

How many stocks is enough?

The benefits of diversification are easy to understand:

- Diversification by number of stocks (larger portfolios) limits the chance that a small number of stinkers will hijack returns.
- Diversification of stock portfolios by sector or industry insulates the broad portfolio against weakness in a few areas.
- Diversification by asset class (stocks, bonds, alternative investments, etc.) helps protect investors against unusually low returns in any single area.

Investors diversify in an attempt to maximize risk-adjusted returns. We recommend you partake in multiple types of diversification, building portfolios of 25 to 35 stocks from various segments of the market, as well as putting some assets into investments outside the stock market.

Unfortunately, while most investors realize diversification is important, they may not know how to diversify effectively. The *Forecasts* has written about sector and asset-class diversification numerous times, but we also get questions about why our recommended lists contain as many stocks as they do. At the moment, our Focus List holds 16 stocks, our Buy List 28, and our Long-Term Buy List 34.

It is impossible to quantify the perfect portfolio size. The goal is to hold as few stocks as possible while minimizing the risk associated with particular companies and industries, known as **unsystematic risk**.

Most older research suggests portfolios of 20 to 35 stocks are optimal. Some modern research that takes into account the smaller commission costs of online brokerage suggests a number closer to 50 is best. There is no true consensus on this issue.

Our Buy List and Long-Term Buy List are comfortably within the longstanding parameters. But even if the optimal portfolio size is 40 or 50, we're covered. Here's why:

High Overall scores limit risk. In other words, you can get away with using fewer stocks, as long as you stick with high Quadrix® scorers. Over the last 15 years (60 quarters), S&P 500 Index stocks averaged quarterly returns of 2.7%, roughly in line with the return of high Overall scorers in the index. However, even during periods when the top Overall scorers aren't outperforming, they deliver those returns on a smoother trajectory.

The data presented in this story comes from a study for which we generated 1,000 randomly selected 20-stock portfolios in each of the last 60 quarters. We did the same for one-, 10-, 40-, and 80-stock portfolios, all taken from the S&P 500 Index and S&P SmallCap 600 Index. These numbers support five facts every *Forecasts* subscriber should understand:

1) *Portfolios containing 20 high-scoring stocks have shown less volatility than 20-stock portfolios chosen randomly.* In our study, 20-stock portfolios selected at random delivered quarterly returns with a standard deviation of 10%, meaning that about two-thirds of the time, the portfolios managed returns within 10% of the average of 2.7%. In contrast, portfolios of 20 stocks with high Overall scores posted similar returns, but with a standard deviation of just 9%.

2) *Most of the diversification benefit for random portfolios of large-caps occurs before you get to 40 stocks.* The additional decrease in volatility for 60- and 80-stock portfolios is minuscule, so even if you don't buy only stocks with high Quadrix scores, there's probably no need to own more than 40.

3) *Even 10-stock portfolios of high Overall scorers have showed lower standard deviations than 80-stock random portfolios.* You don't need 40 or more stocks to gain the full benefits of diversification when you use Quadrix as your first screen in the stock-selection process.

Of course, even though a 10-stock portfolio offers modest volatility, you should also consider reducing risk even further by adding another 15 or 20 stocks — kind of like the Buy and Long-Term Buy lists.

4) *Quadrix-driven portfolios have been less likely to lose money.* 20-stock random portfolios of S&P 500 stocks posted negative returns in 32% of the last 60 quarters, while similar-sized portfolios limited to high Quadrix scorers lost value just 29% of the time. In contrast, stocks with the lowest Overall scores were more likely to lose money than the typical stock — a compelling argument for using Quadrix to help you avoid the weakest stocks. When you begin your stock analysis by eliminating low Overall scorers, as we do, you avoid the riskiest names in the market.

5) *Small stocks follow similar trends.* Just as Quadrix-driven large-cap portfolios showed lower volatility and a smaller chance of loss, the same study performed on the S&P SmallCap 600 suggests investors who prefer the small stuff can reap the same benefits from using Quadrix. Within the S&P 600, quarterly returns of randomly generated 20-stock portfolios had a standard deviation of 11.7%, versus 10.5% for high Overall scorers. That 10.5% standard deviation for high scorers was less volatile than 80-stock random portfolios.