## Project Title: Who Benefits from Tax Breaks for Low Income Earners? Evidence from Mini-Jobs in Germany.

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Many governments provide low income earners with tax breaks or subsidies to incentivize labor supply. While many studies found strong responses along the extensive margin, most researchers find smaller responses along the intensive margin. Small intensive elasticites suggest that either labor supply is not very elastic or labor responses are dampened by search and adjustments costs: individuals want to change working hours but unable to do so due to the unavailability of suitable jobs or due to the cost of finding  $them.^1$ 

In contrast to previous studies I find strong intensive margin responses to a tax notch generated by the "mini-job threshold" in Germany.<sup>2</sup> While jobs with monthly earnings below this threshold are exempt from income and social security taxes, higher-paying jobs are not. The mini-job threshold thus generates a large notch in the tax schedule of individuals. I find sharp bunching at the mini-job threshold which is consistent with employees reducing working hours to avoid larger tax liabilities. The strong bunching is persistent over time and across demographic groups. I also find that when the mini-job threshold increases, the bunching adjusts accordingly. To explain the magnitude of the response I consider firms' incentives. If firms find mini-jobs attractive, more threshold jobs are offered and therefore more individuals are able to respond to the tax notch by reducing their earnings. I consider several channels through which firms could benefit from mini-jobs and show that firms have a preference for mini-jobs because the economic incidence of tax breaks is shared between employers and employees. In other words, firms are able to reduce labor costs by paying lower gross wages to mini-jobbers as compared to regular part-time employees. Finally, I will use a theoretical model to analyze how firm incentives affect equilibrium distribution of jobs when workers experience positive labor adjustment costs. The project will use three datasets: an administrative dataset of labor histories, a large survey of firm employment structures, and a household survey.

The results of this study are very policy relevant. First, accurate estimates of labor supply elasticities are necessary to determine the potential effectiveness of any labor policy. The large tax notch generated by the mini-job threshold provides strong incentives to change working hours and thus allows me to identify labor supply elasticities with high precision. Second, the advantage of this study is that it considers responses to not only income taxes but also to social security taxes. Social security taxes have been understudied due to their simple structure and thus lack of identifying exogenous variation among population groups and over time.<sup>3</sup> Third, in contrast to many studies that calculate labor supply elasticities using tax variation among high income earners, this project focuses on the most vulnerable part of the labor force – individuals with yearly earnings around  $\notin$  4,800. The results of this study will offer better predictions for policies targeted at low income earners. Fourth, the results of this study suggest that firm incentives are of crucial importance for optimal design of labor and tax policies, especially when these policies concern low-earning workers.

<sup>&</sup>lt;sup>1</sup>See Chetty et al. (2011).

<sup>&</sup>lt;sup>2</sup>The threshold has been set at  $\in$  325 from 1999 until 2003, at  $\in$  400 from 2003 until 2012, and at  $\in$  450 since then.

<sup>&</sup>lt;sup>3</sup>See Gruber (1997) and Saez et al. (2012).

## References

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