Levered Single Stock ETFs On NVDA – Crack Cocaine For The Financial Masses And What This Means For The Stock Market

By Vineer Bhansali| April 2, 2024

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In a piece I published last week in this forum (here) I mentioned how the availability of explicit leverage to some, but not to all, has frequently resulted in the tendency for all participants to move off an optimal portfolio into increasingly risky securities. My conclusion was that similar to the dynamics of pre-global financial crisis speculation in implicitly levered "synthetic asset-backed securities", as well as the pre-XIV-meltdown dynamic (XIV was the inverse volatility ETF which erased all of its value in roughly a day in 2018 in an event known as "volmageddon") in 2017, we might be in another period of deleveraging driven meltdown; this time arising from explicitly and implicitly levered positions in name stocks such as NVDA, and many others.

To be sure I do think that the AI revolution is more real this time than in past eras and NVDA is at the forefront of this round; NVDA is the "picks and shovels" provider with pricing power this time. I am a big admirer of the company. But the stock and its legions of fanatics tempted with the ability to lever is another matter. The impact of leverage and market dynamics on price and feedback loops on stock prices cannot be ignored. I have no idea if the fair value for this stock is $200 or $2000 (current price about $900 – Source: Bloomberg). But what I would like to highlight is just like the two other episodes mentioned above, the massive retail inflow into NVDA both through short-dated call options and levered ETFs is providing both explicit and implicit leverage to investors who have wholeheartedly taken advantage of it. And this leverage is primed to unwind, possibly dragging bystanders in index funds with it.

ETFs were designed to provide the exposure to a broad index of a given market in a compact, easy to trade, simple to understand, tax efficient, diversified basket of un-levered securities for investors. However, the regulations surrounding ETFs did not anticipate that these same vehicles would someday be used to provide un-diversified, levered, hard-to-analyze, tax-inefficient short term trading vehicles that can be marketed and sold to unsuspecting retail

investors. Single-name ETFs take a single stock and package them into an ETF. So far, so good, but no one would buy unlevered single-stock ETF since they would be better off buying the stock itself. Enter leverage. Levered single stock ETFs provide investors with levered long or short holdings on a completely undiversified single name - typically a high-flying story stock like NVDA in today's market. For retail investors who notoriously chase recent performance, these vehicles act like a magnet. For a discussion of the risks of single name stock ETFs please see the discussion from the SEC Market Structure Subcommittee of the SEC Investor Advisory Committee (here).

"It is clear to anyone who studies the risks of levered single stock ETFs that they are not a safe "investment" – they are only good as trading vehicles for short term trading, and even then by experts."

According to the note from the SEC committee referenced above, 92% of the holders are retail investors who "*do not understand the potential effects of compounding and daily rebalancing of the 2.0x or 3.0x leveraged or inverse ETFs on the daily returns of a stock, such that the performance significantly diverges from the underlying stock when held over a longer period of time*". In addition: "*As multiple panelists noted, single stock ETFs are inconsistent with the original spirit of the exemptive relief for traditional ETFs, which offered investors a lower cost and transparent way to invest in a diversified portfolio of assets. In contrast to basic traditional ETFs, single stock ETFs are expensive, complex, opaque (due to their reliance on derivatives), and not diversified.*" The main solution from the panel of the investor advisory committee, while they seemed to agree that such single stock ETFS might be "*running afoul of the general spirit of ETFs*" was…to come up with a better naming convention!

When I googled levered and single name ETFs that use Nvidia stock as the underlying holding, I found the following (non-exhaustive list): NVDL (2x levered), NVD2 (2x), NVD3 (3x), 3LNV (3x), NVDU (1.5x) – and I am missing some others, I am sure of it. The largest levered NVDA single name ETF is NVDL, with assets of over $2 billion and massive inflows this year. As NVDA stock has surged, this ETF has had a return for the year of over 175% (as of March 31, 2024), and a one-year return of 488% (source: Bloomberg). NVDL has seen its market cap increase by almost ten-fold in just the last three months. Because of the leverage and the volatility of the stock itself, the ETF has a realized 30-day volatility of 120%. In other words, this ETF acts as a

lottery ticket betting on further gains for NVDA, but with a good chance that in a large enough shock (around 50% shock to NVDA stock), it would lose 100% of its value! Yes, it can happen - just go back and look at charts of XIV and its cousins.

The leverage in some of the ETFs (such as NVDL) Is through total return swaps (TRS), where the investor receives the performance from a dealer using a swap (in exchange the ETF provider pays an interest expense plus a spread normally indexed to some interest rate like SOFR); or in another version (such as NVD2), the ETF provider borrows money on margin to buy 2x or 3x the NVDA stock. Remember, the provider of the ETF (i.e. the manufacturer of the crack, to take my analogy further) is almost never at risk; it simply provides the retail investor with the performance of the levered ETF for a price (approximately 0.75% to 1.5% depending on the ETF), and itself buys the underlying stock to make sure its is holding a mirror image of what it is selling the ultimate buyer. The more the retail investor buys, the more the ETF provider is happy to oblige – why? Because it takes the money from the investor and buys the stock, regardless of the stock's price, and charges its fees on an ever increasing asset base – so if the provider earns $2 million in fees for an ETF that is $200 million in size, it earns almost $20 million in fees when the ETF is $2 billion. But the act of replication of the ETF is the same – add an extra zero to the swap "notional" value and increase your fees by 10x.

"If the stock goes down sharply, a levered ETF can get wiped out (again recall what happened to XIV in a day!), and the ETF provider can just shut down trading, or redeem out the shareholders, or, in many cases can just convert the ETF to a closed end fund whose net asset value can be very different from the stock price"

(see for example that the largest bitcoin fund, GBTC, which owns only bitcoin, traded at close to 40% discount to the value of its only holding, bitcoin, when it was a closed-end fund).

In other words, the ETF provider is just a middleman, an agent, whose main goal is to (1) make fees for providing leverage, (2) take little to no market risk itself, (3) programmatically do what its prospectus says it will do (how many retail investors read and understand the prospectus of a levered ETF is left to guesswork, but if it's like the fine print of any other document, it's probably very few). The providers of levered ETFs are "dealers" of this highly intoxicating legal

financial drug, and to be very clear, what they are doing is entirely legal at the time of this writing, and I cannot really blame them for providing what retail investors want. As a matter of fact when I searched for who the holders of one of these ETFs (NVDL) is, the names that showed up were a little bit surprising: amongst the largest holders there was, surprisingly, one sovereign wealth fund, a number of brokerage shops, and of course some authorized participants and market makers (they might have already unloaded their holdings so I have no idea if they are still large owners). In other words, since the levered ETFs are made to be used as short-term trading vehicles, the long-term holders are predominantly providers of inventory who can provide the levered ETFs on demand to day-traders for of course, a fee, and transactions spreads. Markets live on, with producers providing consumers with what they want for a healthy, almost risk-free profit.

What does concern me, however, is the potential for systemic risk and its impact on markets broadly. As in 2006, when similar simple observations foresaw the melt-down of the credit markets, and in 2018, when our analysis anticipated the melt-up in the volatility markets, this time the risk is bigger, and potentially more systemic. The reason is that NVDA is held in the S&P 500 and Nasdaq indices, which form the backbone of trillions of dollars of assets globally, since they are the most important equity indices for portfolios worldwide. Since NVDA is almost 5% by weight of the S&P as of this writing, every new dollar of money that comes into the S&P 500 via active and passive funds, ETFs, and even derivatives markets, has to mechanically put 5% into NVDA. The higher the price of NVDA goes, the more dollars that have to go into NVDA.

> “In other words, even passive investors who definitely would not otherwise buy the stock are probably buying a lot more than they think they are. Those who can explicitly lever are forcing those who do not want to lever to do the same. It’s like inhaling second-hand smoke.”

At the time of this writing only Microsoft and Apple are larger percentage components of the S&P 500, but the levered ETFs on them have been duds. The same provider whose 2x levered NVDA ETF has over $2 billion in AUM has only one million in the 2x levered Microsoft ETF and

only $20 million in the 2x levered Apple ETF. Speculating on Microsoft and Apple is just not exciting enough, I guess, since even Warren Buffett owns them.

So what is likely to happen next?

If my analysis of the situation is correct, not only NVDA stock, but the levered ETFs, and by extension the market indices are highly vulnerable to a deleveraging episode. Hopefully it will be a short one. Note that when interest rates are at current levels (above 5%), leverage costs at least that much, and possibly more. Rates today are definitely not low, so the availability of leverage is mostly a function of rising value of the levered asset. If for some reason the market's recent romance with an imminent rate cut from the Fed dissipates and rates rise further, leverage would certainly cost even more. Which means that looking out (1) this ability to lever up a high flying, highly volatile stock cheaply has to continue to exist, (2) the price of the stock has to keep going faster than interest rates for the foreseeable future, (3) passive indices and investors have to keep plowing money into the ETFs and funds that track the market indices that hold NVDA. If any of these pre-conditions is violated then the stock can hit an air pocket, and drag down the indices with it as a vicious reverse cycle of redemption starts. In that world, so-called diversified market indices will not behave very diversified. And the risk of contagion from selling can drive the price of other securities beyond fundamental value. In other words, systemic risk can re-emerge in all its ugliness.

> "For investors who have seen this game play out before, today is the time to take some risk off the table and build protection in portfolios. The presence of leverage in some single name ETFs that hold stocks that are a big part of the indices creates the perfect conditions for a systemic shock that can be hedged relatively inexpensively today."

As for buyers who buy single stock ETFs just because of recent eye-popping returns, I think Joel Greenblatt's warning is relevant: "Choosing individual stocks without any idea of what you are looking for is like running through a dynamite factory with a burning match. You may live, but you're still an idiot."

Important Disclosures

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