

# TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD

NYSE:TSM

## Team Members

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# About TSM

\$68.56

↓ 1.08%

-0.75 Today

After hours: \$68.60 (↑ 0.058%) +0.040

Closed: 30 Sept, 18:16:57 GMT-4 · USD · NYSE · Disclaimer

- **Taiwan Semiconductor Manufacturing Co., Ltd.** (NYSE -TSM) engages in the manufacture and sale of integrated circuits and wafer semiconductor devices. It was founded in 1987 as a joint venture of Philips, the government of Taiwan, and private investors
- TSM is the First Taiwan Company to be listed on NYSE on **October 8, 1997**(9:30am New York time)
- The foundry leader has an illustrious **customer base**, including **Apple, AMD and Nvidia**



## Stock Fact Sheet

### Stock Information

Market Cap USD 345.18 billion

Share Outstanding 5.19 billion

52 Weeks Range  
USD 67.760 - USD 128.660

Average Volume 10.63 million



# History



- Since 1994, TSMC has had a compound annual growth rate (CAGR) of 17.4% in revenue and a CAGR of 16.1% in earnings.
- The image below shows the Stock Split History of TSMC

Date	Ratio
Jul. 15, 2009	1:1
Jul. 16, 2008	1:1
Jun. 08, 2007	1:1
Jun. 20, 2006	1:1
Jun. 13, 2005	1.1:1
Jun. 14, 2004	1.1:1
Jul. 07, 2003	1.1:1
Jun. 19, 2002	1.1:1
Jun. 26, 2001	1.4:1
May 15, 2000	1.3:1
Aug. 16, 1999	1.2:1
Aug. 26, 1998	1.5:1

# News

- TSMC has acquired 1 company. It has also divested 1 asset. TSMC's **largest** acquisition to date was in **2000**, when it acquired **WaferTech** for \$350M. TSMC has acquired in 1 US state. The Company's most targeted sectors include semiconductors(100%).
- The largest catalyst to TSMC's growth during covid actually occurred in **July 2020**, when **Intel** announced that they had to delay their 7nm chip due to production problems. These consequences of Intel's announcement caused a huge boost to TSMC's share price, from **\$67 to \$83** within two days of the announcement, a **62%** increase.





- **Taiwan Semiconductor Manufacturing Company Ltd. (TSM) is Attracting Investor Attention:**

For the current quarter, TSMC is expected to post earnings of \$1.67 per share, indicating a change of +54.6% from the year-ago quarter. For the current fiscal year, the consensus earnings estimate of \$6.21 points to a change of +50.7% from the prior year. For the next fiscal year, the consensus earnings estimate of \$6.44 indicates a change of +3.6% from what TSMC is expected to report a year ago.

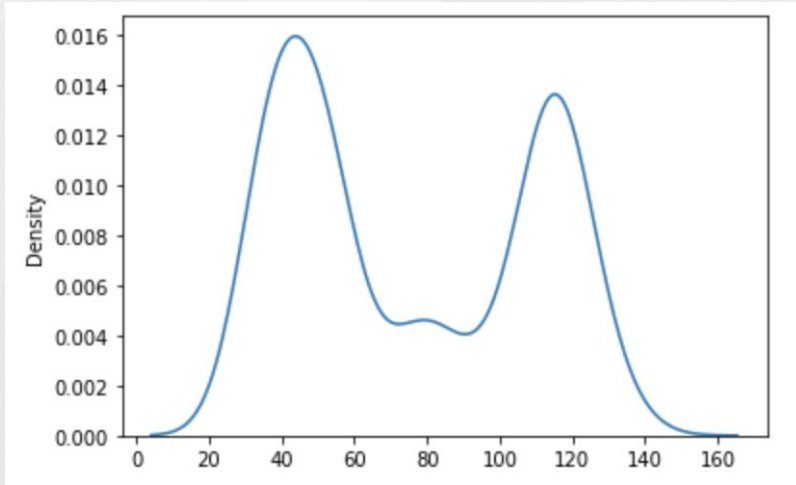
When the earnings estimates for a company goes up, the fair value for its stock goes up as well. And when a stock's fair value is higher than its current market price, investors tend to buy the stock, resulting in its price moving upward.

- Taiwan Semiconductor Manufacturing revenue for the quarter ending June 30, 2022 was \$18.161B, a 36.33% increase year-over-year.

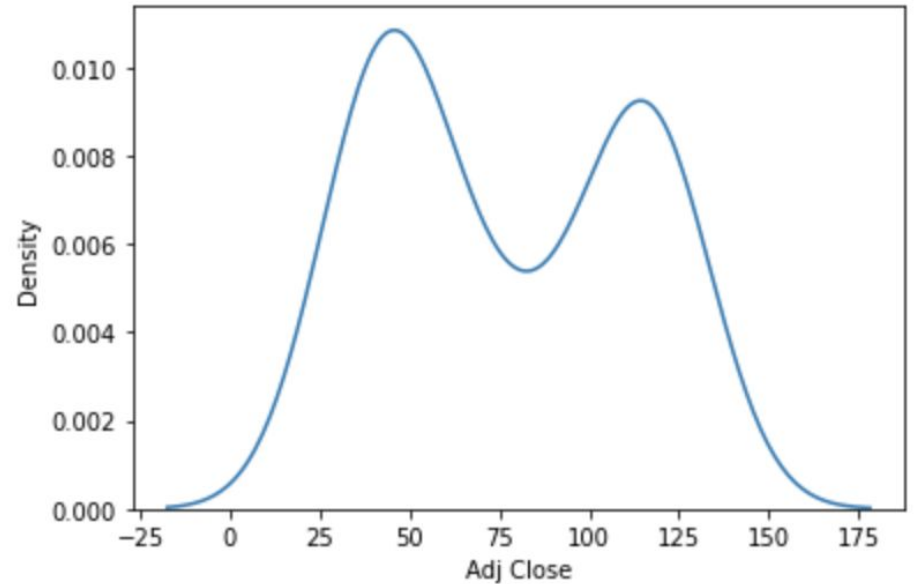
# Stock Distribution

- TSM stock price modelling
- Timeframe - 1st January, 2019 to 4th February, 2022

## Distribution:



## After smoothing:



# Preliminary Mixture Modelling

- TSM stock price modelling
- Timeframe - 1st January, 2019 to 4th February, 2022

## Low peak:

Mean = 118;

Sigma1 = 121;

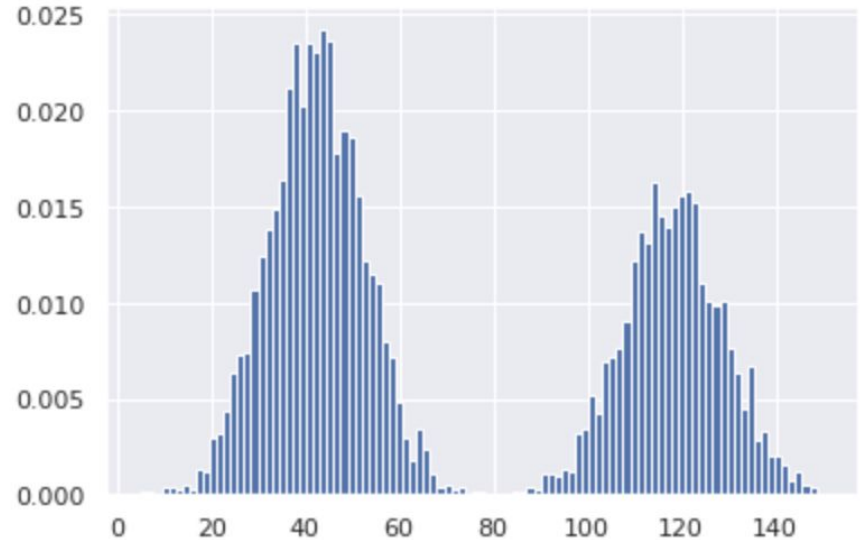
Range - (80, 150)

## High peak:

Mean = 42;

Sigma2 = 100;

Range - (5, 80)



Estimation from mean and std deviation

# EDA

Colab link:

<https://colab.research.google.com/drive/1iqgVwADIB556pZaVtyQFN1QfefdH0Rk8?usp=sharing>

