashed to well under 50 years.

As I mentioned earlier, the yearend prices of our major investees were much higher relative to their intrinsic values than theretofore. While those prices may not yet cause nosebleeds, they are clearly vulnerable to a general market decline. A drop in their prices would not disturb us at all - it might in fact work to our eventual benefit - but it *would* cause at least a one-year reduction in Berkshire's net worth. We think such a reduction is almost certain in at least one of the next three years. Indeed, it would take only about a 10% year-to-year decline in the aggregate value of our portfolio investments to send Berkshire's net worth down.

We continue to be blessed with extraordinary managers at our portfolio companies. They are high-grade, talented, and shareholder-oriented. The exceptional results we have achieved while investing with them accurately reflect their exceptional personal qualities.

o We told you last year that we expected to do little in arbitrage during 1989, and that's the way it turned out. Arbitrage positions are a substitute for short-term cash equivalents, and during part of the year we held relatively low levels of cash. In the rest of the year we had a fairly good-sized cash position and even so chose not to engage in arbitrage. The main reason was corporate transactions that made no economic sense to us; arbitraging such deals comes too close to playing the greater-fool game. (As Wall Streeter Ray DeVoe says: "Fools rush in where angels fear to trade.") We will engage in arbitrage from time to time - sometimes on a large scale - but only when we like the odds.

o Leaving aside the three convertible preferreds discussed in the next section, we substantially reduced our holdings in both medium- and long-term fixed-income securities. In the long-terms, just about our only holdings have been Washington Public Power Supply Systems (WPPSS) bonds carrying coupons ranging from low to high. During the year we sold a number of the low-coupon issues, which we originally bought at very large discounts. Many of these issues had approximately doubled in price since we purchased them and in addition had paid us 15%-17% annually, tax-free. Our prices upon sale were only slightly cheaper than typical high-grade tax-exempts then commanded. We have kept all of our high-coupon WPPSS issues. Some have been called for redemption in 1991 and 1992, and we expect the rest to be called in the early to mid-1990s.

We also sold many of our medium-term tax-exempt bonds during the year. When we bought these bonds we said we would be happy to sell them - regardless of whether they were higher or lower than at our time of purchase - if something we liked better came along. Something did - and concurrently we unloaded most of these

issues at modest gains. Overall, our 1989 profit from the sale of tax-exempt bonds was about \$51 million pre-tax.

o The proceeds from our bond sales, along with our excess cash at the beginning of the year and that generated later through earnings, went into the purchase of three convertible preferred stocks. In the first transaction, which took place in July, we purchased \$600 million of The Gillette Co. preferred with an 8 3/4% dividend, a mandatory redemption in ten years, and the right to convert into common at \$50 per share. We next purchased \$358 million of USAir Group, Inc. preferred stock with mandatory redemption in ten years, a dividend of 9 1/4%, and the right to convert into common at \$60 per share. Finally, late in the year we purchased \$300 million of Champion International Corp. preferred with mandatory redemption in ten years, a 9 1/4% dividend, and the right to convert into common at \$38 per share.

Unlike standard convertible preferred stocks, the issues we own are either non-salable or non-convertible for considerable periods of time and there is consequently no way we can gain from short-term price blips in the common stock. I have gone on the board of Gillette, but I am not on the board of USAir or Champion. (I thoroughly enjoy the boards I am on, but can't handle any more.)

Gillette's business is very much the kind we like. Charlie and I think we understand the company's economics and therefore believe we can make a reasonably intelligent guess about its future. (If you haven't tried Gillette's new Sensor razor, go right out and get one.) However, we have no ability to forecast the economics of the investment banking business (in which we have a position through our 1987 purchase of Salomon convertible preferred), the airline industry, or the paper industry. This does not mean that we predict a negative future for these industries: we're agnostics, not atheists. Our lack of strong convictions about these businesses, however, means that we must structure our investments in them differently from what we do when we invest in a business appearing to have splendid economic characteristics.

In one major respect, however, these purchases are not different: We only want to link up with people whom we like, admire, and trust. John Gutfreund at Salomon, Colman Mockler, Jr. at Gillette, Ed Colodny at USAir, and Andy Sigler at Champion meet this test in spades.

They in turn have demonstrated some confidence in us, insisting in each case that our preferreds have unrestricted voting rights on a fully-converted basis, an arrangement that is far from standard in corporate finance. In effect they are trusting us to be intelligent owners, thinking about tomorrow *instead* of today, just as we are trusting them to be intelligent managers, thinking about tomorrow *as well* as today.

The preferred-stock structures we have negotiated will provide a mediocre return for us if industry economics hinder the performance of our investees, but will produce reasonably attractive results for us if they can earn a return comparable to that of American industry in general. We believe that Gillette, under Colman's management, will far exceed that return and believe that John, Ed, and Andy will reach it unless industry conditions are harsh.

Under almost any conditions, we expect these preferreds to return us our money plus dividends. If that is all we get, though, the result will be disappointing, because we will have given up flexibility and consequently will have missed some significant opportunities that are bound to present themselves during the decade. Under that scenario, we will have obtained

only a preferred-stock yield during a period when the typical preferred stock will have held no appeal for us whatsoever. The only way Berkshire can achieve satisfactory results from its four preferred issues is to have the common stocks of the investee companies do well.

Good management and at least tolerable industry conditions will be needed if that is to happen. But we believe Berkshire's investment will also help and that the other shareholders of each investee will profit over the years ahead from our preferred-stock purchase. The help will come from the fact that each company now has a major, stable, and interested shareholder whose Chairman and Vice Chairman have, through Berkshire's investments, indirectly committed a very large amount of their own money to these undertakings. In dealing with our investees, Charlie and I will be supportive, analytical, and objective. We recognize that we are working with experienced CEOs who are very much in command of their own businesses but who nevertheless, at certain moments, appreciate the chance to test their thinking on someone without ties to their industry or to decisions of the past.

As a group, these convertible preferreds will not produce the returns we can achieve when we find a business with wonderful economic prospects that is unappreciated by the market. Nor will the returns be as attractive as those produced when we make our favorite form of capital deployment, the acquisition of 80% or more of a fine business with a fine management. But both opportunities are rare, particularly in a size befitting our present and anticipated resources.

In summation, Charlie and I feel that our preferred stock investments should produce returns moderately above those achieved by most fixed-income portfolios and that we can play a minor but enjoyable and constructive role in the investee companies.

Zero-Coupon Securities

In September, Berkshire issued \$902.6 million principal amount of Zero-Coupon Convertible Subordinated Debentures, which are now listed on the New York Stock Exchange. Salomon Brothers handled the underwriting in superb fashion, providing us helpful advice and a flawless execution.

Most bonds, of course, require regular payments of interest, usually semi-annually. A zero-coupon bond, conversely, requires no current interest payments; instead, the investor receives his yield by purchasing the security at a significant discount from maturity value. The effective interest rate is determined by the original issue price, the maturity value, and the amount of time between issuance and maturity.

In our case, the bonds were issued at 44.314% of maturity value and are due in 15 years. For investors purchasing the bonds, that is the mathematical equivalent of a 5.5% current payment compounded semi-annually. Because we received only 44.31 cents on the dollar, our proceeds from this offering were \$400 million (less about \$9.5 million of offering expenses).

The bonds were issued in denominations of \$10,000 and each bond is convertible into .4515 shares of Berkshire Hathaway. Because a \$10,000 bond cost \$4,431, this means that the conversion price was \$9,815 per Berkshire share, a 15% premium to the market price then existing. Berkshire can call the bonds at any time after September 28, 1992 at their accreted value (the original issue price plus 5.5% compounded semi-annually) and on two specified days, September 28 of 1994 and 1999, the bondholders can require Berkshire to buy the securities at their

accreted value.

For tax purposes, Berkshire is entitled to deduct the 5.5% interest accrual each year, even though we make no payments to the bondholders. Thus the net effect to us, resulting from the reduced taxes, is positive cash flow. That is a very significant benefit. Some unknowable variables prevent us from calculating our exact effective rate of interest, but under all circumstances it will be well below 5.5%. There is meanwhile a symmetry to the tax law: Any taxable holder of the bonds must pay tax each year on the 5.5% interest, even though he receives no cash.

Neither our bonds nor those of certain other companies that issued similar bonds last year (notably Loews and Motorola) resemble the great bulk of zero-coupon bonds that have been issued in recent years. Of these, Charlie and I have been, and will continue to be, outspoken critics. As I will later explain, such bonds have often been used in the most deceptive of ways and with deadly consequences to investors. But before we tackle that subject, let's travel back to Eden, to a time when the apple had not yet been bitten.

If you're my age you bought your first zero-coupon bonds during World War II, by purchasing the famous Series E U. S. Savings Bond, the most widely-sold bond issue in history. (After the war, these bonds were held by one out of two U. S. households.) Nobody, of course, called the Series E a zero-coupon bond, a term in fact that I doubt had been invented. But that's precisely what the Series E was.

These bonds came in denominations as small as \$18.75. That amount purchased a \$25 obligation of the United States government due in 10 years, terms that gave the buyer a compounded annual return of 2.9%. At the time, this was an attractive offer: the 2.9% rate was higher than that generally available on Government bonds and the holder faced no market-fluctuation risk, since he could at any time cash in his bonds with only a minor reduction in interest.

A second form of zero-coupon U. S. Treasury issue, also benign and useful, surfaced in the last decade. One problem with a normal bond is that even though it pays a given interest rate - say 10% - the holder cannot be assured that a compounded 10% return will be realized. For that rate to materialize, each semi-annual coupon must be reinvested at 10% as it is received. If current interest rates are, say, only 6% or 7% when these coupons come due, the holder will be unable to compound his money over the life of the bond at the advertised rate. For pension funds or other investors with long-term liabilities, "reinvestment risk" of this type can be a serious problem. Savings Bonds might have solved it, except that they are issued only to individuals and are unavailable in large denominations. What big buyers needed was huge quantities of "Savings Bond Equivalents."

Enter some ingenious and, in this case, highly useful investment bankers (led, I'm happy to say, by Salomon Brothers). They created the instrument desired by "stripping" the semi-annual coupons from standard Government issues. Each coupon, once detached, takes on the essential character of a Savings Bond since it represents a single sum due sometime in the future. For example, if you strip the 40 semi-annual coupons from a U. S. Government Bond due in the year 2010, you will have 40 zero-coupon bonds, with maturities from six months to 20 years, each of which can then be bundled with other coupons of like maturity and marketed. If current interest rates are, say, 10% for all maturities, the six-month issue will sell for 95.24% of maturity value and the 20-year issue will sell for 14.20%. The purchaser of any given maturity is thus guaranteed a compounded rate of 10% for his entire holding period. Stripping of government bonds has

occurred on a large scale in recent years, as long-term investors, ranging from pension funds to individual IRA accounts, recognized these high-grade, zero-coupon issues to be well suited to their needs.

But as happens in Wall Street all too often, what the wise do in the beginning, fools do in the end. In the last few years zero-coupon bonds (and their functional equivalent, pay-in-kind bonds, which distribute additional PIK bonds semi-annually as interest instead of paying cash) have been issued in enormous quantities by ever-junkier credits. To these issuers, zero (or PIK) bonds offer one overwhelming advantage: It is impossible to default on a promise to pay nothing. Indeed, if LDC governments had issued no debt in the 1970's other than long-term zero-coupon obligations, they would now have a spotless record as debtors.

This principle at work - that you need not default for a long time if you solemnly promise to pay nothing for a long time - has not been lost on promoters and investment bankers seeking to finance ever-shakier deals. But its acceptance by lenders took a while: When the leveraged buy-out craze began some years back, purchasers could borrow only on a reasonably sound basis, in which conservatively-estimated *free* cash flow - that is, operating earnings plus depreciation and amortization less normalized capital expenditures - was adequate to cover both interest and modest reductions in debt.

Later, as the adrenalin of deal-makers surged, businesses began to be purchased at prices so high that all free cash flow necessarily had to be allocated to the payment of interest. That left nothing for the paydown of debt. In effect, a Scarlett O'Hara "I'll think about it tomorrow" position in respect to principal payments was taken by borrowers and accepted by a new breed of lender, the buyer of original-issue junk bonds. Debt now became something to be refinanced rather than repaid. The change brings to mind a *New Yorker* cartoon in which the grateful borrower rises to shake the hand of the bank's lending officer and gushes: "I don't know how I'll ever repay you."

Soon borrowers found even the new, lax standards intolerably binding. To induce lenders to finance even sillier transactions, they introduced an abomination, EBDIT - Earnings Before Depreciation, Interest and Taxes - as the test of a company's ability to pay interest. Using this sawed-off yardstick, the borrower ignored depreciation as an expense on the theory that it did not require a current cash outlay.

Such an attitude is clearly delusional. At 95% of American businesses, capital expenditures that over time roughly approximate depreciation are a necessity and are every bit as real an expense as labor or utility costs. Even a high school dropout knows that to finance a car he must have income that covers not only interest and operating expenses, but also realistically-calculated depreciation. He would be laughed out of the bank if he started talking about EBDIT.

Capital outlays at a business can be skipped, of course, in any given month, just as a human can skip a day or even a week of eating. But if the skipping becomes routine and is not made up, the body weakens and eventually dies. Furthermore, a start-and-stop feeding policy will over time produce a less healthy organism, human or corporate, than that produced by a steady diet. As businessmen, Charlie and I relish having competitors who are unable to fund capital expenditures.

You might think that waving away a major expense such as depreciation in an attempt to make a terrible deal look like a good one hits the limits of Wall Street's ingenuity. If so, you haven't been paying attention during the past few years.

Promoters needed to find a way to justify even pricier acquisitions. Otherwise, they risked - heaven forbid! - losing deals to other promoters with more "imagination."

So, stepping through the Looking Glass, promoters and their investment bankers proclaimed that EBDIT should now be measured against cash interest only, which meant that interest accruing on zero-coupon or PIK bonds could be ignored when the financial feasibility of a transaction was being assessed. This approach not only relegated depreciation expense to the let's-ignore-it corner, but gave similar treatment to what was usually a significant portion of interest expense. To their shame, many professional investment managers went along with this nonsense, though they usually were careful to do so only with clients' money, not their own. (Calling these managers "professionals" is actually too kind; they should be designated "promotees.")

Under this new standard, a business earning, say, \$100 million pre-tax and having debt on which \$90 million of interest must be paid currently, might use a zero-coupon or PIK issue to incur another \$60 million of annual interest that would accrue and compound but not come due for some years. The rate on these issues would typically be very high, which means that the situation in year 2 might be \$90 million cash interest plus \$69 million accrued interest, and so on as the compounding proceeds. Such high-rate reborrowing schemes, which a few years ago were appropriately confined to the waterfront, soon became models of modern finance at virtually all major investment banking houses.

When they make these offerings, investment bankers display their humorous side: They dispense income and balance sheet projections extending five or more years into the future for companies they barely had heard of a few months earlier. If you are shown such schedules, I suggest that you join in the fun: Ask the investment banker for the *one-year* budgets that his own firm prepared as the last few years began and then compare these with what actually happened.

Some time ago Ken Galbraith, in his witty and insightful *The Great Crash*, coined a new economic term: "the bezzle," defined as the current amount of undiscovered embezzlement. This financial creature has a magical quality: The embezzlers are richer by the amount of the bezzle, while the embezzlees do not yet feel poorer.

Professor Galbraith astutely pointed out that this sum should be added to the National Wealth so that we might know the Psychic National Wealth. Logically, a society that wanted to *feel* enormously prosperous would both encourage its citizens to embezzle and try not to detect the crime. By this means, "wealth" would balloon though not an erg of productive work had been done.

The satirical nonsense of the bezzle is dwarfed by the real-world nonsense of the zero-coupon bond. With zeros, one party to a contract can experience "income" without his opposite experiencing the pain of expenditure. In our illustration, a company capable of earning only \$100 million dollars annually - and therefore capable of paying only that much in interest - magically creates "earnings" for bondholders of \$150 million. As long as major investors willingly don their Peter Pan wings and repeatedly say "I believe," there is no limit to how much "income" can be created by the zero-coupon bond.

Wall Street welcomed this invention with the enthusiasm less-enlightened folk might reserve for the wheel or the plow. Here, finally, was an instrument that would let the Street make deals at prices no longer limited by actual earning power. The result, obviously, would be more transactions: Silly prices will always attract sellers. And, as Jesse Unruh might have put it,

transactions are the mother's milk of finance.

The zero-coupon or PIK bond possesses one additional attraction for the promoter and investment banker, which is that the time elapsing between folly and failure can be stretched out. This is no small benefit. If the period before all costs must be faced is long, promoters can create a string of foolish deals - and take in lots of fees - before any chickens come home to roost from their earlier ventures.

But in the end, alchemy, whether it is metallurgical or financial, fails. A base business can not be transformed into a golden business by tricks of accounting or capital structure. The man claiming to be a financial alchemist may become rich. But gullible investors rather than business achievements will usually be the source of his wealth.

Whatever their weaknesses, we should add, many zero-coupon and PIK bonds will not default. We have in fact owned some and may buy more if their market becomes sufficiently distressed. (We've not, however, even considered buying a new issue from a weak credit.) No financial instrument is evil per se; it's just that some variations have far more potential for mischief than others.

The blue ribbon for mischief-making should go to the zero-coupon issuer unable to make its interest payments on a current basis. Our advice: Whenever an investment banker starts talking about EBDIT - or whenever someone creates a capital structure that does not allow all interest, both payable and accrued, to be comfortably met out of current cash flow *net of ample capital expenditures* - zip up your wallet. Turn the tables by suggesting that the promoter and his high-priced entourage accept zero-coupon fees, deferring their take until the zero-coupon bonds have been paid in full. See then how much enthusiasm for the deal endures.

Our comments about investment bankers may seem harsh. But Charlie and I - in our hopelessly old-fashioned way - believe that they should perform a gatekeeping role, guarding investors against the promoter's propensity to indulge in excess. Promoters, after all, have throughout time exercised the same judgment and restraint in accepting money that alcoholics have exercised in accepting liquor. At a minimum, therefore, the banker's conduct should rise to that of a responsible bartender who, when necessary, refuses the profit from the next drink to avoid sending a drunk out on the highway. In recent years, unfortunately, many leading investment firms have found bartender morality to be an intolerably restrictive standard. Lately, those who have traveled the high road in Wall Street have not encountered heavy traffic.

One distressing footnote: The cost of the zero-coupon folly will not be borne solely by the direct participants. Certain savings and loan associations were heavy buyers of such bonds, using cash that came from FSLIC-insured deposits. Straining to show splendid earnings, these buyers recorded - but did not receive - ultra-high interest income on these issues. Many of these associations are now in major trouble. Had their loans to shaky credits worked, the owners of the associations would have pocketed the profits. In the many cases in which the loans will fail, the taxpayer will pick up the bill. To paraphrase Jackie Mason, at these associations it was the managers who should have been wearing the ski masks.

Mistakes of the First Twenty-five Years (A Condensed Version)

To quote Robert Benchley, "Having a dog teaches a boy

fidelity, perseverance, and to turn around three times before lying down." Such are the shortcomings of experience. Nevertheless, it's a good idea to review past mistakes before committing new ones. So let's take a quick look at the last 25 years.

- o My first mistake, of course, was in buying control of Berkshire. Though I knew its business - textile manufacturing - to be unpromising, I was enticed to buy because the price looked cheap. Stock purchases of that kind had proved reasonably rewarding in my early years, though by the time Berkshire came along in 1965 I was becoming aware that the strategy was not ideal.

If you buy a stock at a sufficiently low price, there will usually be some hiccup in the fortunes of the business that gives you a chance to unload at a decent profit, even though the long-term performance of the business may be terrible. I call this the "cigar butt" approach to investing. A cigar butt found on the street that has only one puff left in it may not offer much of a smoke, but the "bargain purchase" will make that puff all profit.

Unless you are a liquidator, that kind of approach to buying businesses is foolish. First, the original "bargain" price probably will not turn out to be such a steal after all. In a difficult business, no sooner is one problem solved than another surfaces - never is there just one cockroach in the kitchen. Second, any initial advantage you secure will be quickly eroded by the low return that the business earns. For example, if you buy a business for \$8 million that can be sold or liquidated for \$10 million and promptly take either course, you can realize a high return. But the investment will disappoint if the business is sold for \$10 million in ten years and in the interim has annually earned and distributed only a few percent on cost. Time is the friend of the wonderful business, the enemy of the mediocre.

You might think this principle is obvious, but I had to learn it the hard way - in fact, I had to learn it several times over. Shortly after purchasing Berkshire, I acquired a Baltimore department store, Hochschild Kohn, buying through a company called Diversified Retailing that later merged with Berkshire. I bought at a substantial discount from book value, the people were first-class, and the deal included some extras - unrecorded real estate values and a significant LIFO inventory cushion. How could I miss? So-o-o - three years later I was lucky to sell the business for about what I had paid. After ending our corporate marriage to Hochschild Kohn, I had memories like those of the husband in the country song, "My Wife Ran Away With My Best Friend and I Still Miss Him a Lot."

I could give you other personal examples of "bargain-purchase" folly but I'm sure you get the picture: It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price. Charlie understood this early; I was a slow learner. But now, when buying companies or common stocks, we look for first-class businesses accompanied by first-class managements.

- o That leads right into a related lesson: Good jockeys will do well on good horses, but not on broken-down nags. Both Berkshire's textile business and Hochschild, Kohn had able and honest people running them. The same managers employed in a business with good economic characteristics would have achieved fine records. But they were never going to make any progress while running in quicksand.

I've said many times that when a management with a reputation for brilliance tackles a business with a reputation

for bad economics, it is the reputation of the business that remains intact. I just wish I hadn't been so energetic in creating examples. My behavior has matched that admitted by Mae West: "I was Snow White, but I drifted."

- o A further related lesson: Easy does it. After 25 years of buying and supervising a great variety of businesses, Charlie and I have *not* learned how to solve difficult business problems. What we have learned is to avoid them. To the extent we have been successful, it is because we concentrated on identifying one-foot hurdles that we could step over rather than because we acquired any ability to clear seven-footers.

The finding may seem unfair, but in both business and investments it is usually far more profitable to simply stick with the easy and obvious than it is to resolve the difficult. On occasion, tough problems *must* be tackled as was the case when we started our Sunday paper in Buffalo. In other instances, a great investment opportunity occurs when a marvelous business encounters a one-time huge, but solvable, problem as was the case many years back at both American Express and GEICO. Overall, however, we've done better by avoiding dragons than by slaying them.

- o My most surprising discovery: the overwhelming importance in business of an unseen force that we might call "the institutional imperative." In business school, I was given no hint of the imperative's existence and I did not intuitively understand it when I entered the business world. I thought then that decent, intelligent, and experienced managers would automatically make rational business decisions. But I learned over time that isn't so. Instead, rationality frequently wilts when the institutional imperative comes into play.

For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated.

Institutional dynamics, not venality or stupidity, set businesses on these courses, which are too often misguided. After making some expensive mistakes because I ignored the power of the imperative, I have tried to organize and manage Berkshire in ways that minimize its influence. Furthermore, Charlie and I have attempted to concentrate our investments in companies that appear alert to the problem.

- o After some other mistakes, I learned to go into business only with people whom I like, trust, and admire. As I noted before, this policy of itself will not ensure success: A second-class textile or department-store company won't prosper simply because its managers are men that you would be pleased to see your daughter marry. However, an owner - or investor - can accomplish wonders if he manages to associate himself with such people in businesses that possess decent economic characteristics. Conversely, we do not wish to join with managers who lack admirable qualities, no matter how attractive the prospects of their business. We've never succeeded in making a good deal with a bad person.

- o Some of my worst mistakes were not publicly visible. These were stock and business purchases whose virtues I understood and yet didn't make. It's no sin to miss a great opportunity outside one's area of competence. But I have passed on a couple of really

big purchases that were served up to me on a platter and that I was fully capable of understanding. For Berkshire's shareholders, myself included, the cost of this thumb-sucking has been huge.

o Our consistently-conservative financial policies may appear to have been a mistake, but in my view were not. In retrospect, it is clear that significantly higher, though still conventional, leverage ratios at Berkshire would have produced considerably better returns on equity than the 23.8% we have actually averaged. Even in 1965, perhaps we could have judged there to be a 99% probability that higher leverage would lead to nothing but good. Correspondingly, we might have seen only a 1% chance that some shock factor, external or internal, would cause a conventional debt ratio to produce a result falling somewhere between temporary anguish and default.

We wouldn't have liked those 99:1 odds - and never will. 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 learned to live with those also.

* * * * *

We hope in another 25 years to report on the mistakes of the first 50. If we are around in 2015 to do that, you can count on this section occupying many more pages than it does here.

Miscellaneous

We hope to buy more businesses that are similar to the ones we have, and we can use some help. If you have a business that fits the following criteria, call me or, preferably, write.

Here's what we're looking for:

- (1) Large purchases (at least \$10 million of after-tax earnings),
- (2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turnaround" situations),
- (3) businesses earning good returns on equity while employing little or no debt,
- (4) management in place (we can't supply it),
- (5) simple businesses (if there's lots of technology, we won't understand it),
- (6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give.

Our favorite form of purchase is one fitting the Blumkin-Friedman-Heldman mold. In cases like these, the company's owner-managers wish to generate significant amounts of cash, sometimes for themselves, but often for their families or inactive

shareholders. At the same time, these managers wish to remain significant owners who continue to run their companies just as they have in the past. We think we offer a particularly good fit for owners with such objectives. We invite potential sellers to check us out by contacting people with whom we have done business in the past.

Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. Our interest in new ventures, turnarounds, or auction-like sales can best be expressed by a Goldwynism: "Please include me out."

Besides being interested in the purchase of businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock comparable to those we hold in Capital Cities, Salomon, Gillette, USAir and Champion. Last year we said we had a special interest in large purchases of convertible preferreds. We still have an appetite of that kind, but it is limited since we now are close to the maximum position we feel appropriate for this category of investment.

* * * * *

Two years ago, I told you about Harry Bottle, who in 1962 quickly cured a major business mess at the first industrial company I controlled, Dempster Mill Manufacturing (one of my "bargain" purchases) and who 24 years later had reappeared to again rescue me, this time from problems at K&W Products, a small Berkshire subsidiary that produces automotive compounds. As I reported, in short order Harry reduced capital employed at K&W, rationalized production, cut costs, and quadrupled profits. You might think he would then have paused for breath. But last year Harry, now 70, attended a bankruptcy auction and, for a pittance, acquired a product line that is a natural for K&W. That company's profitability may well be increased 50% by this coup. Watch this space for future bulletins on Harry's triumphs.

* * * * *

With more than a year behind him of trading Berkshire's stock on the New York Stock Exchange, our specialist, Jim Maguire of Henderson Brothers, Inc. ("HBI"), continues his outstanding performance. Before we listed, dealer spreads often were 3% or more of market price. Jim has maintained the spread at 50 points or less, which at current prices is well under 1%. Shareholders who buy or sell benefit significantly from this reduction in transaction costs.

Because we are delighted by our experience with Jim, HBI and the NYSE, I said as much in ads that have been run in a series placed by the NYSE. Normally I shun testimonials, but I was pleased in this instance to publicly compliment the Exchange.

* * * * *

Last summer we sold the corporate jet that we purchased for \$850,000 three years ago and bought another used jet for \$6.7 million. Those of you who recall the mathematics of the multiplying bacteria on page 5 will understandably panic: If our net worth continues to increase at current rates, and the cost of replacing planes also continues to rise at the now-established rate of 100% compounded annually, it will not be long before Berkshire's entire net worth is consumed by its jet.

Charlie doesn't like it when I equate the jet with bacteria; he feels it's degrading to the bacteria. His idea of traveling in

style is an air-conditioned bus, a luxury he steps up to only when bargain fares are in effect. My own attitude toward the jet can be summarized by the prayer attributed, apocryphally I'm sure, to St. Augustine as he contemplated leaving a life of secular pleasures to become a priest. Battling the conflict between intellect and glands, he pled: "Help me, Oh Lord, to become chaste - but not yet."

Naming the plane has not been easy. I initially suggested "The Charles T. Munger." Charlie countered with "The Aberration." We finally settled on "The Indefensible."

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About 96.9% of all eligible shares participated in Berkshire's 1989 shareholder-designated contributions program. Contributions made through the program were \$5.9 million, and 2,550 charities were recipients.

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 52-53. If you wish to participate in future programs, we strongly urge that you immediately make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1990 will be ineligible for the 1990 program.

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The annual meeting this year will take place at 9:30 a.m. on Monday, April 30, 1990. Attendance grew last year to about 1,000, very close to the seating capacity of the Witherspoon Hall at Joslyn Museum. So this year's meeting will be moved to the Orpheum Theatre, which is in downtown Omaha, about one-quarter of a mile from the Red Lion Hotel. The Radisson-Redick Tower, a much smaller but nice hotel, is located across the street from the Orpheum. Or you may wish to stay at the Marriott, which is in west Omaha, about 100 yards from Borsheim's. We will have buses at the Marriott that will leave at 8:30 and 8:45 for the meeting and return after it ends.

Charlie and I always enjoy the meeting, and we hope you can make it. The quality of our shareholders is reflected in the quality of the questions we get: We have never attended an annual meeting anywhere that features such a consistently high level of intelligent, owner-related questions.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. Because weekday parking can be tight around the Orpheum, we have lined up a number of nearby lots for our shareholders to use. The attachment also contains information about them.

As usual, we will have buses to take you to Nebraska Furniture Mart and Borsheim's after the meeting and to take you to downtown hotels or to the airport later. I hope that you will allow plenty of time to fully explore the attractions of both stores. Those of you arriving early can visit the Furniture Mart any day of the week; it is open from 10 a.m. to 5:30 p.m. on Saturdays, and from noon to 5:30 p.m. on Sundays.

Borsheim's normally is closed on Sunday, but we will open for shareholders and their guests from noon to 6 p.m. on Sunday, April 29th. Ike likes to put on a show, and you can rely on him to produce something very special for our shareholders.

In this letter we've had a lot to say about rates of compounding. If you can bear having your own rate turn negative for a day - not a pretty thought, I admit - visit Ike on the

29th.

March 2, 1990

Warren E. Buffett
Chairman of the Board