BEYOND NVIDIA: SEMICONDUCTOR COMPANIES MAKING WAVES WITHOUT THE HYPE

Christopher Gannatti - Global Head of Research, Mobeen Tahir - Associate Director, Research 07/17/2024

A recent study on the top 10 most valuable brands in the world found Apple holding the number one position for the third consecutive year with a brand value exceeding \$1 trillion. Google, Microsoft, Amazon and McDonald's round out the top five. Interestingly, Nvidia features at number six, leaping 18 spots in a year and seeing its brand value rise by 178%—by far, the biggest increase among the top 10.

We see the full top 10, along with the percentage change in brand value from 2023, in figure 1.

Figure 1: Top 10 Global Companies by Brand Value

Brand Name	Value (in billions, \$)	% Change from 2023
Apple	1,015.90	+15%
Google	753.47	+30%
Microsoft	712.88	+42%
Amazon	576.62	+23%
McDonald's	221.90	+16%
Nvidia	201.84	+178%
Visa	188.93	+12%
Facebook	166.75	+79%
Oracle	145.50	+58%
Tencent	135.22	-4%

Source: Kantar, as of 2024.

How does a company making semiconductors, a technology few people truly understand, rank right next to the company that is practically the symbol of fast food worldwide? Given how swiftly Nvidia is rising in the rankings, will people who have McDonald's and say, "I'm lovin' it," soon start saying, "I'm liking this, but I'm loving Nvidia more"? Is the world's love for chips going to exceed its love for fries?

Nvidia's prominence among the most popular brands is arguably linked to its share price performance over the last couple of years, positioning it alongside the biggest companies in terms of market capitalization—a purely financial measure, unlike the intangible brand value.

But Nvidia is not alone in its field. Just as there are competitors like KFC, Five Guys and Burger King in the fast food industry, other companies are making semiconductors. They too are making waves this year with spectacular stock market returns, even if they



don't quite match Nvidia's meteoric rise.

For example, if instead of looking at the 10 most valuable global brands, as shown in figure 1, we look at the 10 biggest year-over-year risers in brand value, we would see Advanced Micro Devices in the tenth spot. It increased its brand value 53% relative to $2023.^1$

Chasing Nvidia or Positioning in the Broader AI Megatrend? This Is the Question... We recently wrote about the exchange-traded funds with the biggest exposure to Nvidia. The fact that Nvidia went from \$1 trillion to \$2 trillion and then \$3 trillion in terms of market capitalization without much in the way of significant corrections has been, well, historic. While we do not know if or when trends will change, it's clear that every investor has to consider whether they want to focus on strategies with large weights to Nvidia or if they believe this represents a greater risk and want to position differently.

WisdomTree developed the <u>WisdomTree Artificial Intelligence and Innovation Index</u> in late 2021, which is tracked, before fees and expenses, by the <u>WisdomTree Artificial Intellige nce and Innovation Fund (WTAI)</u>. The strategy is not designed to chase the name with the strongest momentum, like Nvidia, nor is it designed to dramatically overweight the so-called Magnificent 7.2

The strategy instead considers four distinct groups of companies, each meant to represent a component of the broader AI ecosystem:

- Semiconductors
- AI software
- Other hardware
- Innovation

The biggest overall exposure of these four groupings is in the semiconductors group. However, this is not about Nvidia—it is about the fact that from the second half of 2024, consumers and businesses are going to have the option to buy a swath of new devices that each can run AI software, directly.

To put a number to it, alongside a device with which many are familiar, the Apple iPhone 15 is made up of close to 30 individual semiconductors. While one can see the Appledesigned chips that have been widely publicized, an iPhone does not have 100% Appledesigned chips. For example, it is also widely cited that Apple would prefer to do less business with Qualcomm but that it has not yet been able to design chips that would allow it to replace Qualcomm's offering. A

Figure 2 considers the top 20 holdings, as of July 1, 2024, of WTAI. About these holdings, we posed one simple question: Involved with Semiconductors? To simplify, we broke it down into three answers:

• Yes: The company is either designing semiconductors, fabricating semiconductors, creating software that facilitates the design of semiconductors or building machines that facilitate the fabrication of semiconductors.



- Custom: The company has been cited as having a focus on designing its own chips. The Magnificent 7 included Nvidia, Apple, Microsoft, Alphabet, Amazon.com, Meta and Tesla. While Nvidia is in the business of designing chips, the other six companies all have significant efforts toward designing their own chips for their specific use cases. Designing chips is an expensive proposition, so it is not an accident that the world's largest companies with incredible capabilities to generate cash are also the ones embarking on these efforts. We note that Alphabet's Tensor Processing Units (TPUs), made by Broadcom, have been in place for some time and have been quite successful, ⁵ even if Apple's M-series has generated a lot of focus more recently.
- No: The company is not focused on the semiconductor ecosystem. There was only one firm in the top 20 in this group-CrowdStrike. This is a cybersecurity firm that delivers its service as a subscription software package.

Figure 2: WTAI's Top 20 Holdings

Company Name	Involved with Semiconductors?	Weight
Nvidia Corp	Yes	3.04%
Arm Holdings Plc	Yes	2.87%
SK Hynix Inc	Yes	2.51%
Broadcom Inc	Yes	2.36%
Alphabet Inc-Cl A	Custom	2.33%
Meta PlatformsInc. Cl A	Custom	2.30%
Taiwan Semiconductor Manufacturer ADR	Yes	2.28%
Qualcomm Inc	Yes	2.27%
Apple Inc	Custom	2.21%
ASML Holding Nv-Ny Reg Shs	Yes	2.11%
Micron Technology Inc	Yes	2.10%
Microsoft Corp	Custom	2.08%
Synopsys Inc	Yes	2.06%
Cadence Design Systems Inc	Yes	2.05%
Marvell Technology Inc	Yes	1.97%
Amazon.com Inc	Custom	1.96%
Advanced Micro Devices	Yes	1.95%
Samsung Electronics Co Ltd	Yes	1.92%
Crowdstrike Holdings Inc - A	No	1.74%
Tesla Inc	Custom	1.72%

Source: WisdomTree, as of 7/1/24. Holdings subject to change.

Conclusion: Matching the Megatrend with a Time Horizon

We constantly remind ourselves that the world's awakening to generative AI was only with the release of ChatGPT in November 2022-even if it feels like it has been around for a long time. That is not even two years of history as we write these words.

Nvidia has done an incredible job to marry the opportunity with its capabilities, but we are only about 20 months into a multi-decade evolution that could dramatically impact



our relationship with computers, software and data. The semiconductor space is far more diverse than the premium level AI-accelerator chips (like the Nvidia H100 and B100 GPUs), and we believe in diversification across the ecosystem as opposed to trying to quess which individual firm might be next in line to deliver Nvidia-like results.

Important Risks Related to this Article

For current holdings of WTAI, please click <u>here</u>. Holdings are subject to risk and change.

There are risks associated with investing, including the possible loss of principal. The Fund invests in companies primarily involved in the investment theme of artificial intelligence (AI) and innovation. Companies engaged in AI typically face intense competition and potentially rapid product obsolescence. These companies are also heavily dependent on intellectual property rights and may be adversely affected by loss or impairment of those rights. Additionally, AI companies typically invest significant amounts of spending on research and development, and there is no guarantee that the products or services produced by these companies will be successful. Companies that are capitalizing on innovation and developing technologies to displace older technologies or create new markets may not be successful. The Fund invests in the securities included in, or representative of, its Index regardless of their investment merit and the Fund does not attempt to outperform its Index or take defensive positions in declining markets. The composition of the Index is governed by an Index Committee and the Index may not perform as intended. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

For the top 10 holdings of WTAI please visit the Fund's fund detail page at https://www.wisdomtree.com/investments/etfs/megatrends/wtai

For standardized performance and the most recent month-end performance click here NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

Related Blogs

- + The AI Revolution Continues
- + 2024 Superconvergence Biorevolution Series: Journey to the mRNA Vaccine & Beyond
- + Will AI Be Coming for Your Job (Anytime Soon)?

For more investing insights, check out our <u>Economic & Market Outlook</u>

View the online version of this article here.



¹ "Kantar BrandZ Most Valuable Global Brands 2024," Kantar, 2024.

² The term "Magnificent 7" was coined in 2023 for seven of the world's largest market capitalization companies, encompassing Apple, Amazon, Alphabet, Meta, Microsoft, Nvidia and Tesla.

³ Source: https://www.linkedin.com/posts/rajeev-chandrasekhar-971203257_q-how-many-semico nductor-chips-qo-into-a-activity-7120765549571129344-mayd

⁴ Source: https://www.bloomberg.com/news/articles/2023-11-16/apple-project-to-replace-modems-made-by-qualcomm-falls-further-behind-to-2026

⁵ Source: https://cloud.google.com/blog/products/compute/introducing-trillium-6th-gen-tpu
s

IMPORTANT INFORMATION

U.S. investors only: Click <u>here</u> to obtain a WisdomTree ETF prospectus which contains investment objectives, risks, charges, expenses, and other information; read and consider carefully before investing.

There are risks involved with investing, including possible loss of principal. Foreign investing involves currency, political and economic risk. Funds focusing on a single country, sector and/or funds that emphasize investments in smaller companies may experience greater price volatility. Investments in emerging markets, currency, fixed income and alternative investments include additional risks. Please see prospectus for discussion of risks.

Past performance is not indicative of future results. This material contains the opinions of the author, which are subject to change, and should not to be considered or interpreted as a recommendation to participate in any particular trading strategy, or deemed to be an offer or sale of any investment product and it should not be relied on as such. There is no guarantee that any strategies discussed will work under all market conditions. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This material should not be relied upon as research or investment advice regarding any security in particular. The user of this information assumes the entire risk of any use made of the information provided herein. Neither WisdomTree nor its affiliates, nor Foreside Fund Services, LLC, or its affiliates provide tax or legal advice. Investors seeking tax or legal advice should consult their tax or legal advisor. Unless expressly stated otherwise the opinions, interpretations or findings expressed herein do not necessarily represent the views of WisdomTree or any of its affiliates.

The MSCI information may only be used for your internal use, may not be reproduced or re-disseminated in any form and may not be used as a basis for or component of any financial instruments or products or indexes. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each entity involved in compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties. With respect to this information, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including loss profits) or any other damages (www.msci.com)

Jonathan Steinberg, Jeremy Schwartz, Rick Harper, Christopher Gannatti, Bradley Krom, Tripp Zimmerman, Michael Barrer, Anita Rausch, Kevin Flanagan, Brendan Loftus, Joseph Tenaglia, Jeff Weniger, Matt Wagner, Alejandro Saltiel, Ryan Krystopowicz, Jianing Wu, and Brian Manby are registered representatives of Foreside Fund Services, LLC.

WisdomTree Funds are distributed by Foreside Fund Services, LLC, in the U.S. only. You cannot invest directly in an index.

