

Experimental Studies on Bargaining and Competitive Behavior

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Chapter 6

Impact Chapter

In this dissertation, I use behavioral economics and rigorous experimental methods to study competitive and bargaining behavior. I also integrate insights from other disciplines such as psychology and biology. In addition to contributing to the academic discussion, my work also addresses important societal issues, especially in the context of labor markets and public policy. The research and findings presented in this dissertation can inform scientists and policymakers interested in (1) understanding competitive behavior, (2) making use of the portable tools to measure competitiveness (Chapters 2 and 3), (3) analyzing women's bargaining behavior and their biological foundations (Chapter 4), (4) as well as increasing the participation of women in top-level positions (Chapters 2, 3 and 4).

The studies "*Is there a Preference for Competition?*" covered in **Chapter 2** and "*Estimating Preferences for Competition from Convex Budget Sets*" in **Chapter 3**, attempt to understand whether it is possible to conceptualize an individual preference for competition that is irrespective of risk attitudes. The findings from both studies suggest that individuals derive a direct taste from being in a competitive environment and that for a sizeable part of them this taste is negative (i.e., most individuals dislike taking part in a competitive environment compared to a non-competitive environment). There are two aspects that can be derived from this finding. First, there are agents who are forced to perform in competitive environments despite the discomfort they obtain from it, which can impair their accomplishments under this environment. Second, competitive environments have a selection of agents that like competition but not necessarily are the most qualified ones for it. In the labor market situation, both scenarios create inefficiencies, suggesting that policies that tackle competitive environments need to acknowledge and act upon them.

The findings from "*Estimating Preferences for Competition from Convex Budget Sets*" in **Chapter 3** suggest that individuals experience different levels of risk aversion in a competitive and in a non-competitive environment. This variation across competitive environments can inform research on risk preferences, and

more specifically, on the potential sources of variation of risk attitudes within individuals. Understanding the source of systematic changes in risk preferences is crucial, as such variations in risk behavior can have consequences in real-life situations. For instance, in labor market and health outcomes, migration decisions, addictive behavior, and investment (for review, see, e.g., Schildberg-Hörisch, 2018).

The methodologies used in **Chapter 2** and in **Chapter 3** come from the literature in experimental economics around gender differences in competitiveness. The findings from this literature propose that women are less willing to select into a competitive environment than men because they dislike competition more than men (for reviews, see, e.g., Niederle, 2014; Dariel et al., 2017). Although in both studies we observe that women on average dislike competition, it is not entirely clear whether the gender gap in competition is due to this distaste. Our results suggest that when risk is present in both a competitive and a non-competitive environment, men and women do not significantly differ in their aversion to competition. I consider that this finding can help to inform policies oriented to increase the representation of women in competitive environments and top-level positions. The fact that men and women seem to have similar preferences for competition, in general, suggests that other factors could play a more important role in gender differences in competitiveness. This could also explain why policy interventions such as information provision are so successful to reduce the gender gap in competition (Wozniak et al., 2014; Brandts et al., 2015; Balafoutas and Sutter, 2019). In addition to this type of policy intervention, targeting other traits such as risk attitudes, overconfidence, and other factors not present in my research (e.g., reputation and feedback aversion), could be more effective than targeting the trait of competition itself to increase women's participation.

Chapter 4, "*The Impact of the Menstrual Cycle on Bargaining Behavior*" proposes that the variation of bargaining behavior is conditional on the informational setting present in the negotiation process. Given the persisting gender gap both in terms of selection into negotiation and outcomes obtained from negotiations, I consider my findings can be informative to address this problem. In particular, the results in this chapter suggest that there are two forces influencing women's bargaining behavior: an environmental one and a biological one. The first force suggests the need for institutional changes that create better environmental conditions for women to negotiate. This is similar in the spirit to many other gender policies aiming to increase participation of women in the labor force such as quotas, prizes benefiting one's offspring, preferential treatments, and incentives based on cooperation. The second force highlights the need of creating awareness of the role that female sex hormones have in economic behavior. Scientific research analyzing the impact of the menstrual cycle on behavior is scarce not only in medical literature but also in behavioral studies. As a female young researcher it is shocking to see

how little is known about internal processes that constantly shape women's bodies, and behavior in different social and economic domains. I think this study is not only informative for women to understand better how hormones can influence their negotiation decisions but also highlights the need for more research on this topic.

Public debate and promotion of Maastricht University

The research covered in this dissertation has been presented and discussed in several places such as Pittsburgh University (2020), New York University Abu Dhabi (2017-2019), New York University Shanghai (2019), and Universidad del Rosario (2017). In addition, my work has been presented in many prestigious behavioral and experimental conferences such as the ones hosted by the Economic Science Association (ESA) in Europe, America, and Asia, and other well-known conferences such as the International Meeting on Experimental and Behavioral Social Sciences (IMEBESS 2019), Gender Economics and The Workplace (IAB and FAU Erlangen-Nuremberg, Germany 2018), Maastricht Behavioral and Experimental Economics Symposium (M-BEES 2017) and Behavioral Economic Policy Symposium (M-BEPS 2017) and the Conference of Experimental Economics (BEEC, Bogota 2017).

Software and Data analyses

I used the software tool z-Tree to program all the experiments presented in this dissertation and the software STATA to perform the data analyses. The codes are available upon request to the author.