Tools for Obtaining Financial Data

Amy Sillman Investigation 3/10/2021 Metis Data Science Bootcamp

Introduction

Availability of data

Different financial markets

Ease of use/quality of technical documentation

API: Tiingo

Library: Pandas Data Reader

Code walk-through



Tiingo

API that accesses financial data from the Internet

Enterprise-grade, but accessible

End-of-day stock price data

Historical intraday data

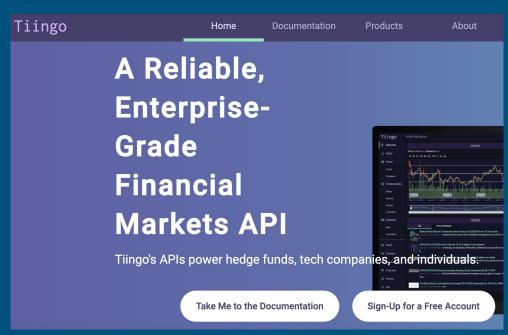
News feeds, tagged content

Cryptocurrencies API

Forex currency exchange data (in early beta)

Search (in early beta)

Documentation not the best



Tiingo: EOD Stock Price Markets Covered

- US stock markets: NYSE, NASDAQ, NYSE American (formerly AMEX)
- NYSE Arca (ETF market)
- US equities exchanges, IEF, Mutual Funds
- Chinese markets: Shenzhen, Shanghai
- Fields: Open, High, Low, Close, Volume, Dividend, Splits (raw and adjusted)
- 50+ years of data

Free account: 500 req/hr, 20k req/day, 5GB/month

\$10/month: 20k req/hr, 150k req/day, 100GB/month

Library: Pandas Data Reader

Extract data from a wide range of Internet sources into a Pandas DataFrame!

Access to many financial markets:

IEX

Moscow Exchange (MOEX)

NASDAQ

Thrift Savings Plan (for civil service employees)

Access to many financial data tools:

Tiingo

AlphaVantage

Federal Reserve Economic Data (FRED)

Enigma

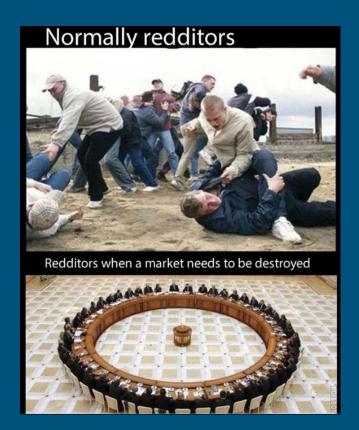
Eurostat

OECD

Quandl

Stooq

Code Walk-Through



Thank you!



Links to Resources

Tiingo API: https://api.tiingo.com

Tiingo on Pypi.org: https://pypi.org/project/tiingo/#description

Tiingo on readthedocs: https://tiingo-python.readthedocs.io/en/latest/readme.html#usage

Pandas Data Reader:

GitHub: https://github.com/pydata/pandas-datareader

Readthedocs (Tiingo section):

https://pandas-datareader.readthedocs.io/en/latest/readers/tiingo.html#module-pandas_datareader.tiingo