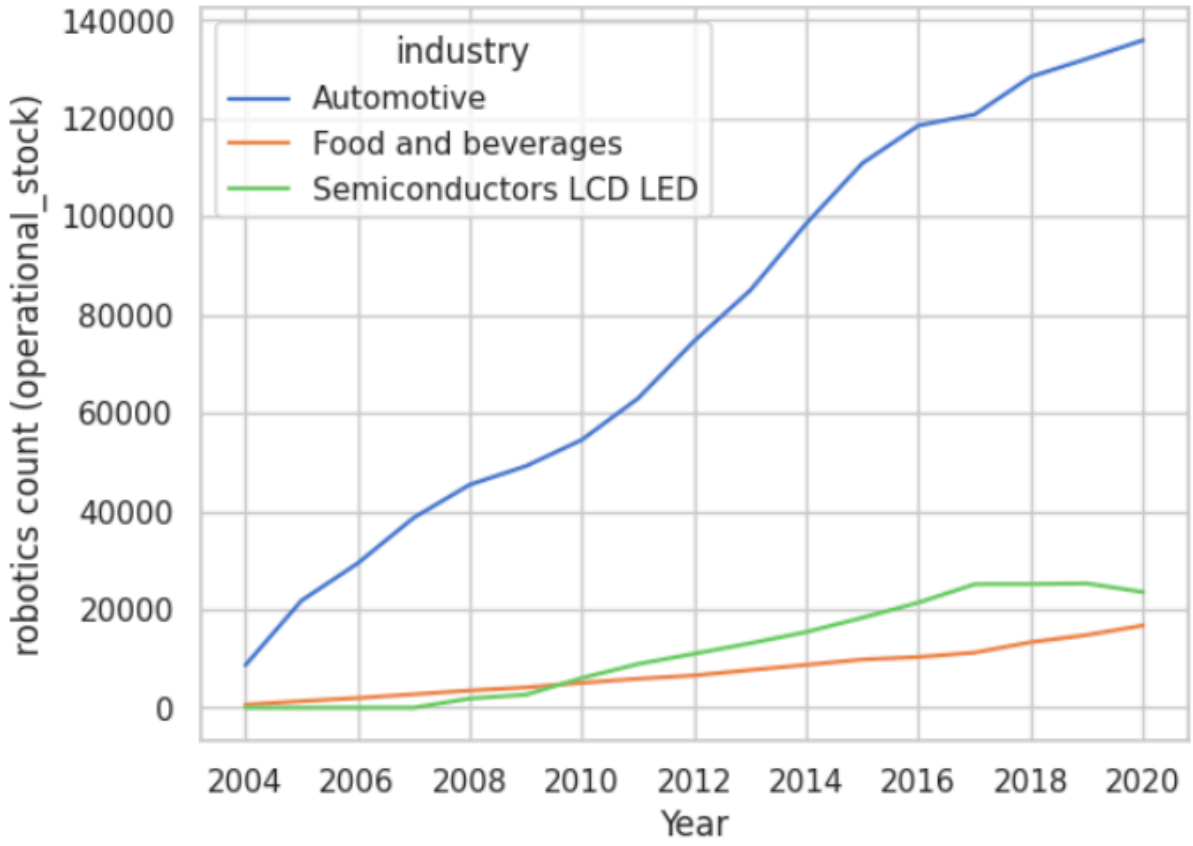
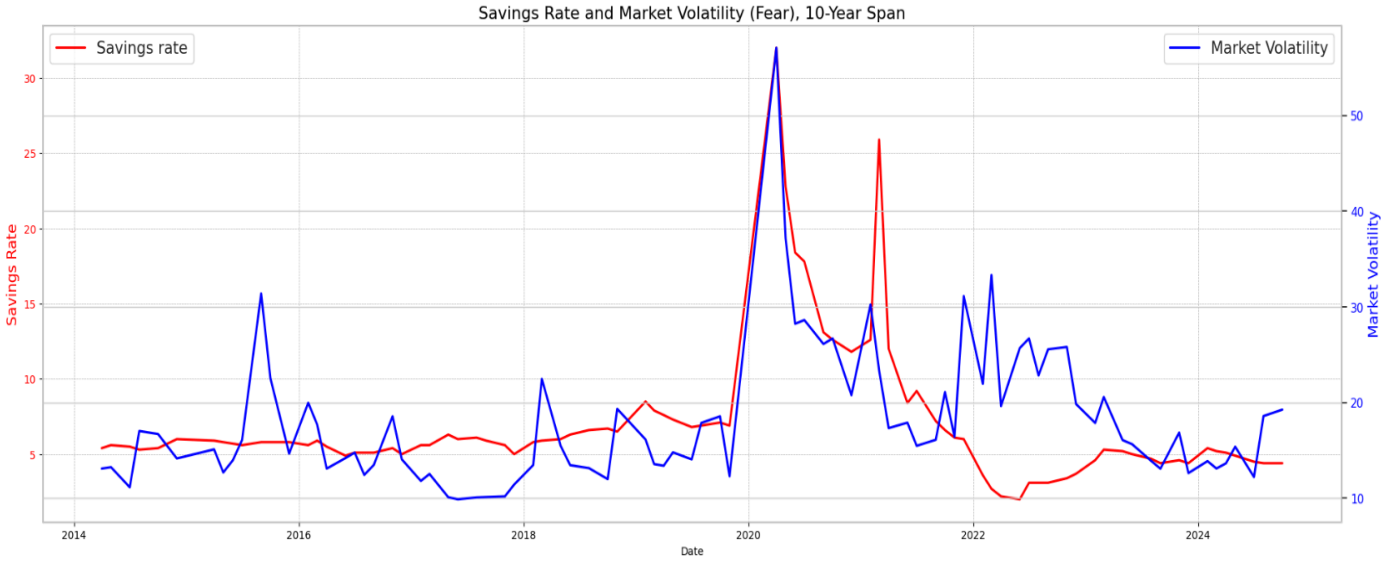

industry
Automotive
Food and beverages
Semiconductors LCD LED
robotics count (operational_stock)
140000
120000
100000
80000
60000
40000
20000
0
2004
2006
2008
2010
2012
2014
2016
2018
2020
Year


Savings Rate and Market Volatility (Fear), 10-Year Span
Savings rate
Market Volatility
Savings Rate
Market Volatility
Date
2014
2016
2018
2020
2022
2024

```
model = smf.ols("np.log(robotics)~ np.log(volatility)", data = merged).fit() # f
print(model.summary()) #check summary stats
```

```
                            OLS Regression Results
==============================================================================
Dep. Variable:       np.log(robotics)   R-squared:                       0.000
Model:                            OLS   Adj. R-squared:                 -0.066
Method:                 Least Squares   F-statistic:                  0.004381
Date:                Sun, 15 Dec 2024   Prob (F-statistic):              0.948
Time:                        21:07:17   Log-Likelihood:                -9.8824
No. Observations:                  17   AIC:                             23.76
Df Residuals:                      15   BIC:                             25.43
Df Model:                           1
Covariance Type:            nonrobust
==========================================================================================
                             coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------------------
Intercept                  9.1697      1.026      8.938      0.000       6.983      11.356
np.log(volatility)        -0.0234      0.354     -0.066      0.948      -0.777       0.730
==============================================================================
Omnibus:                        1.020   Durbin-Watson:                   0.058
Prob(Omnibus):                  0.601   Jarque-Bera (JB):                0.890
Skew:                          -0.351   Prob(JB):                        0.641
Kurtosis:                       2.125   Cond. No.                         29.8
==============================================================================
```

Price	Adj Close	Close	High	Low	Open	Volume
Ticker	^VIX	^VIX	^VIX	^VIX	^VIX	^VIX
Date						
2004-01-02	18.219999	18.219999	18.68	17.540001	17.959999	0
2004-01-05	17.490000	17.490000	18.49	17.440001	18.450001	0
2004-01-06	16.730000	16.730000	17.67	16.190001	17.660000	0
2004-01-07	15.500000	15.500000	16.75	15.500000	16.719999	0
2004-01-08	15.610000	15.610000	15.68	15.320000	15.420000	0