



*See box, page 70, for representative indexes.

What's Up with Gold?

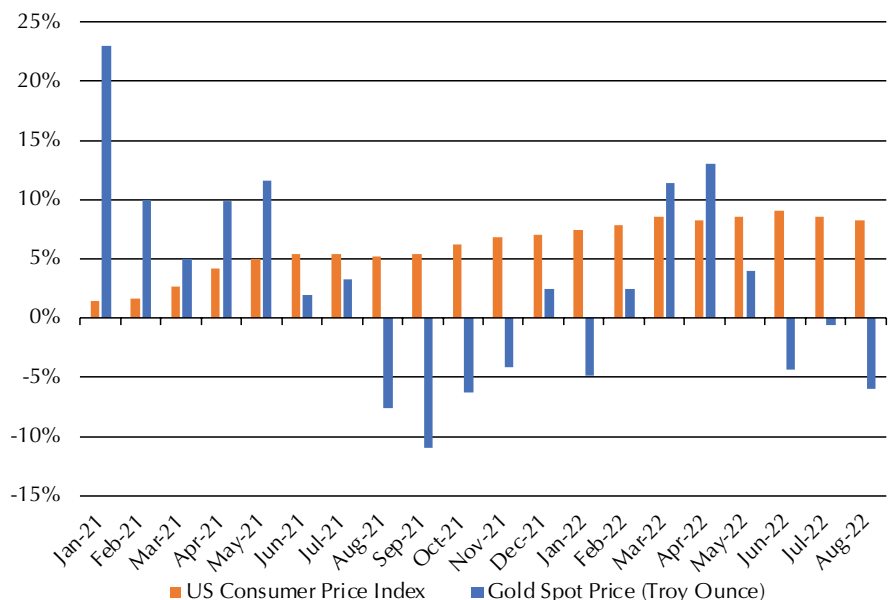
Since inflation began its ascent in early 2021, gold, despite its reputation, has served poorly as a hedge against rising prices (see Chart 1).

During the late 1970s the gold price surged along with double-digit annual inflation. But over the long-term data confirm that the gold price has been far too volatile to serve reliably as an ongoing hedge against rising prices. Chart 2 (following page) shows that monthly changes in the gold price have dwarfed monthly changes in CPI. Indeed, the latter series (in orange) is barely perceptible alongside the gold series.

Gold returns are impacted by many factors, including changes in U.S. interest rates. For decades global financial markets have embraced U.S. Treasury debt the safest form of debt available, so Treasuries compete with gold as a safe-haven asset. In fact, the three-month Treasury bill (T-bill) is presented in finance textbooks as a proxy for the theoretical risk-free rate of return.

(continued next page)

Chart 1: Price Inflation vs Gold Price
Trailing 12 Mo. Change



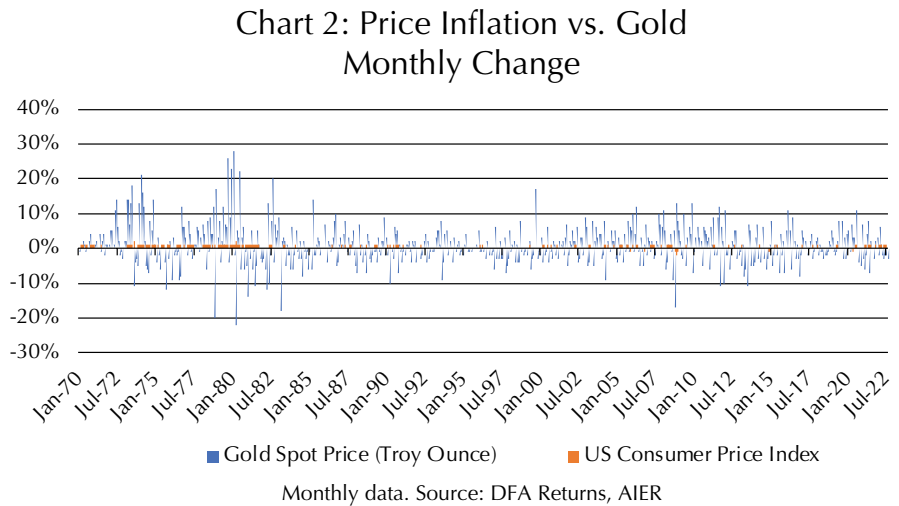
Rates of Interest	
As of September 23, 2022	
Government Obligations¹	
Fed Funds Rate	3.08%
3-Month Treas. Bill	3.19%
10-Yr. Treas. Note	3.70%
30-Yr. Treas. Bond	3.65%
10-Yr. TIPS	1.29%
Muni Bonds - Nat'l 10-Yr.	3.10%
Mortgage Rates²	
15-Yr Fixed	5.44%
30-Yr Fixed	6.29%
Banking³	
Savings	0.17%
Money Market	0.18%
12-month CD	0.60%

[1] Federal Reserve, fmsbonds.com. Annualized Rates. Notes, bonds, TIPS reflect yield to maturity.
 [2] Freddie Mac. Average (National average mortgages with 0.9 points).
 [3] FDIC. Average national rates, non-jumbo deposits (<\$100k).

Gold pays no interest, so its price tends to fall when Treasuries yields increase. This helps to explain why the gold price has fallen this year despite historically high inflation. Treasury rates have surged as the FOMC (belatedly) boosted its Fed Funds Target range from 0.0 to 0.25 percent when the year began, to 3.0 to 3.25 percent in late September.

Higher rates in the U.S. have also attracted capital from foreign investors, which has further suppressed the gold price. As foreign investors have flocked to dollar-denominated assets the dollar has increased in price against foreign currencies. This translates to a higher gold price in local currencies. So, unless foreign central banks follow the Fed's lead by increasing their own rates, this exchange rate effect further erodes global demand for gold and therefore drives returns lower for U.S. investors.

Gold, however, serves well as insurance against unexpected financial shocks. Throughout history during times of extreme distress in capital markets gold has increased in value while other financial asset prices have plummeted.



ed. This was [evident](#) during the 2009 subprime crisis and the economy-wide shutdowns of 2020. Early this year when Russia invaded Ukraine the spot gold price approached its all-time high, though the spike was short lived.

There is no guarantee that global investors will continue to regard U.S. Treasuries as the best proxy for a risk-free asset or that the dollar will remain

the world's reserve currency. Federal spending is near its highest level since World War II and the Fed has once again demonstrated that discretionary monetary policy is ill suited to maintaining stable prices. Gold on the other hand cannot be created with the stroke of a pen.

HOW TO INVEST A LUMP SUM: INVEST NOW, OR OVER TIME?

We are frequently asked whether it is better to invest a lump sum of cash all at once or in a gradual, methodical fashion, referred to as "Dollar Cost Averaging". Over time there is a good chance a household might receive a lump sum from a variety of sources such as an inheritance, severance pay, or the sale of a home. In this article we consider both methods.

Dollar Cost Averaging (DCA) simply refers to investing an equal dollar amount at fixed intervals of time. The goal is to get a better "average price" by taking advantage of volatility. Proponents

Monthly Investment	Price per share	Shares Purchased
\$500	\$20	25
\$500	\$30	16.67
\$500	\$40	12.5
	Total	54.17

of DCA often present an example such as the following:

An investor has \$1,500 to invest. She can invest \$500 per month for three months, or she can invest the \$1,500 all at once. Suppose that the initial purchase price is \$20 per share, and that the price increases by \$10 per month, so that the price series is \$20, \$30, and \$40. The average of these prices is \$30. Table 1 shows that with Dollar Cost Averaging, the

investor winds up with 54.17 shares so that the average purchase cost per share is \$27.69 ($\$1,500 / 54.17$) This is about 8 percent less than the average share price of \$30.

	100% Stock Portfolio		60% Stock / 40% Bond Portfolio	
	Win Rate	Median Wealth at End of period	Win Rate	Median Wealth at End of period
Strategy #1: Invest 100% immediately	68.5%	\$16,908	74.1%	\$15,118
Strategy #2: Invest over 12 months	17.9%	\$16,274	16.2%	\$14,625
Strategy #3: Invest over 3 years	13.5%	\$14,929	9.7%	\$13,516

To contact us:

American Investment Services, Inc.
 250 Division Street.
 P.O. Box 1000
 Great Barrington, MA. 01230

(413) 591-4445

aisinfo@americaninvestment.com

While this is intuitively appealing, this simple analysis fails to point out that the investor would have been far better off had she invested the \$1,500 immediately. In that case she would have purchased 75 shares that would be worth \$3,000 at the end of the three months versus 54.17 shares worth \$2,167 under DCA.

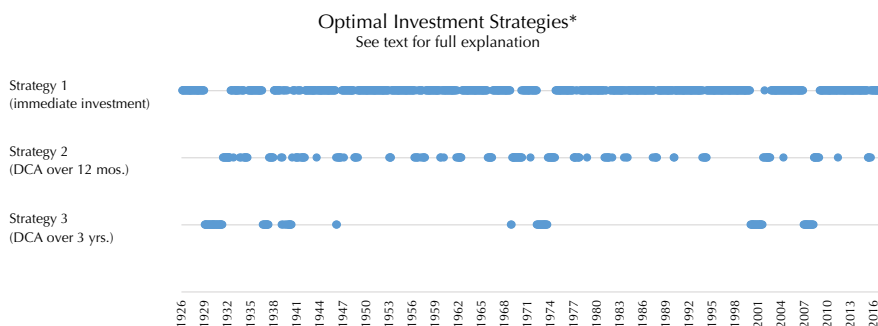
Some readers might cry foul, since we have contrived an example in which prices are rising. Stock prices often fall over the short term, in which case DCA would be the superior strategy.

However, while security prices change unpredictably over short-term intervals, they trend upward over time. Therefore, we submit that investors who have a truly long-run view, and who construct a portfolio that is well-diversified across asset classes, should not be afraid to “take the lump sum plunge” rather than embrace DCA. A look at market history bears this out.

Numbers Please...

Our analysis utilizes data for the S&P 500 as a proxy for stocks and 5-Year U.S. Treasury Notes for bonds. We use these indexes because data are available dating back to 1926. All returns assume the reinvestment of dividends and interest, quarterly rebalancing to target weights, and do not include advisory fees, mutual fund expenses, or transaction costs.

We tested three potential strategies for investors with cash available for investment.



* Blue dot indicates optimal strategy for year indicated. Due to the large number of observations, optimal strategies unavoidably appear to coincide in some years. Generally however it is clear that Strategy 1 (invest immediately) has predominated.

- Strategy #1 invests as soon as the cash is available (immediate investment).
- Strategy #2 invests the cash gradually -- one-twelfth of the cash is invested at one-month intervals for 12 months (1 year horizon).
- Strategy #3 invests even more gradually, with one-twelfth invested over 12 quarters (3-year horizon).

In all three scenarios we considered a 100 percent stock portfolio, as well as a more conventional 60 percent stock/40 percent bond portfolio.

Lump Sum Dominates “Win Rates”

We first considered which strategy created the most wealth at the end of a 5-year investment period for a hypothetical investor with \$10,000 to invest. There

were 1,100 hypothetical starting months between January 1926 and August 2017 and subsequent five-year spans.¹

The “win rate” in Table 2 shows the percentage of five-year spans when a particular strategy was dominant. For an all-stock portfolio, Strategy #1 (investing immediately) was the superior strategy about two-thirds of the time (we note similar findings derived from external research in the U.S., U.K., and Australian capital markets.)² For the more diversified 60/40 portfolio of stocks and bonds, Strategy #1 (immediate investing) dominated almost three out of every four periods.

This supports our contention that, in a world in which market returns are unpredictable, investors are generally better off investing immediately.

The chart above depicts those periods during which each strategy was dominant. Each dot represents a starting month when the indicated strategy was optimal. The preponderance of the dots is on the line for Strategy #1. There are,

(continued page 68)

Table 3	“Spread” and “Worst Case” Ending Period Wealth (5th percentile outcomes)			
	Starting Month Jan. 1926 - Aug. 2017 (1,100 observations)			
	100% Stock Portfolio		60% Stock / 40% Bond Portfolio	
	Spread (Standard deviation of ending period wealth)	5th percentile Ending Period Wealth	Spread (Standard deviation of ending period wealth)	5th percentile Ending Period Wealth
Strategy #1: Invest 100% immediately	\$6,161	\$7,655	\$3,575	\$10,206
Strategy #2: Invest over 12 months	\$5,520	\$7,955	\$3,230	\$9,794
Strategy #3: Invest over 3 years	\$4,236	\$8,118	\$2,503	\$9,973

1. The period starting August 2017 is the most recent span that has five subsequent years of returns.
2. Shtekman, Anatoly, Christos Tasopoulos and Brian Wimmer. “Dollar-cost averaging just means taking risk later.” Vanguard research. July 2012.
3. In the Vanguard paper noted in footnote 2, the authors look at downside risk and find “[t]he allocation to cash during the DCA investment period decreases the risk level of the portfolio, helping to insulate it from a declining market.” “Dollar Cost Averaging May Help to Manage Risk but on Average It Just Reduces Returns.” Michael Kitces. March 2016. A recent research paper by Jon Luskin, CFP in the Journal of Financial Planning suggests that dollar-cost averaging may be advantageous in environments where the CAPE ratio is elevated. We believe that the CAPE ratio is a dubious metric for timing market performance, most notably because the recent past has shown only elevated CAPE ratios, indicating that historical CAPE ratios may be less meaningful.
4. The standard deviation measures how widely dispersed the data are. In this case, it measures the average of the differences of each ending value from the average ending value.

Table 4 Win Rates During Strong Market Returns*, 5 Year Rolling Returns Starting Month Jan. 1926 - Aug. 2017 (280 observations)		
	100% Stock Portfolio	60% Stock / 40% Bond Portfolio
Strategy #1: Invest 100% immediately	75.4%	81.1%
Strategy #2: Invest over 12 months	13.6%	10.4%
Strategy #3: Invest over 3 years	11.1%	8.6%
* 12 month periods with S&P 500 total return of at least 25%.		

however, sporadic periods where some amount of dollar-cost averaging would have been advantageous, most notably right before the Great Depression, dot-com bubble, and the subprime mortgage crisis. This becomes obvious, but only in hindsight.

Uncertainty and the Worst Case

This assessment is inadequate in two respects. First, while it calculates the ending wealth in all cases, it fails to consider the “spread” of those outcomes. That is, it fails to acknowledge that some investors give high priority to the *certainty* of their ending portfolio values, even if it might mean lower gains on the upside. Second, it fails to consider that some investors prioritize “limiting the downside” of losses they might suffer in the event poor market returns prevail.³

Table 3 (previous page) addresses both concerns. The spread of outcomes – represented in the table by standard deviation⁴ – is narrower with DCA strategies. Both the 100 percent stock portfolio as well as the 60/40 portfolio provide more narrow ranges of outcomes with DCA versus immediate investment. This suggests that investors who want a more certain outcome might indeed benefit from DCA, even if it may limit the potential upside depicted in earlier tables.

In terms of limiting the downside we examined the 5th percentile of returns. For the 100 percent stock portfolio, both DCA strategies provide a better result versus immediate investment, and the most gradual strategy is optimal (the \$10,000 starting value falls to only \$8,118).

However, in the case of a 60/40 portfolio, immediate investment is superior. The ending value after five years shows a modest *gain* of \$206 even in the 5th percentile scenario. This suggests that investors who prioritize limiting their potential portfolio losses need

not worry much about how quickly to invest their lump sum, if their portfolio is well diversified, and they have a long-term perspective. This more realistic assessment is often overlooked in other research - which tends to test only 100 percent stock portfolios.

What if Markets are Doing Well?

Investors can be reluctant to invest a lump sum when stock markets have been strong because they are fearful a reversal is imminent. So, we looked at market history to see whether investing after periods of above-average market returns would have any impact on the outcomes.

Specifically, in Table 4, we looked at which strategy provided the highest win rate, but only in those instances when the stock market had risen by at least 25 percent in the preceding 12 months. This reduced our observations to only 280, or roughly one quarter of our original data set.

Remarkably, by these criteria the data reveal that it would have been *even more advantageous* (based on win rates) to invest immediately. Strategy #1 was optimal in three of four instances for a 100 percent portfolio and four in five instances for diversified stock/bond investors. In other words, history provides no compelling evidence to support a gradual investment strategy when recent returns have been strong.

The Rational Investor?

Investors may choose to Dollar Cost Average to avoid “regret risk.” Such investors are especially sensitive to the emotion experienced when an investment outcome, ex-post, is less than an alternative they had considered. Such investors are fearful of looking back and realizing that they invested everything right before a sharp market decline.

Of course, everything becomes clearer in retrospect. We cannot know

in advance how markets will perform over the short-term. The rational investor should therefore invest a lump sum to optimize expected outcomes. But the reality is that regret - a very real and powerful emotion - impacts investors and their “rationality”. So, for some investors, dollar cost averaging *can* serve as a useful palliative. DCA certainly makes sense if, because of fear, the alternative is to never invest at all.

The Takeaways

One must be careful when using back tested data, as we have done here. While we have considered thousands of scenarios by using “rolling” time periods, these are not statistically independent because they overlap. More generally, past performance is no indication of future performance.

Since markets are unpredictable, our research suggests that the wise approach is to invest a lump sum in a well-diversified portfolio immediately. Dollar Cost Averaging over a specified time is the less desirable course of action even during periods when markets have recently provided relatively strong returns.

Investors with cash intended for long-term growth should not remain in cash while “waiting for a correction” out of fear or regret. For the emotional investor who becomes “paralyzed”, DCA may indeed be the best alternative. One proviso: investors who adopt DCA should stick to the plan by making equal dollar investments at regular intervals.

Finally, investors who do not have the luxury of a lump sum, but who do enjoy a steady cash flow, such as a portion of a monthly paycheck, may prefer to invest this income stream at regular intervals. Indeed, millions of people practice this regularly through tax deductible payroll contributions to their 401(k) plans.

For investing a lump sum, Dollar Cost Averaging is not a panacea. Immediate lump sum investing is the rational course of action for those who seek to maximize their long-term returns.

HOMEOWNER RECORDS: WHAT TO KEEP AND FOR HOW LONG¹

Keeping full and accurate homeowner records is not only vital for claiming deductions on your tax return, but also for determining the basis or adjusted basis of your home. These records include your purchase contract and settlement papers if you bought the property, or other objective evidence if you acquired it by gift, inheritance, or similar means. You should also keep any receipts, canceled checks, and similar evidence for improvements or other additions to the basis.

Here are a few examples:

- Putting an addition on your home
- Replacing an entire roof
- Paving your driveway
- Installing central air conditioning
- Rewiring your home
- Assessments for local improvements
- Amounts spent to restore damaged property

You should also keep track of any reductions in the basis, such as:

- Insurance or other reimbursement for casualty losses
- Deductible casualty losses not covered by insurance
- Payment received for easement or right-of-way granted
- Value of subsidy for energy conservation measure excluded from income
- Depreciation deduction if the home is used for business or rental purposes

How you keep records is up to you, but they must be clear and accurate and must be available to the IRS. You must also keep these records for as long as they are important for the federal tax law.

Keep records that support an item of income or a deduction appearing on a return until the period of limitations for the return runs out. A period of limitations is the limited period of time after which no legal action can be brought.

For assessment of tax, the period of limitations is generally three years from the date you filed the return. When filing a claim for credit or refund, the period of limitations is generally three years from the date you filed the original return or two years from the date you paid the tax, whichever is later. Returns filed before the due date are treated as filed on the due date.

You may need to keep records relating to the basis of property longer than the period of limitations. For example, basis is needed to determine gain on home sale. Any gain on sale of a home is tax-exempt for amounts up to \$250,000 (\$500,000 for married couples). Basis is also important in figuring casualty loss, on conversion of the home to business use, or when there is a gift of the home (in that case, it is important to the recipient of the gift). You should keep these records for as long as needed because they are important in figuring the basis of the property. Generally, this means for as long as you own the property and, after you dispose of it, for the period of limitations that applies to you.

1. This article was made available by [Adelson & Co.](#)

EXTENSION DEADLINE LOOMING FOR 2021 TAX RETURNS¹

Time is running short for taxpayers who requested an extra six months to file their 2021 tax return. As a reminder, Monday, October 17, 2022, is the extension deadline for most taxpayers. Taxpayers are encouraged to file a complete and accurate return electronically as early as possible once they have gathered all their information. There is no need to wait until the October deadline.

For those still waiting on their 2020 tax return to be processed, here is a tip to help with e-filing a 2021 tax return: To validate and successfully submit an electronically filed tax return to the IRS, taxpayers need their Adjusted Gross Income, or AGI, from their most recent tax return. Those waiting on their 2020 tax return can still file their 2021 return by entering \$0 for their 2020 AGI on their 2021 tax return. For those using the same tax preparation software as last year, this field will auto-populate.

For taxpayers who have not yet filed, here are a few things to keep in mind about the extension deadline and taxes:

1. Taxpayers can still e-file returns. Electronic filing is the easiest, safest, and most accurate way to file taxes. Taxpayers who have not filed a 2021 tax return yet – including extension filers – can file electronically any time before the October deadline and avoid the last-minute rush to file.
2. Choose direct deposit. For taxpayers owed a refund, the fastest way to get it is to combine direct deposit and e-file. The IRS processes most e-filed returns and issues direct deposit refunds in less than three weeks.
3. Taxpayers who owe taxes should consider using IRS Direct Pay, a simple, quick, and free way to pay from a checking or savings account using a computer or mobile device. There are also other online payment options. Please call the office if you need details about other payment options.
4. Members of the military and those serving in a combat zone generally get more time to file. Military members typically have until at least 180 days after leaving a combat zone to file returns and pay any tax due.
5. Taxpayers should always keep a copy of tax returns for their records. Keeping copies of tax returns can help taxpayers prepare future tax returns or assist with amending a prior year's return.

1. This article was made available by [Adelson & Co.](#)

THE HIGH-YIELD DOW INVESTMENT STRATEGY

HYD Model Portfolio

As of September 15, 2022

	Rank	Yield (%)	Price (\$)	Status	Percent of Portfolio	
					Value (%)	No. Shares (%) ¹
Verizon	1	6.36	41.03	Holding**	21.30	32.83
Dow, Inc.	2	5.97	46.91	Holding**	21.22	28.60
Walgreen Boots	3	5.61	34.23	Buying	8.38	15.47
IBM	4	5.26	125.49	Holding**	25.28	12.73
3M Company	5	5.12	116.42	Holding	1.29	0.70
Chevron	7	3.54	160.62	Selling	22.36	8.80
Kyndryl	NA	NA	10.64	Selling	0.14	0.86
Cash (6-mo. T-Bill)	N/A	N/A			0.01	N/A
Totals					100	100

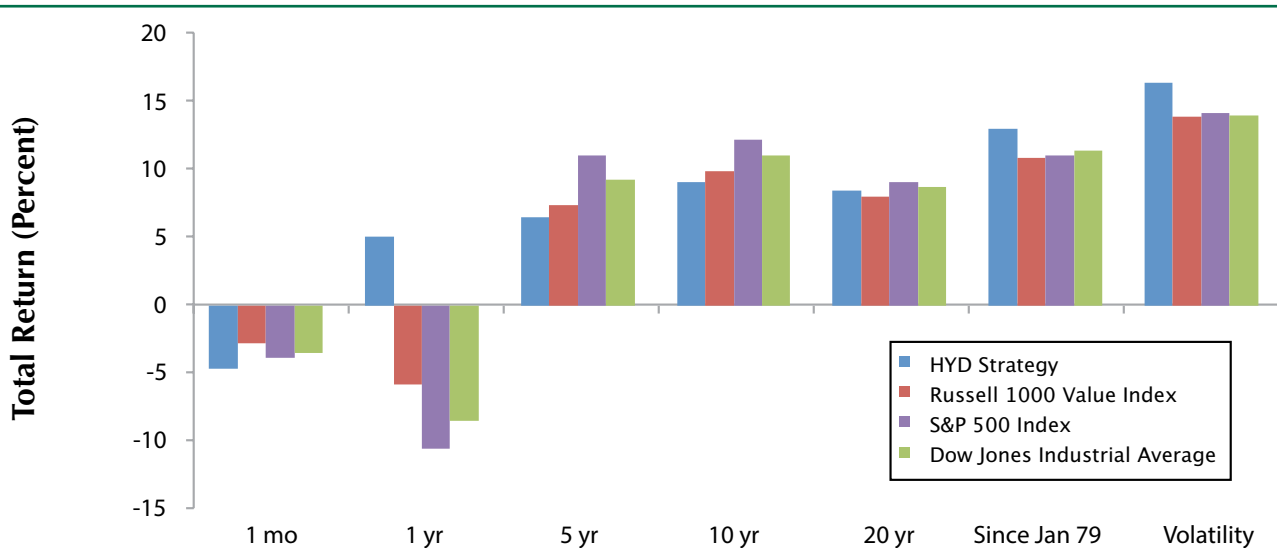
**Currently indicated purchases approximately equal to indicated purchases 18 months ago. ¹Because the percentage of each issue in the portfolio by value reflects the prices shown in the table (closing prices on the date indicated), we are also showing the number of shares of each stock as a percentage of the total number of shares in the entire portfolio.

Subscribers can find a full description of the strategy and methodology in the “Subscribers Only” (Log in required) section of our website: www.americaninvestment.com.

Comparative Hypothetical Total Returns (%) and Volatility

The data presented in the table and chart below represent total returns generated by a hypothetical HYD portfolio and by benchmark indexes for periods ending August 31, 2022*. Returns for the 5-,10- and 20-year periods and since 1979 are annualized, as is the volatility (standard deviation) of returns.

	<u>1 mo.</u>	<u>1 yr.</u>	<u>5 yrs.</u>	<u>10 yrs.</u>	<u>20 yrs.</u>	<u>since Jan 79</u>	<u>Volatility since 1979</u>
HYD Strategy	-5.00	5.46	6.92	9.74	9.09	13.88	17.55
Russell 1000 Value Index	-2.98	-6.23	7.86	10.52	8.53	11.61	14.83
S&P 500 Index	-4.08	-11.23	11.82	13.08	9.74	11.82	15.15
Dow Jones Industrial Average	-3.72	-9.07	9.88	11.77	9.31	12.16	14.93



*Data assume all purchases and sales at mid-month prices (+/- \$0.125 per share commissions), reinvestment of all dividends and interest, and no taxes. Model HYD calculations are based on hypothetical trades following a very exacting stock-selection strategy. They do not reflect returns on actual investments or previous recommendations of AIS. Past performance may differ from future results. Historical performance results for the Russell 1000 Value Index, the Dow Jones Industrial Average and the S&P 500 Index 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. HYD Strategy results reflect the deduction of 1% management fee, the annual rate assessed to a \$500,000 account managed through our Professional Asset Management service.

Unless otherwise specified, returns and data cited within this publication are derived from the following sources: U.S. stock benchmarks: U.S. Marketwide - Russell 3000 Index; U.S. Large Cap Stocks - Russell 1000 Index; U.S. Large Cap Value - Russell 1000 Value Index; U.S. Large Cap Growth - Russell 1000 Growth Index; U.S. Midcap Stocks - Russell Midcap Index; U.S. Small Cap Stocks - Russell 2000 Index; U.S. Small Cap Value - Russell 2000 Value Index; U.S. Small Cap Growth - Russell 2000 Growth Index; U.S. Microcaps - Russell Microcap Index. Fixed income benchmarks: Cash & Equivalents - ICE BofAML US 3-Month Treasury Bill Index; U.S. 1-Year Treasury Notes - ICE BofA 1-Year US Treasury Note Index; U.S. Short-Term Investment Grade - Bloomberg US Government/Credit Bonds Index 1-5 Years; U.S. Bonds - Bloomberg US Aggregate Bond Index; U.S. Government Bonds - Bloomberg US Government Bond Index; TIPS - Bloomberg US TIPS Index; Municipal Bonds - Bloomberg Municipal Bond Index 5 Years; Foreign Bonds (hedged) - FTSE Non-USD World Government Bond Index 1-5 Years (hedged to USD). Foreign stock benchmarks: All returns in U.S. dollars. Developed Markets - MSCI World ex USA Index (net div.); Developed Markets Value - MSCI World ex USA Value Index (net div.); Developed Markets Growth - MSCI World ex USA Growth Index (net div.); Developed Markets Small Cap - MSCI World ex USA Small Cap Index (net div.); Developed Markets Small Cap Value - MSCI World ex USA Small Value Index (net div.); Developed Markets Small Cap Growth - MSCI World ex USA Small Growth Index (net div.); Emerging Markets - MSCI Emerging Markets Index (net div.); Emerging Markets Value - MSCI Emerging Markets Value Index (net div.). Real estate benchmarks: Global REITs - S&P Global REIT Index (net div.); U.S. REITs - S&P United States REIT Index (gross div.); International REITs - S&P Global ex US REIT Index (net div.). Gold benchmark: Gold price: LBMA price. All return data from DFA Returns 2.0 program (gold returns based on spot price) and Currency data from St. Louis Federal Reserve. Country performance provided by Dimensional Fund Advisors, based on respective indexes in the MSCI All Country World ex USA IMI Index (for developed markets) and MSCI Emerging Markets IMI Index. Sector returns represented by S&P 500 sectors.

RECENT MARKET STATISTICS

Precious Metals & Commodity Prices (\$)					Recent Market Returns							
	9/15/22	Mo. Earlier	Yr. Earlier	Prem. (%)	Data through August 31, 2022							
					U.S. Stocks (Mktwd)	Foreign Dev. Stocks	Foreign Emerg. Stocks	Global REITs	U.S. Bonds	Foreign Bonds (hedged)	Gold	
Gold, London p.m. fixing	1,689.10	1,776.60	1,796.95		-3.73%	-4.67%	0.42%	-6.03%	-2.83%	-1.36%	-3.11%	
Silver, London Spot Price	19.37	20.33	23.84		↓	↓	↑	↓	↓	↓	↓	
Crude Oil, W. Texas Int. Spot	85.72	93.52	69.82									
Coin Prices (\$)¹					1-month	3-month	1 year	5 year (annualized)	15 year (annualized)			
American Eagle (1.00)	1,761	1,852	1,873	4.25	-3.51%	-9.35%	-6.49%	-6.78%	-2.01%	-0.55%	-6.87%	
Austrian 100-Corona (0.9802)	1,656	1,741	1,761	0.00	↓	↓	↓	↓	↓	↓	↓	
British Sovereign (0.2354)	398	418	423	0.00								
Canadian Maple Leaf (1.00)	1,734	1,822	1,842	2.66	-13.28%	-18.56%	-21.80%	-14.02%	-11.52%	-3.23%	-5.66%	
Mexican 50-Peso (1.2057)	2,037	2,142	2,167	0.00	↓	↓	↓	↓	↓	↓	↓	
Mexican Ounce (1.00)	1,707	1,795	1,815	1.07								
S. African Krugerrand (1.00)	1,734	1,822	1,842	2.66	11.29%	2.08%	0.59%	2.85%	0.52%	1.02%	5.30%	
U.S. Double Eagle-\$20 (0.9675)					↑	↑	↑	↑	↑	↑	↑	
St. Gaudens (MS-60)	1,835	1,890	1,852	n/a	8.88%	1.75%	1.81%	2.97%	3.09%	1.98%	6.38%	
Liberty (Type II-AU50)	1,806	1,843	1,861	n/a	↑	↑	↑	↑	↑	↑	↑	
Liberty (Type III-AU50)	1,825	1,874	1,836	n/a								
U.S. Silver Coins (\$1,000 face value, circulated)					Best and worst one-year returns, Jan. 2001 - Aug. 2022							
90% Silver Circ. (715 oz.)	17,339	19,306	19,752	n/a	Best	62.5%	57.2%	91.6%	85.7%	13.8%	7.1%	54.6%
40% Silver Circ. (295 oz.)	5,181	6,004	7,426	n/a	During:	04/2020-03/2021	04/2003-03/2004	03/2009-02/2010	04/2009-03/2010	11/2008-10/2009	07/2008-06/2009	06/2005-05/2006
					Worst	-43.5%	-50.3%	-56.6%	-59.5%	-11.5%	-3.2%	-28.0%
					During:	03/2008-02/2009	03/2008-02/2009	12/2007-11/2008	03/2008-02/2009	09/2021-08/2022	09/2021-08/2022	12/2012-11/2013

¹Note: Premium reflects percentage difference between coin price and value of metal in a coin. The weight in troy ounces of the precious metal in coins is indicated in parentheses. Premiums will vary; these indicated premiums are provided in The CDN Monthly Greysheet.

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

Ticker Symbol	Market Prices (\$)			12-Month (\$)		Latest Dividend Amount (\$)	Record Date	Payable Date	Indicated Annual Dividend (\$)	Yield† (%)	
	9/15/22	8/15/22	9/15/21	High	Low						
Verizon	VZ	41.03	45.56	54.57	55.51	40.71	0.653	10/7/22	11/1/22	2.610	6.36
Dow Chemical	DOW	46.91	55.34	60.20	71.86	46.38	0.700	8/31/22	9/9/22	2.800	5.97
Walgreen's	WBA	34.23	41.07	50.12	55.00	33.95	0.480	8/19/22	9/9/22	1.920	5.61
IBM	IBM	125.49	134.93	137.20	144.73	114.56	1.650	8/10/22	9/10/22	6.600	5.26
3M Company	MMM	116.42	151.43	184.19	186.30	115.98	1.490	8/22/22	9/12/22	5.960	5.12
Intel Corp	INTC	28.84	36.34	55.12	56.28	28.72	0.365	11/7/22	12/1/22	1.460	5.06
Chevron	CVX	160.64	156.81	98.24	182.40	93.31	1.420	8/19/22	9/12/22	5.680	3.54
Cisco	CSCO	43.29	46.59	57.56	64.29	40.82	0.380	10/5/22	10/26/22	1.520	3.51
Amgen	AMGN	227.66	251.08	218.13	258.45	198.64	1.940	8/18/22	9/8/22	7.760	3.41
J P Morgan	JPM	117.87	122.46	158.16	172.96	106.06	1.000	7/6/22	7/31/22	4.000	3.39
Merck	MRK	86.76	90.60	72.81	95.72	70.89	0.690	9/15/22	10/7/22	2.760	3.18
Goldman Sachs	GS	331.62	355.85	401.95	426.16	277.84	2.500	9/1/22	9/29/22	10.000	3.02
Coca-Cola	KO	59.53	64.50	55.88	67.20	52.28	0.440	9/16/22	10/3/22	1.760	2.96
Home Depot, Inc.	HD	271.54	314.61	333.37	420.61	264.51	1.900	9/1/22	9/15/22	7.600	2.80
Johnson & Johnson	JNJ	165.08	166.09	165.42	186.69	155.72	1.130	8/23/22	9/6/22	4.520	2.74
Proctor and Gamble	PG	137.45	148.56	145.12	165.35	129.50	0.913	7/22/22	8/15/22	3.652	2.66
Caterpillar	CAT	182.49	195.95	205.73	237.90	167.08	1.200	7/20/22	8/19/22	4.800	2.63
Travelers	TRV	164.16	172.16	157.58	187.98	145.40	0.930	9/9/22	9/30/22	3.720	2.27
Honeywell	HON	176.86	202.25	221.69	228.26	167.35	0.980	8/12/22	9/2/22	3.920	2.22
McDonald's	MCD	253.47	265.44	240.98	271.15	217.68	1.380	9/1/22	9/16/22	5.520	2.18
Wal-Mart Stores	WMT	133.47	132.60	144.55	160.77	117.27	0.560	12/9/22	1/3/23	2.240	1.68
American Express	AXP	156.15	165.40	161.34	199.55	134.12	0.520	7/1/22	8/10/22	2.080	1.33
Unitedhealth Group	UNH	522.91	544.64	417.52	553.29	383.12	1.650	9/12/22	9/20/22	6.600	1.26
Nike	NKE	105.50	116.32	157.91	179.10	99.53	0.305	9/6/22	10/3/22	1.220	1.16
Microsoft Corp.	MSFT	245.38	293.47	304.82	349.67	241.51	0.620	11/17/22	12/8/22	2.480	1.01
Visa Inc.	V	195.37	216.42	223.81	236.96	185.91	0.375	8/12/22	9/1/22	1.500	0.77
Apple	AAPL	152.37	173.19	149.03	182.94	129.04	0.230	8/8/22	8/11/22	0.920	0.60
Walt Disney	DIS	110.77	124.26	184.41	185.90	90.23	0.000	No dividend		0.000	0.00
Salesforce	CRM	154.78	191.06	256.16	311.75	150.48	0.000	No dividend		0.000	0.00
Boeing	BA	149.78	170.47	214.22	233.94	113.02	0.000	No dividend		0.000	0.00

† Based on indicated dividends and market price as of 9/15/22. Extra dividends are not included in annual yields.

All data adjusted for splits and spin-offs. 12-month data begins 9/15/21.

ASSET CLASS INVESTMENT VEHICLES

Data as of September 23, 2022

Fixed Income

	Security Symbol(s) (1)	Avg. Market Cap / Duration	Number of Holdings	Expense Ratio (%)	Turnover (%)	Price-to-Book Ratio	Trailing 12-Mo. Yield (%)	Annualized Returns (%)			Tax Cost Ratio - 3 Years (%) (3)
								3-Year	5-Year	10-Year	
Short-Term Bonds	Vanguard Short-Term Bond Adm	2.67 yrs	2642	0.07	37		1.21	-0.88	0.52	0.82	0.64
Short-Term Bonds	SPDR Portfolio Short Term Corp Bd ETF	1.92 yrs	1203	0.04	56		1.20	-0.02	1.11	1.26	0.69
Short-Term Bonds	iShares 1-3 Year Treasury Bond ETF	1.86 yrs	87	0.15	148		0.52	-0.60	0.42	0.47	0.33
Core Bonds	Vanguard Total Bond Market Adm	6.67 yrs	17261	0.05	69		2.25	-2.86	-0.10	1.00	0.91
Core Bonds	iShares Core US Aggregate Bond ETF	6.54 yrs	9059	0.03	163		2.02	-2.93	-0.15	0.97	0.83
Core Bonds	DFA Core Fixed Income	6.40 yrs	823	0.20	17		2.33	-2.66	0.14	1.25	0.96
Tax-Exempt	Vanguard Ltd-Term Tax-Exempt Inv	2.27 yrs	9899	0.17	37		1.29	-0.06	0.76	1.02	0.00
Tax-Exempt	Vanguard Interm-Term Tx-Ex Inv	4.35 yrs	13999	0.17	18		2.30	-1.06	0.78	1.79	0.01
Inflation-Protected	iShares TIPS Bond ETF	6.84 yrs	51	0.19	34		6.95	1.22	2.18	1.09	1.42
Inflation-Protected	Vanguard Inflation-Protected Securities Inv	7.37 yrs	48	0.20	24		7.91	1.30	2.12	1.04	1.56
International	Vanguard Total International Bond Adm	7.70 yrs	6819	0.11	25		3.40	-3.93	0.14	n/a	1.03

Real Estate (REITs)

U.S. REITs	Vanguard REIT Adm	21.52 B	171	0.12	7	2.29	3.07	-0.10	4.06	6.51	1.35
U.S. REITs	SPDR Dow Jones REIT	17.60 B	116	0.25	10	1.99	3.30	-1.98	2.63	5.46	1.44
Int'l REITs	Vanguard Global ex-US Real Estate Adm (2)	4.78 B	738	0.12	7	0.75	8.06	-8.18	-3.78	1.70	1.73
Int'l REITs	iShares International Developed Property	4.98 B	437	0.48	12	0.76	5.05	-8.35	-3.40	1.71	1.61
Global (incl. U.S.)	SPDR Dow Jones Global Real Estate ETF	12.05 B	278	0.50	6	1.42	3.69	-4.60	0.14	3.33	1.44

U.S. Stocks

Large Cap (blend)	Vanguard S&P 500 Adm	179.02 B	508	0.04	2	3.22	1.54	9.01	10.00	11.85	0.39
Large Cap (blend)	DFA US Equity ETF	124.41 B	665	0.13	7	3.03	1.38	8.64	9.50	n/a	0.71
Large Cap Value	Vanguard Value Adm	95.28 B	352	0.05	9	2.31	2.46	7.01	7.79	10.67	0.62
Large Cap Value	DFA US Marketwide Value	64.57 B	363	0.22	0	1.71	1.85	4.93	5.22	9.80	0.99
Small Cap (blend)	iShares Core S&P Small-Cap ETF	1.95 B	609	0.06	16	1.54	1.76	5.40	5.81	9.98	0.50
Small Cap (blend)	DFA US Small Cap	2.64 B	2003	0.27	12	1.71	1.06	7.24	5.44	9.34	0.94
Small Cap Value	Vanguard Small Cap Value Adm	5.00 B	891	0.07	16	1.58	1.99	6.23	5.31	9.49	0.51
Small Cap Value	iShares Micro-Cap	0.51 B	1790	0.60	44	1.36	1.06	5.35	3.67	8.06	0.37
Small Cap Value	DFA U.S. Small Cap Value	2.36 B	1010	0.30	22	1.04	1.44	10.05	5.61	8.97	1.32
Marketwide	Vanguard Total Stock Market Adm	104.82 B	4059	0.04	4	2.97	1.52	8.29	9.31	11.47	0.39
Marketwide	DFA US Core Equity Market ETF	65.14 B	2598	0.14	4	2.63	1.39	8.64	8.96	11.34	0.78

Foreign Stocks

Developed Markets	Vanguard FTSE Developed Markets Adm	24.55 B	4129	0.07	3	1.31	3.88	-0.85	-0.25	3.95	0.76
Developed Markets	DFA International Core Equity	10.45 B	5307	0.24	8	1.17	3.78	-0.12	-0.64	4.21	0.90
Emerging Markets	Vanguard Emerging Markets Stock Adm	21.49 B	4525	0.14	9	1.50	3.28	-0.15	-0.52	1.65	0.89
Emerging Markets	DFA Emerging Markets Core Equity	9.59 B	6919	0.39	10	1.12	3.19	1.04	-0.34	2.24	0.87

Gold-Related Funds

Gold ETFs	SPDR Gold Minishares			0.10			0.00	2.35	n/a	n/a	0.00
Gold ETFs	GraniteShares Gold Trust			0.17			0.00	2.40	n/a	n/a	0.00

Data provided by the funds and Morningstar. (1) Some funds are available as mutual funds and ETFs, in which case both symbols are shown. In these cases, data represent the mutual fund. The ETF may offer a lower expense ratio and returns may deviate. For Vanguard funds, Adm indicates the Admiral share class is shown; Inv indicates the Investor share class is shown. (2) VGRXL includes a 0.25% fee on purchases and redemptions, which are paid directly to the fund. (3) This represents the percentage-point reduction in an annualized return that results from income taxes. The calculation assumes investors pay the maximum federal rate on capital gains and ordinary income. The calculation comes directly from Morningstar.

The information herein is derived from generally reliable sources, but cannot be guaranteed. American Investment Services, the American Institute for Economic Research, and the officers, employees, or other persons affiliated with either organization may have positions in the investments referred to herein. This communication is for informational purposes only. It is not intended to provide, and should not be interpreted as individualized investment, legal or tax advice. To obtain such advice, please consult with an appropriate professional.