

“Dynamic Model of Matching” Presentation

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Audience Q&A

1) Q Juan Pereyra: Is Z finite?

A Jeremy Fox: Yes. Dupuy and Galichon is a static model with a continuum of types z , but we do not do that here.

2) Q Nikhil Agarwal: I'm not sure if this question will make complete sense. But, let me try. Is there a version of limited liability on the possible transfers? In the static case, we assume that the transfers cannot make individuals worse off relative to no matching. In the dynamic case, I might be tempted to borrow against the potential for future matches in order to transfer. Is this prohibited?

A Jeremy Fox: It is not prohibited. There is no limited liability. If I understand your question precisely, if a worker were to get future human capital from a job, the competitive equilibrium wages might be lower than if no human capital was acquired.

3) Q Marcin Peski: Jeremy, a small clarification to the lit slide. In Peski (21), the match definitely has an effect on matching partners, in a similar way as in yours: the probability of the type transition depends on the current types of both matching partners.

A Jeremy Fox: I agree. Thanks for clarifying. It's also Rust-based model, like yours, but NTU.

Peski: I agree. I think a difference is that you have a search model with binary choice over the current partner you are in contact with and we have a frictionless (unless modeled with switching costs) model of multinomial choice over match partners, at the individual level.

Fox: Let me follow up, Marcin. If I recall, your model of separations is exogenous, like Choo (2015). Correct me if I am wrong. In our model, each time period an agent can endogenously pick a new match based on the agent's new state variable (and the new market conditions if the equilibrium is not stationary).

4) Q Marcin Peski: Search-based vs frictionless in a period (similar to Choo (15)) seems to be the difference. Great thanks. Also, I suspect that although the presentation is limited to Gumbel and Choo-Siow, I suspect that you can work with all kinds of noise distributions, utilizing Galichon-Salanie techniques. Am I correct?

A Jeremy Fox: Yes, we can use other known distributions of the heterogeneity terms. Also like Galichon and Salanie, we could parameterize the distribution of heterogeneity up to a finite vector of parameters and do maximum likelihood.

Peski: Jeremy, I do have exogenous separations, but I also have many-to-many matchings, which perhaps seem similar to what you do. (Though I am not exactly clear how you model separations.) I do have an online appendix (my website) that shows how to add separations and post match decisions (like having children for example), but especially with separations, it is not the most elegant, and it has some interpretational difficulties. I would be happy to talk - if you have a version of your paper and I could understand how exactly separations work.

Fox: I haven't read your appendix; I will. In our model, you are making a multinomial choice over partners each period, at the individual level. So, if you choose a different partner in a following period, that is an endogenous separation.

On many-to-many, I like talking about an extension of ours to trading networks like, in the static sense, section 6 of a paper by Azevedo and Hatfield (2018), which I used empirically in Fox (2018). But that is not the content of what Alfred is presenting today.

Peski: Sounds good. For me, it would mean another match - which is allowed in many-to-many matching framework of the main paper. I simply meant that the way you model separations seem similar to multiple matches for each player.