

Free Financial Data Analysis Platform

Author: Weishuang Gao (2020) Advisor: Peter Yoon

The important thing is to know what you know and what you don't know. (Warren Buffet)

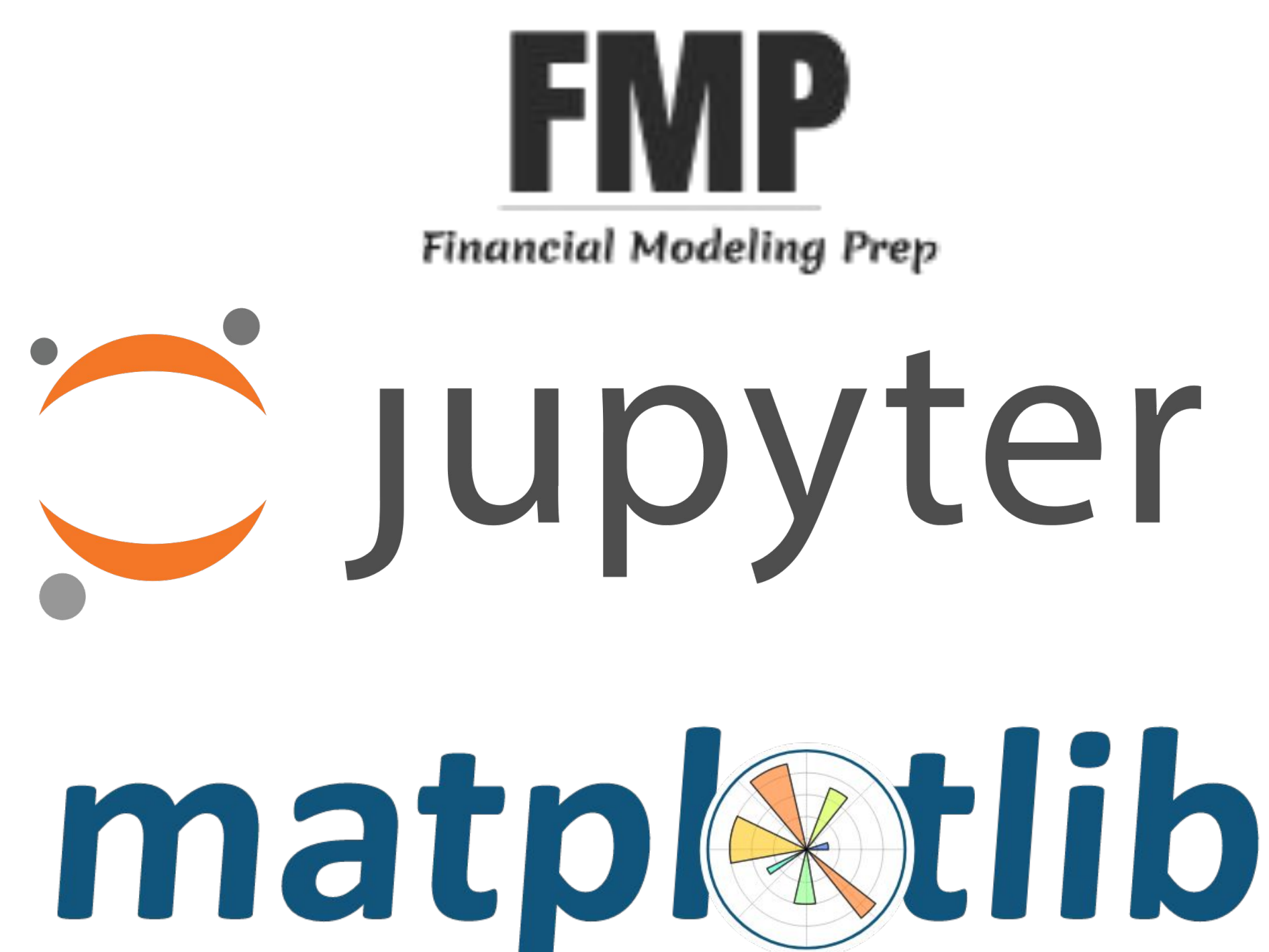
Introduction

- The financial market has always been volatile.
- We need to conduct financial data analysis and understand a company's operations to make investment decisions.

Motivation

- Current financial data analysis tools are expensive
- Lack of side-by-side comparison and visualization

Applications



Result

Fundamental Analysis

Enter the company ticker: AAPL

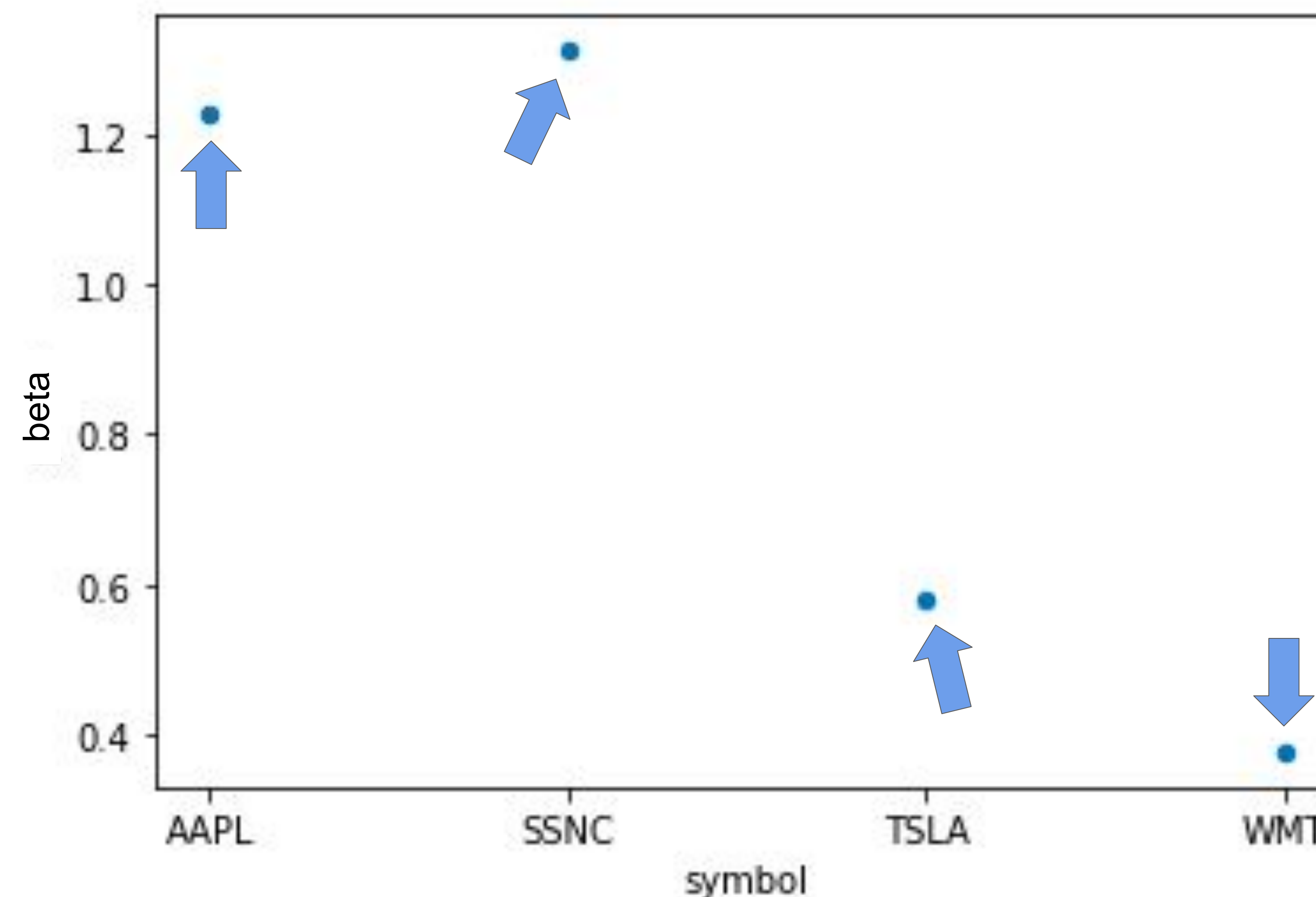
Select: DCF Model

Enter the company ticker: AAPL

Select: Stock Quote

```
{'symbol': 'AAPL', 'profile': {'price': 287.63, 'beta': '1.228499', 'volAvg': '50400291', 'mktCap': '1.25851927E12', 'lastDiv': '2.92', 'range': '170.27-327.85', 'changes': 14.38, 'changesPercentage': '(+5.26%)', 'companyName': 'Apple Inc.', 'exchange': 'Nasdaq Global Select', 'industry': 'Computer Hardware', 'website': 'http://www.apple.com', 'description': 'Apple Inc is designs, manufactures and markets mobile communication and media devices and personal computers, and sells a variety of related software, services, accessories, networking solutions and third-party digital content and applications.', 'ceo': 'Timothy D. Cook', 'sector': 'Technology', 'image': 'https://financialmodelingprep.com/images-New-jpg/AAPL.jpg'}}
{'symbol': 'AAPL', 'rating': {'score': 5, 'rating': 'S', 'recommendation': 'Strong Buy'}, 'ratingDetails': {'P/B': {'score': 5, 'recommendation': 'Strong Buy'}, 'ROA': {'score': 5, 'recommendation': 'Buy'}, 'DCF': {'score': 4, 'recommendation': 'Buy'}, 'P/E': {'score': 5, 'recommendation': 'Strong Buy'}, 'ROE': {'score': 5, 'recommendation': 'Strong Buy'}, 'D/E': {'score': 4, 'recommendation': 'Strong Buy'}}}
{'symbol': 'AAPL', 'date': '2020-04-14', 'dcf': 297.53654206693045, 'Stock Price': 287.03}
```

Technical Analysis



Features

Fundamental Analysis

- Company fundamentals and value based on DCF model

Technical Analysis

- Side-by-side comparison of different financial indexes chosen by the user

Future Developments

- More flexible visualization. Having different types of charts for data in different categories
- More flexibility in DCF model. Give the users the option to change certain input to the model.

Contact: Weishuang Gao, Trinity College, shirley.weishuang@gmail.com