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The Carlyle Compass

By **Jason Thomas**
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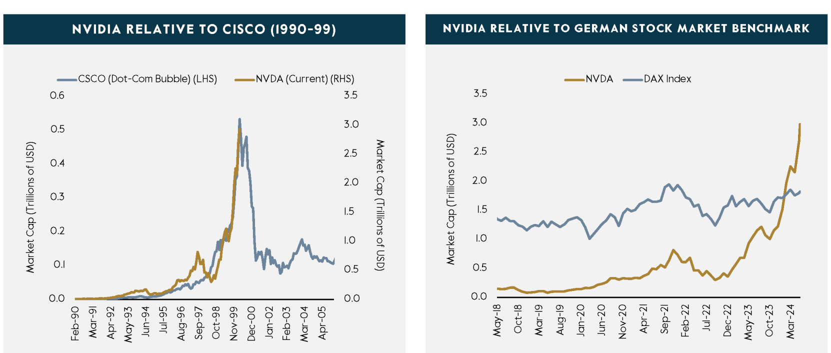
*Welcome back to **The Carlyle Compass**, your weekly newsletter that brings together the latest research and market insights from our global team.*

Last week, Nvidia's market capitalization briefly eclipsed $3 trillion, a 9x increase since ChatGPT's launch. Hardware at the center of technological revolutions rarely escapes investors' attention, whether it be GPUs used to train deep learning models or the routers that facilitated networked computing (Figure 1). As sales explode and the line separating forecast from prophecy blurs, skeptics are won over in proportion to their tracking error.

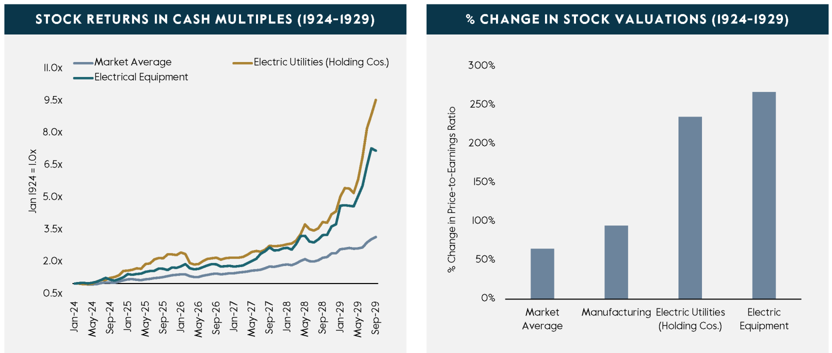
Figure 1: AI Hardware Boom in Context



Source: Carlyle Analysis; Bloomberg, June 2024. There is no guarantee any trends will continue.

This is a tale as old as the available time series. Electrification transitioned from exotic luxury to foundational element of residences and industrial facilities in the 1920s. Investors looking to "play" the unfolding boom naturally crowded into the stocks of electric companies and their state-of-the-art hardware. Both the earnings and multiples of electric utility holding companies rose more than 3x (Figure 2).

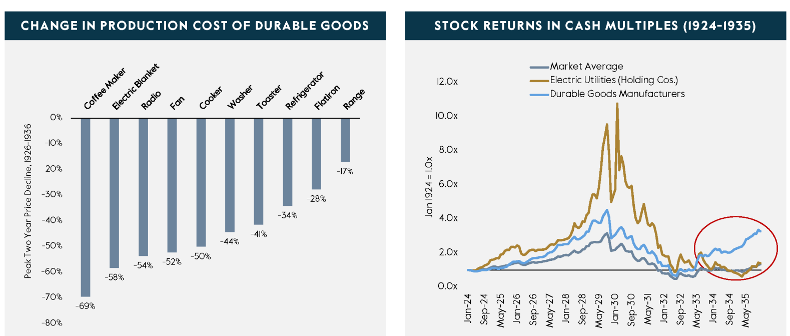
Figure 2: 1920s Electrification Hardware Boom



Source: Carlyle Analysis of Cowles Commission for Research in Economics Data, June 2024. There is no guarantee any trends will continue.

This stock market bubble burst, but not because electricity proved some sort of fad. The market had simply misjudged the value of the hardware bottleneck (power plant turbines, transmission lines, distribution systems) relative to the downstream uses of the new technology. Electrified factories drove down manufacturers' production costs and electrified homes stimulated demand for their products, like radios, washing machines, and refrigerators. This is where the economic value of electrification ultimately accrued, with 11% annualized returns for durable goods manufacturers over a decade stretching through the depths of the Great Depression (Figure 3).

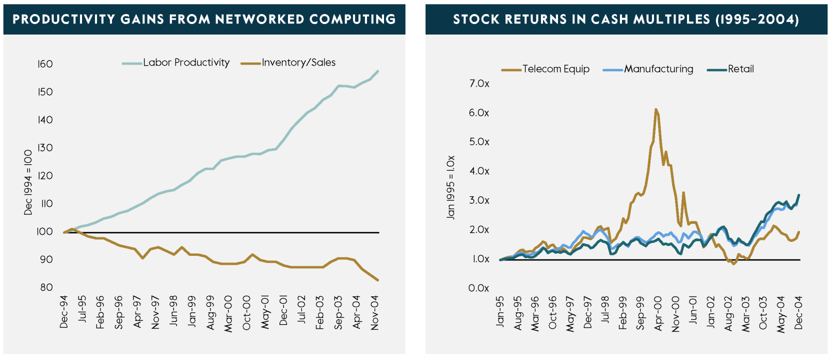
Figure 3: Returns to Electrification



Source: Carlyle Analysis; Ronald C. Tobey, 1997, "Technology as Freedom: The New Deal and the Electrical Modernization of the American Home", Cowles Commission for Research in Economics Data, June 2024. There is no guarantee any trends will continue.

Likewise, the economic value of IT and telecom hardware put in place in the late-1990s manifested as soaring productivity in the manufacturing and retail sectors, as the internet allowed companies to exploit new sales channels, more precisely calibrate production to sales, and streamline logistics networks and supply chains (Figure 4).

Figure 4: Returns to IT & Telecom Hardware



Source: Carlyle Analysis; Bureau of Labor Statistics, Federal Reserve, Cowles Commission for Research in Economics Data, June 2024. There is no guarantee any trends will continue.

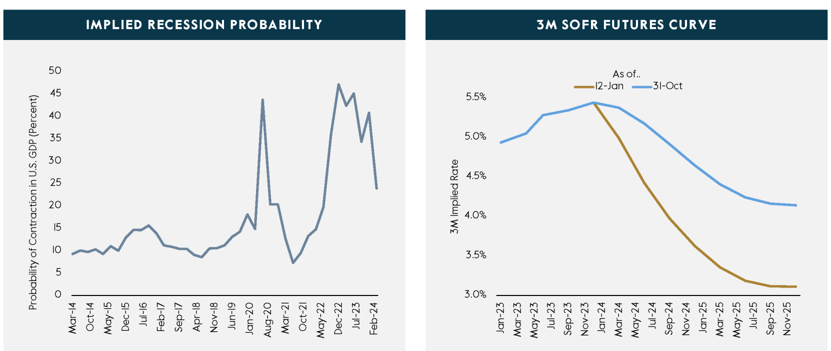
These asset price dynamics send important messages often missed by those inclined to focus on “irrationality” or “market euphoria.” The market seems quite adept at identifying transformational change but gets fixated on the hardware that facilitates it rather than the downstream value that hardware ultimately unlocks.

Rates Market Mugged by Reality

Central banks hike rates to fight inflation and cut them in response to economic weakness. Markets sometimes disregard such common sense.

At the start of the year, professional forecasters sharply revised down recession probabilities at the same time interest rate strategists dialed up rate cut expectations (Figure 5). This seemed to violate basic economic analysis, which is predicated on the “if…then” logic of conditional likelihood.

Figure 5: Stronger Economy & Lower Interest Rates?

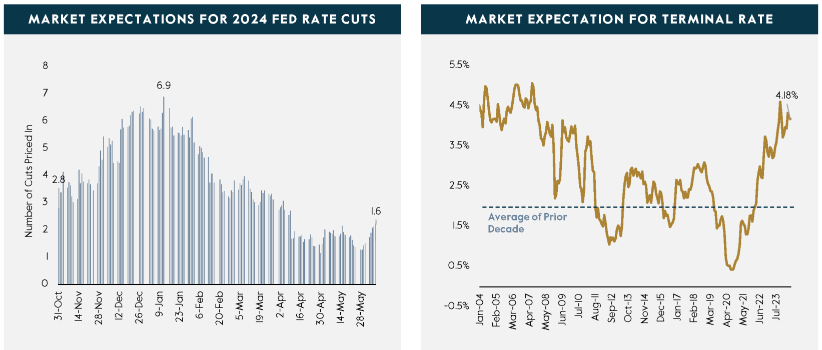


Source: Carlyle Analysis; Federal Reserve Bank of Philadelphia, Bloomberg, March 2024. There is no guarantee any trends will continue.

In the short run, interest rates only have relevance for price-setting to the extent they influence spending decisions, which shape business volumes, hiring, and wage demands. One would only expect rate cuts to arrive in the context of a growth scare. Markets seemed to think the Fed would act in advance of one materializing.

But a data dependent central bank is one that ensures interest rate expectations fluctuate with demand indicators. That’s what’s been observed in recent weeks. Soft survey data made a September cut seem likely; a solid May employment report then pushed that first cut back to November. The Fed’s wait-and-see approach has also provided space for the market to reassess its likely “terminal rate,” or average level of short-term interest rates over time (Figure 6).

Figure 6: Sobriety Returns to Rates Markets



Source: Carlyle Analysis; Bloomberg, Federal Reserve, June 2024. There is no guarantee any trends will continue.

These are healthy developments that should promote price discovery in longer-term capital markets and force companies with crushing interest burdens to transition to more sustainable capital structures.

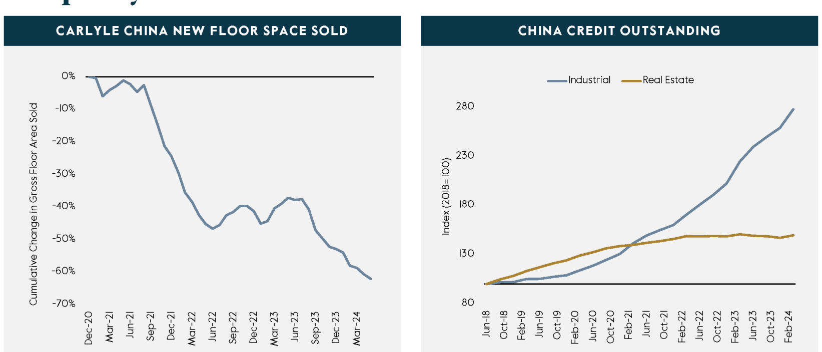
Stabilization Not Stimulus

Do not misunderstand the aims of Chinese authorities. The goal of recent policy announcements is not to stimulate the property sector, but to slow its rate of its decline and limit spillovers on banks, households, and municipal government finances.

A massive property sector was a necessary feature of China's economy when its development depended on moving 500 million people from the countryside to the city. Today it's mostly dead weight given demographic realities and slowing internal migration.

While policymakers have tinkered with various curbs on the sector's growth since 2016, those efforts took on greater urgency in recent years as China was denied access to advanced semiconductors and sought to establish technological supremacy in battery storage and other green industries. Capital previously consumed by real estate has been consciously redirected towards higher value-added industrials (Figure 7).

Figure 7: Reallocating Finite Resources from Property to Industrials



Source: Carlyle Analysis; Bloomberg, May 2024. There is no guarantee any trends will continue.

This policy shift is recognition that the "controlled demolition" of the property sector has been occurring at a rate that jeopardizes project safety.

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