U.S. Large Cap Value
U.S. Small Cap Value
U.S. Marketwide
Global REITs
Foreign Developed Markets
Foreign Emerging Markets

Asset Class Performance by
Representative Index*
2/18=100

(Latest Plot: 2/28/2019)

See box, page 22, for representative indexes.

Rates of Interest
As of March 26, 2019

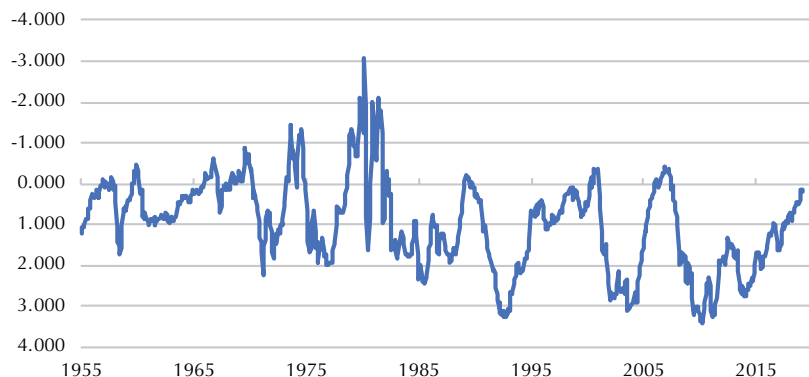|	
Government Obligations[1]	
Fed Funds Rate	2.41%
3-Month Treas. Bill	2.41%
10-Yr. Treas. Note	2.44%
30-Yr. Treas. Bond	2.88%
10-Yr. TIPS	0.54%
Muni Bonds - Nat'l 10-Yr.	2.00%
Mortgage Rates[2]	
15-Yr Fixed	3.71%
30-Yr Fixed	4.28%
Banking[3]	
Savings	0.10%
Money Market	0.18%
12-month CD	0.66%

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

[2] Freddie Mac. Average (National average mortgages with 0.4 points).

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

Is Recession Ahead?

There is rising speculation in the media that recession is on the horizon. While we cannot say for certain what is coming, we can observe that media tend to amplify, if not exaggerate, the significance of newly released data. Fortunately for our readers our parent organization, AIER, has for decades published a consistent and dispassionate assessment of the current state of the economy based on the most recent statistical indictors.

AIER's Business Conditions Monthly provides and empirical assessment regarding the likelihood of a turning point in the business cycle in the near future. Its indicators can be of value to both households and businesses. For example, workers in cyclical industries such as mining or construction can engage in "consumption smoothing" over the business cycle. Similarly, small businesses might pare their inventory if a slowdown is on the horizon.

AIER's currently counsels that "despite having the Leading Indicators index below 50 for a second consecutive month, the outlook remains moderately positive, though with a heightened degree of caution." In other words, there is no cause for alarm.

Among those leading indicators is the interest rate spread between one-year and ten-year U.S. Treasury obligations. The chart below plots the spread since 1960. These data currently reveal an "inverted yield curve" in which short term rates exceed longer term rates. For AIER's take on this development and what it might portend, turn to page 21.

10-year - 1-year Treasury spread

SOCIAL SECURITY CLAIMING

Social Security benefits are a critical component of overall wealth for many retirees. It is not uncommon for a married middle-income couple to take in more than $1 million in benefits over their lifetimes. When to *begin* taking benefits is an important decision. This article describes the fundamentals of Social Security and discusses factors to consider when deciding when to claim.

This decision may seem daunting; after all the Social Security handbook includes an estimated 5,000 rules and the optimal decision depends a great deal on individual circumstances. Please do not hesitate to call us at 413-645-3327 if you have further questions.

Claiming Age and Benefit Level

Social Security benefits can be claimed as early as age 62 or delayed until any age up to 70. At the full retirement age a worker can receive 100 percent of earned benefits. For workers born in 1960 or later, the full retirement age is 67.

A worker qualifies for a benefit after 10 years of earnings. Benefits are calculated based on the highest 35 years of earnings. If you worked less than 35 years, $0 will be used in calculating the average earnings for those years fewer than 35. For example, a worker with 25 years of earnings will include $0 in earnings for 10 years in the calculation of average annual earnings.

A worker who takes early benefits at age 62 will receive 70 percent of the earned benefit. A worker who delays until age 70 will receive 124 percent of the earned benefit.[1] In dollar terms, a worker with a $2,000 monthly earned benefit would receive $1,400 at age 62 or $2,480 at age 70 (ignoring inflation or the possibility of additional working years affecting the benefit calculation). The benefit would range between these amounts at any claiming age between 62 and 70. For this reason, for most workers *the claiming age has a larger impact on retirement income than almost any other financial decision*.

Social Security benefits are indexed for inflation based on the Consumer Price Index. For example, Social Security benefits are set to increase by 2.8 percent in 2019. There have been only three years since 1975 when a cost-of-living adjustment was not applied to benefits.

Married, Divorced, or Widowed

Non-working or low-earning spouses of covered workers are entitled to a benefit equal to half of the worker's earned benefit. Spousal benefits, like worker benefits, can be reduced if they are claimed prior to the full retirement age. Unlike worker benefits, spousal benefits do not accrue additional benefits if claimed after the full retirement age.

Ex-spouses of covered workers are also covered, with exceptions. Generally, if the marriage lasted at least 10 years and the couple has been divorced for at least two years, an ex-spouse who has not remarried will qualify for ex-spousal benefits.

Spousal and ex-spousal benefits do not affect the worker's own benefit. They will not reduce the worker's own earned benefit in any way.

Surviving spouses and young children of covered workers are also entitled to benefits. A surviving spouse can receive up to 100 percent of the full retirement benefit of the worker, inclusive of any accrued benefits the worker earned by delaying retirement past the full retirement age. This rule is important to consider when deciding when married couples should claim, because there is often a strong likelihood that at least one partner will be long-lived.

As an example, men sometimes choose to claim early because they believe they will not live long enough to make delayed claiming "worth it." However, due to the potential for survivor benefits, married couples should consider the joint life expectancy, and not just the primary earner's life expectancy, when deciding when to take benefits.

Working after Claiming

A common misconception is that you cannot work after claiming Social Security benefits. In reality, work income does not affect Social Security benefits after the full retirement age.

If you claim prior to the full retirement age, work income will reduce benefits until the full retirement age. However, those benefits are not lost and are instead included in benefits received after the full retirement age. Additional working years can also marginally increase the earned benefit by increasing average lifetime earnings.

Taxation of Benefits

Social Security is likely to be taxable for most readers, depending on other income. For married couples with combined income[2] greater than $44,000, 85 percent of benefits are taxable. For individual filers, the threshold is $34,000.

Bridging the Gap

Many workers can't wait to quit their jobs, and will sometimes leave prior to age 62. A common plan is to claim Social Security as early as possible in order to generate income in retirement.

However, for many of our clients we recommend continuing to hold off on collecting benefits. If one quits working but holds off on claiming benefits there will almost certainly be a period when one's income may be quite low or even zero. In those cases, it may be necessary to spend from other savings in order to cover retirement spending in those early years. We refer to this strategy as "bridging the gap."

This strategy effectively exchanges one's retirement savings today for Social Security benefits in the future. In a way, it's like buying an annuity from the government. It provides a higher level of inflation-adjusted income backed by the U.S. Treasury in the future, financed by early spending from retirement savings.[3]

When to Claim

While the "correct" claiming age depends on circumstances, many financial planners and retirement researchers advise people to delay benefits up to age 70 in order to lock in a larger benefit for the remainder of retirement. The general argument is that delaying Social Security creates a higher floor of guaranteed income. This allows for other savings to last longer while protecting against three primary retirement risks:

1. Longevity risk, the risk of living longer than expected, because benefits are paid no matter how long you live;

2. Market risk, because benefits are not dependent on stock or bond returns;

Total Value of Future Benefits

	"Risk-free" rate of 5%		"Risk-free" rate of 2%		No "risk-free" rate (0%)	
	Collect at 66	Collect at 70	Collect at 66	Collect at 70	Collect at 66	Collect at 70
Age 80	$431,571	$375,059	$345,868	$321,254	$300,000	$290,400
Age 81	$473,150	$420,212	$372,786	$354,079	$320,000	$316,800
Age 82	$516,807	$467,623	$400,241	$387,561	$340,000	$343,200
Age 83	$562,648	$517,404	$428,246	$421,712	$360,000	$369,600
Age 84	$610,780	$569,674	$456,811	$456,546	$380,000	$396,000
Age 85	$661,319	$624,558	$485,947	$492,077	$400,000	$422,400
Age 86	$714,385	$682,186	$515,666	$528,319	$420,000	$448,800
Age 87	$770,104	$742,695	$545,980	$565,285	$440,000	$475,200
Age 88	$828,610	$806,230	$576,899	$602,991	$460,000	$501,600
Age 89	$890,040	$872,941	$608,437	$641,451	$480,000	$528,000
Age 90	$954,542	$942,988	$640,606	$680,680	$500,000	$554,400
Age 91	$1,022,269	$1,016,538	$673,418	$720,693	$520,000	$580,800
Age 92	$1,093,383	$1,093,765	$706,886	$761,507	$540,000	$607,200

Based on author's calculations.

3. <u>Inflation risk</u>, because benefits include cost-of-living increases.

However, waiting for a higher payout in the future comes at a cost. Those who choose to wait to claim until age 70 give up eight years of potential benefits that could be used to improve quality of life immediately, or invested to create a wealthier future.

A retiree who lives only until age 75, for instance, may end up "regretting" his decision to delay receiving benefits (to the extent that one can have regret in death). A retiree that collects at 62 and lives until 75 will receive 13 years of reduced benefits. That same retiree, who instead delays collection until 70, would receive increased benefits but for only five years. The higher benefit from delaying will not be enough to make up for the eight years of foregone benefits.

On the other hand, for retirees who end up living a long time, until age 95 for instance, it makes a lot of sense (with perfect hindsight) to delay benefits. That retiree would receive 33 years of reduced benefits if she collected at 62, but 25 years of increased benefits if she delayed until age 70. The higher benefit realized by delaying more than makes up for the eight years of benefits foregone between ages 62 through 69.

The Social Security benefit calcula-tion is "actuarially fair," meaning that on average the U.S. Treasury expects to pay out a total amount that does not depend on the age at which you actually claim. There is no way to truly "game" the system unless you have perfect knowledge of how long you will live.

The Breakeven Age

The issue of course is that nobody knows how long they will live. One way to assess this tradeoff is to consider the "breakeven age." This is the future age at which the benefits of different claiming ages become equal, assuming benefits are invested. It is the point at which the value of the higher (but delayed) income stream effectively "catches up" with the value of benefits received if one begins early. This is demonstrated in the table above.

Suppose an individual can choose between collecting $20,000 per year at her full retirement age of 66, and waiting until age 70, when she can collect $26,400 (which reflects the 32 percent benefit increase available for workers born between 1943 and 1954). The first two columns in the table allow her to evaluate this trade off. Each row shows the total future value of these benefits at a particular age, assuming that all future Social Security benefits received were continually invested at a compound annualized rate of return of 5 percent.[4]

In this case, if she takes benefits at age 66 she could accumulate $431,571 by age 80. If instead she delays in order to take higher benefits at age 70 she would have accumulated only $375,059 by age 80. This disparity emerges because age 66 collection in effect provides a four-year "head start" that more than offsets the higher payouts garnered by delaying.

The breakeven age simply tells us the age at which the future value of the "delay" option eventually catches up with, and then surpasses, the "early" option. In this contrived example the breakeven age emerges at roughly age 92. With a projected return of 5 percent, a retiree may decide whether or not to delay based on whether she thinks she will live at least until age 92. Or, a married couple may decide to delay the higher earner's benefit if they think it is reasonably likely that at least one of them will live until age 92.

If the retiree or spouse is healthy and thinks they may live past age 90, it makes sense to delay. On the other hand, if there is a history of family health complications, the retiree may decide to collect earlier.

This simple analysis provides a quantitative framework to use in conjunction with the qualitative aspects of deciding whether to delay. It allows the investor to consider the length of time required to realize the benefits of delaying in light of life expectancy, desired lifestyle, and legacy intentions.

The Interest Rate Wrinkle

The level of Social Security benefits you receive, whether you start early or delay, are (unlike a commercial annuity) unaffected by current interest rates.[5] However, prevailing interest rates can still have a big impact when deciding whether to start early or to delay.

As we move to columns 3 and 4 in the table, we assume a lower discount rate of 2 percent, which may be closer to a current "guaranteed" rate of return on CDs or money markets. This drops the breakeven age to 84. *Other factors held constant, at lower interest rates, the benefits of delaying increase. This is because the "head start" garnered by starting earlier has less impact in a low interest rate environment. Conversely, higher rates favor starting early.*

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1. For workers born in 1960 or later. For workers born prior to 1960, these percentages differ. See the Social Security website at www.sss.gov for more information.
2. Combined income = Adjusted gross income + Nontaxable interest + ½ Social Security benefits.
3. Delorme, Luke and Cara Clase. "Can Dynamic Withdrawals Influence the Decision to Delay Social Security Benefits?" Retirement Management Journal Volume 6, Number 1. 2016.
4. For simplicity we ignore taxes and adjustments for inflation in this demonstration.
5. For example, prices for single premium immediate annuities depend in part on current interest rates. Social Security benefits are adjusted annually to reflect price inflation, but are unaffected by current or future interest rates.

TAX REFORM BASICS AND ROTH OPPORTUNITIES

The deadline for filing 2018 federal income taxes is rapidly approaching. Taxpayers who have already filed their return may have seen substantial changes from prior years. Marginal tax brackets and the standard deduction changed significantly. Taxpayers will see just a modest change in tax brackets and the standard deduction from 2018 to 2019.

Marginal versus Average Rate

The marginal income tax rate is the rate applied to the *next dollar* of taxable income, while the average rate is the total tax paid divided by total taxable income. The average income tax will typically exceed the marginal rate because of the progressivity inherent in the income tax. This progression is depicted in Table 1.

For married couples whose taxable income exceeds $19,400 the average rate incurred will fall below the marginal rate. For example, married taxpayers filing jointly with $150,000 of taxable income face a statutory *marginal* rate of 22 percent. So they retain only 78 cents on the next dollar of taxable income generated.

However the same couple would pay an average (or effective) rate of only 16.5 percent. Table 2 summarizes this calculation. The average rate paid is below the marginal rate because the first $78,950 of taxable income would be taxed at rates lower than 22 percent.

Higher Standard Deduction

The standard deduction for 2019 is $12,200 for single filers and $24,400

for married filing jointly. The standard deduction was almost doubled in 2018 and many taxpayers found that their total itemized deductions no longer exceeded the standard deduction. In 2019, the marginal benefit of claiming additional deductions will again be zero for many filers.

This alters the decision framework for mortgages, charitable contributions, and any other items that would be considered itemized deductions on Schedule A. Notably, deductions for state and local taxes paid are now capped at $10,000, so a married couple needs to generate additional deductions of $14,401 just to make itemizing worthwhile. Without a large mortgage and sizeable charitable contributions, this threshold may be difficult to reach.

All else equal, renting has become more attractive than mortgage-financed home ownership, and larger down payments are more beneficial at the margin than they were prior to 2018. Likewise, annual charitable contributions are less advantageous from a tax perspective. One recommendation for tax-sensitive, charitably-inclined taxpayers is to "bunch" what would have been future charitable contributions into a single year in order to boost itemized deductions every few years.

Table 1: 2019 Income Tax, Married Filing Joint		
Taxable Income	The tax is	of the amount over
up to $19,400	10%	
$19,401 to $78,950	$1,940.00 + 12%	$19,400
$78,951 to $168,400	$9,086.00 + 22%	$78,950
$168,401 to $321,450	$28,765.00 + 24%	$168,400
$321,451 to $408,200	$65,497.00 + 32%	$321,450
$408,201 to $612,350	$93,257.00 + 35%	$408,200
over $612,351	$164,709.50 + 37%	$612,350

Roth Opportunity…For Now

Many of the provisions in the "Tax Cuts and Jobs Act" are not permanent, including the entire rate schedule depicted. Unless the law changes, these reduced rates will revert to the old, higher rates on January 1, 2026. These circumstances present traditional IRA investors with an opportunity, perhaps short-lived, to increase their overall after-tax returns through a Roth conversion.

Previously untaxed assets distributed from a traditional IRA are taxed as ordinary income, and required minimum distributions (RMDs) from these accounts take effect at age 70 1/2. By converting the IRA to a Roth IRA (which has no RMD and from which distributions are taken tax free) one can escape this levy. However, amounts converted are taxed as ordinary income at the time of conversion. Therefore, by converting today an investor will be subject to the currently reduced rates on ordinary income and thereby avoid the prospective increase looming in 2026.

Table 2. Marginal vs. Average Tax Rate		
10% of $19,400	=	$1,940
12% of ($78,950 – $19,400)	=	$7,146
22% of ($150,000-$78,950)	=	$15,631
Total Tax		$24,717
Average Rate: $24,717 / $150,000	=	16.5%

There are two large increases in current tax brackets that stand out (Table 1). Brackets jump sharply from the 12 percent to 22, and from 24 percent to 32 percent. This has important implications for Roth conversions.

For example, taxpayers filing jointly with taxable income of $200,000 will fall in the 24 percent marginal tax bracket. They can therefore convert up to $121,450 to a Roth (calculated as $321,450 - $200,000) without breaking into the 32 percent bracket. To the extent that the couple expects to continue to have similar income in future years, such a conversion could produce significant tax savings down the road. To repeat, this assumes that rates revert to prior levels in 2026, consistent

with current law.

The potential savings from Roth conversions and other tax management techniques vary widely, depending on an investor's circumstances. Although we are not tax professionals, we frequently assist our clients by weighing such trade-offs within a rational, client-specific framework. If you have any questions about charitable giving, Roth conversions, mortgage financing, or any other tax related questions, we encourage you to call us at 413-645-3327.

FEAR NOT THE INVERTED YIELD CURVE - YET[1]

As the financial news networks have reported, the yield curve on government securities has inverted. When the yield curve inverts, which is to say when short maturity bonds yield higher than longer maturity bonds, there is a general view that a recession in the next 12 - 24 months becomes more likely.

It is, in any case, an unusual situation, and one that garners attention from macroeconomists and financial market participants alike.

In fact, going back to 1960, inversions of the yield curve have occurred nine times, with two not preceding a recession. The average length of time between inversion and a recession when one did occur is 14 months.

The market mechanism behind an inversion is that bond traders (and investors, more broadly) observe that they require a higher premium on shorter-term debt than longer-term debt. This is unusual, of course, because typically holders of debt require compensation commensurate with the risk they incur; a longer holding period for an investment necessarily means more exposure to risk, and thus requires higher compensation.

An inverted curve, therefore, initially suggests that some market participants view near-term risk as decidedly higher than longer-term risk, which is priced into the yield curve.

A better interpretation of the significance of a change in the shape of the yield curve and what it predicts owes to the collective effect of expectations about future income and consumption.

When individuals expect their income to rise in the future, they are likely to consume today, borrowing more or saving less; in either case, current

consumption will rise, saving will fall, and interest rates will tend to rise. Firms, meanwhile, will see the increase in consumption, likely choose to expand their productive capacity with capital spending to meet that increase in consumption and will compete for financing, pushing interest rates up as well.

In fact, though, economies tend to grow and shrink cyclically with the business cycle, a major influence upon which are the policy implementations of central banks. Depending upon the pace of economic growth at any given moment, negative shocks to the economy (endogenous or exogenous) may either have little effect or result in a recession.

Thus, the inversion of the yield curve may simply reflect views that in the next 12 to 24 months consumption growth may fall. And in the event that the pace of consumption falls, a negative shock of some sort – financial crisis, rapidly rising oil prices, a sudden (and unexpected) change in Federal Reserve policy – would have a disproportionately larger impact than when that pace is higher.

Other factors impacting the predictive character of an inverted yield curve are the shape (e.g., the flatness/steepness) of the curve and where – in terms of the maturities along the curve – the inversion is actually taking place.

The current inversion is between the rate on the three-month bill versus the yield on the ten-year note, which is slightly different than in previous inverted curves: typically, between yields on the two-month bill and ten-year notes. One possible explanation is that there was an auction of two-month bills by the Department of the Treasury yesterday which was met by strong demand; since

yields and bond prices move oppositely, the buying pressure (pushing up on the two-year bill prices) may have effectively pushed its yield down, resulting in the somewhat anomalous character of this particular inversion.

Because the Federal Reserve has been raising rates and is usually raising the Fed Funds rate during the late phase of an economic expansion, inversions of the yield curve are often preceded by flat curves. In this case, the Fed was in the midst of a tightening campaign until backing off in January, and the yield had indeed been flattening accordingly for some time before the inversion.

Two things to keep in mind: having, as we do, a business cycle arising to no small extent out of the policies of the Federal Reserve, recessions are inevitable; as the saying goes, an economic downturn is not so much an "if" as a "when" (and, perhaps, "how bad for how long"). It might as accurately be said that recessions predict inverted yield curves.

Additionally, both markets and market participants evolve over time; the Principle of Everchanging Cycles ensures that whether in discrete jumps or incrementally, relationships between macroeconomic indicators and phenomena will change over time.

A more pressing issue is: if indeed, using historical averages, a recession is 12 to 18 months away, will the Fed again respond by cutting rates to zero or near zero, having not successfully normalized interest rates (6 to 8%) during this inter-recession growth period? And if that is the case: how many more distorted economic signals will be added to those still hungover from the previous decade of effectively zero interest rates?

1.   By Peter C. Earle, Daily Economy, American Institute for Economic Research, March 2019.

THE HIGH-YIELD DOW INVESTMENT STRATEGY

Recommended HYD Portfolio

As of March 15, 2019

|	Rank	Yield (%)	Price ($)	Status	Value (%)	No. Shares (%)[1]
					—-Percent of Portfolio-—	
IBM	1	4.50	139.43	Holding**	23.41	13.13
Verizon	2	4.13	58.39	Holding**	26.81	35.89
Exxon Mobil	3	4.09	80.15	Holding**	24.13	23.54
Chevron	4	3.80	125.31	Buying	17.29	10.79
Pfizer	6	3.45	41.78	Holding	5.98	11.19
Proctor & Gamble	10	2.80	102.44	Holding	1.84	1.40
General Electric	NA	0.39	9.96	Selling	0.51	4.04
Wabtec	NA	0.66	71.12	Selling	0.02	0.02
Cash (6-mo. T-Bill)	N/A	N/A			0.01	N/A
Totals					100.00	100.00

**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.

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 February 28, 2019*. Returns for the 5-,10- and 20-year periods are annualized, as is the volatility (standard deviation) of returns.

	1 mo.	1 yr.	5 yrs.	10 yrs.	20 yrs.	since Jan 79	Volatility since 1979
HYD Strategy	5.01	11.10	12.78	19.47	9.88	15.01	17.11
Russell 1000 Value Index	3.20	3.16	8.09	15.39	6.76	11.91	14.41
S&P 500 Index	3.21	4.68	10.67	16.67	6.15	11.77	14.81
Dow Jones Industrial Average	4.03	5.95	12.38	16.84	7.76	N/A	N/A
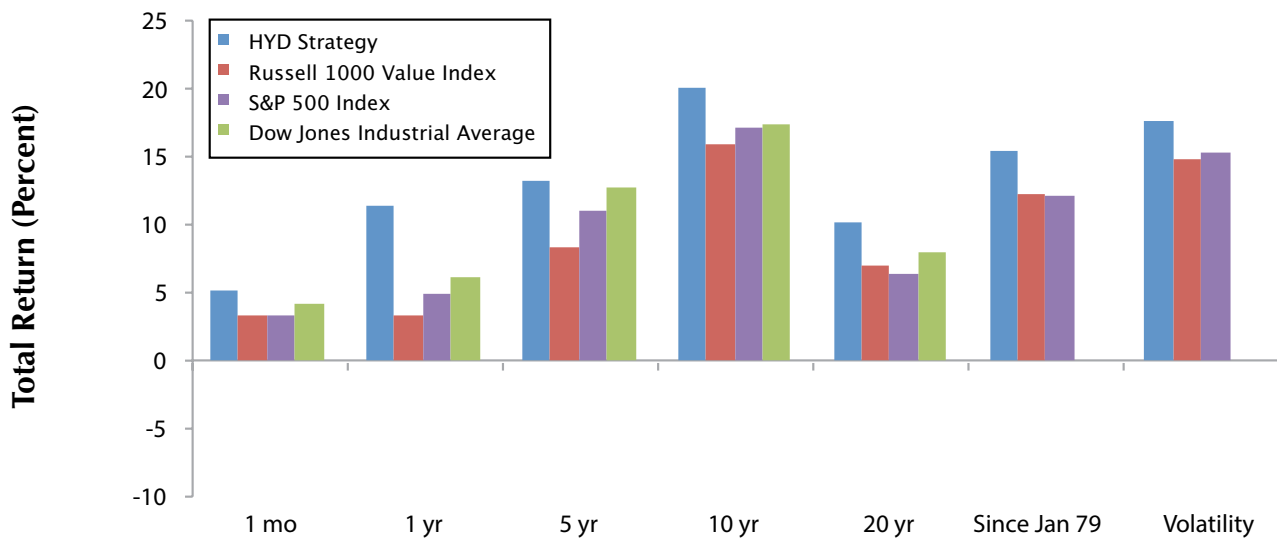
*Data assume all purchases and sales at mid-month prices (+/–$0.125 per share commissions), reinvestment of all dividends and interest, and no taxes. Model HYD calculations are based on hypothetical trades following a very exacting stock-selection strategy. They do not reflect returns on actual investments 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 0.725% management fee, the annual rate assessed to a $500,000 account managed through our Professional Asset Management service.

RECENT MARKET STATISTICS

Precious Metals & Commodity Prices ($)

	3/15/19	Mo. Earlier	Yr. Earlier	Prem. (%)
Gold, London p.m. fixing	1,303.50	1,316.55	1,318.75	
Silver, London Spot Price	15.35	15.68	16.52	
Crude Oil, W. Texas Int. Spot	58.51	55.58	61.35	

Coin Prices ($)[1]

	3/15/19	Mo. Earlier	Yr. Earlier	Prem. (%)
American Eagle (1.00)	1,328.50	1,341.55	1,343.75	1.92
Austrian 100-Corona (0.98)	1,271.43	1,284.22	1,286.38	-0.47
British Sovereign (0.2354)	306.84	309.92	310.43	0.00
Canadian Maple Leaf (1.00)	1,313.50	1,326.55	1,328.75	0.77
Mexican 50-Peso (1.2056)	1,563.50	1,579.23	1,581.89	-0.51
Mexican Ounce (1.00)	1,321.50	1,334.55	1,336.75	1.38
S. African Krugerrand (1.00)	1,310.50	1,323.55	1,325.75	0.54
U.S. Double Eagle-$20 (0.9675)				
St. Gaudens (MS-60)	1,296.00	1,265.00	1,300.00	2.76
Liberty (Type II-AU50)	1,314.00	1,283.00	1,325.00	4.19
Liberty (Type III-AU50)	1,286.00	1,255.00	1290.00	1.97
U.S. Silver Coins ($1,000 face value, circulated)				
90% Silver Circ. (715 oz.)	11,085.00	10,796.00	11,807.00	0.97
40% Silver Circ. (292 oz.)	4,506.50	4,386.50	4,716.00	0.51
Silver Dollars Circ.	18,000.00	18,000.00	22,875.00	51.57

[1]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.

Recent Market Returns
Data through February 28, 2019

	U.S. Stocks (Mktwd)	Foreign Dev. Stocks	Foreign Emerg. Stocks	Global REITs	U.S. Bonds	Foreign Bonds (hedged)	Gold
1-month	3.52% ⬆	2.57% ⬆	0.23% ⬆	-0.08% ⬇	-0.06% ⬇	0.13% ⬆	-0.31% ⬇
3-month	1.94% ⬆	4.21% ⬆	6.11% ⬆	4.31% ⬆	2.86% ⬆	1.17% ⬆	8.34% ⬆
1 year	5.05% ⬆	-5.30% ⬇	-9.89% ⬇	13.62% ⬆	3.17% ⬆	2.96% ⬆	0.55% ⬆
5 year (annualized)	10.15% ⬆	2.01% ⬆	4.13% ⬆	6.05% ⬆	2.32% ⬆	1.88% ⬆	-0.02% ⬇
15 year (annualized)	8.49% ⬆	5.18% ⬆	7.95% ⬆	6.54% ⬆	3.81% ⬆	2.77% ⬆	8.39% ⬆

Best and worst one-year returns, Jan. 2001 - Feb. 2019

	U.S. Stocks	Foreign Dev.	Foreign Emerg.	Global REITs	U.S. Bonds	Foreign Bonds	Gold
Best	56.0%	57.2%	91.6%	85.7%	13.8%	7.1%	57.6%
During:	03/2009-02/2010	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%	-2.5%	0.1%	-27.4%
During:	03/2008-02/2009	03/2008-02/2009	12/2007-11/2008	03/2008-02/2009	09/2012-08/2013	04/2010-03/2011	12/2012-11/2013

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

	Ticker Symbol	3/15/19	2/15/19	3/15/18	High	Low	Amount ($)	Record Date	Payable Date	Annual Dividend ($)	Yield† (%)
IBM	IBM	139.43	138.03	159.61	162.00	105.94	1.570	2/8/19	3/9/19	6.280	4.50
Verizon	VZ	58.39	55.16	48.29	61.58	46.09	0.603	4/10/19	5/1/19	2.410	4.13
Exxon Mobil	XOM	80.15	77.71	74.42	87.36	64.65	0.820	2/11/19	3/11/19	3.280	4.09
Chevron	CVX	125.31	119.35	115.58	131.08	100.22	1.190	2/15/19	3/11/19	4.760	3.80
Coca-Cola	KO	45.30	45.24	43.67	50.84	41.45	0.400	3/15/19	4/1/19	1.600	3.53
Pfizer	PFE	41.78	42.40	36.58	46.47	34.32	0.360	2/1/19	3/1/19	1.440	3.45
J P Morgan	JPM	106.55	105.55	115.24	119.24	91.11	0.800	4/5/19	4/30/19	3.200	3.00
Home Depot, Inc.	HD	182.23	192.39	178.07	215.43	158.09	1.360	3/14/19	3/28/19	5.440	2.99
Walgreen's	WBA	62.63	73.43	67.38	86.31	59.07	0.440	2/15/19	3/12/19	1.760	2.81
Procter and Gamble	PG	102.44	98.48	78.67	102.91	70.73	0.717	1/18/19	2/15/19	2.869	2.80
3M Company	MMM	208.08	208.86	235.87	232.12	176.87	1.440	2/15/19	3/12/19	5.760	2.77
DowDupont	DWDP	55.28	54.24	67.88	71.93	48.89	0.380	2/28/19	3/15/19	1.520	2.75
Merck	MRK	81.57	79.81	55.25	83.07	52.83	0.550	3/15/19	4/5/19	2.200	2.70
Cisco	CSCO	53.20	49.43	45.33	54.23	40.19	0.350	4/5/19	4/24/19	1.400	2.63
Johnson & Johnson	JNJ	137.60	136.38	133.06	148.99	118.62	0.900	2/26/19	3/12/19	3.600	2.62
Caterpillar	CAT	132.67	136.20	154.57	161.60	112.06	0.860	1/22/19	2/20/19	3.440	2.59
McDonald's	MCD	185.33	179.97	161.61	190.88	153.13	1.160	3/1/19	3/15/19	4.640	2.50
United Tech.	UTX	125.92	127.76	129.25	144.15	100.48	0.735	2/15/19	3/10/19	2.940	2.33
Intel Corp	INTC	54.33	51.66	50.88	57.60	42.36	0.315	5/7/19	6/1/19	1.260	2.32
Travelers	TRV	134.18	128.74	140.47	140.63	111.08	0.770	3/11/19	3/29/19	3.080	2.30
Boeing	BA	378.99	417.97	329.98	446.01	292.47	2.055	2/8/19	3/1/19	8.220	2.17
Wal-Mart Stores	WMT	98.42	99.99	87.51	106.21	81.78	0.530	5/10/19	6/3/19	2.120	2.15
Goldman Sachs	GS	198.26	198.50	266.61	262.50	151.70	0.800	2/28/19	3/28/19	3.200	1.61
Microsoft Corp.	MSFT	115.91	108.22	94.18	119.93	87.08	0.460	5/16/19	6/13/19	1.840	1.59
Apple	AAPL	186.12	170.42	178.65	233.47	142.00	0.730	2/11/19	2/14/19	2.920	1.57
Walt Disney	DIS	114.96	112.59	103.24	120.20	97.68	0.880	12/10/18	1/10/19	1.760	1.53
Unitedhealth Group	UNH	251.40	271.13	229.48	287.94	212.50	0.900	3/11/19	3/19/19	3.600	1.43
American Express	AXP	113.52	107.38	94.39	114.55	89.05	0.390	4/5/19	5/10/19	1.560	1.37
Nike	NKE	86.80	85.38	66.39	88.59	63.21	0.220	3/4/19	4/1/19	0.880	1.01
Visa Inc.	V	155.46	144.91	123.41	156.82	116.03	0.250	2/15/19	3/5/19	1.000	0.64

† Based on indicated dividends and market price as of 3/15/19. Extra dividends are not included in annual yields.
All data adjusted for splits and spin-offs. 12-month data begins 3/15/18.

ASSET CLASS INVESTMENT VEHICLES

Data as of March 25, 2019

Category	Description	Mutual Fund	ETF	Avg. Market Cap / Avg. Maturity	Number of Holdings	Expense Ratio (%)	Turnover (%)	Price-to-Book Ratio	Trailing 12-Mo. Yield (%)	1-Year	3-Year	5-Year	Tax Cost Ratio - 3 Years (%) (3)
Fixed Income													
Short-Term Bonds	Vanguard Short-Term Bond Adm	VBIRX	BSV	2.80 yrs	2453	0.07	48		2.08	3.63	1.47	1.51	0.74
Short-Term Bonds	SPDR Portfolio Short Term Corp Bd ETF		SPSB	1.91 yrs	1189	0.07	56		2.44	3.97	2.10	1.66	0.85
Short-Term Bonds	iShares 1-3 Year Treasury Bond ETF		SHY	1.95 yrs	69	0.15	85		1.80	2.66	0.96	0.87	0.49
Interm-Term	Vanguard Total Bond Market Adm	VBTLX	BND	8.30 yrs	17312	0.05	54		2.81	4.78	2.13	2.67	1.10
Interm-Term	iShares Core US Aggregate Bond ETF		AGG	8.00 yrs	7224	0.05	252		2.73	4.95	2.12	2.72	1.04
Tax-Exempt	Vanguard Ltd-Term Tax-Exempt Inv	VMLTX		3.00 yrs	5193	0.17	28		1.84	3.20	1.41	1.48	0.00
Tax-Exempt	SPDR Nuveen Blmbg Barclays ST MunBd ETF		SHM	3.09 yrs	1173	0.20	27		1.25	2.75	0.91	1.07	0.00
Tax-Exempt	Vanguard Interm-Term Tx-Ex Inv	VWITX		5.50 yrs	8026	0.00	15		2.79	5.08	2.37	3.20	0.00
Inflation-Protected	iShares TIPS Bond ETF		TIP	7.99 yrs	39	0.19	21		2.65	2.99	2.02	1.82	0.87
Inflation-Protected	Vanguard Inflation-Protected Securities Inv	VIPSX		8.20 yrs	45	0.20	27		2.98	2.87	1.87	1.77	1.03
International	Vanguard Total International Bond Adm	VTABX	BNDX	9.40 yrs	5545	0.11	22		2.98	5.39	3.28	4.13	0.98
Real Estate (REITs)													
U.S. REITs	Vanguard REIT Adm	VGSLX	VNQ	13.56 B	190	0.12	6	2.41	4.21	23.12	6.46	8.68	1.50
U.S. REITs	SPDR Dow Jones REIT		RWR	13.15 B	96	0.25	6	2.27	3.73	23.13	5.90	8.63	1.61
Int'l REITs	Vanguard Global ex-US Real Estate Adm (2)	VGRLX	VNQI	6.52 B	608	0.12	7	0.93	4.27	3.16	8.53	6.34	1.70
Int'l REITs	iShares International Developed Property		WPS	6.97 B	358	0.48	11	0.93	4.09	4.86	7.40	5.81	1.68
Global (incl. U.S.)	SPDR Dow Jones Global Real Estate ETF		RWO	10.27 B	230	0.50	11	1.49	3.53	15.00	5.15	6.44	1.50
U.S. Stocks													
Large Cap (blend)	Vanguard S&P 500 Adm	VFIAX	VOO	101.29 B	515	0.04	4	2.90	1.84	10.26	13.43	10.67	0.59
Large Cap (blend)	iShares Core S&P 500		IVV	104.06 B	509	0.04	4	2.96	1.98	10.29	13.43	10.65	0.48
Large Cap (blend)	iShares Russell 1000 ETF		IWB	80.65 B	983	0.15	4	2.86	1.84	9.91	13.36	10.30	0.48
Large Cap Value	Vanguard Value Adm	VVIAX	VTV	89.13 B	348	0.05	8	2.10	2.47	8.59	12.00	9.27	0.76
Large Cap Value	iShares Russell 1000 Value		IWD	61.61 B	726	0.20	15	1.89	2.44	6.70	10.12	7.40	0.60
Small Cap (blend)	iShares Core S&P Small-Cap ETF		IJR	1.65 B	605	0.07	12	1.80	1.37	1.30	13.01	8.00	0.37
Small Cap (blend)	Schwab US Small-Cap ETF		SCHA	2.67 B	1742	0.04	9	1.89	1.38	2.05	12.20	6.52	0.48
Small Cap Value	Vanguard Small Cap Value Adm	VSIAX	VBR	3.49 B	866	0.07	18	1.59	2.03	1.70	10.33	6.84	0.65
Small Cap Value	iShares Russell 2000 Value		IWN	1.69 B	1373	0.24	23	1.30	1.73	-0.15	11.04	5.04	0.57
Small Cap Value	iShares Micro-Cap		IWC	0.51 B	1454	0.60	22	1.63	0.87	-3.65	12.93	4.59	0.34
Marketwide	Vanguard Total Stock Market Adm	VTSAX	VTI	58.54 B	3575	0.04	3	2.70	1.81	9.39	13.53	10.11	0.66
Marketwide	Fidelity Total Market Index	FSKAX		57.36 B	3390	0.02	2	2.64	1.83	9.25	13.51	10.09	0.91
Foreign Stocks													
Developed Markets	Vanguard FTSE Developed Markets Adm	VTMGX	VEA	22.73 B	3956	0.07	3	1.36	3.03	-3.16	7.99	n/a	0.84
Developed Markets	iShares Core MSCI EAFE ETF		IEFA	23.59 B	2502	0.08	2	1.41	3.16	-3.09	7.98	2.97	0.76
Emerging Markets	Vanguard Emerging Markets Stock Adm	VEMAX	VWO	20.81 B	4123	0.14	11	1.51	2.61	-6.58	10.27	4.03	0.84
Emerging Markets	Schwab Emerging Markets Equity ETF		SCHE	30.86 B	1028	0.13	18	1.54	2.47	-5.99	10.79	4.21	0.84
Gold-Related Funds													
Gold ETFs	SPDR Gold Minishares		GLDM			0.18			0.00	n/a	n/a	n/a	0.00
Gold ETFs	GraniteShares Gold Trust		BAR			0.17			0.00	-2.04	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) 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 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.

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