THE agony & THE ecstasy

The risks and rewards of a concentrated stock position

PART IV

J.P.Morgan

The Agony and the Ecstasy Part IV: an update on catastrophic stock declines

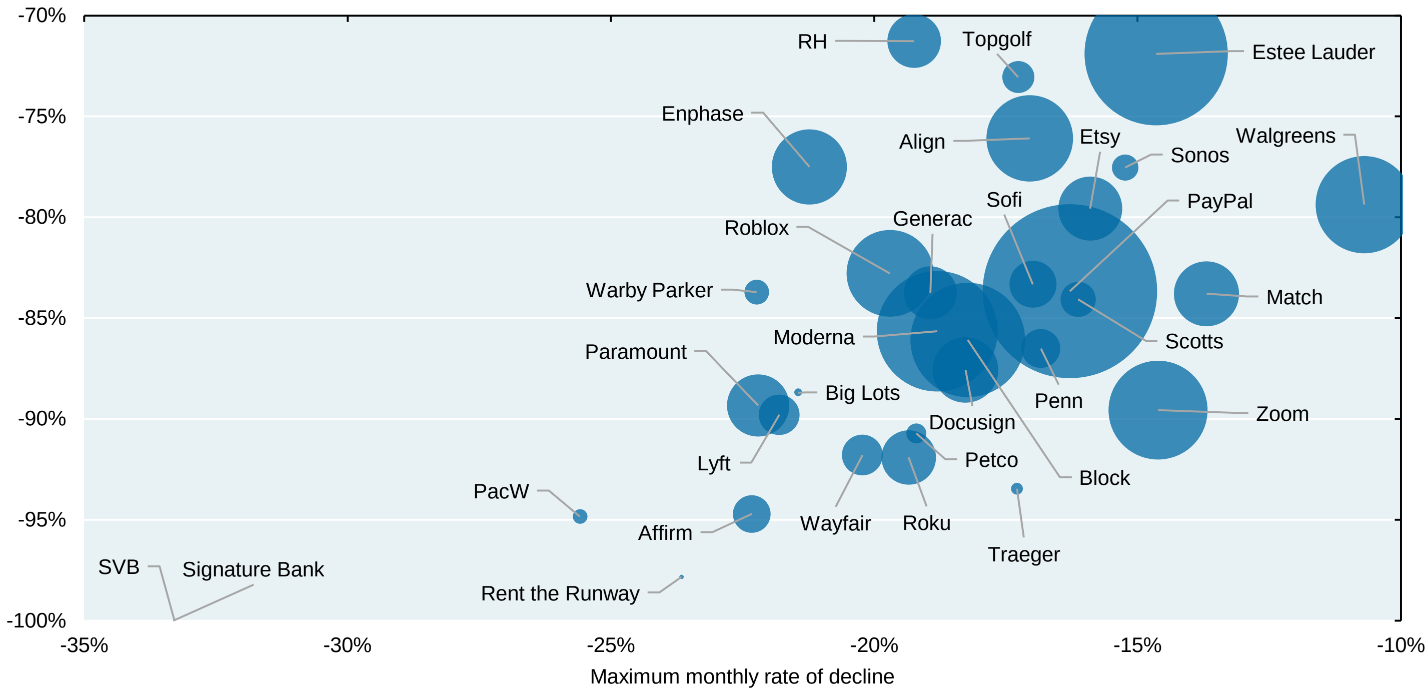
Every few years, we update our archives to reflect what we have learned about event risk for holders of concentrated stock positions[1]. Over the last three years, we have seen a wave of innovation take place, and we also witnessed the largest and fastest government rescue of the private sector in 100 years during COVID. While both of these trends boosted the stock market and drove corporate default rates and credit spreads to very low levels, a variety of foreseeable and unforeseeable risks still catastrophically affected a large number of individual companies. For purposes of our analysis, a catastrophic decline is a stock that declines by 70% from its peak and does not recover.

Some of these companies had strong management teams and excellent financial performance for some period but were unable to sustain it, while others started out with shakier financials and benefitted from risk-seeking capital markets conditions until monetary conditions tightened. The precise narrative around each catastrophic loss differs, but as we will explain, many of the themes are the same. To be clear, some may still recover, while others have still generated substantial gains vs IPO levels despite an interim catastrophic decline. We include such stocks in this analysis since our primary focus is portfolio risk management for current holders of concentrated positions, rather than returns relative to initial public offering prices.

The chart below shows some of the catastrophic decliners reviewed in this piece, with the percentage decline from peak levels on the y axis and the speed of the decline on the x axis. Some of the names surprised us: Moderna, the frontrunner in developing the COVID vaccine; Estee Lauder, a global powerhouse in cosmetics, PayPal, one the world's most innovative fintech companies; and Silicon Valley Bank, which historically had experienced extremely limited losses from its underwriting activities. Other companies on the chart were less of a surprise: digital companies unable to monetize their user base, and temporary beneficiaries from COVID lockdowns and work-from-home conditions.

Catastrophic decliners come in all sizes and fall fast

Percent decline from peak to trough, dot size mkt cap at the trough



Source: Bloomberg, JPMAM, September 2024

[1] Asset Management's Chairman of Market and Investment Strategy Michael Cembalest wrote the first Agony & Ecstasy piece in 2004, and followed up with updates in 2014, 2017 and 2021.

A boom and bust in macroeconomic conditions

In September 2021, both the Fed and the futures markets were pricing in just one Fed hike in the subsequent year, only for inflation to explode upwards in one of the fastest spikes in history. At the same time, the fiscal stimulus that Congress had bestowed on US consumers and small businesses during COVID began to run out, resulting in a squeeze on discretionary incomes and spending. Many companies on our decline list were negatively affected by these wild swings in US monetary and fiscal conditions. These conditions were difficult enough for money managers running diversified stock portfolios, so it's not a surprise that such risks were magnified for individual companies.

2020 – early 2021: Increased fiscal stimulus in response to the COVID lockdown led to increased demand from consumers

Early 2021: Producers struggle to keep up with demand as supply chain disruptions and labor shortages hinder production

Apr 2021: US inflation surpassed 4% and continued to rise rapidly

Early 2022: Energy and food prices spiked due to the Russian invasion of Ukraine. The Fed began to increase the federal funds rate

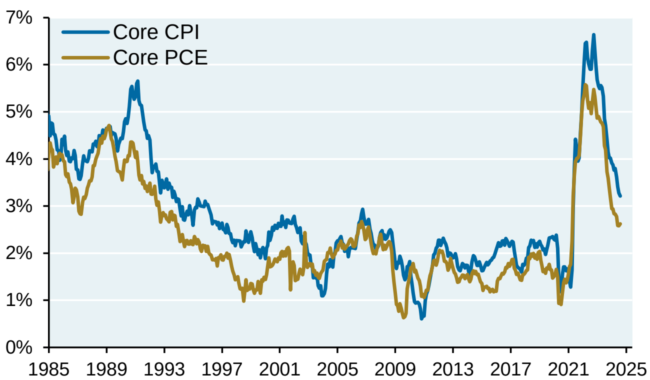
Jun 2022: US inflation peaked at 9% - the highest level in 40 years. The S&P 500 declined more than 20% from peak levels

Jul 2022 – Jul 2023: As the Fed aggressively hiked rates, markets were volatile, eventually recovering closer to 2021 peak levels

Since Aug 2023: The Fed kept interest rates unchanged to quell fears of a recession

Core CPI and PCE inflation

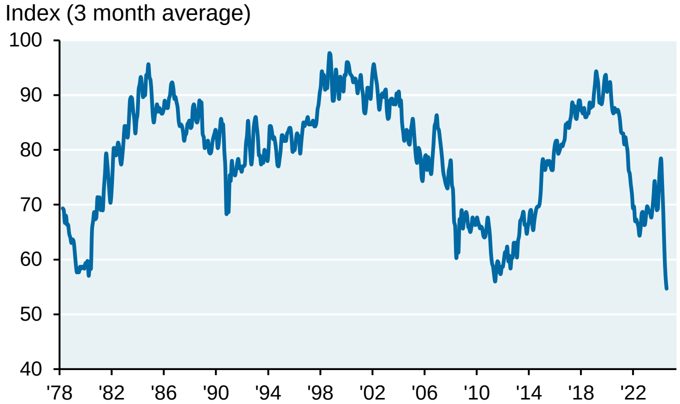
y/y % change



Source: BLS, BEA, August 2024

US consumer real income expectations

Index (3 month average)



Source: Bloomberg, JPMAM, August 31, 2024

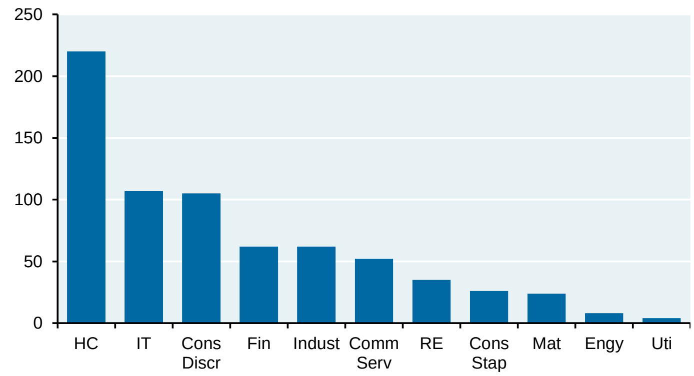
What kind of companies suffer catastrophic declines?

It's tempting to believe that that companies suffering catastrophic losses are primarily run by overly aggressive management teams with too much leverage, companies that have never been profitable from inception or business models that make little sense at all in hindsight (e.g., WeWork). You also might believe that a country like the US that spends more per capita on drug development and healthcare than all other countries in the OECD would entail lower risks for pharma and biotech companies. And you might also believe that there were typically warnings present in valuation signals indicating that the stock was either in a bubble, or a value trap.

Our analysis negates such misconceptions by looking at their peak prices:

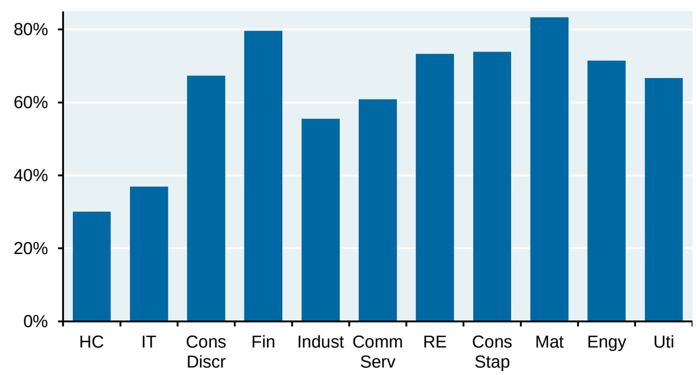
- a significant portion of catastrophic decliners had ostensibly healthy metrics (54**%** were profitable & 63% had net debt-to-EBITDA of 2x or less at their peak)
- the sector with the largest number of decliners was healthcare/biotech
- most of the catastrophic loss stocks were valued at "reasonable" forward P/E multiples at their peak, and were not signaling either distress or irrational investor exuberance

Catastrophic decliners by sector
Number of companies



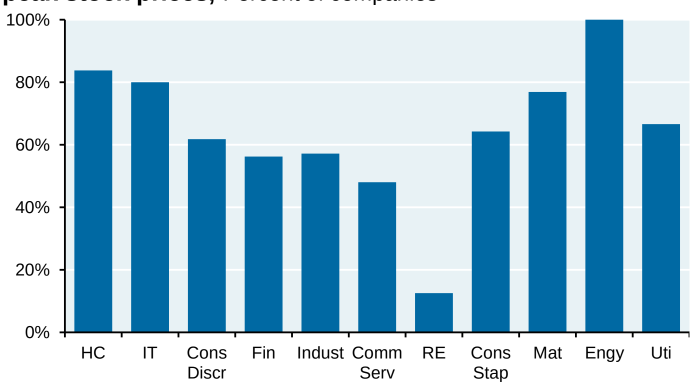
Source: Bloomberg, JPMAM, September 2024

Catastrophic decliners with positive profit margins at peak stock prices, Percent of companies



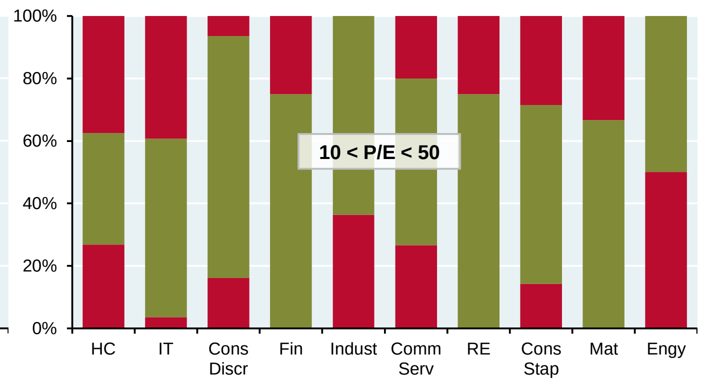
Source: Bloomberg, JPMAM, September 2024

Catastrophic decliners with net debt-to-EBITDA < 2x at peak stock prices, Percent of companies



Source: Bloomberg, JPMAM, September 2024

Catastrophic decliners' forward P/E at peak stock prices
Percent of companies

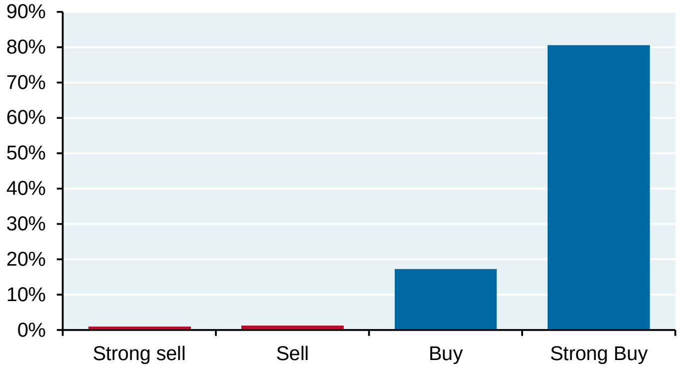


Source: Bloomberg, JPMAM, September 2024

Wall Street research: not much help either in identifying catastrophic risk

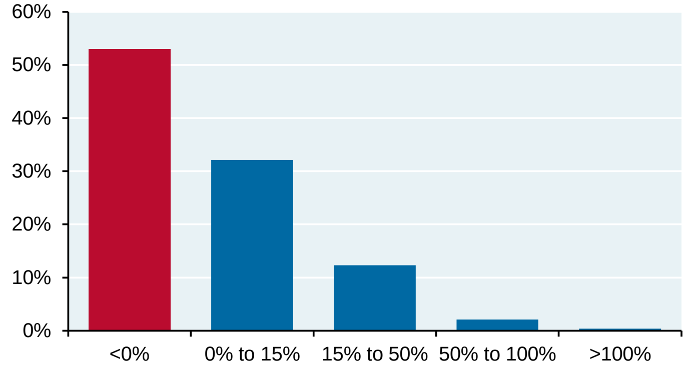
The rating agencies are not alone in struggling to identify pending event/price risk for individual companies. As shown below, when the catastrophic loss stocks were at their peak valuations, street consensus was highly tilted to "strong buy" recommendations, with around half of all stocks having projected further upside to their price targets.

Street consensus recommendation of catastrophic decliners at peak stock prices, Percent



Source: Bloomberg, JPMAM, September 2024

Street consensus price target upside of catastrophic decliners at peak stock prices, Percent of companies



Source: Bloomberg, JPMAM, September 2024

	Street consensus
Rent the Runway	Strong Buy
Traeger	Strong Buy
Block	Strong Buy
Roku	Strong Buy
Sofi	Strong Buy
Topgolf	Strong Buy
Generac	Strong Buy
PayPal	Strong Buy
RH	Strong Buy
Warby Parker	Strong Buy
Docusign	Strong Buy
Match	Strong Buy
Etsy	Strong Buy
Scotts	Strong Buy
SVB	Strong Buy
Roblox	Strong Buy

Source: Bloomberg, JPMAM, September 2024

	Street consensus
Align	Strong Buy
Signature Bank	Strong Buy
Big Lots	Strong Buy
Estee Lauder	Strong Buy
Enphase	Strong Buy
Penn	Buy
Zoom	Buy
Affirm	Buy
Lyft	Buy
Wayfair	Buy
Sonos	Buy
PacW	Buy
Moderna	Buy
Petco	Buy
Walgreens	Buy
Paramount	Sell

Source: Bloomberg, JPMAM, September 2024

Lessons from distant and recent history

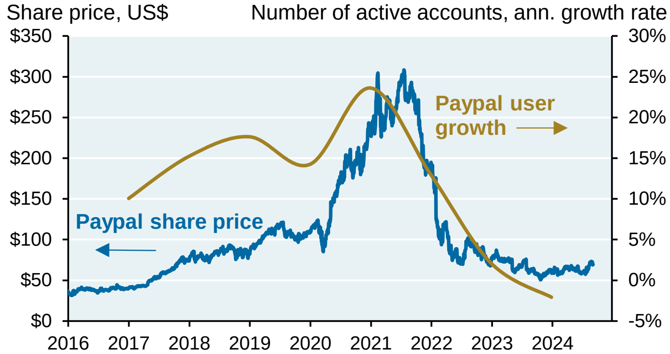
Frustrating though it may be, decades of research on concentrated stock risk has indicated to us that it is close to impossible to reliably anticipate event risk for individual companies, which is why some minimal level of diversification is strongly recommended for investors building portfolios and for holders of concentrated stock positions resulting from companies going public, companies being acquired or positions inherited via estate transfers.

In the charts below, we illustrate some of the notable catastrophic decliners since 2021 with a brief post-mortem of what negatively affected the company.

Post-pandemic, Moderna faced disappointing RSV vaccine efficacy at only 50%, insufficient manufacturing funding and failure to scale their COVID-19 vaccine

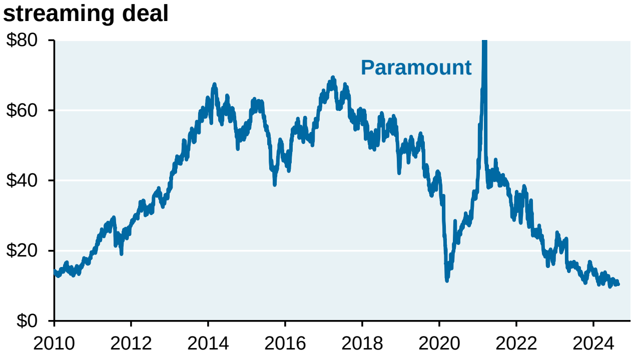
Source: Bloomberg, JPMAM, September 2024

Consumer spending declines fueled by inflation fears, slowing user growth, falling margins



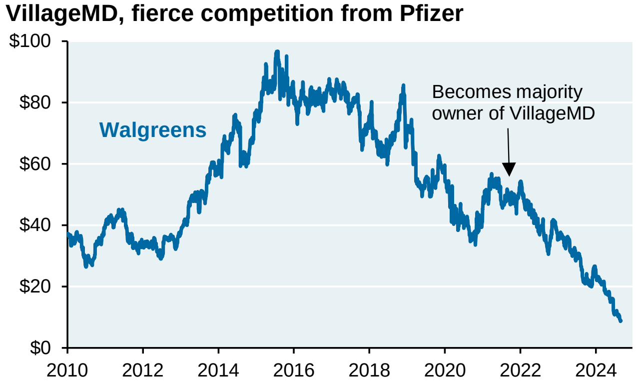
Source: Bloomberg, Paypal annual reports, JPMAM, September 2024

Excess leverage (debt doubled between 2017 & 2018), failure to make streaming profitable and a costly new NFL streaming deal



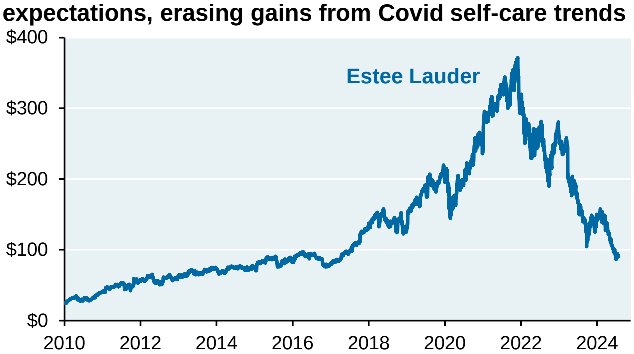
Source: Bloomberg, JPMAM, September 2024

Margin pressures from acquisition of telehealth platform VillageMD, fierce competition from Pfizer



Source: Bloomberg, JPMAM, September 2024

China's endless lockdown (30% of revenues) and supply chain disruptions caused a 60% decline in earnings expectations, erasing gains from Covid self-care trends

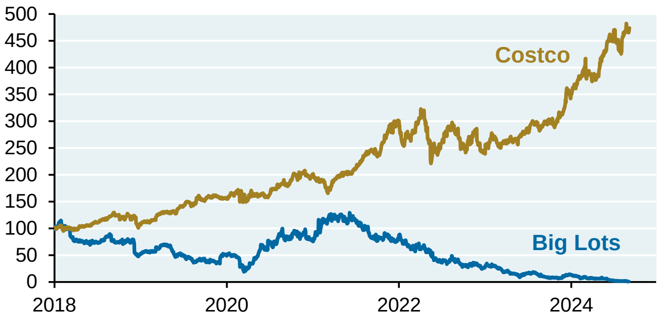


Source: Bloomberg, JPMAM, September 2024

A rising tide does not always lift all boats: struggling companies with successful competitors. Structural tailwinds do not guarantee success at the individual company level. Ill-fated acquisitions brought down Penn Entertainment and Topgolf Callaway, even as the US sports betting industry saw record revenues and golf participation increased for the sixth straight year in 2023. Unprofitable businesses Big Lots and Lyft fell prey to their more financially sound rivals.

Undercapitalized, low free cash flow, bankruptcy concerns, reliant on big ticket discretionary vs Costco's reliable membership dues cash flow, ~90% retention rate

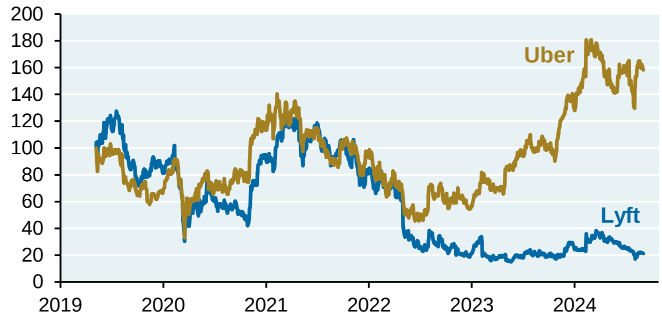
Index (100 = January 2010)



Source: Bloomberg, JPMAM, September 2024

Smaller pure play ride hailing vs Uber's first mover advantage, market share, diversified revenue stream across geographies and products (UberEats, package)

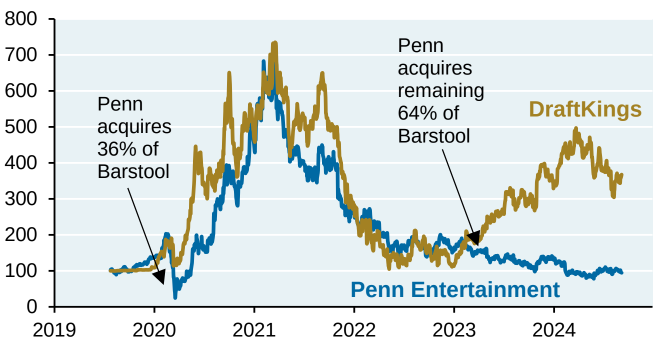
Index (100 = May 2019)



Source: Bloomberg, JPMAM, September 2024

Botched acquisition of Barstool vs Draftkings market share in the fast growing online betting space

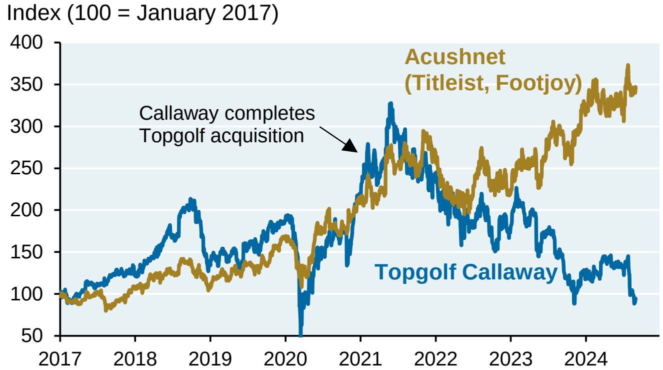
Index (100 = July 2019)



Source: Bloomberg, JPMAM, September 2024

Declining traffic at Topgolf facilities and too much debt, despite overall growth in the game of golf

Index (100 = January 2017)



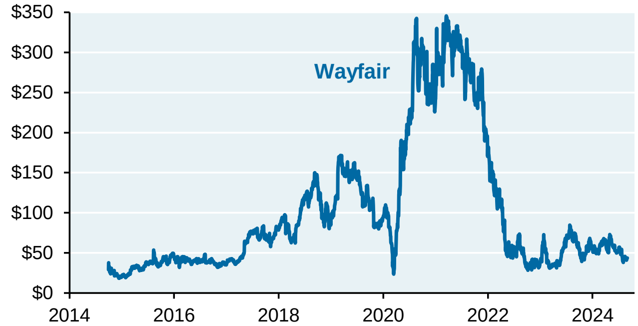
Source: Bloomberg, JPMAM, September 2024

WFH wins to woes. One out of every four Americans made a big ticket purchase during Covid. As people spent more time than ever at home or moved from city apartments to larger suburban houses, they upgraded their living spaces with products from Wayfair, RH and Sonos. However, these large one-time purchases did not create regularly recurring revenue streams for beneficiaries of the stay-at-home era. Furthermore, fears around recession and inflation dampened discretionary spending post-pandemic; the University of Michigan Consumer Sentiment Index plummeted over 30% from March 2020 to March 2022. The combination of rising home prices and higher mortgage rates has also resulted in the worst home price affordability index in recent years.

End of the "suburban migration" trend resulted in a decline of one-off, big ticket purchases; elevated rate environment decreased residential moves

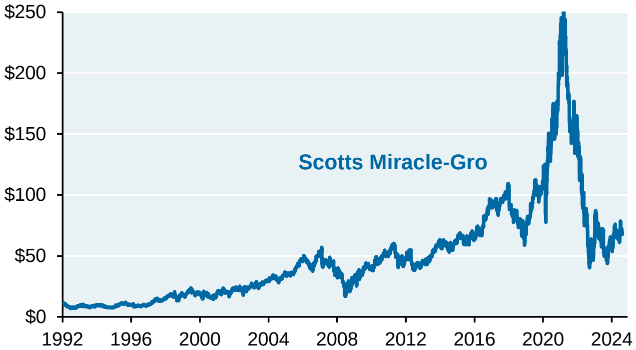
Source: Bloomberg, JPMAM, September 2024

Waning housing market has reduced demand for new furniture; heavy reliance on advertising to drive revenue is compressing margins



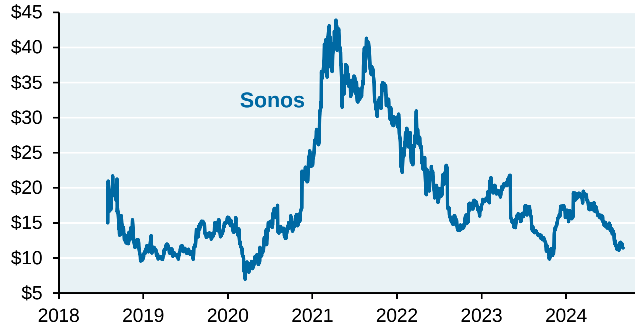
Source: Bloomberg, JPMAM, September 2024

Glut in cannabis business led to reduction in purchases of cultivation equipment; end of WFH gardening



Source: Bloomberg, JPMAM, September 2024

Widely lauded product, but stagnant market penetration among existing customers and slow growth in new customers; limited market share left to grab

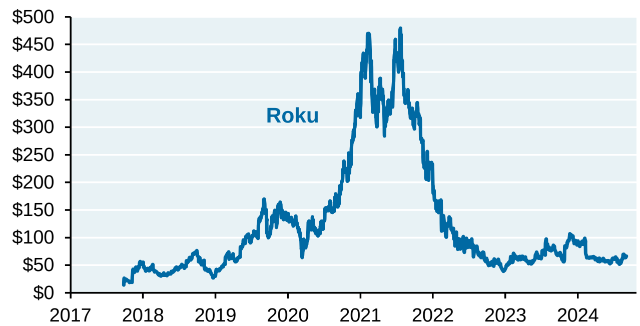


Source: Bloomberg, JPMAM, September 2024

Road the tailwind of new "COVID pets" and were able to sell higher margin one-off pet supplies, however, as people stopped getting new pets they were just left with lower margin recurring consumables revenue

Source: Bloomberg, JPMAM, September 2024

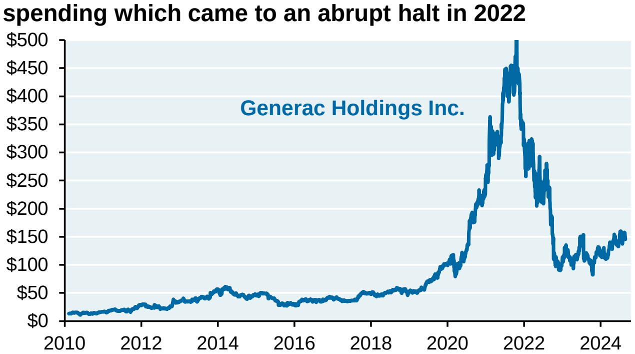
Unable to strike profitable commissions deals with large streaming players like Netflix, Amazon and Alphabet's Youtube



Source: Bloomberg, JPMAM, September 2024

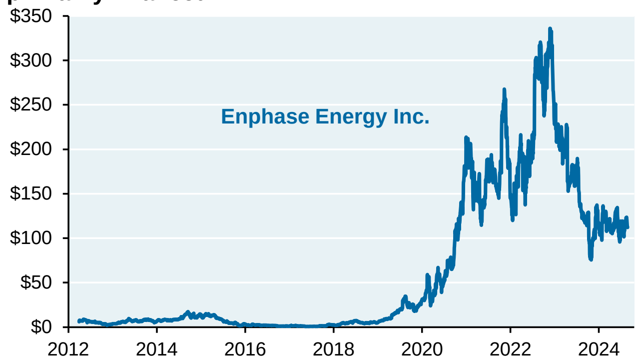
At-home investments peaked during COVID-era. Investments in residential energy upgrades (solar, backup generators, EV docks, etc) was fueled in part by the work-from-home boom, but also by a desire for more stable energy sources in the wake of wildfires, hurricanes and other climate events that disrupted access to the grid. This perfect storm did not last for long; interest rate hikes significantly hindered financing of solar projects, urban sprawl and home purchases slowed, and work-from-home trends declined from peak levels. The same applies to at-home products like Traeger.

As a maker of backup power systems, it was a beneficiary of the housing boom and pandemic "stay-at-home" spending which came to an abrupt halt in 2022



Source: Bloomberg, JPMAM, September 2024

Rising rates hurt residential solar projects which are primarily financed

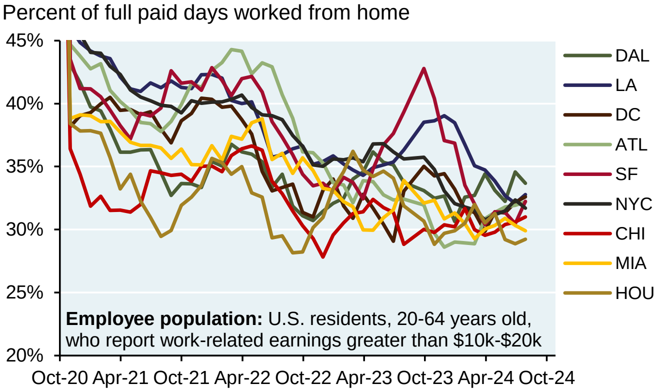


Source: Bloomberg, JPMAM, September 2024

Economic uncertainty impacted demand for luxury discretionary products, and supply chain disruptions did no favors for the high-end grill maker

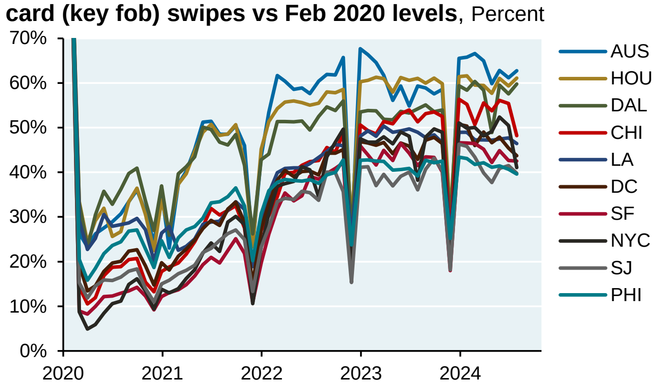
Source: Bloomberg, JPMAM, September 2024

Work from home: large metropolitan cities
Percent of full paid days worked from home



Source: Bloom, Barrero and Davis, August 2024

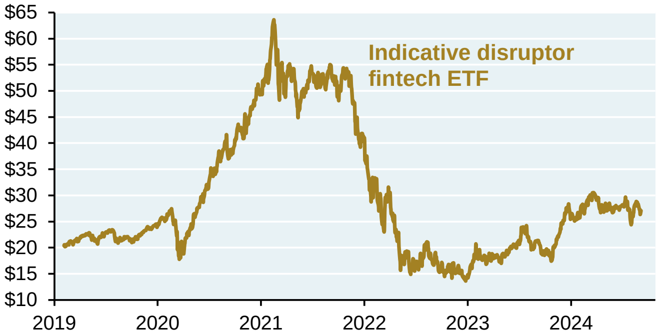
Commercial property utilization rates based on security card (key fob) swipes vs Feb 2020 levels, Percent



Source: Kastle, Bloomberg, JPMAM, August 30, 2024

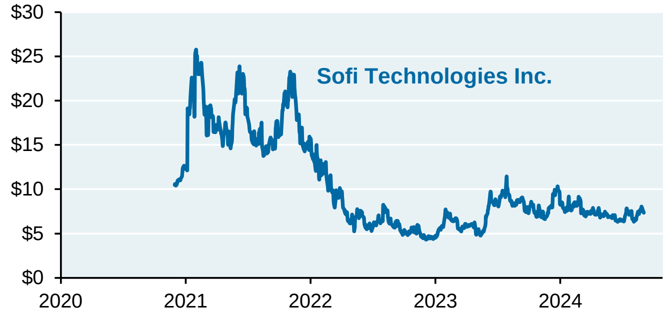
Fintech pressures. As the pandemic pushed more transactions online and put stimulus funds in the pockets of consumers, many fintech stocks thrived. Block went on an exuberant buying spree, but its acquisitions Afterpay and Tidal did not pan out as expected. The rising rate environment brought the fintechs back down to Earth, and for many of these companies profitability is still pending.

Money flowed into the space in the wake the pandemic, as many proclaimed it was the end of the "cash era," but the rate cycle tightened financial conditions



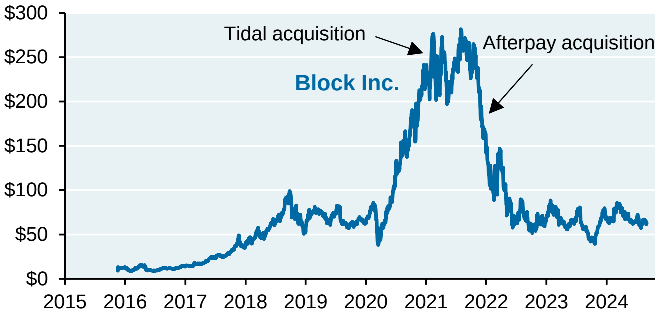
Source: Bloomberg, JPMAM, September 2024

Declined in the wake of the 2022 rate hiking cycle which made its large fixed rate loan book less profitable and its aggressive marketing through above market deposit rates less competitive



Source: Bloomberg, JPMAM, September 2024

Overreached after its rapid growth, with expenses from expanding its market share/product offerings cutting into profitability. Blockchain adoption and monetization did not pan out



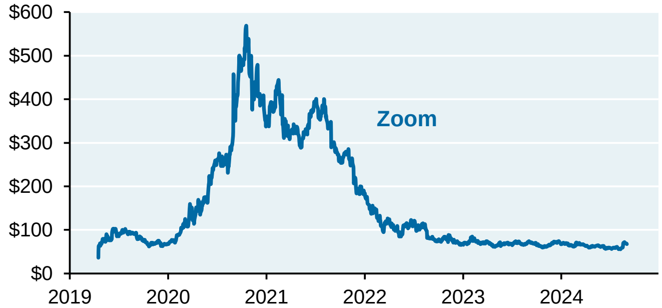
Source: Bloomberg, JPMAM, September 2024

The “buy now, pay later” provider was hurt as stimulus driven consumer cash balances dried up and interest rates rose making their short term loans less profitable and increasing default risk

Source: Bloomberg, JPMAM, September 2024

It's not a popularity contest: even companies with widely-adopted products and services can struggle with monetization. Growing a large userbase can give the illusion that profitability and a strong valuation will inevitably follow, but even some of the biggest names fail to monetize popular products. Take the Match Group (Hinge, Tinder, Match) as an example: out of its 100mm total monthly active users, only 15mm are paid users, and this number has been declining for 7 straight quarters. Or Roblox: the game has a staggering 80 mm daily active users, but half of them are children under 13, a demographic not known for being big spenders.

Competitors have more diverse product offerings and entrenched customer relaitonships, Zoom's spending focused on clinging to market share rather than building out their products

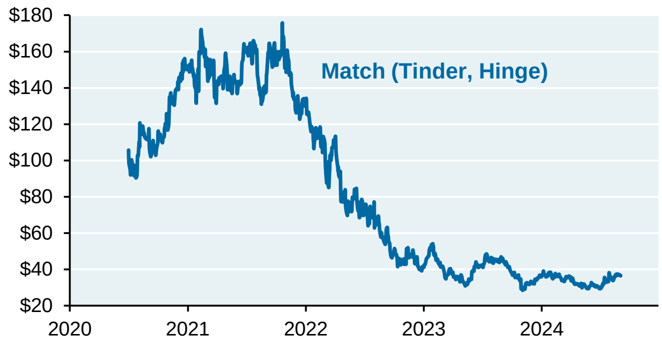


Source: Bloomberg, JPMAM, September 2024

Struggles monetizing 80mm daily active userbase: half are children under 13, 20% of revenues are paid to third party game developers, Roblox is still in the early stages of in-game advertising

Source: Bloomberg, JPMAM, September 2024

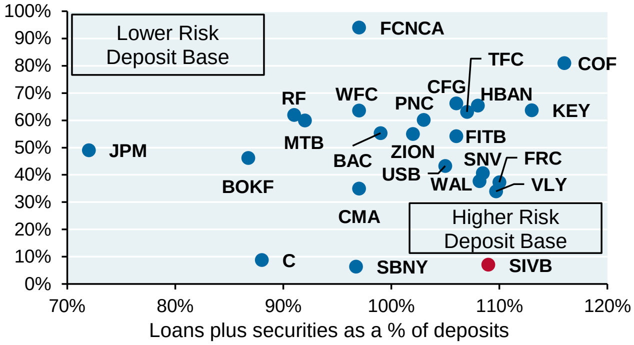
Match's heartbreakers include a decline in paying users, total user growth that falls short of expectations and limited pricing power



Source: Bloomberg, JPMAM, September 2024

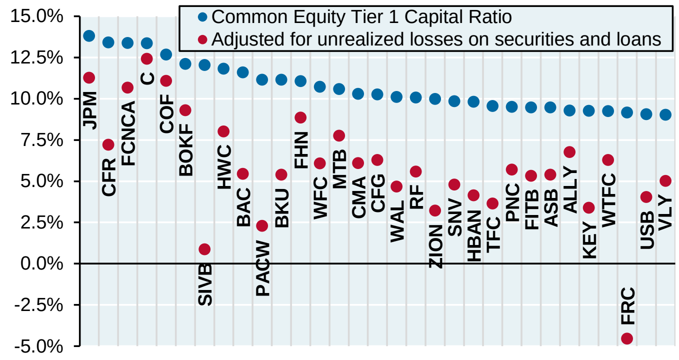
A case of rate risk. SIVB carved out a distinct and riskier niche than other banks, setting itself up for large potential capital shortfalls in case of rising interest rates, deposit outflows and forced asset sales. It extended duration when flooded with deposits, which stoked fears amongst its highly concentrated and mostly uninsured deposit liabilities when the Fed hiked rates. First Republic was another bank whose stock catastrophically declined due to poor asset-liability management rather than being the result of poor risk underwriting, which is normally the reason that banks fail.

US bank loan-to-deposit ratios
Estimated retail deposit share of total deposits



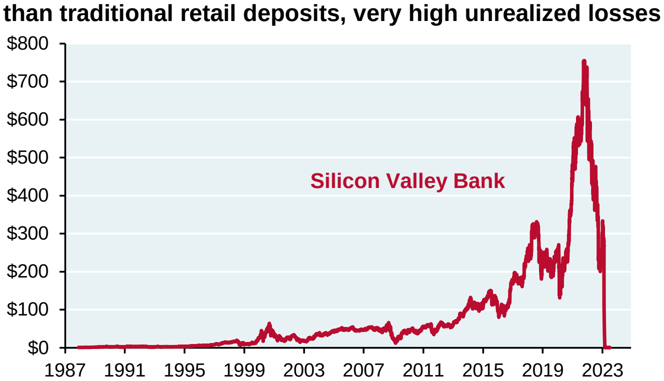
Source: Autonomous Research, JPMAM. Securities include Hold to Maturity and Available for Sale categories. Q3 2022.

Impact of unrealized securities and loan losses on capital
Percent



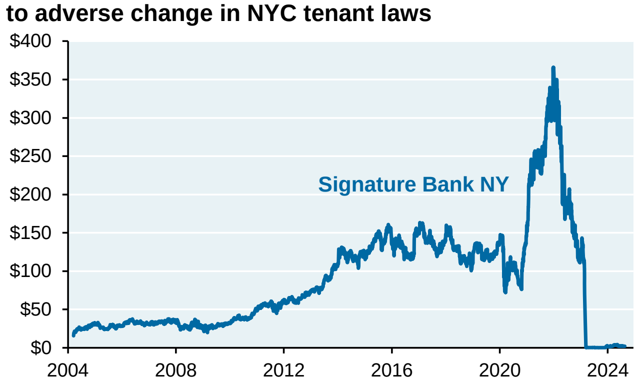
Source: JPMAM, Q2 2023. SIVB and FRC as of Q4 2022.

Extreme reliance on risky institutional/VC funding rather than traditional retail deposits, very high unrealized losses



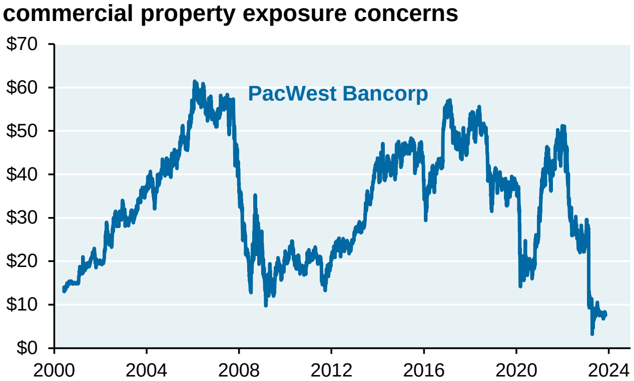
Source: Bloomberg, JPMAM, September 2024

Combination of unrealized securities losses and exposure to adverse change in NYC tenant laws



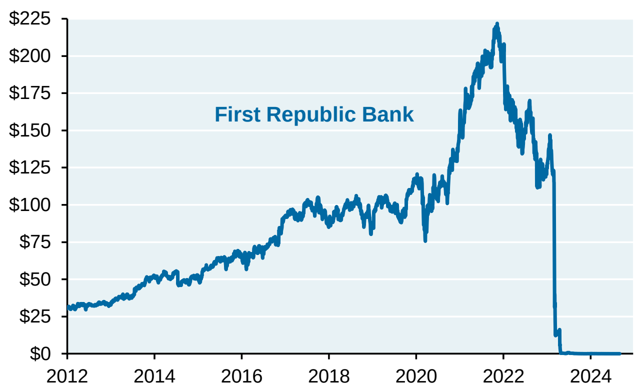
Source: Bloomberg, JPMAM, September 2024

Combination of unrealized securities losses and commercial property exposure concerns



Source: Bloomberg, JPMAM, September 2024

Similar unrealized loss issues to SIVB

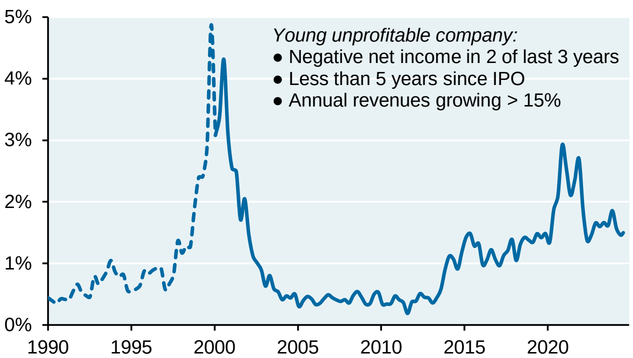


Source: Bloomberg, JPMAM, September 2024

Decline of the disruptors. Innovative, growth-at-all-cost companies thrived in the 2020-2021 era of easy money**.** Investors looked past unprofitability and embraced direct-to-consumer business models such as Warby Parker and Rent the Runway. Yet economic uncertainty flipped the script on the YUCs (young unprofitable companies), as investors flocked to stocks with solid fundamentals. YUCs now make up 1.5% of equity market capitalization, roughly half of their share in late 2020.

The YUCs: Young Unprofitable Companies

% of equity market capitalization



Source: Factset, JPMAM. August 27, 2024

Warby Parker was blinded as investor preferences shifted from growth to profitability amidst economic uncertainty in 2022. The DTC eyeglass company has yet to post positive net income

Source: Bloomberg, JPMAM, September 2024

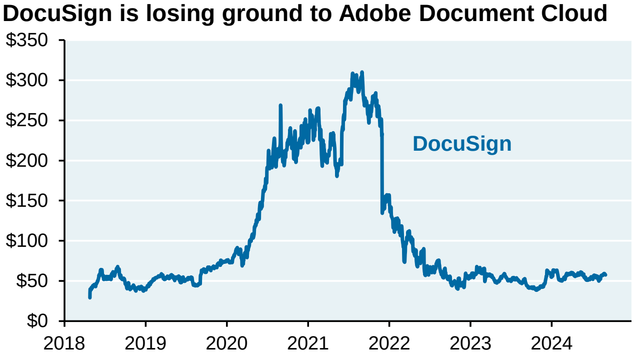
Consumers reduced spending on discretionary items like Invisalign as inflation concerns and recession fears rose

Source: Bloomberg, JPMAM, September 2024

Rent the Runway's customer growth since the pandemic has failed to translate to profitability

Source: Bloomberg, JPMAM, September 2024

DocuSign's slowing sales growth haven't lived up to pandemic-era hype. Despite becoming profitable in 2024, DocuSign is losing ground to Adobe Document Cloud



Source: Bloomberg, JPMAM, September 2024

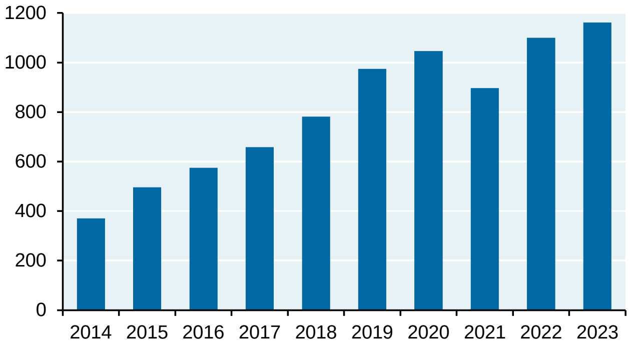
The end of the Covid e-commerce boom, competition from lower cost retailers and an unsuccessful acquisition

Source: Bloomberg, JPMAM, September 2024

Power struggle: activist investors usurp management for better or for worse. Investors have learned from J.C. Penney that activist investors do not always come equipped with the sector and company expertise to bring about positive change. In 2011, activist investors tapped Apple's retail chief to take over as CEO of J.C. Penney. The retailer's product offering and target demographic was transformed but without success, resulting in an 85% stock price decline and the CEO's removal.

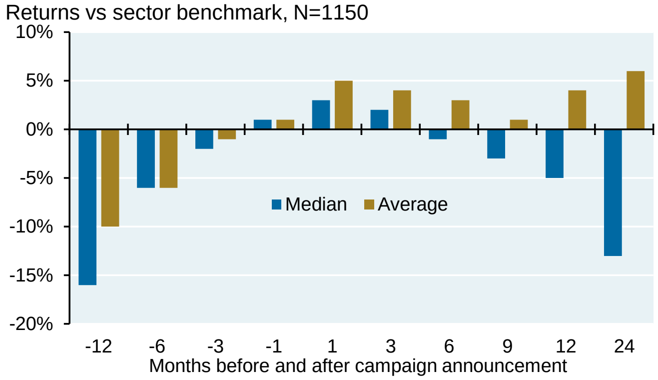
How successful are activist campaigns, really? A Goldman Sachs analysis of more than 2,100 activist campaigns since 2006 found that the median activist-targeted company outperforms its benchmark in the short term, but by six months post-campaign launch and later, the median net return was negative[2]. This trend is corroborated by an analysis from HEC Paris which found the average value of activist-targeted companies rise in the short term and fall in the long term relative to non-targeted companies[3].

Investor activist campaigns have more than tripled over the past decade, Number of campaigns



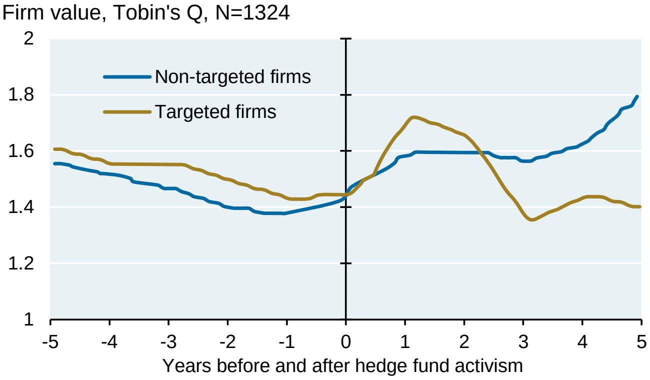
Source: S&P Global, February 2024

Net returns of stocks targeted by activists since 2006
Returns vs sector benchmark, N=1150



Source: Goldman Sachs, 2024

Change in firm value in years around activism
Firm value, Tobin's Q, N=1324



Source: HEC Paris, March 2021

Activists can get it wrong as well

Source: Bloomberg, JPMAM, September 2024

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[2] *"Do activist investors boost shareholder returns?"*, Goldman Sachs, May 2023.

[3] *"Activist Hedge Funds: Good for Some, Bad for Others?"*, HEC Paris, March 2021. Firm value is measured by Tobin's Q, calculated by taking market capitalization divided by the company's assets' replacement value.

Concentrated portfolio diversification and hedging strategies: sell, monetize, diversify, give and hedge

[1] Sell it. An outright sale is the most direct path to mitigating the idiosyncratic risks of a concentrated stock position. Sales strategies come in many shapes and sizes. Most are a tradeoff between price and speed of execution.

Staged selling involves creating a plan that details the quantity of shares to sell, the timeframe and qualifying price levels. The main benefit is that it may mitigate the downward pressure of selling a large position. It also helps deal with the challenge of predicting the best time to make a sale. Investors can also consider which shares will be sold and may have a preference to sell stock that has appreciated less first to mitigate taxes.

A good plan is usually informed by a “trade-cost analysis” to measure the price impact of each sale in the market. The investor should consider volume limits when trading to avoid inadvertently affecting the stock price. The best plans are well-defined and committed, but retain enough flexibility to adapt to unforeseen price swings or unplanned liquidity needs.

Executives and certain insiders of U.S. listed companies may utilize a format of a staged selling strategy referred to as a 10b5-1 plan. These plans are established by the insider and approved by the company when the seller has no insider information. The plan is then executed at some point in the future. This pre-programmed strategy specifies when and how much stock will be sold and is far less flexible than a conventional selling strategy. The seller has no further involvement so the plan can continue even if the seller has access to insider information.

Block trades allow an investor to sell a large portion of shares quickly in the marketplace. This strategy may be effective for investors selling very large positions or significant stakes in companies with limited trading volume. One drawback: block trades are usually conducted at a discount to the last market price.

Covered call options allow an investor to sell shares while collecting an upfront premium. Some investors think of this like being paid to leave their stock position. An investor sets an exit (strike) price, typically above the current market price, at a predetermined date in the future. If the stock rises above the strike price, the buyer can exercise the option and receive the shares at the strike price. The seller keeps the premium regardless if the option is exercised or not.

Target price selling strategies (TPSS) may be useful for a client that has an exit price in mind at a higher price. This sophisticated instrument allows the investor to lock into a series of daily sales at a pre-determined target price, which is usually 5-15% above the current price. Each day, the client will sell an equal portion of shares at the target price. If the stock appreciates above the target price, the investor is locked in to sell and forgoes the opportunity to sell the shares for more. The strategy includes a knock-out provision if the stock declines below a certain price and could be “knocked out” early and no additional shares will be sold at the target price.

Private company sales allow an investor to dispossess shares in a company that has not yet gone public but has grown considerably in size. New laws around the world have made it easier for companies to remain private-longer and the size of private, venture-backed companies is approaching $2 trillion compared to $25 billion just fifteen years ago. Increasingly private companies have permitted transfers of stock for certain shareholders. The private markets remain less liquid than public markets but may be a viable alternative for an investor that is extremely concentrated in a private company.

Of course, **taxes** are the most cited rationale for holding a concentrated position. Selling a position creates a one-time tax payment on unrealized gains. This creates “tax drag” in the portfolio since the investor will have fewer dollar in the market working towards her financial goals. There are various planning and investment strategies aimed at helping investors mitigate the impact of taxes by providing de-risking, monetization or diversification without triggering an immediate taxable event.

[2] Monetize the position. These strategies allow a client to access the value of the concentrated position without selling it. These strategies can generate liquidity for diversification, charitable or lifestyle goals.

Variable prepaid forward (also known as PrISMs) strategies combine a hedge with an upfront cash advance on the hedged position. This non-recourse cash advance can be used for a variety of purposes. The investor also has the benefit of de-risking since the advance can be fully repaid by the shares in the strategy regardless of the stock price at expiration. The investor may forgo upside appreciation in the shares if the stock rises above a defined upside participation limit.

Charitable Remainder Trusts allow the investor to further their philanthropic endeavors by contributing shares to a trust in return for an annual income stream. The trust can sell the concentrated position and invest in a diversified portfolio. When the trust ends any remaining assets pass to a charity of the investor's choice.

Security-based lines of credit allow an investor to pledge her concentrated position as collateral in a lending facility. Strategies like this allow the investor to access capital without selling shares. Investors should be mindful that borrowing will actually increase the risk of the portfolio and could create situations where the client has to sell declining shares to meet collateral requirements.

Hedge and borrow strategies can combine hedging strategies like protective puts and collars to stabilize collateral. Since the collateral is protected at a minimum value a lender may offer higher levels of liquidity and lower costs than a traditional security-based line of credit. The strategy has the added benefit of mitigating the risk of having to sell shares if they decline to meet collateral requirements.

[3] Diversify with an exchange fund. An exchange fund allows investors to exchange a concentrated position for a more diversified portfolio. Traditionally, investors choose to [1] sell stock for cash, and [2] invest the cash in a broad-based portfolio of stocks for diversification. The exchange fund skips the first step and allows the investor to contribute shares directly into the Fund in exchange for Fund Units, without incurring a tax liability. Investors contribute different shares creating diversification within the fund. The Fund is managed to a broad-based benchmark. After a period of seven years, the investor can redeem her units of the fund for a diversified basket of securities that will be assigned her original cost basis.

Certain investors can consider designing and managing a "do-it-yourself", Personal Exchange Fund. This strategy may allow the investor more control over her portfolio investments.

[4] Give it away. Giving shares may allow the investor to pass wealth to loved ones or charitable endeavors.

Direct gifts to family and friends may be a great stocking stuffer and allow you to share financial success with loved ones. There are also income and transfer tax benefits for investors that gift appreciated positions. The grantor gifts not only the current value of the asset but also any future appreciation, which will grow outside of the grantor's taxable estate and will ultimately escape estate taxes. Gifting to individuals – often children- at a lower tax rate may allow them to sell the position with less income tax impact.

Grantor Retained Annuity Trusts (GRATs) allow a grantor to contribute a concentrated position to an irrevocable trust. The trust will repay the grantor the original amount and earn a minimum rate of return as specified by the IRS, known as the 7520 rate. Every year an annuity is paid back to the Grantor. At the end of the trust term any residual assets pass to the beneficiary free of transfer taxes.

The price fluctuations of a concentrated position can be a secret weapon in estate planning. If the concentrated stock performs very well and exceeds the 7520 rate it could result in a significant transfer of wealth. If it does not exceed the 7520 rate the GRAT would fail but the only losses would be stock depreciation and the cost of establishing the GRAT.

Charitable contributions made with an appreciated stock may allow an investor to maximize her charitable impact. Since the entity receiving the appreciated stock is tax-exempt, it may be more effective to let the charity sell the position and wipe out the embedded gain.

Charitable Remainder Trusts allow the investor to further their philanthropic endeavors and defer the payment of capital gains taxes over a period of years by contributing shares to a trust in return for an annual income stream. The trust can sell the concentrated position and invest in a diversified portfolio. When the trust ends any remaining assets pass to a charity of the investor's choice.

[5] Hedge the position. Hedging allows an investor to protect against downside risk in the stock position without selling the position. By retaining the position the investor will continue to receive dividends and maintain voting rights. Importantly most hedges can be administered in a manner that does not create a taxable event thus allowing an investor to avoid "tax drag" and leaving pre-tax dollars to compound in the investment.

Protective puts are a common way to protect against downside risk. The buyer of a put option pays a premium upfront for the right to sell the stock at a predetermined "strike" price on or before the expiration date. The strategy is often compared to insurance since losses below the strike price are guaranteed by the counterparty of the trade. Like insurance, buying put options can become expensive since the buyer will lose the entire premium if the option is not exercised.

The expiration date and strike price of a protective put is more art than a science. Longer options are more expensive than shorter options since the protection lasts longer. Options with higher strikes are like insurance contracts with smaller deductibles. They protect a larger portion of the position but are more expensive.

Protective put spreads involve the purchase of a protective put option combined with the sale of a lower strike put option. The combined package is less expensive than the outright purchase of a protective put option since the protection is limited and the investor is exposed to losses below the lower put strike. This strategy has become increasingly utilized since the cost of lower strike options (which the investor sells) is more expensive, on a relative basis, than higher strike options. This dynamic, referred to as skew, has always existed but has become more pronounced since the GFC as financial regulation has made it more difficult for market makers to sell these deep out-of-the-money options.

Collars are the most utilized strategy for hedging a concentrated position as investors may not have the desire or ability to spend the premium on the Protective Put upfront and are typically willing to sell at a higher price in the future given the large gains they have on the position. The Collar can reduce or eliminate the initial cost of the Protective Put in exchange for agreeing to give up potential future appreciation. In a Collar, the investor purchases a Protective Put and Sells a Covered Call Option. The second option obligates the investor to sell shares at a strike price that is generally above the current price. The combined position reduces downside exposure and upside appreciation, thus narrowing the range of potential outcomes while the Collar is in place.

Proxy hedges. Most hedging strategies utilize derivatives linked directly to the concentrated stock. This poses a few considerations. First, the use of derivatives may create selling pressure on the underlying shares. Additionally, certain shareholders such as insiders and affiliates may be restricted from engaging in derivatives on the position itself. The shareholder may consider hedging using a proxy asset that they expect will share the same risks or anticipate will have correlated returns with the stock position they own. These strategies will never perfectly eliminate risk as the proxy asset may not trade in-line with the concentrated stock.

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