

# Vienna EDUREP 2015

**The return of the Family ?  
A Multiple Equilibrium Approach**

## The 'less family' scenarios

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

*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.

# **The Comparative Macro Evidence**

**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

**‘Post-modern’ family attitudes are stronger in gender-traditional countries**

	<b>“Marriage is out of date”</b>	<b>“I do not want children”</b>
<b>Gender-egalitarian countries</b>		
Denmark	15	0
Norway	14	1
<b>Gender-traditional countries</b>		
Germany (W)	19	7
Spain	25	5

<b>Gender egalitarian countries</b>	<b>Fertility 2009-2011</b>	<b>Gender traditional countries</b>	<b>Fertility: 2009-2011</b>
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

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

Micro-level evidence:

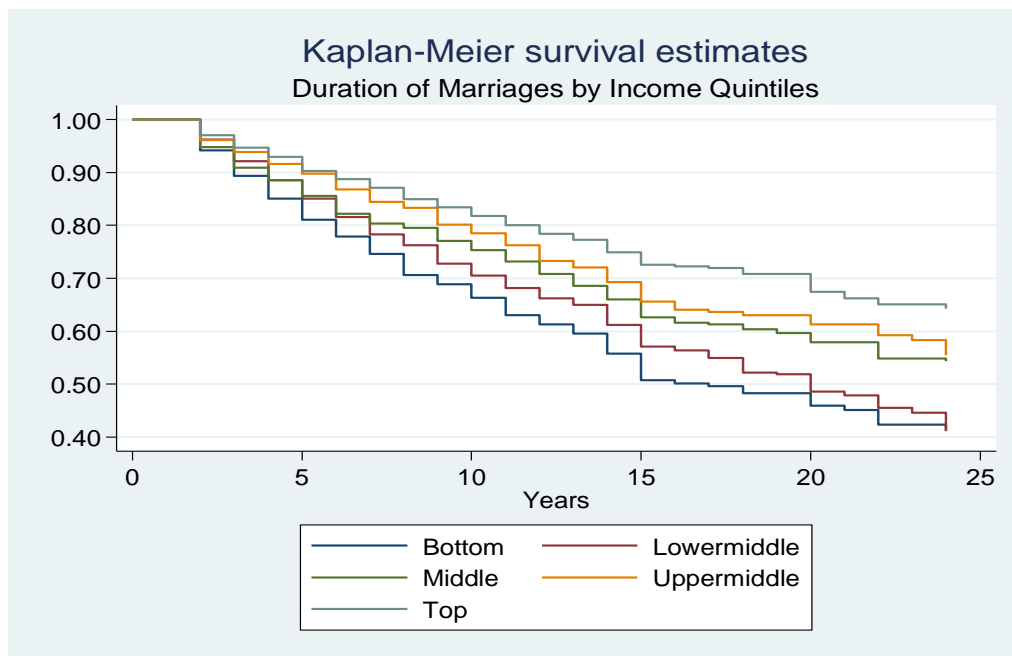
The social gradient is turning upside down



### Divorce ratios Low: High educated women

	1970s	1990s	2010 ca
Denmark		1.6	2.6
Germany	0.8	1.3	
Sweden	0.7	1.6	1.4
US	1.1	2.2	

**Figure 2.2. Marital Survival Rates. US**



**US Example: Percent Divorced by Marriage Cohort**

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

## The diffusion dynamics are operating:

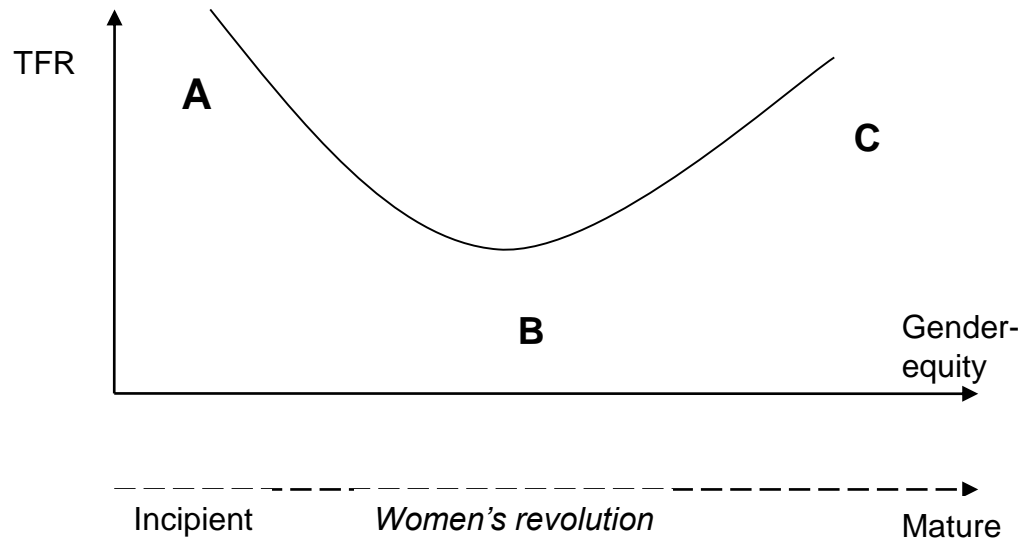
Female income dominance and divorce.

Odds-ratios for three Danish 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

# **A Multiple Equilibrium Approach**

**Figure 1. 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'**

Any evidence?

**Egalitarians and Traditionalists. Men's share of total housework**

	<b>He &lt; 10 percent</b>	<b>He &lt; 20 percent</b>	<b>He &gt; 40 percent</b>	<b>He &gt;50 percent</b>
<b>Denmark</b>	<b>6</b>	<b>16</b>	<b>53</b>	<b>31</b>
<b>UK</b>	<b>19</b>	<b>37</b>	<b>30</b>	<b>17</b>
<b>Spain</b>	<b>18</b>	<b>49</b>	<b>17</b>	<b>8</b>



**Table 3. Diffusion of Gender Egalitarianism  
Predicted Equilibrium distributions.**

	Households in			
	Traditional equilibrium	egalitarian equilibrium		in unstable equilibrium
Denmark	1	52		18
Britain	6	15		49
Spain	27	0		52

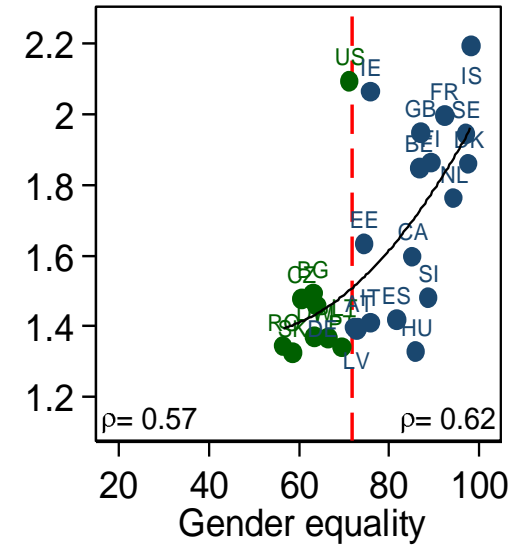
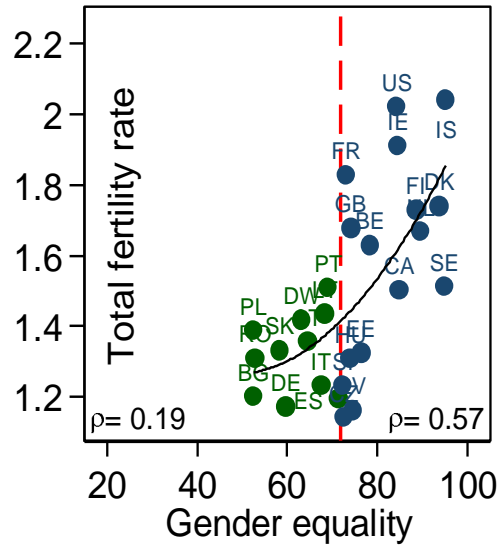
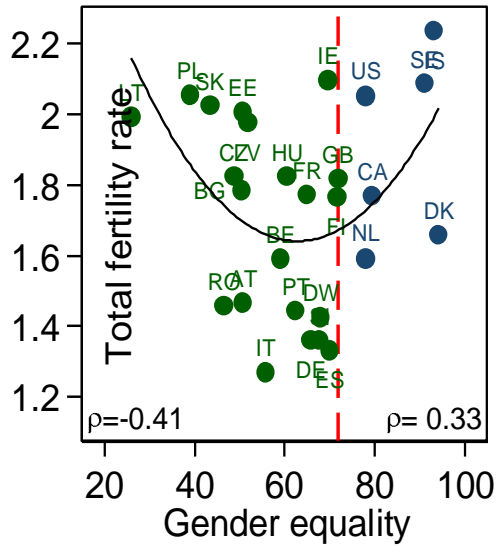
Denmark: Odds-ratios of men being Traditional or Egalitarian.

	Men contribute<10%	Men contribute<20%	Men contribute>40%	Men contribute>50%
Log male wage	.95	1.10	.91	.95
Log female wage	1.46	.92	1.09	1.34
Non-labor income	1.04***	1.03***	.98**	.99
Male education	.79*	.77***	1.14**	1.05
Homogamy	1.48	1.03	.93	.98
# Kids	1.50	1.33*	.73**	.86
Male age	1.05	1.05**	.95***	.95***
Age difference	1.03	1.04	.97	.95
<i>She full-timer</i>	<i>.31**</i>	<i>.50**</i>	<i>1.92***</i>	<i>1.80**</i>
Mother on leave	2.37	1.88	.58	.40
Outside help	.66	1.00	.94	.88

**Between two equilibria:  
Divorce Propensities in Germany: (Marginal effects  
over 15 years, Probit estimation with selection)**

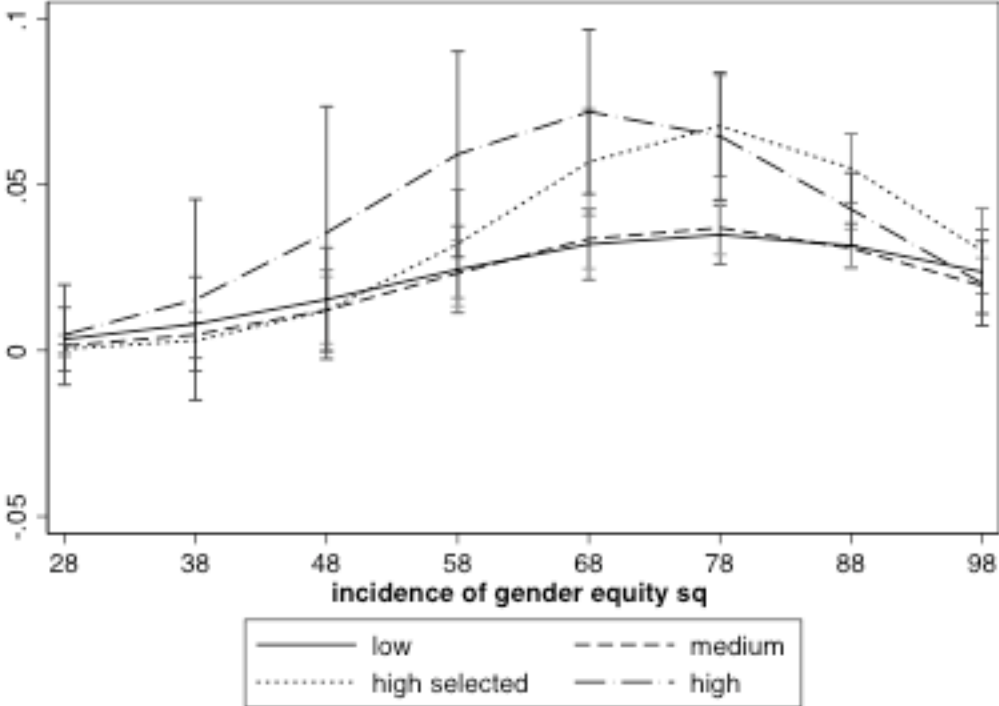
	Marginal effect on divorce risk (%)
<b>Always equitable</b>	<b>- 9**</b>
<b>Always traditional</b>	<b>-12**</b>
<b>Always gender symmetric</b>	<b>-14**</b>
<b>Inequitable -&gt; traditional</b>	<b>-11**</b>
<b>Traditional -&gt; inequitable</b>	<b>+10 *</b>
<b>Gender symmetric -&gt; traditional</b>	<b>+11**</b>
<b>Traditional -&gt; gender symmetric</b>	<b>+ 8 (n.s.)</b>

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



● ≤ Median    ● > Median

Predicted probabilities of being life-long single by levels of gender egalitarianism .



**Predicted probability of life-long singlehood by level of gender egalitarianism  
(95% confidence level intervals):**

**An increase from 35 to 95 level egalitarianism -> 23 percent decline in lifelong singlehood**

