

Utilities Sector Report Ethan Wolfe Investment Management Program 2024 Spring Semester



Introduction

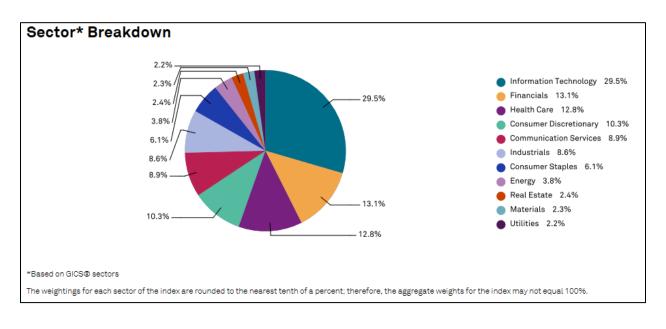
The utilities sector holds vital importance in the global economy, encompassing entities which provide essential services like electricity, water, and gas. The utilities sector's significance lies in its foundational role, supporting the basic needs of households, businesses, and industries. This sector analysis report contains a comprehensive examination of the utilities sector, exploring its size, historical performance, and financial indicators. This research aims to inform decisions related to sector allocation and investment choices, recognizing the role utilities play in sustaining economic activities.

Wisman Fund Current Holdings

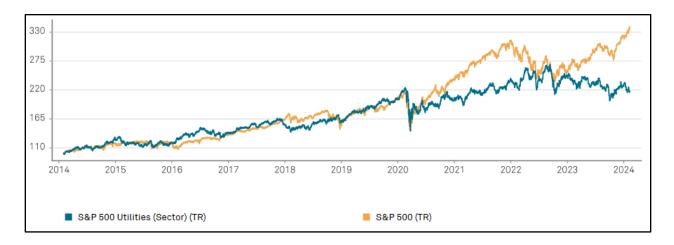
Brookfield Renewable Partners LP (BEP), NextEra Energy, Inc. (NEE), Public Service Enterprise Group Inc. (PEG)

Size and Comparison

As of January 31, 2024, the utilities sector accounts for 2.2% of the S&P 500 index's market capitalization (see the figure below), 30 different companies. The Wisman Fund weighs the utilities sector at 1.7%. The total market capitalization of the utilities sector is \$910.2 billion.



Historical Performance



The above graph shows the sector's 10-year underperformance compared to the S&P 500. The sector maintained equal or better performance relative to the S&P 500 up until 2020's sharp decline. Since this dip, the sector has lagged the index, at times by a wide margin.

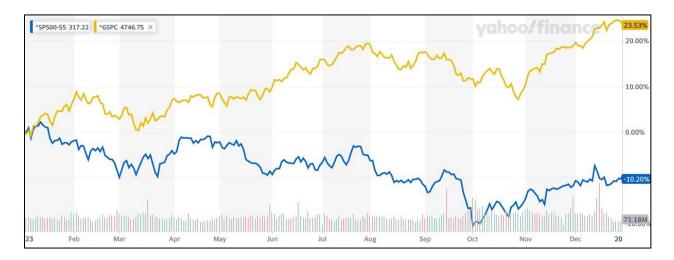
Composition of Utilities Sector

The utilities sector is made up of 5 different industries: electric utilities, gas utilities, multiutilities, water utilities, and independent power and renewable electricity producers. The top ten utility companies by weight in the S&P 500 index are found in the list below. These top constituents make up over 58% of the utilities sector. The Wisman Fund contains one of the top weighted stocks (NextEra Energy, Inc; NEE) and one additional company in the S&P 500 utilities sector (Public Service Enterprise Group Incorporated; PEG).

Ticker	Name	Sector Weight	Market Cap
NEE	NextEra Energy, Inc.	12.73%	116.54B
SO	The Southern Company	8.06%	73.85B
DUK	Duke Energy Corporation	7.81%	71.49B
SRE	Sempra	4.95%	45.29B
AEP	American Electric Power Company, Inc.	4.74%	43.36B
CEG	Constellation Energy Corporation	4.67%	42.74B
D	Dominion Energy, Inc.	4.37%	40.05B
PCG	PG&E Corporation	3.97%	36.33B
EXC	Exelon Corporation	3.93%	35.97B
XEL	Xcel Energy Inc.	3.58%	32.74B

2023 Price Returns

As of December 31st, 2023, 1-year returns for the utilities sector in the S&P 500 saw a decline of 10.20% beginning on January 1st, 2023. Whereas the S&P 500 saw a staggering 23.53% increase over the past year. The utilities sector in the Wisman Fund accounts for 1.7% of the portfolio and has provided an overall weighted 1-year return of -0.11%. The graph below shows the overall performance data from January 1st, 2023, to December 31st, 2023. This illustrates the underperformance of the sector in terms of 1-year returns compared to the S&P 500 index. (*^GSPC is the S&P 500 index ticker symbol*, *^SP500-55 is the utilities sector ticker symbol*)



YTD Price Returns

Utilities has continued to underperform the S&P 500 since the beginning of 2024. YTD returns for the utilities sector in the S&P 500 saw a decline at -2.60%, whereas the S&P 500 has seen growth of 6.70% since the beginning of 2024.



Industry Returns

The table below displays one-year returns for each industry within the utilities sector (as of 02/24/2024). As shown, the independent power and renewable electicity producers industry saw the weakest performance, with negative growth at -36.98%. By contrast, the strongest industry was gas utilities with negative growth of only -2.49%.

Industry	1 year return			
Electric Utilities	-5.91%			
Gas Utilities	-2.49%			
Independent Power and Renewable Electricity Producers	-36.98%			
Multi-Utilities	-8.49%			
Water Utilities	-18.90%			
*1-year return as of February 24 th , 2024				

The Wisman Fund

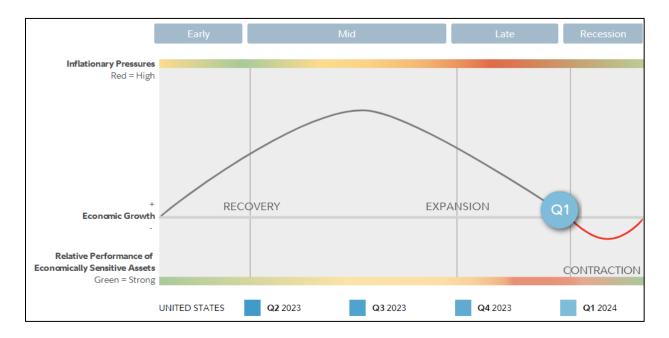
Wisman Fund holdings within the utilities sector have varied in performance. Two owned securites had small positive returns throughout 2023, while one had large negative returns. No securities owned within the utilities sector outperformed the S&P 500 index.



Business Analysis

Economic Cycle

According to Fidelity, the US economy is in a late stage growth phase of the economic cycle (see graph below).



The late expansion stage of the economy is characterized by robust growth, low unemployment, and heightened business activity. During this phase, inflation may rise, leading central banks to tighten monetary policy. While asset prices tend to increase, the late expansion stage sets the stage for an eventual economic slowdown or contraction, emphasizing the need to monitor key indicators closely.

Business Cycle

As seen to the right, the utilities sector performs best during late expansionary and contractionary economic periods. Utility securities typically offer high dividends and slow nominal growth, making them attractive to investors seeking consistent streams of income during times when bonds do not provide desired returns.

Sector	Early	Mid	Late	Recession
Financials	+			_
Real Estate	+ +	-	+	
Cons. Disc.	+ +			
Info Tech.	+	+	_	
Industrials	+ +			
Materials	+			_
Cons. Stap.		_	+	+ +
Health Care				+ +
Energy			+ +	
Comm. Serv.		+		—
Utilities		_	+	+ +

Utilities Sector in the Economy

The utilities sector plays a crucial role in the economy by providing essential services such as electricity, water, and gas. These services are foundational to both residential and industrial activities, supporting households, businesses, and various industries. The sector's investments in infrastructure and technology contribute to overall economic development, while its performance is often influenced by regulatory frameworks that aim to balance affordability, sustainability, and reliability in service provision.

Relationship with the Economy

The companies in the utilities sector have business models which are largely resistant to economic swings. This is due to the nature of their services; consumers continue to pay for utilities even during economic downturns. Despite this, the sector still shows price returns which are somewhat correlated with the market.

SWOT Analysis: Utilities Sector

- <u>Strengths</u> (Internal):
 - *Steady Demand:* Utilities provide essential services that have a constand demand regardless of economic condititions, leading to a stable revenue stream
 - *Regulated Environment:* Many utilities operate in a regulated environment, which can provide a level of stability and predictability in terms of pricing and operations
 - Infrastructure Investments: Ongoing infrastructure investments in the utilities sector contribute to improved efficiency, reliability, and technological advancements
- <u>W</u>eaknesses (Internal):
 - *Regulatory Compliance:* Strict regulations can be a challenge, as compliance may require significant investments, affecting profitability
 - *Aging Infrastructure:* Some utilities face challenges with aging infrastructure, leading to increased maintenance costs and potential service disruptions
 - *Environmental Impact:* Traditional utilities may face criticism for their environmental impact leading to pressure for cleaner and more sustainable practices
- <u>Opportunities (External)</u>:
 - *Renewable Engery Growth:* The shift twoards renewable energy sources presenets opportunites for utilities o invest in and provide cleaner, more sustainable services
 - *Global Expansion:* Some utilities may find opportunities for global expansion, especially in regions with growing populations and increasing energy needs
 - *Energy Storage Solutions:* Developing and implementing effective energy storage solutions can help manage fluctuations in energy supply and demand

- <u>**T**</u>hreats (External):
 - *Economic Downturns:* Economic downturns can impact industrial and commercial energy demand, affecting the financial performance of utility companies
 - *Political and Regulatory Changes:* Changes in government policies or regulations can impact the operating environemnt for utilities, potaentially affecting pricing structures and profitability
 - *Competition from Renewable Sources:* The growing popularity of renewable energy sources poses a threat to traditional utilities that are slow to adapt or invest in cleaner technologies

Economic Analysis

This economic analysis will consider important factors like PCE Inflation, Unemployment, the FED interest rate and monetary policy.

- *Inflation:* The PCE (Personal Consumption Expenditures) inflation rate is at 2.8%, which is above the Federal Reserve's target of 2%, but lower than the 3.3% projection. This indicates that there is currently elevated inflation in the economy. The FED acknowledges this and expresses its commitment to returning inflation to its 2% objective.
- *Unemployment:* The unemployment rate is at 3.8%. This suggests a very tight labor market with low levels of unemployment, which is typically associated with a strong job market.
- *Economic Activity:* The Federal Reserve indicates that economic activity has been expanding at a solid pace. This is a positive sign for the overall health of the economy, although it mentions that job gains have slowed in recent months. Despite this slowdown, the job market remains strong. 2023 percent change in GDP was well above the September projection.
- *Monetary Policy:* The Federal Reserve has decided to maintain the target range for the federal funds rate at 5-1/4 to 5-1/2 percent. This suggests that the FED is holding interest rates steady at a relatively high level, likely to combat inflation. The Fed also mentions its commitment to reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, which is a part of its strategy to normalize its balance sheet.
- *Uncertainty:* The FED acknowledges uncertainty regarding the effects of tighter credit conditions on economic activity, hiring, and inflation. This uncertainty suggests that the central bank is closely monitoring economic developments and may adjust its monetary policy as needed.

The table below acknowledges changes, and projections in real GDP, unemployment, PCE inflation and core PCE inflation.

Percent															
	Median ¹			Central Tendency ²			Range ³								
Variable	2023	2024	2025	2026	Longer run	2023	2024	2025	2026	Longer run	2023	2024	2025	2026	Longer run
Change in real GDP September projection	2.6 2.1	1.4 1.5	1.8 1.8	1.9 1.8	1.8 1.8	2.5-2.7 1.9-2.2	1.2-1.7 1.2-1.8	1.5-2.0 1.6-2.0		1.7-2.0 1.7-2.0	2.5-2.7 1.8-2.6	0.8-2.5 0.4-2.5	1.4-2.5 1.4-2.5		1.6-2.5 1.6-2.5
Unemployment rate September projection	3.8 3.8	4.1 4.1	4.1 4.1	$\frac{4.1}{4.0}$	4.1 4.0	3.8 3.7–3.9	4.0-4.2 3.9-4.4	4.0-4.2 3.9-4.3		3.8–4.3 3.8–4.3	3.7–4.0 3.7–4.0	3.9 - 4.5 3.7 - 4.5	3.8 - 4.7 3.7 - 4.7	3.8 - 4.7 3.7 - 4.5	3.5-4.3 3.5-4.3
PCE inflation September projection	2.8 3.3	$2.4 \\ 2.5$	$2.1 \\ 2.2$	$2.0 \\ 2.0$	2.0 2.0	2.7 - 2.9 3.2 - 3.4	2.2-2.5 2.3-2.7	2.0-2.2 2.0-2.3	2.0 2.0-2.2	2.0 2.0	2.7 - 3.2 3.1 - 3.8	2.1-2.7 2.1-3.5	2.0-2.5 2.0-2.9	2.0-2.3 2.0-2.7	2.0 2.0
Core PCE inflation ⁴ September projection	3.2 3.7	$2.4 \\ 2.6$	2.2 2.3	$2.0 \\ 2.0$		3.2 - 3.3 3.6 - 3.9	2.4 - 2.7 2.5 - 2.8	2.0-2.2 2.0-2.4	2.0-2.1 2.0-2.3		3.2 - 3.7 3.5 - 4.2	2.3 - 3.0 2.3 - 3.6	2.0-2.6 2.0-3.0	2.0-2.3 2.0-2.9	
Memo: Projected appropriate policy path															
Federal funds rate September projection	$5.4 \\ 5.6$	$\frac{4.6}{5.1}$	3.6 3.9	2.9 2.9	2.5 2.5	$5.4 \\ 5.4 - 5.6$	4.4 - 4.9 4.6 - 5.4	3.1 - 3.9 3.4 - 4.9		2.5 - 3.0 2.5 - 3.3	$5.4 \\ 5.4 - 5.6$	3.9 - 5.4 4.4 - 6.1	2.4 - 5.4 2.6 - 5.6	2.4 - 4.9 2.4 - 4.9	

Financial Analysis

These financial fundamentals are used together to assess the financial health and performance of a company. Analysts often consider them alongside other metrics, industry benchmarks, and qualitative factors to form a comprehensive view of a company's financial situation and prospects. It's important to note that the interpretation of these metrics can vary depending on the industry, company size, and economic conditions, so they should be analyzed in context.

Financial Fundamentals

Factors of Interest:

- *ROE:* a financial ratio that shows how much net income a company generates per dollar of invested capital. It helps investors understand how efficiently a firm uses its money to generate profit.
- *EPS Growth Rate:* the net income generated in a given period as allocated to each common share outstanding.
- *ROA:* measures how efficient a company's management is in generating profit from their total assets on their balance sheet.
- *Profit Margin:* represents the portion of a company's sales revenue that it gets to keep as a profit, after subtracting all its costs.

Fundamental	S&P 500	Utilities Sector
ROE	23.24%	15.72%
EPS Growth Rate	3.20%	26.39%
ROA	4.44%	3.80%
Net Profit Margin	10.70%	11.66%

The S&P 500 outperforms the utilities sector in terms of ROE and ROA. However, it lags in terms of EPS Growth Rate and Net Profit Margin.

<u>Major Companies</u>

Fundamental	NextEra Energy, Inc. (NEE)	The Southern Company (SO)	Duke Energy Corporation (DUK)
ROE	16.86%	12.86%	5.79%
EPS Growth Rate	71.43%	11.04%	-
ROA	4.35%	2.90%	1.54%
Net Profit Margin	26.00%	15.74%	9.41%

These major companies in the S&P 500 index utilities sector have mixed fundamentals compared to the market and their sector. NextEra Energy, Inc. has more attractive fundamentals than those of the market.

Valuation Analysis

Valuation ratios, including metrics like the P/E ratio, P/B ratio, P/S ratio and DY play a crucial role in evaluating a company's worth. These ratios are evaluated in conjunction with other financial indicators, industry benchmarks, and qualitative factors to develop a comprehensive understanding of a company's financial standing and future potential.

Ratios of Interest:

- *P/E:* a way to value a company by comparing the price of a stock to its earnings.
- *P/B:* measures the market's valuation of a company relative to its book value.
- *P/S:* an investment valuation ratio that shows a company's market capitalization divided by the company's sales for the previous 12 months.
- *DY:* a financial ratio that tells you the percentage of a company's share price that it pays out in dividends each year.

	S&P 500	Utilities Sector
P/E	23.27	18.82
P/B	4.04	1.77
P/S	2.33	2.01
Dividend Yield	2.06%	3.12%

Based on these financial ratios, the utilities sector appears to be undervalued compared the the S&P 500 index. All three price-to-earnings, price-to-book, and price-to-sales are lower relative to the index. Additionally, the dividend yield of the utilities sector is higher than that of the S&P 500. This supports the assumption that investors view utilities as a source of stable income generation.

<u>Major Companies</u>

Fundamental	NextEra Energy, Inc. (NEE)	The Southern Company (SO)	Duke Energy Corporation (DUK)
P/E	15.71	18.56	17.15
P/B	2.46	2.35	1.52
P/S	4.10	2.94	2.46
Dividend Yield	3.63%	4.14%	4.42%

These companies show an undervaluation relative to the market and sector.

Current Holdings Trialing Returns

Why Trailing Returns?

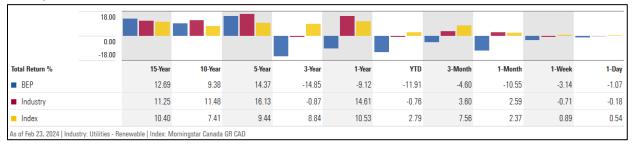
Trailing returns on an absolute basis can give you an idea of how much an investment has grown on a nominal basis, which can be compared to the benchmark. Trailing returns relative to a benchmark can tell you if an investment has outperformed or underperformed the benchmark over the measured time horizon.

NextEra Energy, Inc (NEE)



NextEra Energy has seen poor performance the past three years, but has positive returns when looking back as little as five years. It has had slightly positive returns the past three months.

Brookfield Renewable Partners LP (BEP)



Like NEE, Brookfield Renewable Partners has seen poor performance for the past three years but has seen positive returns over the course of the past five years.



Public Service Enterprise Group (PEG)

Public Service Enterprise Group has performed the best recently out of the Wisman Fund's utilities securities. However, it has still seen negative growth the past year, which is in line with the sector.

Recommendation

Based on the current market conditions and historical performance, we recommend the following actions regarding the Wisman Fund's allocation within the utilities sector:

Underweight Utilities Sector

Considering the bond-proxy nature of the sector, the economic outlook, historical data, current financial data, and the SWOT analysis, the utilities sector should be **underweighted**. The weight of the utilities sector in the S&P 500 index as of January 31st, 2024, was 2.2%. Adjusting the Wisman Fund's holdings to match this weight would be a 0.5% adjustment (~\$1,500). Due to the sector's poor historical performance, it is recommended that the IMP group weights the sector under the market's weight. Despite this recommendation, several economic factors indicate that the US economy will enter a contractionary period some time in the second half of 2024. Gaining exposure to stable, high-dividend, defensive securities within the utilities sector could reduce the negative impact of any economic downturn, should it occur.

The Wisman Fund Current Holdings

Considering the underweight recommendation, it is crucial to look at the current holdings to understand what, if any, changes should be made. The information regarding these stocks can be found below.

	NextEra Energy, Inc. (NEE)	Brookfield Renewable Partners LP (BEP)	Public Service Enterprise Group Inc. (PEG)
YTD Return	-6.50%	-11.90%	-0.70%
Holding Return	-26.10%	-35.40%	83.10%
Total Time Held (Years)	0.75	3.25	10.17
Portfolio Weight	0.48%	0.17%	0.88%
Sector Weight	33.20%	11.86%	55.93%
Market Cap (Size)	\$116.537B	\$15.344B	\$30.273B

Historically, the utilities stocks in the Wisman Fund have not performed to the standard of the benchmark. While Public Service Enterprise Group has a positive return, it has averaged lower returns than the market has. NextEra stands out with its particularly impressive negative returns in a short period of time. Brookfield Renewable Partners is between the two, still underperforming the market. Overall, these holdings have not been particularly productive assets for the Wisman Fund.

Sources

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