

Strange But True

[S&P 500 Composition]

Source: 1999 2Q *TIFF Funds*

More Reasons to Stay the Course

As noted in a letter mailed to all TIFF Members on June 2, TIFF is gratified that so many of its Members have elected to stay the course despite the disappointing returns that some TIFF Funds produced during 1998. Not surprisingly, several Members that have **not** stayed the course have chosen to do what so many individual investors have done in recent years: abandon active management (which the TIFF Funds employ) in favor of capitalization-weighted index funds, including funds that seek to mimic the S&P 500. As the accomplished investor Jim Gipson has noted, investment strategies tend to reach simultaneously their zenith of popularity and their nadir of effectiveness, and given how poorly the S&P 500 has performed in recent months (underperforming the TIFF U.S. Equity Fund by more than 300 bp during 2Q 1999) one is tempted to conclude that S&P 500 index funds reached their nadir of effectiveness as cash flows into them were cresting earlier this year. But several months of inferior returns do not an enduring trend make, and we will refrain from suggesting here that the tide has turned decisively against the megacap stocks that dominate the S&P 500. But we will observe that many investors who have committed capital to cap-weighted index funds do not understand just how much monkey business surrounds their construction and administration. To prove the point, we have assembled the following list of strange but true facts about cap-weighted index funds now being marketed aggressively to institutional investors.

The Winningest Active Manager

The S&P 500 comprises not the 500 largest US stocks but rather 500 issues that a committee of Standard & Poors employees deems representative of the broad US economy. Due primarily to heavy M&A activity, but also to S&P's determination to keep its vaunted 500 Index "current" by replacing fading Industrial Age stocks with sexier Information Age stocks (e.g., America Online replaced the old Woolworth in 1998), there have been more than **260** changes in the Index over the last decade. These changes, coupled with the dramatic outperformance of certain sectors during the late 1990s, have caused the 500's sector weights to change materially over time: technology stocks now comprise 21% of the Index, up from 8% 10 years ago, and energy stocks comprise 6%, down from 18%. More generally, while market observers do not always agree on a uniform definition of what "cyclical" means, issues traditionally deemed cyclical (e.g., capital goods, raw materials, transportation, etc.) represent far less of the S&P 500 than they did before the Information Age began in earnest.

Not Your Grandmother's Index

Given the S&P 500's dominance by very large companies (its 50 largest constituent stocks account for more than 55% of the Index's value and sell for an average P/E more than 70% higher than the residual 450 stocks!), the 500 is very dependent on non-US economic activity: foreign-sourced earnings represent more than 40% of its constituent firms' aggregate income, and roughly 20% of the 500 derive more than half of their income from foreign operations. Some S&P 500 votaries celebrate this fact, arguing that they can gain exposure to foreign economies without investing directly in foreign stocks, but they are paying a hefty price to do so: at June 30, the S&P 500 traded at just under five times book value, a premium to book value 81% higher than the average non-US stock (as measured by the MSCI All Country World Free ex US Index) and a whopping 172% higher than the price/book ratio of 1.8 at which the average emerging market stock trades (as measured by the MSCI Emerging Markets Free Index). It is ironic that the better S&P 500 index funds perform relative to alternate means of stock ownership, the more "prudent" such funds become in the eyes of many fiduciaries. This is ironic because downside risk is usually an important gauge of an investment's prudential qualities, and the more S&P 500 index funds outpace competing alternatives, the more downside risk they entail relative to these same alternatives. *Caveat emptor.*

Other Curious Beasts

Small- and so-called mid-cap indices are also curious beasts because the better their constituent stocks perform, the more turnover such indices display: once individual stocks' capitalizations rise above the cutoff for inclusion in these indices, they are forcibly removed from the surroundings that nurtured them and (typically) reinserted into larger capitalization benchmarks. For example, when the widely followed Russell 2000 index underwent its annual reconstitution on June 30, numerous Internet-related stocks graduated from the R2000 into the Russell 1000. Unlike the S&P 500, which comprises stocks selected subjectively if not somewhat arbitrarily by S&P officials, the stocks comprising Russell's indices are constructed on a purely objective basis. The R1000 comprises the 1000 largest capitalization US stocks; the R2000 comprises the next 2000. As of June 30, the dividing line between the R1000 and the R2000 was \$1.3 billion. The smallest stock in the R2000 has a capitalization of \$178 million, which means that any company consummating an initial public offering (IPO) which results in a market capitalization exceeding this amount immediately appears on the radar screen of R2000 index-trackers, although its actual inclusion in the R2000 may be forestalled pending the next reconstitution of the index. Why doesn't Russell reconstitute its indices more than once per year? Because doing so would cause what is already horrific turnover for vehicles marketed primarily to "buy-and-hold" investors to soar to ludicrous heights. As a result of this year's rebalancing of the R2000, for example, 375 issues left the Index and 513 entered it, producing turnover equal to 26% of the Index's total capitalization on June 30. (More companies entered than exited because 128 companies included in the Index combined with other firms or dropped out for other reasons since the Index was last reconstituted in mid-1998.) Buy-and-hold indeed.

Yankees Go Home

Foreign stock indices also display strange properties. For example, when the UK-based firm Vodafone acquired the US-based firm AirTouch Communications in late June, Vodafone's weight in the popular FT and MSCI cap-weighted indices of the UK stock market soared, and AirTouch vanished from the S&P 500, due to S&P's policy of excluding firms domiciled outside the US. This saga mimics what occurred when Daimler Benz acquired Chrysler (Daimler tried mightily but failed to persuade S&P to let the merged entity replace Chrysler per se in the 500 Index), with a similar tale unfolding when British Petroleum acquired Amoco. In each case, US-benchmarked index funds were forced to make massive sales of the acquired firms' stocks, and non-US-benchmarked indexers were forced to make massive purchases, causing many US institutions that employ indexed strategies globally to essentially sell and simultaneously repurchase the shares in question. This makes a lot of sense — if one makes a living brokering stocks. An analogous situation arose when the Swedish pharmaceutical firm Astra merged recently with UK-based Zeneca, causing index compilers to drop Astra from their Swedish indices while boosting materially Zeneca's or rather AstraZeneca's weight in their UK benchmarks. Brokers were similarly enriched by the feverish trading spawned by Deutsche Telekom's announcement in late May that it had registered for trading the huge block of DT shares still held by the German government. This action caused DT's weight in the DAX index of German stocks (and in all MSCI indices that comprise German shares) to more than double, forcing index funds and other benchmark-trackers to make frenetic purchases of DT common.

Buy High, Sell Low

Because they are cap-weighted, the non-US indices we're discussing here display the same non-contrarian bias with respect to country weights as the S&P 500 does with respect to industry weights: Japan represented 68% of the MSCI EAFE Index when its stock market peaked at the end of 1989 but just 21% at the end of 1998, and emerging markets represented just 8% of the MSCI All Country World ex US Index at year-end 1998, about half their weight when they were hugely in favor at year-end 1993. In hindsight, fiduciaries who committed Other People's Money to EAFE index funds around 1989 or to emerging markets-laden investment vehicles in 1993 look foolish if not downright imprudent. But to the best of our knowledge no fiduciary has ever been sued for utilizing (on an unleveraged basis) passive or indexed strategies entailing capitalization weighting, perhaps because potential plaintiffs recognize that such putative defendants have a persuasive if not airtight defense at their disposal: "everyone else was doing it." This claim may not be the literal truth — US-based institutions investing in foreign stocks made scant use of indexed strategies a decade ago, for example — but it is tautologically true that a capitalization-weighted index fund reflects perfectly the risk and return preferences of the average investor, with average defined in dollar-weighted terms.

Following the Crowd

Some investment experts will disagree sharply with the preceding sentence, on grounds that its veracity depends entirely on the particular index a so-called passive investor chooses to track. We agree. Indeed, according to Modern Portfolio Theory, the only index that can truly be deemed "efficient" for purposes of optimizing long-term risks and returns is a comprehensive (i.e., global) market basket comprising **all** risky assets, including some securities and properties that many trustee groups understandably would find anathema. (Cuban bonds anyone? How about North Korean real estate?) Of course, no fiduciaries would give a minute's thought to owning such a theoretically sound index fund, because the costs of assembling such a portfolio would be so high that an institution electing to do so would effectively be locked into it for decades if not centuries to come. What about much narrower index funds — for example, index funds that seek to track a capitalization-weighted benchmark comprising about 37% of the world's publicly traded equities? This is an apt description of S&P 500 index funds, of course, because the S&P 500 represents about 75% of US stock market capitalization, which in turn represents about 50% of global stock market capitalization. But the assumption that the risk and return preferences of any particular trustee group committing capital to S&P 500 index funds — or indeed to any passive strategy entailing capitalization-weighting — precisely or even approximately match the inherently shifting risk and return attributes of the index being tracked strains credulity. As we have tried to suggest with the foregoing examples, many indexed strategies are anything but passive in the literal sense, and some presuppose ongoing portfolio adjustments that are absurd on their face. That said, such strategies are often the least-worst means of enabling some investors to gain at least some exposure to risky assets without assuming intolerable amounts of the type of risk that some individuals as well as most trustee groups find especially problematic: the risk of being wrong and alone. We think indexed or passive strategies make a lot of sense for many trustee groups provided that such groups commit sufficient time up-front to a task that intelligent users of highly **active** strategies must also perform to avoid getting whipsawed by price gyrations: understanding what they are buying.