

# Supplementary Material for A Systematic Review on Graph Neural Network-based Methods for Stock Market Forecasting

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## 1 DATASET

Table 1 summarizes the various market indexes and market capitalization values of various countries.

Table 1. Summary of market index.

Country	Market Capitalization (In Trillions)	Index	Description
America	40.71	S&P 500 [12]	Since 1957, the Standard and Poor's 500 has been an index of 500 large cap companies listed on the New York Stock Exchange.
		DJIA [4]	Since 1896, the Dow Jones Industrial Average has been an index of 30 blue-chip companies listed on the New York Stock Exchange.
		NASDAQ [8]	Since 1971, the Nasdaq Stock Exchange has included 3626 companies in its index.
		NYSE [10]	An index that includes 2800 companies listed on the New York Stock Exchange since 1792.
		RUSSEL 2000 [11]	An index of 2000 small-cap companies traded on the US Stock Exchange.
China	7.62	SSE [13]	An index of all stocks traded on the Shanghai Stock Exchange since 1904.
		SZSE [15]	An index of top 500 stocks traded on the Shenzhen Stock Exchange.
		CSI 100	An index of top 100 stocks traded on the SSE and SZSE index.
		CSI 300	An index of top 300 stocks traded on SSE and SZSE index.
		CSI 500	An index of top 500 mid cap and small cap stocks traded on the china market.
		A share and B share market [6]	A share market is restricted to mainland Chinese citizens and consists of stocks traded on the SSE and SZSE indexes. whereas the B share market is for foreign investors.
Hong Kong	6.13	HIS [7]	An index of the 64 largest companies traded on the Hong Kong Stock Exchange since 1969.
Japan	5.67	TPX [17]	An index of large companies listed on the Tokyo Stock Exchange since 1878.
Europe	5.5	STOXX 600 [14]	It is an index of 600 large, mid, and small-cap companies from 17 countries in Europe.
India	3.21	NIFTY 50 [9]	An index of 50 large companies listed on the National Stock Exchange since 1994.
		BSE 100 [2]	An index of the top 100 stocks traded on India's Bombay Stock Exchange.
Saudi Arabia	2.4	TASI [16]	Since 2007, the Tadawul All Shares Index has included large companies listed on the Saudi Stock Exchange.
Germany	2.28	DAX [3]	An index of 40 blue-chip companies has traded on the Frankfurt Stock Exchange since 1988.
Taiwan	1.56	TSE [18]	An index of 907 large companies listed on the Taiwan Stock Exchange since 1961.
Italy	0.58	FTSE MIB [5]	The Milano Indice di Borsa is an index that represents the 40 most traded stocks on the Italian Stock Exchange.
Australia	0.0114	ASX [1]	An index of companies listed on the Australian Stock Exchange since 1987.

To evaluate the effectiveness of a forecasting model developed for a specific market index, it is often tested on multiple different market indices to see how it performs in different cross-market scenarios. Some researchers focus on predicting the movements of all the constituent stocks within an index, while others only consider a single target company. By treating the stock market as a network, it is possible to make predictions about both the overall market index and individual stocks.

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