

## **The Impact of Incentive Schemes on Worker Self-Selection – Productivity, Preferences and Gender**

### Abstract:

In this paper we provide controlled experimental evidence on the interaction of incentive schemes, sorting decisions, and performance. In a first sequence of the experiment, all subjects perform a real effort task under a piece rate regime. Subsequently, they can choose to work either in a fixed payment system or, depending on the treatment, in a piece rate system (piece rate treatment), tournament system (tournament treatment), or team compensation system (team treatment). In all three treatments, subjects then go through a series of other treatments to elicit social preferences and risk attitudes. In addition, we collect questionnaire data on effort, self-assessment, risk attitudes, IQ, socioeconomic characteristics, and personality. Our main findings are as follows: First, output is much higher in the variable pay schemes (piece rate, tournament, and team) compared to the fixed payment schemes. Second, this difference largely driven by productivity sorting: the higher individual-specific productivity is, the more likely a subject is to self-select into a variable pay scheme. Relative self-assessment determines sorting into tournaments. Third, more risk averse workers are less likely to sort into variable pay schemes, particularly into tournaments. Fourth, people endowed with social preferences are less likely to sort into tournaments. Fifth, women are less likely to select into variable pay schemes. This is partly explained by differences in risk attitudes between men and women. Subjects also differ with respect to their personality and work attitudes. In particular, women that describe themselves as self-assertion seeking, dominant, carefree, and robust are more likely to participate in tournaments. Finally, reported effort is significantly higher in all variable pay conditions than in the fixed wage condition. Moreover, subjects report that they are more stressed if they work in a variable pay scheme. Our results demonstrate that the implementation of an incentive scheme does not only affect effort provision but also attracts particular types of workers, e.g., with respect to their productivity, risk attitudes or self-confidence. The data also show that assessing the incentive effects without taking self-selection into account leads to utterly wrong conclusions. Methodologically the paper shows that experiments cannot only be used to rule out selection via random assignment but also to study selection in a controlled way.