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2005 Russell Reconstitution Recap

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The 2005 Russell equity index reconstitution was effective at the market close on Friday, June 24. The annual reconstitution event typically results in significant changes to the capitalization and style indexes, and is a major event in the marketplace given the amount of assets benchmarked to the Russell Indexes. As of December 2004, the Frank Russell Company estimates that approximately \$485 billion in indexed assets were tracking the Russell Indexes. In addition, Russell estimates that about \$900 billion in enhanced index and active assets are *benchmarked* to Russell Indexes, and therefore will tend to adjust their risk characteristics to account for the changes in the indexes. As in most years, early predictions of the modifications to the index changes made analysis of the 2005 reconstitution a constantly evolving process.

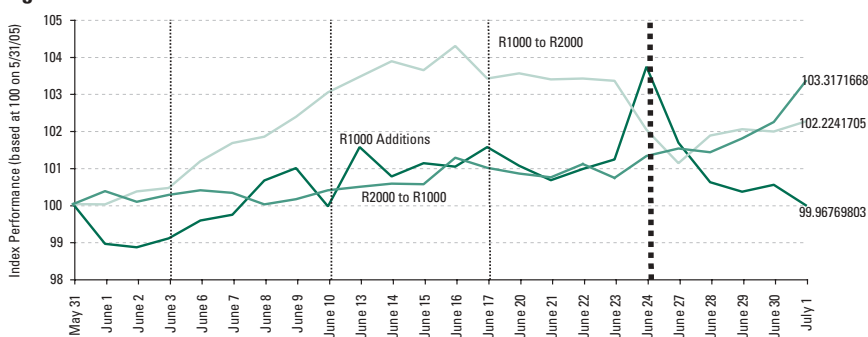
As we expected, the turnover for the core Russell Indexes was lower than in years past, although the style indexes experienced higher turnover. The following analysis details the events surrounding the Russell reconstitution and highlights the post-reconstitution changes on a sector

level. In addition to the updated sector weights, performance of the Russell Index additions and deletions are highlighted.

Performance Review of 2005 Reconstitution Trade

During the month of June, the Russell reconstitution trade generally behaved as expected, with additions outperforming deletions. Additions to the Russell 2000 outpaced the deletions to the same index by 6.3% during the month of June, while the six new names added to the Russell 1000 gained 0.5% above the return of the Russell 1000 Index (Figure 1).

Figure 1. Russell 1000 Additions and Deletions



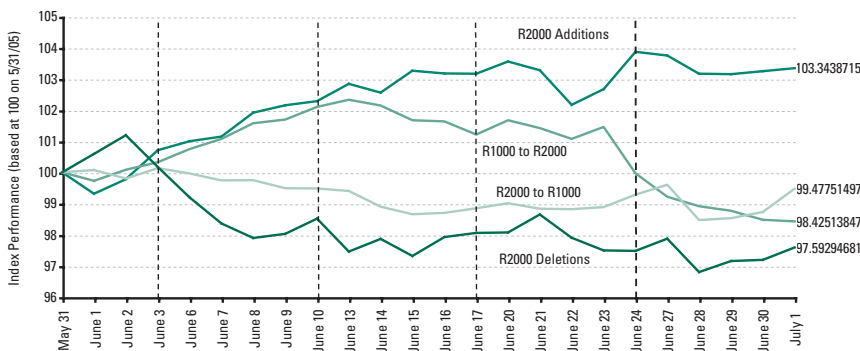
Sources: Goldman Sachs, Northern Trust Global Investments

The migrations between the Russell 1000 and the Russell 2000 performed as expected. This spread represents the performance of the names going from the Russell 2000 to the Russell 1000 versus the performance of the names moving in the opposite direction. We expected the names moving into the Russell 2000 to outperform the basket of names going into the Russell 1000. This was due to the fact that, relative to the market capitalization of each index, there are fewer assets managed against the Russell 1000 than against the Russell 2000. The spread between these migrations reached a high of 3.2% from May 30 until June 15 but collapsed to 0.5% by June 24 (Figure 2).

Intra-Day Performance – June 24

On June 24, the day of the reconstitution, most trades followed the expected direction of indexers' trades, with the exception of migrations (Figure 3). However, these numbers do not show the volatility that was prevalent throughout the trading day, especially during the 30 minutes before the closing bell. For instance, the spread between the Russell 2000 adds and the Russell 2000 deletes finished the day up approximately 1.0%, but had reached a high of 3.5% 20 minutes before the end of the trading day. Similarly, the migrations between the Russell 1000 and 2000 finished the day down 1.9% after collapsing more than 2.3% in the last 20 minutes. In the Russell 1000, the adds basket outperformed the Russell 1000 Index by 2.5%.

Figure 2. Russell 2000 Additions and Deletions



Sources: Goldman Sachs, Northern Trust Global Investments

Figure 3. Post-Reconstitution Performance Summary

Period	Year	Performance Relative to the Russell 2000			Performance Relative to the Russell 1000		
		R2 Adds	R2 Deletes	Adds vs. Deletes	R1 Adds	R2 to R1 Shifts	R1 to R2 Shifts
End of May to Friday before last week of June	2001	-3.4%	-4.9%	1.5%	-7.5%	0.1%	-8.4%
	2002	3.4%	-4.4%	7.8%	4.4%	3.4%	-9.3%
	2003	2.5%	2.0%	0.5%	1.1%	-3.6%	3.6%
	2004	0.5%	-0.6%	1.1%	5.6%	-2.6%	0.8%
	2005	3.3%	-2.0%	5.3%	1.6%	1.0%	3.5%
Month of June	2001	-0.4%	-10.6%	10.2%	2.3%	-0.4%	5.0%
	2002	6.5%	-13.7%	20.2%	5.2%	-0.7%	-3.6%
	2003	1.7%	5.1%	-3.4%	6.1%	-3.2%	4.3%
	2004	-2.8%	-3.4%	0.6%	8.4%	1.6%	0.4%
	2005	3.5%	-2.9%	6.3%	0.5%	2.2%	2.0%
Last week of June	2001	3.3%	-5.9%	9.1%	10.9%	-0.6%	15.1%
	2002	3.0%	-9.2%	12.2%	0.6%	-2.8%	1.1%
	2003	-0.8%	2.4%	-3.2%	2.8%	1.3%	0.7%
	2004	-1.6%	-4.1%	2.5%	3.1%	3.0%	0.0%
	2005	0.7%	-0.6%	1.2%	2.1%	0.3%	-1.3%
Rebalance Day	2001	6.1%	-6.8%	12.9%	8.4%	-1.8%	9.4%
	2002	0.6%	-5.7%	6.3%	3.5%	-0.2%	2.5%
	2003	-0.1%	0.2%	-0.3%	2.0%	-0.9%	0.0%
	2004	-1.3%	-2.5%	1.2%	2.3%	2.5%	-1.0%
	2005	1.2%	0.0%	1.2%	2.5%	0.6%	-1.3%
Expected Flow		Buy	Sell	Buy	Buy	Sell	Buy

Sources: Goldman Sachs, Northern Trust Global Investments

Review of Northern Trust Global Investments' Reconstitution Strategy

In order to successfully manage the reconstitution process, we began reviewing the anticipated changes to the Russell Indexes in January, a full six months ahead of the effective date. In addition to continuous review of the preliminary list of changes, we analyzed various trading alternatives together with their anticipated market impact and associated transaction costs.

A key input to this analysis was an understanding of the potential trading patterns of non-index-fund market participants, including hedge funds, proprietary trading desks and aggressive active managers. Over the last few years, the trading associated with this group of market participants had increased as they seek to profit from anticipated index fund flows associated with the annual rebalance. In order to minimize potential tracking error, index fund managers must trade near the close on the effective date of the reconstitution.

The other market participants attempt to profit by providing the necessary liquidity needed by the index fund managers. As these non-index-fund market participants take advantage of short-term supply/demand imbalances, the net effect has been wealth erosion for index fund investors. In anticipation of this practice, we strategically positioned our portfolios to mitigate this wealth erosion risk.

Beginning in March, we simultaneously began analyzing the data and meeting with leading broker-dealers to determine which firms would be able to execute our strategy most effectively. In May we started to formulate our initial trading strategy, and we finalized broker selection and documentation by the end of the first week of June. Our trading strategy was continuously updated to take into account the changing market conditions associated with the rebalance.

Equally important to the review of the broker-dealers was a detailed analysis of our operational needs and those of our clients' custodians. The ability of a broker to settle the sizable number of transactions on time was an important consideration in the selection process. Throughout the review process, we focused on having a clear understanding of the investment, legal and administrative risks involved, along with a clear goal of controlling the risks.

As a result of our internal and external reviews, we developed a trading strategy that would, within a risk-controlled environment, seek to minimize the wealth erosion that has historically occurred during the annual event.

Our initial analysis of the market environment indicated that there was little pre-trading activity by non-index participants. However, we remained cautious as the effective date

approached and were concerned that a significant portion of the trade would be concentrated on the last day and more precisely, in the last few hours prior to the close on June 24th. On the effective day of the reconstitution, we partnered with select brokers to structure our trades in a way that minimized the downside risk while still allowing us to participate in potential out performance. As a result, most of our Russell-benchmarked funds outperformed their respective benchmarks, despite the transaction costs associated with the significant turnover in the indexes.

Russell Index Enhancements

In August 2004, Russell announced a change to the index methodology with regard to the treatment of Initial Public Offerings (IPOs). Beginning September 30, 2004, IPOs were added to the Indexes on a quarterly basis. Historically the IPOs represented a significant percentage of adds to the index during reconstitution. As shown in Figure 4, 131 stocks were added to the Russell 3000, with 119 stocks added to the Russell 2000 throughout the year prior the reconstitution. The addition of the IPO rule led us to expect lower turnover for the core Russell Indexes.

Figure 4. Number of IPOs Added to Russell Indexes

	Russell 3000	Russell 2000	Russell 1000
Sep-04	48	43	5
Dec-04	40	37	3
Mar-05	43	39	4
Total	131	119	12

Sources: Frank Russell Company, Northern Trust Global Investments

An additional enhancement to the reconstitution process was moving the effective date of the rebalance from the last day in June to the last Friday in June. This eases the trade settlement process as it can take place over the weekend if necessary, thereby reducing some of the risk associated with the annual trade.

Once again, Russell calculated official "provisional" index returns corresponding to the reconstituted indexes. These returns were available from June 1 until June 24. In addition, beginning this year, Russell provided legacy returns for pre-reconstitution indexes from June 27 until July 30. This provided market participants with more flexibility to switch to the new indexes before or after June 24. The publication of these returns also provided better information for managers to analyze trading performance around the day the indexes were reconstituted. This approach is consistent with evolving "best practices" in index construction and maintenance. It shifted some of the

uncertainty and risk of index changes away from index-based investors and back toward market participants who might have previously attempted to profit from a potential “index effect.”

Turnover Analysis

As shown in Figure 5, capitalization turnover in the broad and small cap indexes was slightly lower than last year, while turnover in the large cap Russell 1000 was slightly higher than last year. While the addition of IPOs on a quarterly basis improved the 2005 turnover results for the core indexes, the style indexes all experienced higher turnover. For the Russell 1000, the reclassification of two stocks — General Electric and Pfizer — was the primary cause. General Electric was reclassified from value to growth and Pfizer was reclassified from growth to value, accounting for approximately 20% of the style index turnover.

Figure 5. 2005 Russell Reconstitution One-Way Turnover

	2005	2004	2003
Russell 3000	2.5%	2.8%	2.1%
Russell 1000	3.1%	2.9%	2.6%
Russell 1000 Value	17.4%	13.3%	10.2%
Russell 1000 Growth	19.6%	13.5%	9.6%
Russell 2000	17.8%	18.8%	19.8%
Russell 2000 Value	30.1%	28.6%	34.8%
Russell 2000 Growth	34.5%	32.2%	36.7%

Sources: Frank Russell Company, Northern Trust Global Investments

Figure 7. Core Indexes Sector Weights

Sector	RUSSELL 1000			RUSSELL 2000		
	Pre-Recon	Post-Recon	Change	Pre-Recon	Post-Recon	Change
Auto & Transportation	2.08%	2.16%	0.08%	4.11%	3.59%	-0.52%
Consumer Discretionary	13.84%	14.42%	0.58%	18.65%	19.40%	0.75%
Consumer Staples	7.05%	6.87%	-0.18%	1.70%	1.98%	0.28%
Financial Services	22.03%	21.98%	-0.05%	23.62%	23.48%	-0.14%
Health Care	13.53%	13.36%	-0.17%	11.50%	11.91%	0.41%
Integrated Oils	5.62%	5.45%	-0.17%	0.17%	0.19%	0.02%
Materials & Processing	3.58%	3.70%	0.12%	9.68%	9.02%	-0.66%
Other	4.37%	4.31%	-0.06%	0.50%	0.56%	0.06%
Other Energy	2.72%	2.84%	0.12%	6.02%	4.92%	-1.10%
Producer Durables	4.37%	4.36%	-0.01%	7.85%	7.65%	-0.20%
Technology	13.51%	13.13%	-0.38%	11.30%	13.54%	2.24%
Utilities	7.30%	7.42%	0.12%	4.90%	3.75%	-1.15%

Sources: Goldman Sachs, Northern Trust Global Investments

Review of Index Changes

Effective June 24, six new companies were added to the Russell 1000 Index and 206 companies were added to the Russell 2000 Index. Though the number of companies in total added to the indexes was lower than in 2004, the number of companies that migrated both from the Russell 1000 to the Russell 2000 and vice versa was greater than in 2004.

Figure 6. Changes to the Russell 1000 & Russell 2000 Indexes

	2005	2004	2003	2002	2001
New Additions to Russell 1000	6	16	7	21	24
New Additions to Russell 2000	206	310	280	379	495
Deletions from Russell 2000	209	205	186	225	276
Russell 1000 to Russell 2000	80	67	82	105	110
Russell 2000 to Russell 1000	86	67	92	136	151

Sources: CSFB, Lehman Brothers, Northern Trust Global Investments

Sector Profiles

The Russell 1000 Index did not experience any significant shifts in sector weights following the reconstitution. Within the Russell 1000 Index following the rebalance, Financial Services, Health Care and Technology dominated the index with weights of 21.98%, 13.36% and 13.13% respectively (Figure 7). However, the Russell 1000 Value Index did experience significant weighting shifts as a result of the rebalance. The Other category saw a -3.79% change from the move of GE from value to growth. Health Care had a significant 3.65% increase as Pfizer was reclassified to the value index (Figure 8).

In the small cap arena, the Russell 2000 Index is still dominated by the Financial Services and Consumer Discretionary sectors, with weights of 23.48% and 19.40% respectively (again, Figure 7). The largest change within the Russell 2000 Index was in the Technology sector, which increased 2.24% and now represents 13.54% of the index. Finally, as shown in Figure 9, the Russell 2000 Value Index experienced

the same effect in the Technology sector with an increase of 3.33% and a current weight of 8.92% in the index. Financials increased in the Russell 2000 Growth Index, now representing 12.19%, a change of 0.88%. However the index is still dominated by Consumer Discretionary and Health Care with weights of 22.87% and 19.94%, respectively.

Figure 8. Style Indexes Sector Weights – Russell 1000

Sector	RUSSELL 1000 VALUE			RUSSELL 1000 GROWTH		
	Pre-Recon	Post-Recon	Change	Pre-Recon	Post-Recon	Change
Auto & Transportation	2.22%	2.12%	-0.10%	1.92%	2.20%	0.28%
Consumer Discretionary	8.75%	9.24%	0.49%	19.56%	19.61%	0.05%
Consumer Staples	5.54%	4.84%	-0.70%	8.76%	8.91%	0.15%
Financial Services	32.19%	36.05%	3.86%	10.59%	7.87%	-2.72%
Health Care	3.59%	7.24%	3.65%	24.72%	19.50%	-5.22%
Integrated Oils	10.62%	10.73%	0.11%	0.00%	0.15%	0.15%
Materials & Processing	5.35%	4.65%	-0.70%	1.59%	2.75%	1.16%
Other	6.31%	2.52%	-3.79%	2.19%	6.10%	3.91%
Other Energy	3.50%	3.02%	-0.48%	1.83%	2.67%	0.84%
Producer Durables	3.78%	2.05%	-1.73%	5.04%	6.67%	1.63%
Technology	5.50%	4.48%	-1.02%	22.53%	21.81%	-0.72%
Utilities	12.66%	13.02%	0.36%	1.27%	1.76%	0.49%

Sources: Goldman Sachs, Northern Trust Global Investments

Figure 9. Style Indexes Sector Weights – Russell 2000

Sector	RUSSELL 2000 VALUE			RUSSELL 2000 GROWTH		
	Pre-Recon	Post-Recon	Change	Pre-Recon	Post-Recon	Change
Auto & Transportation	4.94%	3.43%	-1.51%	3.18%	3.75%	0.57%
Consumer Discretionary	13.96%	15.94%	1.98%	23.95%	22.87%	-1.08%
Consumer Staples	2.49%	2.94%	0.45%	0.81%	1.00%	0.19%
Financial Services	34.52%	34.65%	0.13%	11.31%	12.19%	0.88%
Health Care	4.14%	3.97%	-0.17%	19.82%	19.94%	0.12%
Integrated Oils	0.07%	0.03%	-0.04%	0.28%	0.35%	0.07%
Materials & Processing	12.38%	11.45%	-0.93%	6.63%	6.56%	-0.07%
Other	0.85%	0.55%	-0.30%	0.10%	0.57%	0.47%
Other Energy	6.22%	4.23%	-1.99%	5.78%	5.61%	-0.17%
Producer Durables	6.62%	7.21%	0.59%	9.24%	8.09%	-1.15%
Technology	5.59%	8.92%	3.33%	17.75%	18.21%	0.46%
Utilities	8.22%	6.65%	-1.57%	1.15%	0.83%	-0.32%

Sources: Goldman Sachs, Northern Trust Global Investments

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