

# Labor search, inequality, and public policy.

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Labor markets defy the Walrasian auctioneer: the supply of labor is persistently in excess of demand and otherwise observationally equivalent workers receive different compensation. In response, search-theoretic models of the labor market have been developed and are widely used to evaluate public policy. A key component of such models is the theoretical mechanism used to divide labor rents between an employer and employee and set the wage. Different wage setting mechanisms yield, sometimes radically, different theoretical implications for public policy, market efficiency, returns to experience, and inequality between workers. This dissertation is composed of three chapters which grapple with issues of how the wage setting mechanism is selected, the implications of the wage setting mechanism when interpreting aggregate and cross-sectional data, and the interaction of public policy with the wage setting mechanism.

In Chapter 1, *Posted versus negotiated wages in markets with on-the-job search: Theory*, I model a labor market in which workers search on- and off-the-job and firms choose between two wage formation mechanisms. Firms may either post a non-negotiable wage or offer a contingent wage contract which updates to match workers' best-to-date outside offer when profitable. I show that when firms must pay a per-firm cost to offer the contingent contract,

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a separating equilibrium arises in which only low productivity firms offer non-negotiable contracts. Modeling contract heterogeneity improves the on-the-job search model's fit with respect to empirical regularities. With only inflexible wages the model struggles to achieve reasonable labor share at the same time as realistic wage dispersion. With only flexible wage contracts the model fails to provide incentive to search while unemployed and suggests implausibly low entry wages. The mixed-contract model is able to fit wage dispersion and at the same time simulated labor share is proportional to national accounting data, simulated employment transitions are consistent with observed worker histories, and simulated flow value of unemployment is consistent with value guaranteed by social insurance programs. Improved fit makes the new mixed-contract model an better candidate for welfare analysis of social insurance programs particularly when the researcher seeks to value the impact on workers *and* on firms.

In Chapter 2, *Dead-end and career jobs: skill-specific earnings profiles in an on-the-job search equilibrium with heterogeneous wage contracts*, I include differential skill levels on the part of workers in an on-the-job search equilibrium which features heterogeneous wage contracts. Firms choose between posting a non-negotiable contract or hiring under contingent pay which matches the value of a workers best-to-date outside offer. I give conditions under which the market decomposes into parallel skill-specific sub-markets in each of which a separating equilibrium arises where only low productivity firms offer non-negotiable contracts. Even when skill-specific sub-markets are ex-ante identical, differences arise ex-post. More skilled workers are more likely to receive negotiable wage offers. Consequently, high skilled workers experience lower rates of unemployment, more wage dispersion, and higher returns to experience than low skilled workers. I explore the implications for evaluating job training which increases worker skill level while unemployed. The full effect of training is expressed in wages only over time; however, effects are expressed more rapidly in higher percentiles wage distributions. This suggests estimating the returns to training programs, at least in

the shorter-run, based on impacts in the right tail of the wage distribution.

In Chapter 3, *Posted versus negotiated wages in markets with on-the-job search: Estimation*, I address issues which arise when the model on-the-job search model with contract heterogeneity is brought to bear on the data. The key issues are how to assess which firms workers prefer to work for and how this information is related to the output produced by a matched firm and worker. Importantly, it is almost universal in the related literature to assume that worker compensation increasing with firm productivity. The model featuring heterogeneous contracts developed in Chapter 1, however, is at odds with this assumption. I establish that workers' preferences over firms can be more accurately predicted by using data on the rate of turnover within each firm than by using measures of compensation. I then use this information to construct a mapping between firm quality (as revealed by worker preferences), compensation, and output. Importantly, this mapping is consistent with aggregate economic measures (which are not used in estimation) and features a mix of contract types of which a large portion are wage posting.