

## Russell Indexes

Intercontinental Exchange® (ICE®) is the marketplace for futures and futures options on the Russell 2000® small-capitalization and Russell 1000® large-capitalization Indexes. ICE Futures U.S.® is now the exclusive home of futures on these widely accepted measures for institutional investors. Russell's U.S. Indexes are the benchmark for more than \$3.9 trillion in assets. The Russell 2000 index is the most widely accepted measure of small-capitalization stocks trading in the U.S.; 99% of all small-capitalization institutional assets are benchmarked to the Russell Indexes. Nine of the top ten institutional benchmarks for the U.S. market are Russell Indexes and more than 97% of U.S. institutional "style" assets are linked to the Russell Indexes.

The Russell 2000 index is the most widely accepted measure of small-capitalization stocks trading in the U.S.; 99% of all small-capitalization institutional assets are benchmarked to the Russell indexes. The Russell 1000 index is comprised of the largest thousand companies after each year's reconstitution and represents approximately 92% of the U.S. market.

The Russell 3000 index, the aggregate of the Russell 1000 and Russell 2000 indexes, is widely recognized by institutional investors as the best representation of tradable stocks in the U.S. market. The family of Russell indexes serves as the underlying instruments for the mini Russell 2000 and Russell 1000 futures and futures options, as well as for a wide range of actively traded exchange-traded funds (ETFs) and options products.

Equity investing has been migrating away from individual stock-picking and toward index exposure since the mid-1970s. A number of academic studies have demonstrated that asset allocation is a more significant factor in determining long-term performance than issue selection. Moreover, the broader the determination of asset class, the better performance tends to be. This growing body of evidence supports the place of index products, like the ICE mini Russell futures and options, at the core of investors' asset allocation and risk management decisions.

### RUSSELL INDEX CONSTRUCTION

The Russell Indexes are completely rule-based in their construction and composition; there are no committees or editorial boards involved in the process. The Russell 1000 is essentially a compilation of the 1,000 largest stocks by market capitalization in the U.S. market; the Russell 2000 is the next 2,000 stocks by market capitalization. The Indexes are reconstituted annually, with new entries, specifically initial public offerings (IPOs), added quarterly. In 1994, Russell Investments pioneered the use of free float rather than total shares outstanding; this is now the industry standard. A complete description of index construction and methodology is available at:

[www.russell.com/indexes/document/Methodolog.pdf](http://www.russell.com/indexes/document/Methodolog.pdf)

### RUSSELL INDEX FUTURES FAIR VALUE

All futures markets operate on the principle of equivalence over time. Investors should be indifferent to buying the Russell 1000 or Russell 2000 Indexes today and paying all of the physical and financial holding costs involved with ownership, or buying a contract for future delivery in which all of those costs are priced into the contract. The resulting difference between the index value and the futures price is called "basis."

The first component of basis is the opportunity cost of funds tied up in stocks. An investor who liquidates interest-bearing securities and buys stocks is foregoing that interest stream. This makes the index future more valuable than an investment in the index itself, so the long position in the index future should be willing to pay more.

Stocks do pay dividends, however, and those are paid not to the long position in the index future, but rather to the beneficial owners of the stocks themselves. The recipient of those dividends then has the opportunity to reinvest them. These foregone dividend payments and earnings make the index future less valuable than an investment in the index itself.

While earnings on securities deposited in a futures account to satisfy the performance bond or margin need to be accounted for - for the bid-ask spread on the futures and the cash stock positions, and for commissions and the differences between borrowing and lending rates on short-term securities - the general formula for determining fair value is straightforward. It can be stated as "the index plus the short-term interest cost of carry minus the future value of the expected dividends." In formula terms:

$$Future = Index * e^{r*((t_x - t_0)/365)} - \sum_{i=1}^N Div_i * e^{r*((t_x - t_d)/365)}$$

Where  $r$  is the short-term interest rate,  $t_x$  is the futures expiration date,  $t_0$  is the evaluation date,  $t_d$  is the ex-dividend date for stock  $i$  and  $N$  is either 1,000 or 2,000, depending on the index involved.

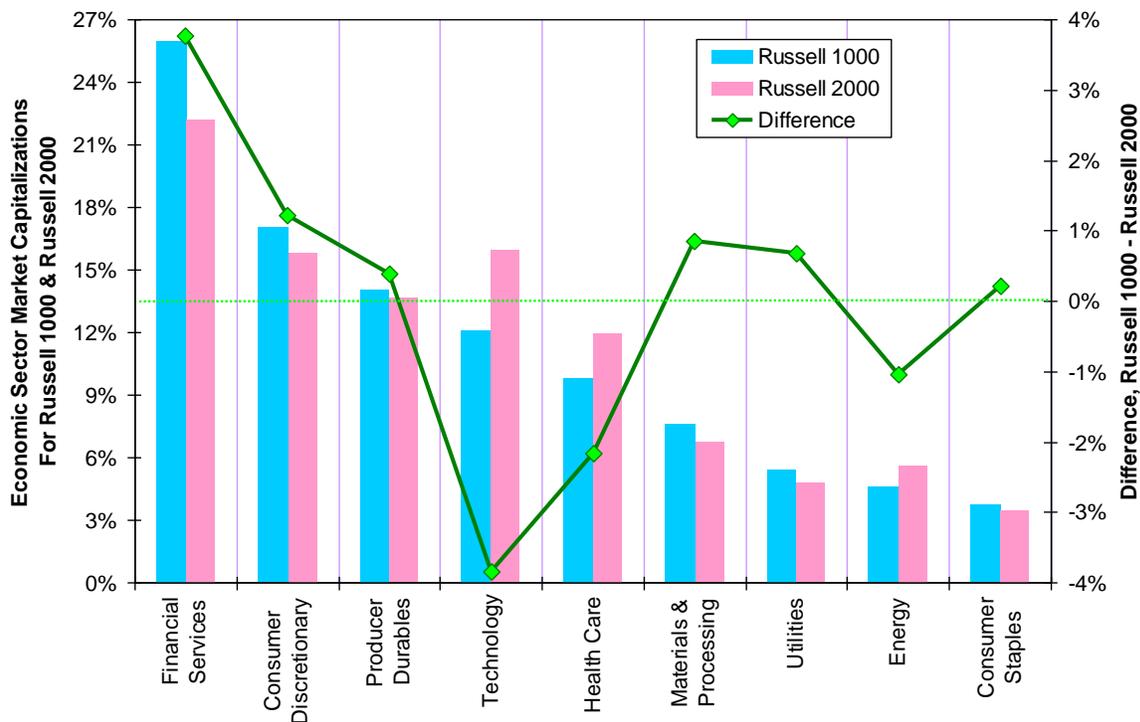
If short-term interest rates are greater than the expected dividend yield on the index, the future can be expected to trade at a premium to the index. If dividend yields are greater than short-term interest rates, the futures contract can be expected to trade below the index.

### RUSSELL INDEX FUTURES APPLICATIONS

Like all stock index futures, the Russell 1000 and 2000 Mini index futures are commonly used for “equitizing” cash and for portfolio risk management.

Investment managers live in two worlds - absolute return and relative performance. In the relative world, they compete with each other to deliver the best performance relative to a benchmark such as the Russell 1000 or Russell 2000 index. This may require putting new funds received or idle cash to work as quickly as possible, often during hours when futures are trading and the cash stock market is either unavailable or is trading at very wide bid-ask spreads in various over-the-counter markets.

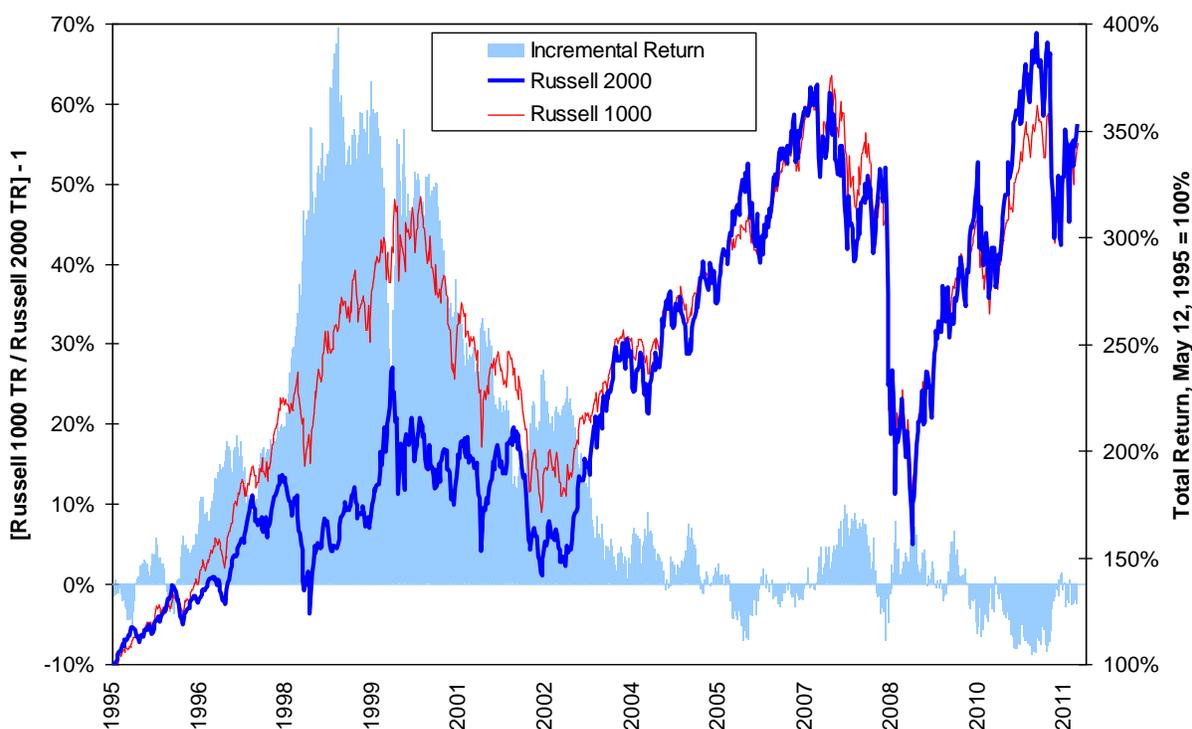
**Economic Sector Weights In Russell 1000 And 2000 Indices**



Source: Russell Investment Management

Let's say a manager benchmarked to the Russell 2000 has an idle \$10 million to invest and the Russell 2000 Mini Index future is trading at 750.00. As each index point is worth \$100, the future itself is worth \$100 \* 750.00, or \$75,000. If we divide \$10 million by \$75,000, we can expose the entire cash position to the Russell 2000 by buying 133 futures.

## The Russell 1000 - Russell 2000 Spread



Source: Bloomberg

Portfolio risk management takes two forms, risk-offset and risk-enhancement. Risk-offset, also known as hedging, involves taking a position in futures or options opposite of the portfolio position. A manager who is long the market can sell index futures to offset the portfolio's risk in part or whole by using the same index value calculation as above. The trade can be duplicated in options on the Russell index futures as well; a price floor can be set under a long portfolio by buying put options and/or selling call options in any number of option strategies.

Risk enhancement takes two forms, too. The first is used by managers who have leveraged portfolios such as mutual funds promising to deliver twice the return of the index, either higher or lower. The second is used by managers who have fallen behind their benchmark. Here a manager can add index futures to a cash portfolio to get a leveraged return. This is the same trade often employed by individual traders who may have no cash market position in the index, but who wish to assume the market's risk higher or lower.

### RUSSELL QUICK LINKS

The tables below are the key contract specifications for the Russell 1000 and Russell 2000 Index Mini futures. A complete list of all critical information and specifications for all of the Russell index futures and options can be found by clicking on the Product names at:

[Russell Indexes](#)

Other links available on this page include:

[Fees](#)

[Margins](#)

### ICE Futures Russell 1000 Mini Index Futures Specifications

|                              |  |
|------------------------------|--|
| Hours                        | 2000 Eastern Standard Time to 1800 Next Day. Platform available for order entry 30 minutes before opening. 1615 Eastern Standard Time settlement |
| Symbol                       | RF (RS for block orders)   |
| Size                         | \$100 * Index  |
| Quotation                    | .10 Index Point = \$10; Calendar Spreads = .05 Index Point   |
| Contract Cycle               | March/June/September/December quarterly expiration   |
| Minimum Fluctuation ("tick") | .10 Index Point = \$10   |
| Daily Settlement             | Prices in the closing session (1614 to 1615 Eastern Standard Time)   |
| Final Settlement             | Special calculation based on opening prices of component stocks on the third business Friday of the contract month                               |
| Daily Price Limit            | See ICE Futures Rule 19.06 for daily price limits and trading halts  |
| First/Last Notice Day        | First business day after the last trading day  |
| Last Trading Day             | Third Friday of expiration month. Trading ceases 0930 Eastern Standard Time  |

### ICE Futures Russell 2000 Mini Index Futures Specifications

|                              |  |
|------------------------------|--|
| Hours                        | 2000 Eastern Standard Time to 1800 Next Day. Platform available for order entry 30 minutes before opening. 1615 Eastern Standard Time settlement |
| Symbol                       | TF (TS for block orders)   |
| Size                         | \$100 * Index  |
| Quotation                    | .10 Index Point = \$10; Calendar Spreads = .05 Index Point   |
| Contract Cycle               | March/June/September/December quarterly expiration   |
| Minimum Fluctuation ("tick") | .10 Index Point = \$10   |
| Daily Settlement             | Prices in the closing session (1614 to 1615 Eastern Standard Time)   |
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#### TRADE AT SETTLEMENT

Many traders and fund managers who need to match the closing level of the Russell indexes as closely as possible will find the Trade at Settlement (TAS) functionality useful. TAS allows a trader to enter an order to buy or sell an eligible futures contract month during the trading day at a price that will be equal to the settlement price for that contract month, or at a price that is up to two minimum price fluctuations above or below the settlement price.

For example, a trader wishing to purchase the September 2012 Russell 2000 Index Mini futures contract could enter an order to purchase the September 2012 futures TAS at a differential of +1 essentially bidding .10 index points above the end-of-day settlement value of the September Russell 2010 futures contract. If the bid is matched, the order is considered executed, and the trade price for both the buyer and seller will be equal to the end-of-day settlement value plus .10 index points. TAS buy and sell orders may be entered from the start of the pre-open period for the respective product through the end of the futures contract settlement window each day.

Additional information on TAS trading can be found at:

[https://www.theice.com/publicdocs/futures\\_us/TAS\\_FAQ.pdf](https://www.theice.com/publicdocs/futures_us/TAS_FAQ.pdf)

#### BLOCK TRADING

Brokers with minimum order sizes of 20 futures or 50 options contracts may be eligible for block trading. Information on Ice Block 2.0®, which offers advanced functionality to streamline the submission of off-exchange trades including OTC Block trades, Exchange for Physicals (EFPs) and Exchange for Swaps to ICE Clear®, can be found at:

[https://www.theice.com/off\\_exchange\\_clearing.jhtml](https://www.theice.com/off_exchange_clearing.jhtml)

## TRADING RUSSELL 1000 AND RUSSELL 2000 INDEX FUTURES AND OPTIONS ON ICE

In a futures trade, both you and the counterparty to your trade have to post initial or original margin with your broker (known in the futures industry as futures commission merchants, or FCMs). Minimum margins are set by ICE Futures U.S., and your broker may demand additional funds. The link to the margin schedule for Russell 1000 and Russell 2000 Mini index futures is available in the Russell Quick Links section.

It is worth noting that ICE Futures U.S. allows for margin offsets between Russell Mini index futures and stock index futures and option products traded at other exchanges.

There are no margin requirements for long option positions. The margin requirements for short option positions vary according to the relationship between a number of factors including the option strike price, the futures price and volatility, and are determined through the Standard Portfolio Analysis of Risk Performance Bond System (“SPAN®”). If the market moves in your favor - higher for a long position, or lower for a short position - the equity in your account rises. You may withdraw these funds down to the “maintenance margin” level depending on your account agreement.

If the market moves adversely - lower for a long position or higher for a short position - your broker will require you to post additional funds, called variation margin, to sustain your maintenance margin level. These “margin calls” assure both your futures commission merchant and the ICE Clear U.S., the exchange clearinghouse, that you can perform according to your contractual commitment. All futures accounts are marked to-market daily, and participants deficient in the margin obligations may have positions liquidated involuntarily.

As the designated clearinghouse ICE Clear U.S. stands as the counterparty to each one of its clearing members. As a AAA-rated entity, the clearinghouse clears trades matched by ICE Futures U.S. and guarantees performance in delivery in the event of a default of any clearing member. The financial integrity and anonymity of ICE Clear U.S. are of increasing importance in a financial system.

What do the financial flows look like in a futures trade? Let’s say a five-contract Russell 2000 Mini futures position is initiated at 750 and the market rises to 760 on the following trading day.

- For the long position, the gain is:  
- 5 contracts x [760 - 750] / contract x \$100 per index point = \$5,000
- For the short position, the loss is equal and opposite:  
- 5 contracts x [750 - 760] / contract x \$100 per index point = -\$5,000

If we reverse the price path, we reverse the gains and losses. Let’s change the starting price to 755 and have the market decline to 739 the next day.

- For the long position, the loss is:  
- 5 contracts x [739 - 755] / contract x \$100 per index point = -\$8,000
- For the short position, the gain is equal and opposite:  
- 5 contracts x [755 - 739] / contract x \$100 per index point = \$8,000

Options traders see the same directional profit and loss profiles relative to price, but the actual profit and loss is subject to a host of factors including the volatility of the market, time to expiration, interest rates and the relationship between the current futures price and the option’s strike price.

## RISK TRANSFER

Risk transfer is a key purpose of a futures market. Any participant in the U.S. equity markets, long or short, can use the Russell Mini index futures and options to protect themselves. As most investors are long, they can sell futures to hedge their risk to the downside. Short investors, such as those in negative-beta mutual funds or ETFs, can hedge their upside risk by going long Russell Mini index futures. The financial flows of a hedge position are equal to those seen in the transactions described above.

Nothing in the above discussion of hedging tells you when and at what price to hedge. This is one of the places where options prove their worth to hedgers. While a conventional long investor may wish to have downside

protection or price floor, that same investor probably wants to participate in any future increases in the U.S. stock market. That investor could buy a December 750 put option, which is the right but not the obligation to receive a short position in, say, a December Russell 2000 Mini future at 750. If the put cost \$50.00, the investor will be guaranteed the right to sell the December future for an effective price of 700.00 (the 750 strike price less the premium paid of 50.00). This right gives the investor protection if the Russell 2000 weakens by the expiry of the December option, but at the same time preserves the ability to profit should the Russell 2000 strengthen over the period.

#### ABOUT ICE

In addition to agricultural commodities, ICE operates existing futures and options markets for crude oil, refined products, natural gas, power, emissions, and foreign currency and equity index futures and options. ICE conducts its energy futures markets through ICE Futures Europe<sup>®</sup>, its U.K. regulated London-based subsidiary, which offers the world's leading oil benchmarks and trades nearly half of the world's global crude oil futures. ICE conducts its soft commodity, foreign exchange and index markets through its U.S. regulated subsidiary, ICE Futures U.S., which provides global futures and options markets, as well as clearing services through ICE Clear U.S., its wholly owned clearinghouse. ICE's state-of-the-art electronic trading platform brings market access and transparency to participants in more than 50 countries.

ICE was added to the Russell 1000<sup>®</sup> Index in June 2006. Headquartered in Atlanta, ICE also has offices in Calgary, Chicago, Houston, London, New York and Singapore. ICE also conducts futures and options trading in canola oil, milling wheat, durum, barley and western barley through ICE Futures Canada<sup>™</sup>, a regulated market in Manitoba, Canada.

#### LEADING ELECTRONIC TRADING PLATFORM

ICE's electronic trading platforms provide rapid trade execution and are amongst the world's most flexible, efficient and secure commodities trading systems. Accessible via direct connections, telecom hubs, the Internet or through a number of front-end providers, ICE offers a 3 millisecond transaction time in its futures markets, the fastest in the industry. ICE's platform is scalable and flexible – which means new products and functionality can be added without market disruption.

ICE offers numerous APIs for accessing futures and OTC markets, including a FIX API.

#### INTEGRATED ACCESS TO GLOBAL DERIVATIVES MARKETS

ICE's integrated futures and OTC markets offer cleared and bilateral products on a widely-distributed electronic platform, with quick response times to participants' needs, changing market conditions and evolving market trends.

#### TRANSPARENCY

Price transparency is vital for efficient and equitable operation of markets. ICE offers unprecedented price transparency and ensures that full depth-of-market is shown. Trades are executed on a first-in/first-out basis, ensuring fair execution priority. ICE also displays a live ticker of all deal terms, and maintains an electronic file of all transactions conducted in its markets.

#### ICE FUTURES U.S. REGULATION

ICE Futures U.S., Inc. is a designated contract market pursuant to the Commodity Exchange Act, as amended, and is regulated by the Commodity Futures Trading Commission. For well over a century, the Exchange has provided reliability, integrity and security in the global marketplace.

#### GETTING INVOLVED

A list of ICE education programs is available at: [www.theice.com/education](http://www.theice.com/education); an overview of ICE capabilities is available at: [www.nxtbook.com/nxtbooks/ice/overview/#/0](http://www.nxtbook.com/nxtbooks/ice/overview/#/0). In addition to our other education offerings, ICE provides contract specific webinar presentations. A list of these presentations can be found at: [www.theice.com/webinars](http://www.theice.com/webinars).

The ICE website: [www.theice.com](http://www.theice.com) should be your first place to start. The home page for the Russell Indexes is: [www.theice.com/russell](http://www.theice.com/russell). The link: [www.theice.com/clear\\_us](http://www.theice.com/clear_us) provides you with the technical details on exchange rules, margins and fees and delivery and expiration. To contact ICE Futures U.S., visit: [www.theice.com/contact](http://www.theice.com/contact)