AIS INVESTMENT GUIDE

Published Monthly by
American Investment Services, Inc

Vol. XLVI, No. 5 Great Barrington, Massachusetts 01230 May 31, 2023

Rates of Interest

As of May 22, 2023

Government Obligations[1]	
Fed Funds Rate	5.08%
3-Month Treas. Bill	5.12%
10-Yr. Treas. Note	3.70%
30-Yr. Treas. Bond	3.95%
10-Yr. TIPS	1.46%
Muni Bonds - Nat'l 10-Yr.	2.55%
Mortgage Rates[2]	
15-Yr Fixed	5.75%
30-Yr Fixed	6.39%
Banking[3]	
Savings	0.40%
Money Market	0.59%
12-month CD	1.59%

[1] Federal Reserve, fmsbonds.com. Annualized Rates. Notes, bonds, TIPS reflect yield to maturity.

[2] Freddie Mac. U.S. Weekly Averages.

[3] FDIC. Average national rates, non-jumbo deposits (<$100k).

OPTIMISM FOR THE LONG RUN

U.S. consumer confidence declined in April, dropping to its lowest level since last summer. According to a senior economist at The Conference Board, "Consumers became more pessimistic about the outlook for both business conditions and labor markets." Banking failures, higher borrowing costs, a government impasse over the debt ceiling, and a softening labor market have everyone worried about recession.

Investors are worried. According to the AAII Investor Sentiment Survey, 39 percent of respondents are bearish (thinking the stock market is headed down) while only 24 percent are bullish (thinking the stock market is headed up). The remaining 37 percent are neutral. Bears have outnumbered bulls most of this year and last.

Pessimists are everywhere. The reality, however, is that it is impossible to predict the direction of the stock market, especially in the near term. Instead of fretting over everything that might go wrong, why not take a step back and look at long-term societal progress? Let's approach the world while setting our emotions aside.

Bad things happen all the time throughout history, but economic progress prevails over the long run. Economist Deirdre McCloskey estimates that over the last 250 years, the "well-being" of humankind has increased by 100 times. Adjusting for inflation, income is about 30 times higher than it was two centuries ago. That represents exponential growth as compared with the previous 40,000 years of modern human existence. Health, wealth, education, and well-being have all experienced extraordinary long-term improvement.

In 1930, U.S. life expectancy at birth was 58 for men and 62 for women. Influenza, pneumonia, tuberculosis, and infant death were among the top 10 leading causes of death in the United States 100 years ago. Penicillin did not exist until 1929. In the 1940's and 1950's, polio paralyzed or killed over a half million people per year. The life expectancy in the U.S. is nearing 80 today. Reaching age 100 will be common by the year 2050, according to demographers at the Stanford Center on Longevity.

In addition to better health and longevity, extreme poverty has declined. In the year 1800, an estimated 81 percent of people worldwide lived below today's equivalent of $1.90 per day. By 1990, that rate had fallen to 44 percent of people. The trend accelerated after 1990, and it is now estimated that less than 10 percent of people worldwide live below that threshold. In the U.S., official poverty

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rates have steadily declined from about 22 percent of the U.S. population in the late 1950s to just 11 percent in recent years.

People are more educated too. In 1940, only about 25 percent of American adults had completed high school; today that number is approaching 90 percent. In 1800, 88 percent of people could not read according to the OECD. Illiteracy has decreased to less than 14 percent worldwide.

Even persistent problems such as worldwide access to clean water have shown signs of improvement in recent history. Access to clean water is estimated to have risen from 62 percent to 74 percent in just the last 20 years (longer term historical data are hard to find).

Perhaps the most astounding advances mankind has seen is the technological progress of the last 50 years. The computing power of a handheld smartphone would have cost an estimated $1 billion in 1970. The computing power of the iPhone 5 – which most people would probably throw away as worthless today – was roughly equivalent to the most advanced supercomputer of 1985 (Cray-2).

Prosperity and Investing

The largest U.S. companies today include Apple, Microsoft, Google, Amazon, Nvidia, Meta (FaceBook), and Tesla. Most were either non-existent or in their infancy just 20 years ago. Imagine what artificial intelligence or biotech companies are just starting out today, positioning to become the market leaders of tomorrow. Progress is self-evident in the growth of earnings of U.S. companies over time. Inflation-adjusted earnings per share of S&P 500 companies have increased about 20 times in the last 100 years.

There are always reasons investors should be fearful, but if the future is anything like the past, we can expect progress to continue. If you step away from the headlines and focus on long-term progress, you will be a better investor. Bears might sound smart and get the headlines, but bulls make money in the long run.

SOCIAL SCIENCE: DOING IT RIGHT

The following is an excerpt from *The Armchair Economist*, by Steven E. Landsburg. It discusses how scientists should respond to phenomena that appear to be inconsistent with their understanding of the way things work.

"Imagine a physicist, well versed in the laws of gravity, which he believes to be excellent approximations to the ultimate truth. One day he encounters his first helium-filled balloon, a blatant challenge to the laws he knows so well. Two courses are open to him: He can say, 'Well, the laws of gravity are usually true, but not always; here is one of the exception'. Or he can say, 'Let me see if there is any way to explain this strange phenomenon without abandoning the most basic principles of my science'. If he takes the latter course, and if he is sufficiently clever, he will eventually discover the properties of objects that are lighter than the air and recognize that their behavior is in perfect harmony with existing theories of gravity. In the process, he will not only learn about helium-filled balloons; he will also come to a deeper understanding of how gravity works.

"Now it might very well be that there are real exceptions to the laws of gravity, and that our physicist will one day encounter one. If he insists on looking for a good explanation without abandoning his theories, he will fail. If there are enough such failures, new theories will eventually arise to supplant the existing ones. Nevertheless, the wise course of action, at least initially, is to see whether surprising facts can be reconciled with existing theories. The attempt itself is good mental exercise for the scientist, and there are sometimes surprising successes. Moreover, if we are too quick to abandon our most successful theories, we will soon be left with nothing at all."[1]

Economists, unlike physicists, are social scientists, but their challenge is similar. When confronted with an apparent anomaly, an economist should seek to explain the phenomenon in the context of what he thinks he knows, rather than dismiss prevailing theory.

Economic models are not reality; they are simply tools to help us explain human behavior. But some can nevertheless be applied usefully in the real world. In the face of exhaustive testing over the years "Modern Portfolio Theory" (MPT) remains robust and as it has been refined it has proven ever more useful in portfolio construction.

Wise investors will construct portfolios under the assumption that capital markets are efficient. There is an inevitable trade-off between risk and return. Investors who think otherwise, and who seek a strategy that will consistently outperform the market based on publicly available information, will search in vain.

1. *The Armchair Economist*, Steven Landsburg, p.12; 1993, The Free Press, NY NY.

Errata

In last month's article Recency Bias, Pattern Seeking, and the Value Premium, we misrepresented the annualized returns for US growth and value stocks that appear in the table. The growth and value labels were reversed. The corrected table is presented below. We regret the error.

Growth vs Value, Annualized Returns, July 1926 - December 2022

	96+ years July 1926-December 2022	3 Years July2017-June 2020	2+ Years July 2020-December 2022
US Value Stocks	12.70%	-3.10%	28.70%
US Growth Stocks	9.70%	17.60%	6.60%

FROM SKYNET TO CHATGPT: AI AND ITS INVESTMENT IMPLICATIONS

*I*f you were to poll strangers on what comes to mind when they hear the term AI (artificial intelligence), I suspect the two most likely answers would be Skynet or ChatGPT. The generative chat program launched in 2022 seems to have drawn the most mainstream attention to AI applications since Arnold Schwarzenegger promised he'd be back. But the history of AI tools is far older than ChatGPT, although less dramatic than its depiction in 1990s science fiction films. And from an investment standpoint, artificial intelligence pales in comparison to the informational content of the market's AI—aggregate intelligence.[1]

AI Isn't New

ChatGPT is but a recent example of AI. One watershed moment came in 1997 when the machine named Deep Blue became the first computer to secure victory in a match against a chess grandmaster. In the mid-2000s, IBM researchers created the Watson computer to compete with star *Jeopardy!* contestants, ultimately defeating two of the show's most decorated past champions. And how many of us routinely dispense orders to, and receive suggestions from, Siri or Alexa?

The common thread among these examples is that each represents a tool that processes and organizes data to identify patterns and summarize information or make suggestions. This type of interaction with AI has grown to permeate our everyday lives. Have you noticed your phone offer an unsolicited ETA for your commute when you get in your car? Does your text app suggest grammar revisions based on the context of your overall message? Congrats—you're an AI user, even if you've never opened a ChatGPT session.

Disappointment for Stock Pickers…

AI has a similarly long history with investing. Active investors have attempted to get an informational edge on markets by using AI processes to retrieve and process data. For example, tools that gauge sentiment from social media or scrape text from company financial reports predate ChatGPT by many years.

While these efforts may have been aimed at selecting stocks that would outperform markets, it's not clear AI tools are a recipe for consistently generating abnormal returns. Material information gleaned from running AI processes is very likely a subset of the vast information set known by the market in aggregate and reflected in market prices. If new information is obtained, the process of acting on that information (buying or selling stocks/bonds) incorporates it into market prices. As more investors employ these tools, any edge from doing so should wane.

Another reason to question AI's role in helping market timing is limitations with its predictions. AI's forecasting ability fares well when assessing patterns that are relatively stable. For example, my phone's navigation app is often successful at "guessing" when I'm commuting to work because I come to the office on the same days each week.

Autonomous car navigation programs know to slow down at the sight of a stop sign because these visual cues are universal and evergreen.

AI is far less likely to successfully predict changes within complex systems that are as dynamic as stock and bond markets. AI trying to predict market prices is like self-piloting cars trying to read stop signs with words, shapes, and colors that differ from one day to the next. The continuous emergence of new information material to market prices is antithetical to static patterns fostering predictability.

AI Can Enhance the Investing Process

AI can make businesses more efficient if used as a tool for what Professor Robert C. Merton describes as "assisted implementation"—interrogating data, servicing clients, or making processes more efficient. But like any tool, you have to know how to use it. For example, if it makes interrogating data much easier, then the chances of finding results from data dredging increase. Where using AI can be very helpful is for firms with massive data sets on their customers' activities. It can help those firms identify what their customers are more likely to buy next and advertise in a smart way.

Over time, the best chess players realized chess computers were a powerful supplement to strategy and pattern recognition. Similarly, the best path forward for investment management is likely an amalgam of humans and technology such as AI.

CHANGING JOBS? DON'T FORGET ABOUT YOUR 401(K)

*O*ne of the most important questions you face when changing jobs is what to do with the money in your 401(k) plan. Making the wrong move could cost you thousands of dollars or more in taxes, penalties, and lower returns.[1]

Cash Out? Think Twice

Let's say you work five years at your current job. For most of those years, you've had the company take a set percentage of your pretax salary and put it into your employer's plan. Now that you're leaving, what should you do?

The first rule of thumb is to leave it alone. Resist the temptation to cash out. The worst thing you can do when leaving a job is to withdraw the money and put it in your bank account. Here's why:

If you decide to have your distribution paid to you, the plan administrator will withhold 20 percent of your total for federal income taxes. So, if you had $100,000 in your account, you're already down to $80,000.

Furthermore, if you're younger than 59 1/2, you'll generally face a 10 percent penalty for early withdrawal come tax time. Now you're down another 10 percent from the top line to $70,000.

There is an exception to the 10 percent early withdrawal tax penalty for 401(k) plans if you separate from service during or after the year you reach age 55 (age 50 for public safety employees of a state, or political subdivision of a state, in a governmental defined benefit plan).

1. This article is reprinted with permission from Dimensional Fund Advisors.

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IRAs, SEPs, SIMPLE IRAs, and SARSEPs do not qualify for the exception.

In addition, because distributions are taxed as ordinary income, at the end of the year you'll have to pay the difference between your tax bracket and the 20 percent already taken out. For example, if you're in the 32 percent tax bracket, you'll still owe 12 percent, or $12,000, which lowers the amount of your cash distribution to $58,000. (If your tax bracket is less than 20 percent, you may qualify for a refund, depending on your overall tax liability for the year compared to what was withheld or paid in estimated taxes for the year.)

But that's not all. You also must pay any applicable state and local taxes. Between taxes and penalties, you could end up with little over half of what you saved, short-changing your retirement savings significantly. Finally, you will miss out on any future tax-deferred growth those assets would have produced had they remained in the retirement plan.

Alternatives

If your new job offers a retirement plan, the easiest course of action is to roll your account into the new plan. A "rollover" is relatively painless to do. Contact the 401(k) plan administrator at your previous job, who should have all the necessary forms.

The best way to roll funds over from an old 401(k) plan to a new one is to use a direct transfer. With the direct transfer, you never receive a check, you avoid all the taxes and penalties mentioned above, and your savings will continue to grow tax deferred.

Many employers require that you work a minimum length of time before you can participate in their 401(k) plan. If that is the case with your new employer, one solution is to keep your money in your former employer's 401(k) plan until you are eligible for the new one. Then you can roll it over into the new plan. Most plans let former employees leave assets in their old plan for several months or longer.

If you're not happy with the fund choices your new employer offers, you might opt for a rollover IRA instead of your company's plan. You can then choose from hundreds of funds and have more control over your money. But again, to avoid the withholding hassle, use direct rollovers.

60-Day Rollover Period

If you have your former employer make the distribution check out to you, the Internal Revenue Service considers this a cash distribution. The check you get will have 20 percent taken out automatically from your vested amount for federal income tax.

But don't panic. You have 60 days to roll over the lump sum (including the 20 percent) to your new employer's plan or into a rollover IRA. Then you won't owe the additional taxes or the 10 percent early withdrawal penalty and, depending on your overall tax liability for the year, you might receive a refund of some or all of the 20 percent withheld. But keep in mind that in your rollover you will have to make up for the withheld 20 percent with funds from another source. Otherwise, the withheld amount will be treated as a distribution and subject to any applicable taxes and penalties.

Leave it Alone

If your vested account balance in your 401(k) is more than $5,000, you can usually leave it with your former employer's retirement plan. Your balance will keep growing tax deferred.

However, if you can't leave the money in your former employer's 401(k) and your new job doesn't have a 401(k), your best bet is a direct rollover into an IRA. The same applies if you've decided to go into business for yourself. You can continue to enjoy tax-deferred growth.

1. This article is provided courtesy of Adelson & Co. PC AdelsonCPA.com.

WHAT TO DO IF YOU MISSED THE TAX FILING DEADLINE

Tuesday, April 18, 2023, was the deadline for most taxpayers to file their income tax returns. If you have not filed a 2022 return yet, it isn't too late.[1]

If you are owed a refund, the sooner you file, the sooner you will get it. If you owe taxes, you should still file and pay as soon as you can, because it will stop the accrual of interest and penalties.

Penalty Relief Eligibility

Some taxpayers filing after the deadline may qualify for penalty relief. Those charged a penalty may contact the IRS by calling the number on their penalty notice and explaining why they couldn't file and pay on time.

For 2022 tax returns due April 18, 2023, some taxpayers automatically qualify for extra time to file and pay taxes due without penalties and interest, including:

- Some disaster victims. Individuals living or working in a federally declared disaster area have more time to file and pay what they owe.

- Taxpayers outside the United States. U.S. citizens and resident aliens who live and work outside the U.S. and Puerto Rico, including military members on duty who do not qualify for the combat zone extension, may qualify for a two-month filing and payment extension.

- Members of the military who served or are currently serving in a combat zone may qualify for an additional extension of at least 180 days to file and pay taxes.

- Support personnel in combat zones or a contingency operation in support of the Armed Forces may also qualify for a filing and payment extension of at least 180 days.

- The military community can also file their taxes using MilTax, a free tax resource offered through the Department of Defense. Eligible taxpayers can use MilTax to file a federal tax return electronically and up to three state returns for free.

Don't Miss a Refund

Every year, more than 1 million taxpayers choose not to file a return and miss out on receiving a refund due to potential refundable tax credits, according to the IRS. The most common examples of these refundable credits are the Earned Income Tax Credit and the Child Tax Credit. For example, the IRS estimates nearly 1.5 million people did not file a tax return for 2019 and missed out on an estimated median refund of $893 (i.e., half of the refunds would have been more than $893, and half would have been less).

Taxpayers usually have three years to file and claim their tax refunds. If they do not file within three years, the money becomes the property of the U.S. Treasury. However, the three-year window for 2019 unfiled returns was postponed to July 17, 2023, due to the COVID-19 pandemic emergency.

How to Make a Payment

If you owe tax, there are several ways to make a payment:

- **Check, money order or cashier's check.** If you are paying along with filing your 2022 income tax return, you should not staple or paperclip the payment to the return. If you are paying an income tax liability without an accompanying income tax return, include Form 1040-V, Payment Voucher, with the payment. Mail the payment to the correct address by state or form. Indicate on the check memo line the specific tax year to which the IRS should apply the payment.

- **Direct Pay.** For individuals, IRS Direct Pay is a fast and free way to pay directly from your checking or savings account.

- **Major credit card or debit card.** There is no IRS fee for credit or debit card payments, but processing companies may charge a convenience or flat fee.

- **Cash Payments.** Individual taxpayers who do not have a bank account or credit card and need to pay their tax bill using cash can make a cash payment at participating PayNearMe Company payment locations (places like 7-Eleven). Individuals wishing to take advantage of this payment option should visit the IRS.gov payments page, select the cash option in the «Other Ways You Can Pay» section, and follow the instructions.

If You Can't Pay in Full

Taxpayers who cannot pay the full amount owed on a tax bill are encouraged to pay as much as possible. By paying as much as possible now, the interest and penalties owed will be less than if you pay nothing. However, if you continue to ignore your tax bill, the IRS may take collection action.

The IRS will work with taxpayers suffering financial hardship. Taxpayers with a history of filing and paying on time often qualify for administrative penalty relief. A taxpayer usually qualifies if they have filed and paid promptly for the past three years and meet other requirements.

Based on individual circumstances, a taxpayer could qualify for an extension of time to pay, an installment agreement, a temporary delay, or an offer in compromise.

Most taxpayers can set up a monthly payment plan or installment agreement that gives them more time to pay. However, penalties and interest will continue to be charged on the unpaid portion of the debt throughout the duration of the installment agreement/payment plan. You should pay as much as possible before entering into an installment agreement.

It is important to review all your options. For example, a credit card payment might make sense if the interest charged were lower than the combination of penalties and interest imposed by the Internal Revenue Code.

Failure to File when Taxes are Due

It is important to understand the ramifications of not filing a past-due return if taxes are due and the steps that the IRS will take. Taxpayers who continue not to file a required return and fail to respond to IRS requests for a return may be considered for various enforcement actions, including substantial penalties and fees.

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1. This article is provided courtesy of Adelson & Co. PC AdelsonCPA.com.

A READER INQUIRES

Q -- In the Precious Metals and Commodity Prices table, why don't you publish the premiums for US Double Eagle and US Silver coins? You have the gold price and the coin prices. It seems this calculation would be simple.

AIS -- Premiums reflect the percentage difference between coin prices and the value of the metal (gold or silver), in a coin. As you suggest, calculating the premium on any given day would be a simple matter if coin prices and metal prices were both available on a daily basis.

Since the *Investment Guide* is a monthly publication, we have chosen to publish prices for gold and silver as of the 15th of every month.

For the first seven coins listed in the table, we obtain estimated premiums directly from the CDN Monthly Greysheet. These premium estimates are generally stable from month-to-month. For each coin type, we calculate an estimated price based on the coin's premium, the spot price of gold on the 15th of each month, and the coin's gold content.

For example, the Canadian Maple Leaf premium is listed at $45. This coin contains 1.00 ounces of gold. The calculated price this month is therefore ($2,015 x 1.00) + $45 = $2,060.

Premiums for Double Eagles and Silver coins, however, are not explicitly listed in the monthly Greysheet. Prices are published monthly but are volatile (as is the underlying price of the metals). We believe premiums calculated based on the data available could be misleading and would not be useful.

THE HIGH-YIELD DOW INVESTMENT STRATEGY

HYD Model Portfolio

As of May 15, 2023

	Rank	Yield (%)	Price ($)	Status	Percent of Portfolio Value (%)	Percent of Portfolio No. Shares (%)[1]
Verizon	1	7.10	36.77	Holding**	22.94	29.72
Walgreen Boots	2	6.10	31.50	Buying	16.94	25.63
3M Company	3	5.97	100.49	Buying	8.29	3.93
IBM	4	5.38	123.36	Holding**	17.09	6.60
Dow, Inc.	5	5.36	52.26	Selling	21.41	19.52
Chevron	6	3.84	157.20	Selling	5.17	1.57
Intel	20	1.68	29.80	Holding	8.15	13.03
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. [1]Because 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.

Over the long-term large cap value stocks have generated annualized returns above those of the overall stock market. This is explained by the inherent trade-off between risk and return. Value companies are in a distressed state and have a higher cost of capital relative to financially sound growth companies. A firm's cost of capital is also the investor's expected return; in order to invest in these shares, potential investors insist upon a lower stock price.

One way to identify lower priced shares is by ranking stocks based on their dividend yield. High-yielding stocks have higher expected returns versus lower yielding stocks because they bear greater risk. For larger accounts, especially those with an explicit need for investment income (such as certain trust accounts), we can incorporate our High Yield Dow (HYD) "4-for-18" strategy as part of a broader overall allocation strategy.

The HYD model is similar to an index approach because it relies on a "rules-based" selection strategy rather than subjective analysis. We began the strategy 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 "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.

This approach provides highly volatile returns that warrant only a limited allocation for most investors. In many situations it is prudent to further diversify this large cap value allocation by also investing in a large cap value index fund.

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. Micro-caps - 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 ($)

	5/15/23	*Mo. Earlier*	*Yr. Earlier*	*Prem. (%)*
Gold, London p.m. fixing	**2,015.30**	2,019.40	1,811.55	
Silver, London Spot Price	**23.89**	26.03	20.84	
Crude Oil, W. Texas Int. Spot	**71.07**	82.58	105.00	
Coin Prices ($)[1]				
American Eagle (1.00)	**2,101**	2,105	1,889	4.25
Austrian 100-Corona (0.9802)	**1,975**	1,979	1,776	0.00
British Sovereign (0.2354)	**474**	475	426	0.00
Canadian Maple Leaf (1.00)	**2,060**	2,064	1,857	2.23
Mexican 50-Peso (1.2057)	**2,430**	2,435	2,184	0.00
Mexican Ounce (1.00)	**2,033**	2,037	1,830	0.89
S. African Krugerrand (1.00)	**2,060**	2,064	1,857	2.23
U.S. Double Eagle-$20 (0.9675)				
St. Gaudens (MS-60)	**2,080**	1,900	2,030	n/a
Liberty (Type II-AU50)	**2,028**	1,748	1,927	n/a
Liberty (Type III-AU50)	**2,007**	1,890	1,907	n/a
U.S. Silver Coins ($1,000 face value, circulated)				
90% Silver Circ. (715 oz.)	**20,914**	19,198	21,861	n/a
40% Silver Circ. (295 oz.)	**6,692**	5,974	7,217	n/a

[1]Note: 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.

Recent Benchmark Returns
Data through April 30, 2023

	U.S. Stocks (Russell 3000 Index)	Developed Markets ex-US (MSCI World ex USA Index, net div.)	Emerging Markets (MSCI EM Index, net div.)	Global REITs (S&P Global REIT Index, net div.)	U.S. Bonds (Bloomberg U.S. Aggregate Bond Index)	Global Bonds ex-US (FTSE Non-USD World Government Bond Index 1-5 Years (hedged to USD))	Gold (Gold Spot Price)
1-month	1.07% ↑	2.84% ↑	-1.13% ↓	1.43% ↑	0.61% ↑	0.33% ↑	1.05% ↑
3-month	1.34% ↑	2.67% ↑	-4.74% ↓	-5.97% ↓	0.49% ↑	1.08% ↑	3.20% ↑
1 year	1.50% ↑	7.05% ↑	-6.51% ↓	-15.03% ↓	-0.43% ↓	0.58% ↑	4.91% ↑
5 year (annualized)	10.60% ↑	3.91% ↑	-1.05% ↓	2.39% ↑	1.18% ↑	1.04% ↑	8.63% ↑
15 year (annualized)	9.62% ↑	2.81% ↑	1.09% ↑	3.14% ↑	2.77% ↑	1.84% ↑	5.58% ↑
Best and worst one-year returns, Jan. 2001 - Apr. 2023							
Best	**62.5%**	**57.2%**	**91.6%**	**85.7%**	**13.8%**	**7.1%**	**54.6%**
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%**	**-15.7%**	**-4.0%**	**-28.0%**
During:	03/2008-02/2009	03/2008-02/2009	12/2007-11/2008	03/2008-02/2009	11/2021-10/2022	10/2021-09/2022	12/2012-11/2013

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

	Ticker Symbol	*Market Prices ($) 5/15/23*	*4/15/23*	*5/15/22*	*12-Month ($) High*	*Low*	*Latest Dividend Amount ($)*	*Record Date*	*Payable Date*	*Indicated Annual Dividend ($)*	*Yield† (%)*
Verizon	VZ	36.77	39.22	48.18	52.18	34.55	0.653	4/10/23	5/1/23	2.610	7.10
Walgreen's	WBA	31.50	35.32	43.55	44.96	30.39	0.480	5/19/23	6/12/23	1.920	6.10
3M Company	MMM	100.49	105.77	149.30	152.50	99.27	1.500	5/19/23	6/12/23	6.000	5.97
IBM	IBM	123.36	128.14	133.60	153.21	115.55	1.660	5/10/23	6/10/23	6.640	5.38
Dow Chemical	DOW	52.26	56.50	67.56	70.38	42.91	0.700	5/31/23	6/9/23	2.800	5.36
Chevron	CVX	157.20	172.44	167.87	189.68	132.54	1.510	5/19/23	6/12/23	6.040	3.84
Amgen	AMGN	233.53	250.00	243.40	296.67	223.30	2.130	5/18/23	6/8/23	8.520	3.65
Cisco	CSCO	47.10	50.54	49.56	52.56	38.60	0.390	7/6/23	7/26/23	1.560	3.31
Goldman Sachs	GS	322.07	336.92	306.99	389.58	277.84	2.500	6/1/23	6/29/23	10.000	3.10
Johnson & Johnson	JNJ	159.55	165.84	176.85	183.35	150.11	1.190	5/23/23	6/6/23	4.760	2.98
J P Morgan	JPM	135.23	138.73	119.09	144.34	101.28	1.000	7/6/23	7/31/23	4.000	2.96
Home Depot, Inc.	HD	288.54	292.19	296.03	347.25	264.51	2.090	6/1/23	6/15/23	8.360	2.90
Coca-Cola	KO	63.94	63.05	65.72	66.38	54.02	0.460	6/16/23	7/3/23	1.840	2.88
Merck	MRK	116.37	115.31	90.41	119.65	83.05	0.730	3/15/23	4/10/23	2.920	2.51
Proctor and Gamble	PG	156.01	151.00	153.62	158.11	122.18	0.941	4/21/23	5/15/23	3.763	2.41
Caterpillar	CAT	211.29	223.68	204.33	266.04	160.60	1.200	4/24/23	5/19/23	4.800	2.27
Travelers	TRV	182.81	168.37	172.78	194.51	149.65	1.000	6/9/23	6/30/23	4.000	2.19
Honeywell	HON	194.31	196.55	193.53	220.96	166.63	1.030	5/12/23	6/2/23	4.120	2.12
McDonald's	MCD	295.90	288.98	245.04	298.86	228.34	1.520	3/1/23	3/15/23	6.080	2.05
Intel Corp	INTC	29.80	31.89	43.60	44.93	24.59	0.125	5/7/23	6/1/23	0.500	1.68
American Express	AXP	150.00	163.22	158.75	182.15	130.65	0.600	7/7/23	8/10/23	2.400	1.60
Wal-Mart Stores	WMT	151.88	148.48	148.05	154.64	117.27	0.570	12/8/23	1/2/24	2.280	1.50
Unitedhealth Group	UNH	486.86	511.79	485.40	558.10	449.70	1.650	3/13/23	3/21/23	6.600	1.36
Nike	NKE	119.83	125.95	113.01	131.31	82.22	0.340	6/5/23	7/5/23	1.360	1.13
Microsoft Corp.	MSFT	309.46	286.14	261.12	313.00	213.43	0.680	5/18/23	6/8/23	2.720	0.88
Visa Inc.	V	232.81	234.02	199.23	235.57	174.60	0.450	5/12/23	6/1/23	1.800	0.77
Apple	AAPL	172.07	165.21	147.11	176.15	124.17	0.240	5/15/23	5/18/23	0.960	0.56
Walt Disney	DIS	92.86	99.90	107.33	126.48	84.07	0.000	No dividend		0.000	0.00
Salesforce	CRM	203.33	194.65	166.91	206.28	126.34	0.000	No dividend		0.000	0.00
Boeing	BA	202.77	201.71	127.20	221.33	113.02	0.000	No dividend		0.000	0.00

† Based on indicated dividends and market price as of 5/15/23. Extra dividends are not included in annual yields.
All data adjusted for splits and spin-offs. 12-month data begins 5/15/22.

ASSET CLASS INVESTMENT VEHICLES

Data as of May 22, 2023		Security Symbol(s) (1) Mutual Fund	ETF	Avg. Market Cap / Duration	Number of Holdings	Expense Ratio (%)	Turnover (%)	Price-to-Book Ratio	Trailing 12-Mo. Yield (%)	Annualized Returns (%) 1-Year	3-Year	5-Year	10-Year	Tax Cost Ratio - 3 Years (%) (3)
Fixed Income														
Short-Term Bonds	Vanguard Short-Term Bond Adm	VBIRX	BSV	2.66 yrs	2666	0.07	41		1.72	0.10	-1.26	1.33	1.05	0.61
Short-Term Bonds	SPDR Portfolio Short Term Corp Bd ETF		SPSB	1.82 yrs	1329	0.04	56		2.50	1.30	0.03	1.74	1.46	0.72
Short-Term Bonds	iShares 1-3 Year Treasury Bond ETF		SHY	1.89 yrs	78	0.15	73		1.78	0.18	-0.99	1.01	0.67	0.36
Core Bonds	Vanguard Total Bond Market Adm	VBTLX	BND	6.56 yrs	17684	0.05	40		2.66	-2.35	-3.80	0.94	1.23	0.94
Core Bonds	iShares Core US Aggregate Bond ETF		AGG	6.37 yrs	10320	0.03	104		2.57	-2.46	-3.85	0.91	1.22	0.85
Core Bonds	DFA Core Fixed Income	DFAPX	DFCF	5.72 yrs	908	0.19	25		2.62	-1.30	-3.41	1.51	1.53	0.97
Tax-Exempt	Vanguard Ltd-Term Tax-Exempt Inv	VMLTX		2.55 yrs	8109	0.17	65		1.87	2.14	0.16	1.40	1.17	0.00
Tax-Exempt	Vanguard Interm-Term Tx-Ex Inv	VWITX		4.62 yrs	12581	0.17	35		2.54	3.39	-0.30	1.85	2.01	0.01
Inflation-Protected	iShares TIPS Bond ETF		TIP	6.87 yrs	51	0.19	20		5.52	-4.19	0.04	2.68	1.44	1.58
Inflation-Protected	Vanguard Inflation-Protected Securities Inv	VIPSX		6.85 yrs	49	0.20	28		7.09	-4.15	0.19	2.66	1.39	1.93
Inflation-Protected	Vanguard Shrt-Term Infl-Prot Sec Idx Adm	VTAPX	VTIP	2.44 yrs	25	0.06	26		5.70	-0.50	2.75	2.85	1.56	1.67
International	Vanguard Total International Bond Adm	VTABX	BNDX	7.49 yrs	6937	0.11	27		1.65	-2.88	-3.35	0.32	n/a	0.81
Real Estate (REITs)														
U.S. REITs	Vanguard REIT Adm	VGSLX	VNQ	21.72 B	169	0.12	7	2.08	4.10	-11.13	7.00	4.88	4.70	1.46
U.S. REITs	SPDR Dow Jones REIT		RWR	19.82 B	114	0.25	10	1.85	3.83	-9.04	9.61	3.54	4.06	1.44
Int'l REITs	Vanguard Global ex-US Real Estate Adm (2)	VGRLX	VNQI	4.96 B	697	0.12	10	0.74	0.55	-13.58	0.39	-3.99	0.14	0.99
Int'l REITs	iShares International Developed Property		WPS	5.08 B	418	0.48	12	0.77	2.00	-14.20	0.93	-3.57	0.39	1.04
Global (incl. U.S.)	SPDR Dow Jones Global Real Estate ETF		RWO	13.16 B	269	0.50	11	1.37	3.75	-10.63	6.82	0.70	2.09	1.35
U.S. Stocks														
Large Cap (blend)	Vanguard S&P 500 Adm	VFIAX	VOO	195.86 B	508	0.04	2	3.48	1.58	9.30	14.11	10.89	11.82	0.38
Large Cap (blend)	DFA US Equity ETF	DUSQX	DFUS	126.90 B	670	0.13	7	3.23	1.45	8.22	14.25	10.16	n/a	0.99
Large Cap Value	Vanguard Value Adm	VVIAX	VTV	105.03 B	342	0.05	5	2.37	2.52	2.92	15.12	8.17	9.81	0.61
Large Cap Value	DFA US Marketwide Value	DFLVX	DFUV	67.75 B	357	0.21	10	1.80	2.04	1.09	15.64	5.57	8.77	1.09
Small Cap (blend)	iShares Core S&P Small-Cap ETF		IJR	1.99 B	608	0.06	16	1.46	1.59	0.09	15.76	4.33	9.11	0.49
Small Cap (blend)	DFA US Small Cap	DFSTX	DFAS	2.73 B	1999	0.27	13	1.71	1.21	4.18	17.70	5.20	8.62	1.12
Small Cap Value	Vanguard Small Cap Value Adm	VSIAX	VBR	4.86 B	850	0.07	13	1.52	2.22	0.64	18.04	4.94	8.40	0.53
Small Cap Value	iShares Micro-Cap		IWC	0.55 B	1718	0.60	44	1.34	1.41	-1.95	10.71	1.61	6.97	0.39
Small Cap Value	DFA U.S. Small Cap Value	DFSVX	DFSV	2.50 B	981	0.30	23	1.06	1.51	1.54	24.51	5.02	7.87	1.68
Marketwide	Vanguard Total Stock Market Adm	VTSAX	VTI	119.04 B	3898	0.04	3	3.17	1.57	8.35	13.43	9.98	11.30	0.37
Marketwide	DFA US Core Equity Market ETF	DFEOX	DFAU	66.72 B	2718	0.14	5	2.72	1.46	7.82	15.48	9.42	11.02	0.90
Foreign Stocks														
Developed Markets	Vanguard FTSE Developed Markets Adm	VTMGX	VEA	30.10 B	4050	0.07	4	1.49	2.79	8.57	11.90	3.41	4.84	0.73
Developed Markets	DFA International Core Equity	DFIEX	DFIC	12.51 B	5212	0.24	11	1.24	2.63	7.49	13.55	2.71	5.17	1.00
Emerging Markets	Vanguard Emerging Markets Stock Adm	VEMAX	VWO	20.34 B	4768	0.14	7	1.51	3.67	-1.34	6.40	0.37	1.94	0.95
Emerging Markets	DFA Emerging Markets Core Equity	DFCEX	DFAE	10.28 B	6808	0.40	14	1.15	3.58	0.20	10.91	1.35	2.76	1.06
Gold-Related Funds														
Gold ETFs	SPDR Gold Minishares		GLDM			0.10			0.00	6.88	4.18	n/a	n/a	0.00
Gold ETFs	GraniteShares Gold Trust		BAR			0.17			0.00	6.78	4.17	8.63	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) VGRLX 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.