

January 1, 2026

We've outlined the major topics & takeaways of our annual letter below – details follow!

MAIN MESSAGE HIGHLIGHTS:

- 2025 solidifies our belief that we're living through an Intelligence Revolution, as massive capital investment is now taking place.
- AI is more than an invention, it's a discovery. Computing has shifted from being a sophisticated calculator that follows rigid directions, to being a collaborative agent that learns, adapts, and generates new solutions.
- Entities now have a recipe to follow, allowing them to unlock productivity gains and new revenue opportunities.
- Technology investments have completely changed as intelligence is generated from AI factories that function as one giant computer.
- Work is being reimagined as enterprises redesign processes, roles, skills, culture, and metrics so people, agents, and robots create more value together.
- It seems societal pushback and energy constraints are the main potential bottlenecks to slow the pace of progress.
- What does this mean for investors? We don't believe we're in a bad bubble. Many leading companies now face quite a dilemma. Expect wild sentiment swings and uncomfortable valuations. Thematic investing probably doesn't capture the value, and opportunity often lies in second-order effects.
- Expect one of our Roaring 2.0's predictions to become very meaningful, as the space economy begins to house AI factories.
- We know this sounds like science fiction, but the *Stellar* production systems starting to be produced imply massive change for humanity.

FORECASTS FOR 2026:

- **Economy:** US economy is a juggernaut, eclipsing \$32.5 Trillion in GDP
- **S&P 500:** Stocks up modestly given the torrid advancement, with equal-weight outperforming
- **Short-term rates:** Fed finds the new neutral and tends to overshoot, cuts to below 3%
- **Long-term rates:** 10-year yield declines with short-term cuts, drifts to below 4% during 2026
- **Oil prices:** Spends most of the year around \$60 as energy demands absorb increased production
- **Inflation:** Higher than 2% target but not high enough to stop rate cuts, 2.75% - 3.25% range
- **Commercial real estate:** FTSE NAREIT All Equity total return index finishing greater than 9%
- **Residential real estate:** Lower mortgage rates release pent-up demand, prices up 4% - 5%

"Fun" forecasts

Long-term forecasts - identifying trends that will command positive attention

- A working quantum computer will become reality, facilitating a jump to ASI
- Humanity breaks ground on a permanent moon-base
- Blake's Tesla will earn money for him as he enrolls in their autonomous ride-hail service
- AGI will be recognized, with the jump to ASI not too far behind

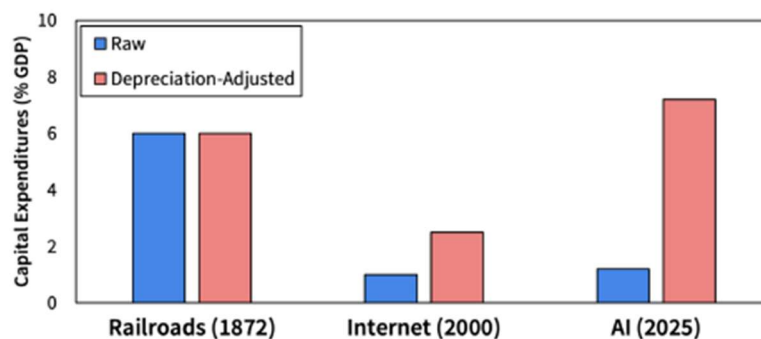
- The cost of energy follows Moore's Law as the thirst for power is met

Dear Fellow Investors,

YOU'RE LIVING THROUGH A REVOLUTION

We've written at great length about the innovation and change headed our way in previous annual letters ([Roaring 2.0's](#), [Intelligence Revolution](#), [You're Not Thinking Big Enough](#)). While these main messages may have seemed a little far-fetched when written, we believe 2025 will go down as the year when many realized that the innovation wave we've been forecasting is indeed very real. We're now in the midst of one of the most significant infrastructure buildouts in history, with companies and governments committing trillions of dollars in capital. Over the past year, just five American companies (Google, Meta, Oracle, Amazon, and Microsoft) have invested over \$350 billion into artificial intelligence with projections for 2026 significantly higher. McKinsey estimates that cumulative AI investment will reach a staggering [\\$5.2 Trillion](#) over the next five years. Relative to GDP, current AI spending already exceeds the peak achieved in the internet boom. Adjusted for faster depreciation, today's AI buildout also surpasses the peak attained during the [railroad buildout](#). At this point it's obvious, the floodgates are open and the race for AI supremacy is on.

Tech-Led Investment Booms



Source: [ExponentialView](#), [Paul Kedrosky](#), Sparkline. Useful life assumed to be 30-, 7- and 5-years, respectively. Depreciation-adjusted scales spending to 30-year useful life.

AI IS MORE THAN AN INVENTION, IT'S A DISCOVERY

AI can currently predict, generate, and reason, and its capabilities are growing rapidly. Given the current trajectory, and based on some predictions from leaders in the field, it's not hard to imagine AI eventually reaching [human-level-and-beyond intelligence](#). In the not-too-distant future, intelligence may be abundant, affordable, and scalable, given the resources being allocated to the field, intense competition, and ability to run locally on numerous devices. Many might not grasp what is occurring, so we wanted to highlight some items to keep in mind regarding what's driving this Intelligence Revolution:

- **DATA – a valuable raw material - the new oil**

Computers speak in a language of 0s and 1s known as [binary code](#). Text, characters, numbers, pixels, etc. all get converted to a string of 0s and 1s allowing electric current to be turned on (1) or off (0). This means words, pictures, audio, video - all get translated into numbers. Pictures are broken down into tiny dots called pixels with the color and brightness represented by a number. Audio has sound waves sampled thousands of times per second with the amplitude of each sample converted to numerical values. Video is essentially a rapid sequence of images, so each frame gets processed like a still image that again gets converted to numbers. There is an estimated 181 zettabytes (that means 21 zeros as

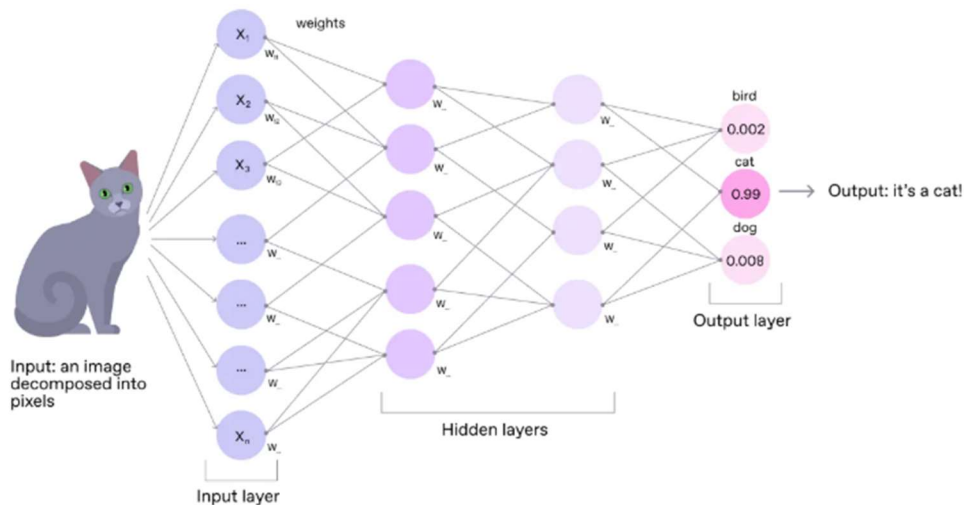
each zettabyte is equal to 1 billion terabytes) of data in the [global datasphere](#) with 90% of the world's total data being generated within just the past two years.

- **TOKENS & EMBEDDINGS – mapping data to numerical identifications**

Whether you have data about customers, products, business workflows, x-ray images, or molecular structures – it can all be “tokenized”. [Tokenization](#) breaks information into small, standardized pieces a computer can process, such as parts of words, image patches and short bits of sound. These pieces are turned into a list of numbers called an embedding, which you can think of as a point on a map where items with similar meaning are placed closer together, and unrelated items are farther apart. Embeddings do not contain meaning on their own, but they capture patterns learned from large amounts of data and serve as the input that machine learning models use for analysis.

- **NEURAL NETWORKS – a blank slate that builds expertise through experience**

Neural networks are computational models [inspired](#) by the structure of the human brain. They consist of many small, interconnected processing units called nodes. Rather than following rigid, predefined rules, these networks learn adjusting internal connections as they process large amounts of tokenized data. Currently, neural networks are the dominant architecture for almost all modern artificial intelligence systems.



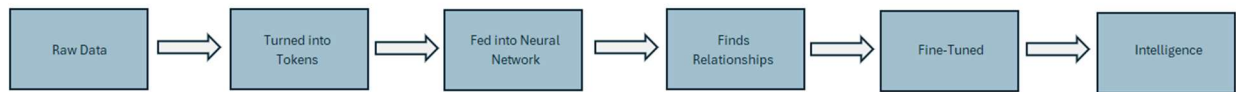
- **TRAINING – like a student studying for a test**

When a neural network is trained it is being taught how to perform a specific task by learning from examples. The model is fed a large set of data relevant to the task. It then goes through a process of guessing, checking how wrong it's guesses were, and adjusting the strength of relationships amongst its nodes over many repetitions, to make increasingly accurate predictions.

- **INFERENCE – the student takes the final exam**

Once trained, a model is ready for interaction. Whether you want the model to write a poem, create a song, animate some old pictures, or drive a car, requests are given to the model as we ask it to make predictions or decisions on new, unseen data.

WHAT'S DIFFERENT



What we've described is of course a gross oversimplification of what's actually taking place. Some of the world's brightest minds in fields such as mathematics, computer science, physics, and engineering are employed in creating this ever-more capable artificial intelligence. The main takeaway is that computer output used to be rigid:

- The same input always produced the same output.
- If something changed, software needed to be updated.
- Output was a result of calculation, retrieving data, or executing a fixed process.

In this new era of artificial intelligence, computer output is adaptive, autonomous, and creative:

- Giving AI the same input might yield different, but still relevant, outputs.
- Models are refined as new data is processed, allowing them to become more intelligent.
- Models can make decisions without direct human intervention, as they rely on their learned patterns.
- Models can handle complex tasks like having conversations with people, becoming digital co-workers, creating songs and videos, or even driving cars.

What we think of as "computing" has shifted from being a sophisticated calculator that follows rigid directions to being a collaborative agent that learns, adapts, and generates new solutions.

WHY IS THE BOOM HAPPENING NOW?

If you are an entity such as a business or government, you now have the recipe for unlocking productivity gains and creating new revenue opportunities. The recipe for transforming into an AI-enabled enterprise looks like this:

- The entity does something unique.
- This uniqueness is captured in its proprietary data and processes.
- Those data and processes need to be digitized so they can be tokenized.
- Once tokenized, what makes us unique can be fed into a neural network.
- Neural networks will unlock intelligence and insights, powered by their foundation knowledge and that data.

Market participants are now following these incentives. They are cutting costs while increasing productivity. Soon (if not already) they will be increasing output while improving the quality of their product or service. A few notable highlights:

- [Lear](#) makes automotive seats – they're using AI to proactively manage their tariff exposure, automate administrative workflows, and balance manufacturing lines. They saved over \$30 million in the first half of 2025 alone and over 11,000 employees now use AI to drive efficiency and innovation.
- [Airbus](#) set an ambitious target of quadrupling production of its A350 aircraft. The plane consists of 5 million parts and is built by hundreds of teams spread across four countries in more than eight plants. Their data such as production schedules, shift schedules, parts deliveries, work orders, quality issues, etc. was also distributed across teams and countries. No single person

could answer – what work remains at any given time on a given aircraft? Through the use of AI, Airbus was able to accelerate production by 33% allowing them to meet their ambitious target.

We could highlight many more examples but the direction is clear – you must be an AI-enabled enterprise to remain competitive in the future.

If you're an entity building state-of-the-art intelligence models that may power tremendous new product categories, you also have a recipe to follow, as your capital expenditures have completely changed:

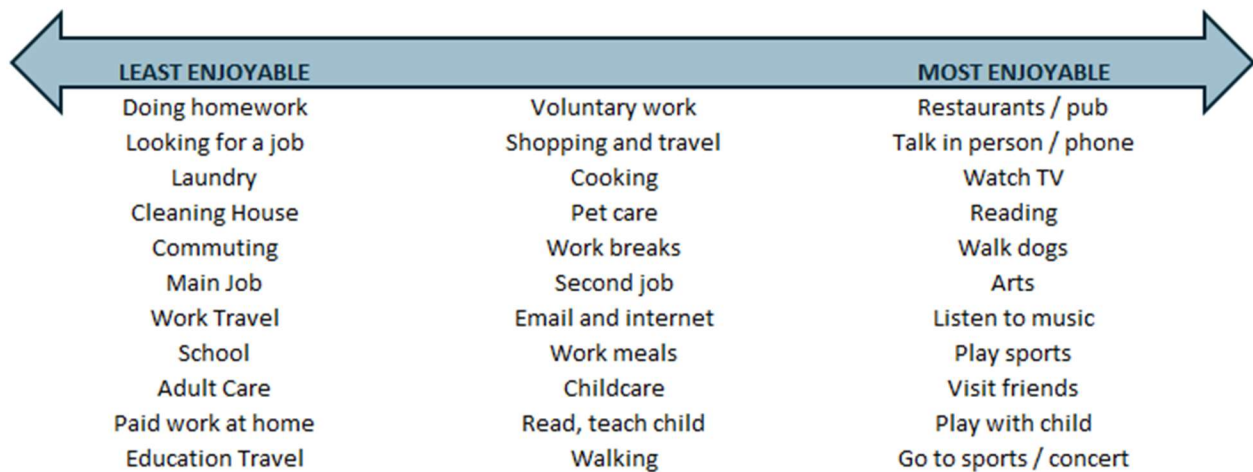
- Data centers used to be powered by chips that processed tasks sequentially (one after the other). This worked well for retrieving data and executing the same processes.
- AI is different and the underlying mathematics are different.
- AI models can be broken into smaller, independent calculations that can be performed at the same time.
- This design shift means computer chips with small, efficient cores that can execute millions of calculations simultaneously are more valuable than chips with a few, ultra-powerful cores, that execute calculations one after the other.
- This has allowed the data center to now function as one giant computer, capable of creating neural networks with trillions of parameters (AI factories).

So far, we've yet to hit an upper bound on making these intelligence models more capable. If we build bigger models, throw more data at them, and power them with faster, more capable computing horsepower, they produce more intelligence. If we spend more time after the model has initially been trained, refining and fine-tuning, the model produces more intelligence. If we allow the model time to "think" about a response, plan out a multi-step problem-solving strategy to more challenging inquiries, the model produces more intelligence. Market participants are incentivized, and intelligence continues to scale.

"Our partners in the United States – the earliest and most voracious adopters of the novel language models that are presently reordering human life and of the Ontology that allows them to effectively operate – understand how significantly the terrain beneath us all has shifted." Alex Karp, CEO – [Palantir Technologies](#)

WORK REIMAGINED

Let's face it – not everyone is happy at work. Many find their career to be more like shackles, tying them to a seemingly never-ending loop of repetitiveness, boredom, and unhappiness. In the book ["What We Really Do All Day"](#) the authors asked people to report their level of enjoyment for various daily activities. The answers might not shock a lot of people:



In the US, non-physical work accounts for about 2/3 of all work hours. Of this non-physical work, about 2/3 of these hours involve tasks that require reasoning and information processing that will best be suited to artificial intelligence. These [automatable](#) activities span roles across numerous industries and represent about 57% of US work hours and 40% of total wages. **The surprising takeaway is that AI could theoretically automate more than half of current US work hours. The shocking takeaway is that this automation could occur using the same AI technology available TODAY.** Given the previously discussed market incentives, it is becoming clear that work in the future will be a partnership between human intelligence (people) and artificial intelligence (agents and robots). For human employees, some roles will shrink, others will grow, while new ones will emerge. There will be a massive transition as enterprises redesign processes, roles, skills, culture, and metrics so people, agents, and robots create more value together.

Deniers of this shift may point out that the output of an AI model is entirely based on complex mathematical calculations and statistical probabilities, rather than "true intelligence" or human-like consciousness. Every action an AI model takes, from generating a sentence, to identifying an object in an image, is a sequence of numerical operations. The model does not "understand" language in a human sense. It calculates the most statistically probable next token in a sequence based on the input it has received. The output of these calculations, while appearing intelligent, is fundamentally different from human cognition. There is no evidence that current AI models possess consciousness, self-awareness, or the ability to "feel" or "intend" anything. We agree, this is entirely true - however, to these deniers we respond with the utterly human – so what? We realize AI is not truly human intelligence or consciousness. **Perhaps the more disappointing realization is that the vast capabilities brought by human intelligence aren't required to perform many of our current job functions.** We believe it's these jobs where many people are not finding satisfaction because they're most likely not challenged, not allowed to be creative, and not forming emotional and social connections with people.

Our advice to both younger and older generations – become familiar with this technology because it's going to be required. AI can make you immensely more productive and unlock time previously spent on unenjoyable tasks. Reimagining work won't be a simple technology rollout, but it's undeniable that it's now underway. Long-term, we believe AI can shift human employment into areas that demand human intelligence – the tasks from the MOST ENJOYABLE column – being creative, social, and spending time connecting with people.

Economist Milton Friedman traveled to Asia in the 1960s and visited a worksite where a new canal was being built. He was shocked to see that instead of modern tractors and earth movers, the workers had

shovels. He asked why there were so few machines. The government bureaucrat explained: "You don't understand, this is a jobs program." To which Milton replied: "Oh, I thought you were trying to build a canal. If it's jobs you want, then you should give these workers spoons, not shovels."

POTENTIAL BOTTLENECKS

So far, we haven't hit upper limits when it comes to making models more intelligent. Thought leaders believe we've gone through an Age of Research from 2012 – 2020, where innovation with model architecture led to more intelligence. We then hit the Age of Scaling from 2020 – present, where we discovered increasing data and computing power led to more intelligence. Many believe we will eventually reach a plateau from scaling hardware and, once again, see new model architectures unlock further intelligence. Gains from AI will most likely be a recurring tailwind in the economy for a long time. Recall, electricity took more than 30 years to spread, industrial robots have been around for decades, and only about 20% of companies run most of their applications in the cloud despite the technology being widely available for about 20 years now. The talent, capital, and excitement are driving this Intelligence Revolution forward so it begs the question, what could actually slow this down?

Cost – McKinsey estimates that by 2030, data centers are projected to require \$6.7 trillion worldwide (approximately 5.7% of global GDP) to keep pace with the demand for compute power. Nearly \$7 trillion in capital outlays needed by 2030 is a staggering number by any measure. Fortunately, many US companies are in phenomenal financial shape (see quarterly commentary asset side of [US balance sheet](#)). The main companies leading the investment in the US (Google, Oracle, Meta, Microsoft, Amazon) generated over \$1.7 trillion in cash flow from operations over the trailing 5 years. **We don't really see cost as a potential bottleneck.**

Return on investment – this will be a bigger question mark. As the economics of AI are just starting to take shape, return on investment remains unknown, but likely unfolds in a few phases:

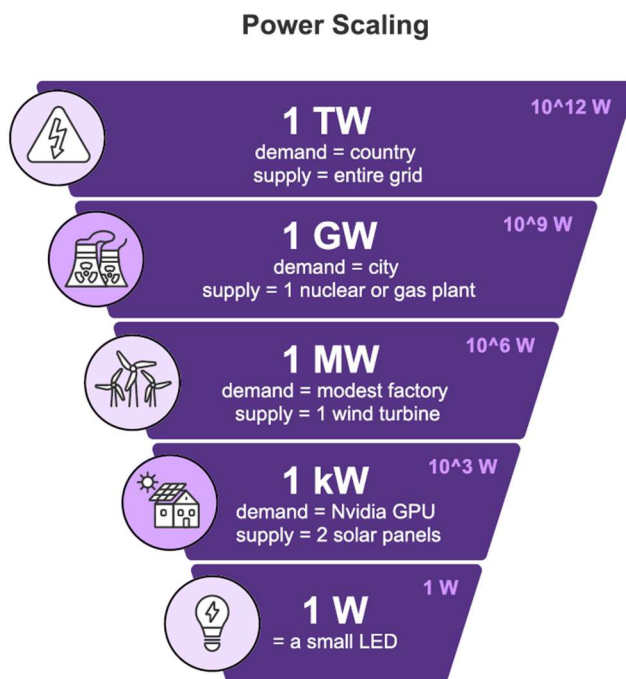
- Phase 1 - Existing companies use AI to make themselves more productive. Tremendous savings via time and cost that lead to growing margins. This is starting to become evident.
- Phase 2 - Tremendous value creation from new products and services enabled by the capabilities of AI. Think digital employees, generative entertainment content (video games, movies, TV shows, music), autonomous transportation, and advanced robotics. Returns from phase two are a bit further down the road.
- Phase 3 – The Intelligence Revolution will be shaped by this era's new miracle material, AI, or what Ivan Zhao refers to as [infinite minds](#). When new technology arrives it takes a while to understand what is fully possible. For example, early phone calls were concise like telegrams, early movies looked like filmed plays, early factories were powered by water wheels then swapped for steam engines – it took a while to realize they no longer needed to be located next to rivers. The full reimagining of what an unconstrained organization looks like is currently unknown but will be unfolding throughout this revolution.

Given that companies are starting to show Phase One returns, progress toward Phase Two projects continues unabated, and transformative Phase Three potential remains, **we believe returns will be sufficient to continue the investments.**

Societal pushback – This is a concern. If McKinsey is right and much of today's work consists of mundane tasks that are easy to automate, we expect these jobs to go first. Companies are already

starting to refer to automation as “seat optimization,” which is a nice way to say that your job can now be handled by an AI agent. Widespread AI adoption causing high levels of unemployment would certainly garner growing demands for a robot tax, AI tax, or universal basic income. The adoption of AI could wind up being chaotic and hugely unpopular. However, using history as a guide, we believe this Intelligence Revolution will be no different. The demand for jobs that require human intelligence will balloon. There will be entirely new careers form that previously didn’t exist. Recall, in the US two hundred thirty-five years ago 90% of people worked on [farms](#) vs. 2% today.

Energy – This is a primary concern. There are estimates that the world will add 125 gigawatts of datacenters in the next 5 years. Datacenters used to be measured in megawatts – now we’re talking about gigawatts. Gigawatt sized datacenters mean they will use as much energy as a city.



Source: Social Capital

Currently, the US has one of the largest grids in the world. It has more than 6 million miles of power lines which is 12 X larger than the interstate highway system. Our grid can produce 1.3 terawatts of power at peak demand and produced over 4,000 terawatt hours of energy last year. Despite these impressive statistics, the American Society of Civil Engineers’ report on US energy infrastructure graded it with a [D+](#). Much of our grid is at, or past, its intended service life:

- 70% of transformers / transmission lines are 25+ years old
- 60% of local distribution lines are 40+ years old
- 60% of circuit breakers are 30+ years old

Powering AI is the consequential challenge that possibly slows development. Further, should energy demand for AI cause electricity prices to skyrocket for consumers, you’ll see even greater pushback towards further development. However, given that policy leaders recognize the importance of this [technology](#) we believe the full force of America’s industrial might is about to mobilize. A combination of easing environmental limits, accelerating approvals for projects already in the pipeline, powering data

centers with off-grid energy sources, utilizing America's vast natural gas resources, installing more solar / battery assets, and eventually seeing the return of small modular nuclear reactors, will **all** likely play a part of ensuring we have enough energy to power AI's continued advancement and consumers don't see their rates skyrocket (more about the probable long-term solution from a Roaring 2.0s theme later in the letter).

WHAT DOES THIS MEAN FOR INVESTORS?

Given the monumental amount of change taking place, investors might have to think quite a bit differently than they did in the past. Some key items to ponder:

ARE WE IN A BUBBLE? It seems a lot of people would take great pride in correctly calling the next bubble to burst. Perhaps it's the appeal of a potential movie deal that attracts people to position themselves as the next prognosticator of doom. As noted in last year's letter, there are differences between good and bad bubbles. Bad bubbles typically arise due to excessive borrowing. Examples like the crash of 1929 and the Great Financial Crisis of 2008 illustrate this perfectly. Good bubbles, however, are required to create something new. It takes excitement to assemble the talent and capital needed to work towards a goal that may sound far-fetched and impossible. Examples like the Manhattan Project or Apollo Missions come to mind. As previously noted, we've yet to hit an upper bound when it comes to making models more intelligent. Abundant, affordable, scalable intelligence will be a good thing for society. **If AI is a bubble, we don't believe it's a bad bubble. The technology is just starting to gain widespread adoption, which makes bubble calls sound incredibly premature.**

PRINSONER'S DILEMMA - Many leading companies now find themselves facing a difficult decision:

- Fail to invest and you run the risk of falling behind competitively
- Invest too much and you could be left with stranded assets

We believe the market will wrestle with this in a company-specific manner. Those showing accelerating business results will be rewarded, while those failing to deliver may be punished. It's an uncomfortable dilemma for some of the world's leading corporations, as they've been exploiting competitive advantages in some instances created a decade or two ago.

SENTIMENT SWINGS - AI optimism may turn to scrutiny as public markets lack patience. We find ourselves in an odd place with "the market". Concentration has become so great that half of the value of the S&P 500 (about \$30 trillion) is held in only 4% of the companies (20 in total). Many of the current index leaders grew to such astonishing valuations because they were asset-light business models that earned tremendous returns on capital. Now, many of them are investing heavily at a pace the market has never seen from them before. Since 2020 Google's capital expenditures have increased by 300%, Meta by 363%, Amazon by 254%, Microsoft by 369%, and Oracle by 1600%! The market will demand return on this investment at some point in the future.

UNCOMFORTABLE VALUATIONS – In the long-run, the stock market is a weighing machine, rewarding companies that produce growing, durable profits. AI's impact could result in valuations that many would deem irrational, but could prove to be justified if a few items play out:

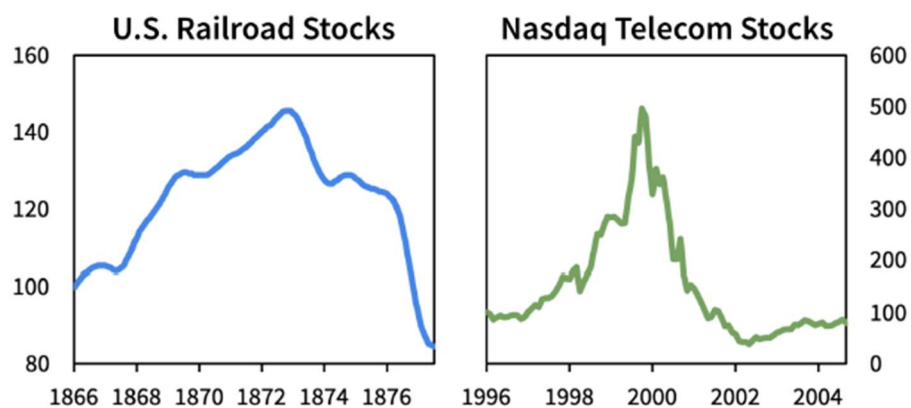
- Margin expansion – If AI investments deliver, existing companies become far more productive. Doing more with less means growing margins, which results in growing profits.
- Growth acceleration – Companies that adapt to becoming AI-enabled and companies that are founded as AI-native, give themselves the opportunity to capture market share from slow-footed

competitors. Further, those that build new products and services give themselves the opportunity to create new markets that previously didn't exist. Digital employees and humanoid robots don't tire, meaning output can occur around the clock.

If a margin lift coupled with accelerating growth proves to be sustainable, valuations can remain elevated above historic levels that many investors have grown comfortable and accustomed to.

THEMATIC INVESTING PROBABLY WON'T CAPTURE THE VALUE - This might sound counterintuitive, but if you look at what happened during the railroad buildout and telecom / internet buildout, stock returns from companies in those broad sectors turned out to be really bad. Just because you've identified a theme such as electrical transformers or data center cooling that will be in tremendous need, doesn't mean you've identified a company whose stock price will enjoy incredible returns. Remember, Cisco Systems helped build the internet but its stock price is still below the March 2000 peak! The market awards premium valuations to unique businesses with lasting competitive advantages that they're able to translate into world-class returns on capital. The Intelligence Revolution presents tremendous opportunities to find new winners but as is typically the case, the number will be small but the amount they win by will be tremendous.

Railroad and Internet Bubbles



Source: [NBER via FRED](#), [Nasdaq](#), Sparkline.

OPPORTUNITY OFTEN LIES IN SECOND-ORDER EFFECTS – In prior infrastructure build outs, the greatest value accrued to society as opposed to the companies leading the buildout. New winners emerged, taking advantage of the robust and affordable infrastructure. For example, Coca Cola built a beverage juggernaut on top of the world's newfound electrical infrastructure and home appliance industry. Netflix transformed the entertainment industry, taking advantage of widespread, affordable high-speed internet infrastructure. In our mind, the Intelligence Revolution offers what the Industrial Revolution offered for people – more leisure time and more discretionary income. We believe second-order winners will offer products and services that cater to that “Most Enjoyable” column previously discussed – items like good company, good food, good experiences, and good entertainment.

HARNESSING ENERGY

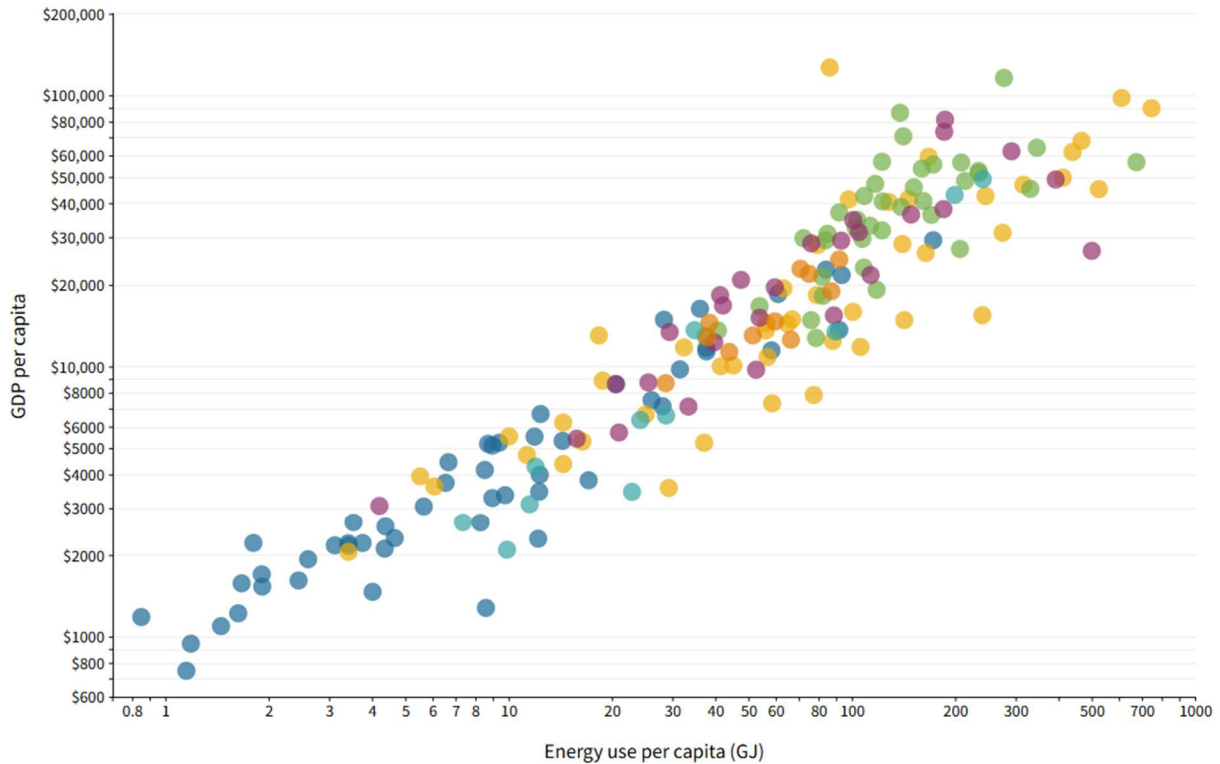
Early Humans used fire for warmth, cooking, and protection. They used brute force along with animal labor to support basic agriculture and transportation that could support small communities. Some of the first ancient civilizations used water and wind as they mechanized tasks like grinding grain and pumping water which was crucial for food security and early industry. The Industrial Revolution saw the use of coal and steam as it powered factories, trains, and ships leading to mass production, urban growth, and

faster global connections dramatically increasing productivity and population. Oil and natural gas fueled the internal combustion engine and generated electricity further accelerating industrialization and transforming daily life with lighting, appliances, and widespread power. Now we have modern sources such as nuclear and renewables that can address fossil fuel depletion. Harnessing energy has propelled human [progress](#) by increasing living standards, enabling population growth, economic development, and technological leaps.

GDP per capita and energy use per capita, 2019

GDP per capita is measured in constant 2017 international dollars per person.

Continent ● Africa ● Asia ● Europe ● North America ● Oceania ● South America



Sources: Our World in Data; World Bank; United Nations Population Division
Boston University Institute for Global Sustainability | visualizingenergy.org | CC BY 4.0

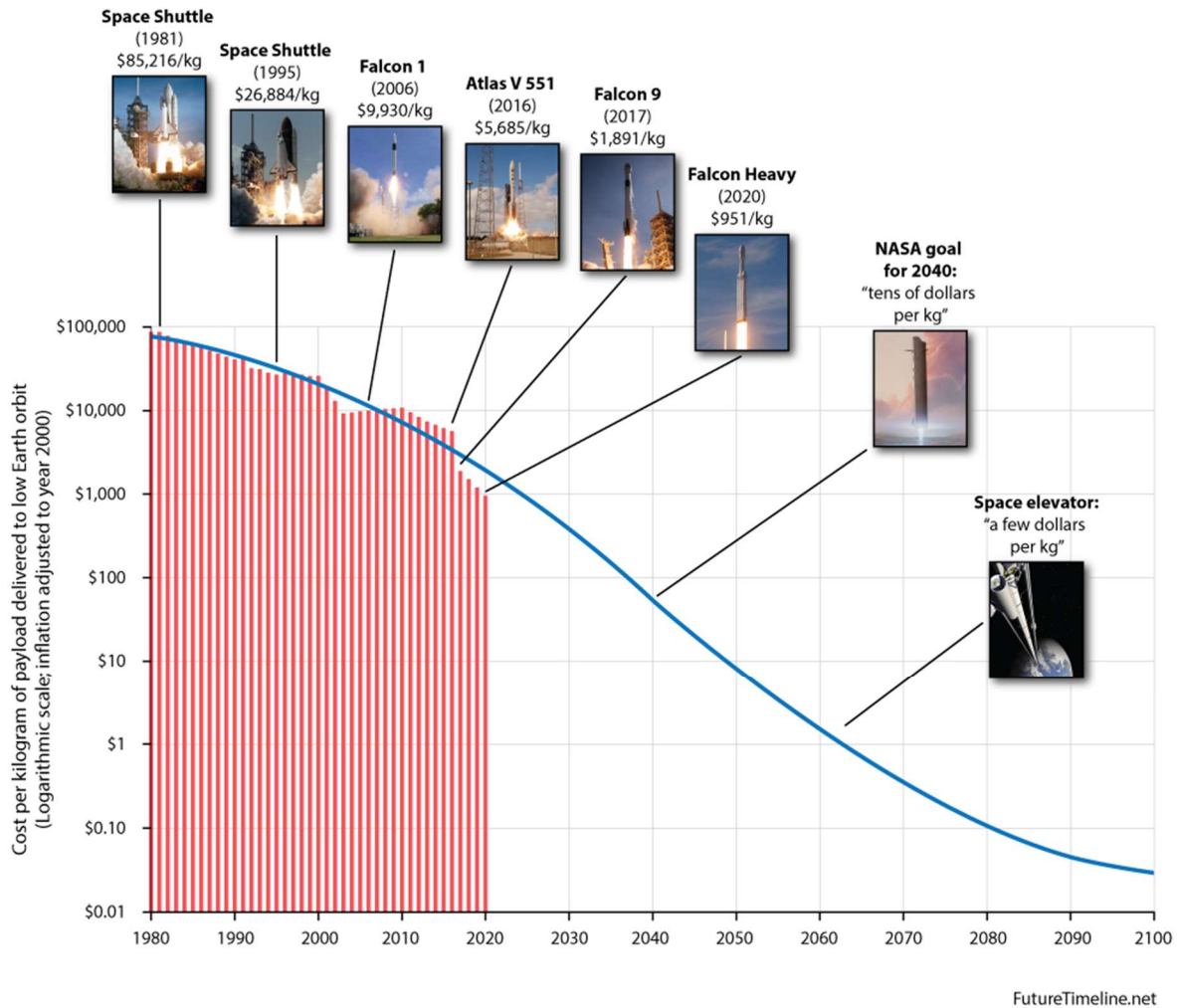
visualizingEnergy

We now find ourselves at a crossroads, requiring urgency to maintain technological competitiveness, while facing significant roadblocks in bringing new energy projects online. As noted last year – we’ve actually seen a slowdown in progress when it comes to building in the real world. Fortunately, we believe American innovation will meet this energy challenge by the continued development of a key theme from our Roaring 2.0’s letter – the [space economy](#). In our letter we noted that the first commercial flights started in the 1920s and predicted the same would be true of space flight in the 2020s. Now, just five years later, we have the space economy’s first meaningful consumer product – [Starlink](#) from SpaceX.

The growing capabilities of reusable rockets add to the possibility of this burgeoning space economy. Greater payload capacity coupled with full reusability means that locating data centers in space actually becomes a [viable](#) solution:

- Partially reusable rockets (like Falcon 9) have [reduced launch costs](#) by orders of magnitude. SpaceX’s Starship would potentially do it once again.

- Data centers located in a sun-synchronous orbit would be powered by an always-on solar energy source.
- Given that space is cold, you wouldn't need the massive, costly cooling systems dependent upon access to water.
- Data transmission works well taking advantage of the [vacuum](#) of space.
- Regulatory burden of trying to permit new energy projects all but goes away.



It is no wonder why tech heavyweights such as [Jeff Bezos](#) and [Google](#) are so intrigued by the possibilities of this new space frontier.

EXTRACTIVE TO STELLAR

It's hard to wrap our minds around the socioeconomic transformation that's about to take place because we're used to an extractive mindset. Authors of the book "[Stellar](#)" offer some wonderful insights on the topic:

Our modern way of life has largely been intact since the agricultural revolution. This was the last period in which there was a complete transformation in the way humans lived. It was a period beyond which nothing was predictable based on past understandings. Old rules, patterns, and dynamics ceased to apply. Once we learned how to domesticate plants and animals people were incentivized to control

inputs. Controlling land, labor, and capital became a driving force in life. Those that controlled scarce inputs were able to build wealth and accumulate power.

Production systems that need a constant flow of scarce inputs create some serious issues. They create the incentive to maximize growth economically, technologically, militarily, and geographically. They create the need for a constant balancing act. Go after too much growth and society possibly collapses via rampant inequality and exploitation. Go for too much stability and you run the risk of falling behind competitively and being overrun. Given the precarious nature of controlling this flow of resources, people are plagued by insecurities and fear. These concerns take people away from being present and force us to plan and accumulate possessions and wealth in order to protect against an uncertain future.

For the first time in modern history, there might be an alternative to an extraction-based way of life. We're seeing the emergence of technologies that once built, require no further extractive inputs to function. These Stellar systems flourish on their own. Take artificial intelligence, humanoid robots, or solar / battery energy systems – once built, they do not require constant input to produce output. If OpenAI were satisfied with the latest version of ChatGPT, they could be done – the model does not need continual training to remain intelligent. When solar panels are coupled with battery storage there is no need to explore for the sun, drill for the sun, refine the sun, or transport the sun. Creation of these Stellar systems implies plummeting production costs as they remove scarcity. The constraints of constantly replenishing raw materials and using human labor to do so could be a thing of the past. This makes an era of sustainable abundance a potential reality.

Talking about this stuff sounded like science fiction not that long ago. If you would have told us that in the year 2025 we'd be discussing computers capable of human level intelligence, rockets that can land themselves, and robots like C3PO, we wouldn't have believed you - but [here we are](#). During this Intelligence Revolution, expect as much [change](#) as what was seen in prior revolutions. While it will take some time to be completely evident, we believe we're at the beginning of this journey as innovation accelerates, becomes ever more capable, and creates opportunities for humans that only seemed real in science fiction movies. The capital commitments made in 2025 will mark the point at which visionary ideas became tangible and what was once deemed impossible, now looks inevitable.

“We are witnessing the next industrial revolution – not powered by steam, electricity, or oil, but by intelligence itself.” - [Jensen Huang](#), NVIDIA CEO

FORECASTS

This is the section of the annual letter where we discuss forecasts made in the past and discuss the bullets on the opening page of this letter. As we do every year, we remind ourselves it's a foolish endeavor to believe we can accurately forecast the future – something no one can truly do! We enjoy using “What If” in our thought process, as it allows for outside-the-box thinking, and challenges our (and your) assumptions. It also allows us to think beyond the current “news cycle” forecasting that permeates much of the financial press. As a reminder, these forecasts are our thoughts as of the writing of this annual letter in mid to late-December. Markets are dynamic and ever-changing. When change occurs, so too must our thoughts to adapt to the then-current investment environment.

We reiterate, our portfolios are managed substantially from the bottom up. This means we look at individual investments themselves and the **long-term** value they represent, knowing that quality companies at the right price represent value. With this reminder out of the way, let us review our forecasts from 2025's annual letter and make some new and bold (and perhaps futile given our long-

term perspective) forecasts for 2026. For 2025, we had a solid record again, getting many correct (4.5) and a couple wrong (3.5). Fortunately, the main message forecasts were mostly on the positive side of the ledger.

The Economy:

For 2025, we forecast the US economy would continue to show a year-over-year increase and eclipse \$30 Trillion. We believed growth from innovation, a more competitive US economy, and “animal spirits” would possibly be offset by a reduction in the size of [government](#). While the efforts to combat bloated bureaucracy have been ongoing, the pushback and political maneuvering have substantially slowed the hoped-for progress. On the other hand, there has been a significant amount of announced [investment](#) to be made in the United States as part of tariff negotiations. While some of these investments are not immediate, they nonetheless illustrate growing momentum for investing in the United States. In 2025, GDP contracted by .6% in Q1, followed by 3.8% growth in Q2, and a robust 4.3% increase in Q3 bringing output to \$31.095 Trillion – **FULL POINT**

For 2026, we believe a few political realities will come to fruition:

- **Mid-term election cycle** – Accomplishing anything significant in Washington typically slows meaning any potential cost savings to be had from reigning in the size of government most likely comes to a grinding halt.
- **First 100 days is behind us** - The bulk of accomplishments seem to occur during this period. Potential “Lame Duck” status might result in political gridlock.

While these items might sound negative for the economy, we view them as positive. This environment allows business to be conducted with a known set of reliable rules that are not easily changed. Given the prospects for a stuck yet stable political environment, accelerating innovation, record investments, and lower input costs (energy and interest rates), we believe the economy continues its sustained growth. **For 2026, we believe the juggernaut known as the US Economy, will continue to grow at an overall rate of at least 2.5% leading to a GDP of over \$32.5 Trillion.**

Inflation:

For 2025, we forecast inflation would be in the range of 3.0% to 3.5%. For the 12 months ending November 2025, the annual inflation rate was 2.7%, down from 3.0% as of the end of September. While we did say that if we were wrong the rate might be lower, the rate was below our target and therefore we get **no point here.**

Arguably, one of the long-term, existential threats to the current world order of US Dollar-denominated global trade is the debasing of our currency through inflation. Deficit spending financed by currency creation is, by its very nature, inflationary. Unfortunately, these two pillars of inflation are still with us. In our opinion, the only way the current world order remains intact is if the United States finally acts like the adult in the room, spends less than it takes in, and uses what now seem like mythical budget surpluses to actually retire debt. If this spending splurge doesn't reverse, eventually we must face the reality that the Pax Americana post-World War II era most likely gets supplanted by something else in a few generations.

While these are our long-term concerns, there are many moving parts when thinking through inflation for 2026. On the inflationary side, a lack of fiscal discipline seems to be our new status quo. On the deflationary side, AI's impact may start to be felt, but the significant gains in efficiency and productivity are still probably a little further down the road. Tariff revenues are real, but remain a wild card. Will the President attempt to hand them out and buy mid-term votes, or do the fiscally responsible thing and apply them to the deficit and debt? Given the potential crosscurrents, we believe **inflation comes in higher than the desired 2% target, but not high enough to spark concerns for hiking short-term rates. We see CPI in the 2.75% - 3.25% range for much of 2026.**

Short-term rates:

Our forecast for 2025 was to see the Fed Funds rate end between 3.5% - 4.0% by year-end. As of the most recent December meeting, the Federal Reserve has set its target range at 3.50% to 3.75% - **FULL POINT.**

We remain of the opinion the Fed will find a new "neutral rate" somewhere between 3.0% and 3.5%. We would lower our expectations for neutral should we see more fiscally prudent federal, and in some cases, state governments. History has shown the rate setting process is anything but precise, with the Fed typically overshooting once a direction has been established. Current momentum favors continued 25 basis point reductions as long as inflation stays in check. The Fed most likely attempts to mirror the inflation rate with the Fed Funds rate. Given our expected inflation range of 2.75% - 3.25% for much of 2026, we forecast the **Federal Reserve will reduce the Fed Funds rate to below 3% during the year.**

Long-term rates:

For 2025 we saw the 10-year yield maintaining its historic average of approximately 4.5%. After starting the year at 4.57%, the 10-year treasury hovered between 4.3% and 4.6% for most of 2025. As the Federal Reserve lowered interest rates in the second half of 2025, we saw long-term rates slowly drift down to 4.12% as of Dec 29th, 2025. While we could say the full year was averaging around our forecast, the current yield is below our forecast rate – **half a point.**

For 2026, we believe the 10-year yield drifts down, as the Federal Reserve lowers short-term rates. The positively sloped yield curve should continue and may actually steepen by year-end. With the possibility of political stalemate, economic market forces will have a chance to function normally. AI should begin to impact the economy and labor market (both the loss of some jobs and the creation of new ones) while overhyped, negative concerns dissipate. It's essential for a healthy economy to have a real economic cost of capital, which is why we believe rates can drop, but not too much. **Therefore, in 2026, we believe the 10-year yield drifts below 4%, eventually finishing the year at 4% give or take 25 basis points.**

Stock Market:

For 2025, we forecast the S&P 500 to be up modestly to a range of 6,200 to 6,400. 2025 saw dramatic capital flows into the new technology areas of the market. The Magnificent 7 (Apple, Alphabet, Amazon, Microsoft, Meta, Nvidia, and Tesla) once again had an exceptional year while returns for the remaining 493 constituents were rather mediocre. We certainly underestimated the upside as the S&P 500 currently stands above 6,900. While the direction was correct, the magnitude was not - **no point.**

Similar to our inflation outlook, there are many crosscurrents in regard to the stock market:

- Lower interest rates would typically imply higher valuations
- Earnings growth remains strong
- Current market multiples are near all-time highs
- Sentiment could swing wildly even for the Magnificent 7 as the market attempts to discount future cash flows from aggressive investments recently made

Interesting to note, of the eleven S&P 500 sectors, only two have an above average weighting in the index (Information Technology and Communication Services). The remaining nine sectors (Energy, Materials, Industrials, Consumer Discretionary, Consumer Staples, Health Care, Financials, Real Estate, and Utilities) all carry a below average weighting. Given that the S&P 500 was up greater than 20% in 2023 and 2024, and up nearly this much in 2025, we do believe the pace of the advance could be a bit extended. Given the concentrated leadership of the Magnificent 7, several of these companies investing heavily to build AI offerings with unknown returns, and a temperamental market that has already shown [manic mood swings](#) in regards to AI announcements, we believe 2026 might be different. While we continue to expect tremendous progress from our leading companies, we believe **2026 will be a year in which the S&P 500 advances modestly but market breadth improves as equal-weight outperforms and capital flows into out-of-favor sectors.**

Oil:

For 2025, we forecast oil prices spending the bulk of the year in the \$65 to \$70 range. Further, we forecast an \$80 upper bound and policies loosening regulations to explore and develop resources would exert downward pressure on price. The high for the year was \$78.71 (Jan 15th, 2025) and indeed the price remained above \$60 for most of the year. While we may end 2025 just below \$60, we certainly had the direction and range for the year correct - **FULL POINT.**

Although there has been continued emphasis on replacing hydrocarbon-based energy production, global oil usage continues to climb. The notion of “peak oil” seems unlikely anytime soon as the IEA’s latest forecast shows global oil demand reaching [113 million barrels](#) per day by 2050 (up 13% from today’s 100 million barrels per day). The reality is we are in an AI arms race with the battle for technological supremacy on the line - all energy sources will be used including our robust, domestic reserves. Our domestic producers have shown they will not develop and produce energy below the cost of production. Further, we’ve long held that the oil producing nations of the world have an absolute need to see the price at a certain level that allows them to generate sufficient revenue to run their countries. **Therefore, while the short-term trend may continue to decline, we anticipate the price to return to the \$60 level and average that for the bulk of 2026.**

Commercial Real Estate:

For 2025 we forecast the FTSE NAREIT All REIT Index rising again, in line with inflation (3.0% to 3.5%) and yields (4.0% to 5.0%), for a total return of 7 to 9%. Similar to 2024, we continued to focus on affordable housing (manufactured home communities), real estate related to disruptive technology (data centers, cell towers, medical research), self-storage, and industrial warehouses. We also noted offices and apartments may see a solid recovery year if challenges were addressed, and negative sentiment were to wane. 2025 proved to be a challenging year for commercial real estate, with the index down just over 2% on a price basis, and up 1.9% when factoring in yield - **no point.**

2026 could benefit from lower interest rates and a desire of capital to purchase existing properties (or a portfolio of properties) at [below](#) construction prices. Once again, we must be judicious on where to allocate capital. We continue to prefer segments such as:

- Data centers – huge demand from AI
- Manufactured housing – demand for affordable housing only exacerbated by the lack of new construction
- Medical [life sciences](#) – a smaller subset of medical office buildings that focuses on advancement in healthcare and tends to come with long-term leases
- Lifestyle – unique experiences driven by growing second-order effects caused by the Intelligence Revolution
- Logistics – continued demand driven by shifting purchase behaviors, as more and more shopping takes place from home

Given that the FTSE NAREIT All REIT Index on a price basis has only grown by 3% over the past 5 years and 14% over the past 10 years, we believe a make-up year may be in store. **For 2026, we forecast the FTSE NAREIT All REIT Index to be up 5% plus dividend yield of 4% for a total return of 9% plus.**

We've often maintained real estate is a long-lived asset, with leases reflecting economic forces over time. As inflation and interest rates rise, renewals on rents will reflect that, but it will be several years before those changes work their way through the marketplace. In the meantime, cash flows continue. The valuation of these cash flows fluctuates over the short-term (even year-to-year) and becomes the volatility seen in the price of REITs. This implies REITs can go through stretches of underperformance when compared to alternative, cash flow generating investments such as the 10-year US treasury. However, when viewed through a long-term perspective, we continue to prefer owning quality REITs that invest in value-added projects. Value is eventually captured through growing demand and rising rents. A well-managed REIT will pair off the liabilities on their property portfolio to these consistent cash flows. This gives them the ability to produce a rising income stream, as opposed to a fixed coupon and see share price appreciation as value-added projects take shape. The staying power of real estate can be a welcome piece to a portfolio.

Residential Real Estate:

For 2025, we forecast a more subdued environment than years past with the Case-Shiller index rising very modestly, if at all. This proved to be spot on as the Case-Shiller 20-City composite is essentially flat year-to-date - **FULL POINT.**

Our thoughts regarding residential real estate largely remain intact. Demand has always been driven by employment. We see the work-from-home trend continuing to unwind. This implies people need to live close to their employers once again, so employment-centric locations should see a recovery. Businesses relocating to states with favorable tax and regulatory environments will continue to [influence](#) the national landscape, subjecting it to varying supply and demand pressures. Immigration could also wane (which could result in a net neutral to negative effect when deportations are factored in) possibly reducing demand in these parts of the country. The new administration may be successful in removing some regulations that impede new housing starts, but most of these reside at the state level. Efforts to unthaw markets by making mortgages [portable](#) could lead to an uptick in transactions. While there might be numerous crosscurrents for residential real estate as well, we believe lower mortgage rates will be the driving factor during the year. **Given our expectations for lower short and long-term rates, we**

believe the Case-Shiller index will reflect some pent-up demand and increase by approximately 4% to 5%.

Fun Forecast for 2025

Last year we predicted that the race to AGI would intensify as major players invest huge amounts of capital and resources. Given the incredible energy demands, research and development costs, infrastructure needs, data acquisition and management costs, and rapidly evolving regulatory environment, only deep-pocketed players would be able to afford the high barriers to entry. The start-up scene is vibrant with smaller players seeing significant investments from the juggernauts. 2025 could be the year in which some of these promising start-ups are actually acquired for their talent and advancements in the field. Companies that achieve AGI will be able to unlock efficiencies and reduce costs, including energy costs. Therefore, our **fun forecast for 2025 was that energy production technology would boom and we'll see the cost of energy become subject to Moore's law by the end of the year.**

Certainly, much of this fun forecast came to fruition as outlined in this year's main message. However, we most likely need to graduate this forecast to the "Long-term" section as declining energy production costs most likely get unlocked via the [space economy](#). Space-based solar power is one of the more intriguing ideas that becomes a potential reality should fully reusable rockets prove to be successful. More on this in the years to come.

Long-term fun forecasts

The real purpose of the "Fun Forecasts" is to have us think outside the box, try and remove the recency bias we all suffer from, and look beyond much of today's negative outlook. Why are we always dreading the "Black Swan" events? Why can't we anticipate "White Swan" occurrences? Many of our annual fun forecasts in the past have not been right in that year, but did come to pass in following years. Someone once said, "we over-estimate what we can accomplish in one year and under-estimate what we can accomplish in five years". Let's think five years (and longer). We'll keep these forecasts here in an attempt to identify significant themes that we should be paying attention to.

Previously made long-term forecasts with updates below:

A working quantum computer will become reality, facilitating a jump to ASI

- 12/9/2024 - Google achieved a milestone in regards to quantum computing. They unveiled [Willow](#), their state-of-the art quantum chip.
- 2/19/2025 - Microsoft unveiled [Majorana 1](#) – the world's first quantum processor powered by topological qubits. They laid out a roadmap to reliable quantum computation putting them on track to build a prototype of a scalable quantum computer in years, not decades.
- 11/12/2025 - IBM unveiled [Quantum Nighthawk](#) – it's most advanced processor yet designed with an architecture to complement high-performing quantum software to deliver quantum advantage next year – this is the point at which a quantum computer can solve a problem better than all classical-only methods.

Humanity will break ground on a permanent moon-base

- 8/24/2024 - Boeing has had many problems in the last year one of which was [stranding](#) two astronauts at the International Space Station. Space X to the rescue and with that [Artemis](#) gets more Space-X input and confidence of it actually happening.
- 2025 - [SpaceX](#) broke their own single-year launch record in 2025 flying 170 times in 2025. This included 165 flights of Falcon 9 and 5 test mission of Starship. This marks the 6th year in a row that SpaceX has set a new launch record.
- 3/2/2025 - [Firefly Aerospace's](#) robotic lander touched down successfully on the moon, remaining operational for about two weeks. This marked an unprecedented achievement for private industry and spaceflight in general.
- 12/18/2025 - the White House signed an executive order establishing a bold vision for [America's space policy](#) which calls for the return to the Moon by 2028, initial elements of a permanent lunar outpost by 2030, and a lunar surface reactor ready for launch by 2030.

Blake's Tesla will earn money for him as he enrolls in their autonomous ride-hail service

- 10/10/2024 - Tesla [unveiled](#) their CyberCab and robotaxi plans set to launch in the very near future. Once activated, the network will allow existing Tesla car owners to add their vehicles into the robotaxi fleet.
- 9/4/2025 - Tesla released their Robotaxi app. On a random Thursday in September it cracked the top 10 of all time highest US ride-hail app [download](#) dates.
- 12/15/2025 - Austin, TX has been Tesla's main market for their [robotaxi](#) service. They initially launched the service with human safety riders as they want to be abundantly cautious. After several months of operation, safety riders are now being removed, and the service appears ready to go live in numerous markets around the country. Blake can't have his car in the fleet just yet, but perhaps 2026 is the year this becomes reality.

New addition for 2025:

AGI will be recognized and the jump to ASI will not be too far behind

- 12/20/2024 - OpenAI unveiled [o3](#) in December. It is a breakthrough model that significantly surpasses all previous models in benchmarks.
- 2025 - Given this year's main message, we feel enough has been said about the progress and future implications of AI – humanity is on the cusp of transformative change.

CONCLUSION

A month away from news headlines and most electronic devices, sailing through the Southern Ocean and truly becoming at one with nature, allows for the rare opportunity to take a step back. Some of the biggest takeaways are things that were already known, only reenforced by quiet reflective moments marveling at penguin colonies, breaching whales, soaring terns and drifting icebergs. Namely, that our mission as your financial advisor is to help you achieve your financial independence so that you are free to embrace life and spend the currency of wealth – TIME - on those things that matter most in your life.

We will always strive to cull through information, ferret out the important from the unimportant, and take short-term emotions out of the long-term investment process. As always, we welcome your feedback and would love to talk about these and other topics that may be important to you. We thank you for your continued confidence and the opportunity to manage your investments.

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The Dow Jones Industrial Average is a price-weighted average of 30 significant stocks traded on the New York Stock Exchange and the NASDAQ.

The Standard & Poor's 500 Index is a capitalization weighted index comprised of 500 widely-held stocks on US stock exchanges. Companies included in the index are selected by the S&P Index Committee, a team of analysts & economists at Standard & Poor's.

S&P 500 Total Return Index is a measure of the price movement of The Standard & Poor's 500 index and including the dividends paid by the companies in the index.

S&P Case Shiller Index – a group of indexes that tracks changes in home prices throughout the United States. Case-Shiller produces indexes representing certain metropolitan statistical areas as well as a national index.

GDP – the monetary value of all the finished goods & services produced within a country's borders in a specific time period.

The MSCI US REIT Total Return Index is an index that broadly represents the price and income movement of the equity REIT universe in the United States. The Index represents approximately 85% of the US REIT universe.

The Barclay's Aggregate Bond Index – includes government securities, mortgage-backed securities, asset-backed securities and corporate securities to simulate the universe of bonds in the market. The maturities of the bonds in the index are more than one year.

P/E Ratio is a valuation ratio of the company's current share price compared to its per-share earnings.

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<http://www.cwam.dadavidsonfa.com/Our-Commentary.4.htm>