

Know What You Own: Your Portfolio Needs New Glasses

Your insights are only as good as your data

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- Traditional industry classification systems group companies into a sector based on their primary business segment, thereby treating each company as one entity with a single product line.
- Secondary and tertiary product line exposures are overlooked these nonprimary businesses can include exposure to new and emerging technologies.
- Using individual product lines to analyze public equity managers, benchmarks, and portfolios provides investors with an enhanced level of precision, enabling better analysis of investments and embedded business risks.

Introduction

Many of us are familiar with the experience of having our eyes examined and getting a new pair of glasses. When you wear the glasses for the first time, the world around you sharpens, and details previously blurred come into focus. Similarly, the view of your public equity portfolio may be blurred by a dated and limited approach to company classifications. Now may be the time for a new pair of glasses when analyzing investments for your portfolio.

Traditional industry classification systems, such as GICS (Global Industry Classification Standard) and ICB (Industrial Classification Benchmark), assign companies to a sector based on its primary business segment. This primary business is treated as the only business in which a company is engaged. These frameworks, for instance, consider Amazon as only an online retailer and Disney as only a consumer media producer, without accounting for the multiple other businesses that each of these companies operate, such as Amazon Web Services or Disney's various parks and resorts. While this approach to industry classification simplifies how companies are categorized, it comes at the cost of significantly reduced precision and granularity. Using Syntax's proprietary FIS¹ classification framework, all of Apple's product lines – not only its primary business segment – and their respective percentage of attributed revenues are shown in Exhibit 1 to demonstrate this point.

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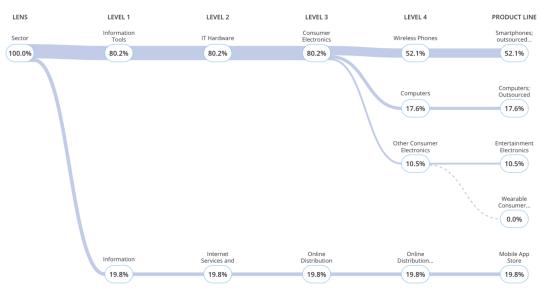
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^{1.} FIS (Functional Information System) is Syntax's proprietary industry classification system designed to address the weaknesses in traditional industry classification systems through its granular mapping of the economic activities of industries and companies, including company product line data.



Exhibit 1: Apple – Sector and Product Line Exposures (as of December 31, 2022)



Source: Syntax

In the Sankey diagram above, 80.2% of Apple's revenues are classified under the Information Tools sector, driven by three IT Hardware product lines: Wireless Phones (52.1%), Computers (17.6%), and Other Consumer Electronics (10.5%). Apple also has meaningful exposure to the Information sector (19.8%) from revenues associated with its Mobile App Store, which is not captured when using traditional industry classification systems. In other words, investors relying on traditional classification frameworks would be discounting 20% of the company's revenues, as well as the related business characteristics and risks associated with this product line.

Furthermore, investors should be wary of focusing solely on a company's primary business segment because, in some instances, emerging technologies and innovations begin as smaller product lines within larger companies and remain as secondary or tertiary exposures before growing into meaningful revenue sources over time. To emphasize this point, we screened the Syntax 500 universe (i.e., U.S. large-cap equity) for companies with cybersecurity revenues in Exhibit 2.



Exhibit 2: Cybersecurity Revenue Exposure – Syntax 500 Universe

| | Product Line | | | Exposure-Modified |
|-------------------------------|--------------|----------|---------------|-------------------|
| Company | Ticker | Exposure | Mkt Cap (\$B) | Mkt Cap (\$B) |
| 1 Palo Alto Networks Inc | PANW | 100.0% | \$64.7 | \$64.7 |
| 2 Fortinet Inc | FTNT | 100.0% | \$46.0 | \$46.0 |
| 3 Zscaler Inc | ZS | 100.0% | \$20.2 | \$20.2 |
| 4 Cloudflare Inc | NET | 100.0% | \$19.5 | \$19.5 |
| 5 Gen Digital Inc | GEN | 100.0% | \$13.0 | \$13.0 |
| 6 Okta Inc | OKTA | 96.1% | \$11.1 | \$10.7 |
| 7 CrowdStrike Holdings Inc | CRWD | 93.7% | \$32.7 | \$30.6 |
| 8 Leidos Holdings Inc | LDOS | 81.5% | \$13.3 | \$10.9 |
| 9 Akamai Technologies Inc | AKAM | 42.6% | \$14.5 | \$6.2 |
| 10 Tyler Technologies Inc | TYL | 22.9% | \$15.9 | \$3.6 |
| 11 General Dynamics Corp | GD | 21.0% | \$61.3 | \$12.9 |
| 12 TransUnion | TRU | 18.0% | \$15.0 | \$2.7 |
| 13 Jacobs Solutions Inc | J | 15.2% | \$17.0 | \$2.6 |
| 14 Accenture PLC | ACN | 12.0% | \$209.4 | \$25.2 |
| 15 Cisco Systems Inc | CSCO | 7.2% | \$216.2 | \$15.5 |
| 16 Raytheon Technologies Corp | RTX | 2.0% | \$125.5 | \$2.5 |

Source: Syntax. Market capitalization (\$B) as of 8 August 2023.

16 companies reported cybersecurity revenues, ranging from 2% to 100%, with half attributing cybersecurity as their main revenue source. Interestingly, the three companies with the largest market capitalization (Accenture, Cisco Systems, and Raytheon) had the lowest percent revenue exposure (12.0%, 7.2%, and 2.0%, respectively) to cybersecurity. Although cybersecurity is currently a relatively small product line for Accenture and Cisco Systems, both companies are sizable players in this market. In the last column of Exhibit 2 are the values for exposure-modified market capitalization, which is a directional measure of what the cybersecurity product line of each company contributes to the respective organization's overall valuation. By this metric, Accenture (\$25.2 billion) and Cisco Systems (\$15.5 billion) would rank fourth and seventh in terms of their industry presence, despite cybersecurity being a relatively small revenue source for each company.

This example highlights one of the key challenges that arise when relying upon data that is based on a company's primary business segment to analyze a stock or portfolio. Investors ultimately get an incomplete picture of a company's characteristics, risks and underlying business models when it is classified under one sector that is associated only with its primary business segment. This limitation can become problematic and have meaningful impact on portfolio analysis. For example, Syntax was recently asked by an investment consulting firm to review the exposures of an actively managed portfolio that is benchmarked to the Russell 1000 Growth Index. To quantify the manager's exposure to emerging technology, we used our Technology Revolution Lens, which groups together revenues related to cutting-edge technology, to evaluate the portfolio. Exhibit 3 below compares the manager's and the benchmark's holdings, which were classified according to the underlying companies' primary sector.



Exhibit 3: Sample Client Portfolio and Benchmark Exposure to Syntax's Tech Revolution Lens – Primary Sector

| Technology Revolution Category | Manager | Benchmark | Difference |
|--|---------|-----------|------------|
| High Performance Compute & Al | 0.0% | 5.3% | -5.3% |
| Banking, Insurance and Investment Technology | 2.5% | 0.6% | 1.9% |
| Robotics | 0.0% | 0.2% | -0.2% |
| Cryptocurrency & Blockchain | 0.0% | 0.0% | 0.0% |
| 5G-Enabling Technology | 0.0% | 1.5% | -1.5% |
| Cybersecurity | 0.0% | 0.7% | -0.7% |
| Internet of Things | 0.0% | 0.0% | 0.0% |
| Totals | 2.5% | 8.3% | -5.9% |

Source: Syntax

The primary sector view shows that the actively managed portfolio has merely 2.5% exposure to emerging technologies, an underweight of roughly 6 percentage points versus the benchmark.

However, this is a misleading view because many of the portfolio's holdings are engaged in cutting-edge technology but are not currently these companies' primary business segment or revenue source. In Exhibit 4, the holdings of the actively managed portfolio and the benchmark are again compared using Syntax's FIS® framework with "product line glasses" that account for the underlying companies' secondary and tertiary exposures.

Exhibit 4: Sample Client Portfolio and Benchmark Exposure to Syntax's Tech Revolution Lens – Product Lines

| Technology Revolution Category | Manager | Benchmark | Difference |
|--|---------|-----------|------------|
| High Performance Compute & Al | 6.7% | 4.9% | 1.8% |
| Banking, Insurance and Investment Technology | 5.0% | 0.8% | 4.3% |
| Robotics | 3.0% | 0.5% | 2.5% |
| Cryptocurrency & Blockchain | 0.2% | 0.1% | 0.2% |
| 5G-Enabling Technology | 0.0% | 1.2% | -1.2% |
| Cybersecurity | 0.0% | 0.7% | -0.7% |
| Internet of Things | 0.0% | 0.2% | -0.2% |
| Totals | 14.9% | 8.3% | 6.6% |

Source: Syntax



By including all the product lines of the underlying holdings, the results seen in Exhibit 4 are significantly different to those in Exhibit 3. The actively managed portfolio's exposure to Technology Revolution activities rose from 2.5% to 14.9%. Relative to the benchmark's exposures, the portfolio, which was underweight by approximately 6 percentage points when using primary sector data, is now overweight by more than 6 percentage points when using Syntax's product line data.

Importance of Going Granular

Investors frequently evaluate portfolio statistics such as sector and industry exposures to draw insights into a portfolio's holdings and a manager's investment skill. In the case highlighted above, using legacy industry classification systems may leave an investor feeling certain that the portfolio manager in question was materially underinvested in emerging technologies relative to the benchmark. However, the investor may be getting only a partial or blurred picture of the portfolio's holdings, which raises some important questions for consideration:

- Are you confident in the data that informs your investment decisions?
- Do you have a clear and full picture to assess investment managers in depth?
- How well do you know the business risks embedded in your public equity portfolio?

Just remember – your insights are only as good as your data.

Learn more about how the granularity and precision of product line data in the Syntax Affinity Platform can improve and sharpen your research and analysis of public equities at www.syntaxdata.com/affinity.



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