The $75,000 Investment Model – Part I

A practical look at what can happen when financially secure retirees decide to put a small amount of surplus money to work

There is a financial situation many retirees eventually reach that receives surprisingly little attention. After decades of working, saving and investing, some enter their seventies with their major financial obligations under control. With any luck, they should own their home outright, have **dependable retirement income**, adequate medical coverage, little or **no debt**, and **enough cash flow to cover normal expenses** without drawing heavily on their investments.

Then there is the money sitting in the bank (over and above any emergency funds everyone should retain just in case).

Perhaps it is $50,000, $75,000 or more. It is not needed for retirement, emergencies or planned purchases. It is simply surplus money accumulated over the years. Keeping it in a savings account feels safe, but inflation gradually reduces its purchasing power.

So what if a financially secure retiree deliberately invested some of that surplus money for five, ten, or twenty years, simply to see what it could accomplish?

That is the idea behind the investment **model** outlined in more detail in Part II.

This is not a recommendation to copy a particular portfolio. It is a case study in what financially comfortable retirees might do with money they genuinely do not need.

The Original Portfolio

The portfolio consists of four holdings: Vanguard S&P 500 ETF (VOO), Invesco QQQ ETF (QQQ), Vanguard Information Technology ETF (VGT), and NVIDIA (NVDA).

The starting portfolio was approximately $76,640, consisting of 45 shares of VOO, 46 shares of QQQ, 85 shares of VGT and six shares of NVDA.

Although these appear to be four separate investments, the three ETFs contain considerable overlap. NVIDIA, Apple, Microsoft, Amazon, Alphabet, Broadcom, AMD and other major companies appear in multiple holdings.

The six NVDA shares represented only about 1.8 percent of the portfolio directly. After including NVIDIA's positions inside VOO, QQQ and VGT, its effective exposure was estimated at roughly 11 percent.

The result is broadly diversified underneath, but significantly concentrated at the top; broad U.S. equities, with additional exposure to technology, artificial intelligence, semiconductors and the digital economy.

The Artificial Intelligence Thesis

Part of the thinking behind the **model** portfolio is the belief that artificial intelligence, robotics and automation could become major economic forces over the next five to twenty years.

The thesis is not that NVIDIA will continue producing extraordinary returns indefinitely. It is that **AI** and automation could substantially increase productivity across many industries.

But economic growth does not automatically translate into stock-market returns. Competition, regulation and technological change can redistribute wealth, and today's technology leaders may not remain tomorrow's leaders.

That is one reason the index funds matter. Rather than trying to predict which company will dominate the future, the indexes allow the portfolio to evolve with the economy. As explained in Part II, index funds do not predict the future; they provide systematic ways to participate in it.

The No-Touch Rule

This **model** depends on one particularly important element; a **strict no-touch rule**.

Buy the portfolio, document the starting point and leave it alone for the agreed-upon period; at least five years.

No selling because NVDA falls. No buying because something becomes fashionable. No switching between QQQ and VOO because one temporarily outperforms the other.

The purpose is to remove one of investing's most unpredictable variables: investor behavior. Markets will provide endless reasons to interfere; the **no-touch rule** deliberately removes those decisions from the experiment.

The Retirement Paradox

Conventional investment advice appropriately becomes more conservative during retirement because retirees generally have less ability to recover from major losses.

But not every dollar owned by a retiree has the same purpose.

A financially secure retiree may have money essential to maintaining a comfortable lifestyle and other money that is completely discretionary. Those two pools do not necessarily need to be invested the same way.

The critical distinction is between taking risk with money you need and taking risk with money you can afford to leave invested for the long term.

This experiment is about the second category.

What Are the Odds?

There is no honest way to predict the outcome using this **model**; although the developer has seen exceptional returns over the past few years which tends to prove its viability.

The portfolio could be substantially higher after five or ten years, but it could also be substantially lower; also explained in Part II. The important question is whether the investor has the financial and psychological capacity to remain invested through up and down periods.

That is why the circumstances surrounding the money matter so much.

The Educational Value

Calling this an investment experiment is deliberate.

The portfolio is a course in economics, finance and human psychology. The tuition is the money at risk. The professor is the market. The brokerage account is the laboratory.

Understanding what is actually owned, recognizing concentration, maintaining discipline and documenting the results may ultimately be more valuable than the investment result itself.

If the portfolio loses money, the experiment has not necessarily failed. If it succeeds, that does not prove the thesis was correct.

The purpose is to understand what happened and why.

The Broader Lesson

The experiment illustrates a broader principle about retirement investing: financial risk should be considered in the context of an investor's entire financial life, not simply their age.

A seventy-five-year-old who needs $75,000 for next year's expenses should not treat that money the same way as a financially secure seventy-five-year-old with reliable income, substantial assets and no foreseeable need for it.

Age matters, but circumstances matter too.

For financially secure retirees, there can be a legitimate role for a pool of aggressive, long-term capital. The purpose might be legacy creation, participation in technological growth, curiosity or simply the satisfaction of seeing what happens when money is allowed to compound.

Final Thoughts

This portfolio is not a magic formula, a guaranteed path to wealth or a substitute for professional financial planning. It is an intentionally aggressive experiment built around broad index funds, substantial technology exposure and one top of class, individual-company position.

Its greatest virtue may not be the particular selection of VOO, QQQ, VGT and NVDA. It may be the circumstances surrounding the investment.

The investors this **model** targets are financially secure. Their essential needs are covered. They understand that equities can decline substantially. They are willing to leave the money alone once committed. And they have no foreseeable need for the capital.

Under those circumstances, taking a measured amount of additional risk can be a rational choice.

After decades of working, saving and worrying about whether there would eventually be enough money to retire comfortably, there is something enjoyable about reaching the other side and being able to say, *"We have enough. We don't need this money. Let's see what it can do."*

That may simply be what happens when financial security creates the freedom to take a measured swing at the future.

And, BTW, this **model**, which is covered in extreme detail in **Part II**, can easily be set up and put into motion by just about anyone via a simple self-directed investment account without hiring an expensive investment advisor or bean counter to deal with any of the dividends or tax ramifications generated as a side effect.

And, you can take that to the bank.

Part II starts on the next page.

An ETF Investment Model – Part II

This is a tricky investment analysis using a few Exchange-Traded Funds (ETFs). So let's use some real numbers to help us understand the applied math and thinking processes involved. Here we go…

Starting point: **If** someone purchased 45 shares of ETF **VOO** which traded at $336.98 on Oct 3, 2022 and closed September 3, 2026 at $710.72 **and** 46 shares of ETF **QQQ** which traded at $267.26 on Oct 3, 2022 and closed September 3, 2026 at $717.67 **and** 85 shares of ETF **VGT** which traded at $316.72 on Oct 3, 2022 and closed September 3, 2026 at $120.88 **and** 6 shares of **NVDA** (using their remaining investment account cash on hand) which traded at $125.12 on Oct 3, 2022 and closed September 3, 2026 at $228.45 **and if/when** a given split happens to occur along the way we want to sell any newly created shares in order to maintain the same number of shares after a given split that we started with on day one (a rebalance rule used to free up some cash for other investments) **and if** we ignore any transaction costs or any fees to execute any buy or sell orders during our outlined timeframe **then** apx how much would the investor have used to become the owner of record?

And what gains, as a result, have they made via all four positions and overall?

Using the prices and share counts provided, and assuming **no commissions or fees** the math works out as follows.

Initial investment — October 3, 2022

Investment	Shares	Price paid	Initial cost
VOO	45	$336.98	$15,164.10
QQQ	46	$267.26	$12,293.96
VGT	85	$316.72	$26,921.20
NVDA	6	$125.12	$750.72
Total	**182 shares**		**$55,129.98**

So the investor would have needed approximately **$55,129.98** to purchase all four positions. As of **September 3, 2026**, the market value of those same 182 shares, using the modeled share counts shown below, is **$76,640.72**.

Note: A person with **$55,250** in a TD Direct Investing investment account could have purchased all of these shares and only the NVDA purchase order would have been charged a $9.99 transaction fee in the process. TD does not charge customers to buy or sell most ETFs. Thus there may have been apx $120 cash left in the account at that point in time; not quite enough to buy any more shares at those modeled prices.

The numbers one should come up with (based on the supplied inputs), which are reflective of a real portfolio which was created on Oct 3, 2022 using very close to the magnitude of amounts suggested, are shown on the next page. These numbers could have been scaled up had the investor wanted to risk more of their funds in the process.

Date	Transactions	Shares afterward	Basis #s
Oct 3, 2022	Buy 6 NVDA @ $125.12	6 NVDA	$750.72
	Buy 45 VOO @ $336.98	45 VOO	$15,164.10
	Buy 46 QQQ @ $267.26	46 QQQ	$12,293.96
	Buy 85 VGT @ $316.72	85 VGT	$26,921.20
			$55,129.98

Date	Transactions	Shares afterward	Cash Out
Jun 7, 2024	NVDA 10-for-1 split	60 NVDA	
Jun 11, 2024	Sell 54 NVDA @ $121.77	6 NVDA	$6,575.58
Apr 21, 2026	VGT 8-for-1 split	680 VGT	
Apr 21, 2026	Sell 595 VGT @ $101.57	85 VGT	$60,434.15
Quarterly DIVs	NVDA DIVs Paid		$2.66
2022 thru 2026	VOO DIVs Paid		$1,153.57
	QQQ DIVs Paid		$477.83
	VGT DIVs Paid		$1,071.78
		Split-Sale Proceeds + Dividends	**$69,715.57**

Date	Price @ Close	Shares afterward	FMV @ Close
Sept. 3, 2026	$228.45	6 NVDA	$1,370.70
	$710.72	45 VOO	$31,982.40
	$717.67	46 QQQ	$33,012.82
	$120.88	85 VGT	$10,274.80
			$76,640.72

A few notes before we continue this review

As a mathematical **model**, this revised table now ties things together:

Component	Amount
Initial investment	**$55,129.98**
Split-sale proceeds	**$67,009.73**
Dividends/distributions	**$2,705.84**
Cash on hand	**$69,715.57**
Remaining securities FMV	**$76,640.72**
Total value Sept. 3, 2026	**$146,356.29**

1. The actual investor who developed this **ETF Investment Model** for analysis **has an adjusted tax/accounting cost basis of apx $66,744.31** USD invested in this portfolio (not the $55.1K covered above).
2. Their actual shares have varied over time, but the **Model** is easier to grasp using **the assumptions and share counts outlined above.**
3. The next table summarizes the historic gains one **might have achieved** via these selected investment options.

Equity	10/03/2022 Price	09/03/2026 Price	Split-adjusted Price Gain	Split-adjusted Percent Price Gain
NVDA	$12.51*	$228.45	$215.94	1,726.14%
VGT	$39.59*	$120.88	$81.29	205.33%
QQQ	$267.26	$717.67	$450.41	168.53%
VOO	$336.98	$710.72	$373.74	110.91%

* Split adjusted prices

From here on we're not going to try to **model** future splits, future dividends, or the mechanics of our hypothetical trading strategy. We're simply going to ask what might happen **if the same four securities repeat approximately the same price performance they delivered during October 3, 2022–September 3, 2026 over an equivalent future period, what would the four positions be worth?**

That is a straightforward historical-performance projection.

The historical window is about **202.4 weeks / 1,417 days**. So, projecting the same length of time forward, starting **from September 3, 2026**, puts us at *approximately* **August 21, 2030**. (The exact calendar date depends on whether we measure elapsed calendar days or trading days.)

Let's do it position by position

We'll start with the **September 3, 2026 FMV**, because that's our starting point for the projection and show the results in rank order:

Equity	Sept. 3, 2026 FMV	Historical price gain	Historical multiplier
NVDA	$1,370.70	1,726.14%	**18.2614×**
VGT	$10,274.80	205.33%	**3.0533×**
QQQ	$33,012.82	168.53%	**2.6853×**
VOO	$31,982.40	110.91%	**2.1091×**

The projection is simply:

Future value = September 3, 2026 value × historical multiplier

NVDA
$1,370.70 × 18.2614 ≈ **$25,030.90**

VGT
$10,274.80 × 3.0533 ≈ **$31,372.05**

QQQ
$33,012.82 × 2.6853 ≈ **$88,649.33**

VOO
$31,982.40 × 2.1091 ≈ **$67,454.08**

So the projected securities would be approximately:

Equity	Sept. 3, 2026	~2030 projection
NVDA	$1,370.70	**$25,031**
VGT	$10,274.80	**$31,372**
QQQ	$33,012.82	**$88,649**
VOO	$31,982.40	**$67,454**
TOTAL	**$76,640.72**	**$212,506**

This projection says the current **$76,640.72 FMV** could roughly become $212,500 if the four securities each repeat approximately the same percentage price performance over the equivalent future period. This is simple math and we're deliberately ignoring fees, dividends, taxes, future splits and the historical cash generated by any split sales; which someone would not need to deal with anyway, unless they wished to make some trades and pay some possible taxes on any gains (other than their dividends) as a result.

And there's an important distinction. That's an increase of approximately: $212,500 − $76,640.72 = $135,859 or approximately 177% additional appreciation during the next equivalent period. But it doesn't mean the original **$55,129.98** would turn into apx **$212,500**. The $76,640.72 is the September 3, 2026 value of the securities after the modeled split sales, with the proceeds and dividends treated separately as cash.

Let's explore this portfolio some more and try to understand what is actually going on—and why this investor might have decided to build it in the first place. To do this we're going to run some **ideas and/or questions** by our very own **Research Analyst and see where that leads us in the process.**

Ideas and/or Questions:

These ETFs seem to be weighted for some reason. Would it be correct to assume that they all might contain NVDA as part of the party mix so to speak? And if we look at the **top 10 stocks held** in each ETF would a lot of those also be the same? Let's get up to speed on what we actually have here. Are we able to figure out what the **top 10 big hitters** are in each ETF; plus what percentages that say the **top 25** that are **held by all 3 ETFs** might be, somehow?

Research Analyst:

Yes — and we have spotted something very important about what is owned. These ETFs aren't three completely different baskets. There is substantial **overlap**, particularly among the largest technology and growth companies. So the portfolio is more concentrated than the four ticker symbols might initially make it seem.

The exact holdings and percentages change over time, so rather than treating any one day's percentages as permanent, let's use a representative snapshot to understand the underlying structure.

First: NVDA is in all three

NVDA is not just a tiny holding.

- **VOO** → **NVDA** is about **7.5%** of the fund.
- **QQQ** → **NVDA** is about **8.4%**.
- **VGT** → **NVDA** is about **17.2%**.

So our six shares of NVDA are actually being supplemented by indirect NVDA exposure through all three ETFs in our representative snapshot. And this is where it gets interesting.

The top 10 "big hitters"

VOO — S&P 500

VOO is the broadest of the three [a hedge of sorts]. It holds roughly **500 companies**, and its weighting is essentially based on the companies' market capitalizations.

Rank	Company	Approx. weight
1	NVIDIA	**7.50%**
2	Apple	**6.57%**
3	Microsoft	**4.29%**
4	Amazon	**3.61%**
5	Alphabet A	**3.24%**
6	Broadcom	**2.77%**
7	Alphabet C	**2.58%**
8	Micron	**2.01%**
9	Meta	**1.91%**
10	Tesla	**1.83%**

Those top 10 alone represent roughly **36.31%** of **VOO**. Notice something already: **8 of those 10** are also likely to show up prominently in **QQQ** and/or **VGT.**

QQQ — NASDAQ-100

QQQ is quite different conceptually. It tracks the **100 largest *non-financial* companies** listed on **NASDAQ**.

A representative holdings snapshot gives approximately:

Rank	Company	Approx. weight
1	NVIDIA	**8.4%**
2	Apple	**7.2%**
3	Microsoft	**4.6%**

4	Amazon	**4.3%**
5	Alphabet A	**3.4%**
6	Alphabet C	**3.3%**
7	Tesla	**3.3%**
8	Broadcom	**3.2%**
9	Meta	**2.8%**
10	Micron	**1.5%**
	Top 10 Total	**42%**

The precise ranking/weights can move, and QQQ rebalances periodically. Invesco explicitly notes that its holdings are subject to change. But the big picture is crystal clear: **QQQ** is heavily tilted toward the same mega-cap growth/technology companies that *dominate* **VOO.**

VGT — Information Technology

This one is the most concentrated toward technology. And look at the difference:

Rank	Company	Approx. weight
1	NVIDIA	17.15%
2	Apple	16.24%
3	Microsoft	10.96%
4	Broadcom	4.21%
5	Micron	3.82%
6	AMD	3.18%
7	Cisco	1.91%
8	Applied Materials	1.69%
9	Intel	1.65%
10	Lam Research	1.54%
	Top 10 Total	**62.35%**

Vanguard's current VGT data shows those first six weights directly, and the remaining holdings in its detailed holdings table.

The first three alone — NVIDIA + Apple + Microsoft — are roughly **44.35%** of **VGT.**

That's a *very* different beast from VOO.

Here's the really interesting part: the overlap

Our instinct was exactly right. The three ETFs share a lot of the same companies.

For example:

Company	VOO	QQQ	VGT
NVIDIA	~7.5%	~8.4%	~17.2%
Apple	~6.6%	~7.2%	~16.2%
Microsoft	~4.3%	~4.6%	~11.0%
Broadcom	~2.8%	~3.2%	~4.2%
Micron	~2.0%	~1.5%+	~3.8%
Amazon	~3.6%	~4.3%	Not IT
Alphabet	~5.8% combined*	~6.7% combined*	Not IT
Meta	~1.9%	~2.8%	Not IT
Tesla	~1.8%	~3.3%	Not IT

*Alphabet has two share classes, so both funds show GOOGL and GOOG separately.

The overlap isn't merely anecdotal. ETF overlap analysis shows that VOO and QQQ share a substantial number of individual holdings and more than half of their portfolio weight. QQQ and VGT also have substantial overlap by weight, as do VOO and VGT.

So we actually have something like this

Think of the three ETFs as three increasingly focused circles:

VOO "Gives us essentially the whole U.S. large-cap market."
↓
QQQ "Gives us the big NASDAQ companies, which happens to heavily favor technology and growth."
↓
VGT "Gives us U.S. information technology companies."

And then we've separately bought **NVDA** which "Gives us NVIDIA specifically." 😂

That's not necessarily bad. What it means is our portfolio is **much more tech/mega-cap concentrated than the four tickers initially suggest.**

And here's what I think we should do next

There's an *excellent* analysis hiding in our question. Rather than simply asking: "How many stocks are in each ETF?" Let's calculate our **actual *look-through* portfolio**.

For example, if one owns:

- $31,982 of VOO
- $33,013 of QQQ
- $10,277 of VGT
- $1,371 of NVDA

…we can mathematically "look through" the ETFs and determine approximately **how many dollars of a $76,640 portfolio are actually exposed to NVIDIA**—and then Apple, Microsoft, Amazon, Alphabet, Broadcom, Micron, Meta, Tesla, AMD, etc. **If** we crunched those numbers we'd end up with how much we invested in the top companies.

That would let us build a table something like this:

Actual company exposure	**Approx. dollars in *our* portfolio**
NVIDIA	$X,XXX
Apple	$X,XXX
Microsoft	$X,XXX
Amazon	$X,XXX
Alphabet	$X,XXX
Broadcom	$X,XXX
etc.	

That is probably the best way to get one's self "up to speed" on what we would actually have. Because I suspect the result is going to be quite revealing: **we don't really own four independent investments.** We probably own a portfolio whose econ exposure is considerably more concentrated in a relatively small group of mega-cap companies.

And we could take it one step further and calculate the **top 25 underlying companies** across the entire **$76,640 portfolio**, their combined percentage, and how much of our portfolio is effectively duplicated across the three ETFs. That's the analysis I'd do next.

Ideas and/or Questions:

Show us the money 'o wise one... that is show us the top 25.

Research Analyst:

Alright, let's take a **deeper look**. And I think we're going to find this more interesting than simply seeing the ETF top-10 lists in our portfolio as it stands September 3, 2026.

- **6 NVDA** = $1,370.70
- **45 VOO** = $31,982.40
- **46 QQQ** = $33,012.82
- **85 VGT** = $10,274.80
- **Total = $76,640.72**

I did a **look-through** calculation for every company held by the ETFs and I multiplied its ETF weight by the dollars in that ETF. I also added our six shares of NVDA directly.

The ETF holdings are moving targets, so this is an approximation using the latest available holdings snapshots. VOO's published top-25 list is from July 31, QQQ's from August 27, and VGT's from the latest August/September data.

Our actual top 25 underlying companies

Here is what our **$76,640 portfolio** looks like when we strip away the ETF wrappers:

Rank	Company	Approx. exposure	% of our portfolio
1	**NVIDIA (NVDA)**	**$8,430**	**11.0%**
2	**Apple (AAPL)**	**$6,334**	**8.3%**
3	**Microsoft (MSFT)**	**$4,801**	**6.3%**
4	**Alphabet (GOOGL + GOOG)**	**$3,875**	**5.1%**
5	**Amazon (AMZN)**	**$2,760**	**3.6%**
6	**Micron (MU)**	**$2,374**	**3.1%**
7	**Broadcom (AVGO)**	**$2,269**	**3.0%**
8	**AMD (AMD)**	**$1,835**	**2.4%**
9	**Meta Platforms (META)**	**$1,492**	**1.9%**
10	**Tesla (TSLA)**	**$1,360**	**1.8%**
11	**Cisco (CSCO)**	**$1,060**	**1.4%**
12	**Intel (INTC)**	**$1,047**	**1.4%**
13	**Walmart (WMT)**	**$965**	**1.3%**
14	**Applied Materials (AMAT)**	**$925**	**1.2%**
15	**Costco (COST)**	**$809**	**1.1%**
16	**Lam Research (LRCX)**	**$574**	**0.75%**
17	**Palantir (PLTR)**	**$565**	**0.74%**
18	**Palo Alto Networks (PANW)**	**$546**	**0.71%**
19	**Texas Instruments (TXN)**	**$526**	**0.69%**
20	**KLA (KLAC)**	**$493**	**0.64%**
21	**JPMorgan (JPM)**	**$467**	**0.61%**
22	**Berkshire Hathaway (BRK.B)**	**$467**	**0.61%**
23	**Eli Lilly (LLY)**	**$451**	**0.59%**
24	**Visa (V)**	**$294**	**0.38%**
25	**Mastercard (MA)**	**$230**	**0.30%**

A small caveat on the ordering: because the source snapshots aren't all from the exact same day, several of the positions around #20–25 can shuffle slightly. The big-picture numbers, however, are quite robust.

Here's the "holy cow" number 😲

The **top 10 companies alone account for roughly 46% of our entire $76,640 portfolio.**

And our **top 8** are approximately **NVIDIA + Apple + Microsoft + Alphabet + Amazon + Micron + Broadcom + AMD**. That's roughly **42% of the entire portfolio**.

That's a *lot* of exposure to a relatively small collection of companies. But as long as most of those perform well, like in the past, they will tend to boost overall results.

And there's an even more interesting observation. **Our direct NVDA position isn't really 1.8%.** We have $1,370.70 of NVDA sitting directly in the account. That's only **1.79% of the portfolio.** But once we look through the ETFs, we estimate that our **total** economic exposure to **NVIDIA** is about **$8,430**, or **~11%** of our **portfolio.** That's because NVDA appears in **all three ETFs** plus individually as the overall winner.

VGT is particularly NVDA-heavy. **NVIDIA** is currently about **17.16%** of **VGT**, while Apple is 16.25% and Microsoft 10.96%. The top 10 holdings comprise about **62%** of **VGT**.

QQQ has **NVDA** at roughly **8.73%**, Apple 7.31%, Microsoft 5.94%, Micron 4.61%, Amazon 4.36%, and AMD 3.40%.

VOO is broader, but even there **NVDA** is roughly **7.55%**, Apple 7.04%, Microsoft 5.36%, Amazon 4.13%, and Alphabet's two share classes together are about 5.9%.

The really cool part is that we accidentally (or on purpose) own an AI/semiconductor-heavy portfolio. Look at these companies:

NVDA
AVGO
MU
AMD
AMAT
LRCX
INTC
CSCO
KLAC
TXN

That's a pretty substantial collection of the semiconductor/AI infrastructure ecosystem. And then we've got:

MSFT
AAPL
AMZN
GOOGL/GOOG
META
PLTR
PANW

This gives us a lot of the software/cloud/AI beneficiaries. So although the account says **NVDA + VOO + QQQ + VGT** the *economic* portfolio is much closer to a large-cap U.S. portfolio with a very **significant** technology/AI/semiconductor tilt.

That's not necessarily a criticism. In fact, given the performance we've been examining, **it's a big part of why this scalable portfolio has done so well.**

And now we'll show something even more useful

There's a subtle but important distinction between **"overlap"** and **"exposure."**

Suppose NVDA is:

- 7.55% of VOO
- 8.73% of QQQ
- 17.16% of VGT
- plus our direct NVDA shares.

We don't have three separate 7–17% NVDA investments. We have **one underlying company exposure**, and the ETFs are simply different wrappers through which we own pieces of it (along with everything else). That's what the $8,430 NVDA number captures.

And this leads to what should be our **next piece of detective work**.

We can reverse-engineer the entire $76,640 portfolio into sectors.

Instead of "VOO = 42%, QQQ = 43%, VGT = 13%, NVDA = 2%", we can say something like:

Technology: ~$X
Communication services: ~$X
Consumer discretionary: ~$X
Financials: ~$X
Healthcare: ~$X
Industrials: ~$X
Energy: ~$X
etc.

That might show us **what we actually own**, rather than what the ticker symbols make it appear we own. And I'd especially like to calculate **our true semiconductor/AI exposure**. Given what I'm seeing here, I suspect that number is going to be *considerably* higher than we might expect from simply looking at the four positions.

Ideas and/or Questions:

I've got my coffee in the microwave. Go ahead and crunch away. I'll be happy to see what we cook up in a minute.

Research Analyst:

Perfect. While the coffee reheats, I'll keep the same hypothetical **$76,640 portfolio** and peel back the ETF layers into the **actual sector exposure** underneath.

One important point before I do that. Some of the holdings/weights in our previous “top 25” answer were based on inconsistent snapshot dates, so I don't want to compound that by presenting a false level of precision. For the **sector analysis**, I'll use a

consistent current holdings snapshot where possible and label the result as approximate.

Let's open the hood.

The available Vanguard data has VOO at about **38.0% Information Technology**, while VGT is, by definition, entirely **Information Technology**. QQQ's **technology** exposure was approximately **58.7%** on September 3, 2026.

I'm going to keep this as a **look-through estimate**, because ETF holdings and sector weights change over time, and the providers don't all **publish** their data on precisely the same day.

First: our $76,640 portfolio is *not* really 4 separate bets

We have:

- **VOO:** $31,982.40 or 41.7%
- **QQQ:** $33,012.82 or 43.1%
- **VGT:** $10,274.80 or 13.4%
- **Direct NVDA:** $1,370.70 or 1.8%

But that's the *wrapper* view. The look-through view is much more revealing.

🕳️ Our approximate technology exposure: ~56%

Using VOO's 38.01% technology weight, QQQ's approximately 58.7% technology weight, VGT's essentially 100% technology mandate, and treating our direct NVDA position as technology, we get approximately **$43,100** of our **$76,640 portfolio**, or roughly **56% technology**.

That's pretty remarkable when the account statement just says VOO + QQQ + VGT + NVDA.

VOO itself is actually **quite diversified**: its latest sector breakdown has financials at 11.78%, communication services 9.68%, consumer discretionary 9.31%, healthcare 8.89%, industrials 8.82%, etc.

But then we stack QQQ and VGT on top of it. And that's what changes the character of our portfolio.

And now the really fun one: semiconductors

This is where I think someone will go, "*Ohhhh...*"**?**

VGT's latest published breakdown puts **semiconductors at 38.37%** of the entire fund. Semiconductor materials/equipment adds another **8.03%**.

And **VOO** itself contains a surprisingly large semiconductor contingent:

- NVIDIA 7.50%
- Broadcom 2.77%
- Micron 2.01%
- AMD 1.47%
- Intel 1.02%
- Applied Materials 0.89%
- Lam Research 0.84%
- plus several smaller semiconductor/equipment names

VOO's top holdings data confirms those major positions. QQQ piles many of those same names on top. So, depending on exactly how we define "semiconductor" — pure chip designers/manufacturers versus including semiconductor equipment — I estimate that roughly **20–25%** of our entire portfolio has semiconductor exposure. That's approximately **$15,000–$19,000** of our $76,640.

And that's before we start talking about companies like Microsoft, Amazon, Meta, Alphabet, etc., which are major **AI infrastructure/users** but aren't classified as semiconductor companies.

The resulting look-through portfolio

Market Sectors	Approx. FMV	% of $76,640
Information Technology	$43,002	**56.11%**
Communication Services	$7,461	9.74%
Consumer Discretionary	$6,732	8.78%
Health Care	$4,267	5.57%
Financials	$3,971	5.18%
Industrials	$3,901	5.09%
Consumer Staples	$3,541	4.62%
Energy	$1,250	1.63%
Utilities	$1,074	1.40%
Materials	$840	1.10%
Real Estate	$601	0.78%
TOTAL	**≈ $76,640**	**≈100.00%**

What jumps out

The headline result is quite striking: **Information Technology ≈ $43,002, or about 56% is the aggressive part and the rest, 44%, is the conservative part of the entire $76,640.72 portfolio.**

That's substantially different from looking at the four tickers individually.

The reason is the **overlap**. VOO itself was approximately **37.9% Information Technology** around this date, while QQQ was approximately **58.7% technology**, and VGT was essentially **99% technology**.

And NVDA is itself classified as **Information Technology**, so the entire $1,370.70 NVDA position adds directly to the technology bucket.

So, in round numbers, our $76.6K portfolio is really behaving like:

~$43.0K Technology
~$7.5K Communication Services
~$6.7K Consumer Discretionary
~$4.3K Health Care
~$4.0K Financials
~$3.9K Industrials
~$3.5K Consumer Staples
~$1.3K Energy
~$1.1K Utilities
~$0.8K Materials
~$0.6K Real Estate

That's the much more revealing picture of what the four tickers collectively represent.

Here's how I'd describe what we actually own

If a friend asked me, "*What kind of portfolio is this?*" I wouldn't answer: "Oh, it's VOO, QQQ, VGT and a little NVDA." I'd say: "It's a U.S. large-cap portfolio with a very substantial mega-cap technology, AI and semiconductor concentration." And that's a much more accurate description.

The Big 8 establish our portfolio's center of gravity

This is probably the most useful way to think about it. Our approximate exposure to the major recurring names across the ETFs looks like:

Company	Approx. % of our portfolio
NVIDIA	**11%**
Apple	**8%**
Microsoft	**6%**
Alphabet	**5%**
Amazon	**4%**
Micron	**3%**
Broadcom	**3%**
AMD	**2–2.5%**

Those eight companies alone are therefore approximately **42% of our portfolio**.

And here's the kicker. The owner probably didn't consciously buy 42% of the portfolio in those eight companies. They bought three ETFs that independently resulted in those companies becoming the large holdings. That's the magic — and the potential risk — of overlapping these particular ETFs.

NVIDIA is the poster child for this

As explained earlier, one might think they had **$1,370.70 of NVDA** which is only **1.8%** of the portfolio. But the ETFs quietly add another roughly **$7,000** of NVDA exposure. So the true exposure is approximately **$8,400 of NVDA ≈ 11% of the portfolio.** That's a *very* different picture.

And NVDA isn't some obscure overlap. It's one of the largest holdings in VOO, one of QQQ's largest holdings, and the largest holding in VGT. In our representative snapshot, VOO has NVDA at about 7.5%, while VGT has it at roughly 17%+. And why not? After all NVDA is the current leader of the pack corporation out there changing the economic world the past few years.

But there's something I actually like about this

This isn't necessarily a "badly diversified portfolio." There's an important distinction.

There are **three different diversification mechanisms**.

VOO = the foundation

VOO owns about **500 U.S. companies** and represents the **broad S&P 500**. Its 38% **technology** weighting is significant, but **the other 62%** [to balance things out] is spread across financials, healthcare, industrials, consumer companies, energy, utilities, real estate, materials, etc.

QQQ = growth/innovation tilt

QQQ owns the NASDAQ-100 — the largest **non-financial** NASDAQ companies — and its methodology produces a very heavy technology/growth tilt. Invesco explicitly describes it as more than a pure technology fund, with meaningful exposure to consumer discretionary, healthcare and industrials as well.

VGT = concentrated technology bet

VGT is the **laser-focused** piece. And this is where things really start focusing on the technology ecosystem. Its current subsector breakdown has semiconductors at 38.37%, technology hardware at 19.14%, systems software at 13.13%, semiconductor equipment at 8.03%, and application software at 8.01%. And then...

NVDA = "I really mean it." 😂

So what do we have?

Once again, **if I had to put a label on the whole thing**, I'd call it a **diversified** U.S. equity portfolio wrapped around a concentrated American **technology** core and the **AI**/semiconductor ecosystem.

And that's actually a **pretty fascinating portfolio**.

The fact that it has performed so well over the historical period we were examining suddenly makes considerably more sense.

We aren't merely benefiting from "the stock market going up." We have **VOO**, which participates in the broad market, plus **QQQ**, which is tilted toward the companies driving the technology boom, plus **VGT**, which is concentrating that part even further, plus **NVDA itself**, which was and arguably will be the single biggest winner of the **AI** buildout.

And I think we have one more killer calculation to do

Now that we know what's actually under the hood, I'd like to take the **$76,640** and answer a slightly different question. If NVIDIA, Apple, Microsoft, Broadcom, Micron, AMD, etc. all disappeared from the ETFs and we counted each underlying company only once, exactly how concentrated are we?

In other words, we could create a **"de-duplicated portfolio"** showing…

Top 10 = X%
Top 25 = X%
Top 50 = X%
Everything else = X%

And then compare that with **VOO** by itself.

That would tell us, in one picture, just how much additional concentration **QQQ + VGT** have added to our otherwise very diversified VOO core. That's where I think the *really* useful "what the hell do we actually own?" answer is hiding. 😎

Ideas and/or Questions:

Can we do that without keeping the sunglasses on?

Research Analyst:

Absolutely. Let's take the sunglasses off and be a little more rigorous. One important caveat, the ETF holdings are continuously changing, and the earlier numbers were **estimates**, not custodial-level position reconciliation. So this is best viewed as a **portfolio-education** **model**, not something someone would use for tax or trading decisions.

The big picture

Our September 3, 2026 portfolio is:

- **VOO:** $31,982.40
- **QQQ:** $33,012.82
- **VGT:** $10,274.80
- **NVDA:** $1,370.70
- **Total: $76,640.72**

If we look through the ETFs and count each underlying company only once, the portfolio is **meaningfully more concentrated than the four ticker symbols make it appear**.

The reason is simple: **VOO + QQQ + VGT** aren't three independent baskets. They're three baskets that repeatedly buy many of the same enormous companies.

The "de-duplicated" way to think about it

Imagine we took away the ETF labels and dumped everything into one big bucket. We would have exposure to **hundreds** of companies, but the money wouldn't be remotely (or even randomly) evenly distributed.

The rough structure is something like:

Portion of portfolio	Approximate share
Top 10 underlying companies	**46%**
Top 25	**58–62%**
Remaining companies	**38–42%**

So, very roughly, about **three-fifths** of our entire **$76.6K** is ultimately represented by just **25 companies.** That's the number I'd keep in our head.

And the top of the pile is particularly concentrated

Our approximate look-through exposure was:

Company	Approx. exposure	% of portfolio
NVIDIA	$8,430	**~11.0%**
Apple	$6,330	**~8.3%**
Microsoft	$4,800	**~6.3%**
Alphabet	$3,875	**~5.1%**
Amazon	$2,760	**~3.6%**
Micron	$2,375	**~3.1%**
Broadcom	$2,270	**~3.0%**
AMD	$1,835	**~2.4%**
Meta	$1,490	**~1.9%**
Tesla	$1,360	**~1.8%**

Those first ten are roughly **$35,500**, or about **46%** of the **entire account**. That's the genuinely important observation.

Compare that with owning VOO alone

This is where this portfolio design becomes much easier to understand. If we had simply put the entire **$76,640** into VOO, we'd still have significant exposure to NVIDIA, Apple, Microsoft, Alphabet, Amazon, etc. But we wouldn't have the *extra layers* created by QQQ and VGT.

Our actual portfolio essentially does this: **VOO** → broad U.S. market **+ QQQ** → disproportionately adds the big NASDAQ/growth companies **+ VGT** → disproportionately adds technology companies **+ NVDA** → disproportionately adds NVIDIA.

So the three ETFs are **not really diversifying** one another **very much** at the top end.

They're mostly changing the **weights** of companies already owned through VOO.

Here's the simplest mental model

Think of VOO as our **base cake**. Then…

- QQQ adds a thick layer of **mega-cap growth**
- VGT adds another layer of **technology**
- NVDA adds a little frosting made entirely of **NVIDIA** 😂

We haven't eliminated diversification. We've **tilted** the **diversification**. And that's **an important distinction**.

What we should *not* conclude from this

We shouldn't look at this and say: "Oh no, this portfolio is dangerously undiversified." That's too strong and wrong. We still have exposure through VOO to **hundreds** of companies and **many** sectors. Rather, I'd say **we have broad diversification underneath**, but considerable **concentration** at the top**.** That's a perfectly legitimate investment approach. It's just important to **know that we're doing it**.

There's another fascinating number

Remember our hypothetical historical-performance exercise?

We started on September 3, 2026 at **$76,640**.

Now consider where that money is concentrated. Approximately **$35,500** → **top 10 companies**. And NVIDIA alone **~$8,430**.

So roughly **11 cents of every dollar** we own is economically tied to NVIDIA. That's despite our direct NVDA position representing only 1.8% of the account (by including it that specifically pushed our overall NVDA exposure above 10%). That's the ETF overlap effect in action.

And here's the part I'd really want us to understand before doing anything

Don't automatically "fix" the overlap. That would be a bad move.

We have an **interesting portfolio**. We don't need to immediately start rearranging it because we've discovered that VOO, QQQ and VGT overlap. The overlap might actually be intentional—or it might simply be the result of whoever assembled the portfolio liking technology and growth. The first thing to do is **understand it**, which is exactly what we're doing. Then we can ask a much better question: "Given that this portfolio is already heavily tilted toward technology and mega-cap growth, **what would happen** if we simply left it alone for 10 or 20 years?"

And *that* is where our earlier historical-performance experiment becomes useful. We can run three scenarios:

- **Optimistic:** the holdings reproduce 100% of their historical annualized performance.
- **Moderate:** they achieve 50% of those historical annualized rates.
- **Conservative:** they achieve 25%.

Then we can see what our **$76,640** could become at 5, 10, 15 and 20 years. That would give us a much better feel for the range between **"Holy crap, this investment could become enormous"** and **"Okay, let's be realistic about what future markets might actually deliver."**

Ideas and/or Questions:

Next we'll try to project "what our $76,640 could become at 5, 10, 15 and 20 years" now that the coffee has cooled down enough to drink. ;^)

Research Analyst:

We want to make one improvement to our earlier exercise. Rather than pretending the whole portfolio earns one blended rate, let's **let each holding compound independently at its own historical annualized rate**. That's much more faithful to the thought experiment we've been building.

Our starting point remains **$76,640**. The historical annualized price-growth rates we derived were approximately:

- **NVDA:** 18.2614× → about **94.0%/yr**
- **VGT:** 3.0533× → about **33.0%/yr**
- **QQQ:** 2.6853× → about **28.6%/yr**
- **VOO:** 2.1091× → about **21.0%/yr**

Those are extraordinary rates—especially NVDA. For context, the **S&P 500's** long-run annualized return is much closer to the roughly **10%** range, although its recent returns have been substantially higher. So let's treat the exercise as mathematical **"what if" territory**, not a forecast.

Scenario 1 — They do it all again

This is the wild one. Each holding repeats **100% of its historical annualized rate**.

What $76,640 *could* become

The numbers

Years from tomorrow	100% historical	50% historical	25% historical
5 years	**~$274,000**	**~$147,000**	**~$107,000**
10 years	**~$1.74 million**	**~$317,000**	**~$153,000**
15 years	**~$27.3 million**	**~$894,000**	**~$232,000**
20 years	**~$659 million**	**~$3.7 million**	**~$375,000**

And yes, that first column gets absolutely ridiculous. **Why? NVDA.**

At a ~94% annualized return, every dollar invested in NVDA would nearly double every year. That's why the 100%-historical scenario eventually goes completely bananas [even though the odds of this happening are better, by any measure, than winning any given lottery]. Our $1,370.70 direct NVDA position alone would theoretically become approximately:

- 5 years: **~$36K**
- 10 years: **~$950K**
- 15 years: **~$25M**
- 20 years: **~$650M** (if we live that long and all the stars align)

So the 20-year portfolio number isn't really telling us anything reliable about the likely future. It's telling us how extraordinarily powerful—and ultimately absurd?—extrapolating **NVDA's 2022–2026 performance indefinitely** becomes.

But look at the 50% scenario

This is the one that catches our attention.

We're no longer saying "Everything repeats its incredible recent performance." We're saying that **each investment achieves only half of the annualized rate it achieved during our historical window.**

And the result is approximately $76,640 → $147K in 5 years → $317K in 10 → $894K in 15 → $3.7M in 20. That's still a very aggressive scenario, but it's vastly less crazy than the 100% column. And remember: we're **not adding another penny**.

No monthly contributions.
No reinvested dividends.
No employer contributions.
No clever trading.
Just: **Buy tomorrow. Hold. Do nothing.**

The 25% scenario is perhaps the most interesting

Now we're saying each investment only achieves **one-quarter of its historical annualized performance**. And we get approximately:

Horizon	Portfolio
Tomorrow	**$76,640**
5 years	**~$107K**
10 years	**~$153K**
15 years	**~$232K**
20 years	**~$375K**

That is a very different picture from the "~$659 million!" headline. And I think this is where the exercise starts becoming **genuinely useful**.

There's an even better benchmark

Here's where I'd make a reality check.

The historical window we chose happens to contain an extraordinary period for technology and especially semiconductors. QQQ, for example, has significantly outperformed the S&P 500 over many recent periods, but that doesn't mean the differential will persist indefinitely. Invesco itself notes that QQQ has beaten the S&P 500 in seven of the last ten years through June 2026. And the S&P 500's long-term historical return is around **10% annually**. So I'd actually like to introduce a **fourth scenario** that isn't based on our historical window at all: What if the entire **$76,640** simply compounds **at 10% per year?**

That apx $75+K produces approximately:

- **5 years:** $123,000
- **10 years:** $199,000
- **15 years:** $319,000
- **20 years:** $514,000

And *that* gives us a very useful yardstick.

So here's a coffee-cup version

If we had a pen and a little napkin on the kitchen table, I'd write…

Starting tomorrow with **$76,640:**

Apx Numbers	5 years	10 years	15 years	20 years
10% market-like	$123K	$199K	$319K	$514K
25% historical rates	$107K	$153K	$232K	$375K
50% historical rates	$147K	$317K	$894K	$3.7M
100% historical rates	$274K	$1.74M	$27.3M	$659M

And *that* is why I wouldn't use the 100% number as a forecast.

It's useful because it demonstrates the mathematics of compounding. But it's essentially a *reductio ad absurdum* (a method of proving the falsity of a premise by showing that its logical consequence is absurd or contradictory): if NVIDIA's 2022–2026 performance continued for another 20 years, the math eventually becomes preposterous or unbelievable. Yes, anything can repeat again. Even lightning can strike the same place twice. But, don't plan on it.

The **25%** and **50%** cases are much more interesting for planning purposes, and the **10%** case gives us a useful broad-market benchmark which this **model** should easily achieve if any model should (given everything we know thus far).

Ideas and/or Questions:

Is the 50% or even the 100% theory actually *reductio ad absurdum* considering how ChatGPT and **AI** in general will be performing like a champ during the next 5, 10, 15 or 20 years and making sure human prosperity, economic growth, health care, happiness, purchasing power and freedom to explore the rest of the solar system and beyond will be happening... and conceivably there will be robots doing most of the work while the GDP of the planet explodes right before our very eyes?

Research Analyst:

We say this deserves a second look. When we originally called the 100% historical-performance scenario *reductio ad absurdum*, we were really making a statement about the mathematics of endlessly extrapolating an extraordinary historical return. We were not making a statement that an AI-driven economic transformation is absurd. Those are two very different propositions, and now that we have stepped back and looked at the bigger picture, we should keep them separate.

Our original four-year window happens to cover a period in which artificial intelligence, semiconductors, cloud computing and the companies supplying the infrastructure for all of it experienced extraordinary growth. We then asked what would happen if each security repeated that performance indefinitely. The resulting numbers eventually become almost comical, particularly because NVDA's historical annualized price

appreciation was so extraordinary. But that doesn't mean the economic forces behind the performance have to disappear. In fact, there is a credible argument that we may still be relatively early in a technological transformation that could have enormous consequences for productivity and economic growth.

We should therefore distinguish between **an extraordinary future and an extraordinary rate of return**. It is entirely conceivable that AI and robotics could make the global economy dramatically more productive over the next 10, 20 or even 30 years. **AI** could increasingly perform cognitive tasks, **robots** could increasingly perform physical tasks, and **AI-assisted research** could *easily* accelerate the development of medicines, materials, energy systems, software and other technologies. If those things happen together, the productive capacity of civilization could increase enormously. Serious economic institutions are already studying this possibility rather than dismissing it as science fiction. The IMF, for example, now treats AI as a potentially transformative force for productivity, investment and economic growth.

That possibility makes our earlier 50% scenario considerably more interesting.

Remember what 50% actually means in our model. We are not saying that these investments will repeat their recent performance. We are taking the annualized historical rates and cutting them in half. That leaves us with approximately 47% annually for NVDA, 16.5% for VGT, 14.3% for QQQ and 10.5% for VOO. Those are still ambitious assumptions, particularly for NVDA, but they aren't all equally outrageous. A 10.5% long-term return for VOO, for example, is hardly a civilization-ending assumption. A mid-teens return for technology-heavy investments over a particularly favorable decade is certainly possible, even if we shouldn't regard it as normal or guaranteed.

The 100% scenario remains much harder to defend as a practical forecast. Our historical NVDA calculation produces something close to a 94% annualized return. If we simply compound that number for another 20 years, our relatively modest direct NVDA position eventually becomes an enormous fortune. The mathematical problem is not that NVDA cannot continue to be extraordinarily successful. The problem is that maintaining a 94% annualized return for two decades would require the company's economic value to grow to a scale that eventually runs into the size of markets, industries and ultimately the global economy itself.

So perhaps we should amend our language. **The 100% scenario is not reductio ad absurdum because an AI-powered future is absurd. It is reductio ad absurdum because indefinitely applying an extraordinary historical rate of return to an already enormous company eventually produces an economically implausible result.**

That's a much better statement.

And there is another reason we shouldn't automatically dismiss the 50% case. Suppose the next twenty years really are extraordinary. Imagine that AI becomes substantially more capable, robotics becomes inexpensive and widespread, energy production expands, manufacturing becomes highly automated, scientific discovery accelerates and software becomes dramatically more productive. Imagine that the world's

productive machinery increasingly becomes capable of building better productive machinery.

In such a world, we could see something resembling a positive feedback loop in technological development. More intelligence and automation produce more output. More output creates more capital. More capital funds more research and infrastructure. Better research creates better technology. Better technology makes additional production cheaper. The cycle continues. It even allows human productivity to recover from devastating setbacks, like wars, and to pick up the pieces and move on faster than before.

We don't know whether that will happen, how quickly it will happen, or how evenly the benefits will be distributed. But it is certainly possible enough that we should not build our investment analysis around the assumption that economic growth must remain confined to the historical norms of the past science, industrial or tech eras.

This also gives us an interesting reason to reconsider our portfolio itself. We discovered that our four tickers are actually a rather concentrated collection of exposure to the companies sitting near the center of the current technology and AI ecosystem. VOO gives us the broad economic foundation. QQQ tilts us toward large growth and innovation-oriented companies. VGT concentrates us further into information technology. Then our direct NVDA position takes that technology bet one step further. And this mix allows an owner to sell all or part of one position and shift it into yet another position should the overall economic outcomes expose better options.

If the AI revolution turns out to be enormous, our portfolio could be unusually well positioned to participate in it.

But we should be careful about saying that it will necessarily *capture* the revolution. Today's winners do not have to remain tomorrow's winners. NVIDIA could be surpassed. A new semiconductor architecture could emerge. New AI companies could replace today's leaders. Entirely new industries could develop that aren't represented meaningfully in our portfolio today.

This is where VOO becomes particularly valuable to our thesis. Because VOO isn't asking us to predict which companies will dominate the next twenty years. The index can evolve as the American economy evolves. Companies that become important can eventually become significant index constituents, while companies that decline in importance can lose their weight or disappear from the index altogether. Our broad-market foundation therefore gives us exposure to a future we cannot yet identify.

And perhaps that is the most important insight we're uncovering.

We don't actually need to believe that **NVIDIA will rule the world for twenty years**.

We don't even need to believe that today's technology leaders will remain today's technology leaders.

We need only believe that technological progress is likely to continue and that our combination of broad U.S. equity exposure and concentrated technology exposure

gives us a reasonable chance of participating in a significant portion of the economic value created by that progress.

That is a much more defensible proposition.

So where does that leave our four scenarios?

I think we should keep all four. They each tell us something different.

The **10% scenario** is our relatively conventional market-like benchmark. It answers the question, "What if our $76,640 simply compounds at a rate broadly consistent with a long-term equity-market experience?"

The **25% historical-rate scenario** gives us a more conservative interpretation of the unusually strong period we've just experienced. It says that perhaps only a quarter of the extraordinary historical annualized rates are available to us in the future.

The **50% scenario** deserves more respect than we originally gave it. It remains aggressive, but it could represent a world in which AI, automation, robotics, semiconductors and related technologies produce an unusually powerful period of economic and corporate growth. We should not call that absurd simply because it is optimistic.

The **100% scenario** is different. It remains primarily a demonstration of compound mathematics. It shows us what happens when we take an extraordinary recent performance record and refuse to allow the rate of growth to diminish. The resulting numbers become so enormous that the exercise eventually tells us more about exponential mathematics than about a plausible investment future.

And there is a wonderful irony here.

If the world really does experience the kind of AI and robotics revolution we're imagining, **humanity could become dramatically wealthier without NVDA producing a 94% annual return for the next twenty years**.

We could have vastly greater productivity, cheaper goods, better healthcare, more abundant energy, increased purchasing power, extraordinary scientific advances and perhaps, eventually, an economy capable of supporting serious expansion even beyond Earth. Those things could happen while the investment returns of individual companies gradually normalize.

In fact, that may be the more likely way technological progress expresses itself. Civilization becomes enormously more capable, while the extraordinary profits of today's pioneers gradually become incorporated into a much larger and more competitive economy.

So perhaps our coffee-cup conclusion should be this.

We shouldn't confuse the possibility of an extraordinary future with the probability of extraordinary investment returns from today's individual

companies. But neither should we make the opposite mistake and assume that because 100% annualized returns are mathematically unsustainable, the economic transformation that could produce the next generation of prosperity must also be unsustainable.

Our 50% scenario may therefore be worth keeping on the table—not as a prediction, but as a legitimate **high-productivity, high-technology scenario**.

And the 100% scenario can stay too.

We'll just put a very large pair of sunglasses on it. 😎

Ideas and/or Questions:

We have literally hundreds of companies in this portfolio. Sure, some of them are smaller and have room for more growth than others. And there are others which we have not even shined any light on because the managers of these ETFs have put their heads together and played them down in order to get the ETFs to follow their selected indexes. Companies like IBM or Walmart are hiding there chugging along. Yet there would seem to be some companies that have a good chance of spinning off some new and surprising front runners or some mergers may take place that kick start even more and better results. Should something like that happen, will these ETFs be able to keep up by adjusting their holdings in the process and capitalize off of it also?

Research Analyst:

Yes. And I think this is actually one of the strongest arguments for using ETFs in the first place. We have been looking at the portfolio as though the holdings we see today are essentially the holdings we will own forever. But that isn't how these indexes work. The companies inside the ETFs are not carved in stone. The indexes are designed to change as the underlying U.S. corporate landscape changes, and the ETFs are designed to follow those indexes.

That means there is a kind of **automatic evolutionary mechanism** built into our portfolio.

Consider VGT first. Vanguard says VGT is designed to track the MSCI US Investable Market Information Technology 25/50 Index, which includes large-, mid- and small-cap U.S. information-technology companies. As of July 31, 2026, VGT had 319 holdings. It isn't simply a collection of today's technology giants. It deliberately includes companies across the capitalization spectrum, including smaller companies that could eventually become much more important. Vanguard also describes the fund as passively managed and says it seeks full replication of the underlying index when possible.

That is important because it means the smaller companies hiding down there are not necessarily irrelevant just because they represent tiny percentages of VGT today. A company might be 0.05% of the fund today, become a 0.5% position several years from now, and eventually become a major holding if its market value grows sufficiently. We don't have to identify that company in advance. The index methodology is doing some of that work for us.

QQQ has a similar but somewhat different mechanism. The NASDAQ-100 is systematically maintained through quarterly rebalancing and an annual December reconstitution. NASDAQ says the annual reconstitution is where most additions and deletions occur, while the quarterly process adjusts constituent weights as companies change in size. The methodology is rules-based rather than dependent upon a committee deciding which exciting new company deserves to be included.

That could become extremely interesting if the next ten or twenty years produce companies that we haven't even heard of yet.

Suppose some relatively obscure company develops a revolutionary technology. Perhaps it produces a breakthrough in AI hardware, robotics, energy storage, quantum computing, biotechnology or some other field that we haven't anticipated. Initially, it might be almost invisible in our portfolio. But if the company's market value explodes and it meets the relevant index requirements, it can eventually become an increasingly important constituent of an index such as the NASDAQ-100.

And once it becomes an important constituent, **our QQQ position automatically participates**.

We don't have to sell something we currently own and figure out what the next winner is. We don't have to discover the company five years before everyone else discovers it. We don't have to become venture capitalists. The index does the selection according to its rules, and QQQ follows the index.

That is a pretty powerful feature.

What about mergers?

Mergers and acquisitions make the story even more interesting.

Suppose Company A and Company B are both represented in one or more of our ETFs and eventually merge. The indexes have rules for dealing with corporate actions, and the resulting index constituents and weights are adjusted accordingly. We don't have to personally figure out what happened to our theoretical fractional ownership of the two companies.

More importantly, a merger could create a company that becomes much more economically important than either predecessor. If the resulting company qualifies for the relevant index and becomes large enough, the index can ultimately reflect that increased importance.

The same principle applies in reverse. A company can fall in importance, be acquired, shrink relative to its peers, or otherwise cease to meet the requirements of an index. It can lose weight or eventually disappear from the index.

In other words, **the portfolio has a built-in mechanism for allowing yesterday's winners to make room for tomorrow's winners.**

That is something we should emphasize because it changes the nature of our original investment thesis.

And what about our IBM and Walmart example?

This is where our observation becomes particularly useful.

We have been staring at NVIDIA, Apple, Microsoft, Broadcom, Micron, AMD and the other stars because they dominate the top of our look-through portfolio. But underneath those giants are hundreds of other companies doing their thing. Some are mature businesses that may simply continue growing steadily. Others may have much smaller market capitalizations and therefore much more room to become significant companies.

Walmart is an excellent example of why we shouldn't confuse **small portfolio weight with unimportant company**. IBM is another. Neither needs to become the next NVIDIA for its existence in a broad index to be useful. They can continue contributing earnings, dividends and capital appreciation while other companies provide the explosive growth.

And some company we currently regard as almost an afterthought could eventually become one of the major holdings.

We simply don't know which one.

That's actually one of the reasons our portfolio is more interesting than the top-10 table initially suggests. The top of the portfolio tells us where most of today's economic exposure resides. The hundreds of smaller positions give us a collection of potential future surprises.

We shouldn't expect all of those surprises to be positive. Some companies will disappoint and perhaps drag down our mix. Some will disappear. Some will be acquired. Some will simply stagnate. That's normal capitalism.

But some will grow enormously. And, on average, these ETFs have produced positive results because of that.

This gives us an interesting way to think about the portfolio

Perhaps we can think of our four holdings as performing different jobs.

VOO gives us broad participation in the American economy. It owns hundreds of large U.S. companies, so we don't have to predict which industries will dominate the next twenty years.

QQQ gives us a more concentrated exposure to large, innovative, non-financial companies listed on NASDAQ. Its rules allow the index to evolve as the composition of that universe changes.

VGT takes this evolutionary process into the information-technology sector where a lot of action resides. It includes large, medium and small U.S. technology companies rather than simply buying today's technology champions. Vanguard currently reports 319

holdings in VGT, which illustrates how much more is going on underneath the handful of companies that dominate its weighting.

And then there is NVDA.

That's the one where we have deliberately stepped outside the evolutionary system and said, "We want a little more of this particular company right now." 😊

So can the ETFs "keep up" with a changing world?

Yes, **within the limits of their index methodologies**, and that is an important qualification.

They aren't actively managed funds where a portfolio manager sits down every morning and says, "I think this obscure robotics company is going to change the world, so let's tinker away and buy it today." VGT is specifically designed to track its technology index, while QQQ tracks the NASDAQ-100 rather than making discretionary investment decisions.

But that isn't necessarily a disadvantage. In some ways, it may be exactly what we want.

We don't need to know which company will become the next NVIDIA. We need to own a mechanism that has a reasonable chance of **eventually owning it if it becomes sufficiently important**.

That is a very different investment objective.

And this is where the portfolio starts looking surprisingly well suited to the uncertain future we have been discussing. If the next twenty years produce a handful of spectacular new corporate winners, our ETFs don't require us to predict their identities today. If the winners emerge from today's smaller technology companies, VGT has exposure to that broader technology universe. If they emerge as major NASDAQ-listed growth companies, QQQ may eventually capture them. If they become major components of the broader U.S. economy, VOO can eventually capture them as well.

We therefore have several overlapping nets in the water. Some fish are caught by all three. Some are caught by two. Some are caught by only one. And occasionally, something new and enormous swims into the net.

Which brings us to perhaps the best answer to our question

We started this investigation thinking that the overlap among VOO, QQQ and VGT might be a flaw. We've learned that it creates concentration, and we should absolutely understand that concentration. But we are now seeing another side of the same structure.

The overlap gives us extra exposure to today's major technology leaders, while the changing index membership gives us a mechanism for participating in tomorrow's leaders. That's a pretty interesting combination.

We don't know whether the next great company will be another NVIDIA, a robotics company, an energy company, a biotechnology company, an entirely new kind of software company, a company full of rocket scientists about to take us to Mars or something we cannot yet imagine. We don't need to know.

If the company becomes important enough within the universe tracked by these indexes, the machines maintaining our ETFs have a good chance of noticing it before we do.

And that may be one of the quietest strengths of our little four-security portfolio.

We have deliberately concentrated our exposure toward the part of the economy we believe has the greatest potential for technological disruption, but we haven't had to make a 20-year prediction about exactly which companies will be responsible for it.

We own today's leaders. We own many of their competitors. We own some of the smaller companies that might become tomorrow's leaders. And through VOO, we still own a substantial portion of the rest of the American corporate economy in case the next great story turns out not to be technology at all.

That's beginning to look less like four static investments and more like a **self-updating participation ticket in the evolution of American capitalism.**

And I think that's a pretty good place for us to end the detective work on what is actually hiding inside this portfolio.

Ideas and/or Questions:

Who started Neuralink and would it be an example of a possible future change in one of these ETFs and, if so, which one and why? What about SpaceX?

And what other companies might be on the radar for future consideration by the managers of one of these ETFs?

Research Analyst:

We'll cover SpaceX at the very bottom. Neuralink is actually an excellent example for the point we were just making, although there is an important catch that makes the example even more useful.

Neuralink was founded in 2016 by Elon Musk and a team of engineers and scientists. Neuralink is developing implantable brain-computer interfaces intended initially to help people with paralysis control computers and other devices through neural signals. Its longer-term ambitions are considerably broader, including applications involving restoration of movement, speech and vision and eventually much more capable connections between biological and artificial intelligence. Neuralink's own materials describe the company as pursuing both near-term medical applications and longer-term expansion of human capability.

So, could Neuralink eventually become part of **our ETFs**?

Potentially, yes—but not today; simply because it is an exciting company. The first obstacle is that Neuralink has historically been a private company rather than a publicly traded stock. Its 2025 Series E financing was a private $650 million funding round, for example. A company generally has to become publicly traded and meet the particular eligibility requirements of an index before an index-tracking ETF can own it.

And this is where our earlier discussion about the ETFs becoming "self-updating" becomes really interesting.

Imagine that five or ten years from now Neuralink goes public. Suppose it succeeds commercially, grows rapidly, develops medical applications that become widely adopted, and eventually becomes one of the largest publicly traded companies on NASDAQ or NYSE. If it met the eligibility requirements and became sufficiently large, it could potentially become a candidate for the **NASDAQ-100**, and therefore potentially become part of QQQ.

The NASDAQ-100 is designed to represent 100 of the largest NASDAQ-listed non-financial companies. Its methodology is specifically designed to keep the index representative of that universe as the market changes, with quarterly rebalancing and annual reconstitution. NASDAQ's current methodology even describes mechanisms for bringing in large companies while retaining existing constituents where appropriate.

That means we don't have to predict today whether Neuralink will be one of the great companies of 2035.

If it becomes one of them, **the index has a mechanism for finding it.** That's exactly the phenomenon we were talking about in the previous section.

But which of our ETFs would be most likely to capture Neuralink?

Of our three ETFs, **QQQ is the most obvious candidate** if Neuralink eventually becomes a very large publicly traded company.

The reason is that Neuralink's business would not necessarily be classified as pure information technology under the GICS sector classification used by VGT. It could conceivably straddle medical devices, healthcare, biotechnology, technology or another classification depending on how the company and its business activities develop. We should not assume today that it would qualify for VGT simply because it uses sophisticated technology.

QQQ has a different proposition. It doesn't require a company to be classified specifically as an information-technology company. Its core requirement is that the company becomes one of the largest eligible non-financial companies listed on NASDAQ. That makes QQQ potentially much more flexible when we start imagining companies that don't fit neatly into today's sector boxes.

VOO could eventually capture Neuralink too, but it would have to become large enough and otherwise qualify for inclusion in the S&P 500. That is a considerably different test.

We shouldn't assume that a successful Neuralink automatically becomes an S&P 500 company.

VGT is the most uncertain of the three because its underlying MSCI index specifically contains companies classified in the Information Technology sector. The index does include large-, mid- and small-cap companies, which gives it considerable breadth, but the sector classification matters.

So, if we were placing imaginary bets on which of our ETFs might eventually own Neuralink, we'd probably say **QQQ first, VOO potentially later, and VGT depending upon how Neuralink is ultimately classified and what its business actually becomes.**

That last qualification is important because we are projecting a company that doesn't yet have a public-market identity. But, if it does go public and does not get included right away, we can always decide to use some of our left over cash to buy some shares, the same way we did with our NVDA pick, and perhaps strike gold that way.

And Neuralink isn't even the most important part of the example

The really interesting part is what Neuralink represents.

Suppose we are sitting here in September 2026 looking at our portfolio and trying to identify the next generation of enormous companies. We can make educated guesses, but we have absolutely no idea which companies will dominate 2035 or 2045.

We might guess correctly. We might be spectacularly wrong. The ETF approach gives us a third possibility. **We don't have to know.**

A company that is tiny, private or nonexistent today could eventually become enormous. If it becomes publicly traded and satisfies the appropriate index rules, it can potentially work its way into one or more of the indexes we're already tracking even if we are laying around on a beach somewhere and forget to keep track of what is going on.

That's an extraordinarily useful feature when we're contemplating the kind of technological transformation we've been discussing.

So who else might be "on the radar"?

This is where we have to be careful with our language. The managers of VOO, QQQ and VGT aren't sitting around holding a meeting and deciding, "Let's buy the next ten companies that we think will change the world." These are primarily **index-tracking funds**, so the relevant index methodologies determine eligibility and weighting rather than an individual portfolio manager simply selecting favorites.

That said, there are some fascinating categories and companies we can watch as potential future additions or increasingly important constituents.

For example, in advanced AI and computing, companies such as **OpenAI**, **Anthropic**, and **xAI** would be obvious names to watch if they become publicly traded and satisfy an

index's requirements. Their future corporate structures and public-market status matter enormously, though, so we should not treat any of them as inevitable future ETF holdings.

In robotics and automation, we could watch companies developing industrial robots, autonomous systems and humanoid robots. Some of these companies are already public, while others remain private. A successful robotics company that grows into a large publicly traded corporation could eventually become exactly the sort of new entrant that an index captures.

In energy and infrastructure, we should also keep our eyes open. The AI economy is extraordinarily dependent upon electricity, data centers, cooling systems, semiconductor manufacturing and the physical infrastructure required to connect everything. A company that looks relatively boring today could become strategically important if the world's demand for computing power and electricity continues to explode.

And that brings us right back to our old friends in semiconductors.

The current MSCI U.S. information-technology index already contains a broad range of companies beneath the giants. As of August 31, 2026, the index had 281 constituents, with a smallest constituent market capitalization of roughly $215 million. NVIDIA, Apple and Microsoft dominate the top, but the index extends much farther down the capitalization spectrum.

That means we already own a sort of **venture-capital-like tail**, although we should be very careful with that comparison. We aren't making concentrated venture investments in tiny startups. Most of these companies are already publicly traded and subject to the index's eligibility rules. But we do have exposure to hundreds of businesses, including some that have considerably more room to grow than today's $4–5 trillion giants.

And here is the really fascinating part

Suppose one of those companies becomes the next NVIDIA. We don't know which one.

Suppose instead that NVIDIA itself gets displaced by a completely different architecture and another company becomes the dominant supplier of whatever replaces today's AI infrastructure. We don't know which one.

Suppose the next gigantic company isn't even in semiconductors. Perhaps it is a robotics company, a biotechnology company, an energy company, a space company, or a business based on a technology that doesn't yet exist. **We don't know which one.**

But if the company becomes sufficiently large and meets the appropriate index requirements, our broad index exposure gives us a mechanism for eventually participating in its growth.

And this brings us to what may be one of the most important characteristics of our portfolio. We initially thought we had purchased a collection of existing companies. We are now discovering that, through the indexes, we have also purchased something

resembling **a mechanism for continuously updating our exposure to the evolving American corporate economy**. VOO does it broadly. QQQ does it within the largest non-financial NASDAQ companies. VGT does it within the U.S. information-technology universe, including large, mid and small companies. And our direct NVDA position is the one place where we deliberately say, "We don't want to wait for the index to tell us who the winner is. We want extra exposure to this particular company, at least for now."

That may be one of the best explanations we've found so far for why this seemingly simple four-security portfolio is actually quite sophisticated underneath the hood.

We're making some very strong bets about the **direction** of technological progress. But we're making fewer bets about the **identity of the ultimate winners**. And if the next Neuralink—or the next company we haven't even heard of yet—eventually becomes one of those winners, there is a reasonable chance that our ETFs will discover it for us. That's the part of this portfolio that could make it particularly interesting over a 5-, 10- or 20-year period.

Ideas and/or Questions:

And, BTW, how many companies hiding inside these ETFs are similar to Berkshire; you know mini-ETF pearls chipping away at American enterprise?

Research Analyst:

This is another place where our look-through exercise becomes more interesting. If by a "mini-ETF pearl" we mean a company that owns, invests in, or operates a collection of other businesses rather than depending on one narrow product, then there are quite a few hiding inside our ETFs. And a lot of these can be private companies owned by listed companies; another way we may have expanded our holdings and diversification into both realms without even knowing it.

The obvious example is Berkshire Hathaway. Berkshire is unusual because it is both an operating company and a huge investment holding company. It owns businesses outright, owns large minority stakes in public companies, and allocates capital among them. In effect, buying Berkshire gives us a diversified collection of American businesses inside a single corporate wrapper.

But Berkshire isn't alone in having this basic characteristic.

The closest relatives hiding in our ETFs

The first group we'd want to look at includes companies such as **Alphabet, Amazon, Microsoft, Meta and JPMorgan**. They aren't Berkshire clones, and we shouldn't pretend they are. But each has developed into something much broader than the business most people associate with its name.

Alphabet (you know the ABCs of business) is a particularly good example. Google Search may still be the economic engine, but Alphabet also owns YouTube, Google Cloud, Waymo and a collection of other businesses and investments. We therefore

aren't simply buying "a search engine." We're buying a corporate ecosystem with several potentially enormous businesses growing underneath it.

Amazon is another. We have the retail operation, Amazon Web Services, advertising, logistics, Prime, entertainment and a growing collection of other businesses. AWS alone would be an enormous company if it were separated from Amazon. That makes Amazon somewhat Berkshire-like in the sense that several substantial economic engines are operating under one corporate roof.

Microsoft has a similar characteristic. Windows and Office are no longer an adequate description of what we own. Azure, enterprise software, gaming, LinkedIn, advertising, GitHub and Microsoft's enormous investment in artificial intelligence all contribute to the picture.

And then there is Meta. Facebook and Instagram are the obvious businesses, but WhatsApp, Messenger, Reality Labs and its enormous artificial-intelligence infrastructure investment give us another example of a company developing multiple economic engines.

These aren't "mini-Berkshires" in the strict accounting sense. They are better described as **corporate ecosystems**.

But there is an even more Berkshire-like category

There are companies whose primary business **is actually owning other companies or investments**.

That is where our Berkshire comparison becomes particularly useful. Berkshire is the giant, famous example. But there are other publicly traded holding companies and investment companies that operate according to related principles. Some are family-controlled businesses, some are conglomerates, some are private-equity-like organizations and some are specialized investment vehicles.

The important point for our portfolio is that these companies can provide a second layer of diversification.

If we buy an ordinary technology company, we're primarily betting on that company's products and services.

If we buy a company that owns ten businesses, we're betting on the capital-allocation decisions and economics of all ten.

And if we own that company through VOO or QQQ, we're getting that diversification **inside our diversification**. That's a pretty neat nesting effect.

Berkshire itself is hiding in our portfolio

Remember our earlier top-25 look-through table? We had Berkshire Hathaway at approximately $467 of economic exposure, or about 0.61% of our entire $76,640 portfolio. That means we already own Berkshire indirectly through the ETFs.

And this illustrates something we've been discovering repeatedly. The portfolio isn't merely a collection of technology companies. VOO brings hundreds of other businesses into the picture, including companies that themselves own collections of businesses.

So when we say that we have "hundreds of companies" underneath the four ETFs, actually that is understating the economic complexity. Some of those companies own other companies. Some own major stakes in other companies. Some operate multiple unrelated businesses. Some have enormous venture-capital or strategic investment portfolios. And some are essentially conglomerates. We therefore have **diversification layered on diversification**.

How many are there?

This is where I would resist giving us a made-up number. If we define a "Berkshire-like company" narrowly as a company whose principal business is owning and allocating capital among a diversified collection of other businesses, there are relatively few obvious candidates among the major holdings.

If we broaden the definition to include companies that have evolved into large corporate ecosystems with multiple significant businesses, the number becomes much larger.

Under that broader definition, we could reasonably put companies such as Alphabet, Amazon, Microsoft, Berkshire Hathaway, Meta and perhaps several financial institutions and conglomerates into the discussion. There are also companies farther down the holdings lists that would qualify depending on exactly how we define our "mini-ETF pearl." And that definition matters enormously.

For example, **JPMorgan isn't Berkshire**. It doesn't operate primarily as a holding company. But it has enormous businesses across consumer banking, commercial banking, investment banking, asset management, payments and other financial activities. It is diversified internally in a way that makes the company itself resemble a miniature financial ecosystem. Likewise, **Visa and Mastercard** don't own a basket of unrelated companies, but their businesses are embedded across enormous portions of the global payments ecosystem. They're "platform" businesses rather than Berkshire-like holding companies. So perhaps "mini-Berkshire" isn't quite the right technical term. I think our earlier phrase, **mini-ETF pearls**, is actually more useful for what we're trying to explain.

And here's why I like this idea for our document

We've been asking whether there are hidden future winners inside our ETFs. Now we're discovering that there are actually several layers of potential winners. At the first level, we own the ETFs. Inside the ETFs, we own hundreds of companies. Inside some of those companies, we own multiple businesses. And some of those businesses are themselves enormous platforms that may generate entirely new businesses over time.

Think about Amazon and AWS, for example. AWS wasn't simply another stock that Amazon purchased and placed in a portfolio. Amazon built a new business inside itself.

If that business eventually becomes much larger than today's expectations, our Amazon ownership benefits without us ever having to buy a separate AWS security.

The same basic idea applies to Alphabet and Waymo, Microsoft and its AI ecosystem, Meta and its AI/virtual-reality ambitions, and numerous other companies that are continually allocating capital toward new opportunities. That means our ETFs aren't just holding **today's businesses**. They are holding companies that are themselves trying to create **tomorrow's businesses**. And that may be an even more important observation than the simple number of stocks we own. Yet with this simple portfolio we own them all. How weird is that?

The Berkshire lesson

Berkshire Hathaway gives us a wonderful mental model for this.

Warren Buffett and Charlie Munger built something that could take earnings from one business, allocate that capital somewhere else, acquire another business, hold excellent public companies, and allow the whole collection to compound over decades.

Our ETFs don't do that themselves. But we own pieces of companies that sometimes do. So, indirectly, we have several different forms of compounding taking place. The ETF compounds as the underlying businesses grow. The individual businesses compound their earnings. Some of those businesses reinvest their earnings into new products. Some acquire other companies. Some create entirely new businesses. Some become platforms upon which thousands of other businesses operate.

And the indexes periodically adjust their membership and weights as all that corporate landscape and mental mining takes place. That's yet another pretty remarkable chain of events sitting behind four ticker symbols.

I think this also gives us a much better answer to our original question about whether some of the "boring" companies hiding farther down the holdings lists might surprise us…

Absolutely.

A. Some won't.
B. Some will simply chug along.
C. Some will decline.
D. Some will be acquired.

Somewhere in that enormous collection of businesses, there are almost certainly companies whose best chapter hasn't been written yet. And we don't have to identify every one of them today. Once again, that's arguably one of the stronger features of our ETF approach.

We can own the forest while allowing the individual trees to surprise us. Berkshire is one particularly impressive tree in that forest. But there are quite a few other trees that are quietly growing branches of their own.

Team Lead (sitting quietly at the head of the conference table):

I think that covers all the bases I wanted us to cover. I'm sure glad I didn't have to think all that up on my own and type it all up for the CEO by tomorrow morning. Do either of you have any last words as a final thought for our readers?

Research Analyst — Final Thought

I think we have, together, taken this portfolio about as far as we reasonably should without turning a relatively simple investment model into an encyclopedia. We began with four securities and a very specific historical-performance question. Along the way, we discovered that those four securities are really a much larger collection of businesses, sectors, technologies, platforms and potential future winners hiding underneath the ETF wrappers.

The most important lesson may be that the portfolio isn't interesting because we can predict exactly what NVIDIA, Apple, Microsoft, or any other company will do over the next 20 years. We can't. Nor should we pretend that an extraordinary period such as 2022–2026 can simply be repeated indefinitely. Our 100% historical scenario was useful precisely because it eventually became so extreme that it forced us to confront the limits of extrapolation.

What makes the portfolio interesting is something different. We have created a structure in which VOO gives us a broad foundation of American enterprise, QQQ tilts us toward some of the largest and most innovative companies in the NASDAQ universe, VGT concentrates that exposure further into information technology, and our direct NVDA position says that we are willing to make one very specific additional pick without losing much sleep over it. Beneath those four positions are hundreds of companies, including some that may eventually become tomorrow's leaders even though we have never heard of them today.

And that brings us back to our rather optimistic discussion about AI, robotics, biotechnology, energy, SMRs, space exploration and whatever else humanity manages to invent. We don't know whether the next twenty years will produce the extraordinary economic expansion we imagined. We don't know whether AI will transform productivity as dramatically as some people expect, whether robots will perform a substantial portion of today's work, or whether entirely new industries will emerge that make today's largest companies look surprisingly ordinary. There are enormous uncertainties and risks on the other side of that story as well.

But there is something wonderfully appropriate about owning broad indexes while contemplating an unknowable future. We don't have to know the names of tomorrow's winners today. If American enterprise continues to innovate, create new businesses, replace old ones, and generate economic value, the indexes are designed to evolve along with that process. Today's giants can become tomorrow's has-beens, while today's smaller companies can grow into tomorrow's giants.

So perhaps our final description of this portfolio should be neither "a technology portfolio" nor "a collection of three+ ETFs." It is better understood as *a* **long-term**

participation in American enterprise, with a deliberately aggressive tilt toward the technologies and companies we believe may help shape the future.

I almost forgot: **Space Exploration Technologies Corp (a.k.a. SpaceX) trades on NASDAQ as SPCX**… after a recent phased IPO. Let's just say that deep inside QQQ (VOO has a small 0.3% amount also) we already have our SPCX bases covered because it recently started trading on the NASDAQ in mid-June. Soon after it entered the **NASDAQ**-100, around July 7, 2026, with an apx **1.27% weight**, and as a result QQQ consequently owns it. Invesco confirms the QQQ inclusion and the 1.27% initial weighting. Plus, inside SpaceX is another hot item; namely **Starlink**. Starlink is another one of those "mini-ETF pearls" which investors will be following closely going forward; and because billions of newly tradable SPCX shares will soon be up for grabs. JPMorgan reportedly estimates that in late September a **NASDAQ**-100 rebalance could increase SpaceX's weight from roughly **1.25%** to **2.25%** or **more**. If that happens, **NASDAQ**-100 index trackers, like QQQ, will have to substantially increase the SPCX position to rebalance its holdings (and there are more phases planned to increase shares down the line as well).

Once again we see this as another example of why this portfolio is worth understanding.

We have looked under the hood, counted the duplicated exposure, identified the concentration, explored the risks, tested some rather outrageous compounding assumptions, and even discovered our little "mini-ETF pearls" hiding inside the larger ETFs. We haven't proven that this portfolio will outperform anything in the future. No analysis can do that.

What we have done is understand what we actually own.

And perhaps that is the most important accomplishment of the entire exercise.