TAMID Group at Michigan

PORTFOLIO MANAGEMENT COMMITTEE REPORT

2024 Year in Review

Equity and Portfolio Data as of January 5, 2025

Fund Performance

Figure 1.1 – TAMID Fund Performance vs Index Benchmarks

	1 Month	2024
TAMID Fund	(3.98%)	5.88%
Russell 3000	(2.62%)	23.81%
S&P 500	(2.42%)	23.31%
Dow Jones Industrial Avg	(4.54%)	13%
NASDAQ	(.46%)	28.6%

* The TAMID portfolio benchmarks its performance against the Russell 3000 index. The Russell 3000 comprises 3,000 of the largest U.S. companies, representing 96% of U.S. listed companies. This broad-based index provides a comprehensive view of overall market performance, including a wide range of mid and small-cap stocks. By choosing the Russell 3000 as a benchmark, TAMID focuses on differentiation, seeking opportunities in smaller and mid-sized companies rather than solely those in the Fortune 500. In theory, this approach allows the fund to uncover unique investments that may be mispriced by the market due to a lack of analyst coverage or investor awareness.

The Big Picture

2024 was an amazing year for stocks as the S&P 500 rose 23.31% while the Russel 3000, TAMID's benchmark index, saw a return of 23.81%, and TAMID's portfolio achieved a 5.88% gain. The key market drivers in 2024 were the continued adoption of AI as well as the decelerating growth of inflation, which led many on the Street to believe multiple rate cuts laid ahead. Coming into 2024, Analysts didn't expect the market to move much throughout the year as the average S&P 500 target was $4,861—less than 2% higher than its closing level in 2024. However, by year end, all major U.S. stock market indices defied expectations, closing with double-digit gains. This occurred despite a year filled with political turmoil, including the wars in the Middle East and Ukraine and a contested U.S. election that saw former President Trump reelected.

Economically, the year presented significant challenges. Despite three interest rate cuts—well below the market consensus of six—the 10-year Treasury yield climbed steadily, closing the year near a five-year high. Unemployment increased, the Federal Reserve continued reducing the money supply through quantitative tightening, and the dollar strengthened further. Additionally, a strict regulatory environment hindered M&A activity.

Amid these headwinds, there were notable bright spots. Inflation, as measured by the Consumer Price Index (CPI), fell to 2.7% in November, down from 3.2% a year earlier. Consumer spending rose 3.7% year over year in the third quarter, and GDP was on track to grow over 2.5%, far exceeding the beginning-of-year consensus estimate of 1%. Further, the massive buildout of artificial intelligence (AI) technologies drove growth across industries, benefiting companies like Nvidia and Microsoft, as well as businesses ranging from Walmart and JPMorgan Chase to local mom-and-pop stores.

TAMID vs. the Russel 3000

In an exceptional year for the market, our fund underperformed the Russell 3000. This underperformance can be attributed to both sector allocation and stock selection decisions. A significant factor was our sector allocation. The communication services sector was the top-performing sector in terms of return. In the Russell 3000, the sector had an 8.1% weighting, while our fund had only a 0.89% exposure. Our limited exposure was solely through the iShares Russell 3000 ETF, not through direct stock ownership. This limited allocation capped our participation in the sector's gains.

Information technology was the next best-performing sector, where our allocation was also below the benchmark. The Russell 3000 had a 27.57% weighting compared to our 16.6% position. Despite strong performances from Taiwan Semiconductor +92.56% and Palo Alto Networks +23.41%, our overall limited exposure to the sector hurt returns. The next best sector was consumer discretionary. Our fund's 13.56% allocation in consumer discretionary stocks was higher than the Russell 3000's 11%. However, the three companies in this sector—LVMH, Evolution Gaming, and Vail Resorts—all ended the year down, which outweighed the sector's broader positive performance.

The financials sector was the next best-performing sector. The sector had a 12.42% weighting in the Russell 3000, while our fund held only an 8.74% position. The following best was the utilities sector, which was underrepresented in our portfolio. Our 0.26% exposure through the iShares ETF was lower than the Russell 3000's 2.34%, further contributing to the underperformance.

Beyond sector allocations, stock selection also contributed to underperformance. Additionally, about 12% of the fund was held as cash in a money market fund, which far underperformed the market.

Despite the underperformance in terms of nominal value, our fund analysts worked hard all year to uncover differentiated views from the market. We believe these theses often require time to play out.

Market Trends That Shaped the TAMID Portfolio in 2024

AI Infrastructure Expansion

In 2024, the AI infrastructure boom echoed the "gold rush" analogy, where suppliers raked in more than the actual miners. Big tech firms—Microsoft, Meta, Alphabet, and Amazon—increased their CAPEX to $64.9 billion in Q3, reflecting an 11% QoQ and a 66% YoY growth, with plans to further increase spending in the coming years. Key beneficiaries included hardware companies like Nvidia, AMD, Broadcom, Dell, and HP. All of these companies are large customers of Taiwan Semiconductor Manufacturing Company (TSM), a portfolio holding that manufactures the chips fueling this growth. TSM's shares rose by 92.56% in 2024. The critical question in the future is whether this jump in CAPEX will yield a large enough ROI for cloud providers and software companies to justify this level of spending.

Growing Energy Demand

AI adoption requires significant energy consumption, with just a single ChatGPT query using ten times more energy than a Google search. Goldman Sachs Research Team projects a 160% rise in data center energy demand by 2030 as AI continues to be built out and adopted. This has led to renewed interest in sustainable energy, particularly nuclear power. Portfolio company Constellation Energy (CEG) partnered with Microsoft to restart a nuclear plant and supply power for AI operations. This deal, along with other partnerships and exceptional company performance, helped drive a 92.71% increase in CEG's stock. Until more renewable energy sources like nuclear become fully operational, companies will continue relying on Liquified Natural Gas (LNG). Rising LNG prices and export growth propelled Cheniere Energy Inc., another portfolio holding, to a 27.18% gain in 2024.

Cybersecurity Adoption

With changing consumer trends, AI adoption, and increased use of cloud services, we have seen more threats than ever online. The last two years saw 90% of the world's internet data generated, making critical infrastructures like hospitals, airports, and energy grids more vulnerable than ever to cyberattacks. One company that experienced this firsthand was UnitedHealth Group, which announced it had been attacked in February and that ⅓ of Americans' data was compromised. The attack cost the company over $2.3 billion, highlighting the need for advanced cybersecurity. Portfolio company Palo Alto Networks (PANW) benefited from this trend. The company offers a range of products for various industries. Their strategy of trying to attract all of a customer's cybersecurity spend on the platform led to record revenue and net income. The stock finished 2024 up 23.41%.

Bitcoin Resurgence

Bitcoin's momentum carried into 2024. January saw the approval of 11 spot Bitcoin ETFs (an ETF that directly buys and holds bitcoin), which opens the door for investors to gain crypto exposure without actually owning crypto itself. One of the ETFs approved was the iShares Bitcoin Trust by BlackRock, a portfolio holding. Overall, Bitcoin finished up 120%, and Blackrock rose 29.29% year over year.

Self-Driving Technology Advancements

2024 was a transformative year for self-driving technology. Waymo, Google's robo-taxi service, expanded across the U.S. and completed 4 million paid trips, becoming the leader in the space. Tesla also made headlines by announcing plans for a Robotaxi to be available in 2026 and older vehicles to have the robo-taxi software enabled as early as 2025. This announcement, coupled with Elon Musk's political support for President-Elect Trump, propelled Tesla's stock. However, it impacted Uber (UBER), a portfolio holding that originally saw a 50% gain in shares but then saw its stock drop 30% in the months following the announcement. Despite Uber's growth in ride-hailing, advertising, and food delivery, as well as cost controls, which drove record free cash flow, investors increasingly became concerned about robotaxis. One such investor is Hedge Fund Manager Brad Gerstner, who exited his Uber position and cited the announcement as the "ChatGPT moment" for full self-driving as a pivotal shift. By the end of the year, the stock had closed down 2.03%.

GLP-1 Drug Adoption

GLP-1 drugs for diabetes and weight loss dominated 2024, with Novo Nordisk's Ozempic and Wegovy and Eli Lilly's Monjaro and Zepbound struggling to meet soaring demand. The FDA temporarily allowed companies like Hims & Hers and Ro to provide compounded versions, which helped alleviate shortages. However, the supply issues have since been resolved, and the FDA has mandated a halt in these productions within 60-90 days. Dexcom (DXCM), a portfolio holding specializing in glucose monitoring devices, faced significant operational and performance challenges due to GLP-1's. Slowing sales for Dexcom products and changing investor sentiment led to a 37.33% decline in the stock.

Top and Bottom Performers in the Portfolio

* Stocks Held Throughout the Entire 2024 Year

Top Performer - Taiwan Semiconductor Mfg. Co. Ltd. (NYSE: TSM): Taiwan Semicunductor's stock appreciated by 92.56% in 2024. As the world's largest semiconductor contract manufacturer, TSM has been a massive beneficiary of the AI infrastructure buildout, transforming its traditionally cyclical business into a more robust growth model. Major clients such as Nvidia, Broadcom, AMD, and Qualcomm have contributed to a large portion of the growth. There is so much demand that TSM has announced it is operating at full capacity and will work to bring on new manufacturing plants, some of which are in Arizona.

TSM competitor Intel struggled this year as its much-anticipated entry into the foundry business has been a flop. Intel is set to receive over $7bn in federal support through the Chip's Act to revitalize U.S. chip production, but they have struggled to attract customers and gain market share from TSM. This has contributed to Intel falling 59.56% during 2024.

Looking forward, TSM is set to report its Q4 results on January 16. Analysts project that TSM will close 2024 with a 30.37% increase in revenue and a 35.86% rise in net income compared to 2023. Despite several positive catalysts, the stock continues to face growing geopolitical risks. There are increasing concerns about a potential Chinese invasion of Taiwan as Beijing has said they have intentions to annex Taiwan by force if necessary. Additionally, President-elect Trump has suggested that Taiwan should contribute more to its own defense, adding to the geopolitical uncertainty.

Bottom Performer - AMN Healthcare Services, Inc. (NYSE: AMN): AMN Healthcare stock closed down 68.06% in 2024 down 68.06. The company initially saw significant demand for travel nurse staffing due to pandemic-induced shortages, which contributed to a 180% from its pandemic low to an all-time high in 2022. However, staffing shortages have begun to resolve, causing nurse-related revenue to decline by 37% in Q3 2024. AMN has also encountered difficulties with its international nurse business, particularly due to visa retrogression issues. In addition to these challenges, AMN's Technology and Workforce Solutions division reported an 11% year-over-year revenue decline, primarily driven by a 34% drop in system revenue for its vendor management product, which is facing increasing competition. These headwinds and other operational challenges have led to a significant decrease in revenue and margins, resulting in an 87% drop in net income compared to the previous year for the 3rd quarter of 2024. Looking ahead, analysts expect another down year, with revenue and earnings forecasted to decline further before demand stabilizes and begins to pick up in 2026, paving the way for potential growth. The pitch team identified three key thesis points for the company: "long-term union disruption," "evolving healthcare professionals' workstyle preferences," and "a tech & software-driven future for healthcare." The critical question remains whether the company's rapid pandemic-era growth and these three theses will continue to hold in a post-COVID world.

Industry Diversification

TAMID's Fund includes a diverse variety of industries to represent a tailored snapshot of the market, with specific weightings towards sectors for which PMC has bullish expectations.

Figure 1.2 – Portfolio Positions and Industry Mix

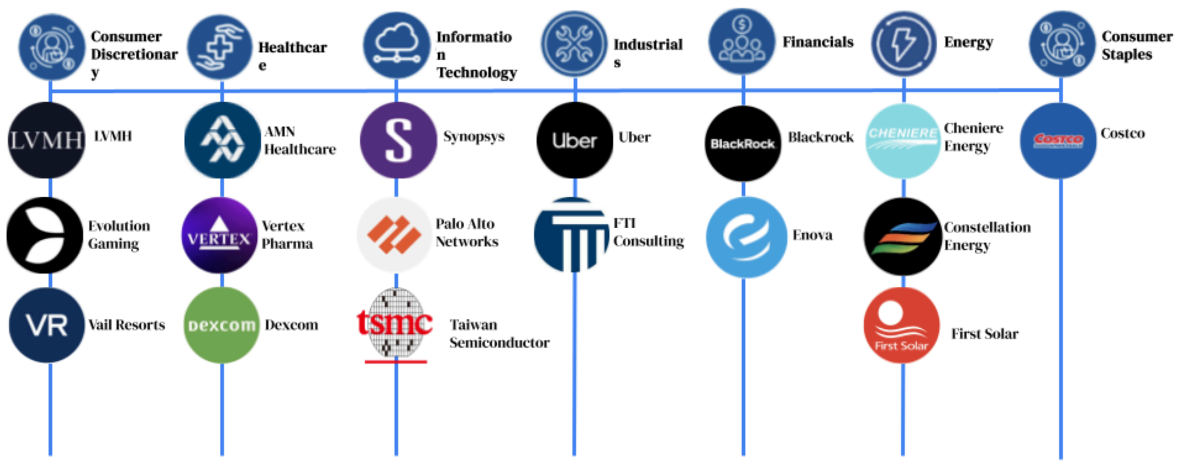
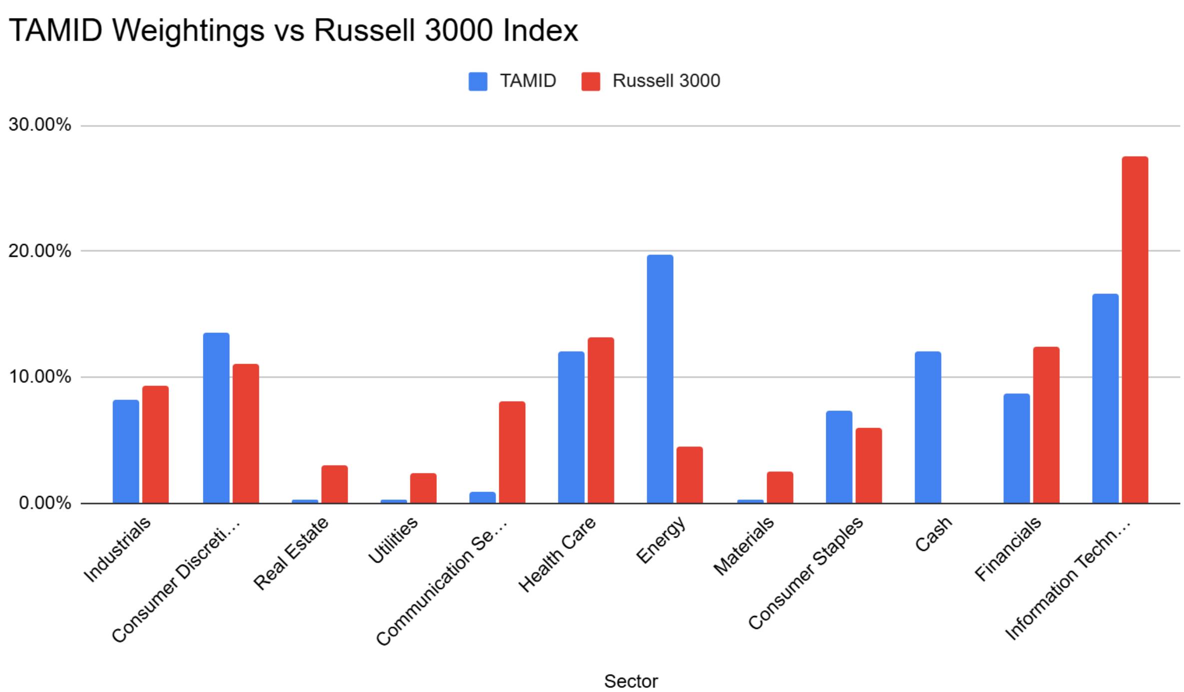


Figure 1.3 – TAMID Industry Mix vs Russell 3000



Future Plans

The Portfolio Management Committee remains integral to the success of TAMID at Michigan's fund. We will continue to diligently evaluate our current holdings and proposed additions to the portfolio. Each new pitch will be analyzed based on its thesis, model, and fit within the overall needs of the portfolio. As we look ahead, we welcome any additional recommendations from members and alumni. If you have any questions or concerns, feel free to contact either of the names listed below:

Sincerely,
Ian Weinberg, PMC Research Analyst (ijw@umich.edu)
Boaz Edidin, Director of Fund (bedidin@umich.edu)
Elliot Saye, Director of Fund (esaye@umich.edu)
Adam Nathan, PMC Chair (anathanj@umich.edu)