## Buffett Offers an Opinion on the Over Valuation of the NASDAQ During July 1999

(From the book, The Snowball by Alice Schroeder), pages 16-23.
Buffett's Speech at the Allen Sun Valley Conference on July 1999.

I would like to talk about the stock market, he (Buffett) said. I will be talking about pricing stocks, but I will not be talking about predicting their course of action next month or next year. Valuing is not the same as predicting.
"In the short run, the market is a voting machine. In the long run, it is a weighing machine. Weight counts eventually. But votes count in the short term. And it is a very undemocratic way of voting. Unfortunately, they have no literacy tests in terms of voting qualification, as you have all learned."

> | Dow Jones Industrial Average |  |
| :--- | :---: |
| December 31, 1964 | 874.12 |
| December 31, 1981 | 875.00 |

During these 17 years, the size of the economy grew more than fivefold. The sales of the Fortune Five Hundred companies grew more than fivefold. ${ }^{1}$ Yet, during these seventeen years, the stock market went exactly nowhere."

He backed up a step or two. "What you are doing when you invest is deferring consumption and laying money out now to get more money back at a later time. And there are really only two questions. One is how much you are going to get back and the other if when.

Now. Aesop was not much of a finance major, because he said something like, 'A bird in hand is worth two in the bush.' But he doesn't say when." They are to finance as gravity is to physics. As interest rates vary, the value of all financial assets-houses, stocks, bonds-changes, as if the price of birds had fluctuated. "And that is why sometimes a bird in the hand is better than two birds in the bush and sometimes two in the bush are better than one in the hand."

Buffett related Aesop to the great bull market of 1990s, which he described as baloney. Profits had grown much less than in that previous period, but birds in the bush were expensive because interest rates were low. Fewer people wanted cash -the bird in the hand-at such low rates. So investors were paying unheard of price for those birds in the bush. Casually, Buffett referred to this as the "greed factor."

Buffett continued, "There were only three ways the stock market could keep raising at ten percent or more a year. One was if interest rates fell and remained below historic levels. The second was if the share of the economy that went to investors, as opposed to employees and government and other thing, rose above its already historically high level." ${ }^{2}$ Or, he said, the economy could start growing faster than normal. ${ }^{3} \mathrm{He}$ called it "wishful thinking" to use optimistic assumptions like these. Some people, he said, were not thinking that the whole market would flourish. They just believed they

[^0]could pick the winners from the rest. Swinging his arms like an orchestra conductor, he succeeded in putting up another slide while explaining that, although innovation might lift the world out of poverty, people who invest in innovation historically have not been glad afterward.

This is half of a page which comes from a list seventy pages long of all the auto companies in the United States." He waved the complete list in the air. "There were two thousand auto companies: the most important invention, probably, of the first half of the twentieth century. It had enormous impact on people's lives. If you had seen at the time of the first car how this country would develop in connection with autos you would have said, 'This is the place I must be.' But of the two thousand companies, as of a few years ago, only three car companies survived. And, at one time or the other, all three were selling for less than book value, which is the amount of money that had been put into the companies and left there. So autos had an enormous impact on America, but in the opposite direction on investors." Below is a chart of General Motors (GM), Ford (F) and the DJIA. Note the massive under-performance of Ford and GM as compared to the DJIA.


But, sometimes it is much easier to figure out the losers. There was, I think, one obvious decision back then. And of course, the thing you should have been doing was shorting horses."

| U.S. Horse Population |  |
| :--- | ---: |
| 1900 | 17 million |
| 1998 | 5 million |

"Frankly, I'm kind of disappointed that the Buffett family was not shorting horses throughout this entire period. There are always losers."

[^1]Spotting the losers is easier than spotting the winners. In fact, the losers from technological change are much easier to spot than the winners. Losing technologies often have a barrier that proves clearly insurmountable in their quest to react to their new competitors. Canals, for example, simply could not achieve the speed of throughput that railways could. The telephone allowed voice transmission, the telegraph did not. The digital computer provided greater accuracy and speed than any analog equivalent could achieve. (Source: Engines that Move Markets by Alasdair Nairn.)

Now the other great invention of the first half of the century was the airplane. In this period from 1919 to 1939, there were about two hundred companies. Imagine if you could have seen the future of the airline industry back there at Kitty Hawk. You would have seen a world undreamed of. But assume you had the insight, and you saw all of these people wishing to fly and to visit their relatives of run away from their relatives or whatever you do in an airplane, and you decided this was the place to be.

As of a couple of years ago, there had been zero money made from the aggregate of all stock investments in the airline industry in history. (Insert 1990 and 2008 charts)
"So I submit to you: I really like to think that if I had been down there at Kitty Hawk, I would have been farsighted enough and public spirited enough to have shot Orville down. I owed it to future capitalists."

## A short financial history of the automobile from Engines That Move Markets: Technology Investing from Railroad to the Internet and Beyond by Alasdair Nairn.

The losers from the old technology (Horse-drawn carriages and buggy whip manufacturers) were fairly easy to spot, but selection of which companies would prove the winners was much more difficult. Literally hundreds of companies sprang up, many of them genuine competitors, some of them effectively stock market scams. For the outsider, there was little to distinguish between the genuine and the fake, let alone which of the genuine companies would succeed.

Even the companies that did eventually succeed did so only after a rocky road. Henry Ford was successful only on his third corporate attempt and only after splitting with his partners over the strategic direction of the company. General Motors had to be rescued twice, and Chrysler was effectively a company resuscitated from previous misfortune. Furthermore, it was only with the introduction of the Ford Model $T$ and its impact in bringing the automobile within the range of the affluent middle classes that the market emerged as a strong growth one. From that point forward, automobile production became an expanding market, but with a price point that was being continually lowered. Those who could not compete were forced to exit, in many cases moving in a very short period from a position of profitability and apparent stability to liquidation.

Despite the growth in demand and production, the car industry was to consolidate from the early part of the century onward. There were many forces driving this, but principle among them were the initially fragile financial base of the majority of companies and the greater capital required for increased production volume and distribution. While production in the early years had concentrated on high-cost, high-margin vehicles, as the technology improved and the car became a product also for the middle classes, the production process itself grew in importance. The economies to be gained from mass production militated against a large number of producers, and the industry began an inexorable move toward consolidation.

The consolidation phase that began early, during the phases of high top-line growth, was to continue in the industry from that point forward. The initial very high returns on capital for the fortunate few gradually reduced, even as the consolidation took place and the rate of growth in net income for the participants was on a downward path almost from the 1920s until the 1970s when, in real terms, profits followed the classic boom-and-bust cycle of a highly capital-intensive and competitive industry. In the early years, the American manufacturers undoubtedly gained from the poor road conditions that forced the production of a more lightweight and standardized vehicle than their more technologically advanced European counterparts. In a domestic economy growing strongly and protected by tariffs, the producers took full advantage to become the major players in the world industry.

On both sides of the Atlantic, the investor was faced with the same issues, selecting a small number of survivors from the larger number of initial competitors. Growth alone was not sufficient to underpin an investment. Returns may have been potentially very strong, but, given the downside, they needed to be. Equally, the investor needed to pay close attention to the profitability of the industry since top-line growth alone proved no guarantee of income growth. The car industry faced the burden of high capital costs alone with low barriers to entry.
"It's much easier to promote an esoteric product, even particularly one with losses, because there is no quantitative guideline. But people will keep coming back to invest, you know. It reminds me a little of that story of the oil prospector who died and went to heaven. And St Peter said, "Well, I checked you out, and you meet all of the qualifications. But there is one problem.' He said, 'We have some tough zoning laws up here, and we keep all of the oil prospectors over in that pen. And as you can see, it is absolutely chick-full. There is no room for you.'
"And the prospector said, 'Do you mind if I just say four words?'
"St. Peter said, 'No harm in that.'
So the prospector cupped his hands and yells out, 'Oil discovered in hell!'
"And of course, the lock comes off the cage and all of the prospectors start heading right straight down.
"St. Peter said, 'That is a pretty slick trick. So', He says, 'go on in, and make yourself at home. You have all the room in the world.'
"The prospector paused for a minute, then said, 'No, I think I will go along with the rest of the buys. There might be some truth to that rumor after all.'

Well, that is the way people feel with stocks. It is very easy to believe that there is some truth to that rumor after all."

This got a mild laugh for a half second, which choked off as soon as the audience caught on to Buffett's point, which was that, like the prospectors, they might be mindless enough to follow rumors and drill for oil in hell.

He closed by returning to the proverbial bird in the bush. There was no new paradigm, he said. Ultimately, the value of the stock market could only reflect the output of the economy.

He put up a slide to illustrate how, for several years the market's valuation had outstripped the economy's growth by an enormous degree. This meant, Buffett said, that the next seventeen years might not look much better than that long stretch from 1964 to 1981 when the Dow had gone exactly nowhere-that is, unless the market plummeted. "If I had to pick the most probable return over that period, he said, "it would probably be six ( $6 \%$ ) percent. Yet a recent Paine-WebberGallup poll had shown that investors expected stocks to return thirteen to twenty-two percent.

He walked over to the screen, waggling his bushy eyebrows, he gestured at the cartoon of a naked man and woman, taken from the legendary book on the stock market, Where Are The Customers' Yachts? "The man said to the woman, 'There are certain things that cannot be adequately explained to a virgin either by words or pictures.'"

The audience took his point, which was that people who bought Internet stocks were about to get screwed. They sat in stony silence. Nobody laughed. Nobody chuckled or snickered or guffawed.

Seeming not to notice, Buffett moved back to podium and told the audience about the goody bag he had brought for them from Berkshire Hathaway. "I just bought a company that sells fractional jets, Netjets," he said. "I thought about giving each of you a quarter share of a Gulfstream IV. But when I went to the airport, I realized that would be a step down for most of you." At that, they laughed. So, he continued, he was giving each of them a jeweler's loupe instead, which he said they should use to look at one another's wives' rings-the third wives' especially.

That hit its mark. The audience laughed and applauded. Then they stopped.
A resentful undercurrent was washing trough the room. Sermonizing on the stock market's excesses at Sun Valley in 1999 was like preaching chastity in a house of ill repute. The speech might rivet the audience to its chairs, but that didn't mean that they would go forth and abstain.

Buffett waved a book in the air. "This book was the intellectual underpinning of the 1929 stockmarket mania. Edgar Lawrence Smith's Common Stocks as Long-Term Investments proved that stocks always yielded more than bonds. Smith identified five reasons, but the most novel of these was the fact that companies retained some of their earnings, which they could reinvest at the same rate of return. That was the plowback-a novel idea in 1924! But as my mentor, Ben Graham, always used to say, 'You can get in way more trouble with a good idea than a bad idea,' because you forget that the good idea has limits. Lord Keynes, in his preface to this book, said, 'There is a danger of expecting the results of the future to be predicted from the past.'"

He had worked his way back around to the same subject: that one couldn't extrapolate from the past few years of accelerating stock prices. "Now, is there anyone I haven't insulted" He paused. The question was rhetorical; nobody raised a hand.
"Thank you," he said, and ended.
"Praise by name, criticize by category" was Buffett's rule. The speech was meant to be provocative, not off-putting-for he cared a great deal what they thought of him. He named no culprits, and he assumed they would get over his jokes. His argument was so powerful, almost unassailable, that he thought even those who didn't like its message must acknowledge its force. And whatever unease the audience felt was not expressed aloud. He answered question until the session ended.

Many believed that Buffett was rationalizing having missed the technology boom, and they were startled to see him make such specific predictions, prophecies that surely would turn out to be wrong. Beyond his earshot, the rumbling went on: "Good ol' Warren. He missed the boat. How could he miss the tech boat? He is a friend of Bill Gates.

## End

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## Editor's Comments

When NASDAQ market prices proceeded to almost double within 8 months of Buffett's Sun Valley speech, nay sayers had a field day. They probably thought that Mr. Buffett was washed up, a hasbeen, and he just "Didn't get 'it.'" Note the Charts on the pages $7 \& 8$.

What critics didn't realize was that Buffett was not predicting prices, but simple cause and effect. If prices were unsustainable, then prices would eventually revert to their mean and come back to earth. The exact timing of when this would occur--no one knows, but knowing that prices will revert is critical to understanding and avoiding risk of permanent capital loss.

In December 27, 1999 Barron's Magazine printed a headline, "What's Wrong Warren? Berkshire is Down for the Year But Don't Count It Out." His methods of investing were extremely out of fashion and against the grain in the dot-com explosion of the late 1990s. The year 1999 was Buffett's first down year in a decade, with Berkshire's per-share book value under-performing the $S \& P 500$ index for the first time in 20 years. At the time, the judgmental pronounced his insistence on investing in firmly established, proven businesses out of date for the much-heralded, dot-comheavy new economy. In 2000 however, Buffett appeared to have the last laugh, as reality weighed down the dot-com mania and the high-tech stock bubble burst. Buffett's portfolio, meanwhile, bounced back as investors ran to established companies, and once again pundits and analysts were praising the far-sighted wisdom of Buffett.

Through it all, Buffett never wavered nor questioned himself, because he operates with his own inner score card. He was neither right nor wrong because others agreed or disagreed with him, but because his facts and reasoning were correct.

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## MAGAZINE

## Mr. Buffett on the Stock Market <br> FORTUNE Monday, November 22, 1999 By Warren Buffett

Warren Buffett, chairman of Berkshire Hathaway, almost never talks publicly about the general level of stock prices--neither in his famed annual report nor at Berkshire's thronged annual meetings nor in the rare speeches he gives. But in the past few months, on four occasions, Buffett did step up to that subject, laying out his opinions, in ways both analytical and creative, about the long-term future for stocks. FORTUNE's Carol Loomis heard the last of those talks, given in September to a group of Buffett's friends (of whom she is one), and also watched a videotape of the first speech, given in July at Allen \& Co.'s Sun Valley, Idaho, bash for business leaders. From those extemporaneous talks (the first made with the Dow Jones industrial average at 11,194), Loomis distilled the following account of what Buffett said. Buffett reviewed it and weighed in with some clarifications.

Investors in stocks these days are expecting far too much, and I'm going to explain why. That will inevitably set me to talking about the general stock market, a subject I'm usually unwilling to discuss. But I want to make one thing clear going in: Though I will be talking about the level of the market, I will not be predicting its next moves. At Berkshire we focus almost exclusively on the valuations of individual companies, looking only to a very limited extent at the valuation of the overall market. Even then, valuing the market has nothing to do with where it's going to go next week or next month or next year, a line of thought we never get into. The fact is that markets behave in ways, sometimes for a very long stretch, that are not linked to value. Sooner or later, though, value counts. So what I am going to be saying--assuming it's correct--will have implications for the long-term results to be realized by American stockholders.

Let's start by defining 'investing.' The definition is simple but often forgotten: Investing is laying out money now to get more money back in the future--more money in real terms, after taking inflation into account.

Now, to get some historical perspective, let's look back at the 34 years before this one--and here we are going to see an almost Biblical kind of symmetry, in the sense of lean years and fat years--to observe what happened in the stock market. Take, to begin with, the first 17 years of the period, from the end of 1964 through 1981. Here's what took place in that interval:

DOW JONES INDUSTRIAL AVERAGE Dec. 31, 1964: 874.12 Dec. 31, 1981: 875.00

Now I'm known as a long-term investor and a patient guy, but that is not my idea of a big move.
And here's a major and very opposite fact: During that same 17 years, the GDP of the U.S.--that is, the business being done in this country--almost quintupled, rising by $370 \%$. Or, if we look at another measure, the sales of the FORTUNE 500 (a changing mix of companies, of course) more than sextupled. And yet the Dow went exactly nowhere.

To understand why that happened, we need first to look at one of the two important variables that affect investment results: interest rates. These act on financial valuations the way gravity acts on matter: The higher the rate, the greater the downward pull. That's because the rates of return that investors need from any kind of investment are directly tied to the risk-free rate that they can earn from government securities. So if the government rate rises, the prices of all other investments must adjust downward, to a level that brings their expected rates of return into line. Conversely, if government interest rates fall, the move pushes the prices of all other investments upward. The basic proposition is this: What an investor should pay today for a dollar to be received tomorrow can only be determined by first looking at the risk-free interest rate.

Consequently, every time the risk-free rate moves by one basis point--by $0.01 \%$--the value of every investment in the country changes. People can see this easily in the case of bonds, whose value is normally affected only by interest rates. In the case of equities or real estate or farms or whatever, other very important variables are almost always at work, and that means the effect of interest rate changes is usually obscured. Nonetheless, the effect--like the invisible pull of gravity--is constantly there.

In the 1964-81 period, there was a tremendous increase in the rates on long-term government bonds, which moved from just over $4 \%$ at year-end 1964 to more than $15 \%$ by late 1981 . That rise in rates had a huge depressing effect on the value of all investments, but the one we noticed, of course, was the price of equities. So there--in that tripling of the gravitational pull of interest rates--lies the major explanation of why tremendous growth in the economy was accompanied by a stock market going nowhere.

Then, in the early 1980s, the situation reversed itself. You will remember Paul Volcker coming in as chairman of the Fed and remember also how unpopular he was. But the heroic things he did--his taking a two-by-four to the economy and breaking the back of inflation--caused the interest rate trend to reverse, with some rather spectacular results. Let's say you put $\$ 1$ million into the $14 \% 30-$ year U.S. bond issued Nov. 16, 1981, and reinvested the coupons. That is, every time you got an interest payment, you used it to buy more of that same bond. At the end of 1998, with long-term
governments by then selling at 5\%, you would have had \$8,181,219 and would have earned an annual return of more than $13 \%$.

That $13 \%$ annual return is better than stocks have done in a great many 17 -year periods in history-in most 17-year periods, in fact. It was a helluva result, and from none other than a stodgy bond.

The power of interest rates had the effect of pushing up equities as well, though other things that we will get to pushed additionally. And so here's what equities did in that same 17 years: If you'd invested $\$ 1$ million in the Dow on Nov. 16, 1981, and reinvested all dividends, you'd have had $\$ 19,720,112$ on Dec. 31, 1998. And your annual return would have been $19 \%$.

The increase in equity values since 1981 beats anything you can find in history. This increase even surpasses what you would have realized if you'd bought stocks in 1932, at their Depression bottom-on its lowest day, July 8, 1932, the Dow closed at 41.22--and held them for 17 years.

The second thing bearing on stock prices during this 17 years was after-tax corporate profits, which this chart [above] displays as a percentage of GDP. In effect, what this chart tells you is what portion of the GDP ended up every year with the shareholders of American business.

The chart, as you will see, starts in 1929. I'm quite fond of 1929, since that's when it all began for me. My dad was a stock salesman at the time, and after the Crash came, in the fall, he was afraid to call anyone--all those people who'd been burned. So he just stayed home in the afternoons. And there wasn't television then. Soooo... I was conceived on or about Nov. 30, 1929 (and born nine months later, on Aug. 30, 1930), and I've forever had a kind of warm feeling about the Crash.

As you can see, corporate profits as a percentage of GDP peaked in 1929, and then they tanked. The left-hand side of the chart, in fact, is filled with aberrations: not only the Depression but also a wartime profits boom--sedated by the excess-profits tax--and another boom after the war. But from 1951 on, the percentage settled down pretty much to a $4 \%$ to $6.5 \%$ range.

By 1981, though, the trend was headed toward the bottom of that band, and in 1982 profits tumbled to $3.5 \%$. So at that point investors were looking at two strong negatives: Profits were sub-par and interest rates were sky-high.

And as is so typical, investors projected out into the future what they were seeing. That's their unshakable habit: looking into the rear-view mirror instead of through the windshield. What they were observing, looking backward, made them very discouraged about the country. They were projecting high interest rates, they were projecting low profits, and they were therefore valuing the Dow at a level that was the same as 17 years earlier, even though GDP had nearly quintupled.

Now, what happened in the 17 years beginning with 1982? One thing that didn't happen was comparable growth in GDP: In this second 17-year period, GDP less than tripled. But interest rates began their descent, and after the Volcker effect wore off, profits began to climb--not steadily, but nonetheless with real power. You can see the profit trend in the chart, which shows that by the late 1990s, after-tax profits as a percent of GDP were running close to $6 \%$, which is on the upper part of the 'normalcy' band. And at the end of 1998, long-term government interest rates had made their way down to that $5 \%$.

These dramatic changes in the two fundamentals that matter most to investors explain much, though not all, of the more than tenfold rise in equity prices--the Dow went from 875 to 9,181-- during this 17 -year period. What was at work also, of course, was market psychology. Once a bull market gets under way, and once you reach the point where everybody has made money no matter what system he or she followed, a crowd is attracted into the game that is responding not to interest rates and profits but simply to the fact that it seems a mistake to be out of stocks. In effect, these people superimpose an I-can't-miss-the-party factor on top of the fundamental factors that drive the market. Like Pavlov's dog, these 'investors' learn that when the bell rings--in this case, the one that opens the New York Stock Exchange at 9:30 a.m.--they get fed. Through this daily reinforcement, they become convinced that there is a God and that He wants them to get rich.

Today, staring fixedly back at the road they just traveled, most investors have rosy expectations. A Paine Webber and Gallup Organization survey released in July shows that the least experienced investors--those who have invested for less than five years--expect annual returns over the next ten years of $22.6 \%$. Even those who have invested for more than 20 years are expecting $12.9 \%$.

Now, I'd like to argue that we can't come even remotely close to that $12.9 \%$, and make my case by examining the key value-determining factors. Today, if an investor is to achieve juicy profits in the market over ten years or 17 or 20 , one or more of three things must happen. I'll delay talking about the last of them for a bit, but here are the first two:
(1) Interest rates must fall further. If government interest rates, now at a level of about $6 \%$, were to fall to $3 \%$, that factor alone would come close to doubling the value of common stocks.
Incidentally, if you think interest rates are going to do that--or fall to the $1 \%$ that Japan has experienced--you should head for where you can really make a bundle: bond options.
(2) Corporate profitability in relation to GDP must rise. You know, someone once told me that New York has more lawyers than people. I think that's the same fellow who thinks profits will become larger than GDP. When you begin to expect the growth of a component factor to forever outpace that of the aggregate, you get into certain mathematical problems. In my opinion, you have to be wildly optimistic to believe that corporate profits as a percent of GDP can, for any sustained period, hold much above $6 \%$. One thing keeping the percentage down will be competition, which is alive and well. In addition, there's a public-policy point: If corporate investors, in aggregate, are going to eat an ever-growing portion of the American economic pie, some other group will have to settle for a smaller portion. That would justifiably raise political problems--and in my view a major reslicing of the pie just isn't going to happen.

So where do some reasonable assumptions lead us? Let's say that GDP grows at an average 5\% a year--3\% real growth, which is pretty darn good, plus $2 \%$ inflation. If GDP grows at 5\%, and you don't have some help from interest rates, the aggregate value of equities is not going to grow a whole lot more. Yes, you can add on a bit of return from dividends. But with stocks selling where they are today, the importance of dividends to total return is way down from what it used to be. Nor can investors expect to score because companies are busy boosting their per-share earnings by buying in their stock. The offset here is that the companies are just about as busy issuing new stock, both through primary offerings and those ever present stock options.

So I come back to my postulation of $5 \%$ growth in GDP and remind you that it is a limiting factor in the returns you're going to get: You cannot expect to forever realize a $12 \%$ annual increase--much
less $22 \%$--in the valuation of American business if its profitability is growing only at $5 \%$. The inescapable fact is that the value of an asset, whatever its character, cannot over the long term grow faster than its earnings do.

Now, maybe you'd like to argue a different case. Fair enough. But give me your assumptions. If you think the American public is going to make $12 \%$ a year in stocks, I think you have to say, for example, 'Well, that's because I expect GDP to grow at $10 \%$ a year, dividends to add two percentage points to returns, and interest rates to stay at a constant level.' Or you've got to rearrange these key variables in some other manner. The Tinker Bell approach--clap if you believe--just won't cut it.

Beyond that, you need to remember that future returns are always affected by current valuations and give some thought to what you're getting for your money in the stock market right now. Here are two 1998 figures for the FORTUNE 500. The companies in this universe account for about $75 \%$ of the value of all publicly owned American businesses, so when you look at the 500, you're really talking about America Inc.

FORTUNE 5001998 profits: $\$ 334,335,000,000$ Market value on March 15, 1999:
\$9,907,233,000,000
As we focus on those two numbers, we need to be aware that the profits figure has its quirks. Profits in 1998 included one very unusual item--a $\$ 16$ billion bookkeeping gain that Ford reported from its spinoff of Associates--and profits also included, as they always do in the 500, the earnings of a few mutual companies, such as State Farm, that do not have a market value. Additionally, one major corporate expense, stock-option compensation costs, is not deducted from profits. On the other hand, the profits figure has been reduced in some cases by write-offs that probably didn't reflect economic reality and could just as well be added back in. But leaving aside these qualifications, investors were saying on March 15 this year that they would pay a hefty $\$ 10$ trillion for the $\$ 334$ billion in profits.

Bear in mind--this is a critical fact often ignored--that investors as a whole cannot get anything out of their businesses except what the businesses earn. Sure, you and I can sell each other stocks at higher and higher prices. Let's say the FORTUNE 500 was just one business and that the people in this room each owned a piece of it. In that case, we could sit here and sell each other pieces at everascending prices. You personally might outsmart the next fellow by buying low and selling high. But no money would leave the game when that happened: You'd simply take out what he put in. Meanwhile, the experience of the group wouldn't have been affected a whit, because its fate would still be tied to profits. The absolute most that the owners of a business, in aggregate, can get out of it in the end--between now and Judgment Day--is what that business earns over time.

And there's still another major qualification to be considered. If you and I were trading pieces of our business in this room, we could escape transactional costs because there would be no brokers around to take a bite out of every trade we made. But in the real world investors have a habit of wanting to change chairs, or of at least getting advice as to whether they should, and that costs money--big money. The expenses they bear--I call them frictional costs--are for a wide range of items. There's the market maker's spread, and commissions, and sales loads, and 12b-1 fees, and management fees, and custodial fees, and wrap fees, and even subscriptions to financial publications. And don't brush these expenses off as irrelevancies. If you were evaluating a piece of investment real estate, would you not deduct management costs in figuring your return? Yes, of
course--and in exactly the same way, stock market investors who are figuring their returns must face up to the frictional costs they bear.

And what do they come to? My estimate is that investors in American stocks pay out well over $\$ 100$ billion a year--say, $\$ 130$ billion--to move around on those chairs or to buy advice as to whether they should! Perhaps $\$ 100$ billion of that relates to the FORTUNE 500. In other words, investors are dissipating almost a third of everything that the FORTUNE 500 is earning for them-that $\$ 334$ billion in 1998--by handing it over to various types of chair-changing and chair-advisory 'helpers.' And when that handoff is completed, the investors who own the 500 are reaping less than a $\$ 250$ billion return on their $\$ 10$ trillion investment. In my view, that's slim pickings.

Perhaps by now you're mentally quarreling with my estimate that $\$ 100$ billion flows to those 'helpers.' How do they charge thee? Let me count the ways. Start with transaction costs, including commissions, the market maker's take, and the spread on underwritten offerings: With double counting stripped out, there will this year be at least 350 billion shares of stock traded in the U.S., and I would estimate that the transaction cost per share for each side--that is, for both the buyer and the seller--will average 6 cents. That adds up to $\$ 42$ billion.

Move on to the additional costs: hefty charges for little guys who have wrap accounts; management fees for big guys; and, looming very large, a raft of expenses for the holders of domestic equity mutual funds. These funds now have assets of about $\$ 3.5$ trillion, and you have to conclude that the annual cost of these to their investors--counting management fees, sales loads, $12 \mathrm{~b}-1$ fees, general operating costs--runs to at least $1 \%$, or $\$ 35$ billion.

And none of the damage I've so far described counts the commissions and spreads on options and futures, or the costs borne by holders of variable annuities, or the myriad other charges that the 'helpers' manage to think up. In short, $\$ 100$ billion of frictional costs for the owners of the FORTUNE 500--which is $1 \%$ of the 500's market value--looks to me not only highly defensible as an estimate, but quite possibly on the low side.

It also looks like a horrendous cost. I heard once about a cartoon in which a news commentator says, 'There was no trading on the New York Stock Exchange today. Everyone was happy with what they owned.' Well, if that were really the case, investors would every year keep around \$130 billion in their pockets.

Let me summarize what I've been saying about the stock market: I think it's very hard to come up with a persuasive case that equities will over the next 17 years perform anything like--anything like--they've performed in the past 17. If I had to pick the most probable return, from appreciation and dividends combined, that investors in aggregate--repeat, aggregate--would earn in a world of constant interest rates, $2 \%$ inflation, and those ever hurtful frictional costs, it would be $6 \%$. If you strip out the inflation component from this nominal return (which you would need to do however inflation fluctuates), that's $4 \%$ in real terms. And if $4 \%$ is wrong, I believe that the percentage is just as likely to be less as more.

Let me come back to what I said earlier: that there are three things that might allow investors to realize significant profits in the market going forward. The first was that interest rates might fall, and the second was that corporate profits as a percent of GDP might rise dramatically. I get to the third point now: Perhaps you are an optimist who believes that though investors as a whole may
slog along, you yourself will be a winner. That thought might be particularly seductive in these early days of the information revolution (which I wholeheartedly believe in). Just pick the obvious winners, your broker will tell you, and ride the wave.

Well, I thought it would be instructive to go back and look at a couple of industries that transformed this country much earlier in this century: automobiles and aviation. Take automobiles first: I have here one page, out of 70 in total, of car and truck manufacturers that have operated in this country. At one time, there was a Berkshire car and an Omaha car. Naturally I noticed those. But there was also a telephone book of others.

All told, there appear to have been at least 2,000 car makes, in an industry that had an incredible impact on people's lives. If you had foreseen in the early days of cars how this industry would develop, you would have said, 'Here is the road to riches.' So what did we progress to by the 1990s? After corporate carnage that never let up, we came down to three U.S. car companies--themselves no lollapaloozas for investors. So here is an industry that had an enormous impact on America--and also an enormous impact, though not the anticipated one, on investors.

Sometimes, incidentally, it's much easier in these transforming events to figure out the losers. You could have grasped the importance of the auto when it came along but still found it hard to pick companies that would make you money. But there was one obvious decision you could have made back then--it's better sometimes to turn these things upside down--and that was to short horses. Frankly, I'm disappointed that the Buffett family was not short horses through this entire period. And we really had no excuse: Living in Nebraska, we would have found it super-easy to borrow horses and avoid a 'short squeeze.'

## U.S. Horse Population 1900: 21 million 1998: 5 million

The other truly transforming business invention of the first quarter of the century, besides the car, was the airplane--another industry whose plainly brilliant future would have caused investors to salivate. So I went back to check out aircraft manufacturers and found that in the 1919-39 period, there were about 300 companies, only a handful still breathing today. Among the planes made then--we must have been the Silicon Valley of that age--were both the Nebraska and the Omaha, two aircraft that even the most loyal Nebraskan no longer relies upon.

Move on to failures of airlines. Here's a list of 129 airlines that in the past 20 years filed for bankruptcy. Continental was smart enough to make that list twice. As of 1992, in fact--though the picture would have improved since then--the money that had been made since the dawn of aviation by all of this country's airline companies was zero. Absolutely zero.

Sizing all this up, I like to think that if I'd been at Kitty Hawk in 1903 when Orville Wright took off, I would have been farsighted enough, and public-spirited enough--I owed this to future capitalists-to shoot him down. I mean, Karl Marx couldn't have done as much damage to capitalists as Orville did.

I won't dwell on other glamorous businesses that dramatically changed our lives but concurrently failed to deliver rewards to U.S. investors: the manufacture of radios and televisions, for example. But I will draw a lesson from these businesses: The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive
advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors.

This talk of 17-year periods makes me think--incongruously, I admit--of 17-year locusts [pictured below]. What could a current brood of these critters, scheduled to take flight in 2016, expect to encounter? I see them entering a world in which the public is less euphoric about stocks than it is now. Naturally, investors will be feeling disappointment--but only because they started out expecting too much.

Grumpy or not, they will have by then grown considerably wealthier, simply because the American business establishment that they own will have been chugging along, increasing its profits by $3 \%$ annually in real terms. Best of all, the rewards from this creation of wealth will have flowed through to Americans in general, who will be enjoying a far higher standard of living than they do today. That wouldn't be a bad world at all--even if it doesn't measure up to what investors got used to in the 17 years just passed.

October 17, 2008 Op-Ed Contributor

## Buy American. I Am.

By WARREN E. BUFFETT

## Omaha

THE financial world is a mess, both in the United States and abroad. Its problems, moreover, have been leaking into the general economy, and the leaks are now turning into a gusher. In the near term, unemployment will rise, business activity will falter and headlines will continue to be scary.

So ... I've been buying American stocks. This is my personal account I'm talking about, in which I previously owned nothing but United States government bonds. (This description leaves aside my Berkshire Hathaway holdings, which are all committed to philanthropy.) If prices keep looking attractive, my non-Berkshire net worth will soon be 100 percent in United States equities.

Why?
A simple rule dictates my buying: Be fearful when others are greedy, and be greedy when others are fearful. And most certainly, fear is now widespread, gripping even seasoned investors. To be sure, investors are right to be wary of highly leveraged entities or businesses in weak competitive positions. But fears regarding the long-term prosperity of the nation's many sound companies make no sense. These businesses will indeed suffer earnings hiccups, as they always have. But most major companies will be setting new profit records 5,10 and 20 years from now.

Let me be clear on one point: I can't predict the short-term movements of the stock market. I haven't the faintest idea as to whether stocks will be higher or lower a month - or a year - from now. What is likely, however, is that the market will move higher, perhaps substantially so, well before either sentiment or the economy turns up. So if you wait for the robins, spring will be over.

A little history here: During the Depression, the Dow hit its low, 41, on July 8, 1932. Economic conditions, though, kept deteriorating until Franklin D. Roosevelt took office in March 1933. By that time, the market had already advanced 30 percent. Or think back to the early days of World War II, when things were going badly for the United States in Europe and the Pacific. The market hit bottom in April 1942, well before Allied fortunes turned. Again, in the early 1980s, the time to buy stocks was when inflation raged and the economy was in the tank. In short, bad news is an investor's best friend. It lets you buy a slice of America's future at a marked-down price.

Over the long term, the stock market news will be good. In the 20th century, the United States endured two world wars and other traumatic and expensive military conflicts; the Depression; a dozen or so recessions and financial panics; oil shocks; a flu epidemic; and the resignation of a disgraced president. Yet the Dow rose from 66 to 11,497.

You might think it would have been impossible for an investor to lose money during a century marked by such an extraordinary gain. But some investors did. The hapless ones bought stocks only when they felt comfort in doing so and then proceeded to sell when the headlines made them queasy.

Today people who hold cash equivalents feel comfortable. They shouldn't. They have opted for a terrible long-term asset, one that pays virtually nothing and is certain to depreciate in value. Indeed, the policies that government will follow in its efforts to alleviate the current crisis will probably prove inflationary and therefore accelerate declines in the real value of cash accounts.

Equities will almost certainly outperform cash over the next decade, probably by a substantial degree. Those investors who cling now to cash are betting they can efficiently time their move away from it later. In waiting for the comfort of good news, they are ignoring Wayne Gretzky's advice: "I skate to where the puck is going to be, not to where it has been."

I don't like to opine on the stock market, and again I emphasize that I have no idea what the market will do in the short term. Nevertheless, I'll follow the lead of a restaurant that opened in an empty bank building and then advertised: "Put your mouth where your money was." Today my money and my mouth both say equities.

Warren E. Buffett is the chief executive of Berkshire Hathaway, a diversified holding company.




[^0]:    ${ }^{1}$ Fortune magazine ranks the largest 500 companies based on sales and refers to them as the Fortune 500. ." This group of companies can be used as a rough proxy for U.S. -based business.
    ${ }^{2}$ Corporate profits at the time were more than $6 \%$ of GDP, compared to a long-term average of $4.88 \%$. They have since risen to over $9 \%$, far above $\backslash$ historic levels.
    ${ }^{3}$ Over long periods the U.S. economy has grown at a real rate of 3\% and a nominal rate (after inflation) of 5\%. Other than a postwar boom or recovery from severe recession, this level is rarely exceeded.

[^1]:    ${ }^{4}$ Some of the Auto companies operating in 1903 were Electric Vehicle Company, The Winton Motor Carriage Company, Packard Motor Car company, Olds Motor Works, Knox Automobile Company, The Peerless Motor Car Co., Waltham Manufacturing Co., Berg Automobile Co., Cadillac Automobile Co., Buffalo Gasoline Motor Co. , etc.

