Capstone Project Proposal

Matchings and Dating App Market

Group 4: Corneel Henri L. Moons, Jillian Ann Hunter, Sofia Pirogova

Project Idea:
We propose to study the *marriage, or dating app, market / matching* using individual-level data. Specifically, we would like to analyze whether certain personal attributes (e.g.education) are more or less scarce in the market, and how these affect matching outcomes, test empirical hypotheses and provide statistical evidence about the role of preferences, incentives, and information.

Research Angles:

- **Market efficiency:** How effective is the matching process overall? What is the expected payoff from using the platform?

- **Strategic behavior:** Dating apps involve uncertainty about the next profile, which introduces scope for strategy

- **Reaction curves:** How do users respond to particular profile attributes or messages?

- **Information asymmetry:** How do stated preferences (what people say they want) compare with revealed preferences (what they actually pursue)?

Preliminary Data:
OkCupid profiles dataset (Kaggle: `https://www.kaggle.com/datasets/andrewmvd/okcupid-profile`
This dataset contains ∼60,000 records, including information such as age, sex, orientation, and family status, as well as open-ended text descriptions.

Risks and Limitations:
A potential risk is that available variables (e.g., relationship status) may not fully capture the richness of incentives, revealed versus stated preferences, or the dynamics of strategic behavior. This could limit the empirical support for some of our hypotheses.