An Anatomy of Monopsony: Search Frictions, Amenities, and Bargaining in Concentrated Markets

Authors: David W. Berger, Kyle F. Herkonhoff, Andreas R. Kostol, Simon Mongey
Discussants: Giuseppe Moscarini, Katarina Borovičková

Daron Acemoglu opened the discussion by stating that this is a very exciting research agenda and that he liked the use of Norwegian data as well as the way the authors constructed labor markets. He agreed with the sentiment of the discussants that the model is too complicated. He explained that once you have the relevant frictions, you can think of the problem of a bilateral monopoly and consider where the wage is relative to the outside options of the two parties. He added that one could also explore how the level of employment varies as you reduce the friction. However, he noted that the predictions depend on the details of the model and that the authors had chosen very specific details. As such, it was hard to know which details matter for the prediction. Monopsony models are a very special type of model and imply certain comparative statics where amenities could play an important role. Switching to the empirical work, Daron Acemoglu pointed out that even with the moments they estimated from the Norwegian data, it was not clear that those can really be identified. He pointed out that there is much more granularity in the data. For example, when you look at wage changes as workers move from one firm to another, that takes the bargaining power differences between firms into account. He emphasized that this would be the direction to go for this exciting research agenda. He concluded that adding structural features to the model and trying to back those out in the data would make it difficult to generate credible conclusions.

Erik Hurst complemented Daron Acemoglu’s points. He agreed that this is an exciting research agenda but emphasized that it will be important to think about which frictions relative to each other are going to matter for explaining labor market dynamics. He also added that it would be helpful to understand what in the data allows authors to distinguish between different levels of a markdown. In relation to the decomposition, Erik Hurst asked what in the data is pinning down how much of the markdown is coming from search relative to other sources. Search appears to be doing a lot and from his own work on minimum wages, which features a monopsony model with search, he noted that the importance of search depended a lot on preferences.

Building on the comments by the discussants, Gabriel Chodorow-Reich emphasized that the bargaining question is really central, and it is hard to get systematic data to discipline models. His intuition was that it is different for different types of workers and different parts of the labor market. He asked the authors about estimating these models. Specifically, whether heterogeneity by worker type or how specific a worker’s skills are is going to affect how much they are subject to bargaining versus wage posting. He added that, at some point, we will have to move away from estimating one model for all workers to incorporating different types of bargaining protocols for different types of workers and different types of firms.

Giuseppe Moscarini highlighted the recent Econometrica paper by Faberman, Mueller, Şahin, and Topa. He pointed out that for those who work on monopsony, they should read the search literature very carefully because there is now so much relevant data. For example, we have data on the probability of accepting outside offers. Given all this data, we can now see the demand and supply side, which gets to the points made earlier by Daron Acemoglu and Erik Hurst about where the identification is coming from. We have had demand on the vacancy side but not supply on the acceptance side. Therefore, using this additional data on the supply side, which the authors do not use yet, in conjunction with the demand side would be key.
Kyle Herkonhoff thanked Giuseppe Moscarini for his helpful response to the many comments and added that they can measure the delta (the ratio of the flows) and so can immediately reject atomistic firm models. Moreover, there is enough empirical work that simulates firm exits, wage and employment responses, and so they can rule out a particular class of models.

David Autor noted that the assumption in the literature is that firms optimally mark down by some amount which provides a labor supply elasticity. However, in reality, most employers have no idea about the labor supply elasticity. Moreover, recent experiments suggest firms do not even understand how much adjusting wages affects applications. Recognizing that employers have wage-setting powers does not necessarily mean firms optimally mark down with a given formula. Simon Mongey responded that one of the nice things about their model is that you can essentially ask a firm in the model to run a reduced-form regression and they would get a number.

On the empirical side, David Autor about the relationship between the Herfindahl-Hirschman Index (HHI) and wage level. Other papers have shown that most variation in concentration is driven by small and large places which have different wage levels in general and so doing aggregated analysis is not necessarily informative about the effect of concentration and wages. However, if you are doing within market comparisons across occupations, then it is informative. He asked the authors which approach they were taking. Kyle Herkonhoff noted that this question was also touched on in Katarína Borovičková’s discussion and responded that because of those concerns relating to HHI, their analysis focused on within region, within occupation, across year. For example, comparing a dentist in Oslo today to a dentist in Oslo tomorrow is informative and it is highly unlikely to reflect sorting.

Simon Mongey followed up by adding that in terms of the regressions, when they do within occupation, across markets, they are controlling for size of the market (number of firms) and the density, so there is no mechanical effect in model, and this is taken care of in the regression as well. He agreed with Gabriel Chodorow-Reich that thinking about skill specificity is important. He also agreed with comments by Daron Acemoglu and Erik Hurst and now that they have model laid out, they can turn off individual model elements as well as think of the identification of each of them. In relation to the comments made in Giuseppe Moscarini’s discussion, Simon Mongey agreed that the distribution of amenities matters. He added that if you turn off the amenities distribution and rank firms in terms of the fraction that hires those coming from other firms relative to unemployment, then 100% of job flows in the model are going up the ‘ladder’, so the only way in the model to have flows going in both directions is to have the amenities distribution. So given the model, the identification argument for that parameter is clear, which Giuseppe also alluded to in relation to search literature.

In relation to the job flows data, Andreas Kostol added that people are more likely, about three times as much, to flow out of the market to different occupations. He explained that there is also a gradient in the flows. For example, people with kids or higher education are less likely to flow out. He pointed out that they could add productivity using a classic value-added measure and agreed that they should add more data.

Ayşegül Şahin pointed out that the authors have endogenous vacancies and there is a cost of posting vacancies. She asked how the cost of posting vacancies was disciplined. Simon Mongey responded that Kyle Herkonhoff had put up the wage formula. Given there is heterogeneity in productivity in the market, wages are primarily driven by this heterogeneity and the bargaining determines what shares workers are getting of that productivity. That maps one-to-one to dispersion in wages, and they match that. Given that dispersion in productivity and given the amount of firms in the market, then the convexity of the
vacancy cost entirely pins down concentration in the market. If you increase this convexity, then large firms do not become too large. Therefore, the measure of concentration provides a key way to get at this, though not necessarily a sufficient statistic. He added that the way the markets are defined in the model allows them to do this analysis.

David Berger concluded the discussion by agreeing with Daron Acemoglu. He emphasized that they wrote this paper as people do not know empirically where markdowns come from. These benchmark frameworks do not work well together. Specifically, bargaining frameworks do not work well with neoclassical frameworks, so more needs to be done here and they are taking a small step in that direction.