Syntax

# Know What You Own: Understanding the U.S. Equity Market

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### Introduction

The standard asset allocation framework starts with developing risk and return assumptions for the various public equity, fixed income, and alternative asset classes, such as hedge funds and private equity. The next step in the process is to assign weights to these sub-asset classes. For public equities, this commonly means setting target allocations to U.S. large and small cap, international developed, and emerging markets benchmarks. Conversations may then take place on tilting the portfolio based on relative valuations of benchmarks, and/or macroeconomic factors such as the strength of the U.S. dollar. While this framework has the benefit of being easy to communicate, is enough emphasis placed on understanding what you actually own? Observations can be made about MSCI EAFE's relative attractiveness to the S&P 500, but are the two comparable? By our calculation, EAFE has a 15% allocation to technology, while the S&P 500 has 40%, an important difference not reflected purely in risk and return expectations.

**One of our goals at Syntax is to help investors better understand what they own**. This paper will focus on the U.S. domestic equity market by comparing the business exposures found in the S&P 500, S&P MidCap 400, and S&P SmallCap 600 Indices. We will also compare the S&P 600 and Russell 2000 indices to highlight how two benchmarks focused on the same market segment can have significant differences in allocations and returns. To produce this analysis, we leveraged Syntax's Functional Information System (FIS), which is our proprietary industry classification system, and our Affinity™ software, a client tool used to access FIS data.

### Sector Comparisons

Exhibit 1 provides the high-level sector exposures of the S&P 500, MidCap 400, and SmallCap 600 indices based on product line information. The market weights used in this report are as of 3/31/2022.

- The S&P 500 has over 20% allocated to the Information Tools and Information sectors, giving the benchmark a growth bias and tilt towards technology.
- The mid cap (S&P 400) and small cap (S&P 600) indices have similar sector allocations, with Financials and Industrials the dominant sectors at over 20% each. When combined, these two sectors make up 48% of each benchmark.

**Exhibit 1: Exposure Comparison: S&P 500, 400 and 600**

| | S&P 500 | S&P 400 | S&P 600 |
|---|---|---|---|
| Financials | 9% | 23% | 26% |
| Industrials | 11% | 25% | 22% |
| Healthcare | 13% | 10% | 12% |
| Consumer Products | 8% | 12% | 10% |
| Information Tools | 20% | 8% | 9% |
| Information | 26% | 9% | 8% |
| Energy | 7% | 8% | 8% |
| Food | 6% | 4% | 6% |

Source: Syntax Affinity™, S&P Dow Jones Indices. As of 3.31.2022.

Exhibit 2 highlights the percentage point difference between sectors and expresses the sector differences as a multiple relative to the S&P 500. The Industrials exposure of the S&P 500 is 14.2 percentage points less than the S&P 400; expressed in multiple terms, it is 0.4x the weight found in the S&P 400. Similar results are shown for Financials. The S&P 500 overweight to tech sectors is over 28 percentage points (Information Tools at +11.8% plus Information at +16.6%) compared to the S&P 400, and the results are similar for the S&P 600. On a multiple base, the S&P 500 has roughly 2.5x the exposure to tech compared to the mid and small cap indices.

**Exhibit 2: S&P 500 Sector Exposure Over (Under): S&P 400 and S&P 600**

| Sector | S&P 500 vs S&P 400 % Difference | S&P 500 vs S&P 400 Multiple | S&P 500 vs 600 % Difference | S&P 500 vs 600 Multiple |
|---|---|---|---|---|
| Industrials | -14.2% | 0.4 | -10.7% | 0.5 |
| Financials | -13.7% | 0.4 | -16.5% | 0.4 |
| Consumer Products | -4.2% | 0.7 | -1.7% | 0.8 |
| Energy | -1.2% | 0.9 | -0.8% | 0.9 |
| Food | 1.7% | 1.4 | -0.2% | 1.0 |
| Healthcare | 3.3% | 1.3 | 1.5% | 1.1 |
| Information Tools | 11.8% | 2.5 | 10.6% | 2.2 |
| Information | 16.6% | 2.8 | 17.8% | 3.3 |

Source: Syntax Affinity™, S&P Dow Jones Indices. As of 3.31.2022.

While each of these indices hold many stocks, looking at their concentration risks by sector calls their diversification into question. One way to analyze the related business risks within and between benchmarks is to analyze exposure to specific themes.

### Exposure To Themes

Sector exposure is most often determined by assigning a company to a specific sector based on its primary business. However, this assumption ignores secondary and tertiary business lines, which are frequently in different sectors. By oversimplifying a company's operations, companies are subject to misclassification. Two notable examples are Amazon, which the widely used Global Industry Classification Standard (GICS) groups in Consumer Discretionary; and Uber, grouped in Industrials, despite earning the vast its revenues from operating software platforms rather than directly performing transportation services. (As of yearend 2021, 48% of Uber's revenues were derived from UberEats, 40% from their ride hailing business, and 12% from freight procurement).

As in the exhibits above, the exposures in the tables below are based on product line information. This allows us to identify exposures to specific themes that cut across sectors. The themes we will be examining are **Real Estate and Technology.**

### Real Estate

Exhibit 3 shows five different sources of real estate exposure. These sources are based on Syntax's classification of activities of each company within their respective benchmarks.

**Exhibit 3: Real Estate Exposure by Company Product Line**

| Business Line | S&P 500 | S&P 400 | S&P 600 |
|---|---|---|---|
| Owners/Operators | 5.9% | 14.1% | 13.4% |
| Financial Products | 0.6% | 4.4% | 8.8% |
| Components | 1.8% | 5.1% | 2.9% |
| Construction | 0.3% | 1.6% | 0.8% |
| Services | 0.5% | 0.6% | 0.7% |
| **Total** | **9.0%** | **25.7%** | **26.5%** |

Source: Syntax Affinity™, S&P Dow Jones Indices. As of 3.31.2022.

Interesting observations can be drawn from the exhibit above:

- The mid and small cap indices have almost three times the exposure to Real Estate as the S&P 500.
- The Owner/Operators category, which includes companies involved in the development, operation and/or provision of short-term access to real estate, is roughly twice that of the S&P 500.
- Exposure to Financial Products, a group that is comprised of companies that provide financial products related to real estate, including mortgages and homeowners' insurance, is negligible for the S&P 500 (0.6%) and meaningful for the S&P 400 (4.4%) and S&P 600 (8.8%).
- The S&P MidCap 400 Index has significant exposure to Components (5.1%).

**Technology**

As shown in Exhibit 4, the S&P 500 has roughly 2.5x the tech exposure as the small and mid cap indices.

**Exhibit 4: Technology Exposure by Company Product Line**

| Business Line | S&P 500 | S&P 400 | S&P 600 |
|---|---|---|---|
| Software | 17.4% | 4.3% | 4.0% |
| Hardware | 15.2% | 6.7% | 9.6% |
| Financial Tech & Payments | 3.4% | 2.3% | 1.5% |
| Internet Infrastructure | 3.3% | 0.1% | 0.2% |
| IT Services | 1.0% | 1.6% | 1.1% |
| **Total** | **40.3%** | **14.9%** | **16.4%** |

Source: Syntax Affinity™, S&P Dow Jones Indices. As of 3.31.2022.

Highlights from Exhibit 4 include:

- Software is dominated by large cap companies that represent 17.4% of the total S&P 500. This is nearly half of the total tech exposure in the index and over 4x the exposure found in the Small and MidCap indices.
- Hardware is the other dominant component of tech exposure at 15.2% of the S&P 500. This segment is the largest part of the mid (6.7%) and small cap (9.6%) indices as well, although the amounts are meaningfully smaller.
- The mid and small cap indices are underweighted to Financial Technology & Payments as well as Internet Infrastructure relative to the S&P 500.

Looking beyond primary sectors makes it easier to understand what you own and the potential impact on your portfolio. For example, based on recent events, a hardware company is more likely to be impacted by supply chain events than a software company.  Exhibit 5 dives into the type of software exposure found in each benchmark.

**Exhibit 5: Software Exposure by Company Product Line**

| Business Line | S&P 500 | S&P 400 | S&P 600 |
|---|---|---|---|
| Enterprise and Application Software | 5.9% | 2.7% | 3.0% |
| Web-Based Retailing and Distribution | 5.5% | 0.8% | 0.6% |
| Search Networks | 3.1% | 0.2% | 0.0% |
| Social Networks | 1.8% | 0.2% | 0.0% |
| Gaming | 0.3% | 0.2% | 0.0% |
| **Total** | **16.5%** | **4.2%** | **3.6%** |

Source: Syntax Affinity™, S&P Dow Jones Indices. As of 3.31.2022.

Large cap companies dominate the software space.

- The S&P 500 has a 5.9% allocation to Enterprise and Application Software (e.g., Microsoft, Adobe) which compares to 2.7% and 3.0% for the mid and small cap indices, respectively.
- Web-Based Retailing and Distribution, Search Networks and Social Networks are all dominated by mega cap U.S. companies such as Amazon, Alphabet and Meta (formerly Facebook).
- In all other categories of software, the mid and small cap indices are between 0% and 0.8%.

Going beyond sectors and looking at exposures to specific themes better identifies the business risks embedded in a portfolio or manager. It also serves as a tool to determine managers that are better complements based on a more robust assessment of their holdings.

**Index Construction**

Plan sponsors, consultants and advisors expend significant effort developing asset allocations. Benchmarks used to develop a policy index are often a default decision. For example, a plan sponsor may opt to use the S&P 500 as a proxy for U.S. large cap stocks, the Russell 2000 index for U.S. small caps, and MSCI EAFE for International Developed stocks. These benchmarks are reasonable proxies for the markets they cover, but there are biases and nuances involved in the construction of cap weighted benchmarks by different organizations. Exhibit 6 illustrates this point by comparing the returns of two popular small cap indices: the S&P 600 and Russell 2000.

**Exhibit 6: Small Cap Benchmark Return Comparison**

| Benchmark | 1 Year | 3 Years | 5 Years | 10 Years |
|---|---|---|---|---|
| S&P 600 | 26.8% | 20.1% | 12.4% | 14.5% |
| Russell 2000 | 14.8% | 20.0% | 12.0% | 13.2% |
| **Difference** | **12.0%** | **0.1%** | **0.4%** | **1.3%** |

Source: Syntax Affinity™, S&P Dow Jones Indices, FTSE Russell. As of 12.31.2021.

The chosen benchmark can have an impact on how success is measured.

- The 1-Year results show the S&P 600 outperforming the Russell 2000 by 12 percentage points. Assume, for example, an active small cap manager returned 20.8% for the past year, exactly in the middle of the two benchmarks. Did the manager have a poor or great year? Your assessment would likely be driven by your preferred benchmark.
- The 3- and 5-Year results show reversion to the mean, with both benchmarks reporting similar returns. The 10-Year results, however, show an annual outperformance of the S&P 600 by 1.3 percentage points. Had the Russell 2000 been selected as the benchmark, 1.3 percentage points of active manager value added net of fees and transaction costs, would have been required to achieve the same results as the passive S&P 600 index.

The next exhibit compares the sector allocations of the two benchmarks.

**Exhibit 7: Sector Comparison: S&P 600 vs. Russell 2000**

| | S&P 600 | R2000 | Difference |
|---|---|---|---|
| Financials | 25.7% | 22.1% | 3.6% |
| Industrials | 21.9% | 18.7% | 3.2% |
| Healthcare | 11.9% | 16.6% | -4.7% |
| Consumer Products | 9.9% | 7.6% | 2.2% |
| Information Tools | 9.1% | 10.8% | -1.7% |
| Information | 7.9% | 9.4% | -1.6% |
| Energy | 7.8% | 9.8% | -2.0% |
| Food | 5.8% | 4.8% | 1.0% |

Source: Syntax Affinity™, S&P Dow Jones Indices, FTSE Russell. As of 3.31.2022.

The S&P 600 is overweight Financials and Industrials by 3.6 and 3.2 percentage points, respectively. In addition, the Russell 2000 has a 4.7 percentage point overweight to Healthcare, which is highlighted below in Exhibit 8.

**Exhibit 8: Healthcare Exposure by Company Product Line**

| Business Line | S&P 600 | R2000 | Difference |
|---|---|---|---|
| **Pharmaceuticals** | **3.5%** | **8.0%** | **-4.6%** |
| Clinical Stage Pharmaceuticals | 1.2% | 4.8% | -3.7% |
| Early-Stage Pharmaceuticals | 0.5% | 3.2% | -2.6% |
| Phase 3 Pharmaceuticals | 0.6% | 1.7% | -1.1% |
| Marketed Pharmaceuticals | 2.0% | 3.0% | -1.0% |
| Mid Stage Pharmaceuticals | 0.8% | 2.0% | -1.2% |
| Mature Pharmaceuticals | 1.2% | 1.0% | 0.2% |
| Other Pharmaceuticals | 0.3% | 0.2% | 0.1% |
| **Healthcare Industry** | **5.1%** | **5.4%** | **-0.4%** |
| **Consumer Healthcare** | **3.4%** | **3.2%** | **0.2%** |
| **Total Healthcare** | **11.9%** | **16.6%** | **-4.7%** |

Source: Syntax Affinity™, S&P Dow Jones Indices, FTSE Russell. As of 3.31.2022.

The Russell 2000 overweight is tied to the Pharmaceutical sector, largely driven by the overweights to Early Stage and Phase 3 Pharmaceuticals. These less mature pharmaceutical companies often have high growth potential but are working towards profitability. They also skew the profitability profile of the Russell 2000 versus the

S&P 600. S&P imposes minimum standards for profitability that helps them cull the universe of stocks down to 600. Russell's inclusive approach captures more companies, including those that are less profitable. But this difference in profitability also drives an industry allocation difference that investors should be aware of.Determining which of these comparable benchmarks will outperform over the long-term is not knowable beforehand, but the biases in these benchmarks are identifiable. Exhibit 9 highlights the number and percentage of profitable stocks in each of the indices discussed in this paper.

**Exhibit 9: Profitable Company Profile: S&P 500, S&P 400, S&P 600 & Russell 2000**

| Benchmark | # Of Stocks in Index | # Of Profitable Stocks | % Of Profitable Stocks | # Of Unprofitable Stocks | % Of Unprofitable Stocks |
|---|---|---|---|---|---|
| S&P 500 | 507 | 501 | 99% | 6 | 1% |
| S&P 400 | 401 | 384 | 96% | 17 | 4% |
| S&P 600 | 603 | 542 | 90% | 61 | 10% |
| Russell 2000 | 2009 | 1339 | 67% | 670 | 33% |

Source: Syntax Affinity™, S&P Dow Jones Indices, FTSE Russell, Bloomberg. As of 3.31.2022.

Based on forecasted earnings over the next 12 months provided by Bloomberg, 99% of the stocks in the S&P 500 and 96% of the stocks in the S&P 400 are expected to be profitable. This percentage is 90% for the S&P 600 and a comparably low 67% for the Russell 2000. The Russell 2000 results are in part driven by the allocation to Early Stage and Phase 3 Pharmaceuticals.

### Closing Thoughts

Investors should be aware of the challenges associated with simplifying assumptions as applied to asset allocation decisions. Additionally, care should be given to inferring too much from what high-level sector weights can tell you about a portfolio. The asset allocation discussion should also address potential biases associated with any benchmark under consideration.

Moving beyond sector allocations and analyzing exposure to themes at companies' product line levels gives investors a better understanding of not only what they own, but also of the related business risks in a portfolio. Using our Technology theme, the S&P 500's 40% exposure to tech is well in excess of the 27% weight to the Information

Technology sector using GICS. When viewing Real Estate through a broader lens that includes exposure to construction companies and real estate loans on bank balance sheets, we find the S&P MidCap 400 and SmallCap 600 Indices have roughly 26% of their portfolio linked to Real Estate, a 3x multiple to the S&P 500.

Comparing the S&P and Russell small cap indices, we observed how differences in index construction methodologies can lead to dispersions in returns, despite the fact the two benchmarks serve as proxies for the same public equity market segment.

In our next paper, we look forward to identifying and comparing the underlying themes and related business risks embedded in the public equity markets for the US (S&P 1500), International Developed (MSCI EAFE) and Emerging Markets (MSCI EM). For more information on Syntax and how we measure risk and construct our own indices to enhance diversification, please visit www.syntaxindices.com.