



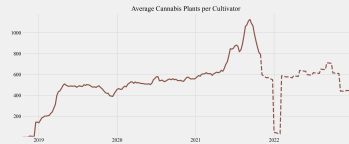
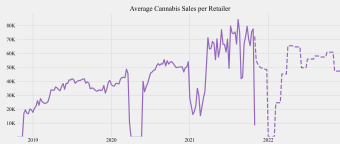
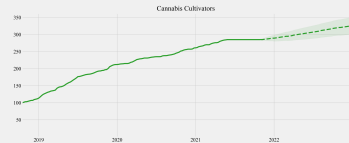
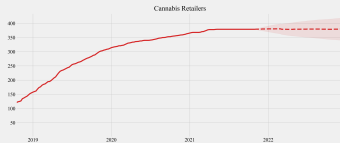
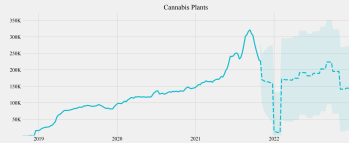
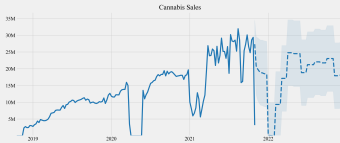
Cannabis Data Science

Meetup

November 10, 2021

# Predicting Market Performance

Massachusetts Historic and Predicted Cannabis Market Performance



Data: Cannabis sales, total implied plants, and licenses data from October 15, 2019 through October 26, 2021.  
Data Source: MA Cannabis Control Commission.

## Structure, Conduct, and Performance

- Fathered by Edward S. Mason (1939).
- Seminal work by Joe Bain and George Stigler.
- Consequences: Antitrust policy.
- Criticisms: Chicago School (efficiencies and poor measurements).

## Collusion

- Argument: Increased market concentration lowers the cost of collusion. A lower cost of collusion increases collusion between firms has an adverse affect on society.
- Counter-argument: Efficient firms will naturally gain market share and increased concentration may not necessarily lead to collusion. Thus, curtailing concentration could curtail efficiencies.

## Regulatory Capture

- Pioneering work by George Stigler.
- Argument: Regulatory agencies get “captured” by large producers to regulate at their behest and use regulation to prevent competition. George J. Stigler Biography by David R. Henderson on

Econlib.org

“The questions concerning what number of firms is too large to permit collusion, and what amount of output control is sufficient for price setting, are essentially empirical issues.”

Reevaluation of the Structure-Conduct-Performance Paradigm in Banking.

Douglas D. Evanoff and Diana L. Fortier

## Measurements

- Measures of profitability.
- Measures of concentration.
- Measures of barriers to entry.
- Total factor of productivity measure.

# The 10 Commandments of Forecasting

- 1 Know what you are forecasting.
- 2 Understand the purpose of forecasting.
- 3 Acknowledge the cost of the forecast error.
- 4 Rationalize the forecast horizon.
- 5 Understand the choice of variables.
- 6 Rationalize the forecasting model used.
- 7 Know how to present the results.
- 8 Know how to decipher the forecast results.
- 9 Use recursive methods.
- 10 Understand that forecasting models evolve over time.



## Until next time

Study some economics, make some forecasts, and next week we can check our forecasts.