

The Concentrated Stock Puzzle

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Managing concentrated positions is a common challenge for financial advisors. Many of their clients are entrepreneurs, employees of start-ups, or corporate executives that have significant wealth tied up in low-cost basis stock or options. While most agree on the value of diversification, transitioning from one or a few concentrated positions to a diversified portfolio is still a challenging puzzle – consisting of biases and significant tax consequences.

The Puzzle

Company stock ownership can be one of the greatest drivers of wealth creation. While individuals continue to see their wealth increase, the excess risk relative to the market is often overlooked. Why? Individuals typically show extreme loyalty to their company, thinking it is bulletproof. While that may be, three key data points suggest that caution is warranted.

- 1) **The average individual stock *underperforms* the market.**
 - **64%** underperform the Russell 1000® Index.¹
- 2) **Single stock volatility is 2x greater than the market, heavily influenced by key ‘event risks.’**

Natural Disasters	Corporate Scandal	Technological Displacement
 2017-18 California Wildfires Jan 2019 Declared Bankruptcy	 2015 Price Gouging Scandal Valeant stock down -90% over next year	 Apple Watch Introduced in April 2015 Fitbit stock down >90%

- 3) **The ‘great’ companies of today aren’t the ‘great’ companies of tomorrow.**

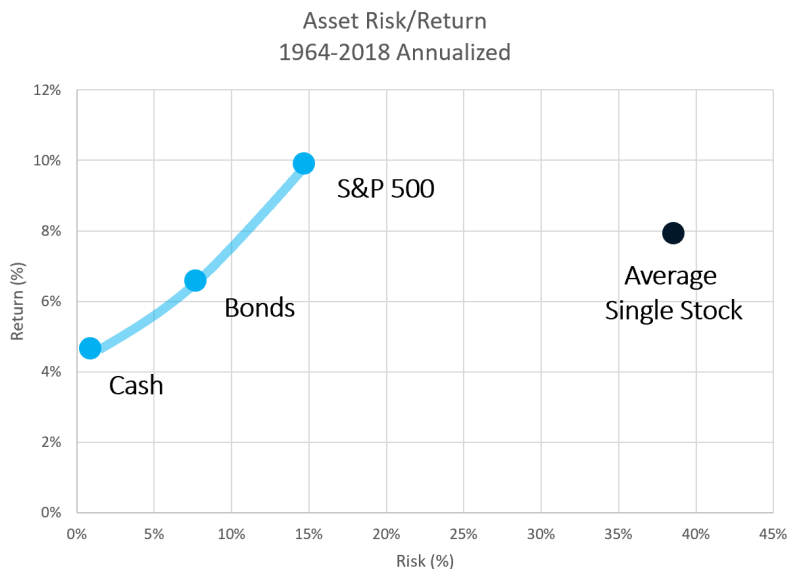
The table below shows Fortune’s ‘Most Admired’ Companies of 1999 alongside their subsequent 20-year returns. The average performance of this group underperformed the S&P 500 Index by **80.5%**.

Company	Absolute Return	Relative Return
1. General Electric	-47.2%	-275.3%
2. Microsoft	358.8%	130.7%
3. Coca-Cola	177.2%	-50.9%
4. Intel	147.6%	-80.5%
5. Berkshire Hathaway	362.6%	134.5%
6. IBM	55.7%	-172.4%
7. Walmart	226.7%	-1.4%
8. Cisco	114.4%	-113.7%
9. Dell	-59.7%	-287.8%
10. Merck	139.7%	-88.4%
Average	147.6%	-80.5%
S&P 500	228.1%	

¹ Based on a study of 2,673 U.S. large cap companies from 1964-2018 from the period they entered the large cap universe until a terminal event (bankruptcy, delisting, merger, acquisition, or the present).

In short, the average risk/return profile of a concentrated position relative to a diversified portfolio (S&P 500) requires taking significantly more risk for meaningfully lower expected return.

Figure 1: Return/Risk Profile for a Single Stock



This leads to a difficult paradox for investors, the source of their wealth creation can be the largest impediment to their wealth preservation.

Transitioning towards a diversified portfolio has its challenges. Many clients we work with hold large positions at a nearly \$0 cost basis. Thus, selling down these securities often triggers a massive tax hit. As quantitative asset managers focused on custom solutions, we ventured to build a tool within [Canvas](#) that can navigate the delicate balance between risk, tax impact, and company sentiment – helping clients get to an optimal portfolio quicker and more tax efficiently. Using Canvas, advisors can now diversify these concentrated positions in a way that is personalized to them.

A Case Study on Managing Concentrated Risk: Accenture (ACN)

Transitioning a concentrated position comes down to two key aspects:

- 1) Tailoring a portfolio *around* the concentrated exposure
- 2) **Continually** tax loss harvesting to realize losses that can be used to offset the embedded gains

We will share a real-life example to illustrate the systematic Canvas process:

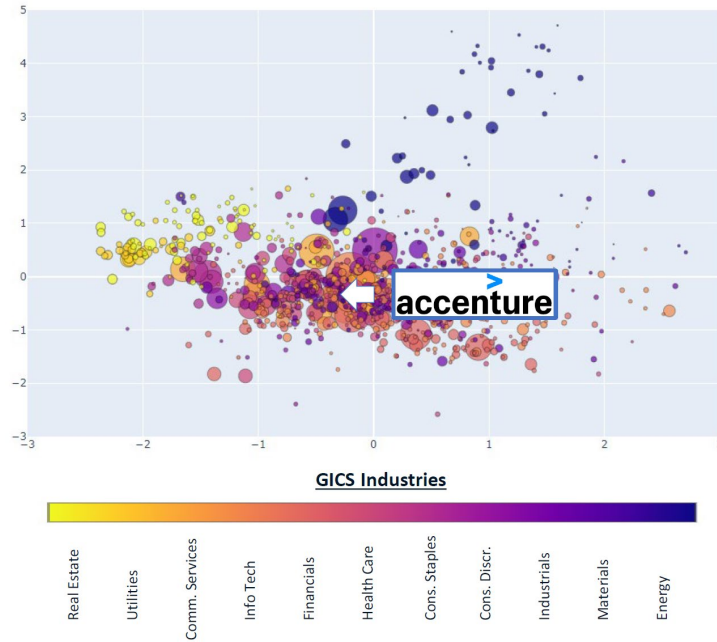
An advisor approached us about a client with a 65% portfolio weight to Accenture. The investor’s cost basis was effectively \$0, meaning a full liquidation would generate a significant tax bill. The advisor wanted to transition their client into a diversified portfolio while minimizing the tax hit. While this entire process can be driven via advisor facing software, we bring the platform analysis to you through words and images below.

Step 1: Applying A Risk Framework to Diversify

Canvas utilizes proprietary risk modeling to assess the drivers of risk for stocks. These ‘drivers’ include common themes like industry, geography, macroeconomic drivers (interest rates, inflation, oil, etc.), as well as factors like value, momentum, yield, and quality. The optimizer uses this risk assessment to understand a stock’s underlying exposures.

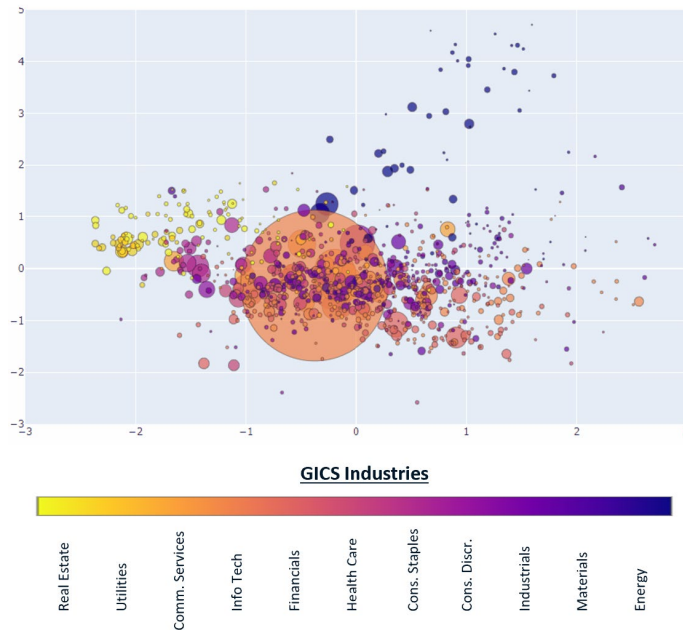
The chart below distills 51 risk factors into a 2D visual of how Accenture’s risk profile compares to the broader market. The size of the circles correspond to each stock’s risk contribution to the Russell 1000 Index and the colors correspond to sectors. Proximity of circles signifies similar risk profiles, so overlapping circles represent overlapping risk exposures.

Figure 2: Representative Risk Exposure Within Russell 1000® Index²



By adjusting the image above for the portfolio's 65% weight to Accenture, the Accenture risk bubble gets significantly larger. A typical solution to diversification is 'bolting-on' market exposure to the outsized position via an index fund. However, this construction is agnostic to the outsized position's risk profile and often creates overlapping risk.

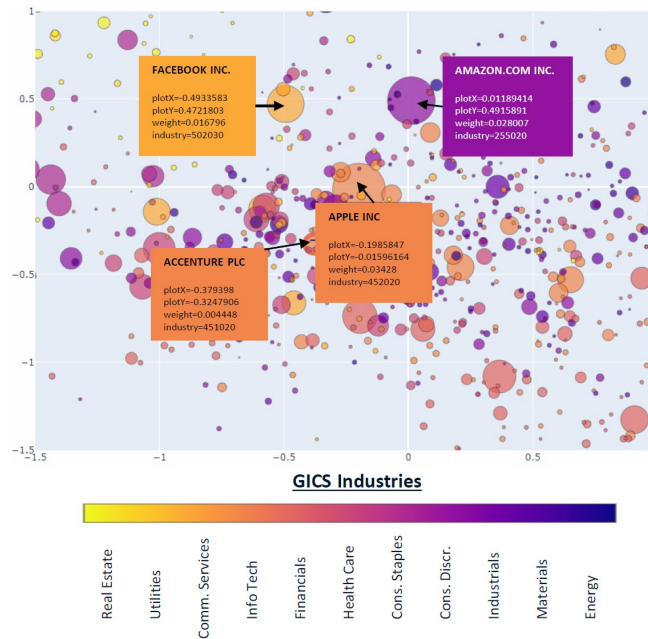
Figure 3: Overlapping Exposure from Typical 'Bolt-On'



² The X and Y axis represent statistical risk factors calculated via Principal Component Analysis.

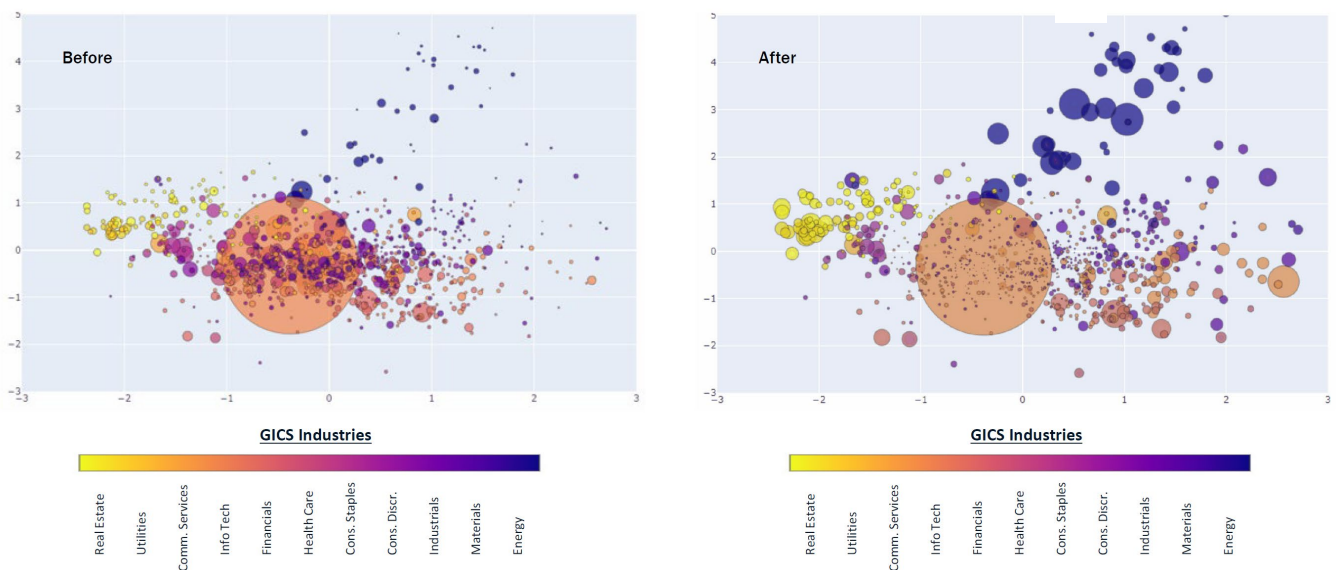
It is clear in Figure 3 that the traditional 'bolt-on' tactic contributes to additional or overlapping risk. To rectify this, Canvas identifies a stock's 'nearest neighbors.'

Figure 4: Identifying Nearest Neighbors



After identifying the nearest neighbors (a few highlighted above), companies with similar risk profiles are restricted or underweighted and a *representative-index* can be established *around* the concentrated position delivering an investment experience closer to the market while mitigating concentration risk.

Figure 5: Building Around the Position Via a Representative Index



Canvas portfolios are managed as [Custom Indexes](#), which offer the power of a Direct Index – investing directly in the underlying holdings of an index – but customized to you. In this case, rebuilding the passive or index investing experience while accounting for a significant overweight to Accenture.

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Step 2: Combining Diversification with Tax Management

Building *around* the concentrated position certainly helps, but the largest determinant of risk is the size of the concentrated position itself. Reducing the position size makes the client’s risk level more in line with the overall market, but the trade-off for this is the tax impact from capital gains when selling down the position.

Tax loss harvesting is the engine that helps reduce concentrated risk and limit capital gains. Historically, 36% of positions in the Russell 1000 Index deliver a negative return annually. By building a representative index consisting of an extensive basket of individual stocks, there is ample opportunity to capture losses over time that can be used to offset capital gains incurred from selling down the concentrated position.

The transition itself is influenced by three key questions:

- 1) What amount of taxes are acceptable from an initial liquidation?
- 2) What amount of taxes are acceptable on an annual basis?
- 3) How long are you willing to tolerate the concentrated stock risk?

Within the Canvas platform, advisors can input holdings and parameters to understand potential outcomes (see below). We refer to these outcomes as ‘glidepaths’.

Figure 6: Varying Outcomes Based on Annual Tax Budget

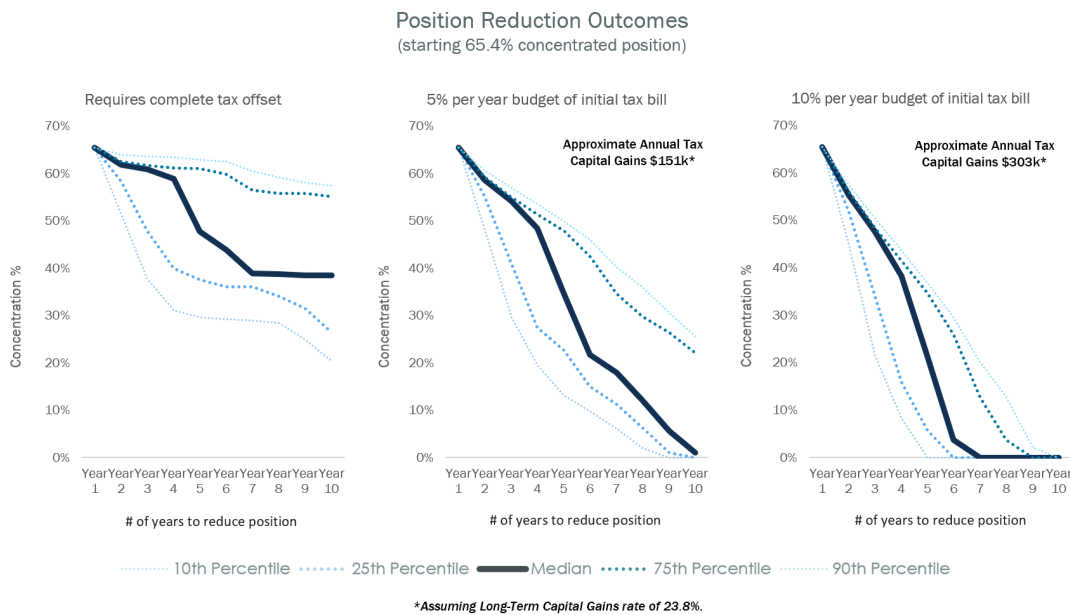


Figure 6 shows three different outcomes based on three different annual tax budgets. As expected, the more taxes you are willing to accept, the faster the position can be transitioned. A similar story occurs with respect to any initial liquidation, Figure 7.

Figure 7: Varying Outcomes Based on Initial Liquidation

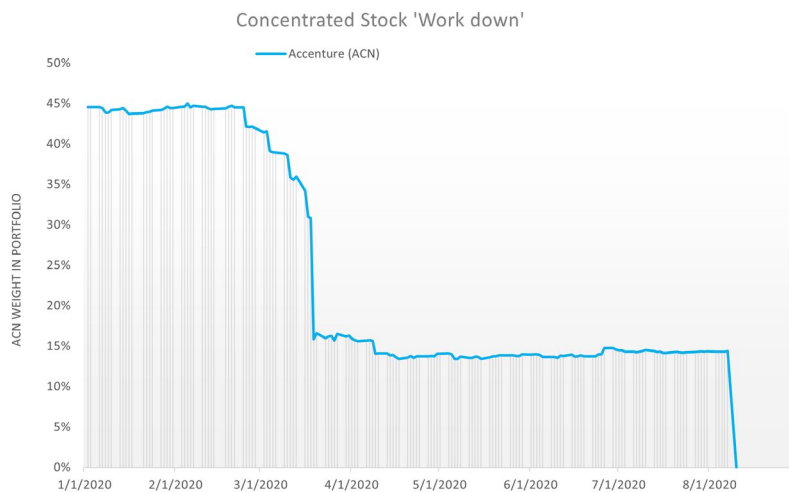


We often recommend using both an initial liquidation and an annual tax budget to reduce the position to market weight within five years.

The Actual Results

Tax budgets aside, the primary driver of managing concentrated risk is the underlying market. Exceptionally strong or weak markets can significantly impact the ability to harvest losses and subsequently reduce concentrated positions. After working through the analysis, the client opened the account in December of 2019 with a 45% weight to Accenture and a goal to reduce the position to market weight without generating capital gains. Though we'd typically expect this to take multiple years, they were the beneficiary of the 1Q 2020 downturn. In the first quarter alone, we were able to reduce the weight of Accenture to just over 15% with **zero capital gains realized**. When many investment managers missed the full opportunity, we were continually harvesting, catching each opportunity to harvest losses and expedite the transition. All in all, we managed this position for eight months, reducing its weight below 14% without incurring a tax hit. The success of this transition led the advisor to liquidate the entire position in August, assuming their fully diversified target model at a fraction of the tax cost and time.

Figure 8: Actual Reduction of Accenture Exposure



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Though downturns are tough on everyone, in this instance it was a very helpful tax asset. Rather than being in year two of a multi-year transition, today the client is fully deployed into a diversified portfolio. Note, when leveraging software like Canvas, it doesn't take a historic downturn to provide material value. Everyday there are stocks trading at a loss. As long as you have exposure to a large portfolio of stocks and are running a dynamic and automated process constantly looking for losses, there is a foundation for reducing concentrated risk in a timely and tax-efficient manner.

Private Company Risk Mapping

The Accenture case is a clean example of working with a public company that has 20 years of risk and return data. However, many entrepreneurs and owners receive private stock and options. We recently worked on two private company cases as the companies approached their IPO. With an impending liquidity event, the advisors sought to develop a road map that captured the momentous event financially and reduced the associated risk tax-efficiently.

The risk management process for private companies is very similar to public companies, however, frameworks and optimizers that straddle public and private markets are hard to come by. To solve this, we developed a process that pairs multiple non-market data points with machine learning algorithms to build a public market proxy that can be used to build around the private – or recently IPO'd – concentrated position. Managing private market risk in concert with public market risk is essential for overall portfolio management. We seek to continue developing tools that enhance customization, risk-return profile, and tax management across asset classes.

Canvas

At its core, Canvas is a platform that enables advisors to tailor portfolios for very specific client needs. We may never see a 45% concentration in Accenture again, but similar situations are coming across advisor desks more and more. We have come to appreciate the pervasiveness of this investing problem and leveraged quantitative analysis to solve for it. Whether it is a single or basket of concentrated stocks, we believe in diversification, and empowering investors with the tools needed to solve this risk, sentiment, and cost puzzle.

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