

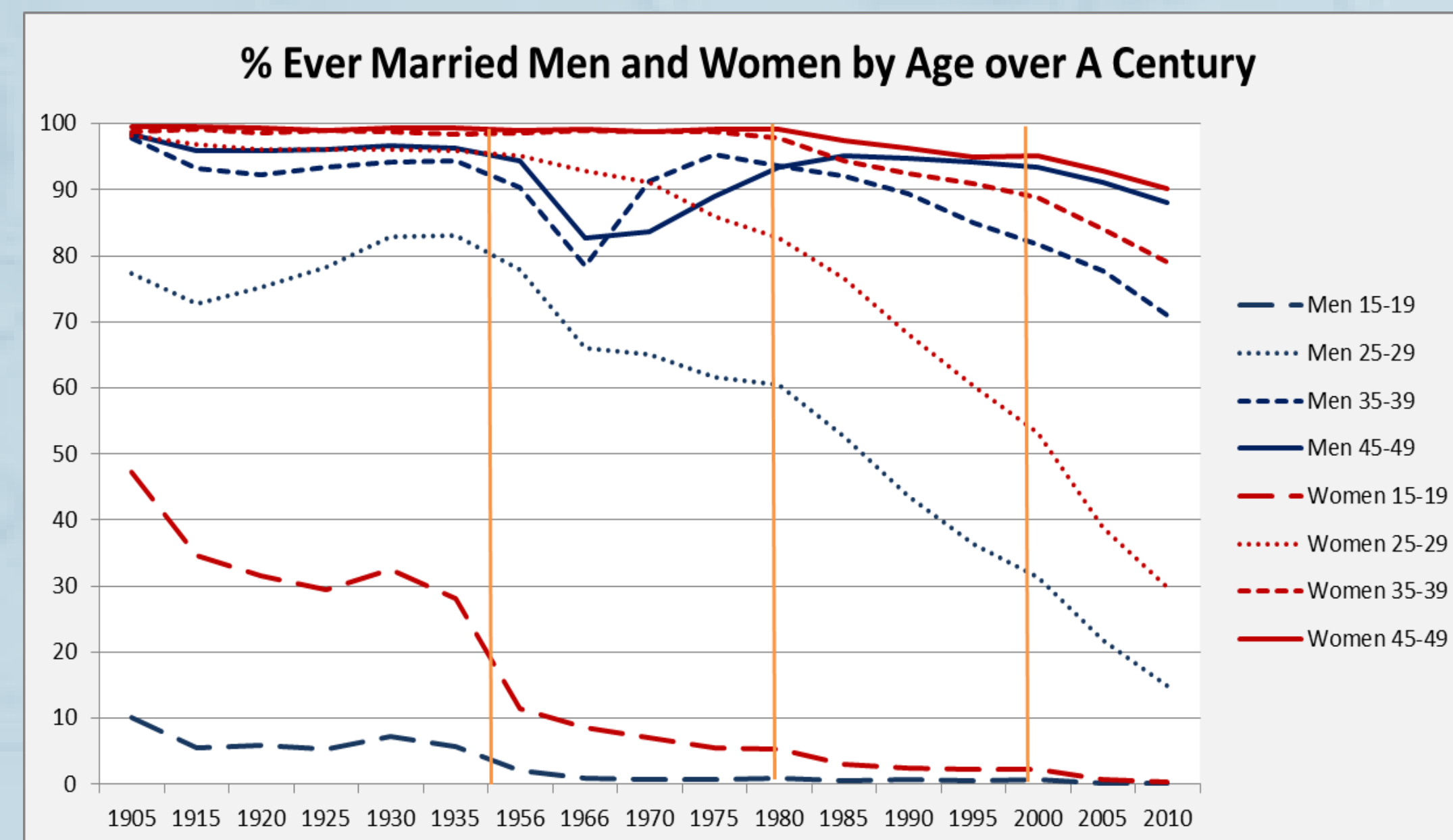
Changing Partner Choice and Marriage Propensities by Education in Taiwan, 2000-2010

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I. Background of this Study

Economic Transformation & Marriage Decline

- Marriage patterns in Taiwan used to be characterized by “early and universal” in the first half of the 20th century.
- Rapid and profound demographic transitions in family behaviors followed vast economic transformations during the process of industrialization since the 1970s.
- Beginning in the latter half of the twentieth century, marriages began to be postponed and increasingly more individuals decided not to marry at all.



Changing Educational Gradient in Marriage?

- Discussions on marriage decline often focus on well-educated women, emphasizing how better education and earning potential among the younger cohorts have driven down marriage rates over the years.
- Yet, men and women from lower social classes also experienced tremendous family transitions in an era of post-industrialization since the late 1990s.
- Empirical research in Taiwan has not paid enough attention to recent marriage differentials by education in times of economic restructuring.

II. Methods

Using nationwide age- and education-specific marriage match data as numerators and exposure populations from the 2000 and 2010 censuses, marriage behaviors are described by using the harmonic-mean two-sex marriage propensity approach proposed by Schoen (1988):

$$M_m(x,a) = C(x,a) / P_m(x,a) \quad (\text{Eq. 1})$$

$$M_f(y,b) = C(y,b) / P_f(y,b) \quad (\text{Eq. 2})$$

$$U(A;B) = aM_m(A;B) + bM_f(A;B) \quad (\text{Eq. 3})$$

Year 2000		Men				Total
Women	<HS	HS	Junior College	College+		
<HS	3.88	2.45	1.30	0.86	8.49	
HS	2.14	2.03	1.44	1.01	6.62	
Junior College	1.18	1.07	1.34	0.99	4.59	
College+	0.53	0.51	0.55	1.86	3.44	
Total	7.73	6.07	4.62	4.72	23.14	

Year 2010		Men				Total
Women	<HS	HS	Junior College	College+		
<HS	1.24	1.15	0.46	0.33	3.18	
HS	0.64	1.08	0.77	0.64	3.13	
Junior College	0.22	0.67	0.81	0.91	2.61	
College+	0.12	0.40	0.73	2.18	3.44	
Total	2.22	3.29	2.78	4.06	12.36	

% changes		Men				Total
Women	<HS	HS	Junior College	College+		
<HS	-68.0%	-53.4%	-64.4%	-61.4%	-62.5%	
HS	-70.0%	-46.8%	-46.1%	-37.1%	-52.6%	
Junior College	-81.6%	-37.7%	-39.3%	-8.6%	-43.2%	
College+	-77.0%	-21.4%	33.4%	17.6%	-0.2%	
Total	-71.3%	-45.7%	-39.8%	-14.0%	-46.6%	

IV. Findings

- Total marriage propensity declined from 23.14 in 2000 to 12.36 in 2010.
- Marriage decline is stronger among the less educated than the better educated
- Educational gradients in marriage propensities have shifted from negative to positive for both sexes.
- Proportions of educationally homogamous marriages (i.e., sum of the diagonal cells divided by the total marriage propensity of a given year) increased from 39% in 2000 to 43% in 2010.
- A stronger trend toward hypergamy formed between much better educated grooms and less educated brides observed in 2010 than in 2000.

III. Decomposition Analyses

Additional analyses were carried out to investigate whether the changes in marriage propensities are due to numbers of eligible partners or to force of attraction by holding the force of attraction constant at the level in 2000 and by holding the structure of eligible partners constant at the composition observed in 2000.

1. Changes in Eligible Partners in between 2000 and 2010

(ratios of the predicted 2010 marriage rates (by age, sex and education) to the actual marriage rates observed in 2000)

Men		Groom			
		<HS	HS	Jr. College	College+
Bride	<HS	1.01	0.71	0.99	0.58
	HS	1.09	0.88	1.00	0.77
	Jr. College	1.06	0.66	0.92	0.62
	College+	1.89	1.66	1.44	1.06

Women		Groom			
		<HS	HS	Jr. College	College+
Bride	<HS	1.07	1.51	1.91	2.10
	HS	0.85	1.15	1.21	1.74
	Jr. College	0.99	1.12	1.15	1.44
	College+	0.62	0.81	0.76	0.95

2. Changes in Force of Attraction in between 2000 and 2010

(ratios of the actual 2010 marriage rates to the predicted marriage rates observed in 2010)

Men		Groom			
		<HS	HS	Jr. College	College+
Bride	<HS	0.32	0.46	0.34	0.37
	HS	0.30	0.50	0.51	0.68
	Jr. College	0.24	0.66	0.68	0.98
	College+	0.31	0.84	1.46	1.15

Women		Groom			
		<HS	HS	Jr. College	College+
Bride	<HS	0.40	0.50	0.36	0.45
	HS	0.37	0.63	0.56	0.67
	Jr. College	0.20	0.67	0.73	1.05
	College+	0.22	0.80	1.29	1.30



V. Potential explanations for the shifting patterns

- The shifting ideas about the foundation of a happy marriage show a convergence between men and women across social groups. Yet a sex gap remains for sex-role values and marriage attitudes. The least educated men, in particular, are more resistant to adopting liberal gender-role values. In turn, negotiating for an egalitarian relationship becomes more of an attainable goal among the better educated men and women.
- Men without tertiary education have experienced a bleak economic outlook in the post-millennium years. There is a tremendous growth in unemployment rates for the less educated and the risk of being out of work is much higher among blue-collar male workers than female workers.

VI. Discussions

- Even though mean level of education in Taiwan has improved over the years, about 19% of men and 17% of women age 20-49 did not have a high school degree in 2010. About 39% of men and women in the same age range are high school graduates. Thus, the group that experienced substantial marriage decline is a non-negligible proportion of the population.
- While government in Taiwan coordinates matchmaking social activities to raise the marriage rates of the middle-class college graduates, the welfare of the disadvantaged sector of the population should also be the focus of public policies.
- More research is certainly needed to unravel the impact of education on men and women's family formation prospects and how social inequality may be reinforced and reproduced through matrimony.

IV. Findings

- **For men**, the least educated men who were in hypogamous marriages face a surplus of eligible better-educated female partners.
- All men in unions involving a college-educated woman also face a surplus of eligible female partners in 2010.
- **For women**, college-educated women in all unions face a shortage of eligible men in 2010, but availability of potential spouses have improved for most women without a college degree.
- From both men's and women's perspectives, almost every group experience a tremendous decline in propensity to marry except for unions where at least one partner is college-educated.
- Changes in marriage propensities across groups are not due to a shortage of potential partners but to an overall drop in propensity to marry