

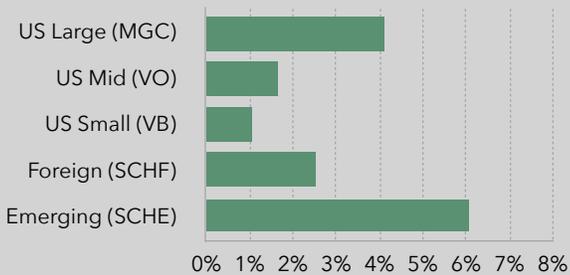
## September 2025

### Economic Data

- Employment data is delayed due to the government shutdown, but ADP reported 32,000 private-sector jobs were lost in September
- Retail sales were up 0.6% in August, with non store retailers leading up 2.0%
- Y/y inflation (CPI) accelerated to a 2.9% pace in August; the core rate (less food and energy) was flat at 3.1%
- Existing homes were down 0.2% in August and up 1.8% y/y; the median home price stood at \$422,600

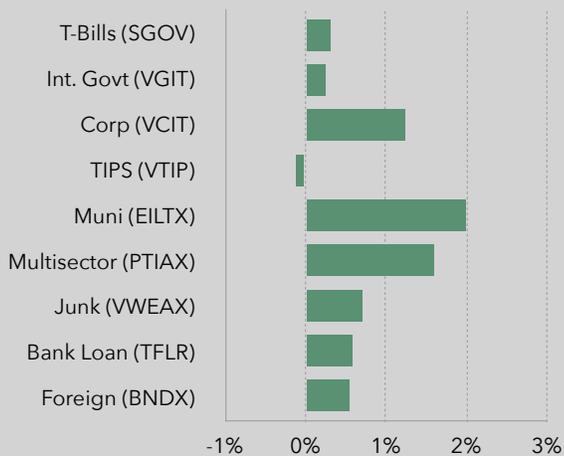
### Stocks

#### September Returns



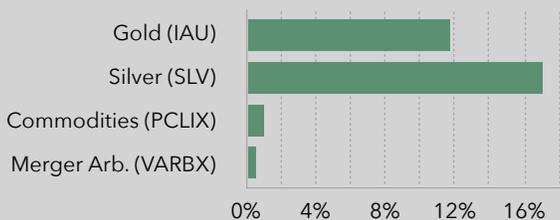
### Bonds

#### September Returns



### Alternatives

#### September Returns



Performance data provided by Morningstar

The brain uses two systems to process information. The first type is intuitive but lazy, rapidly forming judgements with no conscious input. The second system is slow, reflective, and not guided by emotions. It is that second system — type 2 — that we want in control of our investment portfolios.

### The AI Bubble

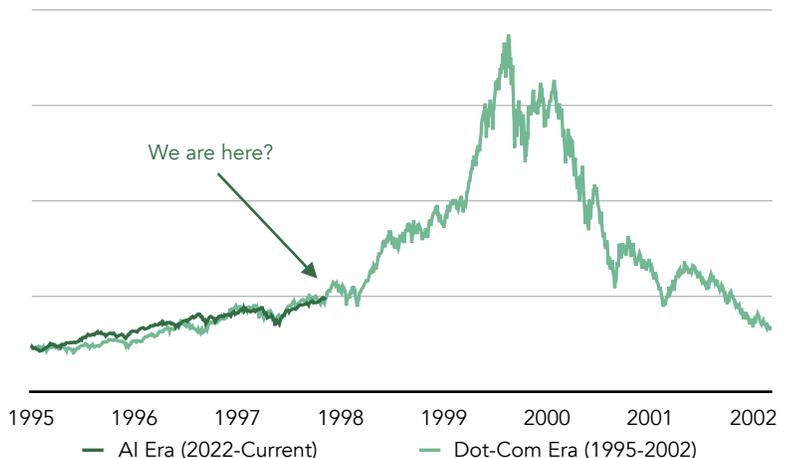
The post-Civil-War railroad boom in the United States spanned from roughly 1866 to 1873. Miles of track surged from about 30,000 just before the war to over 70,000 miles by 1873, and included the completion of the first transcontinental railroad. However, rampant overbuilding and speculative financing led to a dramatic bust with the Panic of 1873, with 89 of the nation's 364 railroads declaring bankruptcy. The US railroad network reached its peak of 254,251 miles in 1916 and has since declined to about 140,000 today.

By comparison, the dot-com boom, spanning roughly 1995 to 2000, was a speculative frenzy in internet-based companies. This era spurred massive infrastructure investment but ended in a bust with the NASDAQ plunging almost 80% from its peak in March 2000 to its trough October 2002, wiping out \$5 trillion in value. Like the railroad boom's overbuilding of track, the dot-com era saw explosive deployment of fiber-optic cable as telecoms raced to future-proof bandwidth for the internet surge, creating a glut of "dark fiber" (unused capacity). During the late 1990s, US companies laid over 80 million miles of fiber—equivalent to circling the Earth more than 3,200 times—representing about 76% of all digital wiring installed to date, yet leaving 85-95% idle immediately after the bust.

Both bubbles built enduring assets—rails for freight, fiber for data—that outlasted the speculation and were beneficial to our nation, even if it was at the cost of widespread financial ruin. As we enter what is probably, very likely, almost certainly going to be a bubble in AI, these past bubbles give us insight into what to expect. (For a much more in-depth take on this, read Derek Thompson's article [This Is How the AI Bubble Will Pop](#))

We are in the midst of a speculative frenzy of infrastructure buildout with AI factories (data centers) being constructed at a breakneck pace. The key thing you need to understand, though, is the shelf-life is different this time. Whereas rails have a useful life of 30-50 years with proper maintenance, and fiber-optic networks 25-40 years, AI GPUs have roughly the same lifespan as the common mouse—only about three years.

### NASDAQ 100 (Dot-Com vs. AI)



The GPUs, like the NVIDIA Blackwells, make up the largest portion of the datacenter cost—about 40-60% (Sources: *Balancier Capital analysis of 2024-2025 builds*; *McKinsey Global Institute, April 2025*). The rest is other stuff like cooling, electrical, networking, and the actual building. So roughly half of the infrastructure is lasting, while the other half needs to be replaced every three years. This is due to high workload demand (operating at nearly 100%, 24 hours/day) and rapid obsolescence. We are only three years into the AI boom (ChatGPT was released November 30, 2022) and the first chips already need to be replaced.

Hundreds of billions of dollars of annual cap-ex is being spent on wilting infrastructure to chase tens of billions in annual revenue. It just doesn't add up. And it is being financed through a sort of circular economy that is cross-subsidizing itself—chip suppliers (e.g. NVIDIA, AMD) and hyperscalers (e.g. Oracle, Microsoft, Coreweave) invest in the customer (e.g. OpenAI, xAI), who use that investment to order the supplier's chips and lease the hyperscalers compute. And maybe it's PTSD from the great financial crisis, but it's a bit unnerving to see data centers being pushed off the balance sheets of hyperscalers like Meta and placed in SPVs (special purpose vehicles) like subprime mortgages had been. First comes the initial speculative frenzy of infrastructure buildout. Then comes the inevitable crash. Then AI changes the world. Just like railroads. Just like the internet.

### The Blow-Off Top

Wait, did I just say crash? Shouldn't we be selling then? No, I am not foolish enough to call a top here. Not even close, actually. Look at the chart on the previous page. If we map the last three years of the NASDAQ 100 index over the first three years of the dot-com bubble starting with the commercialization of the internet on April 30, 1995, what do you notice? They look very similar, but by comparison the AI bubble is only in the build-up phase. It's mid-1998...maybe 1999 if we assume an accelerated pace this go-around. And if you look at the end of the dot-com boom, from September 1999 to March 2000, the index doubled in six months. This is what we call a blow-off top.

A blow-off top is a pattern that signals the climax of a bull market, characterized by a rapid, parabolic surge in asset prices driven by extreme investor euphoria, followed by an abrupt and devastating reversal. It's essentially the final gasp of speculative excess, where FOMO propels prices to unsustainable levels before reality sets in.

The anatomy typically unfolds in four phases. First, the build-up phase where, after a multi-year bull run, prices accelerate sharply upward with minimal pullbacks. This is fueled by positive news, low interest rates, or hype around a theme.

### Binge Box

#### Black Rabbit (Netflix)

I've been in Canmore, Alberta this past month, so I have spending most of my leisure time hiking in the Canadian Rockies. It's absolutely stunning up here, and I can't complain about the healthier use of my free time. This has, however, left me little time for bingeing new shows and therefore without a show to personally recommend for this month. I did get a recommendation from a friend and client, though, for Black Rabbit. He has good taste, so I am confidently recommending the Jude Law and Jason Bateman thriller, sight unseen.

Tactical Asset Allocation					
Asset Class	Heavy Under-weight	Under-weight	Neutral	Over-weight	Heavy Over-weight
<b>Fixed Income</b>					
Duration		●			
Inflation				●	
Credit	●				
Foreign	●				
<b>Equities</b>					
Large Cap		●			
Mid Cap			●		
Small Cap		●			
Developed Intl.			●		
Emerging			●		
<b>Alternatives</b>					
Commodities					●
Merger Arbitrage					●

Next is the parabolic peak where prices go vertical, often doubling or more in a short period. Volatility compresses (VIX is currently around 16) and trading volume reaches all-time highs. Sentiment indicators like the CNN Fear & Greed Index hit "Extreme Greed" (currently "Neutral"), and media buzz gets turned up to 11.

Then comes the turn where insiders and early sellers quietly offload at highs, but the public keeps buying. Some event triggers the reversal, prices gap down, volume explodes on the sell side, and volatility surges (e.g. VIX spikes 50%+).

Finally, the bubble bursts and the market collapses. A sharp, painful decline ensues, often 50-80% from peak, as margin calls, forced liquidations, and capitulation wipe out gains.

The point I'm trying to make is there is often more money to be lost by selling too early in a bubble, than getting out a little late. I can't know with certainty if we will see a blow-off top, but the lyrics of today seem to rhyme with those the market was singing my senior year of high school, when the dot-com blow-off top began. "So tonight I'm gonna party like it's 1999".

### The "Debasement Trade"

That is what Wall Street is calling the rally in silver and gold, with the latter just surging past \$4,000/oz. This has been driven not only by inflation fears, but by a combination of monetary policy easing, geopolitical risk, central bank demand, fiscal uncertainty, government shutdown, concerns over some of the Trump administration's policies, and—in the case of silver—increased industrial demand for solar panels higher-end electronics, and AI chips. Whatever the many reasons, both has been significant positive contributors to portfolio performance.

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## About EmeraldSpark

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