

INDEX BULLETIN

RUSSELL RECONSTITUTION 2006

ANALYSIS OF ANNUAL RUSSELL REBALANCE

Insights into one of the most closely monitored index events of the year.

May 16, 2006

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The Russell family of indexes is among the most popular in the world, recently reaching a record \$3.8 trillion in assets benchmarked to the indexes. Assets indexed to the Russell family continue to increase, reaching slightly over \$530 billion as of year-end, up from \$485 billion in 2004 and more than double the \$224 billion in 2003.

As a result, the annual Russell equity index reconstitution, a major market event that takes place on the last Friday of every June, typically results in significant changes to both the capitalization and style indexes.

Russell continues to evaluate its reconstitution process and implement rules that may serve to reduce turnover slightly. Last year a significant methodology change was initiated; IPOs are now incorporated throughout the year rather than on an annual basis.

This year Russell will incorporate the “no-replacement” rule. As companies are deleted from the Russell Indexes due to corporate actions and delistings throughout the year, the number of stocks within each index deviates from that of the defined index. However during the reconstitution process, as the stocks are ranked and the new list is cut, the number of stocks will equal that of the index title. The “no-replacement” rule will apply to the preliminary list which will be distributed Friday, June 16th, whereby any corporate action after June 16th that may cause a deletion in the index will not be replaced prior to the official released data. This may result in a final index that will not include the exact number of stocks named in the title.

As a leading quantitative asset manager, Northern Trust Global Investments is dedicated to implementing these major index changes in the most efficient manner possible. Even as the reconstitution rules evolve, the potential impact

from market participants and the level of volatility in the market will, as always, require a great deal of portfolio management precision and focus to avoid experiencing unnecessary costs associated with rebalancing portfolios. Our investment objective for the reconstitution process remains intact; we seek to rebalance portfolios in a way that minimizes the impact of wealth erosion associated with this event while tightly controlling both market and operational risk.

The timeline for this process is as follows:

Wednesday, May 31

- U.S. stocks ranked by market capitalization.

Friday, June 16

- Publication of preliminary list of index constituents and weightings.

Friday, June 23 & 30

- Updated preliminary lists published.

Friday, June 30

- Reconstitution effective at the close.

Monday, July 3

- Final lists published.

Index Construction Methodology

The Russell equity indexes are capitalization-weighted, covering approximately 98% of the investable market capitalization in the United States. At the time of the annual reconstitution, all the stocks in the Russell universe are ranked by market capitalization. Market capitalization cutoff points are shown in Figure 1 on the next page. The largest 1000 companies become the Russell 1000 while the next 2000 companies comprise the Russell 2000. The combined list makes up the Russell 3000 index.



Figure 1.					
Total Market Capitalization Cutoff Points for Stocks in the Russell Indexes (in millions)					
Rank	2006	2005	2004	2003	2002
201	\$15,143	\$13,680	\$12,222	\$10,089	\$10,902
501	\$5,147	\$4,450	\$3,940	\$3,146	\$3,564
1001	\$2,041	\$1,721	\$1,622	\$1,214	\$1,369
3000	\$218	\$186	\$177	\$117	\$134

Sources: Wilshire Atlas, Northern Trust Global Investments

Style Indexes

The Russell style indexes are also reconstituted at the end of June each year. Each capitalization index is divided into a growth and value style index, using proprietary methodology. At the time of the reconstitution, approximately 50% of the capitalization weight of each index is assigned to a style index. Approximately 30% of the companies in each capitalization index are represented in both style index, while the remaining 70% are represented in one or the other style index, but not both. Companies are deemed to be either “growth” or “value” based on their adjusted price-to-book ratio and their long-term growth rate as determined by I/B/E/S.

Turnover Analysis

Based on estimates currently available, we expect the turnover to be in line with, or lower than, last year for most of the Russell indexes. (Figure 2). Last year’s higher Russell 1000 Index turnover was caused by a single very large addition, News Corp, which had an approximate weight of 0.47%. The largest expected addition in the Russell 1000 for 2006 is Mirant Corp., with an anticipated weight of 0.06%. As seen in the performance from Reconstitution 2005 through April 2006, (Figure 3) both the Russell 1000 and the Russell 2000 Indexes continued to post strong positive performance up 12.35% and

Figure 2.		
Russell Index Turnover		
(Percentage of Market Capitalization)		
	2006 (Est.)	2005
Russell 3000	0.8	2.5
Russell 1000	1.8	3.1
Russell 1000 Growth	10.1	19.6
Russell 1000 Value	8.9	17.4
Russell 2000	16.7	17.8
Russell 2000 Growth	27.7	34.5
Russell 2000 Value	26.3	30.1

Sources: Frank Russell Co, Northern Trust Global Investments

20.68% through April 2006. With the combination of the general positive movement of both core indexes along with the relatively low dispersions between the Russell 1000 and Russell 2000, we expect turnover to be reduced for the upcoming reconstitution.

Figure 3.		
Russell Index Performance		
	Full Year 2005	June 30, 2005 - April 28, 2006
Russell 1000	6.27%	12.35%
Russell 1000 Growth	5.26%	10.32%
Russell 1000 Value	7.05%	14.42%
Russell 2000	4.55%	20.68%
Russell 2000 Growth	4.15%	23.22%
Russell 2000 Value	4.71%	18.18%

Sources: Frank Russell Co., Northern Trust Global Investments

Accordingly, the lower turnover for the Growth and Value Indexes (Figure 2) is a result of the small performance disparity among the indexes since June 30 2005. One of the largest estimated shifts within the Growth and Value Indexes will be the classification of Procter & Gamble (P&G). P&G is currently classified as 100% in the Russell 1000 Growth Index and is expected to shift to 90% Value/10% Growth, significantly decreasing its weight in the Growth Index. With regard to sector shifts within the Russell 2000 Index, Consumer Discretionary is expected to post the largest change as a result of the annual reconstitution. The current weight of the sector is 17.29% and is expected to increase to 19.80%. As a result of the lower turnover within the Russell 1000 Index, the sector shifts are muted.

As turnover in 2005 was decreased by the addition of the IPOs during the year, the benefit of this rule continues to prevail. On a quarterly basis, since the last reconstitution in June 2005, a total 101 such names were added to the Russell 3000 Index. (Figure 4). Given the IPO activity in the second quarter of 2006, we expect the IPO additions in June to be in line with the previous quarters.

Figure 4.
Number of IPOs added to Russell Indexes

	Russell 3000	Russell 2000	Russell 1000
3 rd Quarter 2005	48	45	3
4 th Quarter 2005	26	24	2
1 st Quarter 2006	27	27	0
Total	101	96	5

Sources: Frank Russell Co., Northern Trust Global Investments

Due in part to the inclusion of IPOs during the year, we again expect lower turnover based on the number of names added/deleted to the Russell 1000 and Russell 2000 Indexes. The large-cap benchmark should receive six new names and the small-cap index 199, in line with last year's levels. (Figure 5). Deletions for the Russell 2000 are expected to be slightly lower than in years past. Migrations from the Russell 1000 to the Russell 2000 are below last year's numbers however are in line with previous years. The number of companies migrating from the Russell 2000 to the Russell 1000 Index is higher than previous years. As seen in Figure 3, the dispersion of returns for the Russell 1000 and Russell 2000 Indexes from June 2005 through April 2006 is 8.33%. The strength of the smaller capitalization companies will lead to a greater number of migrations into the Russell 1000 relative to previous years.

Figure 5.
Projected Changes to the Russell 1000 & Russell 2000 Indexes

	2006 (Est.)	2005	2004
New Additions to R1000	6	6	16
New Additions to R2000	199	206	308
Deletions from R2000	163	209	205
R1000 to R2000	61	80	67
R2000 to R1000	93	86	67

Source: Wilshire Atlas. Northern Trust Global Investments

NTGI Portfolio Management Rebalancing Considerations

In order to effectively rebalance client portfolios to reflect the annual Russell reconstitution, we use an approach that considers the specific characteristics, factors and exogenous risks associated with the transition to the reconstituted benchmarks. Despite a recent reduction in overall turnover, the risk of underperformance

resulting from the index changes requires continued vigilance, especially among the style indexes where high turnover persists.

Once again, we expect non-index manager market participants, such as hedge funds and proprietary trading desks, to attempt to anticipate index manager trading activity and seek to profit from it. If they are successful, this could have a noticeable negative wealth impact on other participants.

Oftentimes, these participants employ a strategy of buying stocks being added to the indexes and selling stocks being deleted from the indexes ahead of expected index manager activity. Absent other information which could affect the stock price, this can cause investors in passively managed funds to sell the stocks being deleted and buy stocks being added at adverse prices.

Intelligent Indexing™

For this reason, a trade related to the annual Russell Index reconstitution needs to be managed in a thoughtful manner, using the best available trading and portfolio management techniques. While the most effective strategy is one that maximizes wealth rather than one that just minimizes commissions, there are other considerations that must be taken into account. For example, investors in a Russell 2000 strategy would want to sell stocks that are migrating to the Russell 1000 Index at the highest possible price, while at the same time, investors in a Russell 1000 strategy would want to buy those same stocks at the lowest possible price. If cross trading is maximized, both investors receive the price at which the stocks are either deleted or added to their respective index, which would be sub-optimal to one or both of the investors. Our approach, which we call **Intelligent Indexing™**, is about being thoughtful in developing an appropriate solution that will minimize the potential for wealth erosion in information based trades, such as those required by the Russell reconstitution.

Developing the appropriate implementation strategy begins with a thorough review of the supply and demand dynamics surrounding the reconstitution. At Northern Trust, this process begins well before the date of the reconstitution and will continue up to the effective date. All facets of this very large trade must be reviewed and constantly monitored. These considerations go beyond just the investment implications and include a review of potential trade settlement

problems, credit exposure and contingency systems. All of these issues are important contributors to the success or failure of this very important transition.

In addition to executing the Russell rebalance trade in a risk and cost minimizing manner for our funds, we can also provide our clients with customized analysis and investment strategies to manage this transition. Since 2005, the availability of provisional and legacy indexes provides a better opportunity for implementation of such strategies, as investors interested in trading before or after the reconstitution day will now have the appropriate “official” Russell benchmarks.

All of us at Northern Trust Global Investments look forward to working with you to effectively manage the Russell event. If you have any questions about the Russell reconstitution or an interest in discussing related index trading strategies, please contact your investment relationship manager.

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