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U.S. MARKET COMMENT

NEW EQUITY INDICES ARE QUITE STYLISH

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New Equity Indices Are Quite Stylish

The new style index series from Standard and Poor's[1] is the latest in a series of more comprehensive and well thought-out style indices that have significantly improved the choices available to style-conscious investors and managers. Dow Jones, for example, introduced its six-factor style indices in 2000, while MSCI's eight-factor indices debuted in early 2003. As can be seen from Table A, these new style indices represent a much more robust definition of style than earlier indices, which rely solely on price-to-book (P/B) ratios (e.g., S&P Barra) or P/B ratios and forward earnings growth rates (e.g., Russell and Wilshire Style). While Wilshire Associates introduced a "second generation" style index as early as 1986, the indices never gained much exposure as Wilshire specifically advises managers against using them as benchmarks due to their high degree of concentration.[2] We tend to favor these multifactor models,[3] as they are more reflective of the actual opportunity sets considered by investment managers. Managers generally do not define style based on one or two factors, but rather consider a multitude of historical characteristics and future expectations. We would note, however, that "first generation" indices were designed to satisfy investor demand spurred by early 1990s research that showed P/B ratios and capitalization differences accounted for a large portion of historical variance in equity returns.[4]

Different Methodologies

The primary distinctions among various style families are their index weightings, reconstitution methods, and use of single- or multi-dimensional scales for defining growth and value. With regard to index weights, the most significant difference is whether or not the indices split the market 50/50 between growth and value. Indeed, problems with indices that used a 50/50 split were in large part responsible for the recent push toward more comprehensive indices. To wit: the dominance of growth stocks from 1994 through 1999 wreaked havoc on these indices, as growth stocks grew to make up significantly more than half of public equity market capitalization. As a result, value indices that split the market 50/50 were littered with growth stocks by the end of 1999, leading many to search for a better way to define growth and value. All but two of the style indices considered here (Dow Jones and S&P's Pure Style indices) require that the full market capitalization of all stocks in their broad index is included in their style indices, resulting in a 50/50 split, with DJ Wilshire and Wilshire Style including the most expensive half of market capitalization in the growth

[1] On May 24 S&P announced the creation of two new style index series that will officially replace the S&P/Barra style indices on December 16, 2005: the S&P/Citigroup Style Index Series and the S&P/Citigroup Pure Style Index Series. S&P will begin publishing returns for the indices on September 16, 2005, and discontinue the S&P/Barra style indices on June 30, 2006. The new style indices will become the official S&P style indices, replacing S&P/Barra style indices in futures, options, and exchange-traded funds, on December 16, 2005. All indices will have a history beginning on July 3, 1995.

[2] According to Wilshire, the Target indices are "'high-octane' style indices that Wilshire has found to be popular for investors wishing to invest passively in style categories. However, they are not recommended as performance benchmarks for most active managers whose style is generally not as concentrated as the Target Indexes."

[3] As with any multifactor model, the marginal benefit of each additional variable declines as more variables are added. Therefore, more complex models are only superior if they are made up of variables with relatively strong explanatory powers.

[4] We refer specifically to the work done by William Sharpe, as well as Eugene Fama and Kenneth French's study of equity returns from 1963-90.

index and the least expensive in the value index. Russell, MSCI, and the broad S&P indices proportionally split stocks' market cap between growth and value depending on their relative style score. Dow Jones and S&P's Pure Style indices remove stocks rated as "neutral," (i.e., not having strong characteristics for either growth or value) from their style indices.

S&P's "Pure Style" indices differ from the other indices in that once their constituents are determined, these indices will be weighted by *the attractiveness of their growth or value score,* rather than by market cap. The intended result is indices that are more equal-weighted, and thus more similar to portfolios of active managers. Given that constituents have not yet been released, we have no way of knowing how different these weightings will be from their cap-weighted counterparts. Still, investors should note that such a weighting methodology will result in an index somewhat different than the actual opportunity set available to investors. As a result, it could be asked whether the Pure Style indices should be considered an index, or rather a mechanistic approach to active investment.

Another difference between index families involves how often they are reconstituted. More frequent reconstitution improves the purity of style definitions, but at the cost of higher turnover. Some of the newer style indices (e.g., MSCI and Dow Jones) try to balance these trade-offs by reconstituting more frequently, but using transition rules aimed at minimizing turnover to stocks that have experienced large, material changes, while leaving less significant movers where they are. The Dow Jones Wilshire indices are rebalanced quarterly, without any transition rules. The new S&P indices, Russell, and Wilshire Style indices use annual rebalancing.

Finally, there is the issue of whether growth and value indices define style along one continuum using the same factors or along two dimensions. The appeal of using separate measures stems from some of the flaws inherent in systems that score all stocks according to the same factors—namely, certain factors are far more applicable to one style than to the other. Many growth stocks, for example, do not pay dividends; thus, while relative dividend yields may provide a useful criterion when sorting through value stocks, they are far less useful for growth stocks. However, two-dimensional models also have their limitations. By giving both growth and value scores to all stocks using unique factors, these systems can wind up categorizing certain stocks as strong candidates for *both* styles. While we tend to lean toward the single continuum approach, we nevertheless recognize both models have limitations.

Style Purity

While the indices, regardless of their methodologies, are highly correlated, significant performance differences do occur (Tables B through E). In particular, the MSCI and Dow Jones indices performed the best during the recent period of growth outperformance, while the Wilshire Target indices did best when value outperformed.

From July 1, 1994, through February 29, 2000, a period of severe growth outperformance, the MSCI Large Cap Growth Index posted the best return, followed by Wilshire Target and Dow Jones. Among small caps, Dow Jones did the best, followed by MSCI and Dow Jones Wilshire. From March 1, 2000, through July 31, 2005, a period of value dominance, the Wilshire Target indices were the best performers among small and large caps, with no other family exhibiting much of a pattern. The most interesting aspect of these results is that the multifactor indices were by far the best performers, indicating that such indices *may* provide a more pure representation of style than those that rely on fewer factors.

Conclusion

While there are differences among the various index families, overall, they represent significant improvements over the first generation of style indices, and provide investors with a wider range of viable benchmarking and indexing options. Investors now have a greater opportunity to benchmark managers against indices that most closely represent the true opportunity set from which managers are selecting. For example, multifactor indices that do not split the market 50/50 between growth and value may be more reasonable benchmarks for concentrated growth and value managers, while those that split the market 50/50 into growth and value may be more appropriate for managers taking a relative value or relative growth approach. However, investors and managers remain entrenched in using Russell style indices. Of the 1,372 style products we track in our database, 901 use a Russell index as their benchmark.

Table A

CHARACTERISTICS OF U.S. EQUITY INDICES

	Dow Jones	Dow Jones Wilshire	MSCI	Russell	S&P/Citigroup[1]	Wilshire[2]
Index Reconstitution	Semi-Ann (with transition rules)	Quarterly	Qtrly (partial)[3] Semi-Ann (full)	Annually	Annually	Wilshire Style - Ann Wilshire Target - Qtrly
Style Factors	6	6	8	2	7	Wilshire Style - 2 Wilshire Target - 6
Growth	P/E, P/B, earnings growth, DY; forward earnings growth	P/E, P/B, earnings growth, DY; trailing revenue growth, earnings growth	5 L-T est EPS growth S-T est EPS growth Internal growth rate L-T hist EPS growth L-T hist sales growth	P/B, I/B/E/S earnings est	5-yr EPS growth 5-yr sales per share growth 5-yr internal growth rate	Wilshire Style - 2: 75% P/B, 25% P/E Wilshire Target - 3: ROE, sales, and earnings growth
Value	Same	Same	3 P/B, DY, 12-mo forward P/E	Same	P/B P/C DY P/S	Wilshire Style - same Wilshire Target - 3: P/E, P/B, DY
50/50 Split between Growth and Value	No	Yes	Yes[4]	Yes[5]	Style: Yes Pure: No	Wilshire Style: Yes Wilshire Target: No
Removes Neutral Stocks	Yes	No	No, included proportionately in growth and value	No, included proportionately in growth and value	Style: No, included proportionately in growth and value Pure: Yes	Wilshire Style: No Wilshire Target: Yes
Independent Factors	No	No	Yes	No	Yes	Wilshire Style: No Wilshire Target: Yes

Sources: Dow Jones & Company, Inc., Frank Russell Company, Morgan Stanley Capital International, S&P/Citigroup Global Equity Indices, and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

[1] Standard & Poor's and Barra formed a partnership in 1992 to publish Growth and Value subsets of the S&P equity indices. Starting September 2005, S&P will discontinue the Barra style indices and adopt Citigroup's style definitions to create a style index and a pure style index, which are depicted in this exhibit.

[2] Wilshire Associates also maintains the Wilshire Target Indices, which are very different from the Wilshire Style Indices.

[3] Partial review dates are used to rebalance constituents that have moved outside the buffer zones.

[4] MSCI proportionally weights stocks into five categories: 100% value, 65/35 value/growth, 50/50, 35/65, and 100% growth. Each stock gets a growth score (using growth factors) and value score (using the value factors). Ultimately, it results in 50/50 growth/value split.

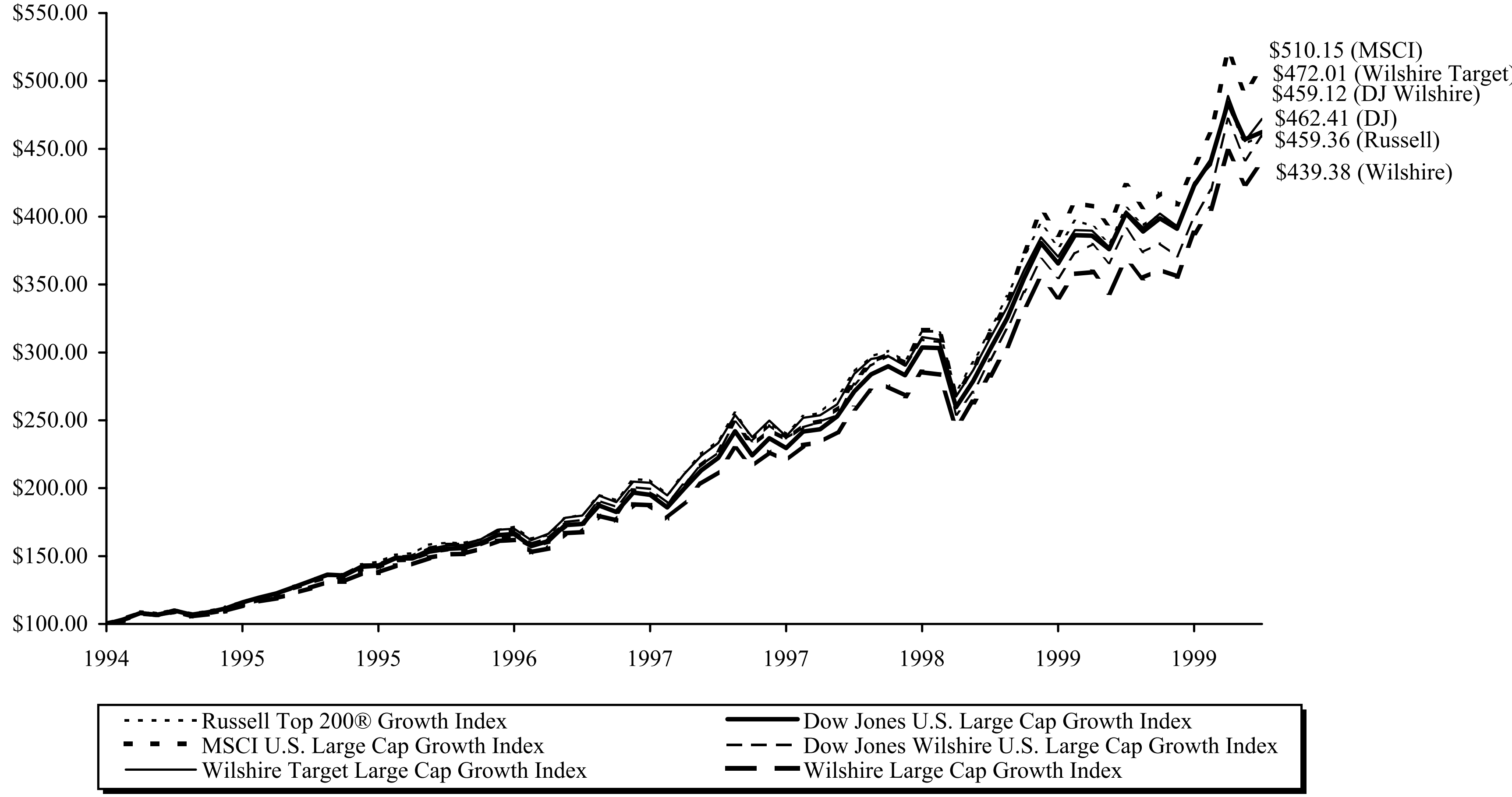
[5] While Russell does not explicitly claim to split its market capitalization indices equally into growth and value, examination of the style index market caps immediately following index reconstitution indicates that market capitalization is approximately equal in each style index.

Table B

CUMULATIVE WEALTH OF SELECTED U.S. LARGE-CAP GROWTH INDICES DURING PERIOD OF GROWTH OUTPERFORMANCE

July 1, 1994 - February 29, 2000

June 30, 1994 = $100.00



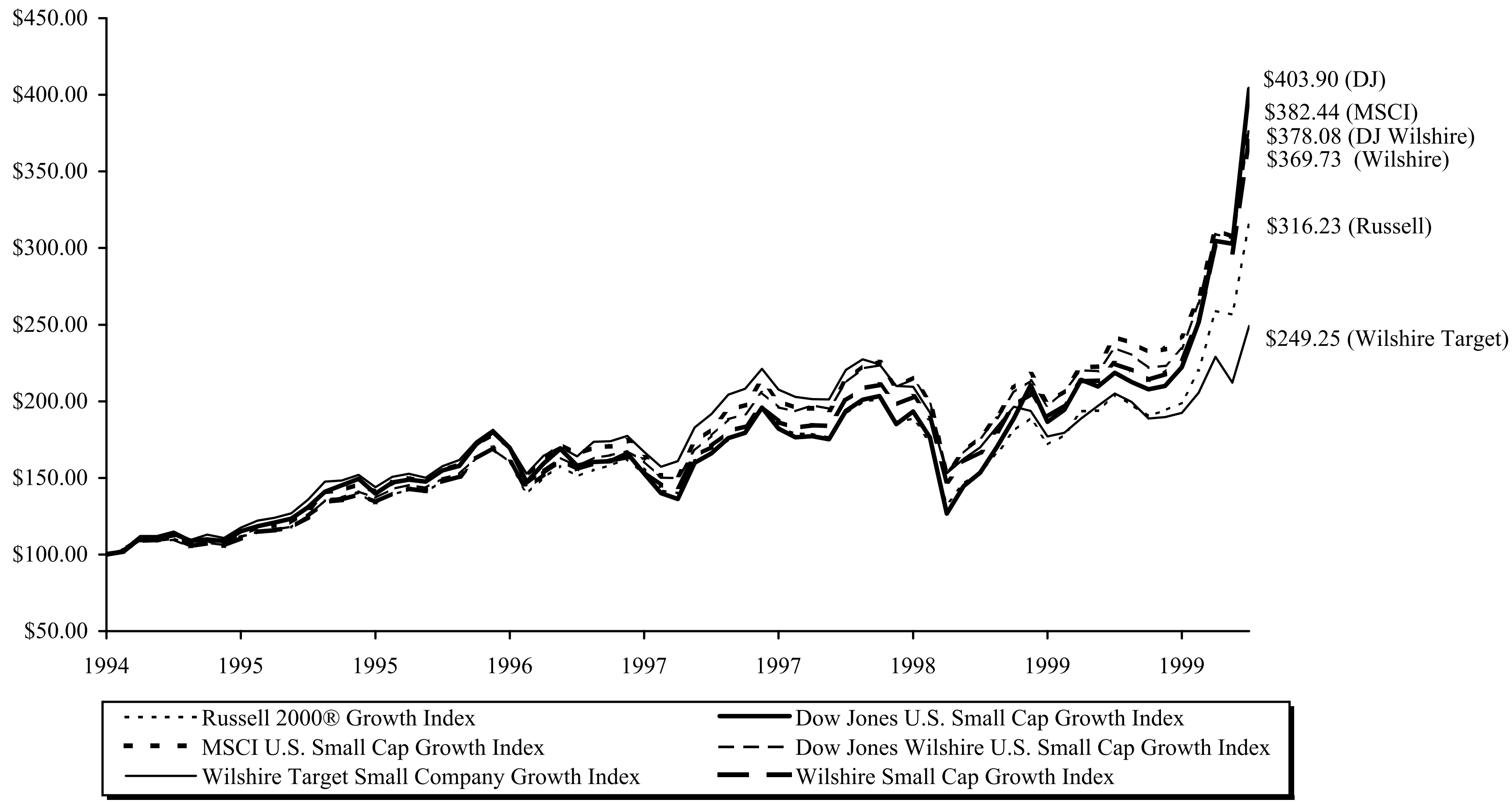
Sources: Dow Jones & Company, Inc., Frank Russell Company, Morgan Stanley Capital International, Thomson Datastream, and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

Table C

CUMULATIVE WEALTH OF SELECTED U.S. SMALL-CAP GROWTH INDICES DURING PERIOD OF GROWTH OUTPERFORMANCE

July 1, 1994 - February 29, 2000

June 30, 1994 = $100.00



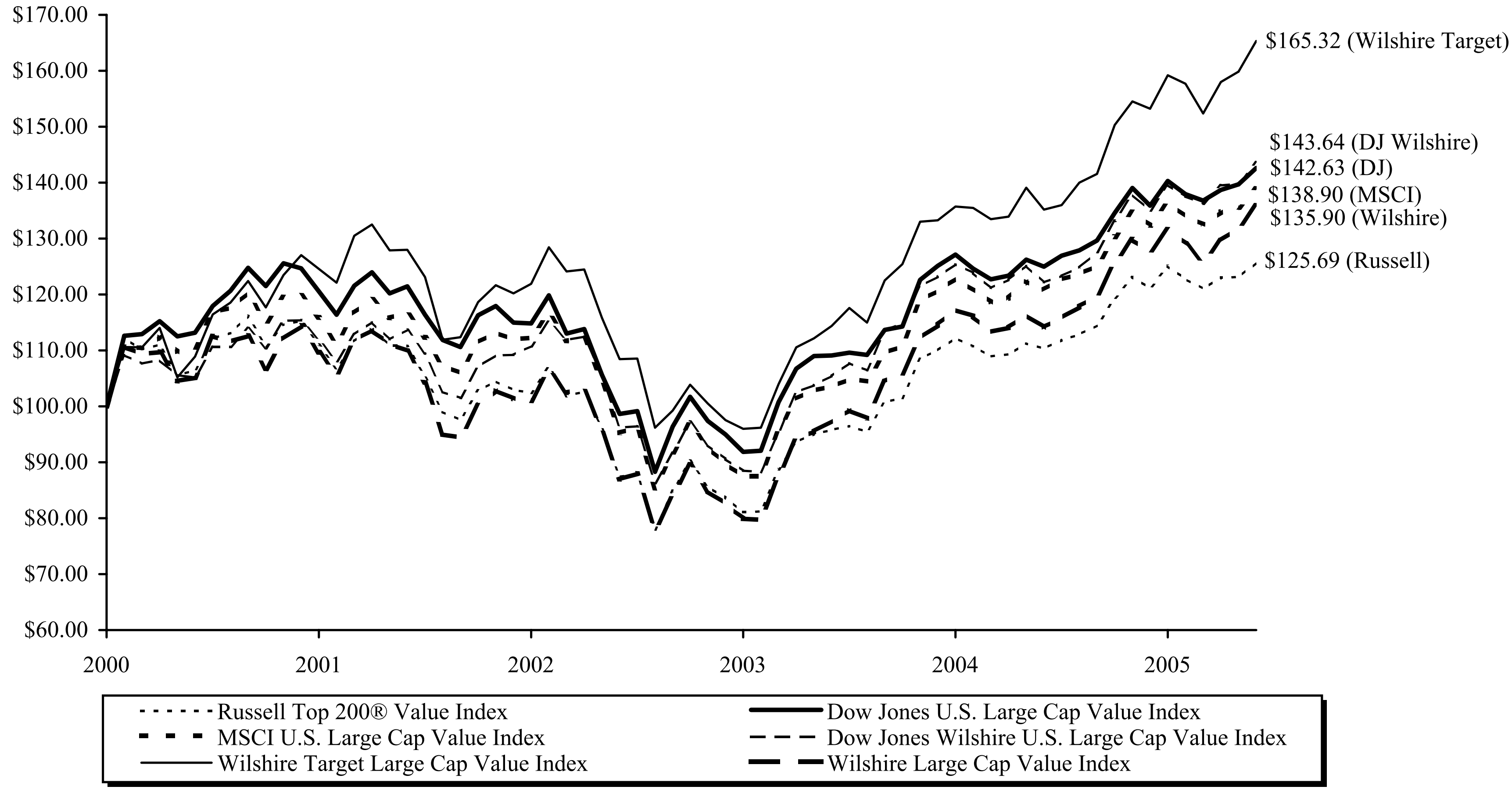
Sources: Dow Jones & Company, Inc., Frank Russell Company, Morgan Stanley Capital International, Thomson Datastream, and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

Table D

CUMULATIVE WEALTH OF SELECTED U.S. LARGE-CAP VALUE INDICES DURING PERIOD OF VALUE OUTPERFORMANCE

March 1, 2000 - July 31, 2005

February 29, 2000 = $100.00



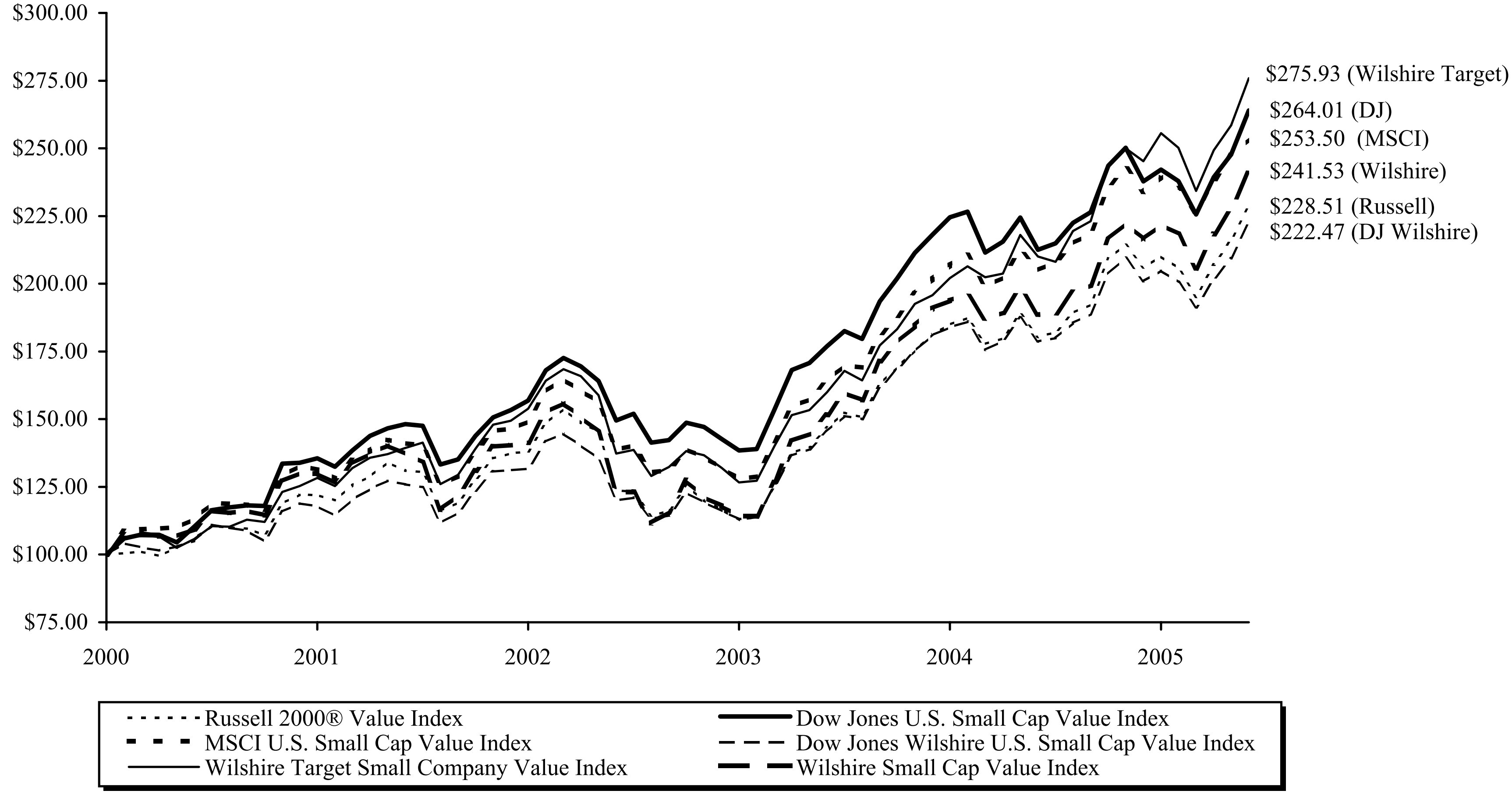
Sources: Dow Jones & Company, Inc., Frank Russell Company, Morgan Stanley Capital International, Thomson Datastream, and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

Table E

**CUMULATIVE WEALTH OF SELECTED U.S. SMALL-CAP VALUE INDICES
DURING PERIOD OF VALUE OUTPERFORMANCE**

March 1, 2000 - July 31, 2005

February 29, 2000 = $100.00



Sources: Dow Jones & Company, Inc., Frank Russell Company, Morgan Stanley Capital International, Thomson Datastream, and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.