



IT'S A NEW YEAR – NOW WHAT?

A SERIES OF UNFORTUNATE EVENTS

One of the challenges of investing is that while the market is a leading indicator for the economy, there really is no leading indicator for the market. But while forecasting the market has proven impossible, that doesn't mean that it's useless to look at recent market activity in formulating investment strategy. If you've read the financial press or watched business television at all in early 2009, you've probably encountered dozens of different ways of expressing the same basic message: The US stock market fell –37% in 2008 (based on the S&P 500 index), its worst calendar-year performance since 1931 — more than 75 years ago. The magnitude of the losses, as well as the dramatic events that accompanied them, have left many investors re-evaluating their core strategies. The turn of the year seems a particularly apposite time to examine what the events of the past several months might mean in terms of investors' strategies for the year ahead.

While in memory 2008 seemed like a uniformly awful year, it really wasn't. I find it most useful to divide it into three distinct periods — January 1 to September 26; the two weeks from September 26 to October 10; and the end of the year, from October 10 to December 31. In the first period, the S&P 500 ground steadily lower on a stream of bad economic and financial news, losing –16% in nine months. In the second period, the market lost –25% in just two weeks, as the news worsened and uncertainty took hold. In the final period, the market oscillated wildly but inconclusively, ending the year nearly flat for that final period, at a mere 4 points above the October 10 level.¹

A CLEAR SHIFT

As dramatic as market movements were throughout last year, it seems clear that the key period was between September 26 and October 10, when the market dropped a full 25%. How can the whole US stock market lose one-fourth of its value in two weeks? To evaluate this shift, let's review what happened during that period and then assess its likely impact.

¹ To reconcile the returns for the three periods (–16%, –25%, and zero) with the final annual figure of –37%, note that the 25% drop in October was from a level already down 16% from 12/31/07. The amount the market fell in early October was 25% of the 9/26/08 level, but just 21% of the 12/31/07 level.

Over the weekend of September 26, Treasury Secretary Henry Paulson, Fed Chair Ben Bernanke, and President Bush proposed a \$700 billion bank rescue package that they insisted was crucial to maintaining the stability of the US financial system. The sheer size of the bail-out package they called for shocked the market. It also set off a round of political wrangling, all the more dramatic because it fell amidst the most intense part of the Presidential election season. The resulting confusion and inability to agree on solutions also magnified the extent of the problems and cast doubt on the effectiveness of any governmental intervention. On Monday, September 29, the House of Representatives rejected the plan, and the market fell sharply. Even though Congress eventually passed a modified version of the Troubled Asset Relief Plan (TARP) later the same week, it could not repair the damage. The attendant uncertainty, along with the dire warnings from both Secretary Paulson and President Bush regarding the consequences of failure to pass a bailout bill, greatly increased fear in a market already nervous about the rapid-fire collapse of Fannie Mae, Freddie Mac, AIG, Merrill Lynch, Lehman Brothers, and Wachovia. In two weeks, the S&P 500 fell -25%, coming to rest right around the 900 level on October 10. That's about where it ended the year, in spite of violent moves in both directions during the fourth quarter. The S&P 500 index lost a stunning total of -37% for the year.

To understand how the market could drop 25% in two weeks, we have to understand what the market value represents. The share price of a stock represents the market assessment of the present value of the company's future cash flows. There are two primary components to calculations of present value: the estimate of the company's earnings or cash flows, and an assessment of the discount rate to use in valuing those cash flows. Generally speaking, that discount rate depends on the general level of interest rates and the degree of risk in the investment. The riskier the investment is, the higher the discount rate — and the lower the present value. When stock prices change, they are usually signaling a change in the market's assessment of the size of expected cash flows (or profitability). Sometimes, however, stock prices change in response to changes in the perception of the riskiness of those cash flows, which requires a change in the discount rate for calculating their present value. After the unsettling developments that hit the market in the interval from September 26 to October 10, it is likely that both aspects of the calculation of share valuation changed.

Let's look at the cash flow side first. The generally bad economic news at the end of September probably did drive expectations of future corporate performance lower, but would that alone explain the 25% drop? If it were due entirely to a change in cash flow expectations, that would mean that market participants had lowered their estimates of overall corporate cash flows — not just for the current year, but for years to come — by 25% all at once. That seems unlikely. The market had been falling for nearly a year by the last weekend of September, suggesting that market participants had already substantially lowered their expectations for corporate financial performance during the course of 2008.

While the uncertainty over the TARP could cause some downward revision in earnings expectations, the uncertainty itself was undoubtedly a major factor in the market's move as well. The move's size suggests that the market shifted the standards of valuation, as investors sharply lowered the prices they would be willing to pay for a given level of expected financial performance. Put another way, market prices adjusted to reflect a higher discount rate for valuing future corporate cash flows. This happened for a couple of reasons. First, the level of uncertainty in the market increased dramatically, and the market tends not to like uncertainty. The involvement of Congress in deliberations over a banking bailout package, financial assistance to the automotive industry, and fiscal stimulus hung a pall of risk broadly over the economy and the markets. Weak credit conditions, as indicated by very low interest rates on US Treasury bills and high rates on most corporate credits, added to the risk that more firms could find themselves suddenly insolvent. And while a consensus emerged late in the summer that the US economy had fallen into recession, estimates of its length and severity varied greatly. So the increase in risk, or perceived risk of future cash flows, is likely to have driven the market lower, meaning the effective rate at which the market consensus discounts future expected corporate cash flows rose considerably.

THE COST OF CAPITAL

When stock prices fall, it means that those buyers that do come into the market are able to demand better return prospects to compensate them for taking on market risks. When investors demand elevated rates of return to commit capital to risky investments, businesses face a corresponding increase in the cost and difficulty of raising capital.

A couple of events that took place at about the same time as the September earthquake in the financial sector that illustrate this point. On September 23, 2008, Berkshire Hathaway, the firm run by widely-admired investor Warren Buffett, invested \$5 billion in Goldman Sachs and Company. Berkshire bought \$5 billion in perpetual preferred stock paying a preferred dividend of 10% per year. Berkshire also received warrants to buy \$5 billion more in Goldman's common stock at a price about 10% below where it was trading at the time of the investment. Observers noted at the time that Mr. Buffett and Berkshire Hathaway have substantial market clout, and were probably able to negotiate terms far more favorable than those that rank-and-file investors would be likely to obtain. In addition, Goldman Sachs, whose business depends critically on investor confidence, probably saw substantial benefit from the imprimatur of an investment by a party whose judgment the market holds in such high regard. A week later, Berkshire Hathaway made a \$3 billion investment, on similar terms, in General Electric.

The terms of the Goldman Sachs and General Electric deals illustrate the type of prospective returns investors demanded to induce them to risk their capital. The high rates on the preferred shares Berkshire received, and the severe dilution that existing shareholders

suffered, illustrate the cost that companies now must bear to raise — and keep — capital. A company's cost of capital is just the flip side of its investors' required rate of return. If investors require a given level of prospective return to induce them to commit capital, companies must meet that required rate of return, or find themselves losing capital.

Even cash-rich companies feel the effect of higher capital costs. Look at Microsoft (MSFT). It, too, fell by nearly –30%, from \$27.40 per share at the close on September 26 to \$19.44 at year-end. While a general economic slowdown would likely weaken MSFT's results in the near term, nothing suggests that the company would earn anything like 30% less than previously expected for the indefinite future. Likewise, Microsoft is unlikely to need to raise new capital — it has only about \$2 billion in debt, and nearly \$20 billion in cash on its balance sheet. The company's operating cash flow was more than \$19 billion for the most recently reported four quarters. So profitability isn't Microsoft's problem, and neither is capital adequacy. But even without a downgrading of earnings expectations, Microsoft's price may have fallen because of a general market perception of an increase in risk, as well as a market repricing of risk — an increase in its cost of capital.

A general increase in the cost of capital has several important implications. We've already seen one — if the rate of return investors require increases, then stock prices will fall, even if nothing else changes. This isn't a static effect, however. Even a profitable, cash-rich company will continue to shed value if the market perceives that it is unable to generate returns that meet the cost of capital. This is because investment activities, *even profitable ones*, whose returns fall short of the cost of capital *destroy value*.

Investors and corporate financial officers will recognize the increase in the cost of capital, either intuitively or explicitly. Either way, they will redeploy capital away from investments whose likely returns are lower than the new cost of capital, and concentrate only on those whose rates of return they judge to be high enough. As CFOs evaluate corporate initiatives, they will find the higher hurdle (CFOs sometimes do refer to the cost of capital, or required rate of return, as a "hurdle rate") excludes many projects they may previously have recommended or approved. As a result, overall investment by corporations seems likely to ease for a time.

We are already seeing some signs of the effect of the cost of capital on investment activity. Anecdotal reports from the Silicon Valley technology community are indicating that some venture capital providers have been insisting on layoffs and other belt-tightening measures on the part of their portfolio companies. It seems likely that corporate investment in plant and equipment will decline in general for a while. And recent results from firms like chip maker Intel (INTC) and chip equipment maker Applied Materials (AMAT) seem to indicate softening in corporate technology investment as well as consumer spending.

TRIAGE ON THE CORPORATE BATTLEFIELD

If an increase in the cost of capital is one factor in the recent drop in stock market values, what are the investment implications of the change? To a large extent the long-term results will depend on whether the repricing of market risk is a temporary spike or a long-term shift, a question whose answer we just don't know. The more persistent the increase in the cost of capital turns out to be, the more profound will be the economic realignment it causes.

In the near term, the casualties will be firms that are marginally profitable, but face capital constraints. Companies whose operations produce only modest returns will have difficulty borrowing or otherwise raising new capital. If they face near-term cash needs, they may find themselves facing insolvency and reorganization. If they already have substantial financial leverage, their accumulated borrowings may bring them to grief even faster.

Another large category of companies will be those that have adequate capital, but whose operations don't produce high enough returns to meet the increased cost of capital. If the increase is a temporary spike, then these firms will suffer a period in which they lose value, but then have a good chance of recovery if capital costs ease relatively soon. On the other hand, if the change in capital costs is more durable, then these firms, too, will continue to destroy value and shed capital.

The market extracts capital from companies destroying value in a variety of ways. The most obvious, and probably most destructive, is bankruptcy, in which the company seeks the protection of the bankruptcy court, which adjudicates the parceling out of losses among creditors, restructures finances and operations, and hopefully ultimately releases the company in better shape to produce sustaining returns. Companies can also restructure themselves, voluntarily selling off or closing divisions, curtailing non-economic investments, and returning cash to shareholders. Finally, at some point in the capital market cycle companies with access to ample capital, but which persistently destroy value by deploying it badly, become vulnerable to hostile takeovers by activists seeking to profit by forcibly removing capital from non-economic uses.

UNUSUAL SCARCITY OF CASH

When the stock market falls sharply, cash-rich firms sometimes respond by initiating share buybacks. From a commonsense point of view, a share buyback amounts to a statement from the company that its stock is cheap. From an investor's point of view, a share buyback is a means by which a company can return cash to its shareholders if the firm's operations are unable to produce returns high enough to meet its cost of capital, and so holding on to that cash would destroy shareholder value. One striking feature of the fall market drop is the absence of share buybacks, in spite of the steep decline in stock market prices. The lack of buybacks suggests that

the availability of corporate credit has become so constrained that even cash-rich companies are hoarding their cash. The failure of companies to buy back their own stock may have contributed to the severity of the market's drop.

The unusual scarcity of cash helped create the conditions that resulted in the extreme market decline in 2008. Buyers have become scarcer in this market, as retail investors made large withdrawals from mutual funds, financial institutions and hedge funds decreased their leverage, and capital generally flowed from risky assets (the stock market) to items on the Fed's expanded menu of fixed income securities enjoying some measure of government guarantee. The result has been a net reduction in the total capital invested in the equity markets. With less capital supporting the same overall quantity of securities, stock prices fell as a result of more selling supply and decreased buying demand.

SHOULD YOU ADJUST YOUR STRATEGY?

For investors, the portion of the market's decline that reflects lower prospects for corporate financial performance due to the overall economic slow-down is value lost, not likely to be recovered until some future, favorable economic surprise occurs. The portion that pertains to the increase in the market discount rate that resolves expected future performance into current prices reflects an increase in the market risk premium. The risk premium is the level of future return potential investors require to induce them to buy risky assets, rather than safer ones like Treasury bills. Put this way, the market drop in early October reflects both a drop in expected future corporate cash flows and an increase in the risk premium in the US stock market.² By dropping further than a downrating of earnings expectations would explain, the market is saying that *investors that buy now insist on higher returns in the future than they had previously expected.*

In my analysis, the increase in the market risk premium likely has two parts. The first is a direct reflection of the increased risk in the market — other things equal, investors usually pay less for riskier assets. The wild swings in the US stock market between mid-October and year-end suggest that the market's assessment of increased risk was correct. The second component is a change in the market pricing of risk itself. As capital has become scarcer and more investors have opted for safer assets like Treasury bills, the premium necessary to attract investors to a given level of risk has increased. Thus the risk premium after mid-October may have been

² For another way to see how lower prices translate into higher future expected returns, take the simple case of a security that pays \$100 for sure a year from today. If you bought that security for \$95, you would look forward to a return of a bit over 5%, but if you could buy the same security for just \$90, then you would be able to look forward to a return of just over 11%. If the payoffs don't change, then a drop in price translates directly into a higher future return. That's why prices for existing bonds go down when interest rates go up.

higher than it would have been in other market environments, even with the elevated level of risk.

In this environment, investors with substantial risk tolerance and long investment horizons may do very well by stepping up their investments in equities. Investors close to the limits of their risk tolerance, or who have current cash needs, should generally respond more to the elevated level of risk, even though they may end up conceding future returns to those with more capacity to put their capital at risk. Thus the separation between appropriate strategies for conservative and aggressive investors may now be sharper than normal.

Some companies will be able to produce returns sufficient to meet the demands of investors. These firms will prosper, and in the end they will likely produce superior returns. When well-known value investors like Warren Buffett or Jeremy Grantham remark that they are beginning to see compelling values in the market, these are the firms they have in mind. We don't know specifically which firms will be the strong ones, and neither do Mr. Buffett or Mr. Grantham. We also don't know which companies that are currently in relatively strong positions will stumble, or which companies that currently appear weak will perform unexpectedly well. But if the market risk premium really has increased, then successful companies — both those blue chips that manage to avoid serious missteps and tomorrow's surprise successes — could produce solid returns in the future. For that reason, some patient investors are cautiously increasing their allocations to stocks. For those with capital available, taking on a judicious degree of risk in a high cost-of-capital environment may lead to attractive results.

CONCLUSION

The turmoil in the equity markets in the fall of 2008 has come about because of the confluence of a variety of factors, from distress in the credit markets, to uncertainty about government policy and its effectiveness, to fears of a prolonged recession. Other factors, like forced selling by mutual funds and hedge funds, may also have come into play. In broad strokes, the sharp drop in equity market prices seems to have three components, which reinforce one another: decreased investor expectations for corporate financial performance; investor perceptions of increased risk in the stock market; and an increase in the return investors require to take on risk, reinforced by the increased availability of government-protected investments.

The re-pricing of risk in the market would suggest that investors are looking forward to better returns in the future, but the picture isn't quite that simple. That's because the re-pricing raises corporations' cost of capital. A higher cost of capital means that companies needing capital will face harsher terms raising it; firms whose operations produce returns short of that cost of capital may destroy value, which could eventually lead investors to withdraw capital; and



fewer investment opportunities will meet the market's elevated return threshold, so overall business investment may be soft.

In spite of the cost of capital, very attractive investment opportunities will continue to exist, and the rewards available to investors able to pursue those opportunities could be unusually generous. For investors with cash on hand, long horizons and the ability to bear risk, a market downdraft can represent an opportunity to build future returns. But the risks in the market remain elevated. Investors with short horizons or large current cash needs may not be able to take so much risk. They may prefer to remain cautious in this difficult market environment.

-Jonathan Tiemann
Menlo Park
January 26, 2009

*Tiemann Investment Advisors, LLC is an SEC-registered investment advisor based in Menlo Park, California. For more information, please send your request to information@tiemann.net or visit www.tiemann.net.
Copyright © Tiemann Investment Advisors, LLC 2009.*