Yes, You Can Invest Directly in an Index

Building a High-Performance Personalized Portfolio

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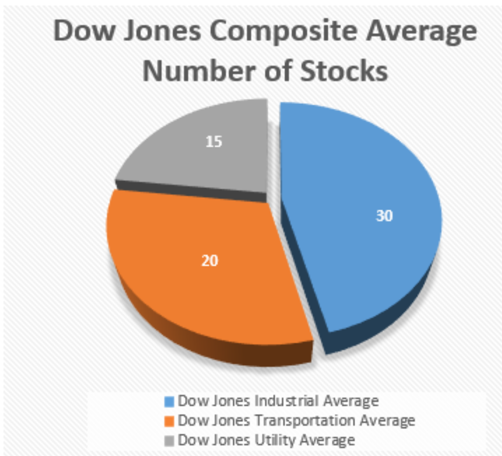
Mutual fund marketing material often makes the spurious claim: "*You cannot invest directly in an index.*" We disagree. You can, in fact, invest directly in an index-based stock portfolio. No mutual fund or ETF needed. This paper begins with a brief history of the Dow Jones Index and its methodology. We review historical index returns. You will learn how to create your own portfolio that precisely replicates the Dow Jones Composite Average™. We then provide seven clear and concise tips on how you might customize a index-based portfolio to seek superior investment returns.

The Dow Jones Composite Average consists of sixty-five component stocks. The Dow Jones Composite includes the thirty component stocks of the Dow Jones Industrial Average™, the twenty stocks of the Dow Jones Transportation Average™, and the fifteen stocks in the Dow Jones Utility Average™.



The Dow Jones Averages are four of the world's oldest most widely recognized stock market indices. The Dow Jones Industrial Average was first published on May 26, 1896. The Dow Jones Composite Average was first calculated on January 2, 1934. The Dow Jones Averages Committee maintains the indices.

> ***"…a stock typically is added to the index only if the company has an excellent reputation, demonstrates sustained growth, and is of interest to a large number of investors."*** -- S&P Dow Jones Index Methodology Factsheet

The original Dow Jones Averages have always been price weighted. This means higher priced stocks have a proportionally larger effect on index performance. In contrast, the popular S&P 500 is capitalization weighted. This means the most valuable companies, as measured by the total market value of their outstanding shares, are more heavily weighted.

The following table shows the 65 component stocks that currently constitute the Dow Jones Composite Average including industry, portfolio weight, stock price and dividend yield. This list of stocks represents an attractive, well diversified strategic portfolio of U.S. based stocks. [Download the source worksheet]().

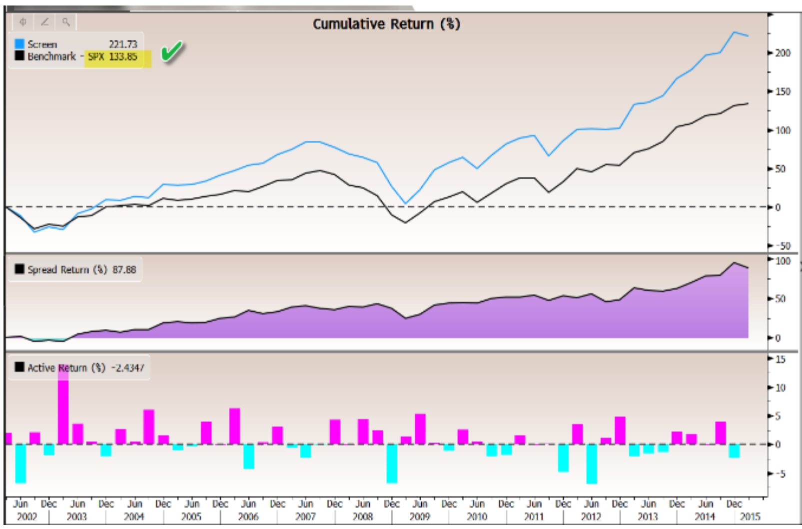
Ticker	Name	Industy	Index Weight (%)	Price	Divident Yield (%)
GS	Goldman Sachs Group	Capital Markets	4.04	199.30	1.31
IBM	International Business Machines	IT Services	3.53	173.97	2.76
FDX	FedEx Corp	Air Freight & Logistics	3.50	172.33	0.60
MMM	3M Co	Industrial Conglomerates	3.23	159.02	2.67
BA	Boeing Co/The	Aerospace & Defense	2.92	144.02	2.57
AAPL	Apple Inc	Technology Hardware	2.61	128.70	1.64
UTX	United Technologies Corp	Aerospace & Defense	2.36	116.45	2.24
UNH	UnitedHealth Group Inc	Health Care Providers & Servic	2.32	114.56	1.49
DIS	Walt Disney Co/The	Media	2.25	111.03	1.10
HD	Home Depot Inc/The	Specialty Retail	2.23	110.06	2.21
CVX	Chevron Corp	Oil, Gas & Consumable Fuels	2.20	108.32	4.05
UNP	Union Pacific Corp	Road & Rail	2.19	107.99	2.17
NSC	Norfolk Southern Corp	Road & Rail	2.11	103.79	2.33
KSU	Kansas City Southern	Road & Rail	2.10	103.47	1.25
NEE	NextEra Energy Inc	Electric Utilities	2.08	102.76	3.12
TRV	Travelers Cos Inc	Insurance	2.07	102.17	2.38
UPS	United Parcel Service Inc	Air Freight & Logistics	2.06	101.43	2.90
NKE	NIKE Inc	Textiles, Apparel & Luxury Goc	2.05	100.83	1.17
JNJ	Johnson & Johnson	Pharmaceuticals	2.04	100.35	2.99
R	Ryder System Inc	Road & Rail	1.97	96.91	1.46
MCD	McDonald's Corp	Hotels, Restaurants & Leisure	1.95	96.13	3.60
XOM	Exxon Mobil Corp	Oil, Gas & Consumable Fuels	1.81	89.11	3.27
JBHT	JB Hunt Transport Services Inc	Road & Rail	1.79	88.29	0.98
CAT	Caterpillar Inc	Machinery	1.77	87.30	3.22
PG	Procter & Gamble Co/The	Household Products	1.63	80.35	3.45
KEX	Kirby Corp	Marine	1.61	79.46	--
WMT	Wal-Mart Stores Inc	Food & Staples Retailing	1.61	79.18	2.54
AXP	American Express Co	Consumer Finance	1.59	78.28	1.50
DUK	Duke Energy Corp	Electric Utilities	1.58	77.96	4.22
DD	EI du Pont de Nemours & Co	Chemicals	1.50	74.03	2.65
D	Dominion Resources Inc/VA	Multi-Utilities	1.46	71.76	3.69
CHRW	CH Robinson Worldwide Inc	Air Freight & Logistics	1.34	66.08	2.43
V	Visa Inc	IT Services	1.33	65.58	0.78
JPM	JPMorgan Chase & Co	Banks	1.31	64.72	2.77
ALK	Alaska Air Group Inc	Airlines	1.31	64.53	1.20
LSTR	Landstar System Inc	Road & Rail	1.30	63.87	0.82
ED	Consolidated Edison Inc	Multi-Utilities	1.26	62.10	4.18
EIX	Edison International	Electric Utilities	1.26	61.92	2.81
UAL	United Continental Holdings Inc	Airlines	1.24	60.92	0.34
MRK	Merck & Co Inc	Pharmaceuticals	1.23	60.64	3.02
AEP	American Electric Power Co Inc	Electric Utilities	1.16	57.36	3.80
CAR	Avis Budget Group Inc	Road & Rail	1.13	55.76	--
AWK	American Water Works Co Inc	Water Utilities	1.11	54.62	2.55
PCG	PG&E Corp	Multi-Utilities	1.09	53.67	3.51
VZ	Verizon Communications Inc	Telecommunication Services	1.02	50.52	4.45
MSFT	Microsoft Corp	Software	0.98	48.24	2.56
EXPD	Expeditors International	Air Freight & Logistics	0.95	47.00	1.56
DAL	Delta Air Lines Inc	Airlines	0.92	45.29	0.99
SO	Southern Co/The	Electric Utilities	0.91	44.98	4.87
NI	NiSource Inc	Multi-Utilities	0.90	44.14	2.54
PEG	Public Service Enterprise	Multi-Utilities	0.87	42.69	3.77
CNW	Con-way Inc	Road & Rail	0.85	42.08	1.48
LUV	Southwest Airlines Co	Airlines	0.85	41.83	0.70
MATX	Matson Inc	Marine	0.84	41.40	1.65
KO	Coca-Cola Co/The	Beverages	0.83	40.96	3.27
FE	FirstEnergy Corp	Electric Utilities	0.74	36.65	3.98
CSX	CSX Corp	Road & Rail	0.74	36.61	1.92
EXC	Exelon Corp	Electric Utilities	0.71	34.81	3.65
PFE	Pfizer Inc	Pharmaceuticals	0.70	34.32	3.36
INTC	Intel Corp	Semiconductors	0.68	33.43	2.94
CSCO	Cisco Systems Inc	Communications Equipment	0.59	29.17	2.80
GE	General Electric Co	Industrial Conglomerates	0.55	27.27	3.42
JBLU	JetBlue Airways Corp	Airlines	0.44	21.58	--
CNP	CenterPoint Energy Inc	Multi-Utilities	0.43	21.11	4.84
AES	AES Corp/VA	Independent Power Producers	0.28	13.64	3.11

Looking at the Bloomberg Professional generated graphic shown below, we see the 20-year historical performance of the Dow Jones Composite Average compares favorably with the S&P 500 Index and the Dow Jones Industrial Average.

Precisely replicating the price-weighted Dow Jones Composite Average is simple. Buy an equal number of shares of each stock in the index. Going forward, you will need to maintain an equal number of shares of each stock in your portfolio. This is more complex. Future corporate actions (i.e. spinoffs and spits) and additions and deletions to the index mean that occasional rebalancing will be needed. This will ensure your portfolio continues to track the index. Rebalancing a price-weighted portfolio can be difficult and expensive. The good news is you might earn a better return using a simpler, less costly weighting and rebalancing strategy.

Two key features of index investing are low turnover and diversification. A stock added to an index usually remains in the index for many years. Low turnover reduces transaction costs including taxes, commissions, bid ask spreads and trade impact. Diversification inherent in an index reduces company specific, “non-systematic risk”. Most indexes hold a variety of stocks from different sectors and industry groups reducing non-systematic risk. Still, the stock market fluctuates so systematic risk remains, even if you were to invest in all the stocks that constitute “the market”. Looking at the comparative return charts shown in the image above, you can see that the sixty-five stock Dow Jones Composite Average tracks very closely the five hundred stock S&P 500 Index. This suggests a 65 stock portfolio provides diversification enough to adequately reduce non-systematic risk. A lengthy portfolio of five hundred or more stocks is unnecessary.

The performance of an equal weighted portfolio of the 65 Dow Jones Composite component stocks rebalanced quarterly is shown in the graphic below. From 3/31/2002 thru 3/31/2015, the simulated equal weighted portfolio generated an 11.80% average annualized return. This hypothetical portfolio substantially outperformed the S&P 500 and the Dow Jones Composite Average. In the lower panel is a histogram showing the monthly active return on our equal weight Dow Composite portfolio relative to the S&P 500. The panel to the right shows the total return on the backtest portfolio was 221.73%. This compares to a total return on the S&P 500 of 133.85% over the same period.



Return Statistics	
Total Return	221.73
Mean Return (%)	11.80
Mean Active Return (%)	2.64
Minimum Return (%)	-8.00
Maximum Return (%)	10.98
Risk Statistics	
Standard Deviation	17.62
Semi variance	15.80
Tracking Error (%)	5.79
Skewness	0.04
Risk/Return Statistics	
Sharpe Ratio	0.42
Jensen Alpha	2.05
Information Ratio	0.36
Beta	0.99
Correlation	0.96

This backtest leads us to our first and favorite tip regarding how to customize your index-based portfolio to improve returns.

Tip # 1

We recommend you equal weight, not fully replicate, your Dow Jones Composite portfolio. Creating an equal weighted portfolio requires simply investing an equal dollar amount in each stock. An equal weighted portfolio is unaffected by stock splits thereby reducing turnover relative to a price weighted index. There is no economic reason to price weight a stock index. Rather, price weighting is a throwback to a bygone era before computers. Journalist Charles Dow was the creator of the Dow Jones Industrial Average. He first calculated the index in 1896 using paper and pen. To this day the index remains price weighted though computers can now easily calculate the geometric linking of multiple assett daily returns necessary for maintaining an equal weight index.

Charles Dow

Tip # 2

Don't sell your spinoffs. A spinoff is a divestiture of parent company assets that involves the creation of an independent public company. A distribution of shares in the new company is made by the parent company. Spinoffs often turn out to be excellent investments as shown in the graphic to the right published in a recent issue of Barron's. Consider for example, Pfizer, a component of the Dow Composite that spun off shares of Zoetis in June 2013. Zoetis stock has thus far substantially outperformed Pfizer. Other top performing Dow Component spinoffs in recent years include McDonald's spinoff Chipotle (up 1250%), and Merck's spinoff of Medco Health (up 550%). GE is set to spinoff shares in Synchrony Financial in the near future. Spin-off companies are generally immediately deleted from the Dow Jones Composite Index but you can and should keep your shares.

Spinning Money

During this six year bull market spun-off companies are outperforming the market significantly.

		Total Returns		
	1Q2015	1-Year	3-Year	5-year
Bloomberg Spin Index	6.8%	16.5%	113.8%	182.5
Guggenheim Spin-Off ETF	6.1	4.5	82.6	134.7
S&P 500 Index	1.0	11.9	56.5	95.0

Source: Bloomberg, Spin-Off Research

Tip # 3

There is no hurry to sell when the Averages Committee deletes a stock from the index or to buy a new stock when it is added. In fact, there is academic research suggesting portfolios of deleted stocks actually outperform portfolios of newly added stocks. In the article *Misfit Stocks*, Hussman Funds provides the following table below analyzing the relative performance of eleven Dow additions and deletions.

Dow Jones Industrial Average
Effective Date through 3/15/05
Annualized Returns in Percent

	Median Returns		Average Returns		Number Replaced
	Additions	Deletions	Additions	Deletions	
Full Period	-3.97	3.72	-2.56	2.75	11

For more information see the research paper *Do Stocks Added to the Dow Outperform the Stocks They Replace?*

Tip # 4

Do not liquidate your portfolio even if you feel all but certain that the market is set to crash. Profitably timing the stock market is very hard to do in the long-run. If you are overcome by the urge to "Sell Everything!" consider instead buying a protective put option on a market index.

Purchasing protective puts make it easier to quantify the cost and profit or loss of your market timing endeavors. Liquidating your entire portfolio to gamble on an imminent market decline is an expensive, horribly undisciplined move. Doing so completely violates the principles of low turnover and diversification.

Tip # 5

Don't be afraid to second guess the Averages Committee by replacing one or more of their stock picks with your own pick. But stay diversified and don't trade too much. Be smart. Don't sell your Johnson & Johnson shares and use the proceeds to purchase a $2.00 a share speculative biotech stock that your barber tells you is a "sure thing". Focus instead on the many terrific blue chip stocks like Google and Berkshire Hathaway never been added to the Dow Jones Averages. The likely reason Google and Berkshire are not in the index is the inordinate effect of an unusually high share price on the index resulting from price weighted methodology. By the way, Apple stock was only recently added to the index. Note this followed a 7-for-1 stock split and a multi-year period of excellent relative performance. Unfortunately the index was a day late and a dollar short.

Tip # 6

To improve your returns consider utilizing a modest amount of leverage in the form of low cost margin borrowing. Don't overdo it though. Control risk by limiting your loan amount to 10% of your account market value or less. Holding cash is a big reason actively managed mutual funds underperform indices in the longer-term. A little margin can give you a big leg up long-term. Keep in mind margin loan rates vary dramatically from broker to broker. Do not borrow unless you do so at a competitive low interest rate. For example, at the time of this writing a $40,000 margin loan E*Trade costs 7.94%, at Interactive Brokers your cost is 1.63%. Do the math, would you really want to donate $2,400 or more per year to E*Trade?

Tip # 7

Keep your transaction costs as low as possible. Find the lowest cost discount broker for your trade size. We often recommend Interactive Brokers to our clients. At Interactive Brokers, the commission to purchase a $100,000 portfolio consisting of sixty-five stocks would total approximately $35. Limit your turnover. Rebalance only when it makes sense from a tax or diversification standpoint. Recognize that is no real need to precisely rebalance your portfolio to equal weight at regular intervals. Don't rebalance simply for the sake of rebalancing. Low turnover matters.

Conclusion

Investors should embrace low-cost, prudently-selected, low-turnover stock portfolios. An index mutual fund or ETF can fit the bill in many cases. However index funds are not for everyone. And while index funds are inexpensive relative to traditional mutual funds, they are not free of cost. A recently created an ETF tracking the Dow Jones Transportation Average carries annual expense ratio of .45%. No ETF currently tracks the Dow Jones Composite Average. What's more, an index ETF or mutual fund may be required by prospectus to mirror the holdings of a given stock index at all times without exception. We have shown why that may not be optimal. For these reasons, we believe that a customized portfolio of individual stocks based on the Dow Jones Composite can be a rewarding alternative to ETFs or mutual funds for savvy, disciplined investors and their advisors.