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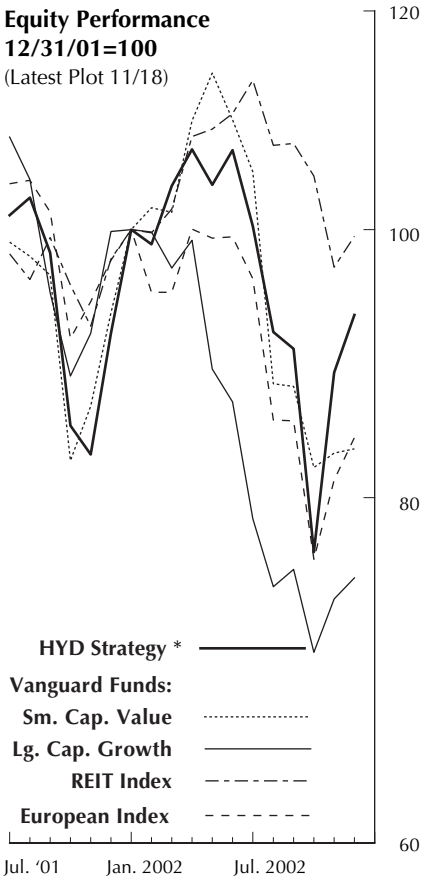

*** HYD is a hypothetical model based on back-tested results. See p. 86 for a full explanation.**

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Paradoxically though, the same factors that make investing abroad easier may challenge the logic of doing so. As markets and people become more interconnected, they appear to be increasingly impacted by one another. A financial crisis or bear market in one country seems to spread like falling dominoes, causing markets to plunge throughout the world.

What does this mean for investors? Conventional wisdom holds that exposure to foreign equities can not only enhance returns, but lower portfolio risk too. If returns in every market around the world become more correlated, that paradigm is weakened. Since this topic has taken on fresh relevance as new studies improve upon old research and the world reels from the U.S.'s tech-bubble collapse, it may be helpful to review the current debate over international investing.

The Global Investing Paradigm

Fifty years ago, Harry Markowitz, then a 25 year old economist, published a paper that profoundly changed the nature of financial management. Prior research focused on the risk- reward tradeoff of individual securities, but failed to recognize the interrelationship of those securities as part of a portfolio. The new body of thought considered the impact that securities of varying characteristics

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GLOBALIZATION AND GLOBAL INVESTING

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had on the volatility and return of a portfolio, and concluded that diversification was the only prudent choice for investing under uncertainty.

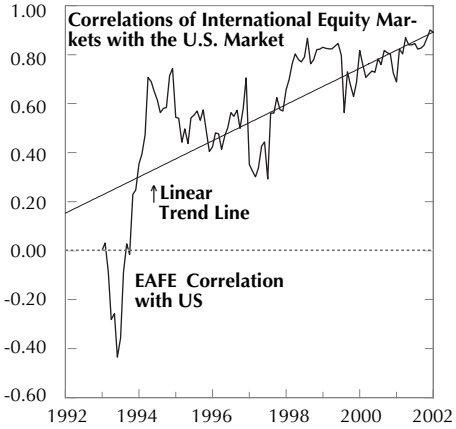
The new paradigm, for which his contribution earned Dr. Markowitz a Nobel Prize, was finally embodied in U.S. law by the 1974 Employee Retirement Income Security Act (ERISA). That law helped usher in the era of "modern portfolio theory" and the concept of asset allocation.

Modern portfolio theory defines an "optimal" portfolio as consisting of a group of assets that achieve the highest possible (expected) return for a given level of risk. To achieve that optimality, assets are chosen, in part, by considering their relationship to one another, so that when one is performing poorly, others are at least not systematically affected. Logically, investors will seek out all possibilities for diversification that meet their risk parameters. Research in the late 1960s illustrated that the same diversification benefits could be derived using foreign investments as part of the mix. In short, any market that doesn't move regularly upon the vicissitudes of an investor's home market is an opportunity for diversification.[1]

Foreign investing grew steadily through the decades. According to the United States Treasury Department, U.S. portfolio investment in foreign securities grew from $89 billion in 1984, when they began calculating the data, to roughly $1.8 trillion by 1997. At the same time, free-trade and capitalism became the mantra for politicians around the world, financial infrastructures were deregulated, and the technology revolution helped to ease the flow of information and capital.

No Where to Hide?

The U.S. stock market crash of 1987 cast a new light on global investing. The rapid spread of the U.S. financial crisis led market participants and researchers to reevaluate the degree of co-movements of global stock markets. Early research showed that correlations among ten major national stock markets increased on average 39% in the 76-month period after the crash, compared to the same period before the crash. While the concept of asset allocation using a broad array of assets held strong, many began to challenge the logic of using non-U.S. assets as part of the mix, arguing that global integration had made economies around the world so interrelated that the diversification benefits of international investing were diminished.



Correlation coefficient of the MSCI Europe, Asia, Far East (EAFE) price index in US dollars with the MSCI USA price index over a rolling 12 month basis. MSCI EAFE represents the markets of developed countries outside of the United States. Indices represent returns available in a market, but are not themselves investments. Source: MSCI, Author's calculations. Data as of 10-31-02.

The fact that markets around the world are generally more correlated than in the past is undisputed. According to analysts at the International Monetary Fund (IMF), the average correlation for 23 developed markets was stable from the mid-1980s through the mid-1990s at about 0.4. That number was low enough to justify international diversification. However, the average correlation increased steadily from the late 1990s to an astounding 0.9 by February 2002. Although various studies may show different levels depending on how they do the number crunching, the trend certainly shows a notably higher level of correlation (see chart above).

In 2001, three Yale University researchers examined 150 years of world equity markets. This study of financial history found parallels between today's information revolution and the "golden" era of global capitalism from 1870 to World War I, when trade and financial integration was fueled by the spread of the telegraph, railroads, steamships, and transatlantic cable. However, not only did they conclude that global integration today is much more deep and broad than in the previous era, but also that correlations between markets today are higher than any time during the 150-year period except for the global bear market experienced during the Great Depression.

If diversification is about limiting the downside, what happens during a bear market? A March 2000 study out of Michigan State University evaluated a portfolio of eight, equally-weighted national stock indexes and found that, during bear markets, dramatically increased correlations heightened the volatility of the portfolio so that international diversification actually worked against the investor.

This concern has extended to Wall Street and the financial press. A 2001 article in the *New York Times* quotes firms such as Merrill Lynch cautiously backing away from their international recommendations due to the increased correlation of national markets. While some professionals cited maintained their international commitment, other evidence suggests that growing correlations have fueled the bias that many investors may already have toward keeping their money at home. According to the Investment Company Institute, an industry trade group, net cash flows (purchases, less redemptions) into foreign equity funds dropped $22 billion in 2001, while US domestic funds still experienced $54 billion of inflows.

But is this a temporary phenomenon, or a permanent part of the financial landscape? Eclipsing earlier research in scope, a September 2002 paper by IMF analysts used data on virtually the entire global stock market (9,679 companies in 42 countries) to challenge the assertion that global integration is the culprit behind markets tracking one another so closely. They reasoned, along with others, that global economic and financial integration would be clearly manifested in a rise in prominence of industry over country effects in international stock returns. Finding that industry effects were largely confined to global telecommunications, media, and technology stocks, they concluded that much of the rise in co-movement across national markets was due to the tech-bubble of the late 1990s, and thus, was largely a cyclical phenomenon.[2]

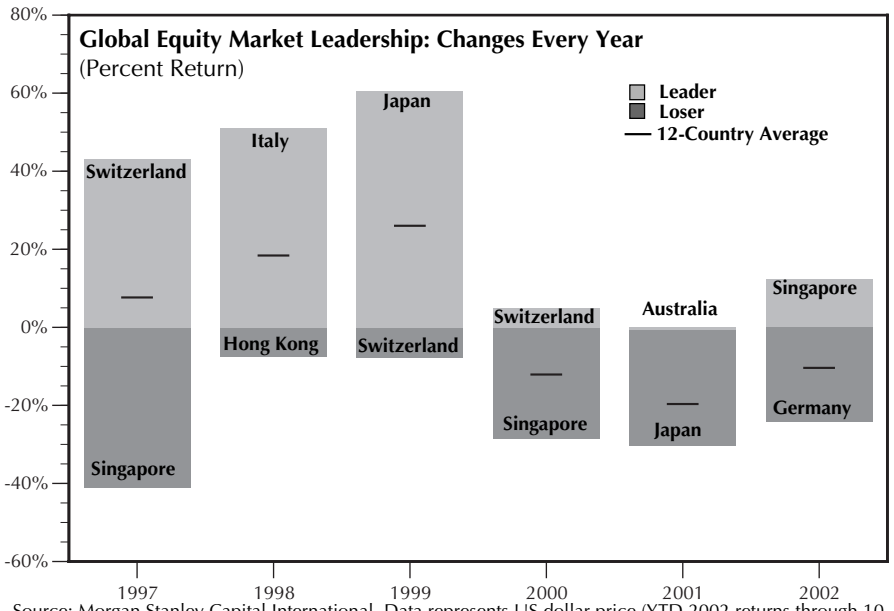
Indeed, in October of 2002, analysts at the U.S. Federal Reserve Bank looked

[1] Foreign-currency-denominated bonds are often not included because the gain from interest-rate differentials can easily be eclipsed by currency movements.

[2] The IMF research did show that countries within the European Monetary Union are experiencing significantly increased integration with increased harmonization of government policies in the region.

at the current global economic turndown in a historical context, and did not find a pronounced increase in the synchronization of economic cycles. Concluding that this downturn is typical of those over the past 30 years, they show that the correlation of business cycles among countries fluctuates widely, and generally rises in recessions and falls during expansions. It turns out that economic and financial integration is only part of the story. More transient factors, such as global shocks (e.g. oil prices) also contribute to coincident business cycles. Such shocks "might lead to temporarily high correlation with few implications for the future."

None of this is to suggest that there is no impact from globalization on financial markets. However, even those most vocal about higher financial market correlations suggest that the benefits from global diversification are only reduced, not eliminated. When the current volatility in global markets subsides, those benefits will be greater. As Stephan Gorman points out in *The International Equity Commitment,* that "investors tend to respond most uniformly to really bad news."



Source: Morgan Stanley Capital International. Data represents US dollar price (YTD 2002 returns through 10-31-02). Chart represents best and worst performance, and average performance for the following markets in the year indicated: Australia, Canada, France, Germany, Hong Kong, Italy, Japan, Singapore, Spain, Switzerland, United Kingdom, USA.

Doomed to Repeat the Past?

The prominent investment advising firm, Frank Russell Company, throws the entire argument on its head by comparing today's debate on global diversification, to one held earlier, on the out-performance of U.S. large-cap and small-cap stocks in the late 1990s. In an article available on the company's website, a Russell consultant draws attention to the conclusion many investors made: that it was unnecessary to invest in small-cap stocks since large-caps were strongly out-performing them. However, those who stayed out of small-caps missed significant out-performance over large-caps in 2000 and 2001. Even though small-cap and large-cap stocks are currently moving closely together, with a correlation of 0.7 to 0.8, consultants still believe in maintaining the broad array of investments for their funds, including allocations to foreign stocks.

It is impossible to know where next year's opportunities lie. For example, a look at the annual price performance of 12 developed equity markets around the world reveals that not one of those markets out-performed the others in any given year[3] (see chart above). In 1999, Japan's stock market handily beat all of the others with a price return of over 60%, in U.S. dollars, only to find itself near the bottom of the pack the next year, falling 29%. In none of those years was the U.S. market the leader.

Additionally, economies that are less mature may offer very high growth opportunities as their industries catch up to fully developed industrialized countries. This is clearly evident by looking at the performance of countries such as South Korea, which has grown on average 5.7% for the past 10 years through 2002, despite the devastating impact of the 1997 Asian financial crisis.[4] That growth translates into stock market performance that beat nearly every other financial market in the world last year with U.S. dollar returns over 47%, when the U.S. market was still trying to find a bottom.

What's an Investor to Do?

The example of Korea merely illustrates one market in a world of opportunities. Emerging-market equities are extremely volatile, however, and we are not convinced that their expected returns justify their inclusion in investors' portfolios, even for investors with a high risk tolerance. We will continue to weigh this alternative, consistent with our ongoing empirical review of historical data.

It may seem intuitive to invest all of your savings in your home market. Indeed, international equities make up only 6% of total mutual fund assets, according to the Investment Company Institute. Judging by that limited participation, many investors may never consider international investing a smart choice. It is reasonable to think that if your own backyard is filled with such venerable names as GE, IBM and Microsoft, why look elsewhere? However, those with some portion of their portfolio invested outside of the United States, may get exposure to companies such as Nestle of Switzerland, Nissan of Japan, British Petroleum of the U.K., L'Oreal of France, Audi of Germany, Heinekin of the Netherlands, and many others.

The easiest way to gain international exposure and diversification is through mutual funds. We recommend a passive approach; currently we recommend two index vehicles, including an exchange-traded index fund (ETF). These are listed on the back page. Exchange-traded funds (ETFs) offer a low cost means of participating in international markets, and offer a plethora of choices; some are exclusive to national markets, while others target various regions and sectors. For now we continue to recommend only European funds, which concentrate on developed economies.

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[3] The markets are: Australia, Canada, France, Germany, Hong Kong, Italy, Japan, Singapore, Spain, Switzerland, United Kingdom, USA. Source: Morgan Stanley Capital International (MSCI), www.msci.com. All markets are classified as developed by MSCI. Data is expressed in U.S. dollars and is on a price-return basis.

[4] Real GDP, in percent terms. Final 2002 data is a forecast. Source: Institute for International Finance.

IS THAT A $100 BILL LYING ON THE GROUND? TWO VIEWS OF MARKET EFFICIENCY

We continue to believe that in the debate over market efficiency, the skeptics, principally behavioral economists, bear the burden of proof, and they have yet to meet it. Nevertheless, we will continue to monitor developments in the field, and in fact our parent, AIER, will be hosting a conference in 2003 featuring Vernon Smith and two other recent Nobel Prize winners, (reprinted from Knowledge@Wharton knowledge.wharton.epenn.edu).

In early October, Daniel Kahneman and Vernon Smith won the Nobel Prize in Economic Sciences for their research, conducted independently, into how individuals make economic decisions. The two professors discovered that investors are not systematically rational, as traditional economic theory asserts (much of Kahneman's research, it should be noted, was conducted with his longtime collaborator, the late Amos Tversky). Investors make decisions for emotional reasons, they base their decisions on shaky premises, they are quick to see cause and effect where there may be none, and so on. The professors' research provided an impetus, respectively, to the burgeoning fields of behavioral finance and experimental economics.

So what does this mean for the markets? Since the stock market is based on the cumulative decisions of individuals, does this suggest that the market isn't efficient at determining the correct prices of stocks? Do arbitrage opportunities abound?

A few days before Kahneman and Smith got their phone calls from the Nobel Prize committee, Wharton hosted a debate that addressed these questions. Called "Two Views of Market Efficiency: A Discussion of Behavioral Finance and Efficient Market Theory," the scrimmage took place between Burton Malkiel and Richard Thaler, and was moderated by Wharton finance professor Jeremy Siegel, author of *Stocks for the Long Run*.

Malkiel, a Princeton University finance professor and author of the famed *A Random Walk Down Wall Street,* represented the efficient-markets camp. This group argues that the market is a mechanism that utilizes the collective information of stock market participants to produce efficient prices, and that there is no easy money – fresh $100 bills lying on the ground – for investors to make by predicting how stocks will behave. In other words, it's hard to consistently beat the Standard & Poor's 500 Index.

Thaler, a finance professor at the University of Chicago and a principal at Fuller & Thaler Asset Management, a money management firm based in San Mateo, Calif., took up the cudgels for the behavioral finance camp. He reflected the view that psychology plays a large role in the movement of stock prices and that patterns, or predictabilities, exist in the market that can be profitably arbitraged.

Both professors staked out common ground – at least initially. The market is not so rational that patterns in stock prices can't be discerned, observed Malkiel. He admitted that psychological factors affect the stock market and that markets overshoot, creating bubbles such as the Internet technology craze of the late 1990s that lifted stock prices to untenable levels.

However, he said, "none of the patterns that have been discovered have been dependable, many have self-destructed as soon as they have been discovered, and many aren't economically meaningful." The patterns that endure are often too small to take advantage of, given the transactions costs associated with the trades. Or the trades are too risky. "I truly believe that our capital markets are remarkably efficient," he continued. "The stock market is far less predictable than many of my academic colleagues have asserted. While the market is not statistically a perfect, random walk, in my judgment investors would be very well-advised to act as if it was essentially unpredictable."

Thaler also claimed what he described as the "sensible" middle ground. "Securities prices are highly correlated with intrinsic value, but sometimes diverge to a significant degree," he said. "It's possible to predict stock prices, but not with great precision – and don't try this at home."

That said, the two professors pursued their separate views of the market.

Malkiel gave a few examples of alleged predictabilities that, he said, on closer reflection don't hold up. One is the popular suggestion that growth stocks perform better over the long haul than value stocks. Even if it were true for a period, he said, there could be two explanations. One is the behavioralist explanation, which is that investors are overconfident in their ability to predict growth stocks and therefore overprice growth stocks. The other is the belief that efficient-market proponents hold – that if there's a pattern for some time, it could be because the value stocks are actually riskier. In other examples, Malkiel noted that patterns in stock prices that get chalked up to investors being exuberant or pessimistic could simply be the adjustment of stock prices to economic conditions.

For those in the efficient-market camp, however, the most convincing proof of the efficiency of the market is the fact that professional portfolio managers cannot consistently outperform the market. "Surely," said Malkiel, "if the market were always dominated by irrational investors, if it systematically deviated from what were rational estimates of value, professionals who are richly incentivized to outperform would be able to beat the market."

But actively managed funds don't beat the S&P 500 index. "If you look at the median mutual fund, and the S&P index over the last 10, 15 and 20 years, there's been about a 200 basis points underperformance of the median mutual fund vs. the S&P index," he said. "If the S&P index were an athlete, they would be testing it for steroids." Not only that, but there is survivorship bias at work behind the statistics, improving the results of managers. What this refers to is the fact that many funds that didn't fare well no longer exist and so their performance isn't incorporated into current statistics.

Some fund managers, of course, do beat the index. But the problem is that investors do not know in advance which managers will rise to the top. The 20 best performing funds in the 1970s, which doubled the returns of the S&P 500 index, underperformed the index in the 1980s, noted Malkiel. The 10 best in the 1980s underperformed in the 1990s. Those who managed the best funds in 1998 and 1999, which did three times as well as the S&P 500 index over the same period, were "written up in *Money* magazine as the genius portfolio managers," said Malkiel, "and in 2000 and 2001 it was fly now, pay later, because they did three times worse than the index."

No Free Lunch

Thaler launched his commentary by pointing out a logical fallacy in the effi-

cient-markets camp. He identified two components of market efficiency. The first, which he calls the No Free Lunch Theorem, simply states that in an efficient market prices aren't predictable and so it's not easy to make money. He agreed that this was largely true. The second component, dubbed the Price Is Right Theorem, suggests that asset prices reflect the intrinsic value of the underlying securities and that the prices are therefore rational.

According to Thaler, Malkiel was making the mistake that many economists make – arguing that the first finding leads logically to the second. Even if prices are unpredictable, said Thaler, "they may be very wrong." He noted that Bob Schiller, whose book *Irrational Exuberance* argued forcefully that prices were not rational during the Internet bubble, called the confusion about this "one of the most remarkable errors in the history of economic thought."

Although Malkiel acknowledged that bubbles can exist, even in an efficient market, he pointed out that markets always come back down to earth. But in Thaler's view, this position misses a significant point. In addition to bubbles, there may be stock market "funks" – times when stock prices are irrationally low. "If bubbles break, what makes us think they break to the right level? Do we know that Japan's stock prices are rational now?" asked Thaler. "If we're going to concede that they were irrational in 1989, like [Malkiel] says Internet prices were irrational in 1999, then we also have to grant the possibility that they're irrationally low now. Stock prices have steadily fallen for over a decade in Japan. If there was a bubble then, maybe they're in a funk now."

The idea that prices are rational at any point is up for grabs. To prove his case, Thaler offered examples of companies whose stock prices were, by most lights, incorrect at some point. In 1907 Royal Dutch and Shell Group formed a single company and merged their interests 60/40, but continued to trade as separate stocks. However, the shares of the respective companies didn't always trade at that ratio, and over the last two decades in particular there were large deviations from their theoretical relationship.

Thaler gave another example. In 1999, 3Com decided to spin off its Palm division, which made handheld computers. 3Com held onto 95% of the shares and announced that each 3Com shareholder would probably get about 1.5 shares of Palm for each share of 3Com. The stocks of the two companies should have moved in tandem, but on the day of the IPO, Palm shot up in value while 3Com lost ground. In other words, what happened wasn't rational, given the numbers.

Malkiel agreed that the 3Com/Palm example was "a $1,000 bill," adding that he had tried to sell Palm short at the time but was unable to borrow shares. The Royal Dutch/Shell trade, he said, wasn't as simple an example since the two stocks were under different national regulatory authorities. More broadly, these and other examples of market inefficiencies are "very small examples," he said, adding that the market "is not a perpetual tulip bulb craze."

Both professors agreed that stock market bubbles eventually deflate but that it's difficult to predict when that will occur. Similarly, they noted that it's hard to take advantage of mispricings because it might take too long for prices to return to a more sensible level. Thaler pointed out that Long-Term Capital Management, the Greenwich, Conn.-based hedge fund that capsized in 1998, had put on the Royal Dutch/Shell trade by going long Shell and shorting Royal Dutch. "But if you're doing it with other people's money, like LTCM was, you've lost your clients before you're right," he said. LTCM was right about Royal Dutch/Shell, but prices didn't fall back into line until 2001.

The point is not simply that there is often no free lunch. "What we learn is that prices are wrong," argued Thaler. These examples are the tip of the iceberg of market inefficiency, not just minor blips. "We can argue till the end of our days about whether value firms outperform growth firms, and if so whether that's rational," he said. "I don't think we can argue for long about whether the Royal Dutch and Shell stocks were priced right. If there's anything the market should be able to get right, it's these things."

The Internet Mistake

What troubles Malkiel most as a proponent of efficient markets, he conceded, "is that when the market got it wrong, the market was not giving the right signals to businesses about what the true cost of capital was – and we had an enormous overinvestment in not only Internet companies but the telecommunications structure to make the Internet run." About 95% of the long-distance fiber is currently unused. "We had a tremendous misallocation of resources," he said.

For Thaler this misallocation of capital is a big iceberg. "The fact that it's hard to predict prices and that most money managers don't earn their fees do not tell us anything about whether the capital markets are doing a good or bad job of allocating capital," he said. "We know there was a $7 trillion mistake in the late 1990s." He doesn't think the government or any other entity could do a better job of allocating resources, but that doesn't mean the market is efficient.

Thaler also pointed out that a consequence of the Internet bubble could be a reduction in the availability of venture capital for a number of years. Siegel weighed in at this point to note that, unlike, say, the railroad bubble of the late 1800s, the Internet bubble involved a lot of people switching jobs but very little destruction of physical capital. "The railroads spent millions of man-years producing iron and cutting through mountains, but with the Internet you didn't have a lot of [physical] resources, so there wasn't that [kind of] misallocation," he said.

Thaler took another swipe at the idea of efficient markets, floating the idea that the runaway boom in stock options was a consequence of the belief in efficient markets. "This was pushed by economists who felt that markets are sending the right signal through stock prices and that the right way to reward CEOs was to load them up with stock options," he said. Siegel agreed that there was overissuance of stock options, but noted that tax issues had fueled the trend. In 1993, he said, the government decided that a CEO's salary in excess of $1 million would not be deductible from the corporate tax bill unless it was deemed incentive-based, and the IRS subsequently ruled that options were incentive-based.

So given the difficulty of predicting stock prices reliably, how does Thaler make investment decisions? Thaler noted that one strategy his money management company follows is to try to predict analyst revisions. "We know people make mistakes," he said. "We think we can predict their mistakes." He compared it to baseball. When a sinker-ball pitcher throws a pitch, batters typically swing too high and hit ground balls. "We try to predict the ground balls of analysts," he explained. "We try to find stocks where we think they're going to revise up next quarter." He joked that he didn't know if the prices were becoming more rational. But, he added, quoting Keynes, "in the long run we're all dead."

THE HIGH-YIELD DOW INVESTMENT STRATEGY

We are convinced that long-term, common-stock investors will receive superior returns on the "large-capitalization-value stocks" component of their holdings when they consistently hold the highest-yielding Dow stocks. The fact that a given company's stock is included in the Dow Jones Industrial Average is evidence that the company is a mature and well-established going concern. When a Dow stock comes on the list of the highest-yielding issues in the Average, it will be because the company is out of favor with the investing public for one reason or another (disappointing earnings, unfavorable news developments, etc.) and its stock price is depressed. A High-Yield Dow (HYD) strategy derives much of its effectiveness because it forces the investor to purchase sound companies when they are out of favor and to sell them when they return to relative popularity.

Selecting from the list will not be cut and dried if the timing of purchases and sales reflects individual prejudices or other *ad hoc* considerations. These usually come down to "I'm not going to buy *that*" or "goody, this fine company has finally come on the list and I'm going to load up." Our experience with investing in the highest-yielding Dow stocks has shown that attempts to "pick and choose" usually do not work as well as a disciplined approach.

Our parent has exhaustively researched many possible High-Yield Dow approaches, backtesting various possible selections from the DJIA ranked by yield for various holding periods. For the 35 years ended in December 1998, they found that the best combination of total return and low risk (volatility) was obtained by purchasing the four highest-yielding issues and holding them for 18 months. (For a thorough discussion of the strategy for investing in the highest-yielding stocks in the DJIA, please read AIER's booklet, "How to Invest Wisely", $12.)

The model portfolio of HYD holdings set forth in the accompanying table reflects the systematic and gradual accumulation the four highest-yielding Dow issues that are neither General Motors nor Philip Morris. We exclude GM because its erratic dividend history has usually rendered its relative yield ineffective as a means of signaling timely purchases, especially when it has ranked no. 4 or higher on the list. We exclude Philip Morris because, in present circumstances, it seems unlikely that there will be sufficient "good news" for it to be sold out of the portfolio. For more than eight years, Philip Morris has never ranked lower than fourth on the list, whatever its ups and downs, and, given the circumstances, using Philip Morris in the strategy amounts to a buy-and-hold approach. The HYD strategy, to repeat, derives much of its superior performance from buying cheap and selling dear.

In the construction of the model, shares purchased 18 months earlier that are no longer eligible for purchase are sold. The hypothetical trades used to compute the composition of the model (as well as the returns on the model and on the full list of 30 Dow stocks) are based on mid-month closing prices, plus or minus $0.125 per share. Of the four stocks eligible for purchase this month, only **SBC Communications** was not eligible for purchase 18 months earlier (in May 2001), and one issue that was eligible for purchase 18 months ago, **International Paper**, is not eligible this month. Investors following the model should find that the indicated purchase of SBC and sales of **International Paper** are sufficiently large to warrant trading. In larger accounts, rebalancing may warrant additional purchases of **JP Morgan Chase** as the model calls for adding to positions that have lagged the entire portfolio. Investors with sizable holdings may be able to track the exact percentages month to month, but smaller accounts should trade less often to avoid excessive transactions costs, only adjusting their holdings toward the percentages in the table if prospective commissions will be less than, say, one percent of the value of a trade.

As of November 14, 2002

					——*Percent of Portfolio**——	
	Rank	*Yield*	*Price*	*Status*	*Value*	*No. Shares†*
Philip Morris	1	6.73%	38.06	*		
JP Morgan Chase	2	6.16%	22.09	Holding**	19.2	28.0
General Motors	3	5.70%	35.07	*		
Eastman Kodak	4	5.18%	34.74	Holding**	28.9	26.8
SBC Comm.	5	4.29%	25.19	Buying	11.9	15.2
Dupont	6	3.28%	42.63	Holding**	25.9	19.6
Honeywell Int'l	7	3.21%	23.38			
Caterpillar	8	3.11%	45.08	Holding	12.6	9.0
GeneralElectric	9	3.02%	23.86			
Int'l Paper	12	2.80%	35.73	Selling	1.5	1.4
					100.0	100.0

Change in Portfolio Value‡

	1 mo.	*1 yr.*	*5 yrs.*	*10 yrs.*	*15 yrs.*	*From 12/63*	*Std. Dev.*
Strategy	12.0%	-5.7%	5.2%	13.4%	16.2%	15.6%	18.9
Dow	4.3%	-11.3%	4.3%	12.3%	13.1%	10.4%	17.0

* The strategy excludes Philip Morris and General Motors. ** Currently indicated purchases approximately equal to indicated purchases 18 months ago. ‡ Assuming all purchases and sales at mid-month prices (+/–$0.125 per share commissions), reinvestment of all dividends and interest, and no taxes. The 5-, 10- and 15-year total returns are annualized as are the total returns and the standard deviations of those returns since December 1963. † Because the percentage of each issue in the portfolio by value reflects the prices shown in the table, we are also showing the number of *shares* of each stock as a percentage of the total number of shares in the entire portfolio.

Note: These calculations are based on hypothetical trades following a very exacting stock-selection strategy, and are gross of any management fees. They do not reflect returns on actual investments or previous recommendations of AIS. Past performance may differ from future results.

By making such adjustments from time to time, investors should achieve results roughly equal to the future performance of the model.

The process of *starting* to use the strategy is not as straightforward. The two most extreme approaches are: 1) buy all the indicated positions at once or 2) spread purchases out over 18 months. Either choice could be said to represent an attempt at market timing, i.e., buying all at once could be construed as a prediction that (and will look good in retrospect only if) the prices of the shares go up after the purchases are made. On the other hand, if purchases are stretched out and stock prices increase, the value of the investor's holdings will lag behind the strategy's performance. We believe that most attempts to time the market are futile, and the best course lies somewhere in between the extremes.

Some portion of the shares now held in the strategy will be sold within a few months. The shares most likely to be sold are those whose indicated yields are too low to make them currently eligible for purchase. This usually means that their prices have risen (and their yields have fallen) in relative if not absolute terms, since they were purchased. If such stocks are purchased now and are sold within a few months, the investor will receive only a portion of the profit, or sustain a greater loss, than the strategy. On the other hand, if the stocks not currently eligible for purchase are bought and the strategy does not call for selling them soon, it will usually be because their prices have decreased so that their indicated yields render them again eligible for purchase. In other words, buying a stock that is not currently among the top four means that it will very likely be sold during the months ahead (perhaps at a gain, perhaps not, but with payment of two commissions either way). Alternatively, if the price decreases so that the issue again becomes eligible for purchase, then the investor's initial purchase would be likely to be held in the portfolio at a loss for some period of time. In the latter situation, the investor would have been better off waiting.

Accordingly, for new HYD clients, we usually purchase the complement of the currently eligible stocks without delay. (This month, the four eligible issues—SBC Communications, Dupont, Eastman Kodak, and J.P. Morgan Chase—account for more than 85% of the total portfolio value). Any remaining cash will be held in a money-market fund pending subsequent purchases, which will be made whenever the client's holdings of each month's eligible stocks are below the percentages indicated by the strategy by an amount sufficient to warrant a trade.

Our **HYD Investment Management Program** provides professional and disciplined application of this strategy for individual accounts. For accounts of $100,000 or more, the fees and expenses of AIS's discretionary portfolio management programs are comparable to those of many index mutual funds. Contact us for information on this and our other discretionary investment management services.

THE DOW JONES INDUSTRIALS RANKED BY YIELD

	Ticker Symbol	Market Prices 11/15/02	Market Prices 10/15/02	Market Prices 11/15/01	12-Month High	12-Month Low	Latest Dividend Amount	Latest Dividend Record Date	Latest Dividend Paid	Indicated Annual Dividend	Indicated Yield† (%)
Philip Morris	MO	**$38.06**	40.02	47.99	57.79	35.40	0.640	9/16/02	10/10/02	2.560	6.73
★ J. P. Morgan Chase	JPM	**$22.09**	18.61	39.55	40.95	15.26	0.340	10/05/02	10/31/02	1.360	6.16
General Motors	GM	**$35.07**	36.70	46.85	68.17	30.80	0.500	11/14/02	12/10/02	2.000	5.70
★ Eastman Kodak	EK	**$34.74**	30.35	28.62	35.50	25.58	0.900	11/01/02	12/13/02	1.800	5.18
★ SBC Comm.	SBC	**$25.19**	23.76	39.00	40.99	19.57	0.270	10/10/02	11/01/02	1.080	4.29
★ DuPont	DD	**$42.63**	41.47	44.11	49.80	35.02	0.350	11/15/02	12/14/02	1.400	3.28
Honeywell Intl.	HON	**$23.38**	22.34	30.87	40.95	18.77	0.188	11/20/02	12/10/02	0.750	3.21
☆ Caterpillar	CAT	**$45.08**	37.98	47.97	59.99	33.75	0.350	10/21/02	11/20/02	1.400	3.11
General Electric	GE	**$23.86**	26.20	41.55	41.84	21.40	0.180	9/27/02	10/25/02	0.720	3.02
☆ International Paper	IP	**$35.73**	37.10	39.66	46.20	31.35	0.250	11/22/02	12/16/02	1.000	2.80
Exxon Mobil	XOM	**$34.85**	36.30	37.19	44.58	29.75	0.230	11/12/02	12/10/02	0.920	2.64
Alcoa	AA	**$22.93**	21.65	37.50	40.50	17.62	0.150	11/08/02	11/25/02	0.600	2.62
Merck	MRK	**$55.37**	50.88	64.66	68.57	38.50	0.360	9/06/02	10/01/02	1.440	2.60
Boeing	BA	**$31.50**	32.15	34.24	51.07	28.53 *L*	0.170	11/15/02	12/06/02	0.680	2.16
Citigroup	C	**$36.90**	34.14	50.09	52.20	24.42	0.180	11/04/02	11/22/02	0.720	1.95
3M Company	MMM	**$129.50**	125.25	114.62	130.89 *H*	100.00	0.620	11/22/02	12/12/02	2.480	1.92
Hewlett-Packard	HPQ	**$16.90**	13.50	22.09	24.12	10.75	0.080	9/18/02	10/09/02	0.320	1.89
Procter & Gamble	PG	**$87.28**	90.42	78.29	94.75	74.08	0.410	10/18/02	11/15/02	1.640	1.88
Coca-Cola	KO	**$45.97**	52.48	50.00	57.91	43.50	0.200	12/01/02	12/15/02	0.800	1.74
United Tech.	UTX	**$63.02**	55.23	57.75	77.75	48.83	0.245	11/15/02	12/10/02	0.980	1.56
Johnson & Johnson	JNJ	**$60.15**	59.56	60.00	65.89	41.40	0.205	11/19/02	12/10/02	0.820	1.36
McDonald's	MCD	**$17.38**	18.06	28.36	30.72	15.75	0.235	11/15/02	12/02/02	0.225	1.29
Walt Disney	DIS	**$18.53**	16.75	20.30	25.17	13.48	0.210	12/07/01	12/21/01	0.210	1.13
AT&T	T	**$13.86**	12.60	16.98	19.25	8.20	0.038	9/30/02	11/01/02	0.150	1.08
American Express	AXP	**$37.65**	33.72	34.39	44.91	26.55	0.080	10/04/02	11/08/02	0.320	0.85
IBM	IBM	**$80.01**	68.48	114.75	126.39	54.01	0.150	11/08/02	12/10/02	0.600	0.75
Home Depot, Inc.	HD	**$28.32**	29.40	46.49	52.60	23.18	0.050	9/05/02	9/19/02	0.200	0.71
Wal-Mart Stores	WMT	**$55.49**	56.29	56.00	63.94	43.72	0.075	12/20/02	1/06/03	0.300	0.54
Intel Corp.	INTC	**$18.80**	16.52	30.78	36.78	12.95	0.020	11/07/02	12/01/02	0.080	0.43
Microsoft Corp.	MSFT	**$56.69**	52.29	66.12	70.62	41.41	0.000	-	-	0.000	0.00

★ BUY. ☆ HOLD. † Based on indicated dividends and market price as of 11/15/02 *H* New 52-week high. *L* New 52-week low. (s) All data adjusted for splits.

Note: The issues indicated for purchase (★) are the 4 highest yielding issues (other than Philip Morris and General Motors) qualifying for purchase in the top 4-for-18 months model portfolio. The issues indicated for retention (☆) have similarly qualified for purchase during one or more of the preceding 17 months, but do not qualify for purchase this month.

RECENT MARKET STATISTICS

Precious Metals & Commodity Prices

	11/15/02	*Mo. Earlier*	*Yr. Earlier*
Gold, London p.m. fixing	**319.10**	316.20	275.45
Silver, London Spot Price	**4.55**	4.31	4.11
Copper, COMEX Spot Price	**0.72**	0.67	0.67
Crude Oil, W. Texas Int. Spot	**25.51**	29.72	17.45
Dow Jones Spot Index	**135.55**	140.40	95.21
Dow Jones-AIG Futures Index	**102.22**	107.03	88.28
CRB-Bridge Futures Index	**227.13**	231.38	186.37

Interest Rates (%)

U.S. Treasury bills -	91 day	**1.21**	1.65	1.89
	182 day	**1.25**	1.66	1.99
	52 week	**1.43**	1.74	2.29
U.S. Treasury bonds -	15 year	**4.71**	4.78	5.29
Corporates:				
High Quality -	10+ year	**6.09**	6.40	6.67
Medium Quality -	10+ year	**7.13**	7.59	7.47
Federal Reserve Discount Rate		**0.75**	1.25	1.50
New York Prime Rate		**4.25**	4.75	5.00
Euro Rates	3 month	**3.21**	3.23	3.34
Government bonds -	10 year	**4.56**	4.25	4.41
Swiss Rates -	3 month	**0.74**	0.76	2.05
Government bonds -	10 year	**2.57**	2.52	3.04

Exchange Rates

British Pound	**$1.578900**	1.554900	1.432200
Canadian Dollar	**$0.631900**	0.629700	0.628800
Euro	**$1.006500**	0.981700	0.884400
Japanese Yen	**$0.008251**	0.008061	0.008156
South African Rand	**$0.104200**	0.096100	0.104900
Swiss Franc	**$0.685700**	0.669200	0.602700

Securities Markets

	11/15/02	*Mo. Earlier*	*Yr. Earlier*
S & P 500 Stock Composite	**909.83**	881.27	1,142.24
Dow Jones Industrial Average	**8,579.09**	8,255.68	9,872.39
Dow Jones Transportation Average	**2,333.20**	2,286.46	2,454.00
Dow Jones Utilities Average	**200.34**	178.13	289.76
Dow Jones Bond Average	**152.78**	144.32	104.26
Nasdaq Composite	**1,411.14**	1,282.44	1,900.57
Financial Times Gold Mines Index	**1,139.51**	1,039.09	808.49
FT African Gold Mines	**2,011.98**	1,880.30	894.22
FT Australasian Gold Mines	**1,465.83**	1,468.56	1,001.68
FT North American Gold Mines	**889.38**	795.05	749.30

Coin Prices

	11/15/02	*Mo. Earlier*	*Yr. Earlier*	*Premium*
American Eagle (1.00)	**$329.45**	325.95	285.95	3.24
Austrian 100-Corona (0.9803)	**$313.83**	310.53	272.53	0.32
British Sovereign (0.2354)	**$79.15**	78.35	69.05	5.37
Canadian Maple Leaf (1.00)	**$329.70**	326.20	286.20	3.32
Mexican 50-Peso (1.2057)	**$387.40**	383.30	336.40	0.69
Mexican Ounce (1.00)	**$321.10**	317.70	278.80	0.63
S. African Krugerrand (1.00)	**$326.45**	323.05	283.75	2.30
U.S. Double Eagle-$20 (0.9675)				
St. Gaudens (MS-60)	**$400.00**	390.00	335.00	29.56
Liberty (Type I-AU)	**$675.00**	675.00	675.00	118.64
Liberty (Type II-AU)	**$385.00**	385.00	400.00	24.70
Liberty (Type III-AU)	**$367.50**	367.50	312.50	19.04
U.S. Silver Coins ($1,000 face value)				
90% Silver (715 oz.)	**$4,600.00**	4,600.00	4,500.00	41.40
40% Silver (292 oz.)	**$1,575.00**	1,575.00	1,537.50	18.55
Silver Dollars	**$6,037.50**	6,025.00	5,850.00	71.53

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $319.10 per ounce and silver at $4.55 per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

Recommended Mutual Funds

	Ticker		*Month*	*Year*	*— 52-Week —*		*Distributions Latest 12 Months*		*Yield*
Short-Term Bond Funds	*Symbol*	***11/15/02***	*Earlier*	*Earlier*	*High*	*Low*	*Income*	*Capital Gains*	*(%)*
★ iShares Lehman 1-3 Yr Treasury	SHY	**$81.84**	81.56	NA	82.17	81.00	0.3853	0.0000	1.88
★ Fidelity Target Time Line 2003	FTARX	**$9.53**	9.50	9.58	9.59	9.41	0.3838	0.0000	4.03
★ USAA Short Term Bond	USSBX	**$8.97**	8.99	9.87	9.87	8.89	0.5042	0.0000	5.62
★ Vanguard Short-term Corporate	VFSTX	**$10.70**	10.62	10.92	10.92	10.58	0.5943	0.0000	5.55
Income Equity Funds									
★ DNP Select Income[1, 2]	DNP	**$9.60**	8.75	11.12	11.62	7.85	0.7800	0.0000	8.13
★ Vanguard REIT Index	VGSIX	**$11.85**	11.51	12.02	13.69	10.94	0.7059	0.0641	5.96
Large Cap. Value Equity Funds									
★ iShares S&P 500 Value Index[3]	IVE	**$43.80**	41.90	54.78	56.94	35.91	0.7824	0.1472	1.79
★ Vanguard Value Index	VIVAX	**$14.94**	14.29	18.90	19.46	12.38	0.3060	0.1070	2.05
Small Cap. Value Equity Funds									
★ iShares Sm. Cap. 600 Value Index[3]	IJS	**$71.90**	69.00	77.95	99.67	62.50	0.6224	0.3430	0.87
★ Vanguard Sm. Cap Value Index	VISVX	**$8.49**	8.18	9.45	11.66	7.43	0.0650	0.3810	0.77
Growth Equity Funds									
★ iShares S&P 500 Growth Index[3]	IVW	**$47.30**	46.30	59.34	61.21	40.02	0.4389	0.1124	0.93
★ Vanguard Growth Index	VIGRX	**$21.01**	20.52	26.45	27.09	18.25	0.2320	0.0000	1.10
Foreign Equity Funds									
★ iShares S&P Europe 350 Index[3]	IEV	**$49.76**	48.08	58.05	60.78	41.40	0.9307	0.0000	1.87
T Rowe Price European Stock	PRESX	**$13.21**	12.69	16.05	16.55	11.34	0.3600	0.0000	2.73
★ Vanguard European Stock Index	VEURX	**$16.85**	16.28	20.26	20.91	14.55	0.4400	0.0000	2.61

Recommended Gold-Mining Companies

	Ticker		*Month*	*Year*	*— 52-Week —*		*Distributions*		*Yield*
	Symbol	***11/15/02***	*Earlier*	*Earlier*	*High*	*Low*	*Latest 12 Months*	*Frequency*	*(%)*
Anglo American PLC, ADR	AAUK	**$13.90**	13.07	15.04	19.61	10.84	0.460	Semiannual	3.31
★ Anglogold Ltd., ADR	AU	**$29.85**	24.09	17.67	34.66	16.55	0.649	Semiannual	2.17
ASA Ltd.[1]	ASA	**$31.40**	29.20	18.75	40.44	18.10	0.600	Quarterly	1.91
★ Barrick Gold Corp.†	ABX	**$15.99**	14.19	14.82	23.49	13.46	0.220	Semiannual	1.38
★ Gold Fields Ltd.	GFI	**$11.73**	10.54	4.59	17.15	4.41	0.111	Semiannual	0.95
★ Newmont Mining	NEM	**$25.18**	23.10	20.18	32.75	18.52	0.120	Quarterly	0.48
★ Placer Dome†	PDG	**$10.04**	8.37	10.60	14.74	7.91	0.100	Semiannual	1.00
★ Rio Tinto PLC‡	RTP	**$78.65**	71.03	74.66	86.00	61.10	2.350	Semiannual	2.99

★ Buy. ☆ Hold. (s) All data adjusted for splits. † Dividend shown is after 15% Canadian tax withholding. ‡ Dividend shown is after 15% U.K. tax withholding on a portion of the total. na Not applicable. [1] Closed-end fund, traded on the NYSE. [2] Dividends paid monthly. [3] Exchange traded fund, traded on ASE.