

Predicting IPO Day Success

Introduction

We live in a world today where investing is not only becoming more widespread, but it is also becoming more accessible and democratized through a multitude of fintech start-ups. Almost anyone now can invest their money with a single touch on their smartphone. One of the types of investment that is on an exponential rise is IPO investing. According to Luisa Beltran from Barron's: *"As of Dec. 7, 954 companies listed their shares in the U.S. this year, collecting \$301 billion, Dealogic says. This is more than double the 399 companies that raised \$146 billion for the same period a year earlier. This year's pace surpassed the high-water mark for IPOs, set at the dawning of the dot-com boom in 1996, when 848 companies in 1996 secured \$79 billion."*

This frenzy around investing in IPOs is two-fold:

1. Potential fast high returns if the company succeeds and grows quickly
2. High returns of the opening day of the IPO

While there are several external factors that impact the first bullet point, such as the state of the stock market, regulations, scandals, supply chain issues, etc... The second bullet point is primarily driven by the company's history and relevant data up until they go public. Therefore, it is possible to imagine that the success of an IPO on opening (whether the price is higher during the day than at the start of the day) is more predictable than the long-term success of the company. The current project seeks to do just that!

About the data

The data contains information about the U.S. stocks of companies (before going public), information such as the number of employees, the location of the headquarters, when the company declares a fiscal month, metadata about ownership and more. Additionally, the dataset also contains the stock price for the companies over the course of their first fiscal year after going public (including the open, close, volume and high of each day).

Link to dataset: <https://www.kaggle.com/proselotis/financial-ipo-data>

Questions

1. Will the price of the IPO stock go higher on its opening day?
2. What are the main factors affecting IPO performance on its opening day?