Project Checkpoint A: Research Report

Stable Growth Consumer Staples ETF

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Introduction

This project aims to develop an actively managed ETF, called the Stable Growth Consumer Staples ETF (SGCS), that targets steady capital appreciation with lower downside risk by actively managing allocations between large-cap U.S. consumer staples stocks and cash equivalents.

The SGCS ETF would likely appeal to investors who want stability, income, and capital preservation rather than aggressive growth. This ETF would be an excellent option for large institutional investors seeking steadier returns such as pensions or endowments as a core defensive position. Likewise, this ETF would be a similarly sufficient option for conservative individual investors such as retirees or near-retirees that are looking for funds that preserve wealth during market downturns.

The applications that support this ETF will utilize equity data sourced from Yahoo! Finance [1] as well as economic indicators from the Federal Reserve Economic Data (FRED) [2] to train machine learning models that direct equity buys, sells, or cash holds.

Literature Review

There are several companies that offer consumer staples ETFs [3] [4] [5]:

State Street	Consumer Staples Select Sector SPDR Fund (XLP)	~16 billion AUM
Vanguard	Vanguard Consumer Staples ETF (VDC)	~9 billion AUM
BlackRock	iShares U.S. Consumer Staples ETF (IYK)	~1 billion AUM

Each of these ETFs have a similar focus on large-cap U.S. consumer staples equities, however, they are all passively managed with quarterly rebalancing. This leaves them vulnerable to quickly evolving market conditions that may significantly decrease the value of the underlying equities.

Methods

The application that actively manages this ETF will be supported by several engineered features used to train a machine learning model that indicates how to reallocate assets at the end of each trading day. The features will be developed based on several key economic indicators sourced from FRED such as GDP growth, inflation, and unemployment. The data will then be utilized to train a suite of machine learning models such as Logistic Regression, XGBoost, and/or Random Forest. Then, based on how these models predict each equity will perform in the following trading day, the portfolio may be rebalanced between equities and cash to gain the most at minimal risk.

Results

At this point, I have set up my environment for future development as well as gained access to the data with which I plan to work with including ticker data from Yahoo! Finance and FRED. I have also performed simple exploratory data analysis on the ingested data to gain an initial understanding of the data.

Conclusions

My short-term goal is to develop robust features that can positively influence the model's predictive ability to determine next-day equity performance. I believe that this will likely be the most intensive part of the project. Following feature development, I plan to approach the problem with several models to compare their performance and select the best performing ones for allocation use.

References

[1] “Yahoo Finance - Stock Market Live, Quotes, Business & Finance News.” Yahoo! Finance. Accessed October 12, 2025. https://finance.yahoo.com/.

[2] “Fred Economic Data.” FRED. Accessed October 12, 2025. https://fred.stlouisfed.org/.

[3] “XLP: The Consumer Staples Select Sector SPDR® Fund.” State Street Investment Management. Accessed October 12, 2025. https://www.ssga.com/us/en/intermediary/etfs/the-consumer-staples-select-sector-spdr-fund-xlp.

[4] “VDC-Vanguard Consumer Staples ETF.” Vanguard. Accessed October 12, 2025. https://investor.vanguard.com/investment-products/etfs/profile/vdc.

[5] “Ishares U.S. Consumer Staples ETF: IYK.” BlackRock. Accessed October 12, 2025. https://www.ishares.com/us/products/239505/ishares-us-consumer-staples-etf.