

Data Descriptions

The provided data sets consist of the daily returns of **98 stocks** from the US market during two distinct time periods: before and after the emergence of COVID-19. Below are the descriptions of each file on Canvas and the metadata table for these stocks.

- **Stock_metadata.csv:**
This is the metadata table in a format readable by coding languages.
- **Data_PreCovid_20170101_20200109.csv:**
This file includes the daily log-returns for each stock during the pre-COVID period, from **2017-01-01 to 2020-01-09** (759 days). Each row represents the daily log-returns for one stock. The order of stocks corresponds to that in the metadata table.
- **Data_PostCovid_20200110_20221231.csv:**
This file contains the daily log-returns for each stock during the post-COVID period, from **2020-01-10 to 2022-12-31** (750 days). Each row represents the daily log-returns for one stock. The order of stocks is consistent with the metadata table.
- **Metadata table (see below)**
This table contains information about the ticker symbol, company name, and corresponding sector (e.g., Technology, Healthcare, etc.) for each stock.

Stock Metadata Table

Index	Symbol	Company Name	Sector
1	AAPL	Apple Inc.	Technology
2	ABBV	AbbVie Inc.	Healthcare
3	ACN	Accenture plc	Technology
4	ADBE	Adobe Inc.	Technology
5	AEP	American Electric Power Company, Inc.	Utilities
6	AMD	Advanced Micro Devices, Inc.	Technology
7	AMT	American Tower Corporation	Real Estate
8	AMZN	Amazon.com, Inc.	Consumer Cyclical
9	APD	Air Products and Chemicals, Inc.	Basic Materials
10	AVGO	Broadcom Inc.	Technology
11	AZN	AstraZeneca PLC	Healthcare
12	BA	The Boeing Company	Industrials
13	BABA	Alibaba Group Holding Limited	Consumer Cyclical
14	BAC	Bank of America Corporation	Financial Services
15	BAC-PE	Bank of America Corporation	Financial Services
16	BHP	BHP Group Limited	Basic Materials
17	BKNG	Booking Holdings Inc.	Consumer Cyclical
18	BML-PG	Bank of America Corporation	Financial Services
19	BP	BP p.l.c.	Energy
20	BRK-A	Berkshire Hathaway Inc.	Financial Services
21	BRK-B	Berkshire Hathaway Inc.	Financial Services
22	BUD	Anheuser-Busch InBev SA/NV	Consumer Defensive
23	CAT	Caterpillar Inc.	Industrials
24	CMCSA	Comcast Corporation	Communication Services
25	COP	ConocoPhillips	Energy
26	COST	Costco Wholesale Corporation	Consumer Defensive
27	CRH	CRH plc	Basic Materials
28	CRM	Salesforce, Inc.	Technology
29	CSCO	Cisco Systems, Inc.	Technology
30	CTA-PB	EIDP, Inc.	Basic Materials
31	CVX	Chevron Corporation	Energy
32	DE	Deere & Company	Industrials
33	DIS	The Walt Disney Company	Communication Services

34	DLR	Digital Realty Trust, Inc.	Real Estate
35	DTEGY	Deutsche Telekom AG	Communication Services
36	ECL	Ecolab Inc.	Basic Materials
37	ENB	Enbridge Inc.	Energy
38	EQIX	Equinix, Inc.	Real Estate
39	ETN	Eaton Corporation plc	Industrials
40	FCX	Freeport-McMoRan Inc.	Basic Materials
41	FMX	Fomento Económico Mexicano, S.A.B. de C.V.	Consumer Defensive
42	GE	GE Aerospace	Industrials
43	GOOG	Alphabet Inc.	Communication Services
44	GOOGL	Alphabet Inc.	Communication Services
45	HD	The Home Depot, Inc.	Consumer Cyclical
46	HON	Honeywell International Inc.	Industrials
47	JNJ	Johnson & Johnson	Healthcare
48	KO	The Coca-Cola Company	Consumer Defensive
49	LIN	Linde plc	Basic Materials
50	LLY	Eli Lilly and Company	Healthcare
51	LMT	Lockheed Martin Corporation	Industrials
52	LOW	Lowe's Companies, Inc.	Consumer Cyclical
53	MA	Mastercard Incorporated	Financial Services
54	MCD	McDonald's Corporation	Consumer Cyclical
55	MDLZ	Mondelez International, Inc.	Consumer Defensive
56	META	Meta Platforms, Inc.	Communication Services
57	MRK	Merck & Co., Inc.	Healthcare
58	MSFT	Microsoft Corporation	Technology
59	NEE	NextEra Energy, Inc.	Utilities
60	NFLX	Netflix, Inc.	Communication Services
61	NGG	National Grid plc	Utilities
62	NVDA	NVIDIA Corporation	Technology
63	NVO	Novo Nordisk A/S	Healthcare
64	O	Realty Income Corporation	Real Estate
65	ORCL	Oracle Corporation	Technology
66	PBR	Petróleo Brasileiro S.A. - Petrobras	Energy
67	PEP	PepsiCo, Inc.	Consumer Defensive
68	PG	The Procter & Gamble Company	Consumer Defensive

69	PLD	Prologis, Inc.	Real Estate
70	PLDGP	Prologis, Inc.	Real Estate
71	PM	Philip Morris International Inc.	Consumer Defensive
72	PSA	Public Storage	Real Estate
73	RHHBF	Roche Holding AG	Healthcare
74	RHHBY	Roche Holding AG	Healthcare
75	RHHVF	Roche Holding AG	Healthcare
76	RIO	Rio Tinto Group	Basic Materials
77	RTX	RTX Corporation	Industrials
78	SCCO	Southern Copper Corporation	Basic Materials
79	SHEL	Shell plc	Energy
80	SHW	The Sherwin-Williams Company	Basic Materials
81	SO	The Southern Company	Utilities
82	SPG	Simon Property Group, Inc.	Real Estate
83	SPG-PJ	Simon Property Group, Inc.	Real Estate
84	SRE	Sempra	Utilities
85	T	AT&T Inc.	Communication Services
86	TJX	The TJX Companies, Inc.	Consumer Cyclical
87	TM	Toyota Motor Corporation	Consumer Cyclical
88	TMUS	T-Mobile US, Inc.	Communication Services
89	TSLA	Tesla, Inc.	Consumer Cyclical
90	UL	Unilever PLC	Consumer Defensive
91	UNH	UnitedHealth Group Incorporated	Healthcare
92	UNP	Union Pacific Corporation	Industrials
93	UPS	United Parcel Service, Inc.	Industrials
94	V	Visa Inc.	Financial Services
95	VZ	Verizon Communications Inc.	Communication Services
96	WELL	Welltower Inc.	Real Estate
97	WMT	Walmart Inc.	Consumer Defensive
98	XOM	Exxon Mobil Corporation	Energy