

Reth theorizing demographic change

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The 'less family' scenarios

SDT: postmodern values -> self-realization, individualism -> less fertility, decline in marriages, more unstable partnerships

Becker framework: max utility from specialization and trade (unitary utility function). Convergence in market productivities undermines rationale of marriage and raises opportunity cost of children.

And yet:

'Post-modern' family values are stronger in gender-traditional countries

| | "Marriage is out of date" | "I do not want children" |
|-------------------------------------|----------------------------------|---------------------------------|
| Gender-egalitarian countries | | |
| Denmark | 15 | 0 |
| Norway | 14 | 1 |
| Gender-traditional countries | | |
| Germany (W) | 19 | 7 |
| Spain | 25 | 5 |

**Table 1. Parity preferences are stable.
Women aged 25-39**

| | No kids | One kid | Two kids | Three+ |
|-------------|---------|---------|----------|--------|
| Denmark | 0 | 2 | 52 | 27 |
| France | 1 | 2 | 54 | 34 |
| Germany | 3 | 10 | 47 | 20 |
| Italy | 2 | 15 | 53 | 15 |
| Netherlands | 1 | 2 | 54 | 24 |
| Spain | 2 | 2 | 43 | 29 |
| Sweden | 2 | 2 | 43 | 29 |
| UK | 2 | 3 | 38 | 34 |

| Gender egalitarian countries | Fertility 2010 | Gender traditional countries | Fertility: 2010 |
|-------------------------------------|-----------------------|-------------------------------------|------------------------|
| Denmark | 1.9 | Germany | 1.4 |
| Norway | 2.0 | Italy | 1.4 |
| Sweden | 1.9 | Portugal | 1.4 |
| U.S. | 2.1 | Spain | 1.4 |

Divorce Trends

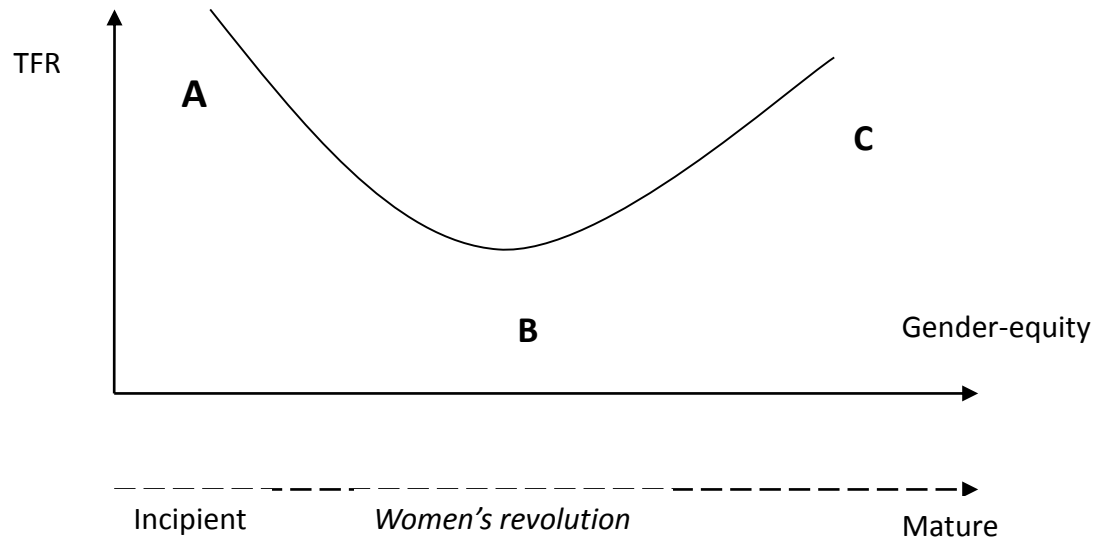
| Gender egalitarian countries | % change in CDR 1985-2010 | Gender Unequal countries | % change in CDR 1985-2010 |
|-------------------------------------|----------------------------------|---------------------------------|----------------------------------|
| Denmark | - 4 | Germany | 0 |
| Iceland | -28 | Ireland | 0 |
| Norway | -13 | Italy | 80 |
| Sweden | - 4 | Portugal | 190 |
| US | -30 | Spain | 267 |

And the social gradient is being reversed.

US Example: Percent Divorced by Marriage Cohort

| | Low education | High Education |
|--------------------|----------------------|-----------------------|
| Married in: | | |
| 1975-79 | 36 | 31 |
| 1985-89 | 35 | 21 |
| 1990-95 | 40 | 18 |

The Revolution of Women's Roles and Fertility



Multiple Equilibrium Dynamics: from traditional to egalitarian family models

1. Stable equilibria are endogenously self-reproduced

* men and women invest in (marital) skills in anticipation of their future proper identities

2. Equilibrium erosion requires exogenous shock

* Goldin: the pill, household technologies, female education (?)

3. In multiple equilibria there will be 1+ unstable equilibrium

* Pareto sub-optimal: inefficiency and inequity (?)

4. Consolidation of new stable equilibrium

• requires endogenously fueled diffusion

5. Core thesis: gender egalitarian equilibrium is precondition for 'more family'

A simple diffusion model.

- Population (P) is either in egalitarian ($(E(t) \leq P(t))$) or in traditional ($P(t) - E(t)$) arrangement.

$E(t)/P$ is share of egalitarians.

Pace of diffusion, $k > 0$):

$$\frac{dE(t)}{dt} = \frac{k}{P} \times E(t) \times (P - E(t))$$

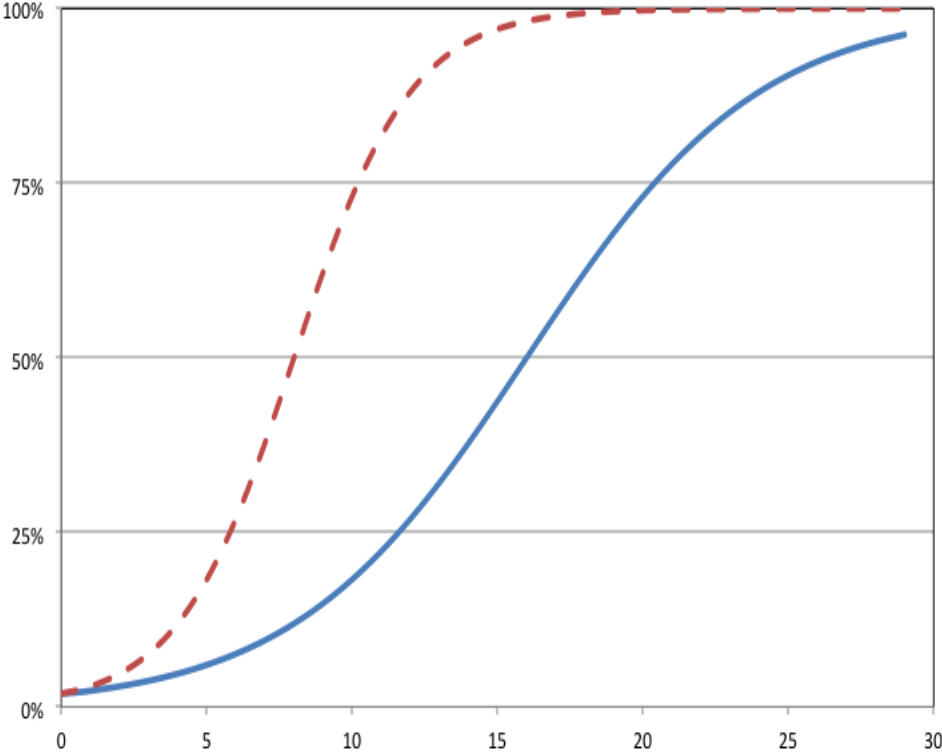
Two possible equilibria:

$E(t)=0$: every couple is traditional

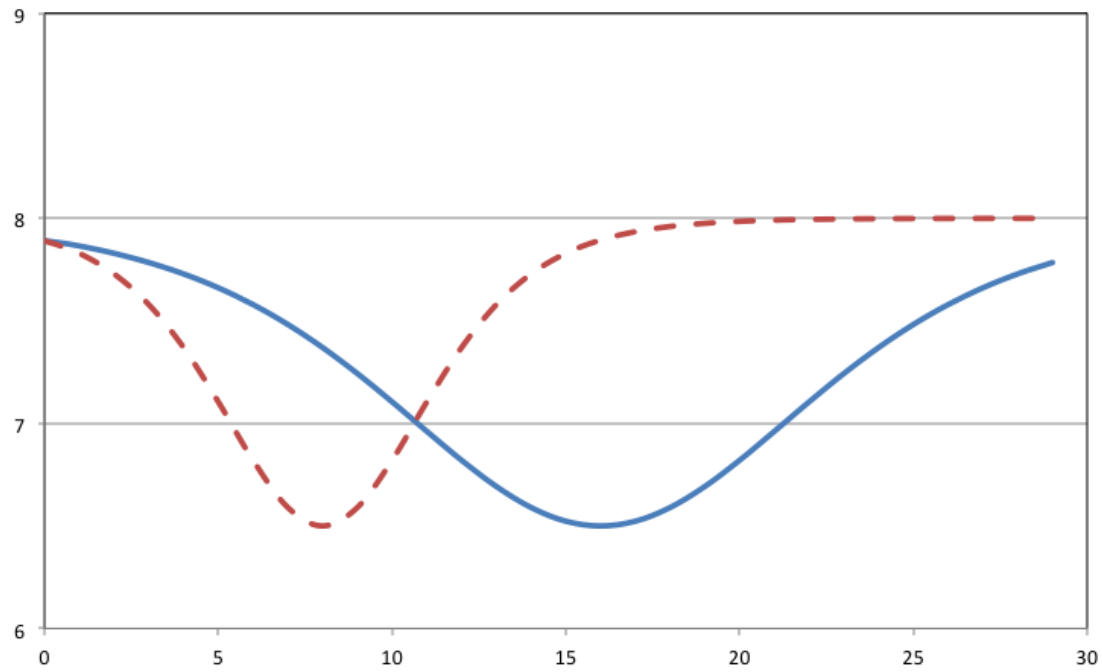
$E(t)=P(t)$: every couple is egalitarian

Any situation in between, $0 < E(t) < P$, is unstable

Figure 2: Diffusion dynamics over time:
share of egalitarians ($E(t)/P$), with $k=0.25$ (continuous line) and $k=0.5$ (dashed line). $\alpha=\exp(-4)$.

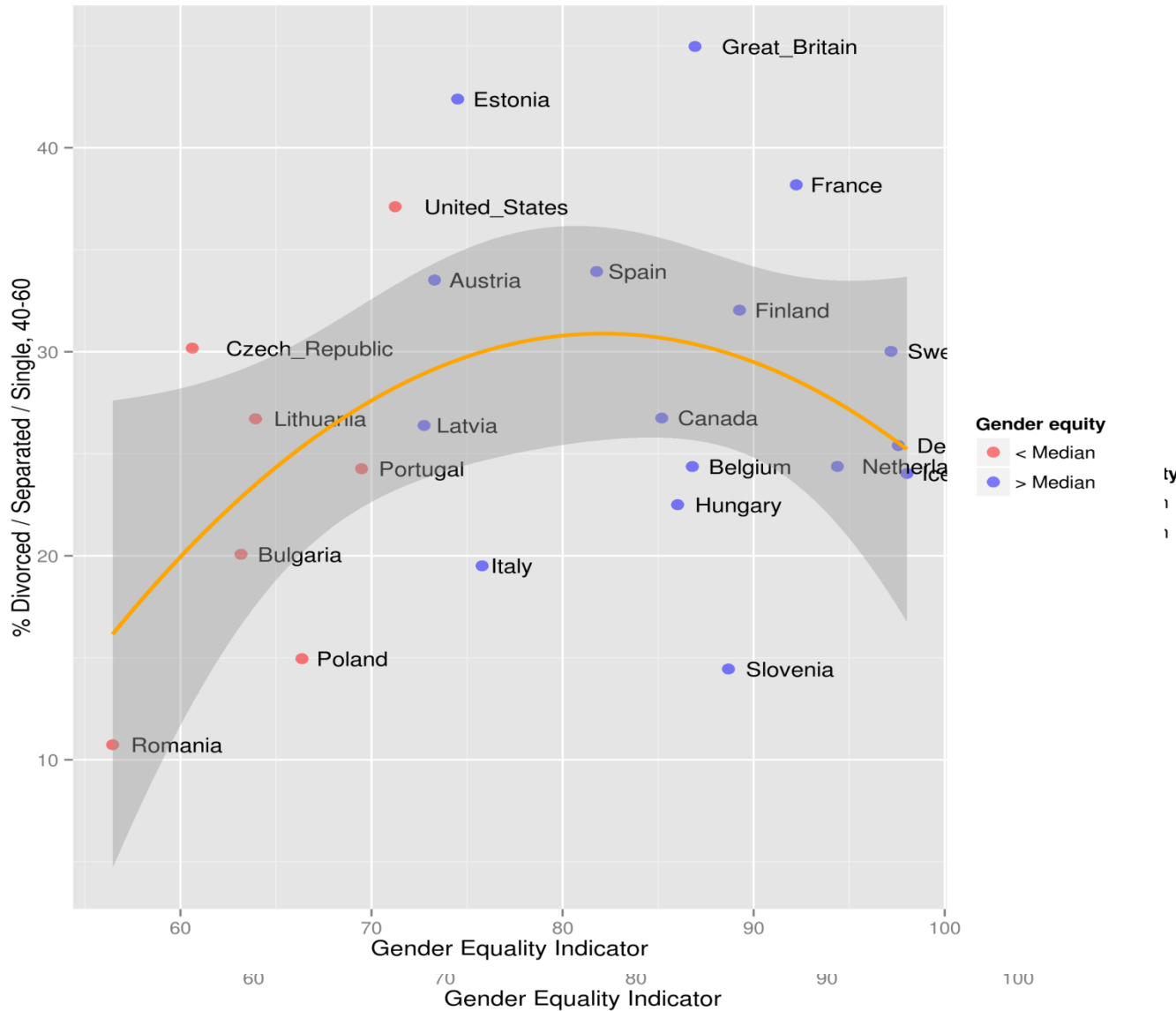


Birth rate dynamics in rival diffusion dynamics (births per 1000)

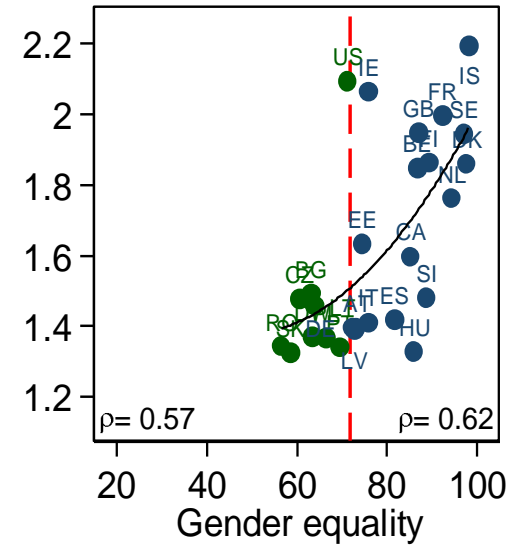
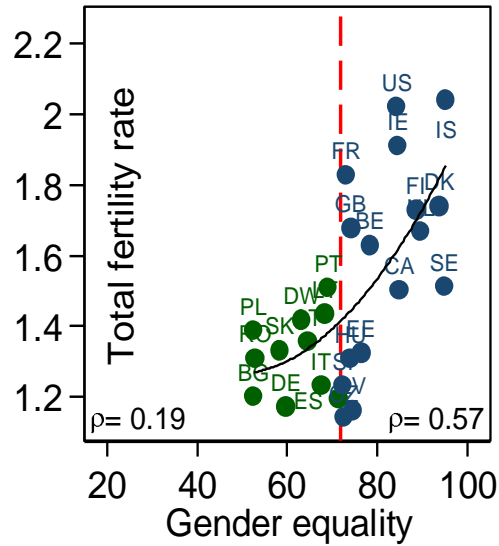
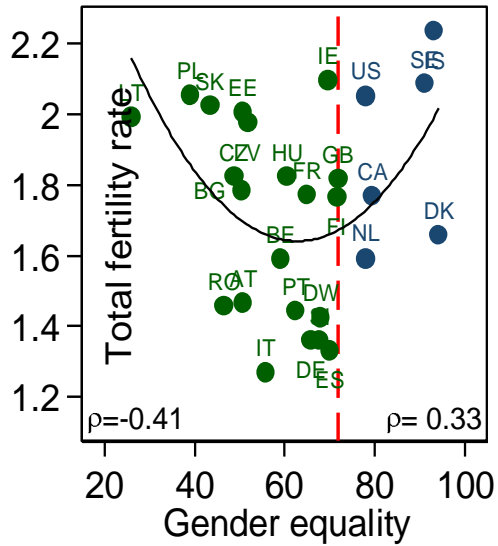


Any empirical support?

Gender egalitarianism and Partnership instability, late 2000s

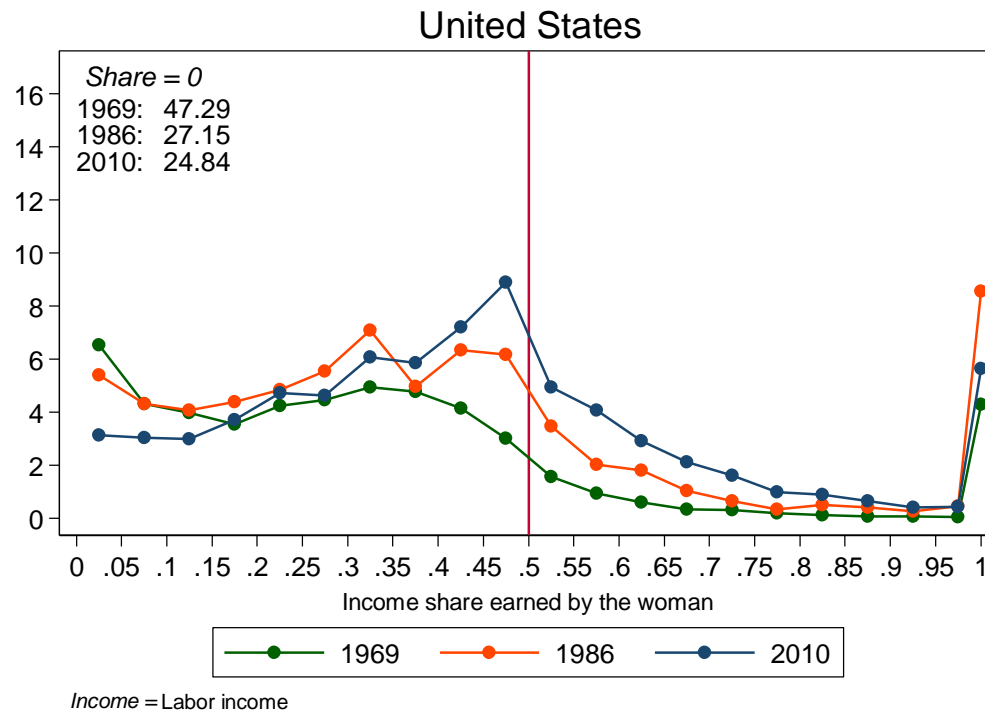


DIFFUSION? TFR vs. level of gender equality 1990, 2000, 2006-09

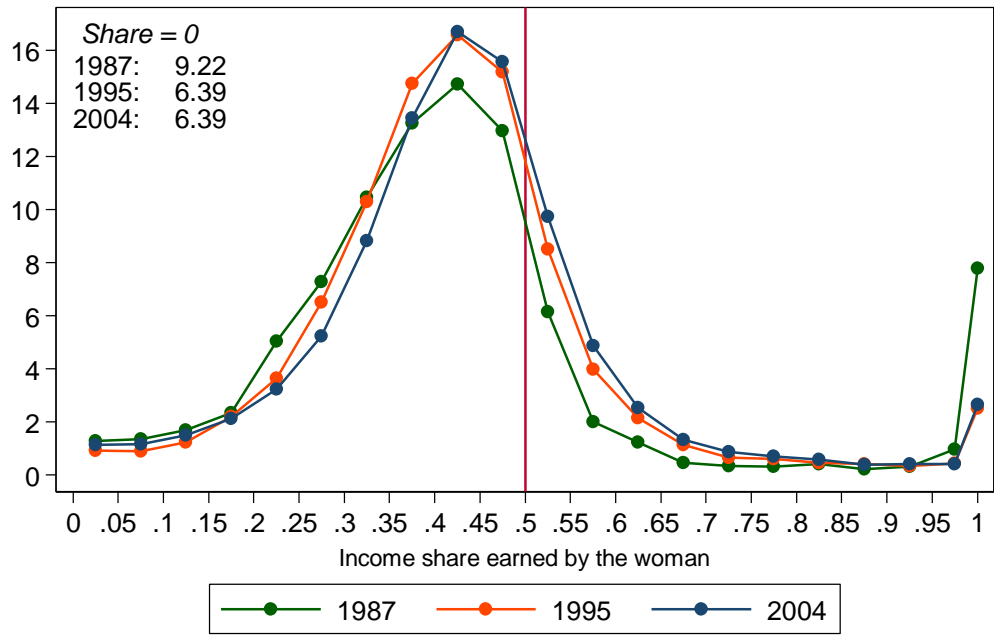


● ≤ Median ● > Median

Doing Gender. The Marianne Bertrand approach



Denmark



Income = Labor income + short-term insurance

**Female income dominance and divorce within high and low educated partnerships.
Event history analysis. Odds-ratios for three marriage cohorts**

| | 1981 cohort | 1990 cohort | 2000 cohort |
|--|-------------|-------------|-------------|
| High educated: She crosses 55% line | 2.2*** | 1.4*** | 1.1*** |
| Low educated: She crosses 55% line | 6.2*** | 3.4*** | 2.1*** |
| Low-high ratio | 2.8 | 2.4 | 1.9 |
| High educated: She crosses 55%, starting at <45% | 1.2*** | 1.1* | 1.1 (n.s.) |
| Low educated: She crosses 55%, starting at <45% | 2.0*** | 1.4*** | 1.3* |
| Low-high ratio | 1.7 | 1.3 | 1.2 |

Diffusion Dynamics.

Year by year divorce risk coefficients (inverted) associated with the transition to female income dominance

