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* HYD is a hypothetical model based on backtested results. See p.46 for more information.

The Investment Guide is intended to provide useful information to investors who manage their own financial assets. We also provide low cost discretionary asset management services for individuals and institutions seeking professional advice and assistance in implementing an investment strategy.

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The Games People Play

Imagine sitting in a bar in which you are introduced to someone said to have an uncanny ability to predict whether the Yankees will win or lose their next game. Further suppose that you know for a fact that for the previous six games he has walked into this bar the day before each game and had been correct every single time.

Would you be impressed? More importantly, suppose this soothsayer then asked you how much you would pay him to provide you with his next prediction. Would you be intrigued?

Suppose, however, that you learned that six games ago this expert had visited 32 bars in New York and loudly claimed he would be able to successfully predict the outcome of the next game, claiming in 16 bars that the Yankees would win while claiming in the other 16 that they would lose. Then, the day before the next game he went into the 16 bars where he had predicted correctly, and followed the same scheme. He repeated this process five times, each time visiting only those bars in which he made a correct prediction.

So, of all 32 bars, you happened to end up in the one in which he was correct all six times. Armed with the true secret of his success, would you be willing to pay for his next prediction? We certainly hope not.¹ Yet, this is essentially the trap into which so many investors fall when they invest in mutual funds or other investment vehicles that have outperformed the market. There are over 6,000 mutual funds attempting to pick winning stocks or time the market. At any point in time there will be several that have outperformed the market, but only as a result of chance.²

In his most recent letter to Berkshire Hathaway shareholders, legendary investor Warren Buffett stated "The goal of the non-professional should not be to pick winners – neither he nor his "helpers" can do that – but should rather be to own a cross-section of businesses that in aggregate are bound to do well. A low-cost S&P 500 index fund will achieve this goal."

We diversify even further by recommending that investors hold not just the S&P 500 index but an index that captures the entire stock market (funds for doing so appear on the back page). Small and mid-cap stocks, which the S&P 500 excludes, have provided substantial returns over time and provide additional diversification. We suspect Mr. Buffett recommends the S&P 500 (he specifically recommends the Vanguard 500 fund) because it is a widely recognized proxy for the market, or for the slightly lower expense ratio this particular fund provides.

1 We are grateful to Ken French, PhD, who provides this example for his students at Dartmouth College (as cited in Chief Investment Officer, February 24, 2014. www.ai-cio.com). 2 We do not rule out the possibility that a very small minority can outperform the market on a risk-adjusted basis based on skill. Unfortunately it is impossible to apply statistical reasoning to identify in advance who those managers will be.

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HOW MUCH SHOULD I SAVE FOR RETIREMENT?

In addition to conducting original research, AIER's staff economists monitor external studies that might be of use to their readers. Below is an evaluation¹ of retirement savings research originally conducted by Dimensional Fund Advisors². The study estimates savings rates that can be adopted as a worker's income changes during his working years, with the goal of ensuring a reasonable and constant living standard in retirement. This is a useful departure from more conventional approaches, which typically focus on a somewhat abstract, single dollar amount to be achieved upon retirement, often many years in the future.

ING's advertising campaign suggests that workers need to save millions of dollars in order to retire comfortably. You know the ads, where people lug around target savings amounts, all upwards of \$1 million. It seems like such a burden to achieve these numbers. But recent research by Dr. Marlena Lee and Dr. Massi De Santis of Dimensional Fund Advisors suggests that maybe the retirement hurdle isn't so insurmountable.

Their research suggests that lowand middle-income households that start saving early and target a savings rate between 2 and 11 percent may actually save enough for retirement. This news is encouraging for young workers who will be reliant on 401(k) balances in retirement.

The study first defines a replacement rate: the percentage of gross preretirement income that is replaced in retirement. If you earned \$50,000 per year in the last year before your retirement, a \$25,000 annual pension would represent a 50 percent replacement rate. The authors find that in order to achieve replacement rates adequate to maintain living standards through retirement, the average household needs to save about 11 percent per year during working years. But that savings rate varies considerably depending on household income.

In order to maintain the same standard of living in retirement, the

Chart 1: Replacement Rates Needed By Income

Replacement rates as a percentage of gross pre-retirement annual income



assumption is that the replacement rate can be less than 100 percent of pre-retirement income. This is for three primary reasons:

- Households usually pay less in taxes during retirement,
- Households no longer need to save during retirement,
- Spending tends to decline with age: the cost of the basket of goods for non-working and retired households is typically lower than it is for working households.

It turns out that the magnitude of these three factors varies by household income. The result is that higher income households typically end up requiring a lower total replacement rate in order to maintain relatively equal living standards. But higher income households also receive lower Social Security replacement rates due to the progressive nature of the system.

Lee and De Santis start by estimating total replacement rates needed to maintain living standards. They then estimate Social Security replacement rates. The difference in these estimates produces the replacement rate that must be covered through savings or by a pension plan. Chart 1 shows the results. The lowest income quartile needs to replace only about 23 percent of preretirement annual income with savings. At higher levels of earnings, savings must account for a 31 to 37 percent replacement rate.

This raises the question of what level of savings over the course of one's working years would enable such replacement rates. Provided the numbers in the chart above, a savings rate is calculated (assuming individuals start saving at age 25 and retire at 66) that would lead to a 90 percent probability of being able to maintain a 40 percent replacement rate throughout retirement.³ The authors account for variability in both investment returns and in income earned over time by incorporating a Monte Carlo simulation of market returns, and by simulating 100,000 potential career/income paths based on longitudinal demographic data.4

Chart 2 shows the results, based on current income. This provides an actionable game plan for workers. For example, when a 25-year old makes \$45,000 a year, a 6.6 percent saving rate should be targeted. As he ages and income increases, this strategy calls for increased savings rates. At age 35, if he makes \$65,000, his savings rate should be 11.0 percent, etc. Demographic data suggests that income for a worker with a college degree will peak at \$120,000 at age 45, at which time he should be saving 17.6 percent.

Those households whose income over time increases more than expected

1 This article, which originally appeared on Daily Economy The AIER Blog (June 16, 2104), was written by Luke Delorme, AIER Research Fellow

² Marlena Lee, PhD and Massi De Santis PhD "Income-Based Savings Rates", and "How Much Should I Save for Retirement", Dimensional Fund Advisors, June 2013 3 Final portfolio values at age 65 (for each of 100,000 simulated income paths) are converted to retirement income at age 66, based on an assumed price of a \$1 real annuity.

^{4 100,000} simulated career/income paths are generated based on data from the Panel Study on Income Dynamics (PSID), the largest longitudinal demographic data set in the world.



will find themselves in the upper end of the income distribution at age 65. Their relatively low savings at the beginning of their career may therefore prove inadequate to meet the 40 percent replacement rate. Chart 2 addresses this challenge (uncertain income paths) by providing savings rates that change along with household income. Such households will have the capacity to increase savings and also know more about their likely future income paths as time passes. As the authors note "A saving rule in which the saving rate increases with income is standard economic theory."

This research has profound implications. It suggests that the burden on lower income households is not insurmountable. For employees who participate in a 401(k) plan, a savings rate of 2 to 8 percent seems like a manageable threshold (especially when an employer "match" is available). This research also suggests that higher income households face a much higher hurdle in order to maintain their living standards in retirement compared with lower income households.

Focusing on attaining a huge dollar amount

by retirement can be overwhelming. Targeting a savings rate that increases with income is much more reasonable. Lee and De Santis provide a useful and much needed starting point.

FIXED INCOME INVESTING: BONDS VERSUS BOND FUNDS

We have received inquiries regarding the question of whether bonds, bond mutual funds (or bond ETFs) are best suited to meet the needs of individual investors. There is a popular notion that bond funds are inherently inferior to holding bonds directly. This claim often rests on the fact that investors can be assured of collecting a bond's par value at maturity. This is a simplistic and extremely narrow view; in particular it ignores the purpose of holding fixed income securities, which is portfolio stability. The optimal means of gaining this stability depends on many factors, especially diversification and costs, where bond funds are superior.

"I'll get it back at maturity"

It is sometimes argued that buying a bond and holding it until maturity provides an investor with the assurance of receiving the bond's principal back at maturity. This claim is often heard during periods when interest rates (and therefore bond prices) are volatile.

But holding a bond until maturity in fact provides no inherent economic benefit. To understand this, it is helpful to review how bonds are priced. Specifically, a bond's price is determined by the following formula:

$$\begin{split} P_{o} &= CF/(1+y)^{1} + CF/(1+y)^{2} + CF/(1+y)^{3} \\ &+ \cdots + CF/(1+y)^{n} + M \ /(1+y)^{n} \end{split}$$

Where:

P_o = Price of the bond CF = Expected coupon interest payments and principal repayment (\$) M = Maturity value (\$) n = Number of periods

y = Yield to maturity

A bond's interest payments are fixed by its stated coupon rate when the bond is issued. From that point onward the bond's price is the only variable that can change to make its yield competitive with yields on newly issued bonds. When interest rates change the price of each bond will change so that comparable bonds with different coupon rates will provide the same yield to maturity.

Rising interest rates translate to lower bond prices. In the present low-interest rate environment, many prognosticators are calling for higher interest rates. In this environment it is tempting to think that there is an inherent advantage in owning an individual bond and holding it until maturity (as opposed to owning a bond mutual fund), because regardless of interest rate gyrations the owner will be assured of receiving the bond's stated par value.

This supposed advantage is an illusion. The bond price mechanism ensures that there is in fact no economic benefit to holding a bond to maturity.

Consider what happens when interest rates rise. A bond holder will find that the price of his bond has fallen to a level necessary to ensure that its yield to maturity has risen to remain competitive with the higher rates available from competing bonds. The bondholder at this point can continue to hold his bond until maturity or he can sell it at a loss and reinvest the proceeds in a bond with the same maturity date but a higher coupon. The total return and present value of the cash flows would be the same in either case. By holding the bond until maturity, the investor would indeed recover his principal, but he would have foregone the higher coupon payments that he could have obtained by selling

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and reinvesting. Aside from avoiding the transaction costs under the sell-and reinvest scenario, holding the bond until maturity provides no inherent benefit.

Bond Fund Advantages

For most investors the greatest advantage of a bond mutual fund or ETF is diversification. A fund typically pools the savings of thousands of investors. This allows investors to participate in a far more broadly diversified pool of securities than they would otherwise be able to obtain on their own. We recommend that investors utilize funds that take a disciplined approach to managing both credit risk and term risk, through an indexing or a variable maturity strategy. These funds' managers make no attempt to predict interest rates or credit risk. Instead they maintain structured exposure to segments of the bond market with measurable risk and return characteristics.

Individuals who choose to hold bonds directly often form a bond ladder within a self-directed bond portfolio. This ensures reasonable diversification across the yield curve by owning a series of bonds scheduled to mature at regular intervals over time. For example an investor could maintain a \$50,000 bond portfolio that includes a series of ten bonds worth \$5,000 each, with one bond scheduled to mature once every six months over the next five years. As bonds mature, the proceeds can be reinvested at the "long end" of the ladder.

In terms of credit risk, however, diversification is far less costly and easier to achieve with a bond fund compared with a self-directed bond portfolio. For example, \$50,000 invested in the Vanguard Short-Term Bond Index fund would provide instant exposure across 1,893 high-quality corporate and government bonds, thereby minimizing the loss resulting from a particular bond defaulting. The same investor with a ten-position bond ladder, on the other hand, could easily see 10 percent of his portfolio's value wiped out in the event of a single default.

Cash flows are another important concern. Fund managers ensure that coupon payments and redemption proceeds are reinvested immediately. This allows investors to systematically purchase a proportionate share of a well-diversified portfolio all in a single transaction. Investors who opt for a self-directed bond portfolio on the other hand must be constantly alert to coupon payments and maturing bonds to ensure that cash flows are reinvested promptly, and they must wait to reinvest until enough cash has accumulated to purchase a round-lot. These idle funds sitting temporarily in cash or a low yielding money market fund can create a "cash drag" that reduces the overall performance of the portfolio.

These cash flows must be managed diligently to ensure optimal performance. Vanguard calculated that between December 31, 1986 and September 30, 2009, the hypothetical compound total return earned on reinvested income on the Barclay's Capital U.S. Aggregate Bond Index accounted for 58 percent of the index's total return. The actual income distributions provided 39 percent of the performance, while only 3 percent was attributable to capital return.¹

Costs

Most individual investors stand to benefit from lower transaction costs realized in bond mutual funds and bond ETFs compared with the transaction costs they would incur through a self-directed bond portfolio. Bond funds are often large enough to generate bond purchases and sales of \$1 million or more; for many investors this exceeds the value of their entire bond portfolio. Economies of scale allow fund managers to obtain higher selling prices, and to pay lower prices when buying. These lower bidask spreads translate to higher returns, especially among corporate, municipal and other non-U.S. Treasury sectors.

These economies of scale are demonstrated in the accompanying chart, which was presented in a 2007 study² that analyzed corporate bond transaction costs. Costs decrease significantly as trade sizes increase, ranging from 0.75 percent for trading \$5,000 to 0.04 percent for trades of \$10 million.

To extend our earlier example, \$50,000 invested in a five-year bond ladder would require purchases of \$5,000 every six months. Based on the cost estimates portrayed in the chart, this would incur transaction costs of 0.75 percent for each trade, or nearly 19 times the 0.04 percent generated within a bond fund.

Management

Bond mutual funds and ETFs charge ongoing management fees to cover fund operating expenses. These fees are expressed in the fund's expense ratio and include portfolio management costs as well as legal, accounting, custody, and recordkeeping services. The average annual expense ratio for taxable bond mutual funds is 1.07 percent, with fund expense ratios ranging from 0.18 percent to 2.1 percent³.

Costs have a greater impact on relative performance in the bond market compared with the equity market. This is because the performance of bond funds, before accounting for fees, is not widely dispersed. Unlike a stock, a large proportion of the total return of a bond is explained by interest rate volatility. Because this single, common factor affects the entire bond market, there is less variation among bond fund returns compared with variation among equity fund returns. Even modestly higher fund expenses in a given bond fund can therefore result in significant underperformance relative to the bond fund market.

Investors with self-directed bond portfolios incur no explicit management expenses, but opportunity costs must be considered. Managing a bond ladder takes time and self-discipline. Trades still must be executed, bond credit quality must be researched, and tax data (such as cost basis) must be recorded. The investor who opts for a self-directed portfolio must also record and calculate any desired performance measures he might want to track. Bond funds on the other hand provide these data routinely.

Doing It Yourself

We began with the premise that receiving a bond's principal back at maturity provides no economic benefit, but there are circumstances when holding a self-directed bond portfolio or even an individual bond can make sense, even for investors with relatively small portfolios.

¹ Scott J. Donaldson, CFA, CFP Taxable bond investing: Bond funds or individual bonds? Vanguard Investment Counseling & Research. P. 5.

² Edwards, Amy K., Lawrence E. Harris, and Michael S. Piwowar. 2007. Corporate bond market transaction costs and transparency. The Journal of Finance 62 (3):1422. ³ Data source Morningstar, Inc. as of May31, 2014. All domestic taxable bond funds (Domestic = more than 95 percent exposure in North America).



This strategy can be justified when circumstances demand that an investor retain control over security-specific portfolio decisions. This is typical when an investor wants to match a bond's maturity date and face redemption value with a known nominal future cash need, or liability. An example might be an investor who is reasonably certain he will need \$20,000 in five years to pay for his child's first year of college. A bond fund might not be the best solution because mutual funds do not have a maturity date; instead they have a net asset value that varies from day-to-day, so their value fluctuates.

U.S. Treasuries can be held directly as an effective means of matching future

liabilities. Our hypothetical investor could almost certainly find a Treasury bond with a face value of \$20,000 that is scheduled to mature when college begins in five years. Treasury spreads are very narrow compared with corporate and municipal bonds, so transaction costs are reasonable. Furthermore diversification is not a crucial concern if the investor is willing to assume that Treasuries indeed provide a "risk free" rate of return.

The price of holding a risk-free asset is that one must accept lower expected returns. Based on current inflation (CPI) projected returns on all Treasuries obligations maturing between zero and five years are negative. Inflation expectations are built into bond prices. Investors concerned about inflation "surprises" might consider TIPS (Treasury Inflation Protected Securities).

This strategy of using a specific bond or bonds to match future cash-flows can therefore be useful when an investor is facing predetermined future liabilities.

88 YEARS OF REAL U.S. STOCK MARKET RETURNS

Last month we published a histogram depicting the distribution of nominal returns for the U.S. stock market since 1926 (measured by the total annual calendar-year returns of the S&P 500 index). These nominal returns do not account for an investor's loss in purchasing power from price inflation.

We have therefore recreated the chart using real returns (nominal returns adjusted for price inflation based on CPI). The randomness of returns is still evident and positive return years are still predominant; however, the number of years with positive returns falls from 64 to 60 and the number of years with negative returns increases from 24 to 28 years. After accounting for price inflation, the magnitude of the market's gains in positive years on average still exceeds the magnitude of losses during negative years: the average (arithmetic) return during positive years was 20.07 percent versus -14.70 percent during negative years.

Over the entire period, on an inflation-adjusted basis, the average (geometric) annual real return was 7.12, versus 10.08 percent in nominal dollars.



Investment Guide

THE HIGH-YIELD DOW INVESTMENT STRATEGY

		Recor	nmended HY[) Portfolio		
As of June 15, 2014					—-Percen	t of Portfolio-—
	Rank	Yield (%)	Price (\$)	Status	Value (%)	No. Shares (%) ¹
AT&T	1	5.25	35.03	Holding**	22.58	25.28
Verizon	2	4.31	49.18	Holding**	23.11	18.43
Pfizer	3	3.52	29.53	Buying	4.40	5.84
Chevron	4	3.36	127.26	Buying	3.03	0.93
General Electric	5	3.25	27.04	Holding	1.50	2.17
McDonald's	7	3.22	100.49	Holding	1.42	0.55
Cisco	8	3.08	24.70	Holding	1.55	2.47
Merck	10	3.02	58.24	Selling	17.71	11.93
Intel Corp	11	3.01	29.87	Selling	24.68	32.40
Cash (6-mo. T-Bill)	N/A	N/A	N/A	0	0.02	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, we are also showing the number of shares of each stock as a percentage of the total number of shares in the entire portfolio.

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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 May 31, 2014*. Returns for the 5-,10- and 20-year periods are annualized, as is the volatility (standard deviation) of returns (January 1979 is the earliest date for which data was available for both the HYD model and relevant benchmark indexes).

	<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>	Volatility (Std. Dev.) <u>since 1979</u>	
HYD Strategy	1.92	16.10	22.01	10.65	12.41	15.65	17.58	
Russell 1000 Value Index	1.46	19.60	18.44	8.00	10.03	12.52	14.78	
S&P 500 Index	2.35	20.45	18.40	7.77	9.54	11.96	15.22	
Dow Jones Industrial Average	1.19	13.27	17.56	7.83	10.24	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 Index 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 0.55% management fee, the annual rate assessed to a \$500,000 account managed through our High Yield Dow investment service.

RECENT MARKET STATISTICS

Precious N	Aetals & C	ommodity	Prices (\$)			Securitie	s Markets		
		6/13/14	Mo. Earlier	Yr. Earlier			6/13/14	Mo. Earlier	Yr. Earlier
Gold, London p.m. fix	king	1,273.00	1,299.00	1,391.25	S & P 500 Stock Compos	site	1,936.16	1,870.85	1,626.73
Silver, London Spot Pi	rice	´ 19.58	19.66	21.69	Dow Jones Industrial Ave	erage	16,775.74	16,446.81	15,070.18
Copper, COMEX Spot	Price	3.03	3.16	3.20	Barclavs US Credit Index	(2.512.29	2,518.47	2,407.88
Crude Oil, W. Texas Ir	nt. Spot	106.90	101.49	97.84	Nasdag Composite		4.310.65	4,069.29	3,423.56
Dow Jones Spot Index	(422.95	432.35	409.90	Financial Times Gold Mi	nes Index	1,474,77	1,468.58	1,696.57
Dow lones-UBS Com	modity Inde	x 134.77	135.79	130.37	FT EMEA (African) Go	d Mines	1,462.22	1,525,16	1,559,28
Reuters-lefferies CRB	Index	310.70	307.78	286.71	FT Asia Pacific Gold N	lines	4,450,17	4.622.02	5.300.85
					FT Americas Gold Min	es	1.300.33	1.271.30	1.522.03
	Interest R	ates (%)					-,	.,	.,
U.S. Treasury bills -	91 dav	0.04	0.03	0.05		Coin Pric	es (\$)		
	182 day	0.07	0.05	0.08		6/13/14	Mo Farlier	Yr Farlier	Prem (%)
	52 week	0.10	0.08	0.12	American Eagle (1.00)	1.300.82	1.335.63	1.425.40	2.19
U.S. Treasury bonds -	10 year	2.60	2.50	2.14	Austrian 100-Corona (0.9803)	1.223.32	1.257.13	1.336.93	-1.97
Corporates:					British Sovereign (0.2354)	305.80	314.00	333.50	2.05
High Quality -	10+ vear	4.26	4.08	4.19	Canadian Maple Leaf (1.00)	1.283.10	1.317.90	1.405.00	0.79
Medium Ouality -	10+ vear	4.79	4.72	5.07	Mexican 50-Peso (1.2057)	1.507.60	1.549.10	1,647,40	-1.78
Federal Reserve Disco	ount Rate	0.75	0.75	0.75	Mexican Ounce (1.00)	1,270,70	1,305.20	1,386,80	-0.18
New York Prime Rate		3.25	3.25	3.25	S. African Krugerrand (1.00)	1,285.18	1,319.97	1,407.38	0.96
Euro Rates	3 month	0.26	0.34	0.21	U.S. Double Eagle-\$20 (0.967)	5)	.,	,	
Government bonds -	 10 vear 	1.41	1.37	1.60	St. Gaudens (MS-60)	1.380.00	1,380.00	1.500.00	12.05
Swiss Rates -	3 month	0.01	0.02	0.02	Liberty (Type I-AU50)	2,225.00	2,225.00	2,225.00	80.66
Government bonds -	- 10 year	0.83	0.76	0.95	Libertý (Type II-AU50)	1,550.00	1,600.00	1,850.00	25.85
	,				Liberty (Type III-AU50)	1,350.00	1,360.00	1,480.00	9.61
	Exchange	Rates (\$)			U.S. Silver Coins (\$1,000 face	value, circ	ulated)	,	
	0				90% Silver Circ. (715 oz.)	14,787.50	15,117.50	16,600.00	5.63
British Pound	1	1.695300	1.679100	1.568600	40% Silver Circ. (292 oz.)	5,552.50	5,637.50	6,250.00	-2.88
Canadian Dollar	().920100	0.918500	0.983000	Silver Dollars Circ.	20,750.00	21,600.00	24,350.00	36.99
Euro	1	1.352200	1.371200	1.333000		-			
Japanese Yen	().009798	0.009860	0.010600	Note: Premium reflects percentage di	fference betv	veen coin price	and value of	metal in a
South African Rand	(0.093370	0.095980	0.100400	coin, with gold at \$1,273.00 per oun	ce and silver	at \$19.58 per c	unce. The weig	ght in troy
Swiss Franc	1	1.110100	1.123800	1.084000	ounces of the precious metal in coins	is indicated	in parentheses.		

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

								La	test Divide	nd	Indica	ted
	Ticker		M	arket Prices	s (\$)	12-Mo	nth (\$)	Amount	Record	Payable	Annual	Yield†
	Symbol		6/13/14	5/15/14	6/14/13	High	Low	(\$)	Date	Date	Dividend (\$) (%)
AT&T	T		35.03	36.52	35.91	36.86	31.74	0.460	4/10/14	5/1/14	1.840	5.25
Verizon	VZ		49.18	47.96	51.07	51.94	45.08	0.530	7/10/14	8/1/14	2.120	4.31
Pfizer	PFE		29.53	29.06	29.09	32.96	27.33	0.260	5/09/14	6/3/14	1.040	3.52
Chevron	CVX		127.26	123.81	120.28	127.83	109.27	1.070	5/19/14	6/10/14	4.280	3.36
General Electric	GE		27.04	26.60	23.52	28.09	22.76	0.220	6/23/14	7/25/14	0.880	3.25
Procter and Gamble	PG		79.64	80.53	78.03	85.82	73.61	0.644	4/25/14	5/15/14	2.574	3.23
McDonald's	MCD		100.49	102.50	98.42	103.78	92.22	0.810	6/02/14	6/16/14	3.240	3.22
Cisco	CSCO		24.70	24.18	24.09	26.49	20.22	0.190	4/03/14	4/23/14	0.760	3.08
Coca-Cola	KO		40.37	40.52	40.34	41.44	36.83	0.305	6/16/14	7/1/14	1.220	3.02
Merck	MRK		58.24	55.89	47.95	59.84	44.62	0.440	6/16/14	7/8/14	1.760	3.02
Intel Corp	INTC		29.87	26.01	24.92	30.06 H	1 21.89	0.225	5/07/14	6/1/14	0.900	3.01
J P Morgan	JPM		57.04	53.51	53.13	61.48	50.06	0.400	7/03/14	7/31/14	1.600	2.81
Johnson & Johnson	JNJ		102.53	100.69	84.91	104.15 H	82.12	0.700	5/27/14	6/10/14	2.800	2.73
Microsoft Corp.	MSFT		41.23	39.60	34.40	41.66	30.84	0.280	8/21/14	9/11/14	1.120	2.72
Exxon Mobil	XOM		102.65	100.78	90.58	103.45	84.79	0.690	5/13/14	6/10/14	2.760	2.69
Dupont	DD		68.30	66.83	52.68	69.75 H	52.02	0.450	5/15/14	6/12/14	1.800	2.64
Caterpillar	CAT	1	106.77	104.99	83.87	109.50 H	80.86	0.700	7/21/14	8/20/14	2.800	2.62
Wal-Mart Stores	WMT		75.28	76.83	74.87	81.37	71.51	0.480	5/09/14	6/2/14	1.920	2.55
IBM	IBM		182.56	186.46	202.20	206.09	172.19	1.100	5/09/14	6/10/14	4.400	2.41
Home Depot, Inc.	HD		78.07	76.24	76.59	83.20	72.21	0.470	6/05/14	6/19/14	1.880	2.41
3M Company	МММ		143.36	140.98	111.03	145.53 H	107.15	0.855	5/23/14	6/12/14	3.420	2.39
Travelers	TRV		95.41	92.37	82.15	95.48 H	1 77.38	0.550	6/10/14	6/30/14	2.200	2.31
Boeing	BA		132.29	131.21	101.83	144.57	96.31	0.730	5/09/14	6/6/14	2.920	2.21
United Tech.	UTX		116.79	115.70	94.02	120.66	90.30	0.590	8/15/14	9/10/14	2.360	2.02
Unitedhealth Group	UNH	1	79.18	76.48	63.80	83.32	63.43	0.375	6/16/14	6/25/14	1.500	1.89
Goldman Sachs	GS		165.89	156.64	162.92	181.13	148.71	0.550	5/30/14	6/27/14	2.200	1.33
Nike	NKE		74.62	72.94	61.89	80.26	59.11	0.240	6/02/14	7/7/14	0.960	1.29
American Express	AXP		94.85	87.60	72.97	95.88 H	1 71.47	0.260	7/11/14	8/8/14	1.040	1.10
Walt Disney	DIS		82.80	80.15	63.80	85.86 H	60.41	0.860	12/16/13	1/16/14	0.860	1.04
Visa Inc.	V		211.29	207.45	180.93	235.50	170.99	0.400	5/16/14	6/3/14	1.600	0.76

* See the Recommended HYD Portfolio table on page 46 for current recommendations. + Based on indicated dividends and market price as of 6/15/14. Extra dividends are not included in annual yields. *H* New 52-week high. *L* New 52-week low. (s) All data adjusted for splits and spin-offs. 12-month data begins 6/16/13. *I* Dividend increased since 5/15/14 Dividend decreased since 5/15/14

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	Security	Avg. Market Cap.	/ No. of	וואה לחמונה	riy ətdusurc Ra	b, do UI 3/31/ Itios	+	12 Mo.		Total	en vernur	(//), dS UI	After Tax*	
Chort/Intermodista Eived Incoma	Symbol	Avg. Maturity	Holdings	Expense ³ (°	6) Sharpe	Turnover (%,) P/B	Yield (%)	1 yr.	3 yr.	5 yr.	1 ут.	3 yr.	5 yr.
Vanguard Short-Term Bond Index	BSV ¹ /VBIS	X 2.8 Yrs.	1893	0.20	1.39	49.6	ł	1.05	1.11	1.45	2.47	0.59	0.86	1.77
iShares Barclays 1-3 Yr. Credit Bond	CSJ ¹	1.99 Yrs.	206	0.20	1.66	8	1	1.10	1.43	1.64	3.08	0.97	1.09	2.35
iShares Barclays 1-3 Yr. Treasury Bond	SHY ¹	1.88 Yrs. 2 8 Vrs	26 7377	0.15	1.18	104	1	0.26 1.65	0.61 1 48	0.51 185	1.03 2.41	0.49	0.36 185	0.74 2.41
SPDR N.B. Short-Term Municipal Bond		3.11 Yrs.	528	0.20	1.24	20	1	0.94	1.29	1.55	2.08	0.88	1.35	1.95
Inflation-Protected Fixed Income iShares Barclays TIPS Bond Vanguard Inflation-Protected Securities	TIP ¹ VIPSX	8.40 Yrs. 8.4 Yrs.	38 38	0.20 0.20	0.62 0.60	47 44	: :	1.13 1.65	0.32 -0.09	3.60 3.54	5.44 5.37	-0.11 -0.80	2.80 2.47	4.48 4.37
International Fixed Income Vanguard Total International Bond Inde	x BNDX'/VTI	BX 8.3 Yrs.	2486	0.23	I	81.2	ł	I	3.57	I	ł	2.93	I	I
Real Estate Vanguard REIT Index SPDR Dow Jones REIT Vanguard Global ex-US Real Estate iShares International Property ETF SPDR Dow Jones Global Real Estate ET	VNQ ¹ /VG ¹ RWR ¹ VNQl ¹ /VG WPS ¹	SIX 8.47 B 10.20 B iXRX ⁵ 5.40 B 6.37 B 8.64 B	104 87 529 334 216	0.24 0.25 0.40 0.48 0.50	0.67 0.64 0.36 0.47 0.59	9 7 9 8.3 8	2.2 2.3 1.1 1.6	3.96 3.12 3.39 4.31 3.59	9.74 10.05 6.52 10.40 10.02	9.96 9.54 7.27 8.12 8.50	22.53 22.38 18.54	8.39 8.46 8.75 8.28	8.88 8.21 5.76 6.70 7.05	21.23 20.86 16.72
U.S. Large Cap Value Vanguard Value Index iShares Russell 1000 Value Index	VTV ¹ /VIV/ IWD ¹	VX 70.52 B 51.51 B	316 670	0.24 0.21	1.10	24.8 16	2.0	2.43 1.99	18.97 19.31	14.31 14.88	17.64 18.21	18.34 18.59	13.79 14.36	17.15 17.73
U.S. Small Cap Value iShares Russell Microcap Index Vanguard Small-Cap Value Index	IWC ¹ VBR ¹ /VISV	0.43 B X 2.73 B	1358 811	0.72 0.27	0.88 0.91	29 47.2	4.2 1.9	1.03 1.84	19.61 21.38	12.73 14.53	19.23 20.88	19.22 20.75	12.36 13.98	18.93 20.35
U.S. Large Cap Growth iShares Russell 1000 Growth Index Vanguard Growth Index	IWF ¹ VUG ¹ / VIG	49.52 B RX 48.90 B	634 370	0.20 0.24	1.12	17 32.3	6.3 4.5	1.35 1.36	21.90 22.37	14.74 15.17	18.81 19.10	21.41 22.03	14.39 14.91	18.50 18.86
U.S. Marketwide Vanguard Total Stock Market Index Fidelity Spartan Total Market Index	VTI ¹ /VTSN FSTMX ²	1X 37.21 B 36.79 B	3698 3305	0.17 0.10	1.11	4.3	2.6 2.3	1.86 1.45	20.39 20.25	14.67 14.71	18.78 18.82	19.86 n/a	14.26 n/а	18.39 n/a
Foreign- Developed Markets iShares MSCI EAFE Growth Index iShares MSCI EAFE Value Index Vanguard FTSE Developed Market SPDR S&P International Small Cap	EFG' EFV' VEA'/VTM GWX'	34.94 B 34.94 B 41.62 B 32.86 B 1.16 B	550 496 1370 2027	0.40 0.40 0.09 0.59	0.49 0.47 0.43 0.42	26 27 213	3.7 1.8 1.2	1.87 3.17 2.94 3.03	15.34 20.07 18.73 17.00	6.58 7.49 7.19 5.55	11.72 10.57 11.30 13.17	14.93 19.30 17.79 15.86	6.32 7.02 6.65 4.90	11.49 10.16 10.87 12.57
Foreign- Emerging Markets Vanguard FTSE Emerging Market Stock	VW01 / VEI	EX 17.66 B	961	0.33	-0.19	26	1.7	2.58	3.88	-2.33	7.80	3.03	-2.84	7.36
Gold-Related Funds iShares Gold Trust SPDR Gold Shares	IAU ¹ GLD ¹	1 1		0.25 0.40	-0.06	0.00	: :	0.00	-10.55 -10.69	-6.86 -7.00	4.73 4.67	-10.55 -10.69	-6.86 -7.00	4.73 4.67
Data provided by the funds and Morn Funds, returns shown are for mutual fun initial investment. *Pre-liquidation. Cal The information herein is derived fro	ingstar. ¹ Excha ds; ETFs' return culated using t m generally r	nge Traded Fund, trade is may deviate. ³ VCXR he highest individual i eliable sources, but o	ed on NYSE. ² 0. X includes a 0.2 ederal income t cannot be guar	5% fee for rec 5% fee on pui ax rates in eff anteed. Ame	lemption in 9 chases and re ect at the time rrican Investr	0 days. ³ For Val sdemptions, wh e of each distrif ment Services,	nguard func nich are paio oution and c the Ameri	Js, expense rati 1 directly into th do not reflect th can Institute fo	os shown are le fund. ⁶ The e impact of § or Economi	e for mutua se are admi state and lo c Research	I funds, ETFe iral shares ar cal taxes or , and the of	s have lower e nd have a \$10, individual tax fficers, emplc	xpenses. ⁴ 1 000 requir situations. yees, or o	or Vanguard ed minimum her persons
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