

Competing for Equality: The Gender Gap in Piano Competitions since 1890

Research Summary for the General Assembly WFIMC 2023

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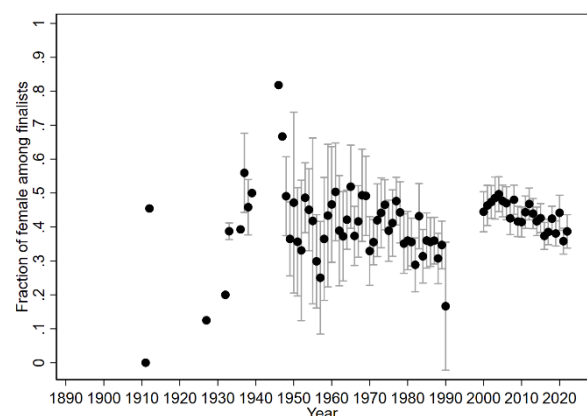
Do competitions or competitive settings disadvantage women? For many careers, advancement is conditional on success in a "competition", which could be an actual tournament (for instance, a piano competition), or a competitive environment (like the job market for musicians, a music award). If competitions are used as a screen but they systematically disadvantage women, society loses the opportunity to benefit from female talent. Can a gender gap be attributable to the disadvantage suffered by women in competitive settings?

We address this question by examining female participation and achievement in international piano competitions, which furnish an ideal setting for this investigation because there are no physical barriers to women becoming pianists, women are involved as both competitors and judges (i.e., competition jurors), and piano competitions have been held in a variety of countries over more than a century, encompassing substantial variation in gender norms across time and space.

Our analysis uses rich administrative data on the near universe of international piano competitions compiled by Gustav Alink in "International Piano Competitions" and it is complemented with more recent data collected by us. This data include the names and nationalities of every participant or juror who took part in **almost every international piano competition held since 1890**. For each competition edition (i.e. event), we know the number of stages involved, the outcome of each stage, as well as the rankings of all finalists. Accordingly, our data allow us to track the competitive histories of nearly every pianist on the competition circuit over a one-hundred year period.

We document a **significant gender gap among piano competition winners**. Women constitute just under 50 percent of all competition pianists, a share that has remained roughly constant during the post World War Two period. However, the share of women among finalists is only 44 percent, while the share of winners who are female is 39 percent. As potential explanations for this gender gap, we examine (i) the role of female (under)-representation on competition juries; (ii) the role of competition intensity; and (iii) whether there are

Figure 1: Gender gap in participation



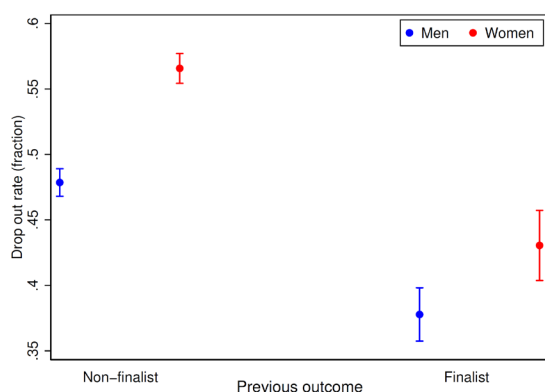
increasing returns to experience and if there are gender differences in the willingness to persist on the competition circuit.

Our key findings are as follows. First, despite the advancement of female representation on juries, we find **no effect of female participation on juries** and whether female pianists enjoy success. This null finding is robust to a wide variety of alternative measures of success or female representation on juries.

Second, we find **no relationship between female success and competition intensity**. Competitions with more stages, which are more physically taxing, attract higher calibre pianists, and require performers to learn more music, do not seem to disadvantage female pianists, and, by some measures, actually help them.

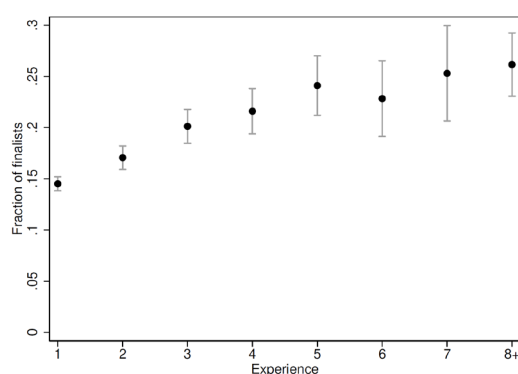
Third, we find **gender differences in willingness to continue competing**. Specifically, female pianists, on average, tend to compete in fewer competitions, and are more likely to drop out of the competition circuit, especially if they do not perform very well at an initial competition. Given that there are **increasing returns to experience** in piano competitions (the likelihood of winning rises as a pianist competes in more competitions), the evidence suggests that gender differences in drop out may be responsible for the observed gender gap among piano competition winners.

Figure 2: Gender differences in drop-out



Notes: Each dot represents the drop out rate point estimate. Bars show 95% confidence intervals. Based on the sub-sample of competitions in which participation at the first stage is observed.

Figure 3: Likelihood of reaching the finals



Notes: Each dot represents the point estimate of the fraction of participants who are finalists. Bars show 95% confidence intervals. Based on the sub-sample of competitions in which participation at the first stage is observed.

This Research Summary is based on the working paper *“Competing for Equality: Understanding the Gender Gap in Piano Competitions since 1890”*, by Roberto Asmat, Karol J. Borowiecki, and Marc Law.

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