

* HYD is a hypothetical model based on backtested results. See p. 38 for full explanation
We offer two discretionary management services: Our Professional Asset Management (PAM) service covers all of our recommended assets and allows us to place trades in stocks, bonds, and mutual funds directly in our clients' accounts.(The accounts remain the property of our clients at all times-we are only authorized to trade on their behalf.) Our High-Yield Dow (HYD) service operates similarly, except it invests only in the highest-yielding Dow stocks, using the 4 -for- 18 model on a fully invested basis. Investors interested in these lowcost services should contact us at 413-528-1216 or Fax 413-528-0103.

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## New Look for the Investment Guide

Beginning this month, the Investment Guide will be printed in color. We hope that this change will make the Guide generally more readable and the details of our charts more distinguishable. In coming months we will be making further improvements.

We have also added our corporate logo to the front page. Our clients have often asked about our "stylized castle" and why we chose it. Our offices have been located on the campus of our parent organization, the American Institute for Economic Research, since 1978. The campus includes a stone "cottage" that was completed in 1932. Though it is not technically a castle we nonetheless refer to it as such, and it inspired us to adopt it for our logo. The three crenellations atop the image represent the three investment principles to which we adhere: Discipline, Diversification, and Low Cost.

## Sell Rio Tinto

In an article last month we removed Rio Tinto PLC (ticker RTP) from our list of recommended gold mining stocks. The proceeds of any sale should be reinvested in accordance with your portfolio's target allocations. Investors' circumstances differ, particularly with regard to unrealized taxable gains, so any sales should be considered carefully.

By holding gold mining stocks, investors gain ownership of "gold in the ground." Our intention is to maintain a portfolio of stocks that will reflect changes in the gold price. RTP is among the world's largest gold producers. It ranked thirteenth worldwide in gold production in 2007 among firms that mine gold. However, RTP also engages in the mining and processing of at least 21 other mineral resources. As a result, changes in RTP's share price are far less correlated to the gold price than those of our other recommended shares. RTP is not included in either the FTSE Gold Miners Index or the Amex Gold Miners Index.

Historically, RTP has paid a generous dividend and it has provided strong total returns. RTP's recent price run-up reflects rapidly expanding worldwide demand for copper, iron and other industrial metals, and has been further fueled by a takeover bid from BHP Billiton.


## FIVE SIMPLE WAYS TO HELP CHILDREN AND GRANDCHILDREN FINANCIALLY

Parents and grandparents looking for ways to help children and grandchildren achieve financial goals have a number of options beyond simply writing a check. Some of them offer attractive tax advantages, while the benefits of others lay more in their potential to instill good financial habits. What follows are five simple ways to help children and grandchildren financially.

## Open a Roth IRA

Roth contributions are made with af-ter-tax dollars, investment earnings grow tax-free, and withdrawals taken according to qualified distribution guidelines are completely tax-free. Because contribution dollars may be withdrawn at any time regardless of age without penalties or taxes, parents or grandparents can use that portion of the Roth without restrictions for a child's benefit. After age 59 1/2, withdrawals are completely tax-free if the account has been held for at least five years. In 2008, the maximum annual contribution is $\$ 5,000$ or taxable income for the year, whichever is less, and individuals age 50 and older can make an additional "catchup" contribution of $\$ 1,000$.

Individuals whose income exceeds \$116,000 (\$169,000 for married couples filing jointly) are not eligible to contribute to a Roth. Additionally anyone with modified adjusted gross income of over $\$ 100,000$ is barred from converting a traditional IRA to a Roth. But there is a "back door" way for high income individuals to open a Roth. Starting in 2010 that income ceiling is lifted. Individuals who want to open a Roth but are restricted from doing so now because their income is too high can contribute to a non-deductible IRA in 2008, 2009, and 2010, then convert the account to a Roth in 2010. Any amounts attributable to earnings will be subject to taxes upon conversion, but the hit can be spread over 2011 and 2012. In subsequent years, someone could continue to fund the non-deductible IRA and immediately convert it to a Roth.

## Open a Coverdell ESA or Section 529 plan

Parents or grandparents with earned income can open one of these accounts for a grandchild under age 18 and contribute up to $\$ 2,000$ a year. If grandparents do not have earned income, they
could gift the money to the parents to open the account. The contributions are not deductible but the amounts deposited accumulate free of tax, and qualified withdrawals used to cover most types of educational expenses, including tuition, are tax-free. The disadvantages of these plans are the limited size of the annual contributions, the fact that donors whose income is too high (in 2008, married couples filing jointly with over \$220,000 in adjusted gross income, and single individuals with over \$110,000 in adjusted gross income) are ineligible to contribute, and the potential impact withdrawals have on financial aid and tax credits and deductions.

Although contributions are not eligible for a federal deduction, investment earnings in Section 529 plans grow taxfree and withdrawals used to pay for a beneficiary's qualified education expenses are exempt from federal taxes. Individual states may offer other incentives, such as an up-front tax deduction for contributions. There are no income limits on participation, contribution limits of the plans often exceed $\$ 300,000$ per beneficiary, and the donor, most often a parent or grandparent, retains control of the account. The plans also have some drawbacks. People who like to take control of their investments are likely to be disappointed because the fund company serving as the program manager controls ongoing investment management. The account must be used for higher education expenses. If it is not, the earnings portion of the withdrawal may be subject to federal income tax and a 10 percent penalty.

## Put Your Child or Grandchild on the Payroll

Aside from giving them spending money, parents and grandparents with their own businesses have a number of reasons to put children on the payroll. It can give children the earned income they need to contribute as much as $\$ 5,000$ to a Roth IRA, since there is no minimum age requirement for setting one up. A drawback to doing this, as opposed to using monies from your own Roth for the child's benefit, is that there is no way to restrict how the money is used once the child reaches the age of majority.

Some families lose out on valuable college-related tax credits and tax deductions because their incomes are too high to qualify. In some situations, it can make
sense for children to get off of their parents' tax returns through income from a family-owned business that gives them enough taxable compensation income to file separately, allowing them to claim these tax benefits that would otherwise be lost. Regardless of what they use the income for, the key to having children or grandchildren work for you is that the pay must be fair compensation for actual work performed in a legitimate business.

## Gift Appreciated Securities

Using a child's tax capacity in this manner has been severely curtailed, though not eliminated, because of a new rule that makes it more difficult to transfer investment assets to minor children. Beginning in 2008, a new rule extends the so-called "kiddie tax"--the tax on the amount of a child's investment income that is taxed at a parent's rate--up to age 24 under certain circumstances. In 2008, the kiddie tax does not apply until investment income exceeds $\$ 1,800$. Once a child turns 18 , the tax does not apply if a child's earned income is more than half of his or her overall support. When the child turns 19, it kicks in only if the child is a full-time student. At age 24, it disappears. Given these restrictions, shifting assets makes the most sense when a child is going to school part-time or not at all, is earning income that amounts to more than half of his or her overall support, or is over age 23.

Assuming these conditions apply, parents or grandparents who own appreciated securities such as stocks or mutual funds outside of a tax-deferred retirement account can still save thousands of dollars by gifting those assets to children or grandchildren. Each individual can gift up to $\$ 12,000$ this year ( $\$ 24,000$ for a married couple) to as many recipients as they wish without having to worry about federal gift tax reporting. The new owner, in this case the child or grandchild, assumes the couple's cost basis and holding period for tax reporting purposes.

If half of a $\$ 24,000$ gift of stocks is attributable to long-term gains on the securities, the parents would have to pay longterm capital gains tax of \$1,800 (\$12,000 x 15 percent) if they sold the securities themselves. But because of the gift the child pays much less. From 2008 through 2010, the capital gains rate for taxpayers in the 10 percent or 15 percent tax brackets is zero, so the savings would amount
to $\$ 1,800$ if the child sold the securities. Of course, donors whose gift recipients may be subject to the kiddie tax can always give gifts of cash and still reduce the size of their estates.

## Pay Tuition or Student Loans

By paying the money directly to a college a child is attending, grandparents can contribute as much as necessary without bumping up against the annual gift tax exclusion limitations. And, they know that the money is being spent for college. This strategy also applies to the direct payment
of medical expenses.
Another alternative is to pay all or part of student loans after a child graduates. That way, the gift won't affect financial aid awards, since the child has already graduated, and the parent or grandparent knows that the grad is using the money for its intended purpose.

## Stay Coordinated

Be careful to coordinate the use of gifts, Section 529 plans, Roth IRAs, and Coverdell ESAs with financial aid considerations. Families that may be eligible
for college financial aid--and that might include those with six figure incomes at some schools--should consider the impact that these strategies may have on both federal financial aid and institutional aid awarded by schools. Also examine tax ramifications. In some cases withdrawing funds from a Section 529 plan or Coverdell ESA, for example, may restrict the use of tax breaks such as the deduction for college tuition and fees or use of a Hope or Lifetime Learning credit.

## "HOW MUCH MONEY WILL I MAKE?"

The title of this article is a question investment advisors dread. The only honest answer, as it relates to the future return on a client's portfolio is "I don't know." There are, however, methods to gauge probabilities of future outcomes. Investors can use these tools to help select an allocation plan suitable to their circumstances and tolerance for risk.

It is our experience that money managers and brokers, all too often intent on "making the sale," will provide an actual number, perhaps in the form of actual results or "back tested" figures based on an index or hypothetical portfolio. This may or may not be accompanied by caveats and cautions that are not only prudent but are also required by the SEC.

Indeed, every quarter we publish hypothetical portfolio results based on back tested portfolios using the historical outcomes of several commercial indexes. We are extremely careful, however, to explain that these results are purely hypothetical and should not be used as an estimate of future results.

In this article we will explain in greater detail exactly why back testing is a severely limited technique, but we will also describe Monte Carlo simulation, an alternative and arguably more useful means of quantifying possible outcomes.

## The Great Illusion

Markets, like a roulette wheel in a casino, have no memory. The returns produced by equities in any given period are statistically independent from those of prior periods. This is because security prices reflect the market's assessment of future earnings and events, so they change randomly in response to new information; past price changes therefore do not affect future price changes. ${ }^{1}$

It is tempting to believe otherwise, but this is naive. Investors are besieged with impressive looking price charts and so-called "technical analysis" from selfproclaimed experts who assert they can divine short-term changes in prices from past trends. In our view this is an abuse of the investing public. Statistical evidence overwhelmingly supports the random nature of stock price fluctuations.

If stock prices change randomly, what are the implications for investors? Table 1 depicts the case of an investor with a 10 year time horizon, who has $\$ 1,000$ to invest in year 1, and has no plans to withdraw from this account, or to add to it. Two hypothetical outcomes are depicted. In both scenarios (A and B) the return is exactly 5 percent in all but the first and last years; in Scenario A the investor earns 20 percent in year 1, but suffers a 10 percent loss in the last year. The opposite occurs in Scenario B. Each portfolio provides an average (arithmetic) annual rate of return of 5 percent, and each has an ending value of $\$ 1,596$. If these returns were simply "reshuffled" several times, the average return and ending portfolio value would be the same each time. If there are no inflows or outflows to a portfolio, the chronological order of returns is irrelevant.

## But in the Real World...

These conditions are of course unrealistic. First, most investors make withdrawals or contributions to their accounts over time. Table 2 depicts the same scenarios, except that in both cases the investor withdraws $\$ 50$ at the end of each year. This time in Scenario A after ten years

[^0]the investor ends with a portfolio worth $\$ 1,020$, where under Scenario B the investor's portfolio would be worth only $\$ 854$. Clearly, when periodic cash flows occur, the chronological order in which annual returns occur can have a significant impact on an investor's ending wealth.

Investors often fixate on establishing an average annual future rate of return, but overlook the importance of when future returns occur from year-to-year. They simply plug in a historical average annual rate of return, such as 5 percent, to each future year when estimating a portfolio's future dollar value. The ending outcome will in fact vary considerably depending on an investor's future cash flows into and out of the portfolio.

## True Independence

But the examples in Tables 1 and 2 are still incomplete. Even though they allow the order of annual returns to vary, they do not simulate returns that are truly independent. Independent returns mean that the market has no "memory." For example, a sample historical 10 year time span that includes a single year with a loss of 10 percent loss means that even though the sample included only one instance of a loss of this magnitude, every year there is a 10 percent chance that such a loss will occur. Even the possibility of 10 consecutive years of 10 percent losses, cannot be ruled out. Similarly, if a 20 percent return occurred during one year in the sample, the possibility of 10 straight years of 20 percent gains cannot be ignored.

We can adjust our analysis however, and simulate truly independent returns from year-to-year. Imagine an experiment in which we wrote down each year's historical returns on a slip of paper, mixed them up and randomly selected these
slips one by one, each time recording the result. However, in order to ensure that each year's actual outcome has an equal chance of occurring in future years, we would replace the slip of paper each time we withdraw it. A single iteration of this process is referred to as a trial.

Table 3 depicts the actual total returns of the S\&P 500 over the past 15 years as well as two trials in which returns were drawn randomly from those 15 years, with replacement. A hypothetical \$1,000 invested in the index in 1993 would have grown to $\$ 4,463$, for an annual (arithmetic) average return of 11.8 percent by the end of 2007. However, because market returns are independent it would be invalid to simply assume this implicit rate of return in each and every future year. When replacement is introduced, any two trials drawn from the same historical data set can provide ending portfolio values that are quite different, even when no withdrawals or contributions are made, as demonstrated in the two trials depicted ( $\$ 3,914$ versus $\$ 3,222$ ).

Thus, we see that even in the absence of withdrawals or contributions, because returns are independent, it is invalid to simply assume a constant annual historical rate of return when estimating a portfolio's future value. What is needed is a means of repeating this trial many times, to capture the very wide range of outcomes that are possible.

Back testing of several long time spans might appear to provide a means of generating random trials. But this technique is impractical, since only a very limited number of independent time spans are available from which to draw inferences. For example, even over an 80 year time span

| Table 1 | Scenario A | Scenario B |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Annual | Portfolio | Year End | Annual | Portfolio | Year End |
| Return | Contributions/ | Portfolio | Return | Contributions/ | Portfolio |
| Year \% | (Withdrawals) | Value | \% | (Withdrawals) | Value |
|  |  | \$1,000 |  |  | \$1,000 |
| 1 20.0\% | - | \$1,200 | -10\% | - | \$900 |
| 2 5.0\% | - | \$1,260 | 5\% | - | \$945 |
| 3 5.0\% | - | \$1,323 | 5\% | - | \$992 |
| 4 5.0\% | - | \$1,389 | 5\% | - | \$1,042 |
| 5 5.0\% | - | \$1,459 | 5\% | - | \$1,094 |
| 6 5.0\% | - | \$1,532 | 5\% | - | \$1,149 |
| 7 5.0\% | - | \$1,608 | 5\% | - | \$1,206 |
| 8 5.0\% | - | \$1,689 | 5\% | - | \$1,266 |
| 9 5.0\% | - | \$1,773 | 5\% | - | \$1,330 |
| $10-10.0 \%$ | - | \$1,596 | 20\% | - | \$1,596 |
| Arith. Avg. 5.0\% |  |  | 5.0\% |  |  |


| Table 2 | Scenario A Scenario B |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Annual | Portfolio | Year End | Annual | Portfolio | Year End |
|  | Return | Contributions/ | Portfolio | Return | Contributions/ | Portfolio |
| Year | \% | (Withdrawals) | Value | \% | (Withdrawals) | Value |
|  |  |  | \$1,000 |  |  | \$1,000 |
| 1 | 20.0\% | (\$50) | \$1,140 | -10\% | (\$50) | \$855 |
| 2 | 5.0\% | (\$50) | \$1,145 | 5\% | (\$50) | \$845 |
| 3 | 5.0\% | (\$50) | \$1,149 | 5\% | (\$50) | \$835 |
| 4 | 5.0\% | (\$50) | \$1,154 | 5\% | (\$50) | \$824 |
| 5 | 5.0\% | (\$50) | \$1,159 | 5\% | (\$50) | \$813 |
| 6 | 5.0\% | (\$50) | \$1,165 | 5\% | (\$50) | \$801 |
| 7 | 5.0\% | (\$50) | \$1,171 | 5\% | (\$50) | \$789 |
| 8 | 5.0\% | (\$50) | \$1,177 | 5\% | (\$50) | \$776 |
| 9 | 5.0\% | (\$50) | \$1,183 | 5\% | (\$50) | \$762 |
| 10 | -10.0\% | (\$50) | \$1,020 | 20\% | (\$50) | \$854 |
| Arith. Avg. | 5.0\% |  |  | 5.0\% |  |  |

such as 1927-2007, only three independent 25 -year holding periods can be constructed (1927-1952, 1953-1978, and 1979-2004). Similarly, only five independent 15 -year samples could be created, eight 10 -year samples, etc. These sample sizes are far too small to ensure reliable estimates of probabilities regarding long-term investment outcomes.

Some analysts attempt to address this problem by creating larger sample data sets taken from overlapping time periods. For example, annual returns between

1927 and 2007 can be used to create 56 holding periods. The first period would begin in 1927 and end in 1952. The second would begin in 1928 and end in 1953, and so on.

The problem with this "rolling return" approach is that these overlapping periods are not statistically independent. Each consecutive 25 year period (e.g. 1928-1953) shares 23 years of common data with its predecessor (1927-1952) and its successor (1929-1953). Meaningful results cannot be drawn from a hold-

| Table 3 | $\begin{gathered} \text { S\&P 500 } \\ \text { Actual 1993-2007 } \end{gathered}$ |  |  | Randomly Drawn from 1993-2007 with Replacement |  |  | Trial 2 <br> Randomly Drawn from 1993-2007 with Replacement |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Annual | Portfolio | Year End | Annual | Portfolio | Year End | Annual | Portfolio | Year End |
|  | Return | Contributions/ | Portfolio | Return | Contributions/ | Portfolio | Return | Contributions/ | Portfolio |
| Year | \% | (Withdrawals) | Value | \% | (Withdrawals) | Value | \% | (Withdrawals) | Value |
|  |  |  | \$1,000 |  |  | \$1,000 |  |  | \$1,000 |
| 1 | 10.0\% | - | \$1,100 | -22.1\% | - | \$779 | 28.6\% | - | \$1,286 |
| 2 | 1.3\% | - | \$1,114 | 10.0\% | - | \$857 | 28.7\% | - | \$1,655 |
| 3 | 37.4\% | - | \$1,531 | 1.3\% | - | \$868 | 10.0\% | - | \$1,820 |
| 4 | 23.1\% | - | \$1,885 | 4.9\% | - | \$911 | 1.3\% | - | \$1,844 |
| 5 | 33.4\% | - | \$2,513 | -22.1\% | - | \$709 | -22.1\% | - | \$1,436 |
| 6 | 28.6\% | - | \$3,232 | -9.1\% | - | \$645 | -11.9\% | - | \$1,266 |
| 7 | 21.0\% | - | \$3,912 | 5.5\% | - | \$680 | 4.9\% | - | \$1,328 |
| 8 | -9.1\% | - | \$3,555 | 37.4\% | - | \$935 | -22.1\% | - | \$1,034 |
| 9 | -11.9\% | - | \$3,133 | 10.0\% | - | \$1,028 | 37.4\% | - | \$1,422 |
| 10 | -22.1\% | - | \$2,441 | 15.8\% | - | \$1,191 | 15.8\% | - | \$1,646 |
| 11 | 28.7\% | - | \$3,141 | 23.1\% | - | \$1,465 | 10.0\% | - | \$1,811 |
| 12 | 10.9\% | - | \$3,482 | 28.7\% | - | \$1,886 | 23.1\% | - | \$2,229 |
| 13 | 4.9\% | - | \$3,653 | 28.6\% | - | \$2,425 | 28.7\% | - | \$2,868 |
| 14 | 15.8\% | - | \$4,231 | 33.4\% | - | \$3,234 | 1.3\% | - | \$2,906 |
| 15 | 5.5\% | - | \$4,463 | 21.0\% | - | \$3,914 | 10.9\% | - | \$3,222 |
| Arith. Avg. | 11.8\% |  |  | 11.1\% |  |  | 9.6\% |  |  |

ing period that contains virtually the same information as sample periods within its proximity.

## Monte Carlo Simulation

Monte Carlo simulation attempts to address all of these shortcomings by simulating large numbers of sample tri$\mathrm{als}^{2}$. This technique essentially replicates our "random drawing with replacement" approach by simulating hundreds of possible outcomes based on different orders of independent returns that might occur. From those results future portfolio returns and values are derived with associated probabilities.

The representative indexes included in these simulations are total return indexes, which are constructed under the assumptions that all dividends are reinvested and that capital gains are never realized. For investors with taxable accounts, taxes paid on dividends and realized gains might generate results lower than those indicated by the simulation. Expenses paid to fund managers are not reflected in the total return indexes.

Table 4, and Chart 1 provide ranges of possible outcomes (expressed as ending wealth percentiles and return percentiles) for our moderate portfolio, for a hypothetical investor starting with an initial investment of $\$ 1$ million.

These outcomes assume that no cash withdrawals or contributions are made and that the target allocations were not changed (though most Monte Carlo software programs can accommodate both cash flows and changing targets). The results reflect inflation-adjusted returns based on the CPI since 1927.

Table 4 displays wealth percentiles, which establish the probability distribution of the accumulated wealth amount. For example, 5 percent of the time, the displayed amounts will fall below the 5th percentile, and 95 percent of the time, the amounts will fall above the 5 th percentile. Therefore, it can be stated that at the 5th

percentile, a portfolio has a 95 percent chance of achieving an amount equal or higher than the amount stated in the table. The percentile tables can also be interpreted in terms of confidence intervals. If, for example, we look at the range of displayed amounts falling between the 33rd and 67th percentiles, we can say that 34 percent of the displayed amounts occur in that range. This also means that 33 percent of the displayed amounts will fall above the 67th percentile and 33 percent will fall below the 33 rd percentile.

The results of this simulation therefore assert that over 10 years, 5 percent of the time (the "best case" scenario), the simulated moderate portfolio would be worth at least $\$ 2,736,803$. However, at the "worst case" percentile, 5 percent of the outcomes suggest that the pro-

[^1]posed portfolio would not have exceeded $\$ 1,343,008$. Simulation results for other time periods can be interpreted in the same manner.

Clearly there is an enormous disparity in possible outcomes. This simply reflects the risk inherent in capital markets. Without risk there would of course be no return. On the other hand, investors should find it reassuring that the longer the time horizon, the range of likely annual returns narrows considerably; this is evident in Chart 1. In other words, discipline pays. The longer you stick to your allocation plan, the more likely it is that you will realize an outcome close to the projected median return of the model.

Monte Carlo simulation is just a probabilistic modeling technique; it does not capture all aspects of risk. Nor should it be used for "micro analysis." Clients sometimes ask us to forecast outcomes to help answer numerous questions such as whether they should make certain purchases or whether both spouses should continue working. This encourages a sense of precision that is unrealistic. Monte Carlo is simply a technique to demonstrate the wide range of possible outcomes that can help investors gauge tolerance for risk.

Investors should run from money managers who make promises regarding future rates of return. However, by assessing possible "upside" and "downside" scenarios, together with associated probabilities, investors might at least sleep better knowing that they have made an attempt to build a portfolio suited to their ability to withstand the random fluctuations of the markets.

## Table 4

## Simulated Wealth Percentiles: Moderate Portfolio with Initial Investment of \$1 million (Inflation Adjusted)

| Percentile | 1 Year | 3 Year | 5 Year | $\mathbf{1 0}$ Year | 15 Year | 20 Year |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 95th | $1,202,180$ | $1,476,114$ | $1,787,347$ | $2,736,803$ | $4,128,778$ | $6,092,785$ |
| 75th | $1,116,324$ | $1,317,252$ | $1,539,499$ | $2,208,844$ | $3,164,464$ | $4,465,872$ |
| 66th | $1,096,957$ | $1,273,422$ | $1,474,973$ | $2,099,441$ | $2,944,836$ | $4,145,224$ |
| 50th | $1,066,009$ | $1,212,979$ | $1,380,861$ | $1,912,120$ | $2,645,632$ | $3,652,934$ |
| 33th | $1,034,177$ | $1,151,186$ | $1,286,600$ | $1,732,417$ | $2,353,310$ | $3,202,161$ |
| 25th | $1,017,961$ | $1,119,160$ | $1,240,537$ | $1,647,801$ | $2,208,997$ | $2,999,714$ |
| 5th | 951,976 | $1,002,389$ | $1,075,165$ | $1,343,008$ | $1,711,232$ | $2,221,811$ |

## THE HIGH-YIELD DOW INVESTMENT STRATEGY

For most investors seeking exposure to U.S. large capitalization value stocks, we recommend either of the two large cap value funds listed on the back page. However, investors who have more than $\$ 100,000$ to dedicate to this asset class might instead consider our high-yield Dow (HYD) investment strategy (\$100,000 is the minimum we estimate that is necessary to ensure that trading costs are reasonable relative to the value of the portfolio). The strategy is especially well suited for certain trusts or other accounts that have an explicit interest in generating investment income, but which also seek capital appreciation. Unlike several popular but simplistic "Dogs of the Dow" methods, our HYD model is based on an exhaustive review of monthly prices, dividends and capital changes pertaining to each of the stocks that have comprised the Dow Jones Industrial Average beginning in July 1962. Though the model follows an exacting stock-selection strategy, investors can easily establish and maintain a high yield Dow portfolio; all that is required is discipline applied on a monthly basis. INVESTMENT GUIDE subscribers can establish and maintain a portfolio simply by ensuring that their portfolios are allocated to reflect the percentage valuations listed in the table to the right. Each month this table will reflect the results of any purchases or sales called for by the model.

For investors who do not wish to manage their own accounts, we can manage an HYD portfolio on your behalf through our low-cost HYD investment service. Contact us at (413) 528-1216.

## HYD: The Nuts and Bolts

Our HYD model began by incrementally "investing" a hypothetical sum of $\$ 1$ million over 18 months. Specifically, one eighteenth of $\$ 1$ million ( $\$ 55,000$ ) was invested equally in each of the 4 highest-yielding issues in the Dow Jones Industrial Average each month, beginning in July 1962. Once fully invested (January 1964) the model began a regular monthly process of considering for sale only those shares purchased 18 months earlier, and replacing them with the shares of the four highest-yielding shares at that time. The model each month thus mechanically purchases shares that are relatively low in price (with a high dividend yield) and sells shares that are relatively high in price (with a low dividend yield), all
the while garnering a relatively high level of dividend income. The model also makes monthly "rebalancing" trades, as required, in order to add to positions that have lagged the entire portfolio and sell positions that have done better.

For a thorough discussion of the strategy, we recommend AIER's booklet, "How to Invest Wisely," (\$12).

Of the four stocks eligible for purchase this month only Pfizer and Bank of America were not eligible for purchase 18 months earlier. HYD investors should find that the indicated purchases of Pfizer and Bank of America, and sales of AT\&T, Altria Group and Philip Morris International are sufficiently large to warrant trading. In larger accounts, rebalancing positions in Citigroup and Verizon may be warranted.

## Recommended HYD Portfolio

| As of May 15, 2008 |  |  |  | _Percent of Portfolio-_ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rank | Yield | Price | Status | Value | No. Shares ${ }^{1}$ |
| Bank of America | 1 | 6.97\% | 36.71 | Buying | 5.71 | 4.53 |
| Pfizer | 2 | 6.37\% | 20.08 | Buying | 23.11 | 33.49 |
| Citigroup | 3 | 5.39\% | 23.73 | Holding** | 16.58 | 20.33 |
| General Motors | 4 | 4.71\% | 21.23 | * |  |  |
| Verizon | 5 | 4.42\% | 38.90 | Holding** | 25.78 | 19.28 |
| AT\&T Corp. | 6 | 4.01\% | 39.86 | Selling | 6.45 | 4.71 |
| General Electric | 7 | 3.83\% | 32.37 |  |  |  |
| Merck \& Co. | 8 | 3.80\% | 40.00 |  |  |  |
| DuPont | 9 | 3.31\% | 49.52 |  |  |  |
| Morgan (JP) | 10 | 3.23\% | 47.02 |  |  |  |
| Altria Group | NA |  | 22.34 | Selling | 6.14 | 8.00 |
| Philip Morris Int'I | NA |  | 53.25 | Selling | 14.64 | 8.00 |
| Kraft | NA |  | 31.93 | Selling | 1.47 | 1.34 |
| Fairpoint | NA |  | 9.78 | Selling | 0.11 | 0.32 |
|  |  |  |  |  | $\overline{00.00}$ | $1 \overline{00.00}$ |

* The strategy excludes General Motors. ${ }^{* *}$ Currently indicated purchases approximately equal to indicated purchases 18 months ago. 1 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.


## Hypothetical Returns: HYD and Relevant Indices

The total returns presented in the table below represent changes in the value of a hypothetical HYD portfolio with a beginning date of January 1979 (the longest period for which data was available for the HYD model and relevant indexes). See the accompanying text for a description of the model's construction.

## Hypothetical Total Returns (percent, through April 30, 2008)*

| H mo. | 1 yr. | 5 yrs. | 10 yrs. | 20 yrs. | Since <br> $1 / 79$ | Std. <br> Dev. |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HYD Strategy | 2.88 | -9.52 | 14.43 | 9.31 | 15.80 | 17.61 | 16.96 |
| Russell 1000 <br> Value Index | 4.87 | -8.97 | 12.84 | 5.97 | 11.91 | 13.71 | 13.84 |
| Dow | 4.70 | 0.47 | 11.12 | 5.64 | 12.38 | NA | NA |

[^2]
## RECENT MARKET STATISTICS

| Precious Metals \& Commodity |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Prices (\$) |  |  |
|  | $\mathbf{5 / 1 5 / 0 \mathbf { 0 8 }}$ | Mo. Earlier | Yr. Earlier |
| Gold, London p.m. fixing | $\mathbf{8 8 1 . 2 5}$ | 929.75 | 668.25 |
| Silver, London Spot Price | $\mathbf{1 6 . 6 0}$ | 17.86 | 13.02 |
| Copper, COMEX Spot Price | $\mathbf{3 . 7 6}$ | 3.89 | 3.53 |
| Crude Oil, W. Texas Int. Spot | $\mathbf{1 2 4 . 1 1}$ | 113.69 | 63.17 |
| Dow Jones Spot Index | $\mathbf{4 3 6 . 6 3}$ | 431.51 | 312.59 |
| Dow Jones-AlG Futures Index | $\mathbf{2 1 4 . 6 8}$ | 212.74 | 173.23 |
| Reuters-Jefferies CRB Index | $\mathbf{4 2 1 . 6 1}$ | 415.36 | 310.48 |

Interest Rates (\%)

| U.S. Treasury bills - | 1.80 | 1.09 | 4.70 |
| :---: | :---: | :---: | :---: |
|  | 1.85 | 1.39 | 4.71 |
|  | 2.08 | 1.56 | 4.85 |
| U.S. Treasury bonds - 10 year | 3.83 | 3.60 | 4.71 |
| Corporates: |  |  |  |
| High Quality - 10+ year | 5.55 | 5.54 | 5.44 |
| Medium Quality - 10+ year | 6.91 | 6.99 | 6.34 |
| Federal Reserve Discount Rate | 2.25 | 2.50 | 6.25 |
| New York Prime Rate | 5.00 | 5.25 | 8.25 |
| Euro Rates 3 month | 4.86 | 4.74 | 4.07 |
| Government bonds - 10 year | 4.09 | 4.02 | 0.00 |
| Swiss Rates - 3 month | 2.78 | 2.85 | 2.41 |
| Government bonds - 10 year | 3.01 | 2.99 | 2.90 |
| Exchange Rates (\$) |  |  |  |
| British Pound | 1.948800 | 1.962700 | 1.986200 |
| Canadian Dollar | 1.000400 | 0.982222 | 0.911079 |
| Euro | 1.549200 | 1.580100 | 1.360300 |
| Japanese Yen | 0.009559 | 0.009869 | 0.008318 |
| South African Rand | 0.131622 | 0.125747 | 0.144718 |
| Swiss Franc | 0.949578 | 0.998104 | 0.824063 |


|  | Securities Markets |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{5 / 1 5 / 0 8}$ | Mo. Earlier | Yr. Earlier |
| S \& P 500 Stock Composite | $\mathbf{1 , 4 2 3 . 5 7}$ | $1,334.43$ | $1,501.19$ |
| Dow Jones Industrial Average | $\mathbf{1 2 , 9 9 2 . 6 6}$ | $12,362.47$ | $13,383.84$ |
| Dow Jones Bond Average | $\mathbf{2 0 9 . 4 4}$ | 207.94 | 200.18 |
| Nasdaq Composite | $\mathbf{2 , 5 3 3 . 7 3}$ | $2,286.04$ | $2,525.29$ |
| Financial Times Gold Mines Index | $\mathbf{2 , 9 2 1 . 2 7}$ | $3,084.40$ | $2,287.19$ |
| FT EMEA (African) Gold Mines | $\mathbf{2 , 6 9 2 . 9 9}$ | $2,630.00$ | $2,844.87$ |
| FT Asia Pacific Gold Mines | $\mathbf{1 2 , 6 1 6 . 8 6}$ | $13,730.10$ | $8,806.41$ |
| FT Americas Gold Mines | $\mathbf{2 , 5 1 2 . 3 0}$ | $2,698.86$ | $1,804.37$ |

Coin Prices (\$)

|  | $\mathbf{5 / 1 5 / 0 8}$ | Mo. Earlier | Yr. Earlier | Prem (\%) |
| :--- | ---: | ---: | ---: | ---: |
| American Eagle (1.00) | $\mathbf{9 0 0 . 6 3}$ | 946.83 | 703.25 | 2.20 |
| Austrian 100-Corona (0.9803) | $\mathbf{8 5 2 . 7 2}$ | 896.72 | 699.33 | -1.29 |
| British Sovereign (0.2354) | $\mathbf{2 1 0 . 6 5}$ | 221.35 | 165.85 | 1.54 |
| Canadian Maple Leaf (1.00) | $\mathbf{8 9 7 . 4 0}$ | 943.60 | 703.50 | 1.83 |
| Mexican 50-Peso (1.2057) | $\mathbf{1 , 0 5 1 . 1 0}$ | $1,105.70$ | 825.10 | -1.08 |
| Mexican Ounce (1.00) | $\mathbf{8 7 1 . 9 0}$ | 916.80 | 684.40 | -1.06 |
| S. African Krugerrand (1.00) | $\mathbf{8 8 0 . 0 5}$ | 925.45 | 693.25 | -0.14 |
| U.S. Double Eagle-\$20 (0.9675) |  |  |  |  |
| St. Gaudens (MS-60) | $\mathbf{8 9 7 . 5 0}$ | 965.00 | 710.00 | 5.27 |
| Liberty (Type I-AU50) | $\mathbf{1 , 0 5 0 . 0 0}$ | $1,050.00$ | 762.50 | 23.15 |
| Liberty (Type II-AU50) | $\mathbf{9 9 0 . 0 0}$ | $1,000.00$ | 712.50 | 16.11 |
| Liberty (Type III-AU50) | $\mathbf{8 7 2 . 5 0}$ | 940.00 | 690.00 | 2.33 |
| U.S. Silver Coins (\$1,000 face value, circulated) |  |  |  |  |
| 90\% Silver Circ. (715 oz.) | $\mathbf{1 1 , 6 8 7 . 5 0}$ | $12,700.00$ | $9,390.00$ | -1.53 |
| 40\% Silver Circ. (292 oz.) | $\mathbf{1 2 , 5 2 5 . 0 0}$ | $5,112.50$ | $3,822.50$ | 158.40 |
| Silver Dollars Circ. | $\mathbf{1 4 , 7 2 5 . 0 0}$ | $15,250.00$ | $10,075.00$ | 14.66 |

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $\$ 881.25$ per ounce and silver at $\$ 16.60$ per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

## THE DOW JONES INDUSTRIALS RANKED BY YIELD*

|  | Ticker <br> Symbol | -_ Market Prices (\$) - |  |  | 12-Month (\$) |  | Latest Dividend Record |  |  | - Indicated - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5/15/08 | 4/15/08 | 5/15/07 | High | Low | Amount (\$) | Date | Paid | Dividend | (\%) |
| Bank of America | BAC | 36.71 | 35.58 | 50.94 | 52.96 | 33.12 | 0.640 | 6/06/08 | 6/27/08 | 2.560 | 6.97 |
| Pfizer | PFE | 20.08 | 20.71 | 27.10 | 27.73 | 19.70 L | 0.320 | 5/09/08 | 6/3/08 | 1.280 | 6.37 |
| Citigroup | C | 23.73 | 22.80 | 52.79 | 55.55 | 17.99 | 0.320 | 5/05/08 | 5/23/08 | 1.280 | 5.39 |
| General Motors | GM | 21.23 | 19.12 | 31.97 | 43.20 | 17.47 | 0.250 | 5/16/08 | 6/10/08 | 1.000 | 4.71 |
| Verizon | VZ | 38.90 | 35.11 | 42.54 | 46.24 | 33.15 | 0.430 | 4/10/08 | 5/1/08 | 1.720 | 4.42 |
| AT\&T (New) | T | 39.86 | 37.33 | 40.39 | 42.97 | 32.95 | 0.400 | 4/10/08 | 5/1/08 | 1.600 | 4.01 |
| General Electric | GE | 32.37 | 31.98 | 36.64 | 42.15 | 31.55 | 0.310 | 2/25/08 | 4/25/08 | 1.240 | 3.83 |
| Merck | MRK | 40.00 | 41.22 | 52.62 | 61.62 | 36.80 L | 0.380 | 3/07/08 | 4/1/08 | 1.520 | 3.80 |
| Dupont | DD | 49.52 | 48.93 | 50.90 | 53.90 | 41.26 | 0.410 | 5/15/08 | 6/12/08 | 1.640 | 3.31 |
| J P Morgan | JPM | 47.02 | 42.12 | 52.03 | 53.07 | 36.01 | 0.380 | 4/04/08 | 4/30/08 | 1.520 | 3.23 |
| Home Depot, Inc. | HD | 29.53 | 27.93 | 38.30 | 41.19 | 23.77 | 0.225 | 3/13/08 | 3/27/08 | 0.900 | 3.05 |
| Johnson \& Johnson | JNJ | 66.68 | 65.65 | 61.82 | 68.85 | 59.72 | 0.460 | 5/27/08 | 6/10/08 | 1.840 | 2.76 |
| Coca-Cola | KO | 57.01 | 60.94 | 52.46 | 65.59 | 51.03 | 0.380 | 6/15/08 | 7/1/08 | 1.520 | 2.67 |
| Chevron | CVX | 98.49 | 90.17 | 80.73 | 99.00 H | 76.40 | 0.650 | 5/19/08 | 6/10/08 | 2.600 | 2.64 |
| 3M Company | MMM | 77.86 | 78.84 | 86.17 | 97.00 | 72.05 | 0.500 | 5/23/08 | 6/12/08 | 2.000 | 2.57 |
| McDonald's | MCD | 60.86 | 55.96 | 51.27 | 63.69 | 46.64 | 0.375 | 3/03/08 | 3/17/08 | 1.500 | 2.46 |
| Procter and Gamble | PG | 66.36 | 70.23 | 62.07 | 75.18 | 60.76 | 0.400 | 4/18/08 | 5/15/08 | 1.600 | 2.41 |
| Intel Corp | INTC | 24.97 | 20.91 | 22.01 | 27.99 | 18.05 | 0.140 | 5/07/08 | 6/1/08 | 0.560 | 2.24 |
| Amer. Int. Group | AIG | 39.57 | 44.11 | 72.07 | 72.96 | 38.15 L | 0.220 | 9/05/08 | 9/19/08 | 0.880 | 2.22 |
| Boeing | BA | 85.55 | 75.70 | 94.34 | 107.83 | 71.59 | 0.400 | 5/09/08 | 6/6/08 | 1.600 | 1.87 |
| Exxon Mobil | XOM | 91.30 | 90.80 | 81.13 | 95.27 | 77.55 | 0.400 | 5/13/08 | 6/10/08 | 1.600 | 1.75 |
| Caterpillar | CAT | 83.50 | 75.95 | 76.01 | 87.00 | 59.60 | 0.360 | 4/21/08 | 5/20/08 | 1.440 | 1.72 |
| United Tech. | UTX | 74.29 | 70.84 | 68.50 | 82.50 | 65.20 | 0.320 | 5/16/08 | 6/10/08 | 1.280 | 1.72 |
| Wal-Mart Stores | WMT | 57.12 | 56.27 | 47.62 | 59.09 H | 42.09 | 0.238 | 12/15/08 | 1/2/09 | 0.950 | 1.66 |
| Alcoa | AA | 42.74 | 34.84 | 39.29 | 48.77 | 26.69 | 0.170 | 5/02/08 | 5/25/08 | 0.680 | 1.59 |
| IBM | IBM | 128.46 | 117.17 | 104.83 | 128.83 H | 97.04 | 0.500 | 5/09/08 | 6/10/08 | 2.000 | 1.56 |
| Microsoft Corp. | MSFT | 30.45 | 28.25 | 30.90 | 37.50 | 26.87 | 0.110 | 5/15/08 | 6/12/08 | 0.440 | 1.44 |
| American Express | AXP | 49.86 | 43.15 | 63.02 | 65.89 | 39.50 | 0.180 | 4/11/08 | 5/9/08 | 0.720 | 1.44 |
| Walt Disney | DIS | 34.99 | 29.93 | 35.94 | 36.79 | 26.30 | 0.350 | 12/07/07 | 1/11/08 | 0.350 | 1.00 |
| Hewlett-Packard | HPQ | 46.73 | 45.82 | 44.75 | 53.48 | 39.99 | 0.080 | 3/12/08 | 4/2/08 | 0.320 | 0.68 |

[^3]|  |  |  |  | Descrip | ptive Quarterly | Statistic | as of 3/31/08 |  |  | Annua | ed Ret | (\%), as | 4/30/0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ticker | Avg. Market Cap. / | No. of |  | Ratios |  | 12 Mo . |  | Total |  |  | After Tax |  |
|  |  | Symbol | Avg. Maturity | Holdings | Expense (\%) | Sharpe | Turnover (\%) P/B | Yield (\%) | 1 yr . | 3 yr . | 5 yr . | 1 yr . | 3 yr . | 5 yr . |
|  | Short/Intermediate Fixed Income |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vanguard Short-Term Bond Index | BSV ${ }^{2}$ | 2.7 Yrs. | 815 | 0.11 | -- | 79 | -- | 7.54 | -- | -- | 6.06 | -- | -- |
|  | Vanguard Short-Term Bond Index | VBISX | 2.7 Yrs. | 816 | 0.18 | 0.55 | 79 | 4.37 | 7.47 | 4.89 | 3.63 | 5.82 | 3.36 | 2.25 |
|  | Vanguard Short-Term Inv. Grade | VFSTX | 3.0 Yrs. | 904 | 0.21 | 0.36 | 48 | 4.86 | 4.66 | 4.55 | 3.63 | 2.91 | 2.95 | 2.17 |
|  | iShares Lehman 1-3 Year Treasury | SHY ${ }^{1}$ | 1.8 Yrs. | 35 | 0.15 | 0.60 | 64 | 3.94 | 7.77 | 4.86 | 3.31 | 6.31 | 3.46 | 2.21 |
|  | Vanguard Limited-Term Tax-Exempt | VMLTX | 3.0 Yrs. | 703 | 0.15 | -- | 32 | 3.45 | 4.79 | 3.46 | 2.69 | 4.79 | 3.46 | 2.69 |
|  | Real Estate |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vanguard REIT Index | VNQ ${ }^{2}$ | 4.9 B . | 98 | 0.12 | 0.50 | $36 \quad 2.2$ | 5.03 | -12.35 | 11.89 | -- | -13.57 | 10.40 | -- |
|  | Vanguard REIT Index | VGSIX ${ }^{3}$ | 4.9 B. | 99 | 0.21 | 0.49 | $36 \quad 2.2$ | 4.92 | -12.59 | 11.67 | 18.17 | -13.63 | 10.33 | 16.50 |
|  | U.S. Large Cap Value |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vanguard Value Index | VTV ${ }^{2}$ | 57.3 B. | 400 | 0.10 | 0.25 | $20 \quad 2.0$ | 3.05 | -9.67 | 8.20 | -- | -10.04 | 7.78 | -- |
|  | Vanguard Value Index | VIVAX | 57.3 B. | 400 | 0.20 | 0.24 | $20 \quad 2.0$ | 2.94 | -9.77 | 8.09 | 12.75 | -10.12 | 7.68 | 12.34 |
|  | U.S. Small Cap Value |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | iShares Russell Microcap Index | IWC ${ }^{1}$ | 0.3 B. | 1385 | 0.60 | na | $20 \quad 1.6$ | 0.86 | -19.82 | -- | -- | -19.92 | -- | -- |
|  | Vanguard Small-Cap Value Index | VBR ${ }^{2}$ | 1.5 B . | 991 | 0.11 | 0.07 | $34 \quad 1.5$ | 2.58 | -12.59 | 7.39 | -- | -13.00 | 6.93 | -- |
|  | Vanguard Small-Cap Value Index | VISVX | 1.5 B . | 991 | 0.22 | 0.06 | 341.5 | 2.42 | -12.68 | 7.28 | 13.99 | -13.07 | 6.84 | 13.70 |
|  | U.S. Large Cap Growth |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | iShares Russell 1000 Growth Index | IWF ${ }^{1}$ | 32.5 B. | 688 | 0.20 | 0.22 | $15 \quad 3.6$ | 1.04 | -0.39 | 8.66 | 9.31 | -0.58 | 8.49 | 9.14 |
|  | Vanguard Growth Index | VIGRX | 39.6 B. | 424 | 0.22 | 0.25 | $23 \quad 3.9$ | 0.90 | 1.55 | 9.28 | 9.41 | 1.42 | 9.14 | 9.27 |
| $\hat{0}$ | U.S. Marketwide |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vanguard Total Stock Market Index | VTI ${ }^{2}$ | 31.0 B . | 3626 | 0.07 | 0.25 | $4 \quad 2.6$ | 1.99 | -4.82 | 8.90 | 11.69 | -5.07 | 8.61 | 11.41 |
|  | Fidelity Spartan Total Market Index | FSTMX ${ }^{4}$ | 28.0 B. | 3364 | 0.10 | 0.26 | $4 \quad 2.4$ | 1.74 | -4.87 | 8.92 | 11.65 | na | na | na |
|  | Foreign- Developed Markets |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | iShares MSCI Growth Index | EFG ${ }^{1}$ | 30.4 B. | 562 | 0.40 | na | $28 \quad 3.3$ | 0.98 | 2.54 | -- | -- | 2.45 | -- | -- |
|  | iShares MSCI Value Index | EFV ${ }^{1}$ | 38.7 B. | 549 | 0.40 | na | $21 \quad 1.7$ | 3.51 | -6.11 | -- | -- | -6.69 | -- | -- |
|  | Vanguard Europe Pacific Index | VEA ${ }^{2}$ | 38.1 B. | 1154 | 0.12 | na | $6 \quad 2.8$ | -- | -- | --- | -- | -- | --- | -- |
|  | Vanguard Tax-Managed International | VTMGX ${ }^{5}$ | 38.0 B. | 1154 | 0.15 | 0.86 | $6 \quad 2.8$ | 2.38 | -1.96 | 15.93 | 20.54 | -2.15 | 15.68 | 20.31 |
|  | Vanguard Developed Markets Index | VDMIX ${ }^{6}$ | 38.1 B. | 1156 | 0.22 | 0.84 | $7 \quad 2.9$ | 3.11 | -1.11 | 16.08 | 20.38 | -1.67 | 15.52 | 19.83 |
|  | Foreign- Emerging Markets |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Vanguard Emerging Market Index | $\mathrm{VWO}^{2}$ | 20.1 B. | 940 | 0.25 | 1.16 | $9 \quad 3.3$ | 2.09 | 26.37 | 32.75 | -- | 25.98 | 32.40 | -- |
|  | Vanguard Emerging Market Index | VEIEX ${ }^{7}$ | 20.1 B. | 940 | 0.37 | 1.15 | $9 \quad 3.3$ | 1.98 | 24.95 | 32.17 | 34.53 | 24.58 | 31.84 | 34.22 |
|  | Gold-Related Funds |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | iShares COMEX Gold Trust | $1 \mathrm{AU}^{2}$ | -- | 1 | 0.40 | -- | -- -- | 0.00 | 26.29 | 25.15 | -- | 26.29 | 25.15 | -- |
|  | streetTRACKS Gold Shares | GLD ${ }^{1}$ | -- | 1 | 0.40 | -- | -- -- | 0.00 | 28.80 | -- | -- | 28.80 | -- | -- |
|  |  |  | Recommended | Gold-Mi | g Compani | es (\$) |  |  |  |  | provid | the fu | and M | ingstar. ${ }^{1}$ Ex |
|  |  | Ticker | Month | Year | --- 52-Week --- |  | Distribu | utions | Yield |  | ge Traded | d, traded o | NYSE. ${ }^{2}$ Ex | ange Traded |
|  |  | Symbol | 5/15/08 Earlier | Earlier | High Low |  | Last 12 Months | Frequency | (\%) |  | traded 5\% fee | redemption | ee for | mption in 1 $1 \%$ fee for |
|  | Anglogold Ltd., ADR | AU | $39.25 \quad 36.90$ | 42.59 | $51.35 \quad 30.50$ |  | 0.1905 | Semiannual | 0.4854 |  | ption in | $\begin{aligned} & \text { redempti } \\ & \text { yrs. } \quad 6 \\ & 29 \end{aligned}$ | $\begin{aligned} & \text { in } 90 \text { da } \\ & \text { ee for re } \end{aligned}$ | mption in 60 |
|  | Barrick Gold Corp. $\dagger$ | ABX | 39.1643 .48 | 30.005 | $54.74 \quad 27.79$ |  | 0.2975 | Semiannual | 0.7597 |  | $70.5 \%$ | for purch | se and 0.5\% | $\%$ fee for re- |
| 》 | Gold Fields Ltd. | GFI | 13.9014 .40 | 17.121 | 19.9212 .82 |  | 0.2575 | Semiannual | 1.8525 | demp | tion. * | culated usi | ge high | est individual |
| $\stackrel{\text { ¢ }}{ }$ | Goldcorp, Inc. $\dagger$ | GG | 40.31 41.27 | 23.68 4 | 46.3021 .00 |  | 0.1530 | Monthly | 0.3796 |  | al income | $x$ rates in | fect at the | time of each |
| $\stackrel{\sim}{\sim}$ | Newmont Mining | NEM | $46.73 \quad 45.45$ | 40.215 | 57.5538 .01 |  | 0.4000 | Quarterly | 0.8560 |  | bution and | o not refle | the impa | t of state and |
| N 0 0 | The information herein is derived from Research, and the officers, employees, | generally rel other perso | iable sources, but can ns affiliated with either | not be guar er organizatio | ranteed. America <br> on may from time | n Investm e to time h | ent Services, the Amer ave positions in the inv | rican Institute for vestments referr | Economic to herein. |  | axes an is after | dividual Canadia | situation ax withhol | + Dividend ding. |


[^0]:    ${ }^{1}$ There is evidence of security price "momentum" from period to period but these episodes occur over time spans of less than one year and are not exploitable.

[^1]:    ${ }^{2}$ In Tables 1-3 we depicted annual returns for ease of demonstration. Monte Carlo modeling (utilized in Table 4 and Chart 1) typically utilizes monthly return data, which provides a much larger sample size. Most of our recommended asset classes display momentum (autocorrelation) as well as low but positive correlation with one another (serial correlation). Many Monte Carlo programs fail to capture these characteristics. However, the software we utilized allows the user the option of preserving this correlation, which we have done.

[^2]:    *Data assume 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 20-year total returns are annualized, as is the standard deviation of those returns since January 1979, where available. Model HYD 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. Historical performance results for investment indexes and/or categories generally do not reflect the deduction of transaction and/or custodial charges or the deduction of an investment-management fee, the incurrence of which would have the effect of decreasing historical performance results.

[^3]:    * See the Recommended HYD Portfolio table on page 30 for current recommendations. $\dagger$ Based on indicated dividends and market price as of 5/15/08.

    Extra dividends are not included in annual yields. H New 52-week high. $L$ New 52 -week low. (s) All data adjusted for splits and spin-offs. 12 -month data begins $5 / 15 / 07$.

