“The Dual Local Markets: Family, Jobs, and the Spatial Distribution of Skills”

by Jingting Fan and Ben Zou

Discussion by Kohei Takeda (NUS, CEP)

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Three phenomena in the last half century (in US)

- Population has been concentrated toward skill-intensive cities
- The marriage rate has declined since the 1960s
- The labor force participation among women has increased

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- Population has been concentrated toward skill-intensive cities
  - Endogenous amenities by different skills
  - Infrastructure investment
  - Structural transformation
  - Trade shock
  - Two-side sorting
- The marriage rate has declined since the 1960s
- The labor force participation among women has increased

In this paper

- We learn new ways of thinking about how to incorporate the marriage market in a parsimonious way in QSE model

- Canonical QSE model has:
  - Homogeneous agents
  - Differentiated amenities and productivity across cities
  - Migration costs and trade costs
  - Agglomeration

- When we consider marriage, we need to extend the model by introducing:
  - Gender
  - Matching between different types of workers
  - Different decision-making between singles and couples

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Different migration costs/decisions?

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Why do people form couples?
How is the reason different by location?

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Labor supply decision as a household

QSE with marriage in a nutshell

Migration pattern

$$\pi^e_{od,s} = \frac{\exp\left(\theta^e_s(\overline{U}^e_{d,s} - d^e_{od,s})\right)}{\sum_d \exp\left(\theta^e_s(\overline{U}^e_{d,s} - d^e_{od,s})\right)}$$

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Consumption and (exogenous) amenities

Single rate

The attractiveness of a city for singles relative to couples

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Single rate

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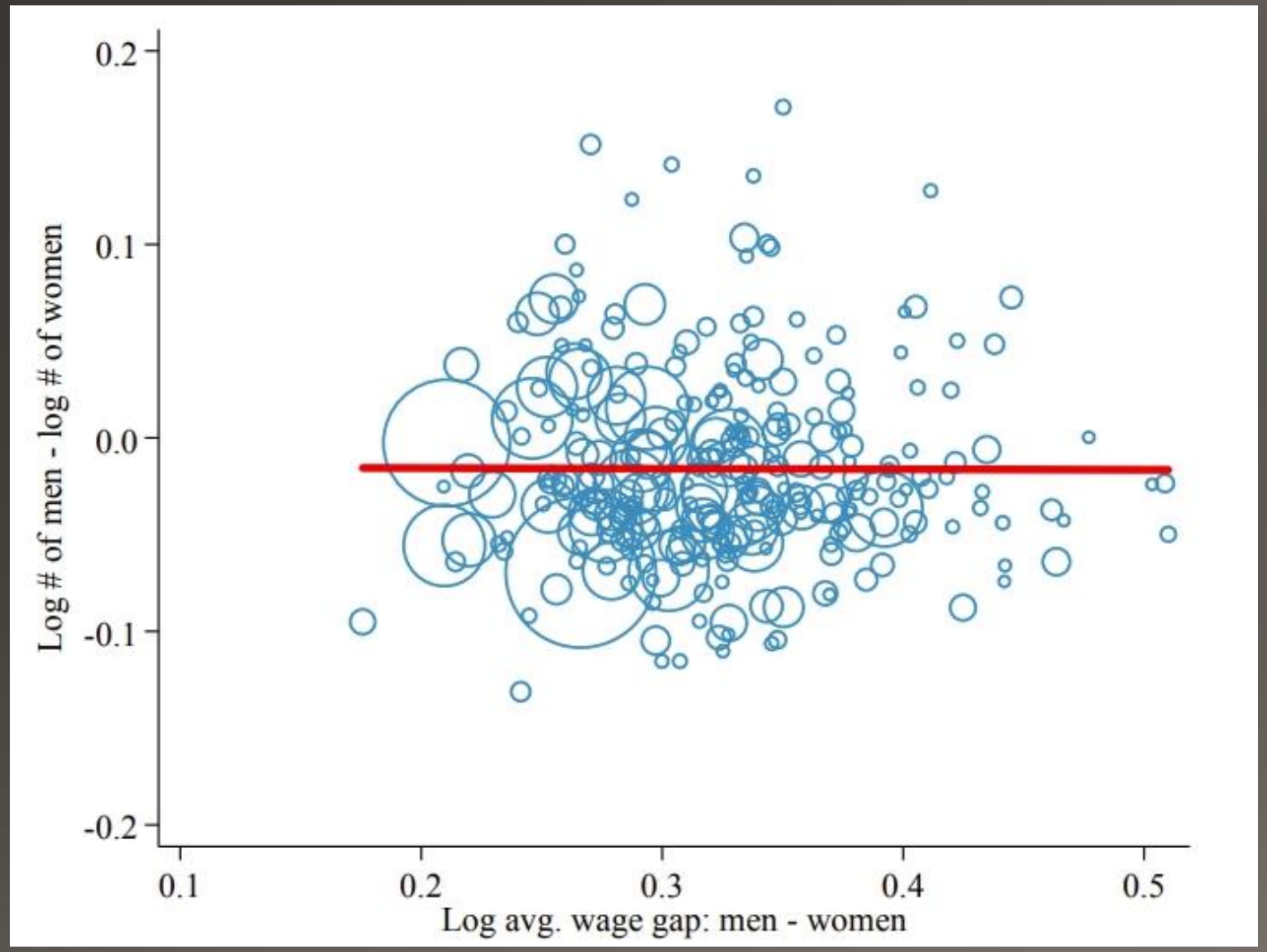
The attractiveness of a city for singles relative to couples

Distribution of workers by gender, education and marriage status

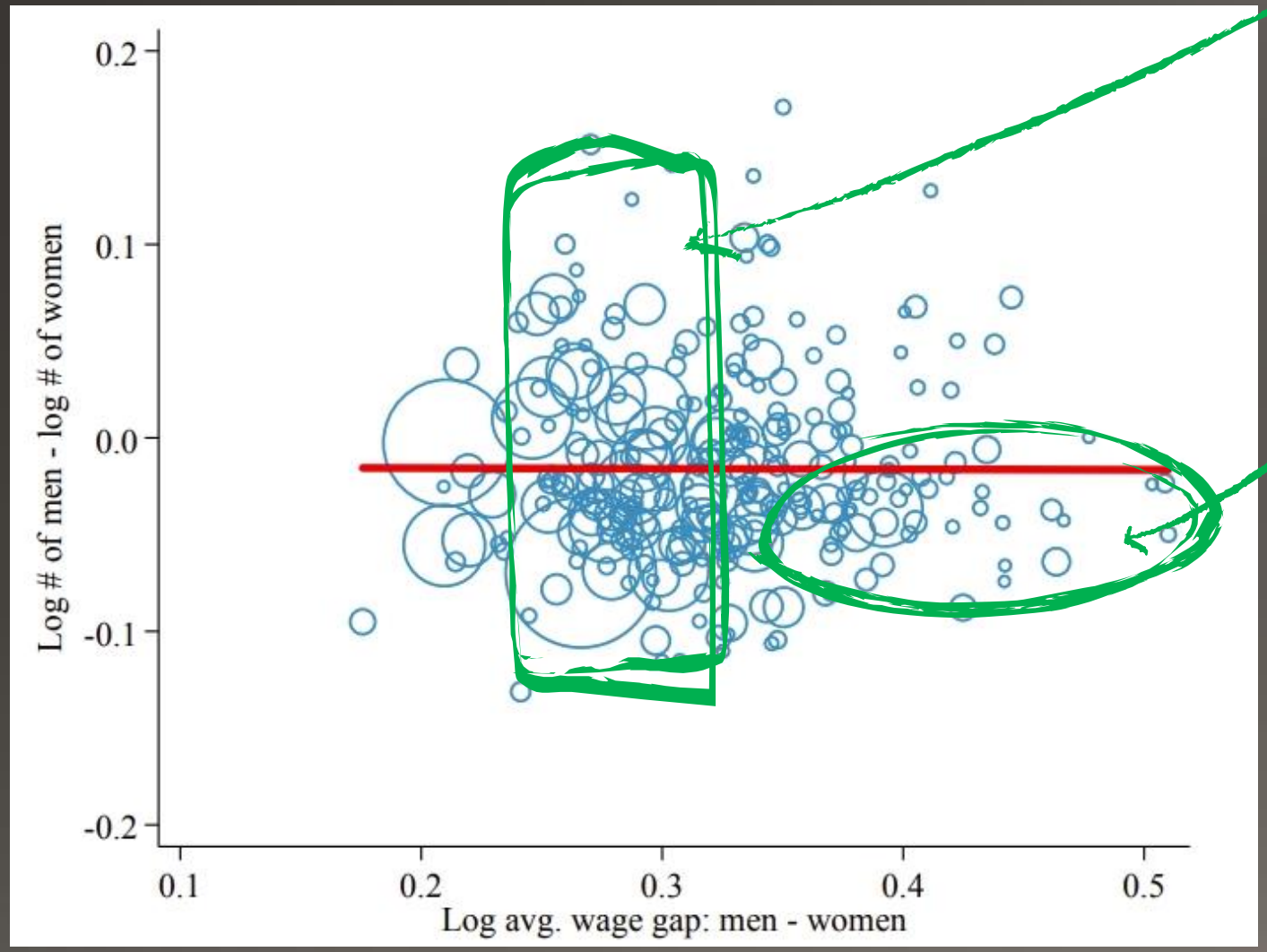
Idiosyncratic taste shocks related to marriage, location choices (dispersion force)

Endogenous amenity and productivity (agglomeration)

Marriage as an amenity?



Marriage as an amenity?



We can explain this variation by

- City-Gender specific (perception of) amenities
- Gender-specific living costs

Is this particular to "marriage"?

For these cities, higher labour demand for men?

- City-Sector specific productivity

- Can we see the real wage gap?
- Can we separately see singles and couples?
- Any anecdote/survey about the difference in location choices for singles and couples?

Model choices

- Decision on children and education: can workers' expected utility include the costs and benefits of having children?
  - Any heterogeneity in their costs across US cities?
  - Linked to labor supply decision (currently in the draft)
  - Can you introduce education costs as an exogenous cost when they have children?

- Marriage is an agglomeration force within the same skill group -> Fat tail of skills?

- Lifecycle: the value of staying in a city as a single can be different over time
  - When people are young (i.e., when they make migration decisions and work choices), they care more about wages and the working environment
  - When people become older, they care more about health care, housing costs, and being close to their family, …
  - Can we introduce some weighting them by age?

Tastes for marriage matter

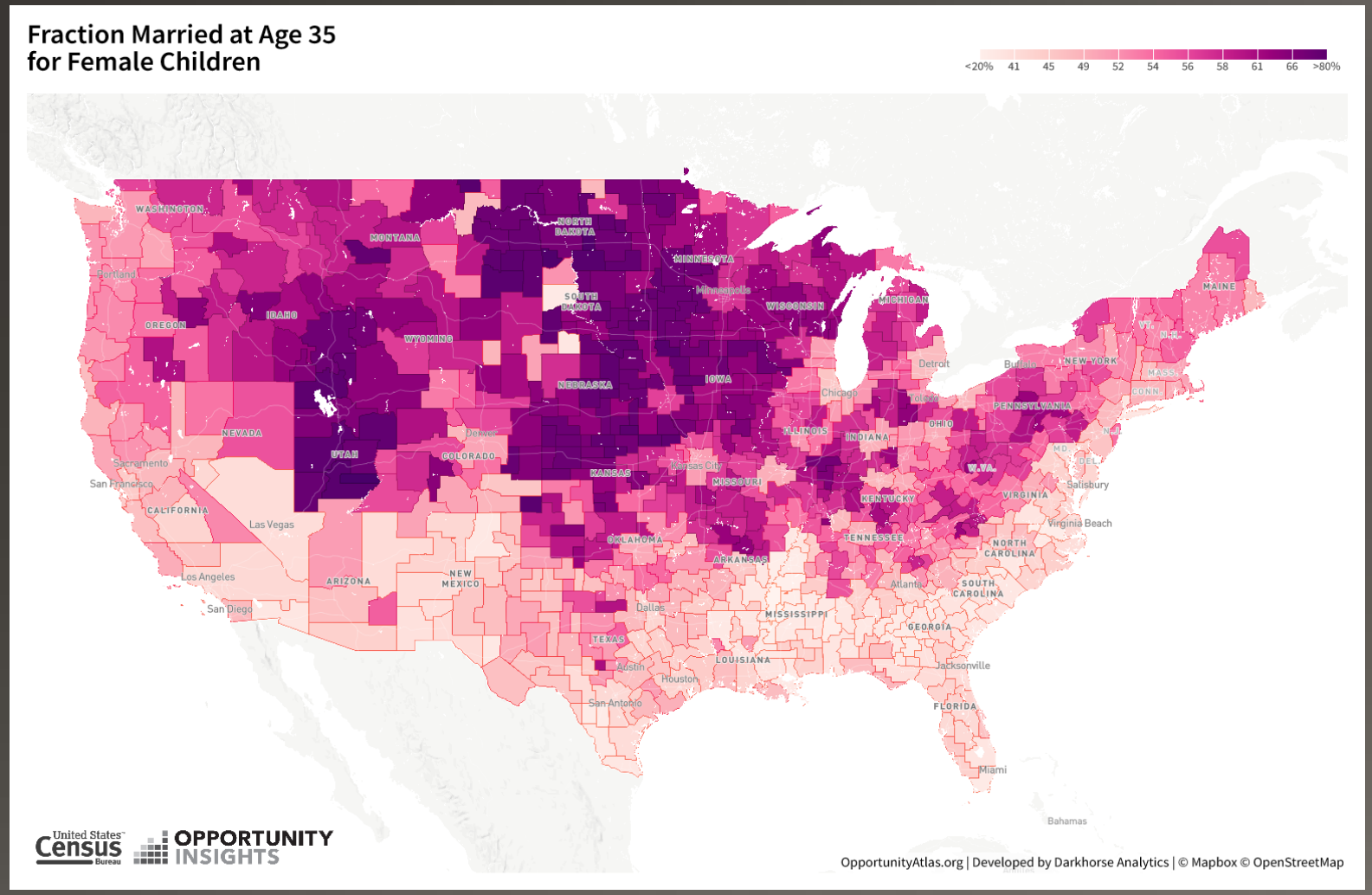
	Baseline	Eliminate the role of				No Marriage
		home production	amenity mix	taste/love	all	
	(1)	(2)	(3)	(4)	(5)	(6)
% married	0.68	0.60	0.68	0.44	0.14	-
the composition of marriages						
(H,H)	0.21	0.20	0.22	0.08	0.05	-
(H,L)	0.13	0.12	0.12	0.15	0.06	-
(L,H)	0.09	0.10	0.09	0.36	0.26	-
(L,L)	0.56	0.58	0.57	0.42	0.62	-
The gradient of $\Delta \log(pop)$ w.r.t. $\log(\frac{H}{L})$	-	0.14	0.06	0.09	0.78	1.55
The gradient of $\Delta \log(\frac{H}{L})$ w.r.t. $\log(\frac{H}{L})$	-	0.10	0.09	0.15	1.10	1.75

- Why do we need both?
  - Decrease weights of idiosyncratic taste shocks of marriage
  - Change in skill-match (pairs) specific taste
- Any policy implications? Welfare measure?

Remarks in model calibration

- Female labor supply elasticity is (i) estimated for selected couples; and (ii) the same between 1960 and 2000 for counterfactuals
- No local externality in the matching
- Again, we are back to the discussion: amenity or marriage?
  - I would suggest an exercise in which we shut down heterogeneity in (fundamental) amenities across cities
  - How much can we (the model) explain the spatial variation of (i) skills; and (ii) marriage/single rates
- Can we use different age groups to see how tastes are stable (or not)?

Finally, location choices and marriage rate for the future



- The calibrated model can derive (i) people's location choice and (ii) marriage probability, conditional on their origin
- Can we directly see their spatial pattern?
- This would be interesting to see how their career choice and life are shaped by space