

On the State of the Union

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Journal of Political Economy (2000)

Sargent Reading Group Presentation

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Goal of Paper

"most exits from and entrances to AFDC rolls are associated with changes in family structure and not with changes in labor supply and earnings"

Moffitt (1992)

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"most exits from and entrances to AFDC rolls are associated with changes in family structure and not with changes in labor supply and earnings"

Moffitt (1992)

- ▶ Develop an equilibrium search model of marriage and divorce that can be used to study:
 - ▶ marriage and divorce
 - ▶ investment in children
 - ▶ intergenerational mobility
 - ▶ child support, welfare policies

Demographics

- ▶ 4 period OLG economy
 - ▶ 2 period as child
 - ▶ 2 periods as adult
- ▶ 2 genders: male, female
- ▶ Females bear 2 children in first period of adulthood:
 - ▶ 1 male, 1 female
- ▶ Adults can be married, single or divorced
- ▶ Single adults receive random draw from marriage market of same age.

Preferences

Adult Females

$$F(c, e, 1 - l - t) = \log c + \delta_1 \log e + \delta_2 \log (1 - l - t)$$

c : consumption

e : human capital investment in children

l : time spent working

t : time spend in child care

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Adult Males (married)

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Adult Males (single)

$$M(c, 0, 1 - n) \equiv \log c + \theta_2 \log(1 - n)$$

Household Production

$x_s \in X$: productivity of female

$z_s \in Z$: productivity of male

Single Adult

$$c_s = \begin{cases} x_s l_s & \text{if female} \\ z_s n_s & \text{if male} \end{cases}$$

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Married Couple

$$c_s = x_s l_s + z_s n_s - \gamma_s$$

c_s public good

$\gamma_s \in \Gamma$: marriage shock (love/hate)
realized **after** marriage decision (iid)

Human Capital Production

Investment in child...

$$e = t^\alpha c^{1-\alpha}$$

... determines productivity as adult:

- ▶ Discretized normal distribution in first period as adult:

$$E[x_s | e] = \varepsilon (e_{s-2} + e_{s-1})$$

$$E[z_s | e] = \kappa + \varepsilon (e_{s-2} + e_{s-1})$$

- ▶ Discretized AR(1) in second period as adult...

Intra-household Decisions

- ▶ Conditional on marriage decision, all other choices are static!

Single male trivial choice of (c, n)

Single female trivial choice of (c, l, t, e)

Married couple (c, n, l, t, e) determined as nash equilibrium

Why Get Married?

1. Economies of scale in consumption
2. Direct utility (γ), option to divorce if negative
3. Males only get utility from children if married

Marriage Market

$\Phi_j(x)$ = distribution over x of single age j females

$\Omega_j(x)$ = distribution over x of single age j males

- ▶ Marriage by mutual agreement, unilateral divorce.
- ▶ Age 2:
 - ▶ married at age 1: decide whether to remain married or divorce
 - ▶ single at age 1: decide whether or not to marry
 - ▶ state: (x, z)
- ▶ Age 1:
 - ▶ decide whether or not to marry
 - ▶ state: (x, z, Φ_1, Ω_1)

Stationary Matching Equilibrium

- ▶ Decision rules:
 - ▶ labor supply
 - ▶ child care time
 - ▶ marriage/divorce
- ▶ Distributions $\Phi_1, \Phi_2, \Omega_1, \Omega_2$ such that
 1. Decision rules for singles solve household problems
 2. Decision rules for married couples are Nash Equilibrium
 3. Marriage decisions are mutually optimal given decision rules and distributions.
 4. Distributions are consistent with the decision rules.

Experiment: Child Support

- ▶ Divorced females receive fraction of ex-husband's income
 - ▶ current income of ex-husband is state variable for ex-wife
 - ▶ marital status in previous period is state variable males
- ▶ Direct effect:
 - ▶ improve children from single-parent families
- ▶ Indirect effects:
 - ▶ divorce is less attractive to males
 - ▶ children themselves become more attractive in marriage market and hence less-likely to divorce
- ▶ In long run, males are better off in economy with child support!

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Side note: investment in children may be inefficient:

- ▶ non-altruistic, externalities may be present
- ▶ children always prefer more productive fathers...
- ▶ ... but not necessarily more productive mothers