

ETF (Symbol: DIA)

Game Theory: Bitcoin, Gold, Dow Theory, DeFi, Simon Sinek & Benjamin Graham
Analysis of the Dow 30

July 26, 2021

Industry: Diversified
Tracking ETF: SPDR Dow Jones Industrial ETF (DIA)

Index Overview: The Dow Jones Industrial Average is a 30-stock, price-weighted index that measures the performance of some of the largest U.S. companies. The index provides suitable sector representation with the exception of the transportation industry group and utilities sector which are covered by the Dow Jones Transportation Average and the Dow Jones Utility Average respectively. When Charles H. Dow first unveiled his industrial stock average on May 26, 1896, the stock market was not highly regarded. Prudent investors bought bonds, which paid predictable amounts of interest and were backed by real machinery, factory buildings and other hard assets. Today, stocks are widely accepted as investment vehicles, even by conservative investors. The 30 stocks now in the Dow Jones Industrial Average are all major factors in their industries, and their stocks are widely held by individuals and institutional investors. Besides longevity, two other factors play a role in its widespread popularity: It is understandable to most people, and it reliably indicates the market's basic trend.
Sources: DJAverages.com and spindices.com

Analyst Notes:
Analysis by Allen Gillespie, CFA (864) 288-2849

Are Stocks Too High to Buy?
Game Theory: Bitcoin, Gold, Dow Theory, Defi, Simon Sinek & Benjamin Graham
Analysis of the Dow Jones Industrial Average

Nominal v. Real Prices
Investors should invest to increase or maintain the real purchasing power of their savings.
In this effort, investors have traditionally used both technical and fundamental analysis tools like Dow Theory or a Benjamin Graham analysis of security values. Unfortunately, the oversized monetary printing presses and changing nature of the economy have turned many of these tools to rubbish. **Our work, however, shows that these tools regain their value when one adjusts security values from nominal prices into real price equivalents and adjusts from controlled interest rates into free market equivalents.**

The modern analyst faces difficulty estimating values due to the unprecedented degree of monetary deformation wrought by central banks and central planners. Central bank policies target nominal prices, prevent distressed selling, and created a monetary hall of mirrors for asset prices. Nominal prices have separated from fundamental values by what I term the **“asset price inflation monetary gap.”**

Global central banks and treasury departments actively lend at subsidized rates, and they buy both fixed income and equity securities with newly printed money on a near daily basis. As a result, the Bank of Japan and the Swiss Central Bank now rank among the Top 10 holders of a broad range of equity securities. For example, in its last 13-F filing the Swiss National Bank

Fintrust Recommendation

Fintrust Rating:	HOLD
Target Price:	\$367.11
Current Share Price	\$351.41
Expected Return	4.46%
52 Week Price Range	\$259.94-351.45

Fintrust Brokerage Services, LLC rates companies a BUY, HOLD, SELL, or SHORT.

- A BUY rating is given when the security is expected to outperform the broad equity market as measured by the S&P 500 on a risk adjusted basis over the next year.
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The distribution of ratings across Fintrust's entire company universe is 57.1% Buy, 35.7% Hold, 7.1% Sell, and 0% Short

Key Figures (Dow 30 @ 7/26/2021)

Key figures pricing data reflects previous trading day's closing price. Other applicable data are trailing 12-months unless otherwise specified.

R.O.A.E	20.8%
Earn \$	\$1375.25
Divs \$	\$604.25
Book Value \$	\$6688.86

P/E (Actual)	25.49x
Earns Yield %	3.92%
Divs Yield %	1.72%
P/B	5.24x

Please see pages 9 and 10 of this publication for important certification and disclosure information

Analyst's Notes....Continued

reported holding 65,603,396 shares of Apple, 27,893,417 shares of Microsoft, 11,038,366 shares of Johnson & Johnson, 10,559,848 shares of Proctor & Gamble, 7,225,294 shares of Visa, 10,559,848 shares of Proctor & Gamble, 3,792,538 shares of United Health Care, along with holdings in many other Dow Jones Index member securities. In the United States, Blackrock buys fixed income ETFs on behalf of the US Treasury with money supplied by the Fed through special purpose entities.

Continuous and indiscriminate central bank asset purchases distort financial markets because central banks are infinite players, whereas, individual investors have finite lives. Simon Sinek's addresses the **Game Theory** quagmire that results when infinite players play against finite players in this Google talk:

"The Finite and Infinite Games of Leadership|Simon Sinek|Talks at Google"

<https://www.youtube.com/watch?v= osKgFwKoDQ>

Interestingly, however, with the development of cryptocurrencies, Defi, and tokeneconomics, the free market may have reversed the role and turned Central Banks into finite players.

Historically, nominal to real price adjustments were straightforward. Consumer price goods baskets were relatively uniform, and other stores of value like gold and commodities had direct links to the industrial economy. Equity values were reflected in the share prices of the companies in the Dow Jones Industrial and Dow Jones Transportation Averages. The transition from an Industrial Economy to a Digital and Information Economy, however, created a gap that made real price measurement adjustments difficult. Software businesses like Microsoft simply do not need the same amounts of tangible property, plant, and equipment as industrial companies like Caterpillar in order to drive business value. Fortunately, the universe created cryptocurrencies, and thereby provided the modern analyst additional tools for measuring real values. **I believe real price estimates can now be obtained from nominal prices by conversions into gold for tangible assets and conversions into bitcoin for the goodwill, patents, trademark, network values, and other intangible assets associated with technology and service businesses.**

Under my Bitcoin, Gold, Dow Theory Framework, first published in 2017, I postulate that the value of one gold coin, plus one bitcoin, will approximate the value of one Dow share over time. This has largely proven correct to this point in time. In this framework, tangible book values and centrally directed interest rates are easily measured and change infrequently. Meanwhile intangible values like patents, trademarks, network effects, and inflationary values of more difficult to accurately price. **Logically this suggests that the volatility of gold should be lower than the volatility of equities, the volatility of cryptocurrencies would be higher than equities, and the volatility of equities would reflect a blended volatility based on the ratio of tangible to intangible values of the businesses.** A fourth factor in all asset values would be the asset price inflation monetary gap. Finally, the analyst must make a determination as to the appropriate discount rates to use.

Since my last report, interestingly, the market has also developed a new free market interest rate mechanism for the technology economy in DeFi and Staking rates.

Does this type of analysis work?

I will let the reader decide for his or herself, but I would point out that my analysis has correctly identified two technical points of resistance for the Dow Jones Industrial index, one technical point of support for the stock Index, and correctly identified the most undervalued asset classes consistently over the last 5 years. I began this real time experiment and have posted all reports on Bloomberg. I am updating this year's analysis because equity markets are again pushing against the upper ranges of my price range estimates. Here are my words from the 2019 report, a performance table to my 2020 report, and my recommendations chart with both our high and low recommendations charted since 2015.

Analyst's Notes....Continued

What I Wrote in December 2019

“Much like last year’s analysis, the current low levels of dividend and earnings yields and interest rates suggest a fair degree of caution....Based on an earnings retention rate of 54.08% and a return on average equity of 21.3% the implied expected book value growth for 2020 would be a solid 11.52%, which when added to an initial 2.22% dividend yield would led to **an expected 13.74% total return under average conditions.** While impressive and consistent with historical ranges, I continue to point out that this may represent near peak conditions.”

I continued with the following:

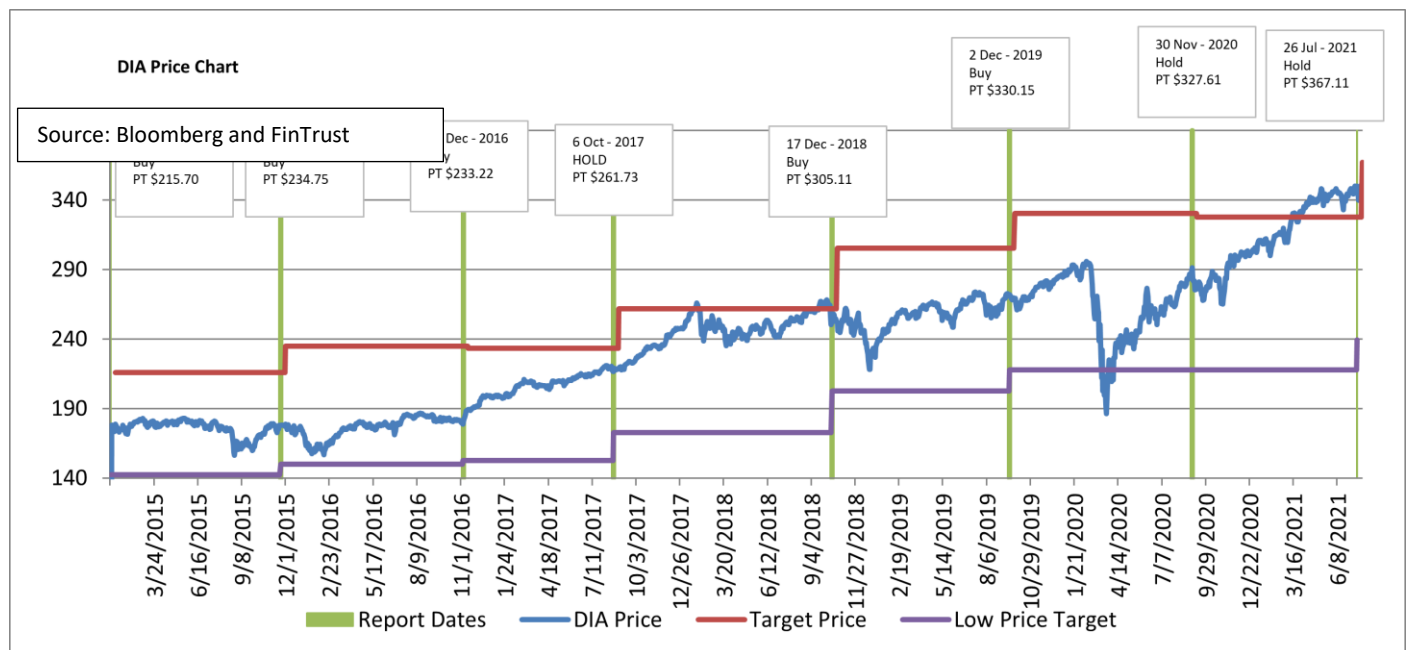
“I am less confident in the analysis now, however, given the suppressed nature of global interest rates, as both equities and bonds may be mispriced...Prices close to **21,760 would be low in relation to past multiples...**”

Furthermore, I continued and introduced the reader to my Bitcoin Gold Dow Theory.

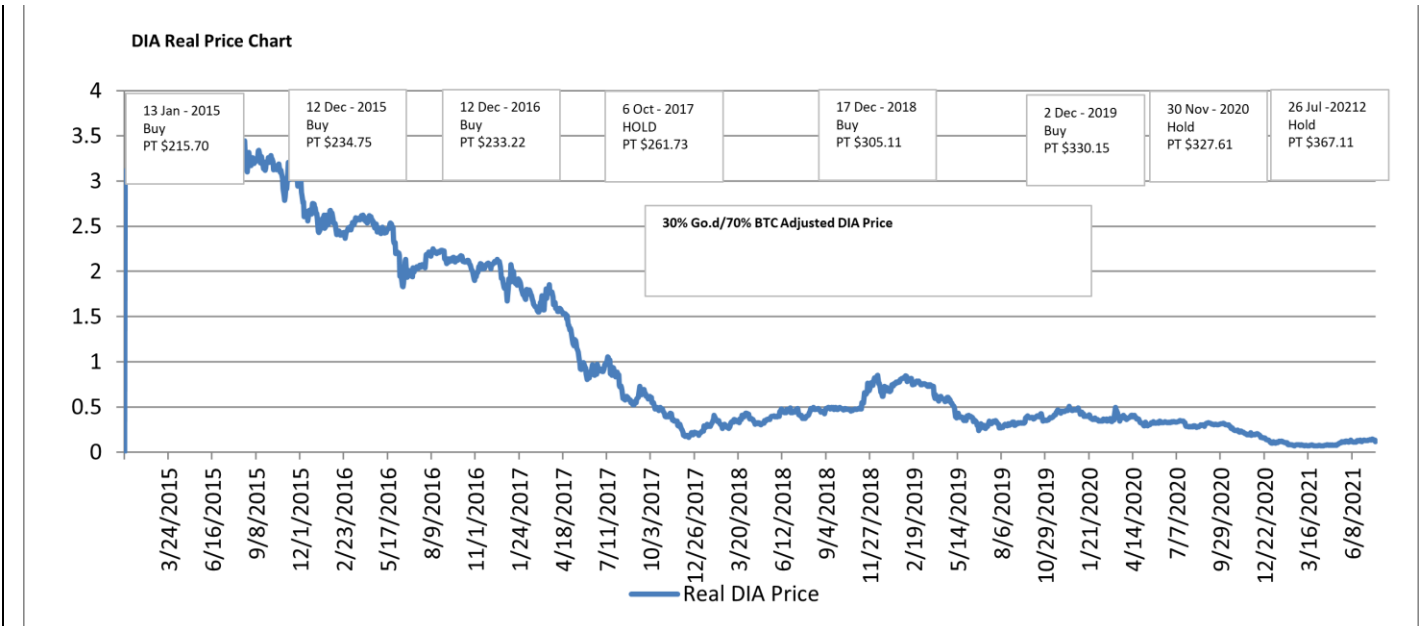
Under the headline Nominal v. Real Prices, I provided the following:

“I think the value of one gold coin plus one bitcoin will approximate the value of one Dow share over time. This implies a bitcoin target price of \$21,532 and a gold price of \$6,512.”

Asset	12/2/2019	11/27/2020	Change
Gold (GLD etf)	\$137.79	\$167.63	+21.7%
Bitcoin (BTC)	\$7,319.36	\$16,790	+129.4%
Dow Jones Average ETF (DIA)	\$278.2	\$299.14	+7.5%



Analyst's Notes....Continued

**Mid - 2021 Analyst Highlights**

- **Our current analysis suggests levels below 30,322 on the Dow Jones Average would be considered below average, while a level closer to 23,933 would represent low prices, while an index level of 36,711 would be considered rich** in relation to past sales, earnings, book value, dividends and forward analyst estimates. Given the current risk to reward ratio, FinTrust is maintaining its rating recommendation to HOLD for the Dow Jones Industrial Average exchange traded fund (ETF symbol: DIA), as the market is currently 15.6% above the midpoint of our 2021 estimated price range and the risk-reward ratio is poor.
- **I am decreasing my recommended equities asset allocation**, as the data suggest an allocation for defensive investors of 40/60 currently. Equities are currently 15.6% above the midpoint of our estimated valuation range, while gold still appears undervalued relative to equities. **Should equities continue to trade higher from here toward the top of our estimated price range, I would recommend investors proportionately decrease their equity allocations. Conversely, should equities trade lower from here, I believe investors should proportionately increase their equity allocations.**
- Today, the tangible book value of the Dow sits at \$6,688, so I am maintaining my **gold price target of \$6,688.**
- Today's Dow Price of \$35,144 less our gold price target yields an **implied bitcoin target price of \$28,372.**
- As in our previous reports, the data suggests that for the "defensive investor" reasonable allocations, toward the common stocks of the Dow Jones Industrial Average levels appear appropriate and reasonable. For fixed income investors, I continue to recommend inflation protected, tax-free, floating rate and high-quality bonds, while for aggressive investors I recommend gold equities, gold, and cryptocurrency in place of short-term fixed income and money market holdings.

Risks to the Recommendation:

- Risks include, but are not limited to, (1) Unanticipated changes in inflation, interest rates and industrial production (2) credit risk (3) regulatory, governmental, and tax law changes (4) product and business risks (5) the mere fact the future is uncertain (6) political risks (7) and all other risks normally associated with investments in common equities.

Analyst's Notes....Continued**2021 Mid-Year Benjamin Graham Analysis of the Dow Jones Industrial Average**

In his investment classic, *The Intelligent Investor*, the father of security analysis Benjamin Graham endeavored to answer the following question:

“Is the stock market too high for conservative purchase?”

He recommends methods by which a defensive investor might determine the appropriate portfolio level asset allocation and simple methods by which to value securities in order to develop long term return expectations. He defined a defensive investor as one that is “interested chiefly in safety plus freedom from bother.”

He also defined an “investor” and a “speculator” with his famous statement that “an investment operation is one which, upon thorough analysis promises safety of principal and an adequate return. Operations not meeting these requirements are speculative.” He argued for a 50/50 split of funds between stocks and bonds for defensive investors, unless the weight of the evidence suggested a tilt toward a 75/25 or 25/75 mix.

In this analysis, I seek to logically implement his recommendations by analyzing the Dow 30 by using data from *Value Line*, *Market Smith*, *Bloomberg*, and *Barron's*.

What Has Happened Since December 2019?

We published our last report on December 2, 2019 while the Dow Jones Industrial Index was rising toward its pre-Covid peak. The index reached its peak on Feb 12, 2020 and then experienced a waterfall decline to \$18,213 slightly below our low-price estimate for 2020. The index has since stage a strong recovery to today's \$35,061 level on the back of fiscal and monetary stimulus.

Since last year, earnings for the Dow Jones Industrial Index stocks have declined from their peak, however, the yield curve has regained a positive slope which points toward improved economic conditions and earnings have recovered. As in 2019, **the recovery in equities has been greater than the rise in earnings due the asset price inflation monetary gap through the Federal Reserve's systematic destruction of bond markets.** Since the time of our last report, the yield on the DJ Equal Weight US Corp Bond Index has risen 2.02% to 2.15% despite a weakened earnings coverage ratio. Meanwhile, the yield on high quality tax-free bonds as measured by the Bond Buyer 20 Bond Index has fallen from 2.19% to 2.03% despite a decline in municipal tax revenues and budget deficits.

What Policy Now? – A Top-Down Look

“Much like last year's analysis, the current low levels of dividend and earnings yields and interest rates suggest a fair degree of caution. For the 52 weeks ending July 23, 2021 Barron's reports the 12-month trailing earnings for the Dow 30 components at \$1,375.25 v. \$1,179.1 for the prior year and paid dividends of \$604.25 while equity book rose to \$6,688.86 from \$6,512.92. Based on an earnings retention rate of 56% and a return on average equity of 20.8%, the implied expected book value growth for the next year would be a solid 11.7%, which when added to an initial 1.72% dividend yield would lead to **an expected 13.4% total return under average conditions.** While impressive and consistent with historical ranges, **I continue to point out that earnings have yet to turn significantly upward, interest rates are severely depressed, corporate and government deficits are higher, and currency values are in flux.**

In expanding this analysis to the broader S&P 500 index, using data for book value, return on equity, dividends and earnings returns, one finds that earnings rose to \$128.2 from \$116.3. The S&P 500 companies dividends have begun to rise again on a year over year basis as of June increasing from \$59.6 v. the prior year's \$57.6. Average equity for the S&P 500 was \$927 for the trailing 12 months, which when combined with the 53.5% earnings retention rate yields an expectation for book value growth of 7.45%. **This 7.45% growth when added to the initial 1.36% yield leads to a total return expectation of 8.81% for the next twelve months.**

Analyst's Notes....Continued

Given that our interest is in determining portfolio policy for the defensive investor, I have previously suggested a few modifications to Mr. Graham's methods. First, I have suggested deflating current profits by 1/3 for a normalization of interest rates in order to stress test the analysis. Previously, estimating the degree of interest rate distortion was a guessing game, but the developments in Defi and cryptocurrency staking markets have added clarity to the task.

These free-market staking rates can be viewed here.

<https://www.gemini.com/earn>

The marketcap of cryptocurrencies as of July 6, 2021 stands at \$1.4 Trillion according to Coinmarketcap.com and Bitcoin has the largest market capitalization at \$634 billion. Given the limited supply features of Bitcoin, Bitcoin inherently provides fiat currency inflation protection, thus the BTC staking rate may be considered a real rate of interest. As BTC is considered good collateral on cryptocurrency exchanges, it may be considered a short-term rate of interest. **Thus, the BTC staking yield of 2.05% suggests central banks are underpricing interest rates by nearly 2.0%.**

Finally, I also suggest adjusting the return expectations by the one-year probability of a down year in stocks (35.65% for the 115 years from 1901-2016).

What portfolio policy then for the "defensive" investor?

It must be evident to the reader that I continue to find the stocks of the Dow Jones Industrial Average at today's prices look better on average than taxable bond given the spread between the expected total return on equities (13.4% and 8.81% for the Dow and S&P) versus the (2.19%) yield on taxable bonds. **I am more confident in the analysis now than last year given that earnings have declined to recessionary lows, but I remain concerned in my analysis given the suppressed nature of global interest rates, as both equities and bonds may be mispriced.** Despite trading near the midpoint of my estimated range, the case for equities at today's prices is still not so compelling when compared to high quality bonds and alternatives, as to lead a defensive investor to completely abandon balanced asset allocations in the search of a little more growth and income.

Portfolio Policy – A Bottom's Up Look

In discussing common stock selection for the defensive investor, Graham suggests the following:

1. Adequate though not excessive diversification, meaning a minimum of ten to a maximum of about 30 stocks.
2. Limit selections to large prominent and conservatively financed corporations.
3. Each company should have a long record of continuous dividends.
4. An investor should place a limit on the price he will pay in relation to average earnings over say the past 7 years.

Later, in *The Intelligent Investor*, Graham figures that estimates for a group of equities are likely to be a good deal more dependable than those for individual companies and he uses data from *Value Line* to illustrate his point. The outcome of this effort, in 1965, found that while earnings estimates proved to be high, and many wrong, the use of low multipliers on earnings led reasonable results for a portfolio of equities over the following five years.

In an effort to produce an analysis similar to Prof. Graham, I once again took the Dow 30 Components, a diverse set of 30 prominent and conservatively financed corporations. I then calculated the average ratios of price to sales, price to earnings, dividend yields, and price to book value for at least the previous 12 years (2007-2020), if available, in order to capture the period both before and after the Covid recession, and possibly the prior recession as well. Then using both the annual high and annual low for the stock price, I calculated the corresponding price to sales, price to book, price to earnings and dividend yields and averaged these for each security across various trailing time periods. I further applied these average ratios to the forward estimates for each respective variable from *Value Line* and *MarketSmith* and FinTrust estimates to develop price range estimates for each of Dow Components.

Analyst's Notes.....Continued**What portfolio policy then for the “defensive” investor?**

As Mr. Graham cautions, the valuations reached by the method above are unlikely to prove sufficiently dependable, particularly on an individual company level, so an investor must endeavor to pay a low-prices in relation to average earnings. This suggests prices below 30,322 on the Dow Jones Industrial Average would appear reasonable, while prices above 36,711 would appear to be too high for the defensive investor. **Prices close to 23,933 would be low in relation to past multiples.**

Recommendation:

My analysis suggests levels below 30,322 on the Dow Jones Industrial Average would be below the 10-year average, and levels closer to 23,933 would represent low prices relative to the average results, while an index level of 36,711 would be considered rich in relation to past sales, earnings, book value, dividends, and forward analyst estimates. The data suggest that for the “defensive investor” reasonable allocations toward common stocks at today’s levels appear appropriate and reasonable. **Given the components of the Dow 30 collectively appear to trade at slightly above average levels (35,144 v. 30,322 or 115.63% of average), portfolio policy for the “defensive investor” should lean toward lower than average equity allocations (so if one normally splits funds in a 50/50 ratio, the analysis suggests a 40/60 ratio).**

Risks to the Recommendation:

With the benefit of hindsight, Mr. Graham recognized in later editions that he underestimated the risks associated with bonds in 1965, as future inflation proved quite devastating to bond portfolios in the 1970s. Interestingly, today’s data points certainly still look similar to those of Mr. Graham’s 1965 edition. No one, in 1965, anticipated the high inflation rate of the 1970s and the impact it was to have on both the earnings of corporations and bond portfolios. **I believe that the next large inflation could be digital in nature, as millennial investors may prefer uploading excess money to non-fiat currencies in the cloud with their phones verse the complications associated with investing in gold, real estate, and other fixed or tangible assets.** In addition to unanticipated inflation, other risks to the recommendation include, but are not limit to, regulatory, governmental, and tax law changes, political risks, the mere fact the future is uncertain, and all other risks normally associated with investments in common equities.

Source: *Value Line*, *MarketSmith*, and FinTrust estimates

The table below contains the range estimates for the individual securities in the Dow Jones Industrial Index.

Stock	Symbol	AveLowEst	AveHighEst	Last_Price 7/26/2021
Apple Inc.	AAPL	67.88	119.28	148.99
Amgen Inc.	AMGN	202.33	288.24	245.08
American Express	AXP	100.86	193.38	172.61
The Boeing Company	BA	125.25	211.07	225.85
Caterpillar Inc.	CAT	118.22	211.81	211.03
Salesforce.com	CRM	181.79	333.44	247.60
Cisco Systems Inc.	CSCO	37.662	53.16	55.47
Chevron Corporation	CVX	85.23	122.04	100.95
The Walt Disney Company	DIS	82.95	127.29	178.74
Dow Inc.	DOW	434.06	84.26	62.01
The Goldman Sachs Group, Inc.	GS	301.31	478.80	375.90
The Home Depot, Inc.	HD	209.85	326.90	331.18
Honeywell International Inc.	HON	133.69	195	229.25
International Business Machines	IBM	153.25	221.27	142.77
Intel Corporation	INTC	47.36	72.33	54.31
Johnson & Johnson	JNJ	141.35	184.68	171.87
JPMorgan Chase & Co.	JPM	105.77	179.88	151.65
The Coca-Cola Company	KO	44.19	60.21	57.06
McDonald's Corp.	MCD	148.06	216.28	243.98
3M Company	MMM	159.04	227.82	201.67
Merk & Co. Inc.	MRK	61.36	93.02	77.24
Microsoft Corporation	MSFT	140.46	184.13	289.05
Nike Inc.	NKE	78.03	123.09	165.09
The Proctor & Gamble Company	PG	101.26	127.21	140.28
The Travelers Companies, Inc.	TRV	124.62	183.65	148.82
United Health Group Incorporated	UNH	281.19	439.65	413.54
Visa Inc.	V	155.23	299.21	250.25
Verizon Communications Inc.	VZ	48.18	67.47	55.78
Walgreens Boots Alliance Inc.	WBA	61.96	94.56	47.25
Wal-Mart Stores Inc.	WMT	93.82	126.8	142.63
Total		3635.17	5575.93	5337.90
DowDivisor		.151885169	.151885169	.151885169
Index Est.		23933.67	36711.48	35144.31

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