Healthcare

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Part I Introduction & Dataset

2000 - 2019

Large developments in the field.

Socio-political importance.

Excludes COVID-19 pandemic outliers.

Variables Considered & Discarded

Initial Variables:

Macroeconomic: GDP growth, Inflation rate, Industrial production, population growth, Unemployment rate, Interest rates.

Financial: S&P 500, 10 Year Bond, US Dollar Index, NASDAQ Composite, Oil Price, Gold Price.

Discarded Due to High Correlation:

Industrial production, Population growth, S&P 500, 10 Year Bond, NASDAQ Composite, Oil, Gold price.

Part I Model Analysis & Conclusions

Monthly vs. Annual Returns:

Similar variables; difference in coefficient scaling.

Significant: GDP Growth, Inflation Rate, Unemployment, Interest Rates.

Satisfied assumptions of linearity, independence of errors, normality of errors.

Model does make economic sense.

Ex: GDP, inflation rates rises, stock price rises .

Part II Variables

Variables seem predict the return: Interest Rates; Inflation

Discard variables : Industrial production, US dollar, unemployment, population growth, S&P500, and 10 year bond, NASDAQ Composite, Oil and Gold price.

The variables that explain both monthly and annual returns are similar, and the models are highly significant.

Unemployment, Interest Rates and US Dollar Index, these three variables have significant coefficients(p-values < 0.05).

R^2 is 0.643, explaining a substantial portion of the variation in our sector's excess returns.

Part II Recommendation

Recommendation : buy

Reasons:

1. Unemployment decreased, the unemployment rate and the returns of the healthcare industry are correlated.

2. Interest rate declines, indicating that borrowing money is becoming cheaper. This may promote the development of economy, hence the prosperous of healthcare industry.