

A Disciplined Approach to Small Caps

For many investors the small cap universe is the realm of guessing and taking chances. When it comes to stock selection in this segment, Sudhir Nanda, portfolio manager of the T. Rowe Price Diversified Small-Cap Growth Fund, leverages his academic background and profound testing process to run a diversified portfolio with low volatility and no room for random decisions.

Could you tell us about the history and the background of the fund?

The fund has been around since the nineties but, at the time, it was managed with a different investment process and lacked in our performance expectation. In 2006, when I took over the fund, I implemented a different management process based on multi factor analysis that drove our stock selection model and stock screening process.

With my academic teaching and research background, I found it interesting to develop and implement a stock selection model that is anchored in elaborate economic research and back testing.

How do you define your investment philosophy?

It is built on two main considerations. The first one is low stock turnover because, particularly in the small-cap space, turnover can be very expensive. The second aspect is a lower risk profile than the benchmark, because avoiding big losses in down markets leads to compounding higher long-term returns. Diversification is another key element as it diminishes the overall risk in the portfolio.

I believe that making the right choices for the metrics behind stock selection, combined with a discipline in applying that process, leads to strong performance over time. We have back tested each of the metrics that we use over different environments. There is no random selection; it is all based on careful analysis.

What is your investment process?

Our stock selection process starts with the stocks included in the MSCI Small Cap Growth Index, which serves as our benchmark. Then we apply five stock selection metrics: valuation, profitability as measured by return on equity, capital allocation, earnings estimate revisions and price momentum, and earnings quality.

Valuation has the greatest weight in the process because, over time, cheap stocks have outperformed expensive stocks. That simple fact is true for the U.S., the growth universe, and for every part of the world that we have studied. However, it is important to know which valuation metric to use in different markets and sectors.

For profitability, we use return on equity or return on investment, depending on what is most appropriate for a specific sector. The companies that we select should not be overinvesting. If they are investing, they should be doing it in projects generating returns to capital that exceed their cost of capital. We also like companies that use the excess cash to buy back stocks and we avoid companies that tend to dilute shareholder value by issuing stock.



Sudhir Nanda, is the head of the Quantitative Equity Research Group as well as a portfolio manager. He is president and chairman of the Investment Advisory Committee of the US Structured Active Small-Cap Growth Equity Strategy. Nanda is a vice president of T. Rowe Price Group, Inc.

Nanda has 14 years of investment experience, 13 of which have been with T. Rowe Price. Before joining the firm in 2000, he was an assistant professor of finance at Penn State University, Harrisburg. Nanda has several years of international experience in financial and general management positions with Tata Steel in India.

Nanda earned a B.A., with honors, in mathematics from St. Stephen's College, Delhi, and an M.B.A. from the Indian Institute of Management, Calcutta. He also received a Ph.D. in finance from the University of Massachusetts, Amherst. Additionally, he has earned the Chartered Financial Analyst designation.

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We also look for good earnings quality with an emphasis on cash earnings, not accounting earnings. There are times, especially towards the end of economic cycles, when companies experience slowdowns, inventory builds up, and cash flow generation stalls, even if the company is still producing accounting earnings. The companies with high free cash flow tend to hold up better in down markets, thus decreasing the volatility of our portfolio and helping us to outperform. More importantly, companies with high free cash flow have financial flexibility; if their stock goes down, these companies can buy back. In a recession or down market, they also have the ability to keep on investing.

Estimate revisions and price momentum have less weight than valuation, profitability, and capital allocation, because more emphasis on momentum would lead to a higher turnover, which can be devastating to performance in the small-cap universe. Our turnover tends to be between 15% and 20% on average—a reflection of our lower weight on momentum compared to our peers.

Once the stocks in my universe have been ranked based on a combination of valuation metrics, I define the bottom 20% as cheap and the top 20% as expensive. Every stock receives a rank from one to five based on each of the different metrics, while the market multiple varies. The portfolio is fully invested, so I do not try to time the market. Overall, the fund tends to outperform in down markets and to be in line with the benchmark in up markets.

Why have you chosen the MSCI Small Cap Growth Index for your benchmark?

The MSCI Small Cap Growth Index significantly differs from the Russell 2000 Growth Index, most commonly used in the small-cap space. One of the differences is the definition of small cap, so the market capitalization of our fund tends to be slightly larger by construction, when compared to the typical small-cap fund. The stocks we typically invest in have market cap of between \$500 million and \$4 billion, with most of the weight being in the range of \$1 billion to \$3 billion.

We also believe that MSCI has a superior definition of growth and value. Another difference is the rebalancing. MSCI has two rebalancing periods that do not affect the portfolio performance as much as Russell's single annual rebalancing. When a stock goes into the mid-cap range, MSCI will leave it in the index for up to three rebalancing periods. It is a very slow-moving index, which leads to a low turnover, and low turnover is key for small-cap money managers.

What are the unique features of your research process?

The quantitative equity group at T. Rowe Price has grown over the last six years. As part of this process, we have constructed a research database that goes back 20 to 50 years in the U.S. Our models are based on practices that have been proven to work in academic research, but we modify academic research to make it useful.

It is important to stress that the model is not purely mechanistic. The model looks at all the metrics, creates a weighted average, and comes up with a rank for each stock, but the final decisions require human insight and expertise.

One of the advantages of our firm is that we have an excellent small- and mid-cap franchise on the fundamental side. We have analysts covering almost every industry in the U.S., so I am able to take advantage of their industry and company insights. For example, in the small-cap space, biotech companies represent 5% to 6% of the benchmark, and you cannot pick biotech stocks unless you have specialist knowledge of the industry.

So, we use a combination of fundamental research, analyst insights, academic research, and what we have observed over time. We know the historic performance patterns for each metric and how relevant it is in a recession or a growth period. Every day I look at the changes in stock ranks. For the stocks that have declined, I double-check the numbers and get additional information to decide if I want to sell. When my objective is to buy a new stock, I may have a choice of buying four stocks in an industry, so I would do more research on each of them.

Could you use some examples to illustrate your research process?

Some years ago we bought Hanesbrands, which was spun off from Sara Lee Corporation. At the time, it was a small-cap stock with very high free cash flow yield. The company was coming out of a difficult period with high cotton prices and many investors abandoning the stock. However, it was paying back its debt using its cash flow and, over time, it invested in other businesses and diversified its portfolio. We chose the stock exactly because of its capital allocation, increasing return on assets, and the judicious use of cash flow. It is not a small-cap stock any more and we have not added to it, but we still keep the name in the portfolio. Not surprisingly, after its market cap increased above \$3 billion, many investors became interested in the stock.

Another example is Middleby Corp, a provider of kitchen equipment for restaurants, which we have owned for almost eight years. The company has grown both organically and through acquiring businesses in the same space. It is a stock with good growth characteristics, not always cheap, but with high ranks in terms of capital allocation. While many companies run into problems when they start growing outside of their niche, Middleby expands within its area of specialization, combining similar businesses and bringing down the costs. If they start to acquire businesses in different sectors, I would be worried.

What is your buy/sell discipline?

To begin with, there are different levels of discipline. First of all, I buy stocks that are in the small-cap growth universe, not random stocks. Second, I have a system that I follow judiciously—I only buy stocks that rank well in my process. Then, there is discipline in the portfolio construction and

a limit to the maximum position size. Overall, it is very process-oriented discipline that excludes taking decisions based on how I feel about a certain name on a particular day.

The buy-and-sell decisions start with the rankings. Before a stock goes into the portfolio, we examine the fundamentals to make sure that there are no lawsuits, recent changes in strategy, or a sudden management change, or any other issue that creates risk we are not willing to take.

My decisions are also based on which stocks would improve portfolio construction, diversification, and stability. One of the considerations is whether we already own a similar stock in the portfolio. For example, if I owned Abercrombie and Fitch, I might not buy Aeropostale because they both operate in the same market.

However, when a stock leaves the index because it has grown to the mid-cap universe, I may still hold it if it looks attractive. I believe in letting your winners run, unlike investors who may keep holding their losers and selling their winners. As a whole, the strategy of letting your winners run leads to better performance and keeps the turnover low.

What is your portfolio construction process?

We keep the sector weights in the portfolio similar to those of the benchmark. That means that if the benchmark has 20% in the technology sector, the fund will have approximately 20% exposure to technology stocks. The reason is that we have built a process that works for selecting stocks within sectors, not for picking sectors. Choosing a sector has elements of a macroeconomic call because different sectors tend to do well in different parts of the economic cycle. We do not do market timing and do not make macro calls in this portfolio. Instead, we focus on stock selection.

We maintain a diversified portfolio with about 300 stocks at all times. Statistically, it is much easier to outperform with more stocks, as long as each of the stocks is individually attractive. If I can find 200 or 300 attractive stocks in the small-cap market, I do not see why I should not buy all of them, provided my process allows that. Moreover, in the small-cap space, you can define attractive stocks, but you cannot tell when they will outperform. It could take two or five years, so through buying many attractive stocks, I make sure that I have winners in each period.

New positions typically start with 20 basis points of the portfolio and then gradually increase. Being an incremental trader, I buy a starter position and then I add to it when the stock is down. For risk control purposes, when a stock position goes over 1% weight in the portfolio, I would stop buying it.

The individual stock position size depends on the risk associated with each stock. For example, we would allocate smaller positions to biotech companies than to consumer staples companies. For stable businesses, we have fewer stocks with larger weights, or a more concentrated exposure, while for riskier sectors we prefer smaller positions in a larger number of companies. We also compare our positions to the benchmark to decide whether we want to be overweight or underweight in a specific company.

Since our portfolio consists of high quality companies, there is a lot of takeover activity. Typically, about 5% to 10% of the companies in the portfolio are acquired. Just today a pharmaceutical company was taken over and I expect a few takeovers in the biotech sector in the near future. In fact, we benefit a lot from takeover activities, so I tend to buy a lot of attractive stocks in periods with high takeover activity.

How do you define and manage risk?

We have a dedicated portfolio risk management group, which reports to our chief risk officer. Since the group monitors all the portfolios of the company, during our regular meetings they alert us whenever they find something unusual.

T. Rowe Price Diversified Small-Cap Growth Fund

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Source: Company Documents

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Our research staff analyzes and selects funds based on their consistency in performance and durability of investment style.

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Our analysis consistently shows which metrics worked yesterday, which part of our portfolio is not working, and why we may be outperforming or underperforming. Furthermore, there is an additional layer of monitoring by our equity steering committee, which consists of a few global senior portfolio managers. In their process, they scrutinize all the portfolios to make sure we are styled correctly. Internally, when I do a trade, it is visible to everybody in the equity division as there are many people observing what we are doing. If we are buying or selling a stock, and one of our fundamental portfolios owns it, most likely the analyst will ask why.

Since we aim to outperform in down markets, we always consider the potential losses to the overall portfolio. At this point, we look at all the different measures, including beta, standard deviation of returns, and the downside risk of the individual stocks. Internally, we allocate risk scores for every stock, based on a number of different metrics such as leverage, short- and long-term volatility. This methodology helps us understand how the stock is likely to behave in different markets.

Generally speaking, I want my portfolio to have certain characteristics of behavior. There is a period of time when we may underperform, typically when coming out of a recession and when junk stocks do well. That is obviously a risk that we recognize and are willing to take in order to have a high quality portfolio.

Our disciplined investment process is aligned with our approach to risk management. Within the growth universe, as valuation buyers, we emphasize good capital allocation and free cash flow generation. Being a part of a global firm with a very strong fundamental operation provides significant information advantage over the average competitor in the small-cap space. **T**

EXPLANATORY NOTES—ARTICLE REPRINT

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When considering mutual funds, investors should look beyond historical performance. They should consider factors such as the fund's investment objective, the types of securities in which it invests, and its level of risk compared with other types of investments. There are inherent risks associated with investing in the stock market, including possible loss of principal. Stocks of small companies are often subject to more erratic or abrupt price movements than larger-company stocks.

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