

# AnalyzeSP1500

June 10, 2022

```
[ ]: import pandas as pd
import os
import sqlite3
import numpy as np
import matplotlib.pyplot as plt
from datetime import datetime
from scipy import stats
import matplotlib
from matplotlib.dates import DateFormatter
import matplotlib.dates as md
import datetime as dt
from pivottablejs import pivot_ui
from IPython.display import HTML
import seaborn as sns
#import qgrid
#import ipywidgets as widgets
```

```
[ ]: def time_to_int(dateobj):
    total = int(dateobj.strftime('%S'))
    total += int(dateobj.strftime('%M')) * 60
    total += int(dateobj.strftime('%H')) * 60 * 60
    total += (int(dateobj.strftime('%j')) - 1) * 60 * 60 * 24
    total += (int(dateobj.strftime('%Y')) - 1970) * 60 * 60 * 24 * 365
    return total

def myfunc(x):
    return slope * x + intercept
```

```
[ ]: db_filename = 'todo.db'

db_is_new = not os.path.exists(db_filename)

conn = sqlite3.connect(db_filename)

if db_is_new:
    print('Need to create schema')
else:
```

```

    print('Database exists, assume schema does, too.')

conn.close()

```

```

[ ]: prices = pd.read_excel('SP1500_screener_multiple.
    ↪xlsx',sheet_name="SP1500_Sectors_Indexes_Prices")

```

```

[ ]: stock_fundamentals = pd.read_excel('SP1500_screener_multiple.
    ↪xlsx',sheet_name="Stock_Fundamentals")

```

```

[ ]: print(stock_fundamentals.set_index(stock_fundamentals.iloc[:, 0]).index)

```

```

[ ]:

```

```

[ ]:

```

```

[ ]: #stock_fundamentals[stock_fundamentals.set_index(stock_fundamentals.iloc[:, 0]).
    ↪index=='VOX']

```

```

[ ]: #prices[prices['Symbol']=='VOX'].set_index('Date')

```

```

[ ]: #plt.plot(prices[prices['Symbol']=='VOX'].set_index('Date')['Adj Close'])

```

```

[ ]: screener = pd.read_excel('SP1500_screener_multiple.xlsx',sheet_name="Screener")

```

```

[ ]: #screener.set_index('Symbol').loc['BA']

```

```

[ ]: fundamentals = pd.read_excel('SP1500_screener_multiple.
    ↪xlsx',sheet_name="Stock_Fundamentals")
    fundamentals.set_index(fundamentals.columns[0],inplace=True)

```

```

[ ]:

```

```

[ ]: stock_indexes = pd.read_excel('SP1500_screener_multiple.
    ↪xlsx',sheet_name="SP1500")
    stock_indexes.drop(stock_indexes.columns[0], axis=1, inplace=True)
    stock_indexes.set_index(stock_indexes.columns[0],inplace=True)
    stock_indexes

```

```

[ ]: spdr_indexes = pd.read_excel('SP1500_screener_multiple.
    ↪xlsx',sheet_name="spdr_indexes")
    #vanguard_sectors.drop(vanguard_sectors.columns[0], axis=1, inplace=True)
    spdr_indexes.set_index(spdr_indexes.columns[0],inplace=True)
    spdr_indexes.columns=['Symbol']
    spdr_indexes

```

```
[ ]: vanguard_sectors = pd.read_excel('SP1500_screener_multiple.
↳xlsx',sheet_name="vanguard_sectors")
#vanguard_sectors.drop(vanguard_sectors.columns[0], axis=1, inplace=True)
vanguard_sectors.set_index(vanguard_sectors.columns[0],inplace=True)
vanguard_sectors.columns=['Symbol']
vanguard_sectors

[ ]:

[ ]:

[ ]: #[*spdr_indexes['Symbol'],*vanguard_sectors['Symbol']]

[ ]:

[ ]: sector_performance_return = pd.DataFrame()

for v in [*spdr_indexes['Symbol'],*vanguard_sectors['Symbol']]:
    subset = prices[prices['Symbol'] == v]
    subset_ = subset.set_index('Date').asfreq('Q')[['Adj Close']].pct_change()
    subset_.index = subset_.index.values.astype('M8[D]')
    dt_str = subset_.index[-1].strftime('%Y-%m-%d')
    tail = subset[subset.set_index('Date').index>=dt_str]
    dt_str = subset.set_index('Date').index[-1].strftime('%Y-%m-%d')
    tail_ = pd.DataFrame([(tail.set_index('Date')[ 'Adj Close' ][-1]-tail.
↳set_index('Date')[ 'Adj Close' ][0])/tail.set_index('Date')[ 'Adj_
↳Close' ][0]],index=[datetime.strptime(dt_str, '%Y-%m-%d')],columns=['Adj_
↳Close'])
    subset__ = pd.concat([subset_,tail_],axis=0)
    sector_performance_return = pd.
↳concat([sector_performance_return,subset__],axis=1)

[ ]: sector_performance_return

[ ]: sector_performance_return.columns = [*[i for i in spdr_indexes.index],*[v for v in
↳vanguard_sectors.index]]
sector_performance_return = sector_performance_return.T

[ ]: cm = sns.color_palette("blend:red,yellow,green", as_cmap=True)

sector_performance_return.style.background_gradient(cmap = cm,axis=1)

[ ]:

[ ]: sector_performance_return

[ ]:
```

```
[ ]: sector_performances = pd.DataFrame()
sector_performances_values = pd.DataFrame()
for c in sector_performance_return.columns:
    print(c)
    temp = pd.DataFrame(sector_performance_return[c].
↳sort_values(ascending=False).index,columns=[c])
    temp2 = pd.DataFrame(sector_performance_return[c].
↳sort_values(ascending=False),columns=[c])
    temp2.reset_index(drop=True,inplace=True)
    sector_performances = pd.concat([sector_performances,temp],axis=1)
    sector_performances_values = pd.
↳concat([sector_performances_values,temp2],axis=1)
    #print(sector_performance_return[c].sort_values(ascending=False))
sector_performances_values
```

```
[ ]:
```

```
[ ]: sector_performances = pd.DataFrame()
for c in sector_performance_return.columns:
    print(c)
    temp = pd.DataFrame(sector_performance_return[c].
↳sort_values(ascending=False).index,columns=[c])
    sector_performances = pd.concat([sector_performances,temp],axis=1)
    #print(sector_performance_return[c].sort_values(ascending=False))
```

```
[ ]:
```

```
[ ]: import matplotlib as mp
cycles_ = ['Expansion','Slowdown','Recession','Recovery']
from IPython.display import display
from PIL import Image

path=r"C:
↳\Users\User\Documents\wiki\wiki\dev\python\Python-Stock\reports\figures\Business_
↳cycles.png"
display(Image.open(path))

def b_g(s, cmap=cm, low=0, high=0):
    # Pass the columns from Dataframe A
    a = A.loc[:,s.name].copy()
    #rng = a.max() - a.min()
    rng = np.nanmax(A.values.ravel()) - np.nanmin(A.values.ravel())
    norm = mp.colors.Normalize(np.nanmin(A.values.ravel()) - (rng * low),
                               np.nanmax(A.values.ravel()) + (rng * high))
    normed = norm(a.values)
    #c = [mp.colors.rgb2hex(x) for x in plt.cm.get_cmap(cmap)(normed)]
    c = [mp.colors.rgb2hex(x) for x in plt.cm.get_cmap(cm)(normed)]
```

```

        return ['background-color: %s' % color for color in c]

A = sector_performances_values
B = sector_performances
df = B.style.apply(b_g,cmap='RdYlGn')
#sector_performances.style.background_gradient(cmap = cm,axis=1,)
df

```

```
[ ]:
```

```

[ ]: sector_performance = []
for v in vanguard_sectors['Symbol']:
    sector_performance.
    ↪append([v,screener[screener['Symbol']==v]['risk_trend_factor'].values[0]])
    #print([v,)

```

```

[ ]: temp_v = vanguard_sectors.reset_index()
temp_v.columns = ['Sector','Symbol']

```

```
[ ]:
```

```

[ ]: pd.DataFrame(sector_performance,columns=['Symbol','risk_trend_factor']).
    ↪merge(temp_v, on='Symbol', how='left').
    ↪sort_values(by='risk_trend_factor',ascending=False)

```

```
[ ]:
```

```
[ ]:
```

```

[ ]: for v in sector_performance_return.index:
    subset = pd.DataFrame(sector_performance_return.loc[v])
    subset.columns = ['Return']
    plt.plot(subset)
    plt.xticks(subset.index, rotation=45)
plt.legend(sector_performance_return.index,loc=2)
plt.show()

```

```
[ ]: sector_performance_return.T.iloc[-1].sort_values(ascending=False).index
```

```
[ ]: sector_performance_return
```

```

[ ]: sector_performance_return.T[sector_performance_return.T.iloc[-1].
    ↪sort_values(ascending=False).index].style.background_gradient(cmap =
    ↪cm,axis=None)

```

```
[ ]:
```

```

[ ]: #qgrid.show_grid(sector_dataset_pivot)

[ ]:

[ ]:

[ ]:

[ ]:

[ ]:

[ ]:

[ ]:

[ ]:

[ ]: threshold = .9875

[ ]:

[ ]: screener_good = screener[screener['risk_trend_factor'] != 'missing']

    risk_trend_threshold = screener_good['risk_trend_factor'].
        ↪ quantile(q=[threshold]).values[0]

[ ]: risk_trend_threshold

[ ]: stock_sectors = stock_fundamentals.set_index((stock_fundamentals.iloc[:,
        ↪ 0]))['sector']

[ ]:

[ ]: temp = stock_sectors.reset_index()
    temp.columns = ['Symbol', 'Sector']

[ ]:

[ ]: risk_screened =
    ↪ screener_good[screener_good['risk_trend_factor'] > risk_trend_threshold]
    risk_screened
    #left join sector
    risk_screened.merge(temp, on='Symbol', how='left')

[ ]: screener.columns

```

```
[ ]:
```

```
[ ]: """
above_1yearSDev =
    ↳ screener_good[screener_good['latest_p']>screener['mean_1y']+screener_good['std_1y']]['Symbol']
    ↳ values
above_2yearSDev =
    ↳ screener_good[screener_good['latest_p']>screener['mean_2y']+screener_good['std_2y']]['Symbol']
    ↳ values
above_yearsSDev = np.intersect1d(above_1yearSDev,above_2yearSDev)
"""
```

```
[ ]: #above_yearSDev
```

```
[ ]: """
above_2year_t = screener[screener['pct_2yr']>threshold]['Symbol'].values
above_1year_t = screener[screener['pct_1yr']>threshold]['Symbol'].values
above_years_t = np.intersect1d(above_2year_t,above_1year_t)
"""
```

```
[ ]: #above_years_t
```

```
[ ]: #above_combined = np.intersect1d(above_yearSDev,above_years_t)
```

```
[ ]: #above_combined
```

```
[ ]: #screened_final_set = np.intersect1d(risk_screened,above_combined)
```

```
[ ]: screened_final_set = risk_screened.set_index('Symbol')
#screened_final_set
```

```
[ ]:
```

```
[ ]:
```

```
[ ]:
```

```
[ ]: pd.DataFrame(screener.set_index(screener.iloc[:,0]).loc[s]).dropna().T
```

```
[ ]:
```

```
[ ]: #v_ = np.setdiff1d(np.setdiff1d(screened_final_set.index,temp_v['Symbol'].
    ↳ values),spdr_indexes.iloc[:,0].values)[0]
#stock_fundamentals.drop(stock_fundamentals.index[stock_fundamentals[''] == 0],
    ↳ inplace = True)
```

```
[ ]: #pivot_ui(prices, outfile_path='pivottablejs.html')
#HTML('pivottablejs.html')
```

```
[ ]: subset.columns
```

```
[ ]: import pickle
fundamentals_quarterlies = pickle.load(open('./fundamental.pkl', 'rb'))
```

```
[ ]: fundamental_entries = [e[0] for e in fundamentals_quarterlies]
```

```
[ ]: loc
```

```
[ ]:
```

```
[387]: #from matplotlib.pyplot import figure

#figure(figsize=(8, 8), dpi=80)

import matplotlib as mpl
import matplotlib.pyplot as plt
mpl.rcParams['figure.figsize'] = (8, 6)
mpl.rcParams['axes.grid'] = False

print("adf < .05 or .01, mean reverting")
print("Hurst")
print("> .5 - The time series is mean reverting.")
print("= .5 - The time series is a Geometric Brownian Motion.")
print("< .5 - The time series is trending.")

for s in np.setdiff1d(np.setdiff1d(screened_final_set.index,temp_v['Symbol'].
↪values),spdr_indexes.iloc[:,0].values):
    print(s)
    subset=prices[prices['Symbol']==s]

    if(np.sum(np.array(fundamental_entries)==s)>0):
        loc = np.where(np.array(fundamental_entries)==s)[0]
        for items in fundamentals_quarterlies[loc[0]]:
            display(items)

    dates = []
    for t in subset['Date'].values:
        d = pd.Timestamp(t).strftime('%Y-%m-%d')
        dates.append(d)
        dto = datetime.strptime(d, '%Y-%m-%d').date()
```



```

display(pd.DataFrame(screener.set_index(screener.iloc[:,0]).loc[s]).
↳dropna().
↳T[['volume_factor','latest_p','vol_30d_2yr','pct_2yr','adf','hurst']])
    #display(pd.DataFrame(stock_fundamentals.set_index(stock_fundamentals.iloc[:
↳,0]).loc[s]).dropna().T)
    temp = pd.DataFrame(stock_fundamentals.set_index(stock_fundamentals.iloc[:
↳,0]).loc[s])
    display(temp[np.array(temp!='error')].T)

old_ordinal = [datetime.strptime(i, '%Y-%m-%d').toordinal() for i in dates]
new_ordinal = old_ordinal + md.date2num(np.datetime64('0000-12-31'))
x = new_ordinal
y= subset['Adj Close']

slope, intercept, r, p, std_err = stats.linregress(x, y)

mymodel = list(map(myfunc, x))

fig, ax = plt.subplots()

msize = 2
plt.plot(x, y,marker = '.',markersize=msize)
plt.plot(x, subset['trailing_1yr_max'],marker = '.',markersize=msize)
plt.plot(x, subset['trailing_1yr_min'],marker = '.',markersize=msize)

plt.plot(x, subset['21dBOLD'],marker = '.',markersize=msize)
plt.plot(x, subset['21dBOLU'],marker = '.',markersize=msize)
plt.plot(x, subset['21dMA-TP'],marker = '.',markersize=msize)
plt.plot(x, subset['90dSMA'],marker = '.',markersize=msize)
plt.plot(x, subset['90dSMA']+subset['90dSDev']*2,marker = '.
↳',markersize=msize)
    plt.plot(x, subset['90dSMA']-subset['90dSDev']*2,marker = '.
↳',markersize=msize)

plt.plot(x, subset['supply_trend_1yr'],marker = '.',markersize=msize)
print("supply trend:",screener.loc[np.where(screener.set_index('Symbol').
↳index==s)[0][0]]['vol_30d_2yr'])
print("Index:", stock_indexes.iloc[np.where(np.array(stock_indexes.
↳index)==s)[0][0]][0])
plt.plot(x, mymodel)

labels =_
↳['Close','1yrMax','1yrMin','21dBOLD','21dBOLU','21dMA-TP','90dSMA','90dSMA+Sdev*2','90dSMA-

plt.legend(labels, fontsize=8,loc=2)

```

```

l = matplotlib.dates.AutoDateLocator()
f = matplotlib.dates.ConciseDateFormatter(l)

ax.set_xticklabels(ax.get_xticks(), rotation = 45)

locator = matplotlib.dates.AutoDateLocator()
formatter = matplotlib.dates.ConciseDateFormatter(locator)

ax.xaxis.set_major_locator(locator)
ax.xaxis.set_major_formatter(formatter)

date_form = DateFormatter("%Y-%m-%d")
ax.xaxis.set_major_formatter(date_form)
plt.show()

```

adf < .05 or .01, mean reverting

Hurst

> .5 - The time series is mean reverting.

= .5 - The time series is a Geometric Brownian Motion.

< .5 - The time series is trending.

ACC

'ACC'

[['quarterly\_balance\_sheet',

	2022-03-31	2021-12-31	2021-09-30	\
Capital Surplus	4.693018e+09	4.694242e+09	4.538210e+09	
Total Liab	4.218002e+09	4.273301e+09	4.501487e+09	
Total Stockholder Equity	3.093994e+09	3.117378e+09	2.982993e+09	
Minority Interest	1.842520e+08	1.839070e+08	6.423900e+07	
Deferred Long Term Liab	7.300000e+06	3.450000e+07	2.750000e+07	
Total Assets	7.496248e+09	7.574586e+09	7.548719e+09	
Common Stock	1.393000e+06	1.391000e+06	1.390000e+06	
Other Current Assets	1.698800e+07	1.432600e+07	2.016300e+07	
Other Liab	1.522020e+08	1.697290e+08	1.850330e+08	
Treasury Stock	-1.600417e+09	-1.578255e+09	-1.556607e+09	
Other Assets	2.143290e+08	1.773490e+08	2.318220e+08	
Cash	8.765600e+07	1.203510e+08	4.207300e+07	
Total Current Liabilities	5.727700e+07	1.168230e+08	9.838000e+07	
Other Stockholder Equity	-1.596530e+09	-1.574312e+09	-1.551896e+09	
Property Plant Equipment	7.156799e+09	7.198609e+09	7.232212e+09	
Total Current Assets	1.251200e+08	1.678280e+08	8.468500e+07	
Net Tangible Assets	3.093994e+09	3.086578e+09	2.982993e+09	
Net Receivables	2.047600e+07	3.268700e+07	2.218800e+07	
Long Term Debt	3.509626e+09	3.513684e+09	3.723677e+09	
Accounts Payable	5.727700e+07	9.306700e+07	9.838000e+07	
Intangible Assets	NaN	3.080000e+07	NaN	

	2021-06-30
Capital Surplus	4.515450e+09
Total Liab	4.437234e+09
Total Stockholder Equity	3.035925e+09
Minority Interest	6.528200e+07
Deferred Long Term Liab	2.460000e+07
Total Assets	7.538441e+09
Common Stock	1.386000e+06
Other Current Assets	2.747600e+07
Other Liab	1.373950e+08
Treasury Stock	-1.480911e+09
Other Assets	2.333970e+08
Cash	3.028300e+07
Total Current Liabilities	6.970500e+07
Other Stockholder Equity	-1.476181e+09
Property Plant Equipment	7.237327e+09
Total Current Assets	6.771700e+07
Net Tangible Assets	3.035925e+09
Net Receivables	9.775000e+06
Long Term Debt	3.734507e+09
Accounts Payable	6.970500e+07
Intangible Assets	NaN ],

['quarterly\_cashflow',

	2022-03-31	2021-12-31	\
Net Income	39183000.0	40712000.0	
Change To Liabilities	0.0	-5928000.0	
Total Cashflows From Investing Activities	NaN	-39104000.0	
Net Borrowings	NaN	-203737000.0	
Total Cash From Financing Activities	NaN	-2685000.0	
Change To Operating Activities	NaN	-4668000.0	
Issuance Of Stock	NaN	1000.0	
Change In Cash	NaN	72441000.0	
Total Cash From Operating Activities	NaN	114230000.0	
Depreciation	NaN	69294000.0	
Other Cashflows From Investing Activities	NaN	-436000.0	
Dividends Paid	NaN	-65817000.0	
Change To Account Receivables	NaN	8001000.0	
Other Cashflows From Financing Activities	NaN	266868000.0	
Change To Netincome	NaN	5202000.0	
Repurchase Of Stock	NaN	NaN	

	2021-09-30	2021-06-30
Net Income	-11439000.0	-9402000.0
Change To Liabilities	28335000.0	11132000.0
Total Cashflows From Investing Activities	-57467000.0	-76294000.0
Net Borrowings	-10415000.0	53424000.0
Total Cash From Financing Activities	-57209000.0	17226000.0
Change To Operating Activities	40390000.0	-29447000.0

Issuance Of Stock	21198000.0	38476000.0
Change In Cash	4477000.0	-7470000.0
Total Cash From Operating Activities	119153000.0	51598000.0
Depreciation	69445000.0	68741000.0
Other Cashflows From Investing Activities	2944000.0	-961000.0
Dividends Paid	-65948000.0	-65379000.0
Change To Account Receivables	-12413000.0	3867000.0
Other Cashflows From Financing Activities	-523000.0	-9295000.0
Change To Netincome	3365000.0	5289000.0
Repurchase Of Stock	-1521000.0	-1521000.0

['quarterly\_earnings',

Revenue Earnings

Quarter

2Q2021	208521000	-9402000
3Q2021	228877000	-11439000
4Q2021	272289000	40712000
1Q2022	273746000	39183000

['quarterly\_financials',

2022-03-31 2021-12-31 2021-09-30

\

Research Development	None	None	None
Effect Of Accounting Charges	None	None	None
Income Before Tax	43060000.0	42051000.0	-13019000.0
Minority Interest	184252000.0	183907000.0	64239000.0
Net Income	39183000.0	40712000.0	-11439000.0
Selling General Administrative	9098000.0	25234000.0	10309000.0
Gross Profit	154845000.0	177993000.0	94800000.0
Ebit	75195000.0	80965000.0	15046000.0
Operating Income	75195000.0	80965000.0	15046000.0
Other Operating Expenses	NaN	2500000.0	2500000.0
Interest Expense	-31675000.0	-31922000.0	-30741000.0
Extraordinary Items	None	None	None
Non Recurring	None	None	None
Other Items	None	None	None
Income Tax Expense	340000.0	340000.0	340000.0
Total Revenue	273746000.0	272289000.0	228877000.0
Total Operating Expenses	198551000.0	191324000.0	213831000.0
Cost Of Revenue	118901000.0	94296000.0	134077000.0
Total Other Income Expense Net	-32135000.0	-38914000.0	-28065000.0
Discontinued Operations	None	None	None
Net Income From Continuing Ops	42720000.0	41711000.0	-13359000.0
Net Income Applicable To Common Shares	39183000.0	40299000.0	-12006000.0

2021-06-30

Research Development	None
Effect Of Accounting Charges	None
Income Before Tax	-10712000.0

Minority Interest	65282000.0
Net Income	-9402000.0
Selling General Administrative	12093000.0
Gross Profit	99534000.0
Ebit	18700000.0
Operating Income	18700000.0
Other Operating Expenses	2500000.0
Interest Expense	-30658000.0
Extraordinary Items	None
Non Recurring	None
Other Items	None
Income Tax Expense	341000.0
Total Revenue	208521000.0
Total Operating Expenses	189821000.0
Cost Of Revenue	108987000.0
Total Other Income Expense Net	-29412000.0
Discontinued Operations	None
Net Income From Continuing Ops	-11053000.0
Net Income Applicable To Common Shares	-9973000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	% Out
0	Vanguard Specialized-Real Estate Index Fund	6638008	2022-01-30	0.0476
1	Vanguard Total Stock Market Index Fund	4010039	2022-03-30	0.0287
2	iShares Core S&P Midcap ETF	3948421	2022-03-30	0.0283
3	Vanguard Small-Cap Index Fund	3489766	2022-03-30	0.0250
4	Allspring Special Mid Cap Value Fund	3211005	2022-03-30	0.0230
5	Vanguard Small-Cap Growth Index Fund	2105407	2022-03-30	0.0151
6	Vanguard Extended Market Index Fund	1839581	2022-03-30	0.0132
7	JP Morgan Small Cap Equity Fund	1494119	2022-03-30	0.0107
8	SPDR S&P Mid Cap 400 ETF Trust	1198313	2022-03-30	0.0086
9	Price (T.Rowe) Small Cap Stock Fund	1079217	2022-03-30	0.0077

	Value
0	346902298
1	224441882
2	220993123
3	195322203
4	179719949
5	117839629
6	102961348
7	83625840
8	67069578
9	60403775 ],

['options', ('2022-06-17',)],  
['sustainability', None]]

volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
---------------	----------	-------------	---------	-----	-------

ACC	2.74796	64.730003	26040186.597938	0.985652	0.964437	0.248556
-----	---------	-----------	-----------------	----------	----------	----------

Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	dividendYield	\
------------	------	--------------	--------------	--------------	---------------	---

ACC	ACC	1.00147	2.184	122.276	1.88	0.029
-----	-----	---------	-------	---------	------	-------

	earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	revenueGrowth	\
--	----------------	--------	---------------	-----------	-----	---------------	---

ACC	1.498	466354240	0.47421	99.64615	...	0.176
-----	-------	-----------	---------	----------	-----	-------

	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
--	-----------------	--------	------------	-------------	-----------	---

ACC	7.081	Real Estate	0.86	NaN	87656000
-----	-------	-------------	------	-----	----------

	totalCashPerShare	totalDebt	totalRevenue	trailingPE
--	-------------------	-----------	--------------	------------

ACC	0.63	4008523008	983433024	518.16
-----	------	------------	-----------	--------

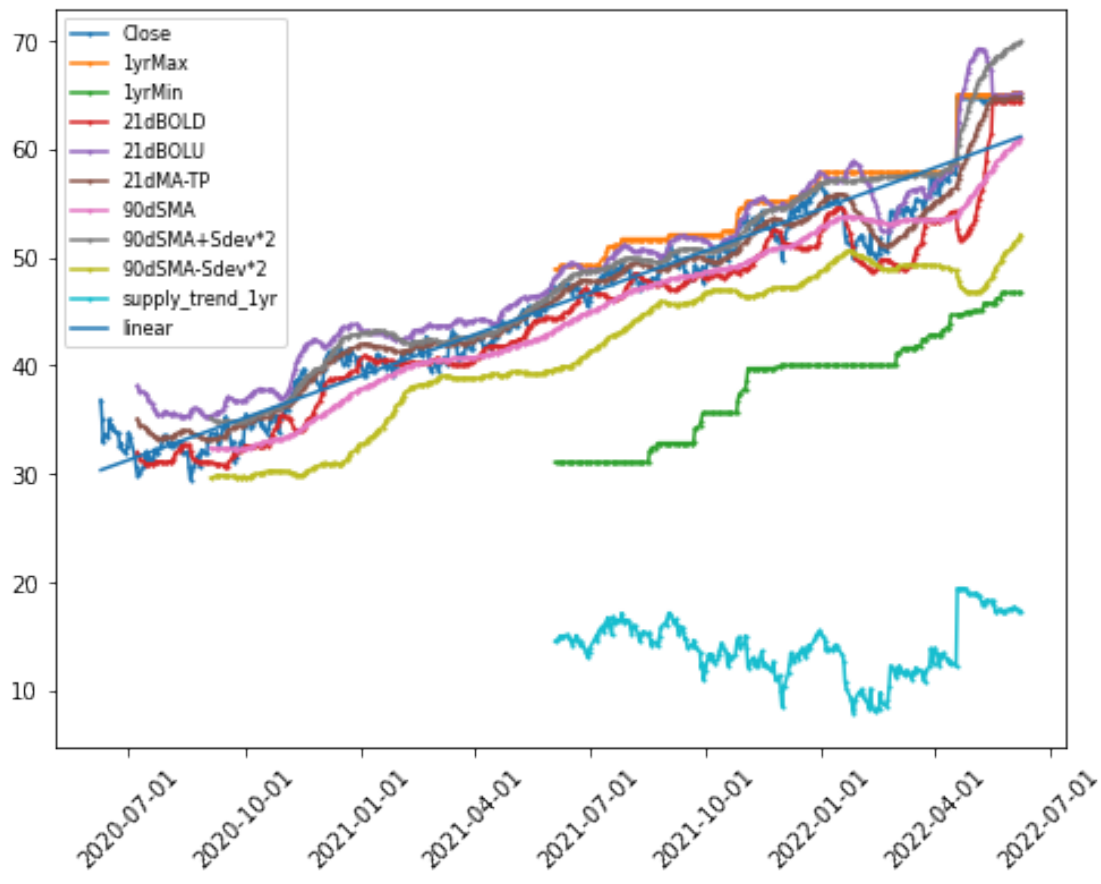
[1 rows x 36 columns]

supply trend: 26040186.59793814

Index: SP400

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



APA

'APA'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Capital Surplus	1.164500e+10	1.168600e+10	1.170400e+10	
Total Liab	1.330800e+10	1.270500e+10	1.281900e+10	
Total Stockholder Equity	-1.595000e+09	-1.095000e+09	-9.640000e+08	
Minority Interest	1.590000e+09	1.580000e+09	1.657000e+09	
Deferred Long Term Liab	5.700000e+08	5.150000e+08	5.120000e+08	
Other Current Liab	3.370000e+08	2.760000e+08	2.990000e+08	
Total Assets	1.330300e+10	1.331000e+10	1.351200e+10	
Common Stock	2.620000e+08	2.620000e+08	2.620000e+08	
Other Current Assets	1.550000e+08	1.020000e+08	7.600000e+07	
Retained Earnings	-9.488000e+09	-9.870000e+09	-9.757000e+09	
Other Liab	3.744000e+09	3.673000e+09	2.626000e+09	
Treasury Stock	-4.014000e+09	-3.173000e+09	-3.173000e+09	
Other Assets	1.223000e+09	1.255000e+09	5.120000e+08	
Cash	3.020000e+08	3.770000e+08	1.249000e+09	
Total Current Liabilities	2.117000e+09	1.839000e+09	1.773000e+09	
Deferred Long Term Asset Charges	1.300000e+07	NaN	NaN	
Other Stockholder Equity	2.200000e+07	1.500000e+07	1.500000e+07	
Property Plant Equipment	8.335000e+09	8.336000e+09	8.501000e+09	
Total Current Assets	2.380000e+09	2.181000e+09	2.945000e+09	
Long Term Investments	1.365000e+09	1.538000e+09	1.554000e+09	
Net Tangible Assets	-1.595000e+09	-1.095000e+09	-9.640000e+08	
Net Receivables	1.394000e+09	1.170000e+09	1.068000e+09	
Long Term Debt	7.261000e+09	7.159000e+09	8.386000e+09	
Inventory	4.730000e+08	4.760000e+08	4.790000e+08	
Accounts Payable	7.310000e+08	6.870000e+08	6.030000e+08	
Short Long Term Debt	NaN	2.130000e+08	2.130000e+08	

	2021-03-31
Capital Surplus	1.172700e+10
Total Liab	1.278300e+10
Total Stockholder Equity	-1.258000e+09
Minority Interest	1.602000e+09
Deferred Long Term Liab	4.930000e+08
Other Current Liab	2.000000e+08
Total Assets	1.312700e+10
Common Stock	2.620000e+08
Other Current Assets	1.450000e+08
Retained Earnings	-1.007300e+10
Other Liab	2.732000e+09
Treasury Stock	-3.174000e+09
Other Assets	4.970000e+08

Cash	5.380000e+08		
Total Current Liabilities	1.338000e+09		
Deferred Long Term Asset Charges	NaN		
Other Stockholder Equity	1.500000e+07		
Property Plant Equipment	8.718000e+09		
Total Current Assets	2.345000e+09		
Long Term Investments	1.567000e+09		
Net Tangible Assets	-1.258000e+09		
Net Receivables	1.071000e+09		
Long Term Debt	8.678000e+09		
Inventory	5.020000e+08		
Accounts Payable	5.240000e+08		
Short Long Term Debt	NaN	],	
['quarterly_cashflow',			
	2021-12-31	2021-09-30	\
Investments	-1.000000e+06	-3.000000e+06	
Change To Liabilities	2.600000e+07	6.200000e+07	
Total Cashflows From Investing Activities	-2.910000e+08	-1.490000e+08	
Net Borrowings	1.020000e+08	-1.335000e+09	
Total Cash From Financing Activities	-8.690000e+08	-1.494000e+09	
Change To Operating Activities	1.800000e+08	-1.800000e+07	
Net Income	3.820000e+08	-1.130000e+08	
Change In Cash	-7.500000e+07	-8.720000e+08	
Repurchase Of Stock	-8.470000e+08	-8.470000e+08	
Total Cash From Operating Activities	1.085000e+09	7.710000e+08	
Depreciation	3.650000e+08	3.690000e+08	
Other Cashflows From Investing Activities	8.000000e+06	3.200000e+07	
Dividends Paid	-2.400000e+07	-9.000000e+06	
Change To Inventory	1.000000e+07	-3.900000e+07	
Change To Account Receivables	-1.210000e+08	-1.000000e+08	
Other Cashflows From Financing Activities	-1.000000e+08	-1.500000e+08	
Change To Netincome	2.430000e+08	6.100000e+08	
Capital Expenditures	-3.150000e+08	-2.360000e+08	
	2021-06-30	2021-03-31	
Investments	-3000000.0	-21000000.0	
Change To Liabilities	82000000.0	75000000.0	
Total Cashflows From Investing Activities	-126000000.0	-267000000.0	
Net Borrowings	-79000000.0	-58000000.0	
Total Cash From Financing Activities	-132000000.0	-128000000.0	
Change To Operating Activities	104000000.0	-79000000.0	
Net Income	316000000.0	388000000.0	
Change In Cash	711000000.0	276000000.0	
Repurchase Of Stock	-847000000.0	-847000000.0	
Total Cash From Operating Activities	969000000.0	671000000.0	
Depreciation	382000000.0	388000000.0	
Other Cashflows From Investing Activities	5000000.0	7000000.0	
Dividends Paid	-10000000.0	-9000000.0	



Change To Inventory	23000000.0	-3000000.0
Change To Account Receivables	3000000.0	-168000000.0
Other Cashflows From Financing Activities	-43000000.0	-61000000.0
Change To Netincome	59000000.0	70000000.0
Capital Expenditures	-306000000.0	-256000000.0

['quarterly\_earnings',

	Revenue	Earnings
--	---------	----------

Quarter

1Q2021	1932000000	388000000
2Q2021	1830000000	316000000
3Q2021	2099000000	-113000000
4Q2021	2164000000	382000000

['quarterly\_financials',

	2021-12-31	2021-09-30	\
Research Development	None	None	
Effect Of Accounting Charges	None	None	
Income Before Tax	654000000.0	122000000.0	
Minority Interest	1590000000.0	1580000000.0	
Net Income	382000000.0	-113000000.0	
Selling General Administrative	137000000.0	70000000.0	
Gross Profit	1467000000.0	1301000000.0	
Ebit	937000000.0	774000000.0	
Operating Income	937000000.0	774000000.0	
Other Operating Expenses	15000000.0	88000000.0	
Interest Expense	-94000000.0	-101000000.0	
Extraordinary Items	None	None	
Non Recurring	None	None	
Other Items	None	None	
Income Tax Expense	169000000.0	152000000.0	
Total Revenue	2164000000.0	2099000000.0	
Total Operating Expenses	1227000000.0	1325000000.0	
Cost Of Revenue	697000000.0	798000000.0	
Total Other Income Expense Net	-283000000.0	-652000000.0	
Discontinued Operations	None	None	
Net Income From Continuing Ops	485000000.0	-30000000.0	
Net Income Applicable To Common Shares	382000000.0	-113000000.0	

	2021-06-30	2021-03-31
Research Development	None	None
Effect Of Accounting Charges	None	None
Income Before Tax	495000000.0	620000000.0
Minority Interest	1657000000.0	1602000000.0
Net Income	316000000.0	388000000.0
Selling General Administrative	86000000.0	83000000.0
Gross Profit	1196000000.0	1116000000.0
Ebit	510000000.0	745000000.0
Operating Income	510000000.0	745000000.0
Other Operating Expenses	223000000.0	-103000000.0

Interest Expense	-111000000.0	-112000000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	87000000.0	170000000.0
Total Revenue	1830000000.0	1932000000.0
Total Operating Expenses	1320000000.0	1187000000.0
Cost Of Revenue	634000000.0	816000000.0
Total Other Income Expense Net	-15000000.0	-125000000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	408000000.0	450000000.0
Net Income Applicable To Common Shares	316000000.0	388000000.0

],  
['mutualfund\_holders',

	Holder	Shares	Date Reported	% Out	\
0	Oakmark Fund	12743809	2021-12-30	0.0377	
1	Select Sector SPDR Fund-Energy Select	10683025	2022-01-30	0.0316	
2	Vanguard Total Stock Market Index Fund	10325855	2021-12-30	0.0305	
3	Vanguard Small-Cap Index Fund	9149341	2021-12-30	0.0271	
4	Vanguard/Windsor II	8002477	2022-01-30	0.0237	
5	Vanguard 500 Index Fund	7693595	2021-12-30	0.0227	
6	Vanguard Small Cap Value Index Fund	5800585	2021-12-30	0.0171	
7	Oakmark Select Fund	5500000	2021-12-30	0.0163	
8	SPDR S&P 500 ETF Trust	4043068	2022-01-30	0.0120	
9	Fidelity 500 Index Fund	3720217	2022-02-27	0.0110	

Value

0	342681024
1	354783260
2	277662240
3	246025779
4	265762261
5	206880769
6	155977730
7	147895000
8	134270288
9	132551331

],  
['options', ('2022-07-15', '2023-01-20', '2024-01-19')],  
['sustainability', None]]

volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
APA	1.046028	51.169998	197541093.608247	0.982472	0.997556 0.411319
Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	dividendYield \
APA	APA 4.42549	1.124	NaN	0.5	0.0122
earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	returnOnEquity \
APA	38.999	4470000128	0.55701	NaN ...	27.07216
revenueGrowth	revenuePerShare	sector	shortRatio	totalAssets	totalCash \

APA	0.905	21.457	Energy	1.45	NaN	302000000
-----	-------	--------	--------	------	-----	-----------

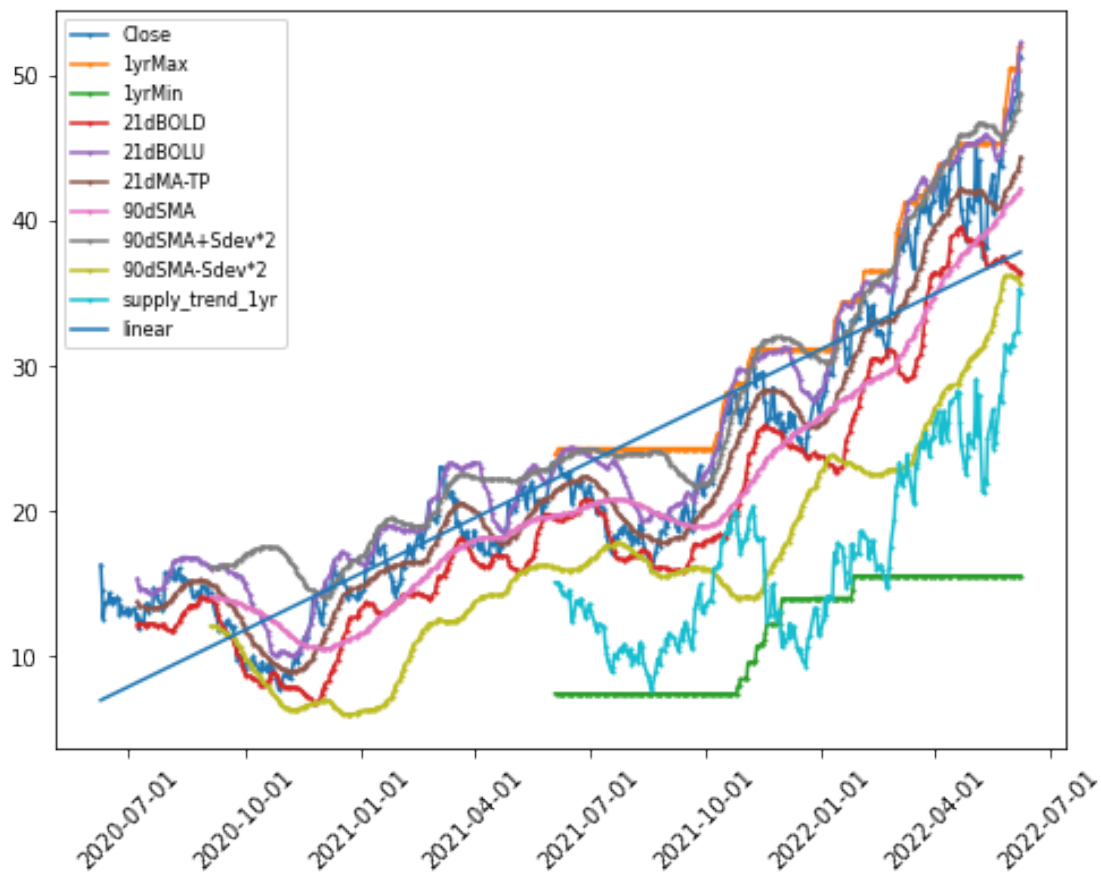
	totalCashPerShare	totalDebt	totalRevenue
APA	0.871	7760999936	8024999936

[1 rows x 35 columns]

supply trend: 197541093.6082474

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



COP

'COP'

```
[['quarterly_balance_sheet',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
```

```

['quarterly_cashflow',
Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: []],
['quarterly_earnings',
Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: []],
['quarterly_financials',
Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: []],
['mutualfund_holders', None],
['options', ('2022-08-19', '2023-01-20', '2024-01-19')],
['sustainability',

                                Value

2022-5
palmOil                        False
controversialWeapons           False
gambling                       False
socialScore                    9.71
nuclear                       False
furLeather                     False
alcoholic                     False
gmo                           False
catholic                      False
socialPercentile              None
peerCount                     66
governanceScore               7.68
environmentPercentile         None
animalTesting                 False
tobacco                       False
totalEsg                      34.92
highestControversy            2
esgPerformance                OUT_PERF
coal                          False
pesticides                    False
adult                         False
percentile                    77.49
peerGroup                     Oil & Gas Producers
smallArms                     False
environmentScore              17.53
governancePercentile          None
militaryContract              False]]

volume_factor  latest_p  vol_30d_2yr  pct_2yr  adf  hurst
COP           0.820306  121.860001  190916954.226804  0.977007  0.998092  0.385752

Unnamed: 0      beta currentRatio debtToEquity dividendRate dividendYield \

```

COP	COP	1.350272	1.513	38.088	1.92	0.0156
-----	-----	----------	-------	--------	------	--------

	earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	revenueGrowth	\
COP	4.853	25497999360	0.46444	10.605744	...	0.828	

	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
COP	41.447	Energy	1.83	NaN	7144000000	

	totalCashPerShare	totalDebt	totalRevenue	trailingPE
COP	5.523	18745999360	54899998720	12.631906

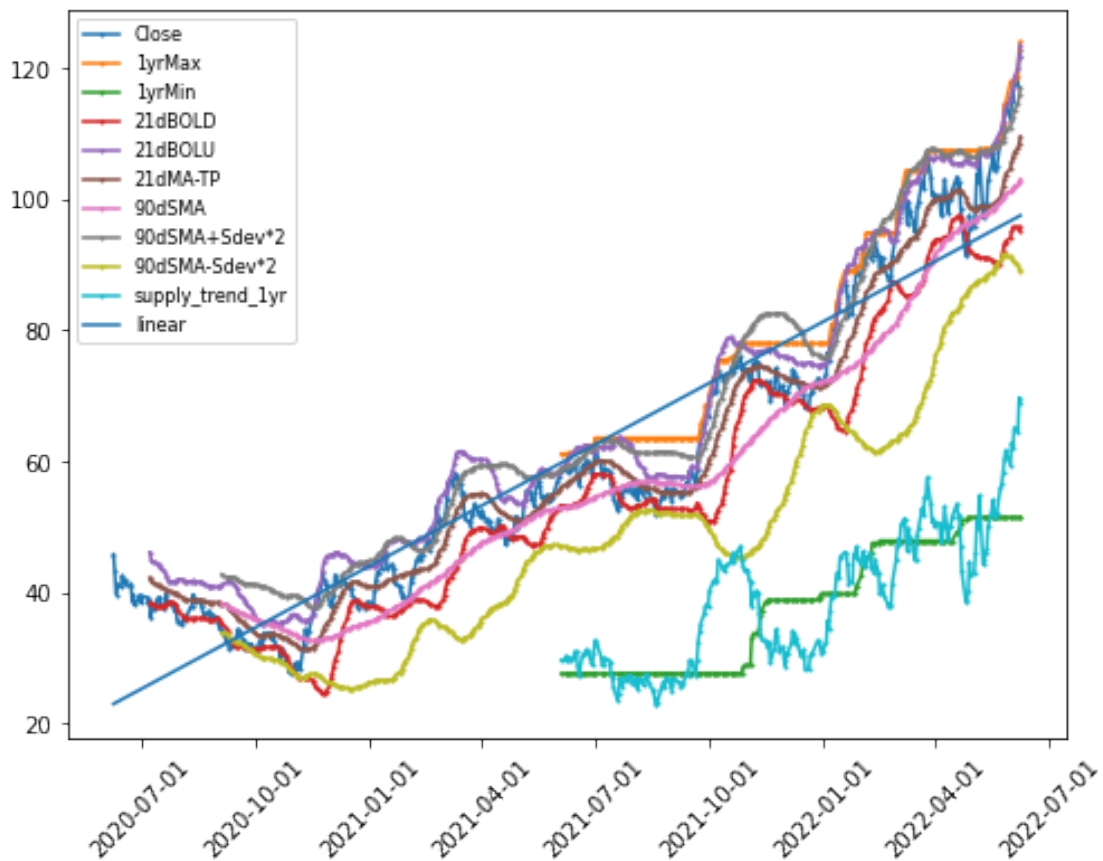
[1 rows x 36 columns]

supply trend: 190916954.2268041

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



CTRA

'CTRA'

```
[['quarterly_balance_sheet',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
['quarterly_cashflow',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
['quarterly_earnings',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
['quarterly_financials',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
['mutualfund_holders', None],  
['options', ('2022-07-15', '2022-09-16', '2023-01-20', '2024-01-19')],  
['sustainability',
```

	Value
2022-5	
palmOil	False
controversialWeapons	False
gambling	False
socialScore	14.01
nuclear	False
furLeather	False
alcoholic	False
gmo	False
catholic	False
socialPercentile	None
peerCount	66
governanceScore	9.28
environmentPercentile	None
animalTesting	False
tobacco	False
totalEsg	46.68
highestControversy	2
esgPerformance	LEAD_PERF
coal	False
pesticides	False
adult	False
percentile	95.93
peerGroup	Oil & Gas Producers
smallArms	False
environmentScore	23.39

```

governancePercentile      None
militaryContract          False]]

volume_factor  latest_p    vol_30d_2yr  pct_2yr    adf    hurst
CTRA          1.216696  35.779999  167604738.14433  0.965424  0.999084  0.432234

Unnamed: 0      beta currentRatio debtToEquity dividendRate \
CTRA          CTRA -0.234119      1.565      29.266      0.6

dividendYield earningsGrowth      ebitda ebitdaMargins forwardPE ... \
CTRA          0.0167      1.387  3284000000      0.63105  9.618279 ...

revenueGrowth revenuePerShare  sector shortRatio totalAssets  totalCash \
CTRA          3.243      8.591  Energy      3.43      NaN  1447000064

totalCashPerShare  totalDebt totalRevenue trailingPE
CTRA          1.796  3444000000  5203999744  13.311011

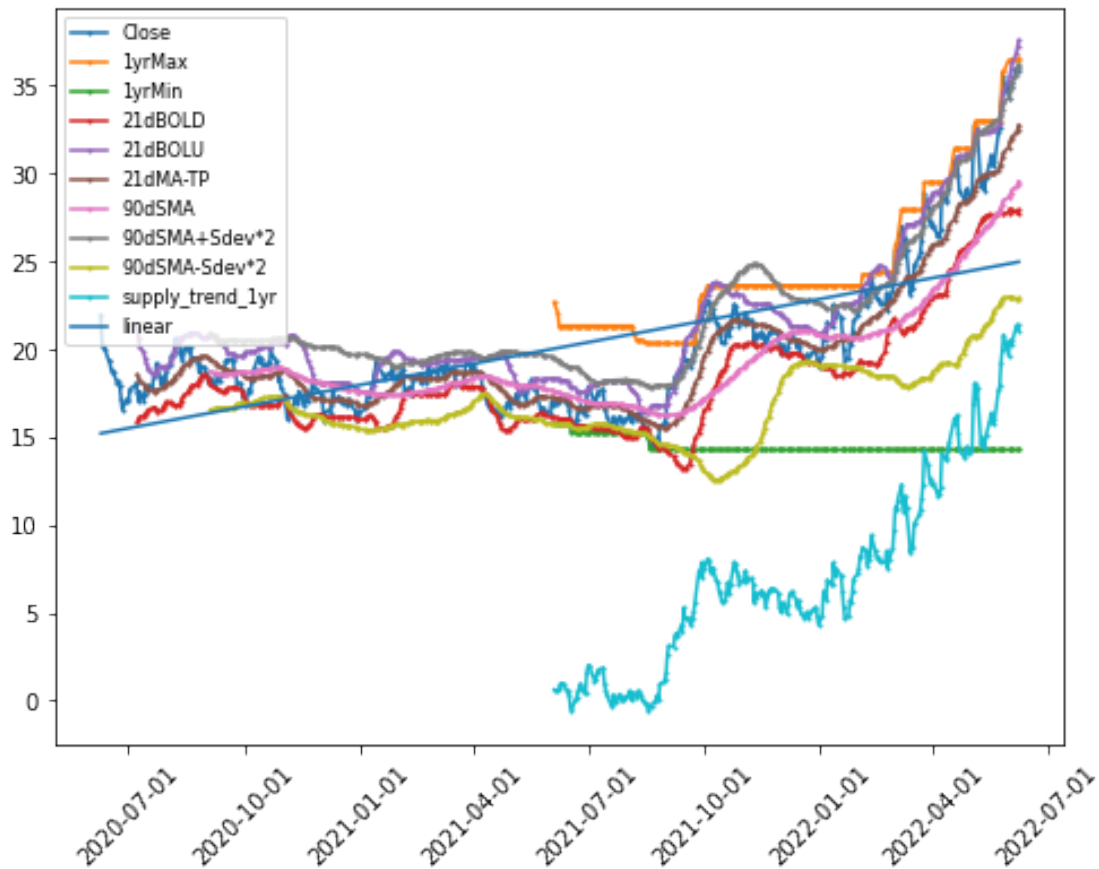
```

[1 rows x 36 columns]

supply trend: 167604738.1443299

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



CVX

'CVX'

```
[['quarterly_balance_sheet',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
['quarterly_cashflow',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
['quarterly_earnings',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
['quarterly_financials',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
['mutualfund_holders', None],
```



```

['options', ('2022-06-17', '2023-01-20', '2024-01-19')],
['sustainability',

                                Value
2022-5
palmOil                        False
controversialWeapons           False
gambling                       False
socialScore                    10.63
nuclear                       False
furLeather                     False
alcoholic                     False
gmo                            False
catholic                      False
socialPercentile              None
peerCount                     66
governanceScore               9.95
environmentPercentile         None
animalTesting                 True
tobacco                       False
totalEsg                      43
highestControversy            3
esgPerformance                LEAD_PERF
coal                          False
pesticides                    False
adult                         False
percentile                    92.22
peerGroup                     Oil & Gas Producers
smallArms                     False
environmentScore              22.42
governancePercentile          None
militaryContract              False]]

    volume_factor    latest_p    vol_30d_2yr    pct_2yr    adf    hurst
CVX      0.924514  181.130005  239020305.360825  0.989168  0.997066  0.503962

    Unnamed: 0    beta    currentRatio    debtToEquity    dividendRate    dividendYield  \
CVX      CVX    1.078947      1.433      19.941      5.68      0.0315

    earningsGrowth    ebitda    ebitdaMargins    forwardPE    ...    revenueGrowth  \
CVX      3.473    38521999360      0.21783    12.431709    ...      0.683

    revenuePerShare    sector    shortRatio    totalAssets    totalCash  \
CVX      92.025    Energy      2.03      NaN    11704000512

    totalCashPerShare    totalDebt    totalRevenue    trailingPE
CVX      5.957    29333000192    176843997184      17.0187

[1 rows x 36 columns]

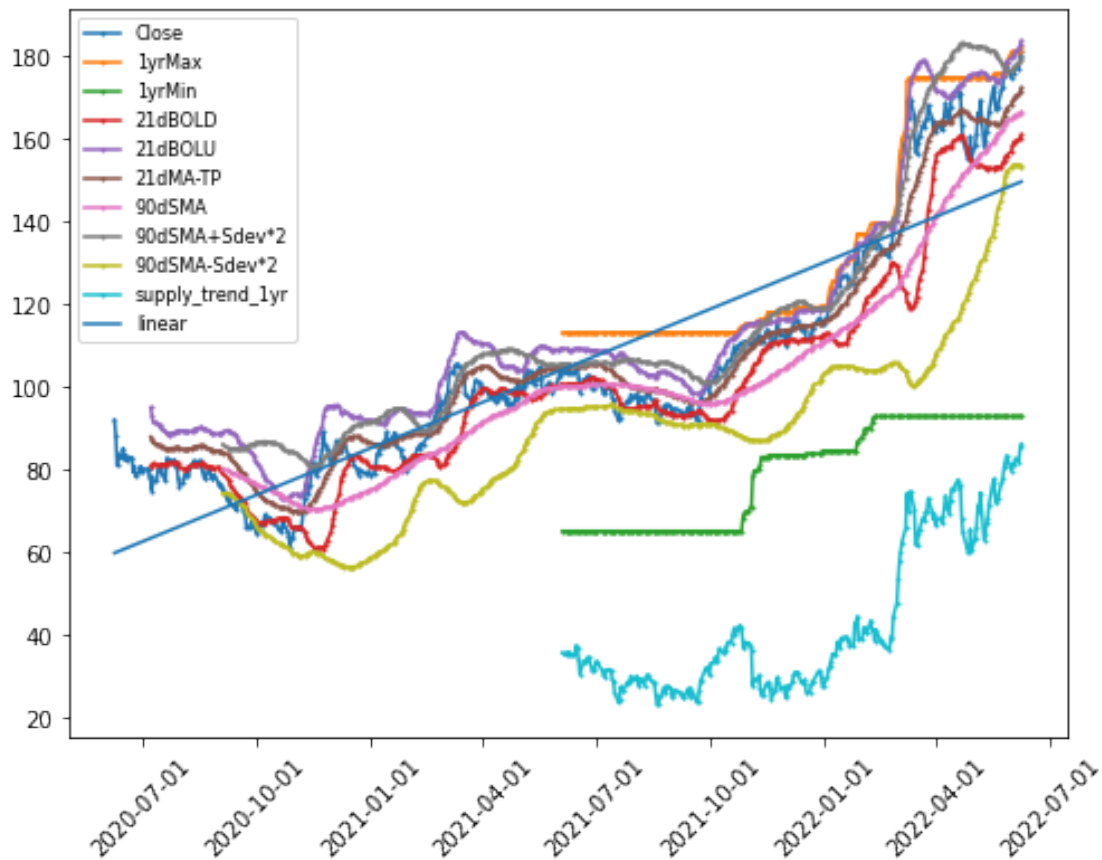
```

supply trend: 239020305.3608247

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

```
ax.set_xticklabels(ax.get_xticks(), rotation = 45)
```



DVN

'DVN'

```
[['quarterly_balance_sheet',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
 ['quarterly_cashflow',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
 ['quarterly_earnings',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]
```

```

Index: [],
['quarterly_financials',
Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: [],
['mutualfund_holders', None],
['options', ('2022-07-15', '2023-01-20', '2024-01-19')],
['sustainability',

```

```

Value
2022-5
palmOil False
controversialWeapons False
gambling False
socialScore 8.78
nuclear False
furLeather False
alcoholic False
gmo False
catholic False
socialPercentile None
peerCount 66
governanceScore 7.86
environmentPercentile None
animalTesting False
tobacco False
totalEsg 34.39
highestControversy 2
esgPerformance OUT_PERF
coal False
pesticides False
adult False
percentile 76.03
peerGroup Oil & Gas Producers
smallArms False
environmentScore 17.75
governancePercentile None
militaryContract False]]

```

```

volume_factor latest_p vol_30d_2yr pct_2yr adf hurst
DVN 0.980624 77.93 238032506.391753 0.982368 0.998988 0.381544

```

```

Unnamed: 0 beta currentRatio debtToEquity dividendRate dividendYield \
DVN DVN 2.588475 1.325 71.489 5.08 0.0652

```

```

earningsGrowth ebitda ebitdaMargins forwardPE ... revenueGrowth \
DVN 3.625 6653000192 0.4454 8.886986 ... 0.74

```

```

revenuePerShare sector shortRatio totalAssets totalCash \
DVN 22.47 Energy 1.45 NaN 2459000064

```

	totalCashPerShare	totalDebt	totalRevenue	trailingPE
DVN	3.726	6744999936	14936999936	14.614228

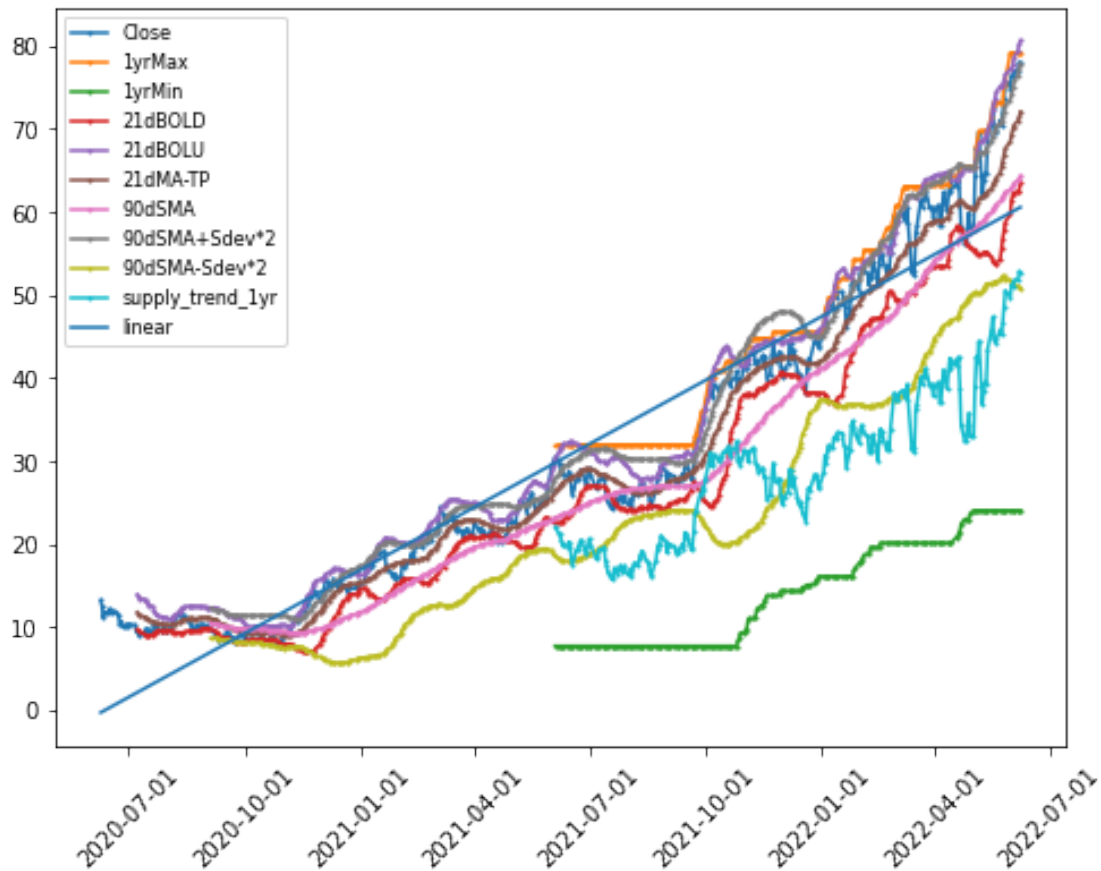
[1 rows x 36 columns]

supply trend: 238032506.3917526

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



EQT

'EQT'

[['quarterly\_balance\_sheet',

Empty DataFrame

Columns: [Open, High, Low, Close, Adj Close, Volume]

Index: [],

['quarterly\_cashflow',

```

Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: [],
['quarterly_earnings',
Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: [],
['quarterly_financials',
Empty DataFrame
Columns: [Open, High, Low, Close, Adj Close, Volume]
Index: [],
['mutualfund_holders', None],
['options', ('2022-06-17', '2023-01-20', '2024-01-19')],
['sustainability',

```

	Value					
2022-5						
palmOil	False					
controversialWeapons	False					
gambling	False					
socialScore	10.21					
nuclear	False					
furLeather	False					
alcoholic	False					
gmo	False					
catholic	False					
socialPercentile	None					
peerCount	66					
governanceScore	7.64					
environmentPercentile	None					
animalTesting	False					
tobacco	False					
totalEsg	37.38					
highestControversy	1					
esgPerformance	OUT_PERF					
coal	False					
pesticides	False					
adult	False					
percentile	83.58					
peerGroup	Oil & Gas Producers					
smallArms	False					
environmentScore	19.53					
governancePercentile	None					
militaryContract	False]]					
	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
EQT	1.283262	48.970001	137858884.329897	0.963901	0.998306	0.468927
	Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	dividendYield \
EQT	EQT	0.947822	0.398	61.543	0.5	0.0104

earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	returnOnEquity	\
EQT	NaN	-1089323008	-0.13465	7.936791	...	-0.3018

revenueGrowth	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
EQT	1.206	23.313	Energy	2.08	NaN	16913000

totalCashPerShare	totalDebt	totalRevenue
EQT	0.046	5050277888
		8089885184

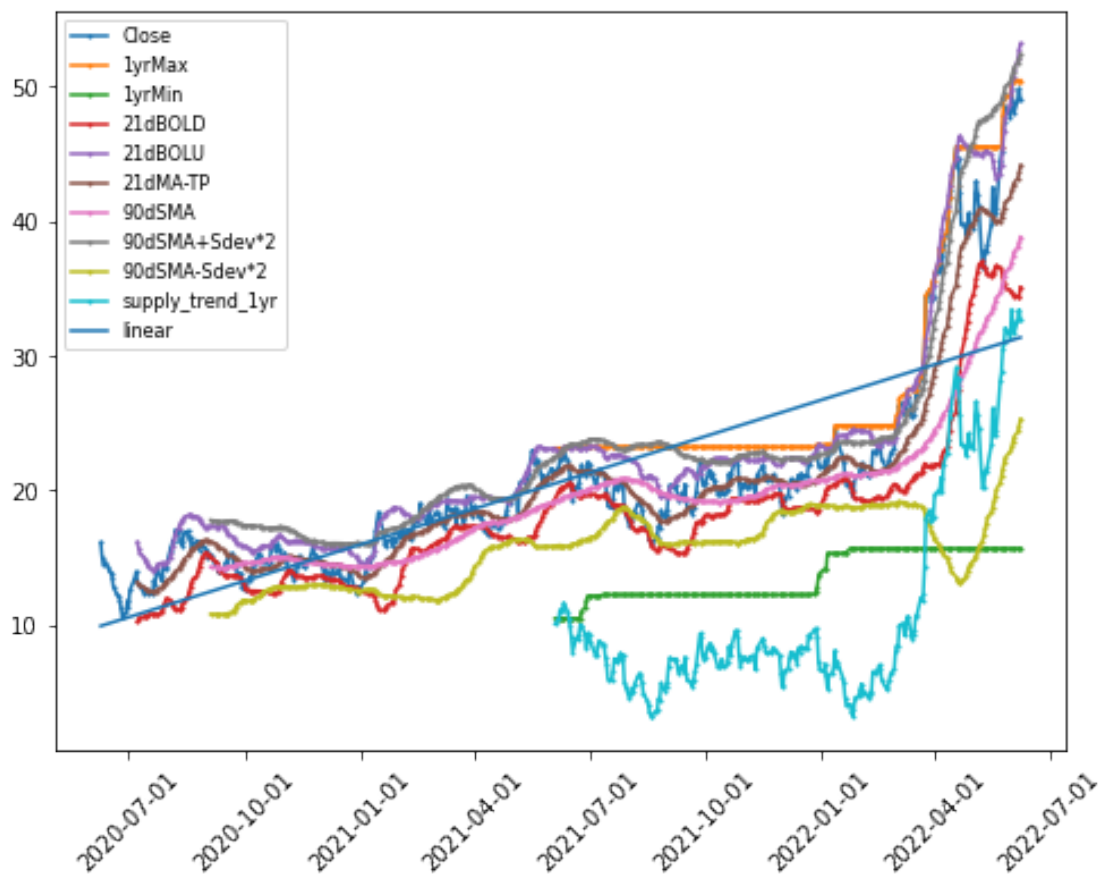
[1 rows x 35 columns]

supply trend: 137858884.3298969

Index: SP400

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



LNTH

'LNTH'

['quarterly\_balance\_sheet',

	2022-03-31	2021-12-31	2021-09-30 \
Intangible Assets	340204000.0	348510000.0	356883000.0
Capital Surplus	691516000.0	685472000.0	680819000.0
Total Liab	417316000.0	399345000.0	348472000.0
Total Stockholder Equity	515850000.0	464439000.0	499344000.0
Other Current Liab	89178000.0	NaN	NaN
Total Assets	933166000.0	863784000.0	847816000.0
Common Stock	686000.0	677000.0	677000.0
Other Current Assets	12860000.0	2705000.0	12043000.0
Retained Earnings	-178263000.0	-221225000.0	-181010000.0
Other Liab	64083000.0	129181000.0	88437000.0
Good Will	61189000.0	61189000.0	61189000.0
Treasury Stock	1911000.0	-485000.0	-1142000.0
Other Assets	78005000.0	92734000.0	103495000.0
Cash	105355000.0	98508000.0	91475000.0
Total Current Liabilities	177657000.0	90497000.0	76903000.0
Deferred Long Term Asset Charges	47868000.0	62764000.0	66493000.0
Short Long Term Debt	12500000.0	11607000.0	10766000.0
Other Stockholder Equity	1911000.0	-485000.0	-1142000.0
Property Plant Equipment	125634000.0	125560000.0	124728000.0
Total Current Assets	324747000.0	235791000.0	201521000.0
Long Term Investments	3387000.0	NaN	NaN
Net Tangible Assets	114457000.0	54740000.0	81272000.0
Net Receivables	172283000.0	89336000.0	64054000.0
Long Term Debt	159165000.0	162729000.0	166479000.0
Inventory	34249000.0	35129000.0	33949000.0
Accounts Payable	22383000.0	20787000.0	20508000.0

	2021-06-30
Intangible Assets	365259000.0
Capital Surplus	676059000.0
Total Liab	349662000.0
Total Stockholder Equity	508140000.0
Other Current Liab	NaN
Total Assets	857802000.0
Common Stock	676000.0
Other Current Assets	8102000.0
Retained Earnings	-167595000.0
Other Liab	106587000.0
Good Will	61189000.0
Treasury Stock	-1000000.0
Other Assets	126648000.0
Cash	91500000.0
Total Current Liabilities	73826000.0
Deferred Long Term Asset Charges	64777000.0

Short Long Term Debt	11269000.0
Other Stockholder Equity	-1000000.0
Property Plant Equipment	118493000.0
Total Current Assets	186213000.0
Long Term Investments	NaN
Net Tangible Assets	81692000.0
Net Receivables	54892000.0
Long Term Debt	168514000.0
Inventory	31719000.0
Accounts Payable	21471000.0 ],

['quarterly\_cashflow',

2022-03-31 2021-12-31 2021-09-30

\

Change To Liabilities	1506000.0	649000.0	-1112000.0
Total Cashflows From Investing Activities	-1390000.0	-4544000.0	-2420000.0
Net Borrowings	-2609000.0	-2591000.0	-2620000.0
Total Cash From Financing Activities	-2179000.0	-2100000.0	-1726000.0
Change To Operating Activities	-1674000.0	10133000.0	3754000.0
Issuance Of Stock	5934000.0	678000.0	961000.0
Net Income	42962000.0	-40215000.0	-13415000.0
Change In Cash	6846000.0	7034000.0	-25000.0
Repurchase Of Stock	-5504000.0	-187000.0	-67000.0
Effect Of Exchange Rate	151000.0	-211000.0	-219000.0
Total Cash From Operating Activities	10264000.0	13889000.0	4340000.0
Depreciation	11786000.0	12200000.0	12339000.0
Change To Inventory	-1634000.0	-2924000.0	-2513000.0
Change To Account Receivables	-85155000.0	-25381000.0	-9272000.0
Change To Netincome	42227000.0	59181000.0	14314000.0
Capital Expenditures	-3190000.0	-4544000.0	-2420000.0

2021-06-30

Change To Liabilities	1778000.0
Total Cashflows From Investing Activities	-2656000.0
Net Borrowings	-2565000.0
Total Cash From Financing Activities	-715000.0
Change To Operating Activities	9341000.0
Issuance Of Stock	2043000.0
Net Income	-26657000.0
Change In Cash	22639000.0
Repurchase Of Stock	-193000.0
Effect Of Exchange Rate	141000.0
Total Cash From Operating Activities	25869000.0
Depreciation	9626000.0
Change To Inventory	-2001000.0
Change To Account Receivables	3897000.0
Change To Netincome	29700000.0
Capital Expenditures	-2656000.0 ],



```

['quarterly_earnings',
    Revenue Earnings
Quarter
2Q2021 101064000 -26657000
3Q2021 102073000 -13415000
4Q2021 129562000 -40215000
1Q2022 208880000 42962000],
['quarterly_financials',

```

	2022-03-31	2021-12-31	2021-09-30
Research Development	12203000.0	11293000.0	11252000.0
Effect Of Accounting Charges	None	None	None
Income Before Tax	57901000.0	-41007000.0	-19837000.0
Minority Interest	None	None	None
Net Income	42962000.0	-40215000.0	-13415000.0
Selling General Administrative	57942000.0	42593000.0	36205000.0
Gross Profit	129070000.0	57908000.0	42669000.0
Ebit	58925000.0	4022000.0	-4788000.0
Operating Income	58925000.0	4022000.0	-4788000.0
Other Operating Expenses	None	None	None
Interest Expense	-1509000.0	-1528000.0	-1569000.0
Extraordinary Items	None	None	None
Non Recurring	None	None	None
Other Items	None	None	None
Income Tax Expense	14939000.0	-792000.0	-6422000.0
Total Revenue	208880000.0	129562000.0	102073000.0
Total Operating Expenses	149955000.0	125540000.0	106861000.0
Cost Of Revenue	79810000.0	71654000.0	59404000.0
Total Other Income Expense Net	-1024000.0	-45029000.0	-15049000.0
Discontinued Operations	None	None	None
Net Income From Continuing Ops	42962000.0	-40215000.0	-13415000.0
Net Income Applicable To Common Shares	42962000.0	-40215000.0	-13415000.0
	2021-06-30		
Research Development	12061000.0		
Effect Of Accounting Charges	None		
Income Before Tax	-28536000.0		
Minority Interest	None		
Net Income	-26657000.0		
Selling General Administrative	60808000.0		
Gross Profit	46088000.0		
Ebit	-26781000.0		
Operating Income	-26781000.0		
Other Operating Expenses	None		
Interest Expense	-1937000.0		
Extraordinary Items	None		
Non Recurring	None		

Other Items	None
Income Tax Expense	-1879000.0
Total Revenue	101064000.0
Total Operating Expenses	127845000.0
Cost Of Revenue	54976000.0
Total Other Income Expense Net	-1755000.0
Discontinued Operations	None
Net Income From Continuing Ops	-26657000.0
Net Income Applicable To Common Shares	-26657000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	\
0	iShares Core S&P Smallcap ETF	4760862	2022-01-30	
1	Vanguard Total Stock Market Index Fund	1818068	2021-12-30	
2	iShares Russell 2000 ETF	1546604	2022-01-30	
3	Artisan International Small-Mid Fund	1430335	2021-12-30	
4	Thrivent Small Cap Stock Fund	983011	2022-01-30	
5	Vanguard Extended Market Index Fund	869393	2021-12-30	
6	John Hancock Small Cap Core Fd	846280	2022-01-30	
7	Blair (William) Mutual Funds,Inc-Small Cap Val...	724920	2022-02-27	
8	Price (T.Rowe) Small-Cap Value Fund	720839	2021-12-30	
9	Price (T.Rowe) Health Sciences Fund	720458	2021-12-30	

	% Out	Value
0	0.0694	120973503
1	0.0265	52523984
2	0.0225	39299207
3	0.0208	41322378
4	0.0143	24978309
5	0.0127	25116763
6	0.0123	21503974
7	0.0106	34665674
8	0.0105	20825038
9	0.0105	20814031 ],

['options', ('2022-07-15',)],  
['sustainability', None]]

	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
LNTH	1.716236	72.089996	13932232.371134	0.973285	0.998931	0.528641

	Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	\
LNTH	LNTH	0.943627	1.828	36.846	NaN	

	dividendYield	earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	\
LNTH	NaN	3.692	108329000	0.20002	75.42696	...	

	returnOnEquity	revenueGrowth	revenuePerShare	sector	shortRatio	\
LNTH	-0.07151	1.258	7.998	Healthcare	1.93	

	totalAssets	totalCash	totalCashPerShare	totalDebt	totalRevenue
--	-------------	-----------	-------------------	-----------	--------------

LNTH            NaN   105355000            1.535   190072992            541579008

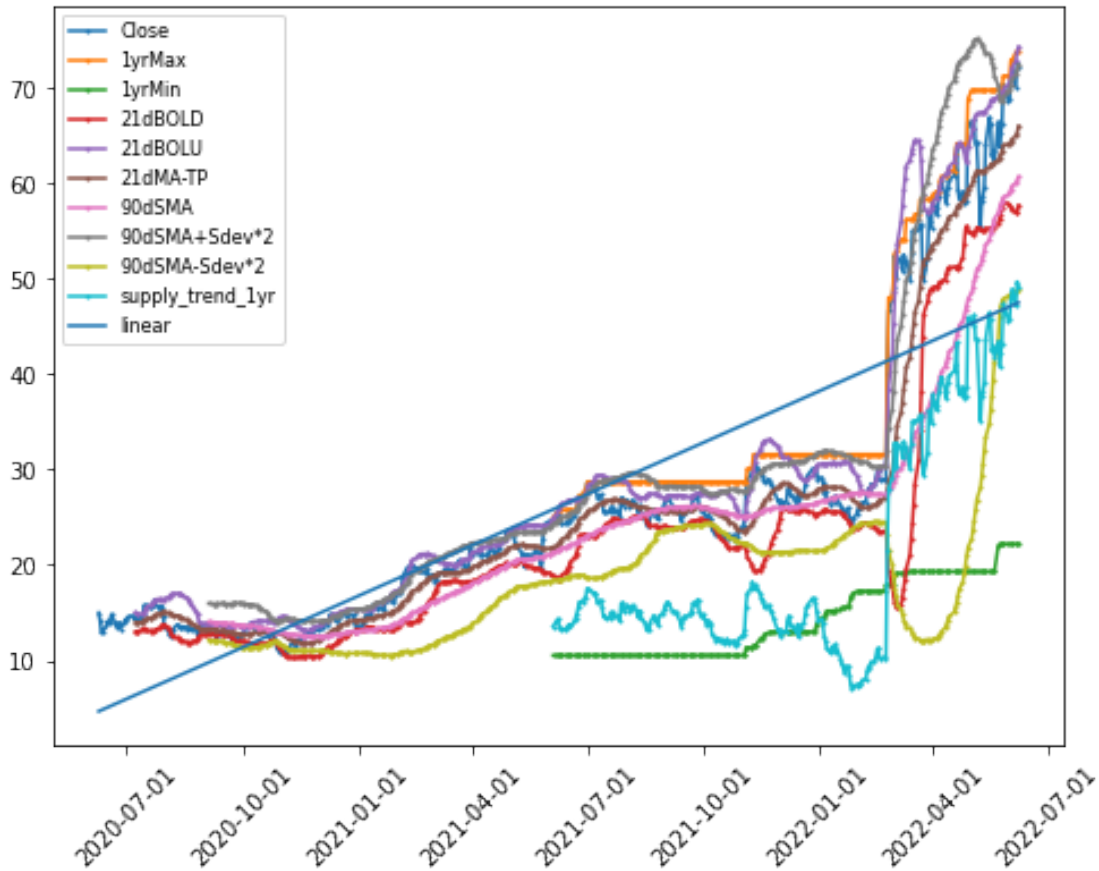
[1 rows x 35 columns]

supply trend: 13932232.37113402

Index: SP600

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



MCK

	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
MCK	1.033937	315.019989	22551770.103093	0.875512	0.985062	0.491201

	Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	dividendYield	\
MCK	MCK	0.663839	0.954	NaN	1.88	0.0059	

	earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	revenueGrowth	\
MCK	-0.406	3191000064	0.01209	12.411926	...	0.118	

	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
MCK	1733.198	Healthcare	2.18	NaN	3532000000	

	totalCashPerShare	totalDebt	totalRevenue	trailingPE
MCK	24.297	7616999936	263965999104	43.771442

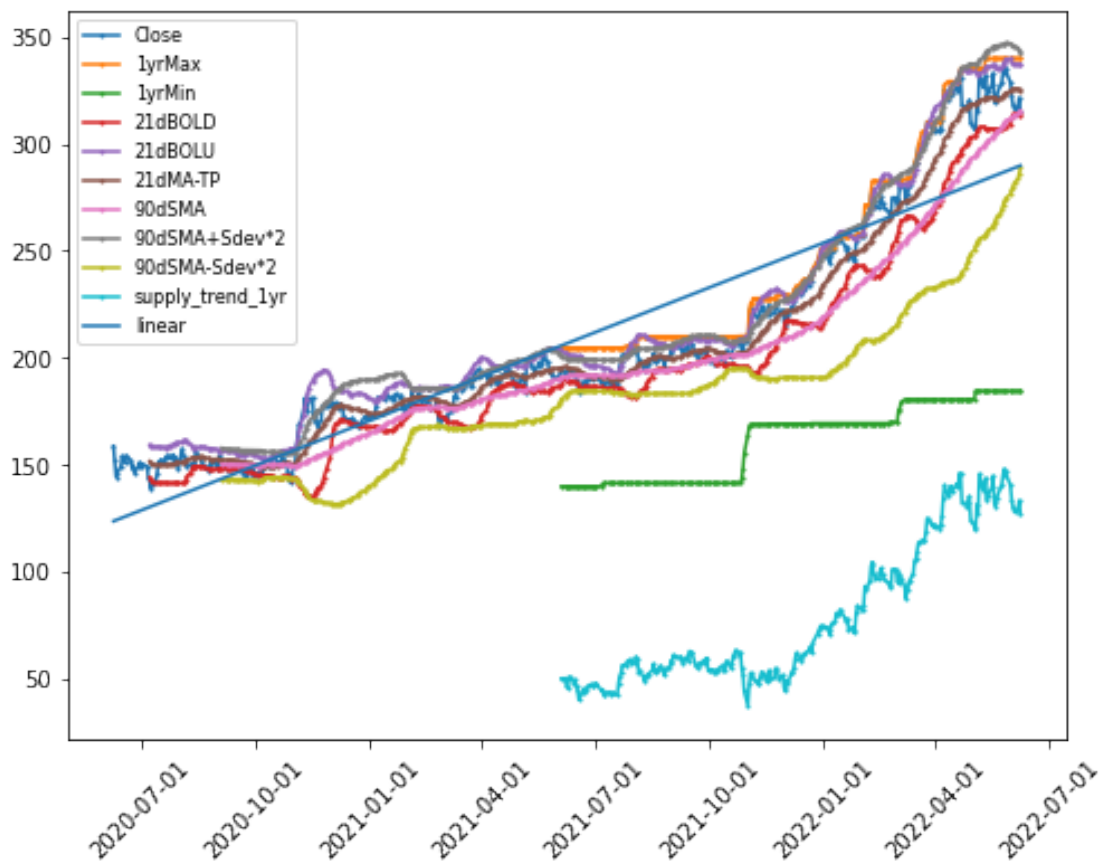
[1 rows x 36 columns]

supply trend: 22551770.10309278

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



MPC

'MPC'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Capital Surplus	3.326200e+10	3.325600e+10	3.323800e+10	

Total Liab	5.179200e+10	5.333600e+10	5.760700e+10
Total Stockholder Equity	2.620600e+10	2.828000e+10	2.892100e+10
Minority Interest	7.375000e+09	7.684000e+09	7.772000e+09
Other Current Liab	2.278000e+09	3.377000e+09	6.148000e+09
Total Assets	8.537300e+10	8.930000e+10	9.430000e+10
Common Stock	1.000000e+07	1.000000e+07	1.000000e+07
Other Current Assets	5.680000e+08	5.850000e+08	5.850000e+08
Retained Earnings	1.290500e+10	1.248400e+10	1.216000e+10
Other Liab	7.999000e+09	8.193000e+09	8.825000e+09
Good Will	8.256000e+09	8.256000e+09	8.256000e+09
Treasury Stock	-1.997100e+10	-1.747000e+10	-1.648700e+10
Other Assets	2.400000e+09	2.463000e+09	2.532000e+09
Cash	5.291000e+09	5.874000e+09	1.183900e+10
Total Current Liabilities	1.789800e+10	1.689800e+10	1.951200e+10
Deferred Long Term Asset Charges	2.000000e+06	NaN	NaN
Short Long Term Debt	4.980000e+08	7.300000e+07	7.000000e+07
Other Stockholder Equity	-6.700000e+07	-3.440000e+08	-3.400000e+08
Property Plant Equipment	3.881200e+10	3.905400e+10	3.949600e+10
Total Current Assets	3.049600e+10	3.414300e+10	3.859200e+10
Long Term Investments	5.409000e+09	5.384000e+09	5.424000e+09
Net Tangible Assets	1.795000e+10	2.002400e+10	2.066500e+10
Short Term Investments	5.548000e+09	7.352000e+09	5.418000e+09
Net Receivables	1.103400e+10	1.112100e+10	1.187100e+10
Long Term Debt	2.444300e+10	2.665500e+10	2.763900e+10
Inventory	8.055000e+09	9.211000e+09	8.879000e+09
Accounts Payable	1.370000e+10	1.219600e+10	1.217000e+10

2021-03-31

Capital Surplus	3.322200e+10
Total Liab	5.717200e+10
Total Stockholder Equity	2.159200e+10
Minority Interest	7.887000e+09
Other Current Liab	3.370000e+09
Total Assets	8.665100e+10
Common Stock	1.000000e+07
Other Current Assets	1.176200e+10
Retained Earnings	4.029000e+09
Other Liab	9.386000e+09
Good Will	8.256000e+09
Treasury Stock	-1.566900e+10
Other Assets	2.594000e+09
Cash	6.240000e+08
Total Current Liabilities	1.608500e+10
Deferred Long Term Asset Charges	NaN
Short Long Term Debt	6.900000e+07
Other Stockholder Equity	-5.110000e+08
Property Plant Equipment	4.000500e+10
Total Current Assets	3.036100e+10

Long Term Investments	5.435000e+09
Net Tangible Assets	1.333600e+10
Short Term Investments	NaN
Net Receivables	9.568000e+09
Long Term Debt	3.006100e+10
Inventory	8.407000e+09
Accounts Payable	9.953000e+09 ],

['quarterly\_cashflow',

	2021-12-31	2021-09-30 \
Investments	1.742000e+09	-1.934000e+09
Change To Liabilities	1.590000e+09	1.930000e+08
Total Cashflows From Investing Activities	1.448000e+09	-2.054000e+09
Net Borrowings	-1.951000e+09	-1.018000e+09
Total Cash From Financing Activities	-5.703000e+09	-2.762000e+09
Change To Operating Activities	-2.000000e+06	1.000000e+06
Issuance Of Stock	3.500000e+07	1.800000e+07
Net Income	7.740000e+08	6.940000e+08
Change In Cash	-5.810000e+08	-5.964000e+09
Repurchase Of Stock	-2.742000e+09	-9.280000e+08
Total Cash From Operating Activities	3.674000e+09	-1.148000e+09
Depreciation	8.130000e+08	8.360000e+08
Other Cashflows From Investing Activities	1.320000e+08	2.400000e+08
Dividends Paid	-3.540000e+08	-3.700000e+08
Change To Inventory	1.173000e+09	-3.260000e+08
Change To Account Receivables	-1.534000e+09	1.820000e+08
Other Cashflows From Financing Activities	-6.910000e+08	-4.640000e+08
Change To Netincome	8.400000e+08	-2.746000e+09
Capital Expenditures	-4.810000e+08	-3.770000e+08

	2021-06-30	2021-03-31
Investments	-5.477000e+09	-5.000000e+07
Change To Liabilities	2.656000e+09	1.821000e+09
Total Cashflows From Investing Activities	1.567000e+10	-2.670000e+08
Net Borrowings	-4.169000e+09	8.650000e+08
Total Cash From Financing Activities	-5.970000e+09	1.600000e+07
Change To Operating Activities	-1.000000e+06	5.000000e+06
Issuance Of Stock	3.000000e+07	2.300000e+07
Net Income	8.512000e+09	-2.420000e+08
Change In Cash	1.108000e+10	2.030000e+08
Repurchase Of Stock	-9.840000e+08	-9.840000e+08
Total Cash From Operating Activities	1.380000e+09	4.540000e+08
Depreciation	8.710000e+08	8.440000e+08
Other Cashflows From Investing Activities	2.144400e+10	1.100000e+07
Dividends Paid	-3.810000e+08	-3.790000e+08
Change To Inventory	-4.720000e+08	-4.080000e+08
Change To Account Receivables	-2.224000e+09	-1.723000e+09
Other Cashflows From Financing Activities	-4.660000e+08	-4.930000e+08
Change To Netincome	-7.981000e+09	1.350000e+08

Capital Expenditures -3.020000e+08 -3.040000e+08 ],  
['quarterly\_earnings',

Revenue Earnings  
Quarter  
1Q2021 22788000000 -242000000  
2Q2021 29734000000 8512000000  
3Q2021 32491000000 694000000  
4Q2021 35438000000 774000000],  
['quarterly\_financials',

	2021-12-31	2021-09-30 \
Research Development	None	None
Effect Of Accounting Charges	None	None
Income Before Tax	1348000000.0	1012000000.0
Minority Interest	7375000000.0	7684000000.0
Net Income	774000000.0	694000000.0
Selling General Administrative	654000000.0	691000000.0
Gross Profit	3254000000.0	2928000000.0
Ebit	1610000000.0	1208000000.0
Operating Income	1610000000.0	1208000000.0
Other Operating Expenses	177000000.0	193000000.0
Interest Expense	-302000000.0	-313000000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	243000000.0	-18000000.0
Total Revenue	35438000000.0	32491000000.0
Total Operating Expenses	33828000000.0	31283000000.0
Cost Of Revenue	32184000000.0	29563000000.0
Total Other Income Expense Net	-262000000.0	-196000000.0
Discontinued Operations	NaN	NaN
Net Income From Continuing Ops	1105000000.0	1030000000.0
Net Income Applicable To Common Shares	772000000.0	694000000.0

	2021-06-30	2021-03-31
Research Development	None	None
Effect Of Accounting Charges	None	None
Income Before Tax	593000000.0	-136000000.0
Minority Interest	7772000000.0	7887000000.0
Net Income	8512000000.0	-242000000.0
Selling General Administrative	681000000.0	575000000.0
Gross Profit	2557000000.0	1704000000.0
Ebit	816000000.0	123000000.0
Operating Income	816000000.0	123000000.0
Other Operating Expenses	189000000.0	162000000.0
Interest Expense	-318000000.0	-334000000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None

Income Tax Expense	5000000.0	34000000.0
Total Revenue	29734000000.0	22788000000.0
Total Operating Expenses	28918000000.0	22665000000.0
Cost Of Revenue	27177000000.0	21084000000.0
Total Other Income Expense Net	-223000000.0	-259000000.0
Discontinued Operations	8214000000.0	234000000.0
Net Income From Continuing Ops	588000000.0	-170000000.0
Net Income Applicable To Common Shares	8512000000.0	-242000000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	\
0	Select Sector SPDR Fund-Energy Select	18103056	2022-01-30	
1	Vanguard Total Stock Market Index Fund	17494854	2021-12-30	
2	Vanguard 500 Index Fund	13037019	2021-12-30	
3	Vanguard Mid-Cap Index Fund	6960433	2021-12-30	
4	SPDR S&P 500 ETF Trust	6540311	2022-01-30	
5	Fidelity 500 Index Fund	6304109	2022-02-27	
6	iShares Core S&P 500 ETF	5120813	2022-01-30	
7	Vanguard Index-Value Index Fund	4704115	2021-12-30	
8	Vanguard Institutional Index Fund-Institutiona...	4638261	2021-12-30	
9	iShares Select Dividend ETF	4127022	2022-01-30	

	% Out	Value
0	0.0335	1298894268
1	0.0323	1119495707
2	0.0241	834238845
3	0.0129	445398107
4	0.0121	469267314
5	0.0117	490900967
6	0.0095	367418332
7	0.0087	301016318
8	0.0086	296802321
9	0.0076	296113828 ],

['options', ('2022-07-15', '2022-09-16', '2023-01-20', '2024-01-19')],

['sustainability',

	Value
2022-5	
palmOil	False
controversialWeapons	False
gambling	False
socialScore	7.01
nuclear	False
furLeather	False
alcoholic	False
gmo	False
catholic	False
socialPercentile	0
peerCount	39
governanceScore	5.87



```

environmentPercentile      0
animalTesting              False
tobacco                   False
totalEsg                   28.78
highestControversy        3
esgPerformance            None
coal                      False
pesticides                 False
adult                     False
percentile                 57.14
peerGroup                  Refiners & Pipelines
smallArms                  False
environmentScore           15.91
governancePercentile      0
militaryContract           False]]

volume_factor  latest_p  vol_30d_2yr  pct_2yr  adf  hurst
MPC            0.938895  112.870003  139273334.845361  0.983142  0.999044  0.43444

  Unnamed: 0      beta currentRatio debtToEquity dividendRate dividendYield \
MPC            MPC  1.910294          1.704          80.117          2.32          0.0242

earningsGrowth      ebitda ebitdaMargins  forwardPE  ... revenueGrowth \
MPC            1.917  7120999936          0.05912  26.388626  ...          0.967

revenuePerShare  sector shortRatio totalAssets  totalCash \
MPC            189.986  Energy          2.92          NaN  10839000064

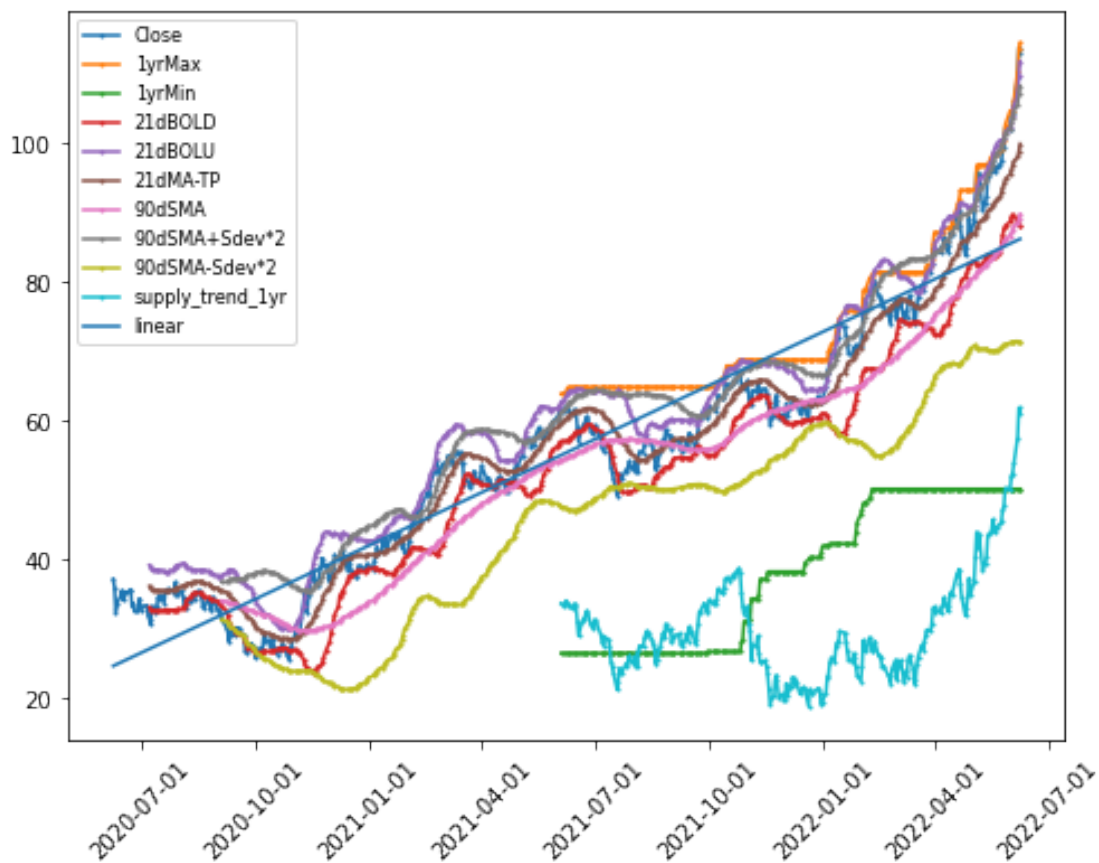
totalCashPerShare  totalDebt  totalRevenue trailingPE
MPC            19.177  26904000512  120450998272  7.816931

[1 rows x 36 columns]

supply trend: 139273334.8453608
Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel_14824\3532675363.py:71: UserWarning:
FixedFormatter should only be used together with FixedLocator
  ax.set_xticklabels(ax.get_xticks(), rotation = 45)

```



MRO

'MRO'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Capital Surplus	7.221000e+09	7.213000e+09	7.201000e+09	
Total Liab	6.308000e+09	6.365000e+09	7.166000e+09	
Total Stockholder Equity	1.068600e+10	1.079600e+10	1.063400e+10	
Other Current Liab	3.680000e+08	4.960000e+08	5.020000e+08	
Total Assets	1.699400e+10	1.716100e+10	1.780000e+10	
Common Stock	9.370000e+08	9.370000e+08	9.370000e+08	
Other Current Assets	2.200000e+07	2.500000e+07	1.900000e+07	
Retained Earnings	7.271000e+09	6.669000e+09	6.524000e+09	
Other Liab	6.440000e+08	6.420000e+08	6.650000e+08	
Treasury Stock	-4.743000e+09	-4.023000e+09	-4.028000e+09	
Other Assets	1.100000e+08	1.040000e+08	9.300000e+07	
Cash	5.800000e+08	4.850000e+08	9.700000e+08	
Total Current Liabilities	1.637000e+09	1.676000e+09	1.575000e+09	
Short Long Term Debt	3.900000e+07	3.900000e+07	3.500000e+07	
Other Stockholder Equity	8.200000e+07	8.200000e+07	7.700000e+07	

Property Plant Equipment	1.458600e+10	1.484300e+10	1.511100e+10
Total Current Assets	1.821000e+09	1.655000e+09	2.075000e+09
Long Term Investments	4.770000e+08	5.590000e+08	5.210000e+08
Net Tangible Assets	1.068600e+10	1.079600e+10	1.063400e+10
Net Receivables	1.142000e+09	1.068000e+09	1.008000e+09
Long Term Debt	3.980000e+09	3.983000e+09	4.882000e+09
Inventory	7.700000e+07	7.700000e+07	7.800000e+07
Accounts Payable	1.110000e+09	1.028000e+09	9.370000e+08

2021-03-31

Capital Surplus	7.195000e+09
Total Liab	7.562000e+09
Total Stockholder Equity	1.067100e+10
Other Current Liab	3.810000e+08
Total Assets	1.823300e+10
Common Stock	9.370000e+08
Other Current Assets	2.600000e+07
Retained Earnings	6.540000e+09
Other Liab	6.950000e+08
Treasury Stock	-4.001000e+09
Other Assets	9.600000e+07
Cash	1.125000e+09
Total Current Liabilities	1.899000e+09
Short Long Term Debt	5.010000e+08
Other Stockholder Equity	1.120000e+08
Property Plant Equipment	1.542500e+10
Total Current Assets	2.150000e+09
Long Term Investments	5.620000e+08
Net Tangible Assets	1.067100e+10
Net Receivables	9.210000e+08
Long Term Debt	4.910000e+09
Inventory	7.800000e+07
Accounts Payable	9.180000e+08

['quarterly\_cashflow',

	2021-12-31	2021-09-30	\
Investments	4.600000e+07	9.000000e+06	
Change To Liabilities	1.410000e+08	1.070000e+08	
Total Cashflows From Investing Activities	-2.820000e+08	-2.650000e+08	
Total Cash From Financing Activities	-7.690000e+08	-1.036000e+09	
Change To Operating Activities	-2.000000e+07	-7.000000e+06	
Net Income	6.490000e+08	1.840000e+08	
Change In Cash	9.500000e+07	-4.850000e+08	
Repurchase Of Stock	-7.240000e+08	-1.000000e+06	
Total Cash From Operating Activities	1.146000e+09	8.160000e+08	
Depreciation	4.630000e+08	5.830000e+08	
Dividends Paid	-4.700000e+07	-3.900000e+07	
Change To Account Receivables	-7.600000e+07	-6.000000e+07	
Other Cashflows From Financing Activities	2.000000e+06	-9.600000e+07	

Change To Netincome	-1.100000e+07	8.000000e+06
Capital Expenditures	-2.740000e+08	-2.890000e+08
Net Borrowings	NaN	-9.000000e+08
Other Cashflows From Investing Activities	NaN	1.000000e+06
Change To Inventory	NaN	1.000000e+06

	2021-06-30	2021-03-31
Investments	6000000.0	6000000.0
Change To Liabilities	20000000.0	101000000.0
Total Cashflows From Investing Activities	-256000000.0	-207000000.0
Total Cash From Financing Activities	-554000000.0	-32000000.0
Change To Operating Activities	12000000.0	61000000.0
Net Income	16000000.0	97000000.0
Change In Cash	-155000000.0	383000000.0
Repurchase Of Stock	-1000000.0	-9000000.0
Total Cash From Operating Activities	655000000.0	622000000.0
Depreciation	600000000.0	512000000.0
Dividends Paid	-32000000.0	-23000000.0
Change To Account Receivables	-78000000.0	-175000000.0
Other Cashflows From Financing Activities	-22000000.0	-22000000.0
Change To Netincome	85000000.0	28000000.0
Capital Expenditures	-274000000.0	-209000000.0
Net Borrowings	-500000000.0	-500000000.0
Other Cashflows From Investing Activities	1000000.0	-1000000.0
Change To Inventory	1000000.0	-2000000.0

['quarterly\_earnings',

	Revenue	Earnings
--	---------	----------

Quarter

1Q2021	1180000000	97000000
2Q2021	1259000000	16000000
3Q2021	1439000000	184000000
4Q2021	1738000000	649000000

['quarterly\_financials',

	2021-12-31	2021-09-30	\
Research Development	None	None	
Effect Of Accounting Charges	None	None	
Income Before Tax	683000000.0	188000000.0	
Minority Interest	None	None	
Net Income	649000000.0	184000000.0	
Selling General Administrative	61000000.0	70000000.0	
Gross Profit	1393000000.0	1089000000.0	
Ebit	755000000.0	254000000.0	
Operating Income	755000000.0	254000000.0	
Other Operating Expenses	94000000.0	167000000.0	
Interest Expense	-74000000.0	-57000000.0	
Extraordinary Items	None	None	
Non Recurring	None	None	
Other Items	None	None	

Income Tax Expense	34000000.0	4000000.0
Total Revenue	1738000000.0	1439000000.0
Total Operating Expenses	983000000.0	1185000000.0
Cost Of Revenue	345000000.0	350000000.0
Total Other Income Expense Net	-72000000.0	-66000000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	649000000.0	184000000.0
Net Income Applicable To Common Shares	649000000.0	184000000.0

	2021-06-30	2021-03-31
Research Development	None	None
Effect Of Accounting Charges	None	None
Income Before Tax	26000000.0	107000000.0
Minority Interest	None	None
Net Income	16000000.0	97000000.0
Selling General Administrative	69000000.0	75000000.0
Gross Profit	966000000.0	907000000.0
Ebit	54000000.0	87000000.0
Operating Income	54000000.0	87000000.0
Other Operating Expenses	240000000.0	227000000.0
Interest Expense	-59000000.0	-13000000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	10000000.0	10000000.0
Total Revenue	1259000000.0	1180000000.0
Total Operating Expenses	1205000000.0	1093000000.0
Cost Of Revenue	293000000.0	273000000.0
Total Other Income Expense Net	-28000000.0	20000000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	16000000.0	97000000.0
Net Income Applicable To Common Shares	16000000.0	97000000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	% Out	\
0	Vanguard/Windsor II	26018487	2022-01-30	0.0368	
1	Select Sector SPDR Fund-Energy Select	22895120	2022-01-30	0.0324	
2	Vanguard Total Stock Market Index Fund	22131478	2021-12-30	0.0313	
3	Vanguard Small-Cap Index Fund	19611815	2021-12-30	0.0277	
4	Vanguard 500 Index Fund	16486851	2021-12-30	0.0233	
5	Vanguard Small Cap Value Index Fund	12430773	2021-12-30	0.0176	
6	Fidelity Low-Priced Stock Fund	12282677	2022-02-27	0.0174	
7	SPDR S&P 500 ETF Trust	8364080	2022-01-30	0.0118	
8	Fidelity 500 Index Fund	7972838	2022-02-27	0.0113	
9	Invesco Comstock Fd	7808667	2022-01-30	0.0110	

Value

0	506579941
1	445767986

```

2 363398868
3 322026002
4 270714093
5 204113292
6 277097193
7 162848637
8 179867225
9 152034746 ],
['options', ('2022-07-15', '2022-09-16', '2023-01-20', '2024-01-19')],
['sustainability',

                                Value
2022-5
palmOil                        False
controversialWeapons           False
gambling                       False
socialScore                    10.01
nuclear                       False
furLeather                     False
alcoholic                     False
gmo                            False
catholic                      False
socialPercentile               0
peerCount                     66
governanceScore               8.13
environmentPercentile         0
animalTesting                  False
tobacco                       False
totalEsg                      42.05
highestControversy            2
esgPerformance                None
coal                          False
pesticides                    False
adult                         False
percentile                    90.8
peerGroup                      Oil & Gas Producers
smallArms                     False
environmentScore              23.91
governancePercentile          0
militaryContract              False]]

    volume_factor latest_p    vol_30d_2yr  pct_2yr      adf      hurst
MRO      0.933455    31.93  475361004.948454  0.955608  0.998893  0.434829

    Unnamed: 0      beta currentRatio debtToEquity dividendRate dividendYield \
MRO      MRO  2.766666      1.112      38.48      0.32      0.0119

    earningsGrowth      ebitda ebitdaMargins  forwardPE  ... returnOnEquity \
MRO      NaN  3308999936      0.58921  15.943877  ...      0.08905

```

	revenueGrowth	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
MRO	1.091	7.136	Energy	0.93	NaN	580000000	

	totalCashPerShare	totalDebt	totalRevenue
MRO	0.794	4112000000	5616000000

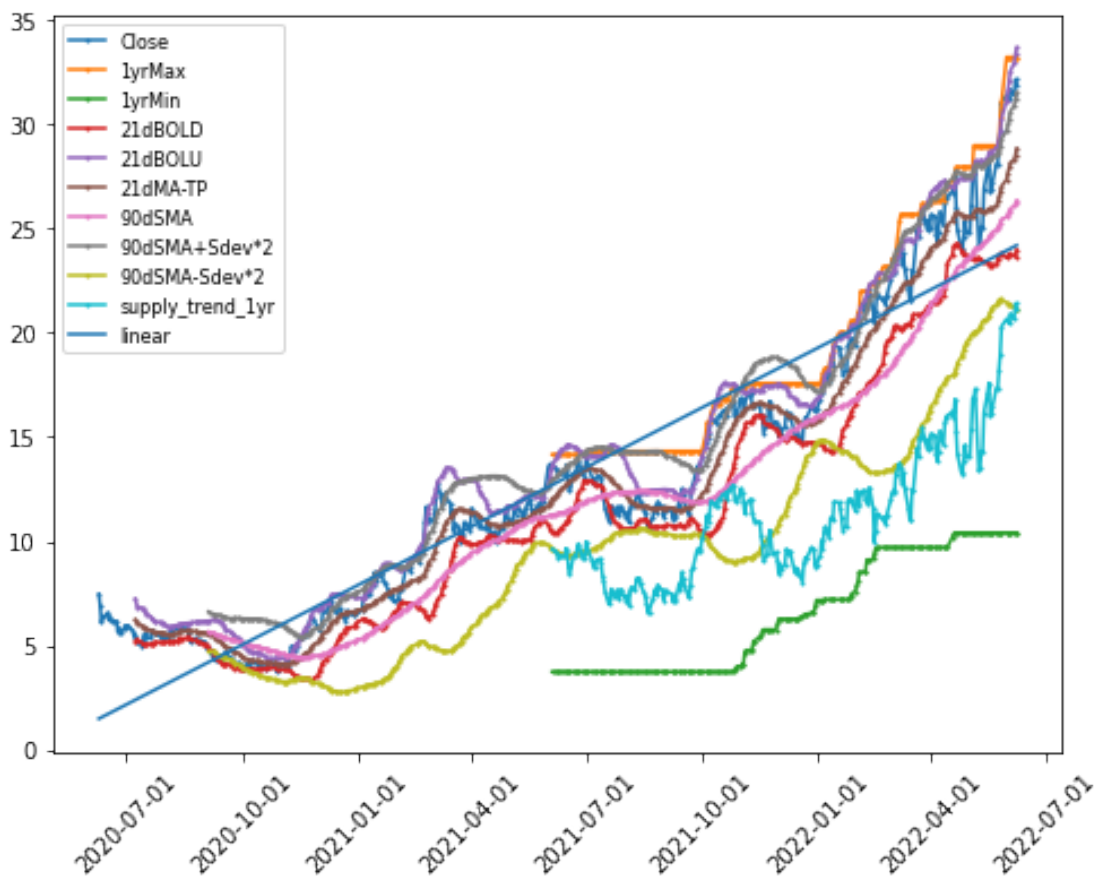
[1 rows x 35 columns]

supply trend: 475361004.9484536

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



MTOR

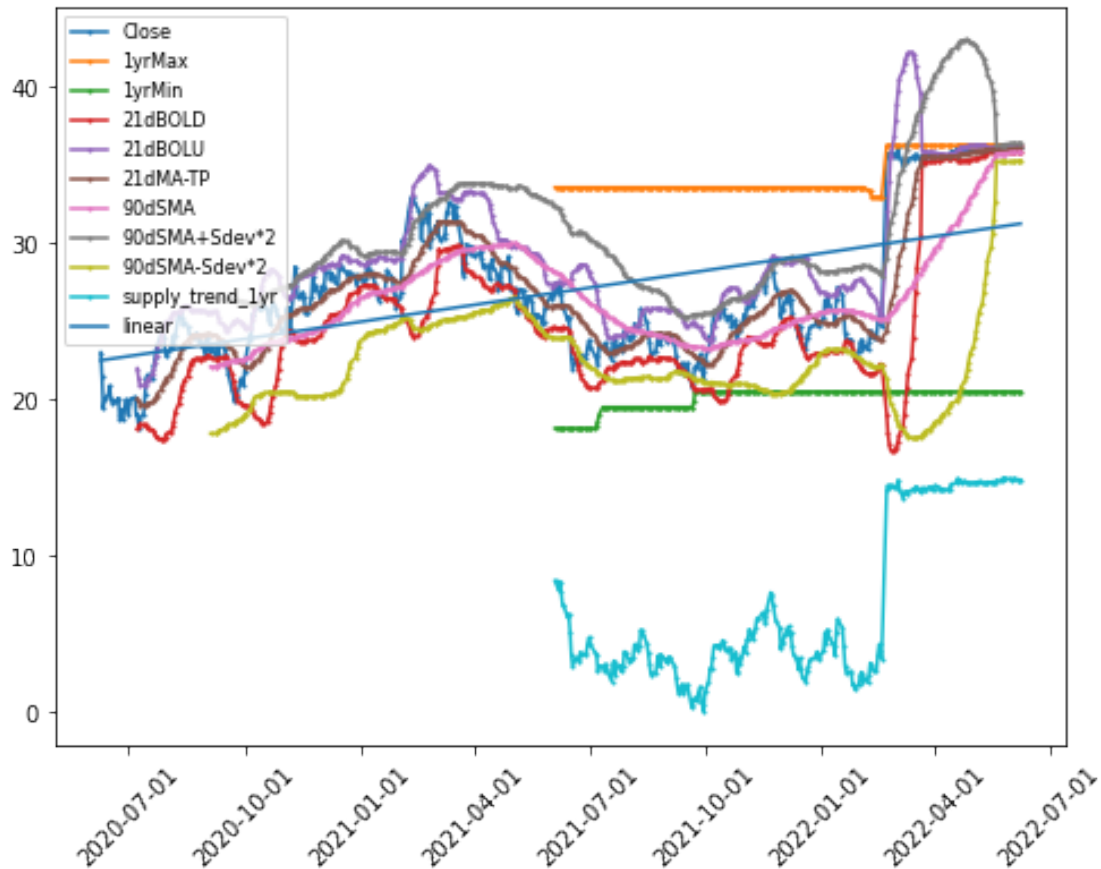
	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
MTOR	1.652223	36.119999	15273304.742268	0.990077	0.524241	0.400653

Unnamed: 0

MTOR MTOR

supply trend: 15273304.74226804  
Index: SP600

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



SJI

'SJI'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Intangible Assets	1.404300e+07	1.473100e+07	1.611800e+07	
Capital Surplus	1.559060e+09	1.463655e+09	1.462322e+09	
Total Liab	5.309231e+09	5.187967e+09	4.938285e+09	
Total Stockholder Equity	1.989152e+09	1.828587e+09	1.887399e+09	
Minority Interest	1.028900e+07	7.457000e+06	7.425000e+06	
Deferred Long Term Liab	6.724160e+08	6.694870e+08	6.701760e+08	
Other Current Liab	1.596050e+08	2.273930e+08	1.760970e+08	
Total Assets	7.308672e+09	7.024011e+09	6.833109e+09	



Common Stock	1.466750e+08	1.405610e+08	1.405570e+08
Other Current Assets	9.504100e+07	1.416900e+08	8.351100e+07
Retained Earnings	3.104330e+08	2.628420e+08	3.229880e+08
Other Liab	1.141049e+09	1.165851e+09	1.163466e+09
Good Will	7.069600e+08	7.069600e+08	7.069600e+08
Treasury Stock	-2.701600e+07	-3.847100e+07	-3.846800e+07
Other Assets	9.811060e+08	9.530460e+08	9.168080e+08
Cash	2.875400e+07	2.541500e+07	8.789900e+07
Total Current Liabilities	9.556820e+08	8.187800e+08	5.896010e+08
Short Long Term Debt	6.663900e+07	6.663600e+07	9.155500e+07
Other Stockholder Equity	-2.672900e+07	-3.819100e+07	-3.820000e+07
Property Plant Equipment	4.929055e+09	4.741429e+09	4.633664e+09
Total Current Assets	6.389620e+08	5.716560e+08	5.270180e+08
Long Term Investments	3.854600e+07	3.618900e+07	3.254100e+07
Net Tangible Assets	1.268149e+09	1.106896e+09	1.164321e+09
Net Receivables	3.951240e+08	2.603440e+08	2.495690e+08
Long Term Debt	3.190808e+09	3.197736e+09	3.182118e+09
Inventory	6.079700e+07	6.639100e+07	4.158000e+07
Accounts Payable	3.301640e+08	3.009550e+08	2.261080e+08

	2021-03-31	
Intangible Assets	1.570100e+07	
Capital Surplus	1.193552e+09	
Total Liab	4.971266e+09	
Total Stockholder Equity	1.737118e+09	
Minority Interest	6.124000e+06	
Deferred Long Term Liab	6.507100e+08	
Other Current Liab	1.368470e+08	
Total Assets	6.714508e+09	
Common Stock	1.282150e+08	
Other Current Assets	3.854100e+07	
Retained Earnings	4.538230e+08	
Other Liab	1.148234e+09	
Good Will	7.069600e+08	
Treasury Stock	-3.847200e+07	
Other Assets	8.649660e+08	
Cash	3.038600e+07	
Total Current Liabilities	7.526990e+08	
Short Long Term Debt	1.433030e+08	
Other Stockholder Equity	-3.820800e+07	
Property Plant Equipment	4.524998e+09	
Total Current Assets	4.889150e+08	
Long Term Investments	1.129680e+08	
Net Tangible Assets	1.014457e+09	
Net Receivables	3.626680e+08	
Long Term Debt	3.067233e+09	
Inventory	2.054900e+07	
Accounts Payable	2.180780e+08	],

['quarterly\_cashflow',

	2021-12-31	2021-09-30	\
Net Income	0.0	-26130000.0	
Change To Liabilities	0.0	0.0	
Investments	NaN	-22044000.0	
Total Cashflows From Investing Activities	NaN	-164851000.0	
Net Borrowings	NaN	107800000.0	
Total Cash From Financing Activities	NaN	70091000.0	
Change In Cash	NaN	-62484000.0	
Total Cash From Operating Activities	NaN	32276000.0	
Depreciation	NaN	48089000.0	
Other Cashflows From Investing Activities	NaN	-1418000.0	
Dividends Paid	NaN	-34007000.0	
Other Cashflows From Financing Activities	NaN	-3702000.0	
Change To Netincome	NaN	10317000.0	
Capital Expenditures	NaN	-141378000.0	
Issuance Of Stock	NaN	NaN	

	2021-06-30	2021-03-31	
Net Income	-96828000.0	128598000.0	
Change To Liabilities	0.0	0.0	
Investments	-17530000.0	-196000.0	
Total Cashflows From Investing Activities	-156992000.0	-112328000.0	
Net Borrowings	-84100000.0	-127600000.0	
Total Cash From Financing Activities	169869000.0	-96098000.0	
Change In Cash	56065000.0	-9963000.0	
Total Cash From Operating Activities	43188000.0	198463000.0	
Depreciation	49180000.0	54440000.0	
Other Cashflows From Investing Activities	1968000.0	-6752000.0	
Dividends Paid	-30453000.0	-30453000.0	
Other Cashflows From Financing Activities	-3078000.0	-10770000.0	
Change To Netincome	90836000.0	15425000.0	
Capital Expenditures	-126758000.0	-105380000.0	
Issuance Of Stock	287500000.0	42272000.0	],

['quarterly\_earnings',

	Revenue	Earnings
Quarter		
1Q2021	674300000	128598000
2Q2021	311828000	-96828000
3Q2021	365631000	-26130000
4Q2021	0	0],

['quarterly\_financials',

	2021-12-31	2021-09-30	2021-06-30	\
Research Development	None	None	None	
Effect Of Accounting Charges	None	None	None	
Income Before Tax	NaN	-37557000.0	-101362000.0	
Minority Interest	10289000.0	7457000.0	7425000.0	
Net Income	0.0	-26130000.0	-96828000.0	

Selling General Administrative	None	None	None
Gross Profit	0.0	16068000.0	47452000.0
Ebit	0.0	-8973000.0	11609000.0
Operating Income	NaN	-8973000.0	11609000.0
Other Operating Expenses	NaN	-8040000.0	2812000.0
Interest Expense	NaN	-31468000.0	-31185000.0
Extraordinary Items	None	None	None
Non Recurring	None	None	None
Other Items	None	None	None
Income Tax Expense	0.0	-11727000.0	-4702000.0
Total Revenue	0.0	365631000.0	311828000.0
Total Operating Expenses	0.0	374604000.0	300219000.0
Cost Of Revenue	0.0	349563000.0	264376000.0
Total Other Income Expense Net	0.0	-28584000.0	-112971000.0
Discontinued Operations	NaN	-127000.0	-80000.0
Net Income From Continuing Ops	NaN	-25830000.0	-96660000.0
Net Income Applicable To Common Shares	NaN	-26130000.0	-96828000.0

2021-03-31

Research Development	None
Effect Of Accounting Charges	None
Income Before Tax	170567000.0
Minority Interest	6124000.0
Net Income	128598000.0
Selling General Administrative	None
Gross Profit	232623000.0
Ebit	196828000.0
Operating Income	196828000.0
Other Operating Expenses	3983000.0
Interest Expense	-31459000.0
Extraordinary Items	None
Non Recurring	None
Other Items	None
Income Tax Expense	41769000.0
Total Revenue	674300000.0
Total Operating Expenses	477472000.0
Cost Of Revenue	441677000.0
Total Other Income Expense Net	-26261000.0
Discontinued Operations	-71000.0
Net Income From Continuing Ops	128798000.0
Net Income Applicable To Common Shares	128598000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	\
0	SPDR (R) Ser Tr- SPDR (R) S&P (R) Dividend ETF	11551756	2022-01-30	
1	iShares Core S&P Smallcap ETF	7909776	2022-01-30	
2	Vanguard Total Stock Market Index Fund	3185871	2021-12-30	
3	Vanguard Small-Cap Index Fund	2832115	2021-12-30	
4	iShares Russell 2000 ETF	2351525	2022-01-30	

5	SSgA SPDR ETFs Europe I-SPDR S&P US Dividend A...	2037036	2022-02-27
6	SSgA SPDR ETFs Europe I-SPDR S&P U.S. Div Aris...	2037036	2022-02-27
7	iShares S&P Smallcap 600 Value ETF	1870014	2022-01-30
8	Vanguard Small Cap Value Index Fund	1795423	2021-12-30
9	Delaware Group Equity Funds V-Small Cap Value ...	1632000	2022-02-27

	% Out	Value
0	0.0944	289024935
1	0.0646	197902595
2	0.0260	83214950
3	0.0231	73974843
4	0.0192	58835155
5	0.0166	69116631
6	0.0166	69116631
7	0.0153	46787750
8	0.0147	46896448
9	0.0133	55373760 ],

['options', ('2022-07-15',)],  
['sustainability', None]]

	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
SJI	0.772481	34.66	27428508.247423	0.961358	0.821762	0.398169

	Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	dividendYield	\
SJI	SJI	0.767156	0.669	180.745	1.24	0.0371	

	earningsGrowth	ebitda	ebitdaMargins	forwardPE	... revenueGrowth	\
SJI	NaN	563539008	0.2829	20.479042	...	NaN

	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
SJI	18.23	Utilities	3.26	NaN	28754000	

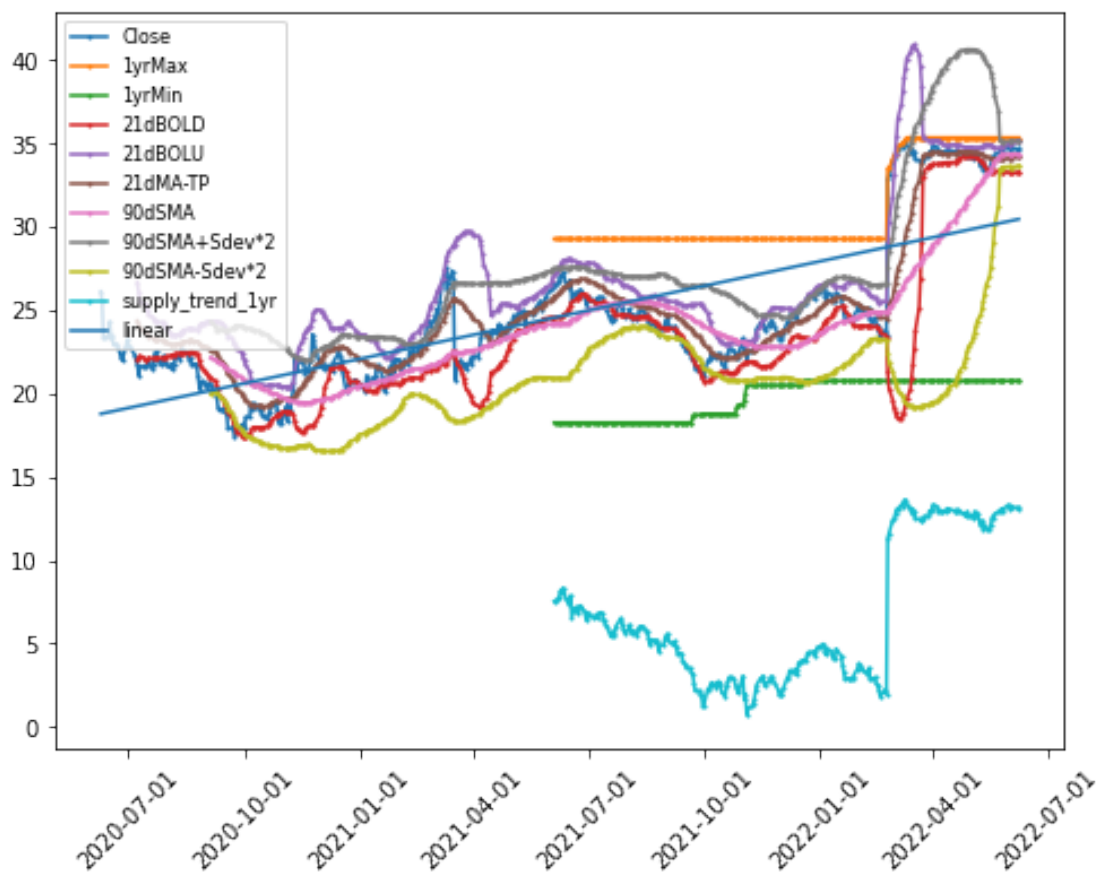
	totalCashPerShare	totalDebt	totalRevenue	trailingPE
SJI	0.245	3613896960	1991996032	48.78745

[1 rows x 36 columns]

supply trend: 27428508.24742268

Index: SP600

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



TVTY

'TVTY'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Intangible Assets	29049000.0	29049000.0	29049000.0	
Capital Surplus	514461000.0	514313000.0	512674000.0	
Total Liab	479634000.0	490770000.0	488961000.0	
Total Stockholder Equity	118907000.0	140669000.0	34787000.0	
Other Current Liab	22671000.0	3686000.0	3937000.0	
Total Assets	598541000.0	631439000.0	523748000.0	
Common Stock	50000.0	49000.0	49000.0	
Other Current Assets	13733000.0	15610000.0	16423000.0	
Retained Earnings	-359171000.0	-333825000.0	-436592000.0	
Other Liab	3202000.0	846000.0	976000.0	
Good Will	334680000.0	334680000.0	334680000.0	
Treasury Stock	-36433000.0	-39868000.0	-41344000.0	
Other Assets	2969000.0	5736000.0	5872000.0	
Cash	60132000.0	51755000.0	24226000.0	
Total Current Liabilities	87423000.0	92830000.0	85472000.0	

Short Long Term Debt	10625000.0	17234000.0	17724000.0
Other Stockholder Equity	-8251000.0	-11686000.0	-13162000.0
Property Plant Equipment	35942000.0	32682000.0	34446000.0
Total Current Assets	195901000.0	229292000.0	108901000.0
Net Tangible Assets	-244822000.0	-223060000.0	-328942000.0
Short Term Investments	49746000.0	91183000.0	NaN
Net Receivables	65825000.0	63963000.0	60600000.0
Long Term Debt	385522000.0	391666000.0	395112000.0
Accounts Payable	25325000.0	21188000.0	18982000.0
Deferred Long Term Asset Charges	NaN	1643000.0	917000.0
Long Term Investments	NaN	NaN	10800000.0

	2021-03-31
Intangible Assets	29049000.0
Capital Surplus	513923000.0
Total Liab	513644000.0
Total Stockholder Equity	26254000.0
Other Current Liab	4351000.0
Total Assets	539898000.0
Common Stock	49000.0
Other Current Assets	19586000.0
Retained Earnings	-444949000.0
Other Liab	1088000.0
Good Will	334680000.0
Treasury Stock	-42769000.0
Other Assets	7194000.0
Cash	52428000.0
Total Current Liabilities	89125000.0
Short Long Term Debt	21651000.0
Other Stockholder Equity	-14587000.0
Property Plant Equipment	36269000.0
Total Current Assets	121906000.0
Net Tangible Assets	-337475000.0
Short Term Investments	NaN
Net Receivables	45738000.0
Long Term Debt	413971000.0
Accounts Payable	18400000.0
Deferred Long Term Asset Charges	1186000.0
Long Term Investments	10800000.0 ],
['quarterly_cashflow',	

	2021-12-31	2021-09-30 \
Change To Liabilities	-254000.0	96000.0
Total Cashflows From Investing Activities	-9797000.0	-1582000.0
Net Borrowings	-1869000.0	867000.0
Total Cash From Financing Activities	-3727000.0	319000.0
Change To Operating Activities	1785000.0	5480000.0
Issuance Of Stock	52000.0	276000.0
Net Income	-25346000.0	102767000.0

Change In Cash	8377000.0	27529000.0
Repurchase Of Stock	-1910000.0	-824000.0
Total Cash From Operating Activities	21901000.0	28792000.0
Depreciation	3119000.0	2756000.0
Other Cashflows From Investing Activities	1046000.0	-1695000.0
Change To Account Receivables	1233000.0	-10823000.0
Change To Netincome	46028000.0	-81619000.0
Capital Expenditures	-8096000.0	-2615000.0
Investments	NaN	2728000.0
Other Cashflows From Financing Activities	NaN	NaN

	2021-06-30	2021-03-31
Change To Liabilities	-1731000.0	-151000.0
Total Cashflows From Investing Activities	-1399000.0	-3194000.0
Net Borrowings	-32545000.0	-65043000.0
Total Cash From Financing Activities	-40615000.0	-67381000.0
Change To Operating Activities	-3034000.0	2438000.0
Issuance Of Stock	194000.0	164000.0
Net Income	8357000.0	19136000.0
Change In Cash	-28202000.0	-47957000.0
Repurchase Of Stock	-4311000.0	-2502000.0
Total Cash From Operating Activities	13812000.0	22618000.0
Depreciation	2740000.0	2683000.0
Other Cashflows From Investing Activities	-1668000.0	-1633000.0
Change To Account Receivables	-8181000.0	-18978000.0
Change To Netincome	20874000.0	5013000.0
Capital Expenditures	-2478000.0	-1561000.0
Investments	2728000.0	2728000.0
Other Cashflows From Financing Activities	-3953000.0	-3953000.0 ],

['quarterly\_earnings',

Revenue Earnings

Quarter

1Q2021	108085000	19136000
2Q2021	120071000	8357000
3Q2021	126289000	102767000
4Q2021	126808000	-25346000],

['quarterly\_financials',

2021-12-31 2021-09-30 2021-06-30

\

Research Development	None	None	None
Effect Of Accounting Charges	None	None	None
Income Before Tax	-15424000.0	112624000.0	8958000.0
Minority Interest	None	None	None
Net Income	-25346000.0	102767000.0	8357000.0
Selling General Administrative	14551000.0	11995000.0	9930000.0
Gross Profit	48990000.0	51780000.0	51432000.0
Ebit	31320000.0	37029000.0	38762000.0

Operating Income	31320000.0	37029000.0	38762000.0
Other Operating Expenses	None	None	None
Interest Expense	-7934000.0	-7543000.0	-9659000.0
Extraordinary Items	None	None	None
Non Recurring	None	None	None
Other Items	None	None	None
Income Tax Expense	9614000.0	8925000.0	187000.0
Total Revenue	126808000.0	126289000.0	120071000.0
Total Operating Expenses	95488000.0	89260000.0	81309000.0
Cost Of Revenue	77818000.0	74509000.0	68639000.0
Total Other Income Expense Net	-46744000.0	75595000.0	-29804000.0
Discontinued Operations	-308000.0	-932000.0	-414000.0
Net Income From Continuing Ops	-25038000.0	103699000.0	8771000.0
Net Income Applicable To Common Shares	-25346000.0	102767000.0	8357000.0

2021-03-31

Research Development	None
Effect Of Accounting Charges	None
Income Before Tax	27564000.0
Minority Interest	None
Net Income	19136000.0
Selling General Administrative	9606000.0
Gross Profit	50800000.0
Ebit	38511000.0
Operating Income	38511000.0
Other Operating Expenses	None
Interest Expense	-9626000.0
Extraordinary Items	None
Non Recurring	None
Other Items	None
Income Tax Expense	7620000.0
Total Revenue	108085000.0
Total Operating Expenses	69574000.0
Cost Of Revenue	57285000.0
Total Other Income Expense Net	-10947000.0
Discontinued Operations	-808000.0
Net Income From Continuing Ops	19944000.0
Net Income Applicable To Common Shares	19136000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	\
0	iShares Core S&P Smallcap ETF	3109924	2022-01-30	
1	Trust for Advised Port-Miller Opportunity Trust	3000000	2021-12-30	
2	Vanguard Total Stock Market Index Fund	1205505	2021-12-30	
3	Vanguard Small-Cap Index Fund	1087474	2021-12-30	
4	iShares Russell 2000 ETF	1007421	2022-01-30	
5	Vanguard Small Cap Value Index Fund	675190	2021-12-30	
6	John Hancock Small Cap Core Fd	673643	2022-01-30	
7	Vanguard Extended Market Index Fund	579630	2021-12-30	



8	iShares S&P Smallcap 600 Value ETF	389127	2022-01-30
9	Vanguard Tax Managed Fund-Small Cap Fund	367500	2021-12-30

	% Out	Value
0	0.0624	79116466
1	0.0601	79320000
2	0.0242	31873552
3	0.0218	28752812
4	0.0202	25628790
5	0.0135	17852023
6	0.0135	17137477
7	0.0116	15325417
8	0.0078	9899390
9	0.0074	9716700

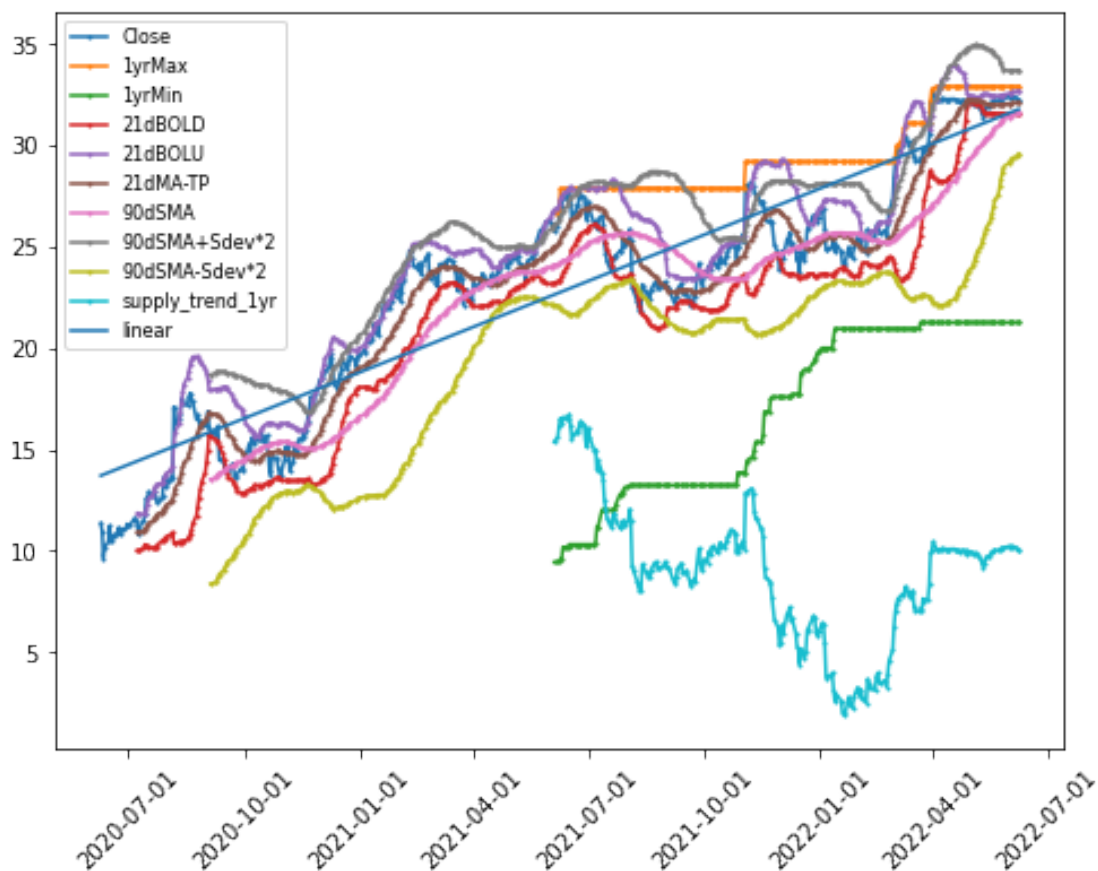
],  
['options', ('2022-08-19',)],  
['sustainability', None]]

	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
TVTY	1.584759	32.169998	10500521.443299	0.968282	0.645187	0.398114

Unnamed: 0  
TVTY TVTY

supply trend: 10500521.44329897  
Index: SP600

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



WMB

'WMB'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Intangible Assets	7.402000e+09	7.481000e+09	7.277000e+09	
Capital Surplus	2.444900e+10	2.442500e+10	2.440100e+10	
Total Liab	3.351100e+10	3.206600e+10	3.124200e+10	
Total Stockholder Equity	1.138800e+10	1.116300e+10	1.147700e+10	
Minority Interest	2.678000e+09	2.721000e+09	2.753000e+09	
Other Current Liab	3.750000e+08	2.600000e+07	2.600000e+07	
Total Assets	4.761200e+10	4.598500e+10	4.550700e+10	
Common Stock	1.250000e+09	1.249000e+09	1.249000e+09	
Other Current Assets	4.900000e+08	3.170000e+08	2.310000e+08	
Retained Earnings	-1.323700e+10	-1.336100e+10	-1.302200e+10	
Other Liab	6.748000e+09	6.788000e+09	6.392000e+09	
Treasury Stock	-1.074000e+09	-1.150000e+09	-1.151000e+09	
Other Assets	1.117000e+09	1.220000e+09	1.182000e+09	
Cash	1.680000e+09	2.140000e+08	1.201000e+09	
Total Current Liabilities	4.972000e+09	4.940000e+09	3.759000e+09	

Short Long Term Debt	2.025000e+09	2.024000e+09	2.143000e+09
Other Stockholder Equity	-3.300000e+07	-1.090000e+08	-1.100000e+08
Property Plant Equipment	2.941700e+10	2.931400e+10	2.929900e+10
Total Current Assets	4.549000e+09	2.885000e+09	2.625000e+09
Long Term Investments	5.127000e+09	5.085000e+09	5.124000e+09
Net Tangible Assets	3.986000e+09	3.682000e+09	4.200000e+09
Net Receivables	2.000000e+09	1.986000e+09	9.990000e+08
Long Term Debt	2.165000e+10	2.033800e+10	2.109100e+10
Inventory	3.790000e+08	3.680000e+08	1.940000e+08
Accounts Payable	1.746000e+09	1.674000e+09	6.110000e+08

	2021-03-31
Intangible Assets	7.362000e+09
Capital Surplus	2.438400e+10
Total Liab	3.078900e+10
Total Stockholder Equity	1.166700e+10
Minority Interest	2.771000e+09
Other Current Liab	2.600000e+07
Total Assets	4.526200e+10
Common Stock	1.249000e+09
Other Current Assets	1.690000e+08
Retained Earnings	-1.282500e+10
Other Liab	6.162000e+09
Treasury Stock	-1.141000e+09
Other Assets	1.198000e+09
Cash	1.126000e+09
Total Current Liabilities	3.535000e+09
Short Long Term Debt	2.142000e+09
Other Stockholder Equity	-1.000000e+08
Property Plant Equipment	2.907600e+10
Total Current Assets	2.497000e+09
Long Term Investments	5.129000e+09
Net Tangible Assets	4.305000e+09
Net Receivables	1.058000e+09
Long Term Debt	2.109200e+10
Inventory	1.440000e+08
Accounts Payable	5.380000e+08 ] ,

['quarterly\_cashflow',

	2021-12-31	2021-09-30 \
Investments	-3.600000e+07	-3.500000e+07
Change To Liabilities	7.300000e+07	4.760000e+08
Total Cashflows From Investing Activities	-3.570000e+08	-4.080000e+08
Net Borrowings	1.250000e+09	-8.760000e+08
Total Cash From Financing Activities	6.840000e+08	-1.413000e+09
Change To Operating Activities	-1.500000e+07	-2.250000e+08
Issuance Of Stock	3.000000e+06	3.000000e+06
Net Income	6.220000e+08	1.650000e+08
Change In Cash	1.466000e+09	-9.870000e+08

Total Cash From Operating Activities	1.139000e+09	8.340000e+08
Depreciation	4.540000e+08	4.870000e+08
Other Cashflows From Investing Activities	-1.000000e+06	1.500000e+07
Dividends Paid	-4.980000e+08	-4.980000e+08
Change To Inventory	-1.200000e+07	-5.400000e+07
Change To Account Receivables	-7.000000e+06	-4.880000e+08
Other Cashflows From Financing Activities	-7.100000e+07	-4.200000e+07
Change To Netincome	2.400000e+07	4.730000e+08
Capital Expenditures	-2.900000e+08	-2.670000e+08

	2021-06-30	2021-03-31
Investments	-2.900000e+07	-14000000.0
Change To Liabilities	5.600000e+07	38000000.0
Total Cashflows From Investing Activities	-4.430000e+08	-257000000.0
Net Borrowings	-5.000000e+06	892000000.0
Total Cash From Financing Activities	-5.390000e+08	326000000.0
Change To Operating Activities	8.000000e+07	-122000000.0
Issuance Of Stock	3.000000e+06	3000000.0
Net Income	3.040000e+08	426000000.0
Change In Cash	7.500000e+07	984000000.0
Total Cash From Operating Activities	1.057000e+09	915000000.0
Depreciation	4.630000e+08	438000000.0
Other Cashflows From Investing Activities	1.500000e+07	18000000.0
Dividends Paid	-4.980000e+08	-498000000.0
Change To Inventory	-5.000000e+07	-8000000.0
Change To Account Receivables	9.000000e+06	-59000000.0
Other Cashflows From Financing Activities	-3.600000e+07	-71000000.0
Change To Netincome	1.950000e+08	202000000.0
Capital Expenditures	-4.290000e+08	-261000000.0

['quarterly\_earnings',

	Revenue	Earnings
--	---------	----------

Quarter

1Q2021	2612000000	426000000
2Q2021	2333000000	304000000
3Q2021	2866000000	165000000
4Q2021	2964000000	622000000

['quarterly\_financials',

	2021-12-31	2021-09-30	\
Research Development	None	None	
Effect Of Accounting Charges	None	None	
Income Before Tax	830000000.0	226000000.0	
Minority Interest	2678000000.0	2721000000.0	
Net Income	622000000.0	165000000.0	
Selling General Administrative	166000000.0	148000000.0	
Gross Profit	1271000000.0	1386000000.0	
Ebit	942000000.0	359000000.0	
Operating Income	942000000.0	359000000.0	
Other Operating Expenses	-291000000.0	392000000.0	

Interest Expense	-295000000.0	-292000000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	198000000.0	53000000.0
Total Revenue	2964000000.0	2866000000.0
Total Operating Expenses	2022000000.0	2507000000.0
Cost Of Revenue	1693000000.0	1480000000.0
Total Other Income Expense Net	-112000000.0	-133000000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	632000000.0	173000000.0
Net Income Applicable To Common Shares	621000000.0	164000000.0

	2021-06-30	2021-03-31
Research Development	None	None
Effect Of Accounting Charges	None	None
Income Before Tax	441000000.0	576000000.0
Minority Interest	2753000000.0	2771000000.0
Net Income	304000000.0	426000000.0
Selling General Administrative	113000000.0	123000000.0
Gross Profit	1239000000.0	1299000000.0
Ebit	601000000.0	739000000.0
Operating Income	601000000.0	739000000.0
Other Operating Expenses	62000000.0	-1000000.0
Interest Expense	-298000000.0	-294000000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	119000000.0	141000000.0
Total Revenue	2333000000.0	2612000000.0
Total Operating Expenses	1732000000.0	1873000000.0
Cost Of Revenue	1094000000.0	1313000000.0
Total Other Income Expense Net	-160000000.0	-163000000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	322000000.0	435000000.0
Net Income Applicable To Common Shares	304000000.0	425000000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	\
0	Dodge & Cox Stock Fund	48998900	2021-12-30	
1	Select Sector SPDR Fund-Energy Select	35731116	2022-01-30	
2	Vanguard Total Stock Market Index Fund	33151255	2021-12-30	
3	Vanguard 500 Index Fund	24131216	2021-12-30	
4	Vanguard Mid-Cap Index Fund	13077347	2021-12-30	
5	SPDR S&P 500 ETF Trust	12886779	2022-01-30	
6	Fidelity 500 Index Fund	12442873	2022-02-27	
7	iShares Core S&P 500 ETF	10149046	2022-01-30	
8	Vanguard Index-Value Index Fund	9284313	2021-12-30	
9	Franklin Mutual Series Fund-Mutual Global Disc...	9186656	2021-12-30	

	% Out	Value
0	0.0402	1275931356
1	0.0293	1069789613
2	0.0272	863258680
3	0.0198	628376864
4	0.0107	340534115
5	0.0106	385830163
6	0.0102	389213067
7	0.0083	303862437
8	0.0076	241763510
9	0.0075	239220522 ]

['options', ('2022-08-19', '2023-01-20', '2024-01-19')],  
['sustainability',

	Value
2022-5	
palmOil	False
controversialWeapons	False
gambling	False
socialScore	10.43
nuclear	False
furLeather	False
alcoholic	False
gmo	False
catholic	False
socialPercentile	0
peerCount	39
governanceScore	3.2
environmentPercentile	0
animalTesting	False
tobacco	False
totalEsg	23.26
highestControversy	2
esgPerformance	None
coal	False
pesticides	False
adult	False
percentile	36.21
peerGroup	Refiners & Pipelines
smallArms	False
environmentScore	9.62
governancePercentile	0
militaryContract	False]]

	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
WMB	0.928194	37.490002	179022337.319588	0.975916	0.981545	0.353409

Unnamed: 0      beta   currentRatio   debtToEquity   dividendRate   dividendYield   \

	WMB	WMB	1.303921	0.915	169.059	1.7	0.0489
WMB							

	earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	revenueGrowth	\
WMB	4.666	4482999808	0.41605	27.804688	...	0.416	

	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
WMB	8.867	Energy	2.32	NaN	1680000000	

	totalCashPerShare	totalDebt	totalRevenue	trailingPE
WMB	1.382	23839000576	10775000064	43.40244

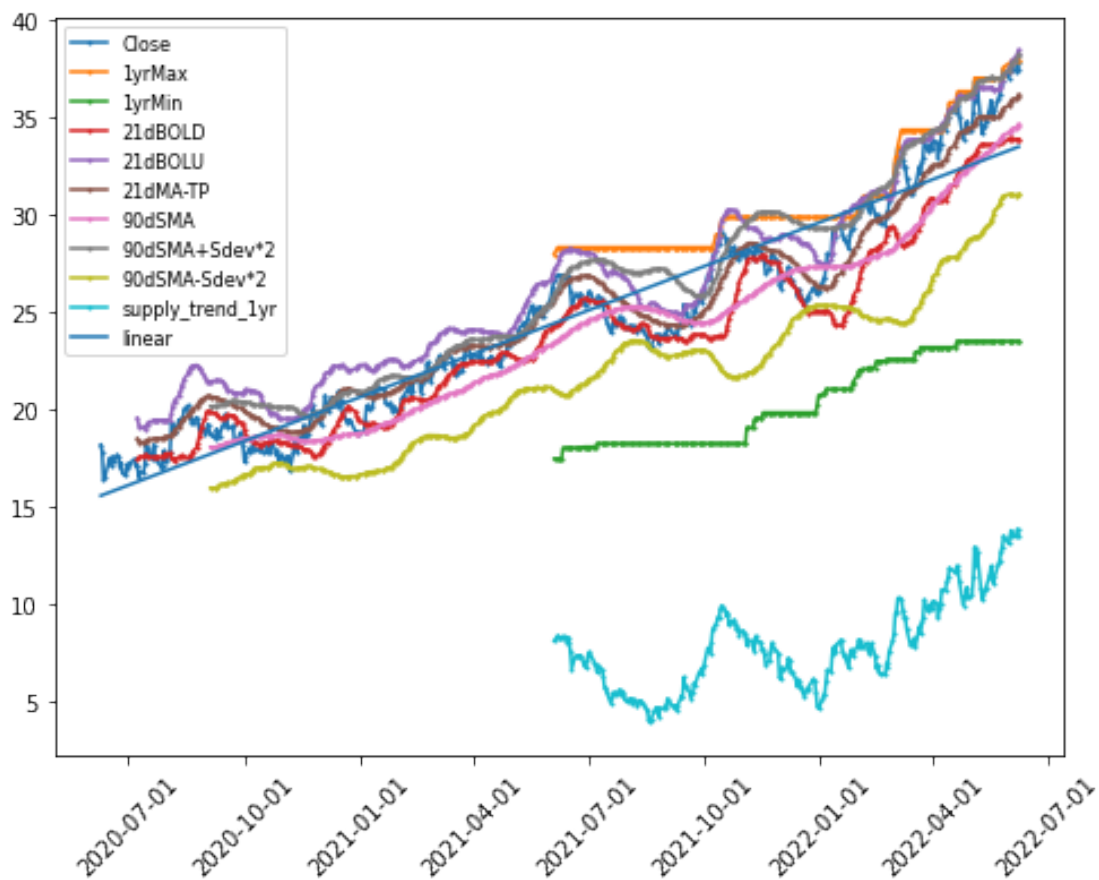
[1 rows x 36 columns]

supply trend: 179022337.3195876

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator

ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



WRB

'WRB'

```
[['quarterly_balance_sheet',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
 ['quarterly_cashflow',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
 ['quarterly_earnings',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
 ['quarterly_financials',  
  Empty DataFrame  
  Columns: [Open, High, Low, Close, Adj Close, Volume]  
  Index: []],  
 ['mutualfund_holders', None],  
 ['options', ('2022-07-15',)],  
 ['sustainability',
```

	Value
2022-5	
palmOil	False
controversialWeapons	False
gambling	False
socialScore	7.83
nuclear	False
furLeather	False
alcoholic	False
gmo	False
catholic	False
socialPercentile	None
peerCount	96
governanceScore	12.16
environmentPercentile	None
animalTesting	False
tobacco	False
totalEsg	21.95
highestControversy	1
esgPerformance	AVG_PERF
coal	False
pesticides	False
adult	False
percentile	31.22
peerGroup	Insurance
smallArms	False
environmentScore	1.95



```

governancePercentile      None
militaryContract          False]]

volume_factor  latest_p    vol_30d_2yr  pct_2yr      adf      hurst
WRB           1.321099  71.019997  24485451.237113  0.963551  0.976404  0.420893

Unnamed: 0      beta currentRatio debtToEquity dividendRate dividendYield \
WRB            WRB  0.741517          0.453          44.413          0.35          0.0049

earningsGrowth      ebitda ebitdaMargins  forwardPE  ... revenueGrowth \
WRB                1.585  1969144064          0.19279  15.017057  ...          0.352

revenuePerShare      sector shortRatio totalAssets  totalCash \
WRB                36.85  Financial Services          1.22          NaN  3303750912

totalCashPerShare  totalDebt totalRevenue trailingPE
WRB                12.458  3059073024  10214005760  14.222536

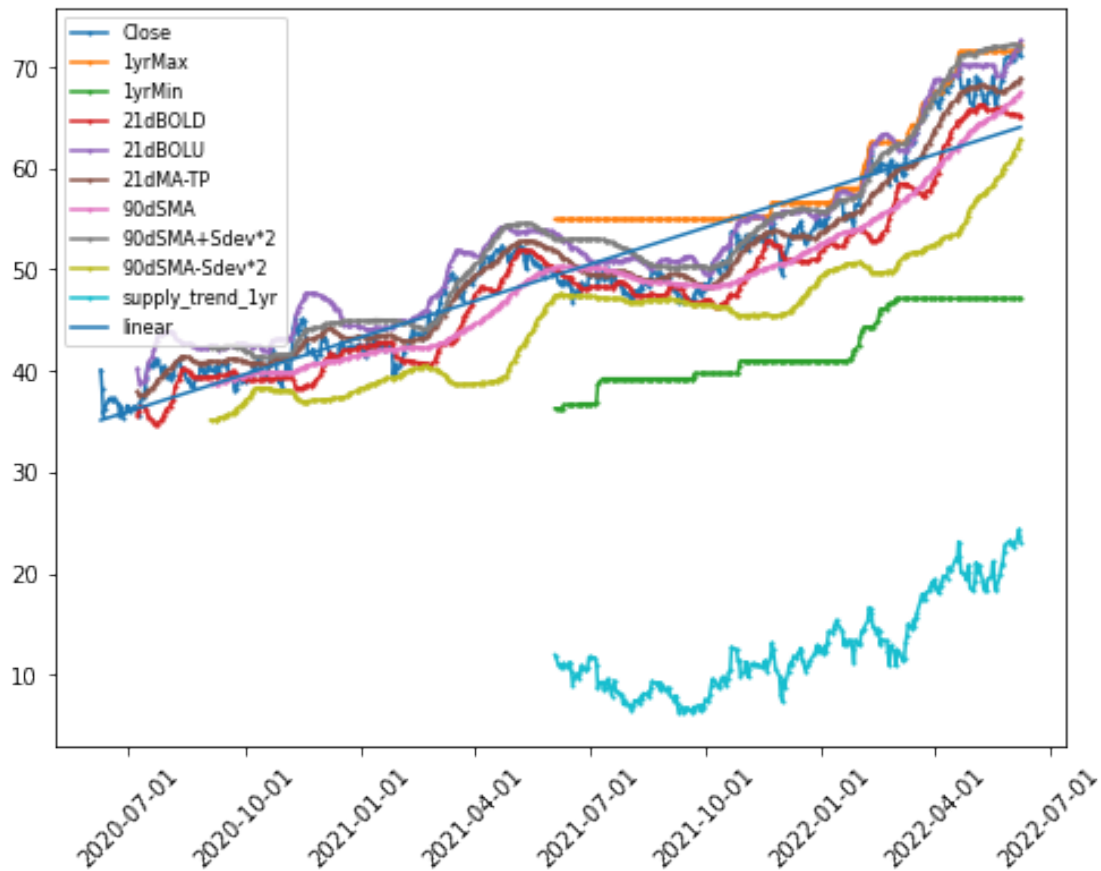
```

[1 rows x 36 columns]

supply trend: 24485451.2371134

Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



XOM

'XOM'

```
[['quarterly_balance_sheet',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
 ['quarterly_cashflow',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
 ['quarterly_earnings',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
 ['quarterly_financials',
  Empty DataFrame
  Columns: [Open, High, Low, Close, Adj Close, Volume]
  Index: []],
 ['mutualfund_holders', None],
```

```
['options',
 ('2022-06-17', '2022-07-15', '2023-01-20', '2024-01-19', '2026-02-21']],
['sustainability',
```

2022-5		Value
palmOil		False
controversialWeapons		False
gambling		False
socialScore		9.82
nuclear		False
furLeather		False
alcoholic		False
gmo		False
catholic		False
socialPercentile		None
peerCount		66
governanceScore		8.14
environmentPercentile		None
animalTesting		True
tobacco		False
totalEsg		36.46
highestControversy		3
esgPerformance		OUT_PERF
coal		False
pesticides		False
adult		False
percentile		81.8
peerGroup	Oil & Gas Producers	
smallArms		False
environmentScore		18.51
governancePercentile		None
militaryContract		False]]

	volume_factor	latest_p	vol_30d_2yr	pct_2yr	adf	hurst
XOM	1.055221	104.589996	552456789.896907	0.986839	0.997874	0.488125

	Unnamed: 0	beta	currentRatio	debtToEquity	dividendRate	dividendYield	\
XOM	XOM	1.040834	1.072	26.929	3.52	0.0341	

	earningsGrowth	ebitda	ebitdaMargins	forwardPE	...	revenueGrowth	\
XOM	1.003	53895000064	0.17427	11.818078	...	0.525	

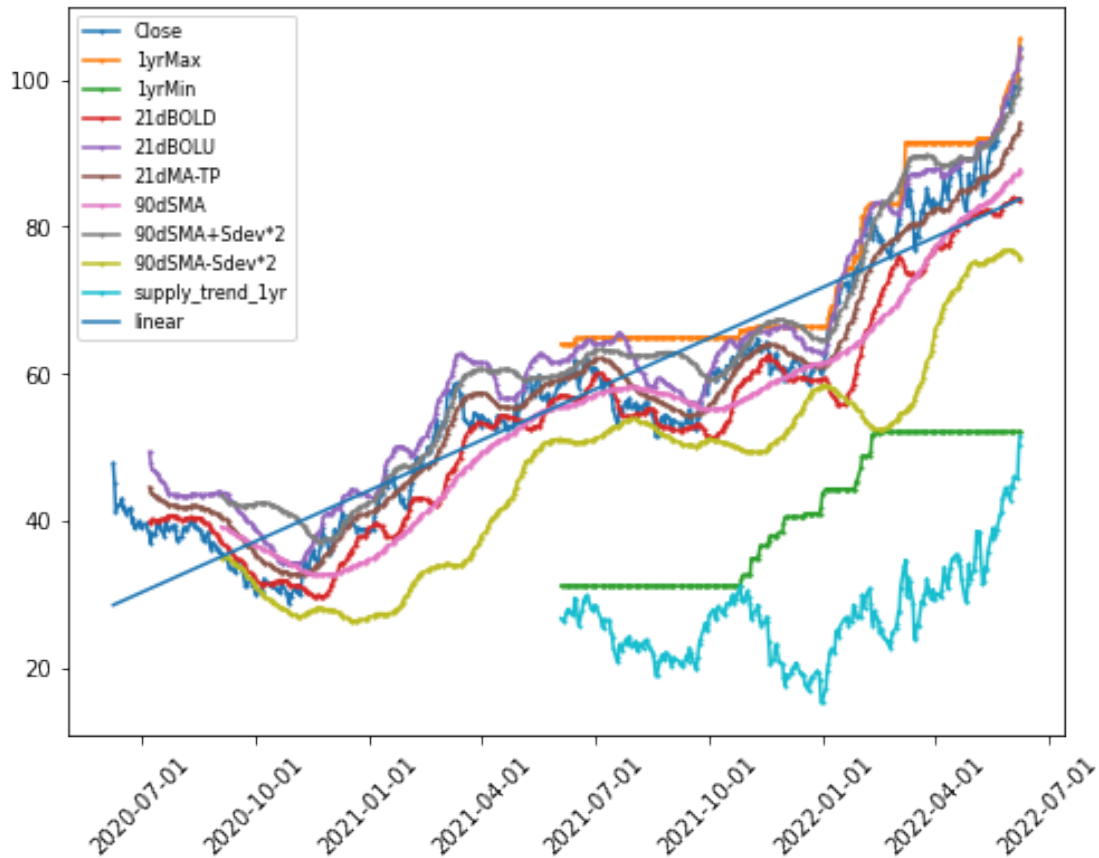
	revenuePerShare	sector	shortRatio	totalAssets	totalCash	\
XOM	72.369	Energy	1.13	NaN	11073999872	

	totalCashPerShare	totalDebt	totalRevenue	trailingPE
XOM	2.629	47537000448	309269004288	17.34494

```
[1 rows x 36 columns]
```

supply trend: 552456789.8969072  
Index: SP500

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



Y

'Y'

[['quarterly\_balance\_sheet',

	2021-12-31	2021-09-30	2021-06-30	\
Intangible Assets	1.511159e+09	1.465825e+09	1.453498e+09	
Capital Surplus	3.608905e+09	3.611383e+09	3.612783e+09	
Total Liab	2.276445e+10	2.274715e+10	2.110891e+10	
Total Stockholder Equity	9.186882e+09	8.859510e+09	9.142031e+09	
Minority Interest	3.173460e+08	2.625260e+08	2.407220e+08	
Other Current Liab	3.213810e+09	3.516756e+09	3.335249e+09	
Total Assets	3.226868e+10	3.186919e+10	3.049166e+10	
Common Stock	1.746000e+07	1.746000e+07	1.746000e+07	
Other Current Assets	2.283585e+09	2.282419e+09	1.959696e+09	

Retained Earnings	7.353226e+09	6.837060e+09	6.952026e+09
Other Liab	1.156344e+10	1.634516e+10	1.541578e+10
Good Will	7.536070e+08	6.318270e+08	6.276120e+08
Treasury Stock	-1.792709e+09	-1.606393e+09	-1.440238e+09
Other Assets	3.343289e+09	3.745712e+09	3.475111e+09
Cash	9.279660e+08	9.955060e+08	8.714590e+08
Total Current Liabilities	8.135612e+09	3.849789e+09	3.629478e+09
Other Stockholder Equity	1.418220e+08	2.283490e+08	3.031960e+08
Property Plant Equipment	5.449520e+08	2.994040e+08	3.028480e+08
Total Current Assets	5.812488e+09	5.826124e+09	4.648640e+09
Long Term Investments	2.030318e+10	1.990030e+10	1.998395e+10
Net Tangible Assets	7.508869e+09	7.441654e+09	7.712753e+09
Short Term Investments	1.142258e+09	1.060414e+09	3.790090e+08
Net Receivables	1.458679e+09	1.487785e+09	1.438476e+09
Long Term Debt	2.847199e+09	2.552198e+09	2.063652e+09
Accounts Payable	4.871502e+09	3.330330e+08	2.942290e+08

2021-03-31

Intangible Assets	1.411883e+09
Capital Surplus	3.613764e+09
Total Liab	2.045644e+10
Total Stockholder Equity	8.695881e+09
Minority Interest	2.335630e+08
Other Current Liab	3.185510e+09
Total Assets	2.938588e+10
Common Stock	1.746000e+07
Other Current Assets	1.919911e+09
Retained Earnings	6.548375e+09
Other Liab	1.494084e+10
Good Will	6.141140e+08
Treasury Stock	-1.483718e+09
Other Assets	3.327209e+09
Cash	1.197474e+09
Total Current Liabilities	3.435316e+09
Other Stockholder Equity	2.241900e+08
Property Plant Equipment	2.697900e+08
Total Current Assets	4.996506e+09
Long Term Investments	1.876638e+10
Net Tangible Assets	7.306970e+09
Short Term Investments	5.949580e+08
Net Receivables	1.284163e+09
Long Term Debt	2.080288e+09
Accounts Payable	2.498060e+08

['quarterly\_cashflow',

2021-12-31 2021-09-30 \

Investments	-520402000.0	-868753000.0
Change To Liabilities	-328277000.0	178707000.0
Total Cashflows From Investing Activities	-513449000.0	-894562000.0

Net Borrowings	294594000.0	493862000.0
Total Cash From Financing Activities	163341000.0	388748000.0
Change To Operating Activities	314365000.0	433531000.0
Net Income	516166000.0	-114966000.0
Change In Cash	-67540000.0	124047000.0
Repurchase Of Stock	-100080000.0	-91324000.0
Effect Of Exchange Rate	-3522000.0	-5100000.0
Total Cash From Operating Activities	286090000.0	634961000.0
Depreciation	46051000.0	45531000.0
Other Cashflows From Investing Activities	-46013000.0	-13366000.0
Change To Account Receivables	29106000.0	-49309000.0
Other Cashflows From Financing Activities	-31173000.0	-13790000.0
Change To Netincome	-291321000.0	141467000.0
Capital Expenditures	-14586000.0	-12137000.0

	2021-06-30	2021-03-31
Investments	-704852000.0	-16812000.0
Change To Liabilities	152288000.0	192735000.0
Total Cashflows From Investing Activities	-703762000.0	102643000.0
Net Borrowings	-49783000.0	-55729000.0
Total Cash From Financing Activities	-119660000.0	-127859000.0
Change To Operating Activities	107189000.0	248684000.0
Net Income	403651000.0	230041000.0
Change In Cash	-326015000.0	406032000.0
Repurchase Of Stock	-35925000.0	-63192000.0
Effect Of Exchange Rate	520000.0	-11047000.0
Total Cash From Operating Activities	496887000.0	442295000.0
Depreciation	42895000.0	43554000.0
Other Cashflows From Investing Activities	-74819000.0	101159000.0
Change To Account Receivables	-154313000.0	-138822000.0
Other Cashflows From Financing Activities	-33952000.0	-8938000.0
Change To Netincome	-54823000.0	-133897000.0
Capital Expenditures	-20606000.0	-12322000.0

['quarterly\_earnings',

Revenue Earnings

Quarter

1Q2021 2653713000 230041000  
2Q2021 2928797000 403651000  
3Q2021 2866613000 -114966000  
4Q2021 3554982000 516166000],

['quarterly\_financials',

	2021-12-31	2021-09-30	\
Research Development	None	None	
Effect Of Accounting Charges	None	None	
Income Before Tax	705907000.0	-112004000.0	
Minority Interest	317346000.0	262526000.0	
Net Income	516166000.0	-114966000.0	
Selling General Administrative	21287000.0	6225000.0	

Gross Profit	1894495000.0	823489000.0
Ebit	734767000.0	-86345000.0
Operating Income	734767000.0	-86345000.0
Other Operating Expenses	1125075000.0	890972000.0
Interest Expense	-28860000.0	-25659000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	149286000.0	-28509000.0
Total Revenue	3554982000.0	2866613000.0
Total Operating Expenses	2820215000.0	2952958000.0
Cost Of Revenue	1660487000.0	2043124000.0
Total Other Income Expense Net	-28860000.0	-25659000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	556621000.0	-83495000.0
Net Income Applicable To Common Shares	516166000.0	-114966000.0

	2021-06-30	2021-03-31
Research Development	None	None
Effect Of Accounting Charges	None	None
Income Before Tax	521870000.0	296930000.0
Minority Interest	240722000.0	233563000.0
Net Income	403651000.0	230041000.0
Selling General Administrative	20148000.0	9558000.0
Gross Profit	1318078000.0	1065607000.0
Ebit	545907000.0	320682000.0
Operating Income	545907000.0	320682000.0
Other Operating Expenses	739592000.0	723889000.0
Interest Expense	-24037000.0	-23752000.0
Extraordinary Items	None	None
Non Recurring	None	None
Other Items	None	None
Income Tax Expense	102281000.0	58867000.0
Total Revenue	2928797000.0	2653713000.0
Total Operating Expenses	2382890000.0	2333031000.0
Cost Of Revenue	1610719000.0	1588106000.0
Total Other Income Expense Net	-24037000.0	-23752000.0
Discontinued Operations	None	None
Net Income From Continuing Ops	419589000.0	238063000.0
Net Income Applicable To Common Shares	403651000.0	230041000.0 ],

['mutualfund\_holders',

	Holder	Shares	Date Reported	\
0	Victory Portfolios-Sycamore Established Value ...	500000	2022-01-30	
1	Victory Portfolios-Sycamore Established Value ...	500000	2022-01-30	
2	iShares Core S&P Midcap ETF	380243	2022-01-30	
3	iShares Core S&P Midcap ETF	380243	2022-01-30	
4	Vanguard Total Stock Market Index Fund	369755	2021-12-30	
5	Vanguard Total Stock Market Index Fund	369755	2021-12-30	

6	First Eagle Global Fund	309855	2022-01-30
7	First Eagle Global Fund	309855	2022-01-30
8	John Hancock Fds III-Disciplined Value Mid Cap Fd	259557	2021-12-30
9	John Hancock Fds III-Disciplined Value Mid Cap Fd	259557	2021-12-30
10	Touchstone Funds Group Tr-Touchstone Mid-Cap Fd	199509	2021-12-30
11	Touchstone Funds Group Tr-Touchstone Mid-Cap Fd	199509	2021-12-30
12	Vanguard Extended Market Index Fund	181014	2021-12-30
13	Vanguard Extended Market Index Fund	181014	2021-12-30
14	Franklin Mutual Series Fund-Mutual Shares Fund	170350	2021-12-30
15	Franklin Mutual Series Fund-Mutual Shares Fund	170350	2021-12-30
16	Vanguard Small-Cap Index Fund	164314	2021-12-30
17	Vanguard Small-Cap Index Fund	164314	2021-12-30
18	Vanguard Mid-Cap Index Fund	147164	2021-12-30
19	Vanguard Mid-Cap Index Fund	147164	2021-12-30

	% Out	Value
0	0.0372	332000000
1	0.0372	332000000
2	0.0283	252481352
3	0.0283	252481352
4	0.0275	246844740
5	0.0275	246844740
6	0.0230	205743720
7	0.0230	205743720
8	0.0193	173277657
9	0.0193	173277657
10	0.0148	133190213
11	0.0148	133190213
12	0.0135	120843136
13	0.0135	120843136
14	0.0127	113723956
15	0.0127	113723956
16	0.0122	109694383
17	0.0122	109694383
18	0.0109	98245214
19	0.0109	98245214 ],

['options', ('2022-07-15',)],

['sustainability',

	Value
2022-5	
palmOil	False
controversialWeapons	False
gambling	False
socialScore	8.71
nuclear	False
furLeather	False
alcoholic	False
gmo	False



```

catholic                False
socialPercentile         0
peerCount                96
governanceScore          11.77
environmentPercentile    0
animalTesting            False
tobacco                  False
totalEsg                 21.71
highestControversy       1
esgPerformance           None
coal                     False
pesticides               False
adult                    False
percentile               30.32
peerGroup                 Insurance
smallArms                 False
environmentScore          1.23
governancePercentile     0
militaryContract         False]]

volume_factor    latest_p    vol_30d_2yr    pct_2yr    adf    hurst
Y      1.634502  834.159973  1613947.42268  0.928634  0.752168  0.303435

Unnamed: 0    beta    currentRatio    debtToEquity    dividendRate    dividendYield  \
Y      Y    0.70049    0.714    32.782    NaN    NaN

earningsGrowth    ebitda    ebitdaMargins    forwardPE    ...    revenueGrowth  \
Y      2.347    1693042048    0.14104    11.922999    ...    0.335

revenuePerShare    sector    shortRatio    totalAssets    totalCash  \
Y      866.486    Financial Services    2.14    NaN    2070224000

totalCashPerShare    totalDebt    totalRevenue    trailingPE
Y      153.015    3115698944    12004105216    17.192856

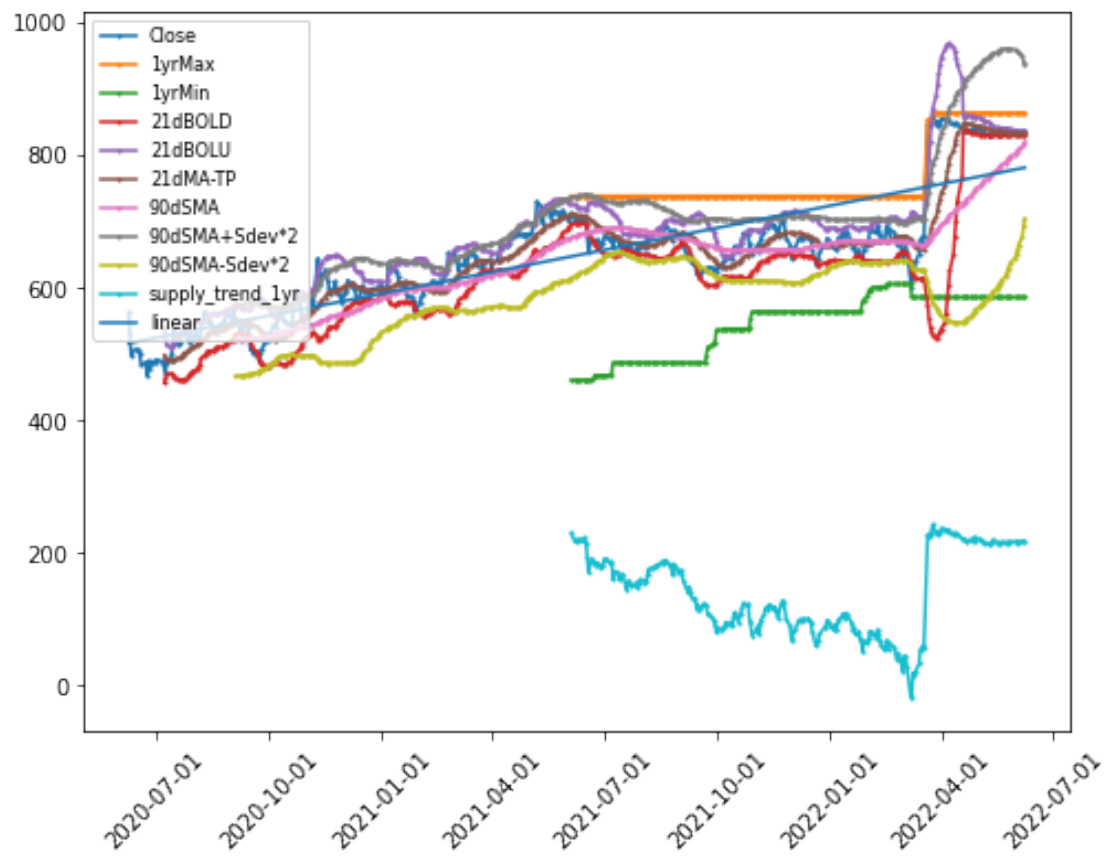
```

[1 rows x 36 columns]

supply trend: 1613947.422680412

Index: SP400

C:\Users\User\AppData\Local\Temp\ipykernel\_14824\3532675363.py:71: UserWarning:  
FixedFormatter should only be used together with FixedLocator  
ax.set\_xticklabels(ax.get\_xticks(), rotation = 45)



[ ]: