

CBOT[®] Dow Complex Reference Guide

DJIASM Futures

DJIASM Options

mini-sized DowSM Futures

mini-sized DowSM Options

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1. Introduction

The Chicago Board of Trade complex of futures and options based on the Dow Jones Industrial Average allow active traders to choose how, where, and when they express their market opinions.

In times of economic uncertainty and volatile markets, active traders can gain flexibility from being able to trade CBOT mini-sized Dow futures (with a \$5 multiplier), CBOT DJIA futures (with a \$10 multiplier), or the respective options on each of these products. In addition, these contracts give market users a choice of open auction or electronic trading platforms. And the CBOT electronic trading platform allows traders to respond to political and economic shifts almost around the clock.

2. Key Benefits

Electronic Access—from Virtually Anywhere, Any Time

The CBOT electronic trading platform provides traders direct access—from order entry to trade confirmation. You can gain direct access through your futures broker or an order entry software vendor.

CBOT mini-sized Dow futures and options are fully electronic and trade almost around the clock. While CBOT DJIA futures and options trade on the open auction platform during regular trading hours, they too trade electronically overnight.

The CBOT's Electronic Trading Platform e-cbot[®] powered by LIFFE CONNECT[®]

As the world's premier exchange for futures trading, the Chicago Board of Trade has entered into a licensing agreement to use the LIFFE CONNECT electronic trading platform.

Functionally, the platform provides enhanced trading capabilities, better reporting, flexible matching algorithms, and the ability to accommodate anticipated future trading needs. The wide range of competitive advantages are crucial for the CBOT to deliver on our promise of providing the highest levels of integrity, liquidity, and flexibility to the global electronic trading community.

e-cbot powered by LIFFE CONNECT offers competitive advantages to help trading be more effective and profitable by:

- Greater trading flexibility
- Enhanced reporting and historical information
- For many, LIFFE CONNECT is a familiar platform
- Front end compatibility
- Functionality: The new CBOT trading platform recognizes 7 futures and 32 option spread strategies. Traders can enter orders to execute a specific option spread, for example a straddle (buying both, or selling both, a call and put with the same strike price and same expiration month). This spread trade can be executed just like a single trade, without the need to execute each leg of the spread separately.

Lower Margins, Greater Leverage

Exchange margins for the contracts of the CBOT Dow complex are low compared to other index futures—both in terms of dollars and as a percentage of contract value. Therefore, CBOT Dow complex futures offer more leverage than other stock index futures. More leverage provides greater exposure to price changes and allows you to take larger positions in these contracts.

CBOT/CME Common Clearing Link

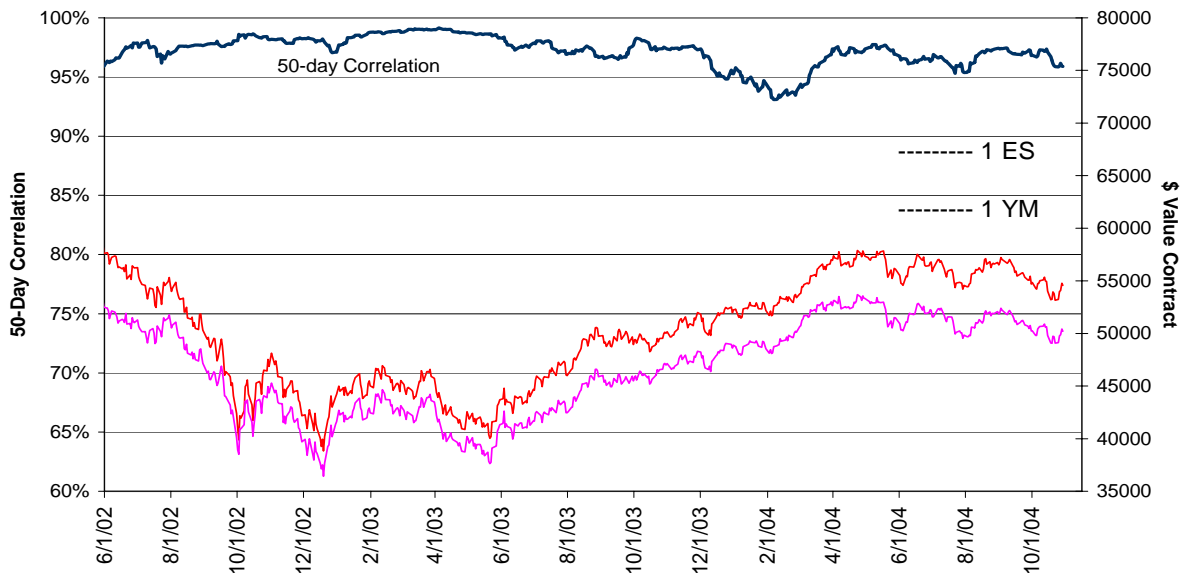
The CME/CBOT Common Clearing Link provides significant reductions in spread margin requirements. Initial reviews show risk offsets for spread margins of at least 70 percent for equity index futures. For example:

The Mini “SPUD”

There are many traders who are active in the SPUD spread (the acronym stands for SP Under Dow).

An overnight spread trade composed of Long 1 CBOT mini-sized Dow futures and Short 1 CME e-mini S&P futures would normally have a total initial margin requirement of approximately \$6500 (\$2500 for CBOT mini-sized Dow and \$4000 for e-mini S&P). Under the new Common Clearing Link, the initial margin requirement for an overnight position in this spread is approximately \$325, which represents a reduction in spread margins of about 95 percent. Note that this is an estimate using recent correlations between the Dow and the SP500 of approximately 95%.

CBOT mini-sized Dow vs. E-mini S&P 500



Viewing the above chart, you can see that the 50-day rolling correlation of percentage price changes in this spread has stayed above 95 percent. Yet as recently as the summer of 2000, the correlation had been as low as 76 percent.

Dow Options Advantages

Advantages of DJIA options and mini-sized Dow options vs. DJX options and option on DIAMONDS:

- Portfolio based margining
- Trading hours are longer, virtually 24 hours per day
- Contract sizes are 10 times (DJIA options) and 5 times (mini-sized Dow options) larger than either DJX or Diamond options, and are therefore more efficient in terms of commissions and fees.
- Futures style tax treatment (as section 1256 contracts).
- Deep, liquid markets

3. Index and Contract Features

3.A Dow Jones Industrial Average

The Composition of the Dow Jones Industrial Average

The Dow Jones Industrial Average tracks a price-weighted portfolio of the stocks of 30 of the largest, best-known U.S. companies.

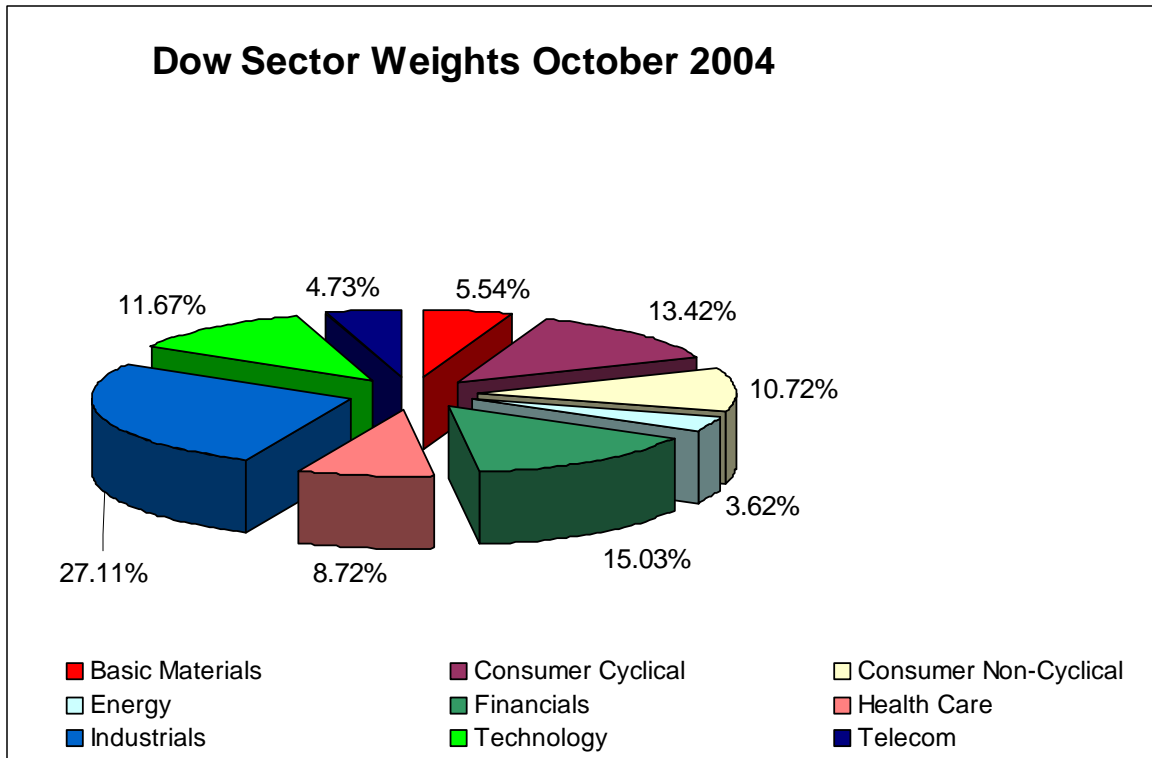
As Exhibit 1 illustrates, the DJIA is **the** U.S. blue-chip index. Its 30 stocks are household names and among the largest U.S. companies, with market capitalization ranging from \$26 billion (Caterpillar Inc.) to \$335 billion (General Electric). Twenty-eight stocks trade on the NYSE and two (Intel and Microsoft) on Nasdaq. The 30 DJIA stocks provide a diversified exposure to the different sectors and styles of the U.S. market.

The average book-to-market and price/earning ratios of the DJIA are comparable to those of the S&P 500, but quite often its dividend yield is higher. The DJIA is commonly viewed as the “blue chip” index.

Exhibit 1: The 30 Dow Stocks

The 30 Stocks in the DJIA				
Name	Ticker	Sector	10/29/2004	Weight
Procter & Gamble	PG	Consumer Non-Cyclical	51.18	3.76%
IBM	IBM	Technology	89.75	6.60%
United Technologies	UTX	Industrials	92.82	6.83%
3 M	MMM	Industrials	77.57	5.70%
Caterpillar	CAT	Industrials	80.54	5.92%
AIG	AIG	Financials	60.71	4.46%
WalMart	WMT	Consumer Non-Cyclical	53.92	3.97%
Altria	MO	Consumer Cyclical	48.46	3.56%
American Express	AXP	Financials	53.07	4.46%
Citigroup	C	Financials	44.37	3.26%
Johnson&Johnson	JNJ	Health Care	58.38	4.29%
Coca-Cola	KO	Consumer Non-Cyclical	40.66	2.99%
General Motors	GM	Consumer Cyclical	38.55	2.84%
Merck	MRK	Health Care	31.31	2.30%
DuPont	DD	Basic Materials	42.87	3.15%
ExxonMobil	XOM	Energy	49.22	3.62%
Boeing	BA	Industrials	49.90	3.67%
JPMorgan Chase	JPM	Financials	38.60	2.84%
Verizon	VZ	Telecom	39.10	2.88%
HomeDepot	HD	Consumer Cyclical	41.08	3.02%
Pfizer	PFE	Health Care	28.95	2.13%
Honeywell	HON	Industrials	33.68	2.48%
Alcoa	AA	Basic Materials	32.50	2.39%
General Electric	GE	Industrials	34.12	2.51%
McDonalds	MCD	Consumer Cyclical	29.15	2.14%
Intel	INTC	Technology	22.26	1.64%
Disney	DIS	Consumer Cyclical	25.22	1.86%
Microsoft	MSFT	Technology	27.99	2.06%
SBC Communications	SBC	Telecom	25.26	1.86%
HewlettPackard	HPQ	Technology	18.66	1.37%

Exhibit 2: DJIA Sector Weights



The DJIA delivers exposure to a diversified cross section of the U.S economy. As Exhibit 2 shows, the industrial sector is the most heavily represented. However, the DJIA also provides significant exposure to stocks in the consumer non-cyclical, consumer cyclical, technology, basic materials, health care, financial, telecom, and energy sectors.

The Function of the DJIA Divisor

The DJIA is called an average because that is what it originally was—a simple arithmetic average of the prices of the component stocks. With the passage of time, this proved inadequate. Stocks were added to the portfolio. Stocks split. Companies merged or divested business units. To keep these structural changes from interrupting the focus on market fundamentals that a benchmark index must maintain, Dow Jones introduced the use of a divisor to maintain index continuity.

The DJIA level, therefore, is the sum of the prices of the component stocks divided by the DJIA divisor. For example, the October 29, 2004 settlement prices were those in Exhibit 1. The divisor was 0.13561241, the sum of the stock prices was \$1,359.85, and the DJIA settled at 10,027.47.

$$1,359.85 \div 0.13561241 = 10,027.47$$

When an event occurs that will motivate calculation of a new divisor, such as a stock split, Dow Jones adjusts the closing price of the affected stock (or stocks if there is more than one such event on the given day), sums the stock prices to include the split price, and solves for a new divisor that will generate the same DJIA value that the former divisor generated using the non-adjusted price.

To see how this might work in practice, suppose a hypothetical situation in which Coca Cola, priced at \$51.02 on June 30, has announced a 2-for-1 split for October 1. The new stock price will be \$25.51, and the adjusted sum of the stock prices will be \$1,384.19. That means the new divisor will be 0.133158.

$$\begin{aligned} 1,384.19 \div \text{new divisor} &= 10,395.07 \\ \text{new divisor} &= 1,384.19 \div 10,395.07 \\ \text{new divisor} &= 0.133158 \end{aligned}$$

By changing the divisor in this way, Dow Jones preserves the continuity of the DJIA as a tracking tool for fundamental stock market shifts.

The use of the divisor in constructing the DJIA has important implications for arbitragers and active traders.

For one, this makes it easy to replicate the index with a basket of stocks. The level of the DJIA is the market value of a portfolio composed of an equal number of shares of the 30 DJIA stocks. To find this number, solve the reciprocal of the DJIA divisor. On June 22, 2004, that would have shown that the 10,395.07 DJIA level represented a basket of 7.37 shares of each of the 30 stocks ($1 \div 0.1356124 = 7.373957$).

For another, the use of the divisor makes the DJIA easy for active traders to track. A dollar move in the price of any DJIA stock moves the DJIA by $1 \div \text{DJIA divisor}$. For example, given that the sum of the June 22, 2004 settlement prices is 1,409.70, suppose that one stock price rose \$1 to make the new sum 1,410.70. That would raise the level of the DJIA to 10,402.44, which is 7.37 higher than the actual settlement index value of that day.

$$\begin{aligned} 1,410.70 \div 0.1356124 &= 10,402.44 \\ 1,409.70 \div 0.1356124 &= 10,395.07 \\ \text{difference} &= 7.373957 \\ 1 \div 0.1356124 &= 7.373957 \end{aligned}$$

This difference between the actual and hypothetical index values shows that a \$1 change in the price of one stock changes the index value by the same amount as one divided by the DJIA divisor. You can see how this makes the index easy to track.

Calculating the Number of Shares vs. Futures

For traders involved in trading the spread between the basket of DJIA stocks and futures, the calculations previously mentioned need to be adjusted by the multiplier of the futures contract. The result will be the correct number of each of the Dow 30 stocks to hold against a futures contract.

$$\text{Futures multiplier} * (1 \div \text{Divisor}) = \text{Number of shares}$$

For baskets against the CBOT DJIA futures:

$$\$10 * (1 \div .1356124) = 73.73$$

For baskets against the CBOT mini-sized Dow futures:

$$\$5 * (1 \div .1356124) = 36.87$$

Contract Value and Size

Stock index contract value defines your market exposure, and the CBOT Dow complex gives you four choices—CBOT mini-sized Dow futures and options, and full-sized CBOT DJIA futures and options.

To determine the contract value of either futures contract, multiply the futures price by the multiplier. For example, with CBOT mini-sized Dow futures trading at 10,000, a one contract futures position gives you market exposure equivalent to \$50,000 (10,000 x \$5 = \$50,000). At the same futures price, a one contract position in CBOT DJIA futures gives you a \$100,000 market exposure (10,000 x \$10 = \$100,000).

Options on mini-sized Dow futures are quoted in regular Dow index points. An option with a premium of 317 points will cost $317 * \$5 = \$1,585$.

Options on CBOT DJIA futures use a \$100 multiplier, so an option with a 31.70 premium will actually cost \$3,170. An alternative way to look at this is to notice that the 31.70 option premium is equivalent to 317 index points, or \$3,170 (317 x \$10).

Liquidity

The contracts of the CBOT Dow complex provide active traders with a large and rapidly growing liquidity pool. Liquidity is important to traders because it reduces the most important transaction cost, the bid-ask spread. Liquid markets also allow traders to enter and exit trades when they want to, not when the market dictates.

Exhibit 3 shows the average daily volumes of CBOT DJIA futures, DJIA options and CBOT mini-sized Dow futures from January 2002 through May 2004.

You can see that volume growth in these contracts has been on a sharply upward trend for the last year depicted. This is a strong indication that good liquidity is consistently getting better.

Volume growth is a sign of growing liquidity. Greater liquidity lowers transaction costs and increases trading opportunity.

Exhibit 3: CBOT Dow Complex — Average Daily Volume

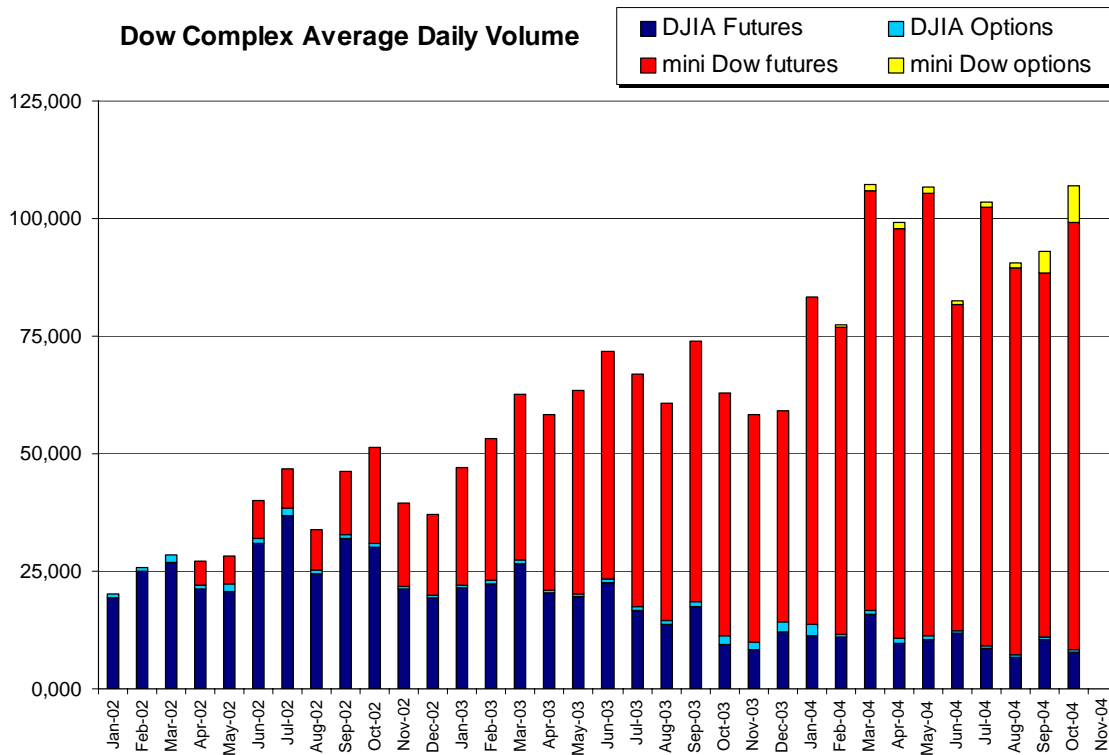
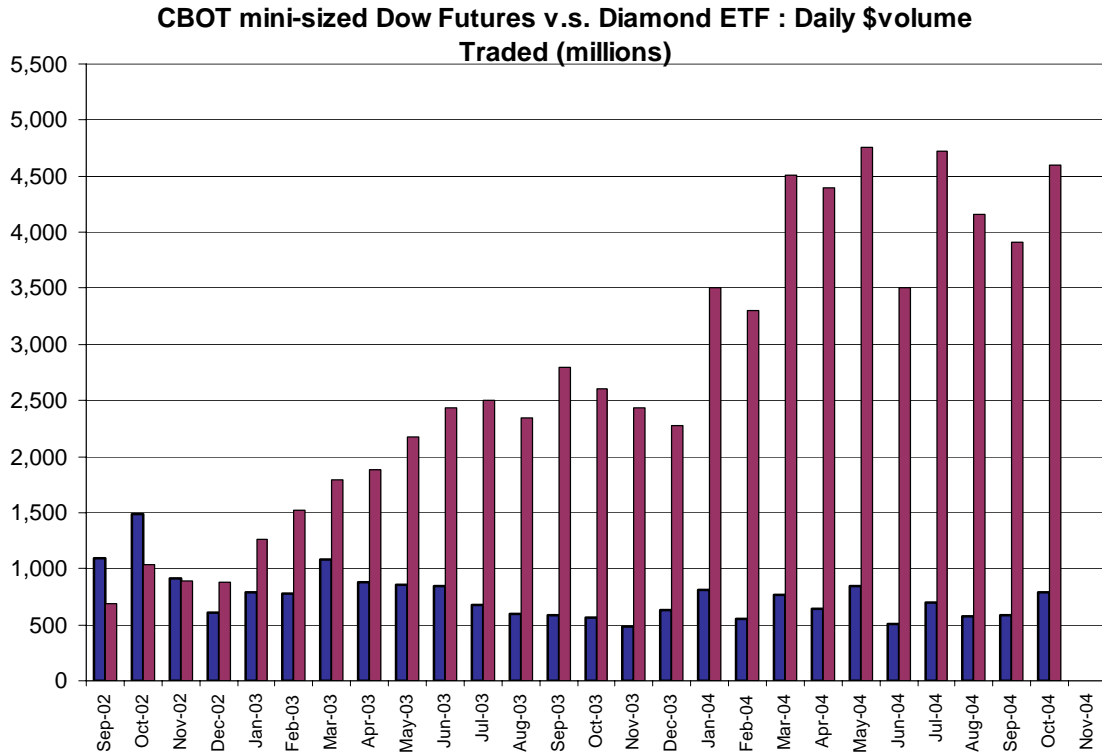


Exhibit 4 shows the average daily dollar volume traded for CBOT mini-sized Dow futures as a percentage of the average daily dollar volume traded for the DIAMOND Exchange Traded Fund (ETF). CBOT mini-sized Dow futures routinely trade over 600% of the dollar volume of the Diamond ETF.

Advantages of the CBOT mini-sized Dow futures over the Diamond ETF:

- Margins – Initial margin requirements for CBOT Dow futures are approximately 4 to 7 percent of the underlying contract value, compared to a Reg T requirement of 50 percent for ETFs.
- Tax Benefits – CBOT Dow futures qualify for the 60/40 tax treatment for broad based index futures.
- No management fee
- Tighter bid – ask spreads.

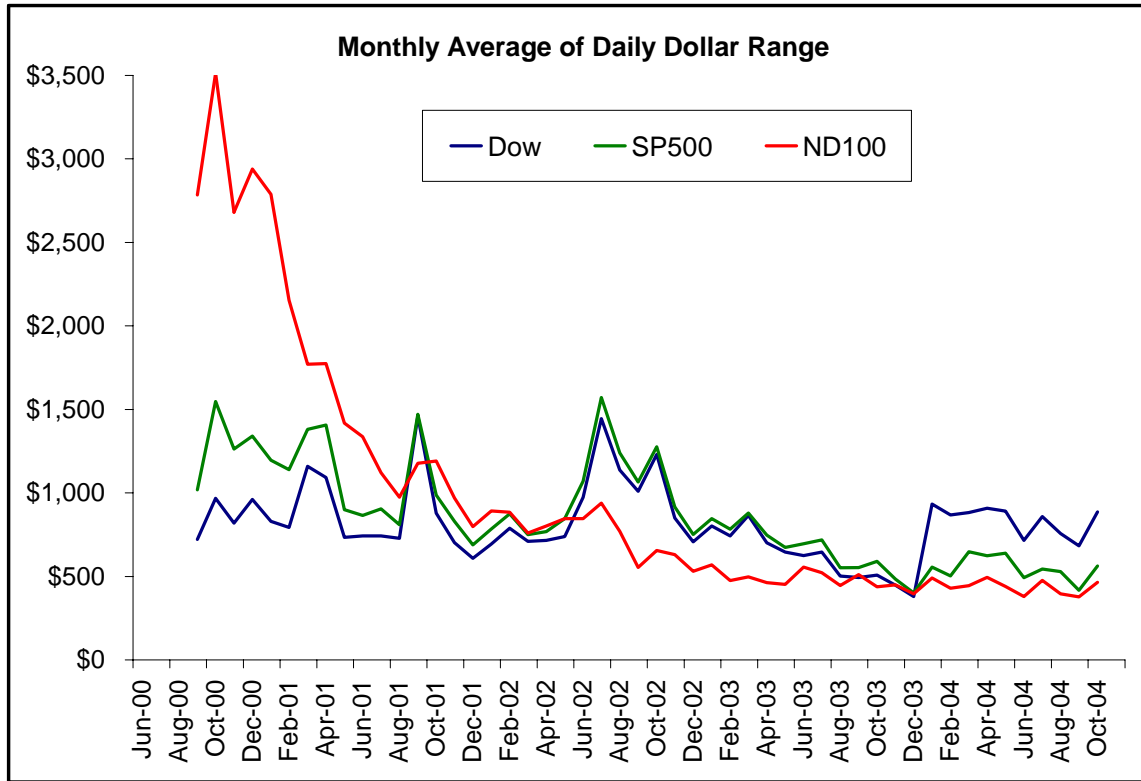
Exhibit 4: CBOT mini-sized Dow vs. DIAMOND ETF



Dollar Volatility

Volatility is a double-edged sword for futures traders. On the positive side, volatility translates into trading opportunity. On the negative side, too much volatility creates risk. It isn't only that traders can suffer losses but that they can be stopped out of a trade and then miss the next positive market move. Ideally, then, traders want a futures contract that exhibits enough volatility but not so much as to be unduly dangerous. Exhibit 5 plots the daily dollar volatility of the three major U.S. stock indexes.

Exhibit 5: Intra-Day Dollar Volatility of Major U.S. Stock Indexes



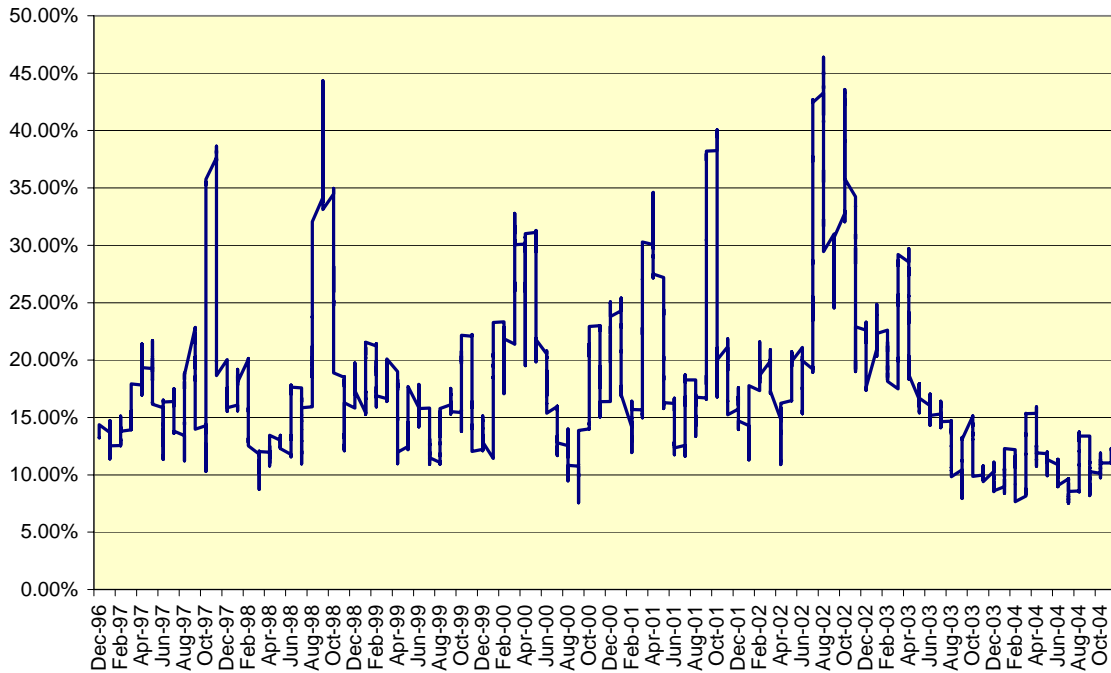
Dollar volatility relates to market opportunity. Clearly, the DJIA generates ample trading opportunity without creating undue risk.

Note: These values were calculated based upon cash indexes and multipliers of mini-sized index futures.

The importance of this is that it demonstrates that, although they contain many fewer stocks and use a simpler method of index construction, CBOT DJIA and CBOT mini-sized Dow futures provide excellent means to achieve exposure to the broad U.S. stock market.

Exhibit 6: DJIA Historical Volatility

Dow Jones Industrial Average - 20 day Historical Volatility



The chart shows the 20-day historical volatility for the DJIA (historical volatility is the annualized standard deviation of logarithmic prices changes, and is usually based on the closing prices).

Since the mid 1990s, the 20-day H.V. has been ranging from about 10 percent on the low side, to above 40 percent on the high side. This presents opportunities for trading DJIA options and options on CBOT mini-sized Dow futures.

4. Pricing and Fair Value

Determinants of Fair Value

The price of a futures contract is a risk-adjusted forecast of the value of the cash index at the expiration of the contract based on the expectations and risk preferences of market participants. This derivation is analogous to the valuation of the cash index, but there are two important differences:

- The price specified for a cash index is for current payment where the price specified for a futures is for payment at expiration.
- The price of a futures excludes the value of dividends paid prior to futures expiration. The cash index includes this value.

Comparing these fair values to actual futures levels allows traders to gauge the relationship of the futures price to its theoretical fair value and to decide whether futures are trading rich or cheap. Given these differences, the futures price is not equal to the underlying cash index, but has the following fair value relative to the underlying index:

CBOT DJIA

Futures Fair Value = $DJIA * (1 + r \text{ (days/360)}) - DJIA \text{ dividends}$

Here, r is a short-term rate from the current date to the futures expiration, typically the relevant maturity LIBOR. Days refers to the number of days to expiration. Dividends is the sum of dividends, in index points, to be paid by expiration. The difference between the fair value of a futures contract and the underlying cash index is called the fair value premium or discount depending on its sign. The sign depends on the effective rate of interest relative to the dividend yield of the cash index. In the past, fair values were generally at a premium, except towards expiration when the effective rate of interest might be low enough to be offset by dividends. In the current low interest rate environment, fair value is more often at a discount. The fair value of nearby DJIA futures is updated daily at www.cbot.com/dow.

CBOT DJIASM Futures Fair Value Example:

A quick example

$$FV = C * [1 + r * (t/360)] - D$$

Where,

C = cash DJIA index

r = short term interest rate

t = days to futures expiration

D = Dividends to expiration, expressed in Index points.

Given the following inputs –

$$C = 9400.00$$

$$R = 1.10 \%$$

$$T = 29$$

$$D = 10.00$$

$$FV = 9400.00 * [1 + .011 * (29/360)] - 10.00 = -1.67$$

So, the theoretical futures price should be 9398.33 (futures minimum tick is 1 Dow point, so we would simply view FV as 9398).

The CBOT website publishes the FV level every day before the markets open

(www.cbot.com/dow).

Mispricing and Arbitrage

What keeps CBOT mini-sized Dow futures in line with the cash DJIA?

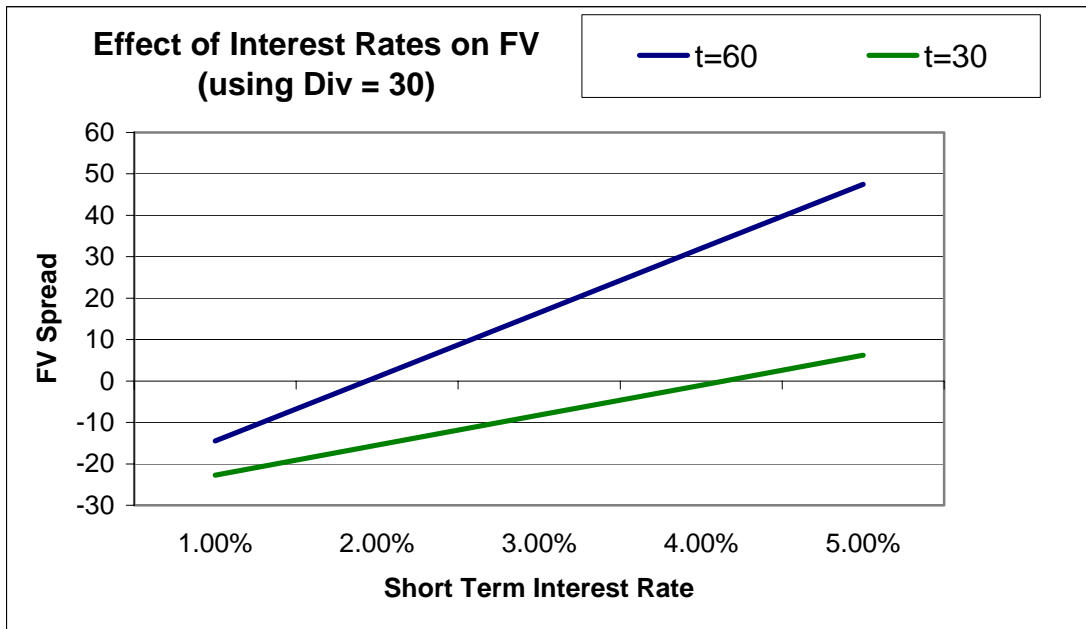
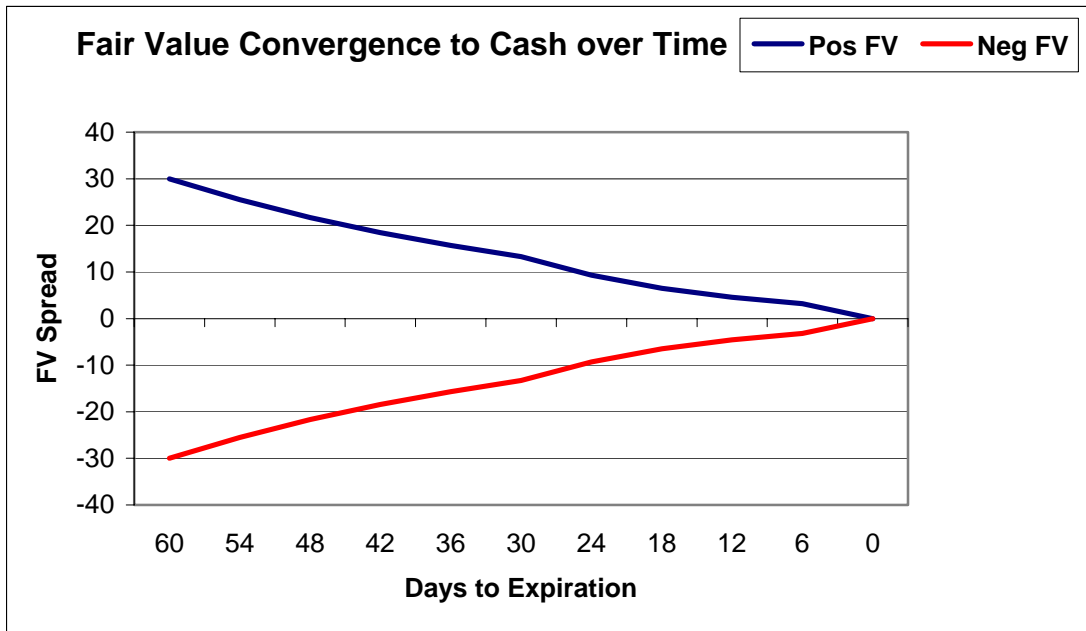
Professional arbitrage firms and institutions trade baskets composed of the 30 stocks in the DJIA against CBOT mini-sized Dow futures and DJIA futures. They also trade ETFs such as the Diamonds against futures. In both these cases, the arbitrage will help keep markets in line during the vast majority of time. There may be cases of extreme volatility where futures and cash move “out of line” for a brief time (basically a matter of seconds) before being forced back to fair value.

For example, if DJIA futures fair value is –12.00, ie if cash DJIA is at 9400, then DJIA futures should be at 9388. If DJIA futures are instead trading at 9380, about 8 points too cheap, traders will buy the DJIA futures and sell baskets of the 30 Dow stocks. As more traders enter this spread, the futures will quickly get back to trading at – 12.00 below the cash DJIA.

Basically, for individual traders, the arbitrage game is normally out of reach given the costs & capital involved. However, individual traders do benefit from having

arbitrage firms, as the latter help keep markets in line, and also add liquidity to both the futures and cash markets.

Exhibit 13: Fair Value Over Time & Interest Rate Changes



5. Administrative Details

Settlement Process

Daily Settlement and Margins

The initial margin for CBOT DJIA futures and CBOT mini-sized Dow futures contracts ranges from 4% to 7% of contract value. Daily gains and losses are debited from customer accounts at futures brokerage firms. If the amount in the account falls below the maintenance margin, the account must be brought back to its initial level. The maintenance margin is 1/1.35 of the initial margin.

The CBOT Clearing House gives margin credits on certain inter-index spreads. For current margin details, visit www.cbot.com > Clearing > Margins.

Final Settlement Price and Special Opening Quotation

CBOT DJIA and CBOT mini-sized Dow futures are settled in cash, not by physical delivery of the basket of stocks. The final settlement price is a Special Opening Quotation (SOQ) of the cash index determined on the day following the last day of trading, usually the third Friday of the contract month. Unlike the futures, which are quoted in full index points, the SOQ is calculated to two decimal places, as are the underlying cash indexes.

The SOQ of the DJIA is calculated from the sequence of opening prices of the underlying individual stocks in each index. In contrast, the DJIA is calculated from the sequence of last transaction prices, or, if the stock has not traded yet, its last closing price. The official opening prices of stocks traded on the NYSE are their first traded prices and are determined by the relevant specialists through a special opening auction. The exact opening time depends on the magnitude of order imbalances in the specialist's book, and different stocks typically open at different times. The opening prices of the stocks traded on Nasdaq are also the first traded prices but are determined through the regular trading process.

Because of the different prices input into the SOQs, they are unlikely to be equal to either the current or to nearby values of the DJIA, including their opening values. To illustrate, suppose that the DJIA includes just two stocks, General Motors and Microsoft, the divisor is 0.01, and the following prices occur:

Determining the SOQ				
	Last Close	9:30 a.m. *	9:31 a.m. *	9:32 a.m. *
General Motors	\$46.01	Not Open	\$46.09	\$46.03
Microsoft	\$47.48	Not Open	Not Open	\$47.50
SOQ				9359
DJIA	9349	9349	9357	9353
*Eastern Standard Time				

Notice that at 9:30, neither stock is open, and the DJIA quote is the same as the last close. A minute later, General Motors opens at \$46.09, and this drives the index up 8 points to 9357. Finally, at 9:32, Microsoft opens at \$47.50, and General Motors trades down 6 cents to \$46.03. The two 9:32 prices drive the index down 4 points to 9353. The SOQ, based on the two opening prices, is 9359, which is 6 points higher than the traded index price. This illustrates the process for arriving at an SOQ and shows why the SOQ is unlikely to match the currently traded DJIA level.

Exchange for Physicals (EFPs)

EFPs, also referred to as against actuals or versus cash, were originally designed to allow two hedgers to exchange futures for cash positions. In an EFP trade, the two counterparties negotiate the price and size of offsetting futures and securities transactions. For CBOT Dow futures, the CBOT accepts EFPs against any security, which is reasonably correlated with the DJIA, such as portfolios of correlated stocks and DIAMONDS.

Only the futures side of the EFP is transacted on the futures exchange, but clearing firms on the opposite sides of an EFP are required to confirm the terms of the cash market side of the EFP before submitting the futures orders. The CME clearing process requires that EFPs for both CME and CBT transactions be entered using the CME's Online Clearing 21® EFP (Exchange for Physicals) Trade Entry System. This system appears on the CME 3270 Supersession menu as PCBT-EFP. It is listed in the same section of the menu as PCBT-TES. EFPs should not be entered as standard type 9 trades. Clearing 21 EFP uses a one-sided entry method, and it is the responsibility of the sell side to submit CBOT products.

The execution time is defined as the time the EFP is actually executed, not the time at which the parties to the trade report it to their respective firms. Confirmation and processing of EFP trades can be done either on the floor of the exchange or in back offices.

Fungibility

CBOT mini-sized Dow (\$5 multiplier) and CBOT DJIA futures (\$10 multiplier) are fully fungible contracts. Fungibility allows the offset and liquidation of CBOT mini-sized Dow against CBOT DJIA futures held in the same account, contract month, and year in a ratio of 2 to 1.

- CME Clearing will facilitate these offsets as a Type 8 transaction and Transfer Reason Code P. CME Clearing will take the opposing side as firm 995.
- The user will enter only one side of the transaction and the opposing side will be created by the system. For example, customer 12345 is long 10 mini-sized Dow futures and short 5 full-size contracts. The user would go into the Fungible Product Offset Entry screen and enter a transaction to sell 10 mini-sized Dow futures and enter account number 12345. Upon hitting enter, a buy of 5 full-sized Dow futures is created at the prior day's settlement price. Upon hitting enter again confirms the entries and sends both records to the firm's bookkeeping system via MQM/TREX messaging.
- All positions must be in the correct ratio of two minis to one full size.
- Offsets that are correctly entered will be matched; if not, they will be considered an outrade and displayed on the back office unmatched trade report.
- The Trade Register will identify these adjustments as position offsets, and the register data file will indicate position offsets with a unique transaction type of X in card column 46.
- CME Clearing will report open interest for all cleared net offset positions in CBOT DJIA and CBOT mini-sized Dow futures under firm 995.

Price Limits and Trading Halts

CBOT DJIA futures and options and CBOT mini-sized Dow futures and options futures have price limits and related trading halts. The trading halts are coordinated with trading halts at the primary securities market, the NYSE. These trading halts are often referred to as circuit-breakers.

NYSE Trading Halts:

Successive NYSE trading halts are triggered by 10%, 20%, and 30% intra-day declines of the DJIA from its previous closing value. More precisely, circuit-breaker threshold levels are specified in index points and are calculated at the end of every quarter as 10%, 20%, and 30% of the average daily closing value of the DJIA in the preceding calendar month, with rounding to the nearest 50 points. New quarterly circuit-breaker levels are announced on January 1, April 1, July 1, and October 1.

Price Limits for CBOT Dow Complex Futures and Options

Price limits for all CBOT Dow Complex contracts are set equal to NYSE 10%, 20%, and 30% quarterly circuit-breaker thresholds. The 10%, 20%, and 30% price limits are effective when the primary securities market is open for trading, usually 8:30 a.m. to 3:00 p.m., Chicago time. The limits are restricted to price changes below the previous daily settlement. They apply to contracts traded in open auction and on the CBOT electronic trading system. When the primary securities market is not open for trading, only the 10% price limit is in effect and it applies to price changes both above and below the previous daily settlement price.

Trading Halts for CBOT Dow Complex Futures and Options

Trading halts for CBOT Dow Complex contracts are triggered when (a) the primary CBOT DJIA futures contract is limit offered 10%, 20% or 30% below its previous close and (b) the corresponding NYSE trading halt is in effect. The full schedule of trading halts and resumptions of trading follows:

8:15 a.m.-12:00 p.m. (Chicago time)

Trading in futures contracts halts if and only if (a) the primary futures contract is limit offered at the 10%, 20%, or 30% limit and (b) the corresponding 10%, 20%, or 30% trading halt has been declared on the NYSE. Trading in options is suspended while the underlying futures are locked limit. The 10% NYSE trading halt lasts one hour. The 20% NYSE trading halt lasts two hours. The 30% NYSE trading halt lasts until the close. Trading in futures and options contracts resumes after 50% (by capitalization weighting) of the underlying DJIA stocks have reopened for trading after a trading halt. The next higher price limit (if applicable) is then in effect.

12:00 p.m.-1:00 p.m. (Chicago time)

The 10%, 20%, and 30% quarterly price limits are still in effect and are subject to the same conditions as above, but the 20% NYSE trading halt lasts one hour instead of two hours.

1:00 p.m.-1:30 p.m. (Chicago time)

The 10%, 20%, and 30% quarterly price limits are still in effect and are subject to the same conditions as above, but the 10% NYSE trading halt lasts one half hour instead of one hour, and the 20% and 30% NYSE trading halts last until the close.

1:30 p.m.-3:00 p.m. (Chicago time)

The 10% quarterly price limit and corresponding 10% NYSE trading halt are no longer in effect. The 20% and 30% limits are still in effect and are subject to the same conditions as during the 1:00 p.m. to 1:30 p.m. period.

Electronic Error Policy

If a CBOT member or electronic trading terminal operator believes the price of a trade executed on the CBOT electronic platform is in error, he can contact CBOT Market Operations to report the situation. It is important to note that this notification must occur within 5 minutes of the execution time of the asserted mistrade. Otherwise, the trade will stand. For a complete statement of the CBOT electronic error policy, visit www.cbot.com > Electronic Trading > Error Trade Policy.

6. Appendixes

CBOT Dow Complex: Salient Features

CBOT mini-sized Dow Futures	
Trading Unit	Five (\$5) times the Dow Jones Industrial Average Index. The DJIA is a price-weighted index of thirty (30) of the largest, most liquid U.S. stocks.
Tick Size	Minimum price fluctuation is one point (\$5.00 per contract).
Price Quote	One point equals \$5 per contract
Contract Months	Mar, Jun, Sep, Dec Four months listed at all times.
Last Trading Day	The trading day preceding the final settlement day.
Final Settlement Day	The third Friday of the contract month.
Settlement	Cash settlement on the final settlement day. The final settlement price is \$5 times a Special Opening quotation of the index.
Trading Hours	Electronic Trading: 7:15 p.m. to 4:00 p.m., Chicago time, Sunday - Friday. Trading in expiring contracts closes at 3:15 p.m. Chicago time on the last trading day.
Exchange Ticker Symbol	Electronic: YM
Daily Price Limits	Successive 10%, 20% and 30% limits.
Fungibility	CBOT mini-sized Dow futures (\$5) and CBOT DJIA futures (\$10) are fungible contracts. You can offset positions in these contracts on a 2:1 ratio if they are held in the same account and have identical expiration dates.

CBOT DJIA Futures	
Trading Unit	Ten (\$10) times the Dow Jones Industrial Average. The DJIA is a price-weighted index of 30 of the largest, most liquid U.S. stocks.
Tick Size	Minimum price fluctuation is one point (\$10.00 per contract).
Price Quote	One point equals \$10 per contract
Contract Months	Mar, Jun, Sep, Dec - Four nearest months in March quarterly cycle and two additional Decembers listed at all times.
Last Trading Day	The trading day preceding the final settlement day.
Final Settlement Day	The third Friday of the contract month.
Settlement	Cash settlement on the final settlement day. The final settlement price is \$10 times a Special Opening quotation of the index.
Trading Hours	Open Auction: 7:20 a.m. to 3:15 p.m. Chicago Time, Mon.-Fri. Electronic: 7:15 p.m. to 7:00 a.m. Chicago time, Sun.-Fri. Trading in expiring contracts closes at 3:15 p.m. Chicago time on the last trading day.
Exchange Ticker Symbol	Open Auction: DJ - Electronic: ZD
Daily Price Limits	Successive 10%, 20% and 30% limits.
Fungibility	CBOT mini-sized Dow futures (\$5) and CBOT DJIA futures (\$10) are fungible contracts. You can offset positions in these contracts on a 2:1 ratio if they are held in the same account and have identical expiration dates.

Options on CBOT mini-sized Dow Futures	
Underlying	One CBOT mini-sized Dow futures contract.
Tick Size	Minimum price fluctuation is one point (\$5.00 per contract).
Premium Quotation	One point equals \$5 per contract
Strike Price Intervals	Twenty 100 index point intervals up and down from the futures price.
Contract Months	Quarterly cycle of March, June, September, December plus two monthly (serial) option contracts. The monthly option contract exercises into the nearby futures contract. For example, an August option exercises into a September futures position.
Last Trading Day	For standard quarterly option contracts: The Thursday immediately preceding the Final Settlement Day. For serial option contracts: The third Friday of the serial contract month.
Final Settlement Day	The third Friday of the contract month.
Exercise and Settlement Process	Options are American style exercise. Serial options or non-expiring quarterly options exercise into the underlying futures contract. Exercise of expiring quarterly options results in cash settlement based on the SOQ. Buyers of options can exercise options on any business day prior to expiration. Deadline for notice to the Clearing House is 6:00 pm Chicago time. On the last day of trading for serial options and the day following the last day of trading for quarterly options, in-the-money options are automatically exercised unless notice is given prior to 6:00 pm Chicago time.
Expiration	Unexercised quarterly expiration options expire at 7:00 p.m. Chicago time on the business day following the last trading day. Unexercised serial expiration options expire at 7:00 p.m. on the last trading day.
Trading Hours	Electronic Trading: 7:15 p.m. to 4:00 p.m., Chicago time, Sunday - Friday. Trading in expiring quarterly contracts closes at 3:15 p.m. Chicago time on the last trading day. Serial contracts close at 4p.m. Chicago time on the last trading day.
Exchange Ticker Symbol	Electronic: OYM
Daily Price Limits	Successive 10%, 20% and 30% limits.

Options on CBOT DJIA Futures	
Underlying	One CBOT DJIA futures contract.
Tick Size	Minimum price fluctuation is 0.05 point of option premium or 0.5 index points, which is equal to \$5.
Premium Quotation	Option premium is quoted with an implicit multiplier of \$100. For example, 34.65 points of option premium is equal to \$3,465, which is also equal to 346.5 index points.
Strike Price Intervals	Twenty 100 index point intervals up and down from the futures price plus an additional ten 200 point intervals above and below the highest and lowest 100 point intervals.
Contract Months	Quarterly cycle of March, June, September, December plus 2 to 3 nearest months (serial months) such that four consecutive contract months are listed.
Last Trading Day	For standard quarterly option contracts: The Thursday immediately preceding the Final Settlement Day. For serial option contracts: The third Friday of the serial contract month.
Final Settlement Day	The third Friday of the contract month.
Exercise and Settlement Process	Options are American style exercise. Serial options or non-expiring quarterly options exercise into the underlying futures contract. Exercise of expiring quarterly options results in cash settlement based on the SOQ. Buyers of options can exercise options on any business day prior to expiration. Deadline for notice to the Clearing House is 6:00 pm Chicago time. On the last day of trading for serial options and the day following the last day of trading for quarterly options, in-the-money options are automatically exercised unless notice is given prior to 6:00 pm Chicago time.
Expiration	Unexercised quarterly expiration options expire at 7:00 p.m. Chicago time on the business day following the last trading day. Unexercised serial expiration options expire at 7:00 p.m. on the last trading day.
Trading Hours	Electronic Trading: 7:15 p.m. to 7:00 a.m., Chicago time, Sunday - Friday. Trading in expiring quarterly contracts closes at 3:15 p.m. Chicago time on the last trading day. Serial contracts close at 4p.m. Chicago time on the last trading day.
Exchange Ticker Symbol	Open Auction: DJC for calls / DJP for puts. Electronic: OZD
Daily Price Limits	Successive 10%, 20% and 30% limits.

Ticker Symbols

Vendor	CBOT® mini-sized Dow Futures	Options on CBOT® mini-sized Dow Futures	CBOT® DJIA Futures (\$10)		Options on CBOT® DJIA Futures	
	Electronic	Electronic	Electronic	Open Auction	Electronic	Open Auction
CBOT	YM	OYM	ZD	DJ	OZD	DJC / DJP
Bloomberg	DM	DMA<index>OMON	EDJ	DJ	EDJ	DJ
CGI (Star Data)	YM	YM	ZD	DJ	ZD	DJ
Comstock	YM		ZD	DJ	ZD	DJ
CQG	YM	YM	DFA	DF	DFA	DF
DTN	@YM	OYM	@DJ	DJ	N/A	DJ
Esignal	YM	YM	ZD	DJ	ZD	DJ
FutureSource	EYM	CEYM/PEYM	ZD	DJ	CDJ / PDJ	CDJ / PDJ
Hyperfeed	/YM		/ZD	/DJ	/ZD	/DJ
ILX	D./		Z/	DJ/	Z/	DJ/
NAQ	5YM		5ZD	2DJ	5OZD	2DJ
Reuters	YM	YM	ZD	DJ	ZD	DJ
Reuters Bridge	YM		ZD	DJ	ZD	DJ
Sunguard	2YM		2ZD	2DJ	2ZD	2DJ
Townsend	/YM	/YM	/ZD	/DJ	/ZD	/DJ
Track Data	Q'	Q'	ZD	DJ	ZD	DJ

CBOT Dow Complex Resources

To learn more about trading the contracts of the CBOT Dow Complex, visit www.cbot.com/dow. This site provides valuable educational materials and essential trading tools that can make it easier to reap the benefits of trading these contracts. The materials available include:

- Free real-time depth of market quotes (the book) for mini-sized Dow Futures
- Free real-time quotes for mini-sized Dow Options
- Free futures tutorial
- Free real-time electronic trading simulators
- Online Interactive Seminars with industry experts
- Dow FAQs
- [Weekly](#) Electronic newsletter
- Trading strategies from industry experts
- Links to the Dow trading community, trading resources, and news headlines

Contact Information CBOT Business Development

To learn more about the contracts of the CBOT Dow complex, e-mail dowinformation@cbot.com or call:

312-341-7955

For questions specifically relating to EFPs, contact CBOT Market Surveillance.

312-341-7758

To report electronic out-trades, call CBOT Market Operations:

312-347-4600

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