# The Effects of Premarital Cohabitation on Family Formation

# **Behaviors in East Asia and the West**

Kojima, Hiroshi Waseda, University, Faculty of Social Sciences 1-6-1 Nishiwaseda, Shinjuku-ku Tokyo 169-8050, Japan E-mail: kojima@waseda.jp

#### Introduction

This study presents the results of comparative analysis of the effects of premarital cohabitation on family formation behaviors in Japan, South Korea and Singapore, drawing on microdata from the 2009 Survey on Comparative Study of Family Policies in East Asia (South Korea, Singapore and Japan) and the 2005 Comparative Opinion Survey on Declining-Birthrate Societies (South Korea, Japan, France, Sweden and the U.S.), which were conducted by the Section for Measures against Declining Birthrate, Director-General for Policies on Cohesive Society, Cabinet Office (CAO, Japanese Government). This is, in a way, an extension of the author's collaborative studies (Kojima and Rallu 1997, Rallu and Kojima) which showed that the difference in fertility between Japan and France was partly due to the lack of births by cohabiting couples in Japan. Even though the births by cohabiting couples are still infrequent in Japan, premarital cohabitation experience has become sufficiently frequent and seems to affect family formation behaviors as in the West.

### **Background**

Premarital cohabitation has spread in the West since the 1970s, but it has been believed to be rare in East Asia. But recent surveys show that cohabitation is gradually spreading in East Asia while it largely remains to be a precursor to marriage rather than an alternative. Even in the West, it is a precursor to marriage for many couples. In Japanese case it is possible that survey respondents are increasingly more candid about reporting the past cohabitation experience than before, considering a large increase from 13.2% in the CAO 2005 survey to 22.5% in the 2009 survey among respondents aged 20-49 (Table 1). These CAO surveys show that, in South Korea, it appears to have declined because of an increase in underreporting, particularly among women who exhibit considerably lower percentage than men.

Retrospective information is more highly subject to bias and memory lapse than information on current status. Cohabitation may be inherently difficult to measure particularly when it is temporary or on and off and it is entered for convenience. Thus, it is subject to various kinds of errors including the different reporting between the two partners as well as misreporting and underreporting and may be affected by change in social acceptability (Hayford and Morgan 2008). The reporting of cohabitation is difficult to get, particularly from women in East Asia where it is stigmatized. Survey effects seem to be prominent for sensitive questions and they are not consistent within or across surveys and, thus, difficult to assess. But it seems to be changing at least for cohabitation experience in Japan. It seems appropriate to analyze it and the analyses on determinants of cohabitation have increased, but there are not too many studies on its effects on family formation behaviors.

#### **Data and Method**

The data for the analyses derived from the 2009 and 2005 CAO surveys mentioned above. The surveys were conducted on a nationally representative sample of about 1,000 men and women aged 20-49 in

each country and, thus, the caution is necessary when interpreting the results. The information on premarital cohabitation derived from the following set of questions.

Q1. Which of the following best describes your Current marital status? For this survey, by "marriage" we mean a legal marriage. Please choose one answer.

(Choice) 2. I am living with a partner (cohabiting means a couple stay together for a longer period of time).

Q3 sub.2. How old were you when you first started living with your partner?

Q10. Have you ever lived with a partner before? Please choose one of the following. (Choice)

- 1. Never
- 2. I have in the past, but not now.
- 3. I am now living with a partner and will eventually get married with him/her.
- 4. I am living with a partner but I do not intend to get married at all.

The proportional hazard models (Cox regressions) were applied to the microdata for each sex of six countries in the 2009 and 2005 surveys. Dependent variables include the hazard of first marriage, first birth, second birth and third birth. Independent variables include education, urban-rural residence (citizenship and ethnicity for Singapore), premarital cohabitation experiences and the interaction of higher education and premarital cohabitation experience.

#### **Results**

The results of proportional hazard analyses of microdata for East Asia (2009) in Table 2 show positive (hastening) effects of cohabitation on marriage and first birth hazards among Japanese men and women with medium/lower education and a negative effect on first birth hazard among Japanese men with higher education. They show positive effects on marriage and first birth hazard among Korean men with higher education. The results also reveal a positive effect on first birth hazard among Singaporean men and positive effects on marriage, first birth and second birth hazards among Singaporean women with medium/lower education and negative effects among Singaporean women with higher education.

On the other hands, the results of proportional hazard analyses of microdata for East Asia (2005) show positive effects of cohabitation on marriage and first birth hazards among Japanese men and women with medium/lower education and a positive effect on third birth hazard among men with higher education. They also reveal negative effects on first and second birth hazards among Japanese men with higher education. They show a negative effect on second birth hazard among Korans with medium/lower education but a positive effect among Korea men with higher education.

The results of proportional hazard analyses of microdata for the West (2005) in Table 3 show positive effects of cohabitation on marriage hazard among American men and women with medium/lower education and a positive effect on first birth hazard among America women with medium/low education, but negative effects on second and third births among American men with medium/low education. They reveal positive effects of cohabitation on marriage hazard among French men and women with medium/lower education and positive effects on first, second and third birth hazards among French men with medium/low education. They also show a positive effect on marriage hazard among French women with higher education. The results reveal positive effects of cohabitation on marriage and first birth hazards among Swedish men and women with medium/lower education and positive effects on second and third birth hazards among Swedish women with medium/low education, but a positive effect on marriage hazard among Swedish men with higher education.

Therefore, the results of proportional hazard models tend to reveal that premarital cohabitation tends to

have positive (hastening) effects on the timing of marriage and childbearing among Japanese men and women as well as Singaporean women, but that negative effects on the timing of childbearing among Korean men and women. While premarital cohabitation tends to have negative (delaying) effects on the timing of childbearing among male and female college graduates in Japan and female college graduates in Singapore, it tends to have positive effects among male college graduates in South Korea.

Premarital cohabitation tends to have positive effects on the timing of marriage and childbearing among French men, Swedish men and women, and American women. It also tends to have a positive effect on the timing of marriage among French women including college graduates and a negative effect on the timing of marriage among Swedish male college graduates. Among American men, premarital cohabitation tends to have a positive effect on the timing of marriage, but negative effects on the timing of childbearing.

#### Conclusion

In sum, the positive effects on the timing of marriage and childbearing tend to be found in East Asia and the West except for a few cases. But the precise effect depends on survey years, countries and gender as well as dependent variables. A Nationally representative longitudinal survey of couples of all kinds including dating, LAT (living apart together, ), cohabiting and married as suggested by Smock et al. (2008) is also necessary in East Asia. Direct question in Korean surveys on retrospective history is also recommended because Korea might have had similar level of cohabitation with Japan in recent past.

According to Kojima and Rallu (2007, 2008), Japan and France used to have similar fertility patterns until mid-1980s, but diverged because of lack of births by cohabiting couples and catch-up births in the 30s. According to Loffler (2009), under the condition of limited government support for the youth, the responsibility is born by the family and their situation affects the life-course decision of the youth, including that for cohabitation and marriage.

### Figure or Table Title

Table 1	Cohabitation	in 200	9 and 200	15 CAO	SURVEVS
I abic i	Conabitation	111 200	J and Zuc	$\omega$ $\omega$ $\sim$	Suiveys

Country	Ooriabitati	200		710 ourvey	Country	2005					
<u></u>	% Kever Mean Age Mean					%		Mean Age	Mean		
	Cohabit	Cohabited		Duration		Cohabit	Cohabited		Duration		
<u>Japan</u>					<u>Japan</u>						
Total	2.9%	22.5%	24.2	2.36	Total	0.9%	13.2%	22.7	3.05		
Male	3.0%	25.0%	25.1	2.34	Male	1.2%	13.4%	22.2	4.76		
Female	2.8%	19.9%	23.2	2.38	Female	0.7%	13.0%	23.0	2.00		
South Korea					South Korea						
Total	0.5%	4.9%	26.5	3.37	Total	1.1%	6.4%	25.8	3.32		
Male	1.0%	8.2%	26.6	3.54	Male	1.4%	10.2%	25.3	3.55		
Female	0.0%	1.4%	25.7	2.00	Female	0.8%	2.4%	27.5	2.50		
<u>Singapore</u>					<u>USA</u>						
Total	3.0%	9.9%	25.0	3.30	Total	30.7%	58.7%	23.4	8.87		
Male	3.0%	11.4%	25.9	3.72	Male	29.0%	59.5%	24.0	9.08		
Female	3.0%	8.3%	23.8	2.70	Female	32.2%	58.0%	22.8	8.67		
(Source)	Kojima (2	009:398-399	)		<u>France</u>						
					Total	18.8%	53.2%	24.1	6.59		
					Male	20.4%	50.9%	25.4	7.02		
					Female	17.2%	55.4%	22.9	6.21		
					Sweden						
					Total	29.3%	75.9%	22.2	8.87		
					Male	31.3%	73.1%	22.7	9.29		
					Female	27.5%	78.4%	21.7	8.48		

Table 2 Proportional hazards analyses for determinants of timing of first marriage and first to third birth by sex in 2009

Independent Var	Proportional nazaros analyses for determinants of timing of first r Japan				llamaye and mo		y sex iii 2003 Orea		Singapore			
Category	First Marriage	First Birth	Second Birth	Third Birth		First Birth	Second Birth	Third Birth	First Marriage	First	Second Birth	Third Birth
(Male)	,	•		•				•	,			
Education												
Higher	0.0462	-0.0032	0.0643	-0.3011	-0.1886 &	-0.2178 #	0.1408	-0.0360	0.3505 *	0.4815 *	0.6040 *	0.3891
Lower	0.1479	0.2467	0.4404 &	0.5989 &					0.2578 &	0.3693 *	0.5490 *	0.7707 &
U/R (S:Race)												
Metro(S:Malay)	-0.2159 &	-0.2111	-0.0493	-0.3113	-0.0893	-0.1023	-0.0557	-0.4995	0.0546	0.1046	-0.3261	-0.8734
Rural(S:Indian)	0.2365 &	0.3064 #	0.3419 #	0.0663	-0.0394	-0.1075	0.2868	0.6740	0.7515 ***	0.6406 ***	0.7683 ***	1.3583 ***
Nationality (Sing.)												
Expatriots		•		•					0.4822 **	0.3333 #	0.0520	0.6854 &
Premarital Cohab												
Yes	0.8250 ***	0.7663 ***	0.4502 #	0.0633	0.0348	-0.0847	0.2843	0.5858	0.2311	0.3918 &	-0.0780	-13.9797 \$
Yes X higher edu	-0.3045	-0.4961 #	-0.2378	-0.4481	0.6211 &	0.6886 &	0.2600	-13.5510 \$	-0.0172	0.0081	0.1464	13.8034 \$
N	508	508	508	508	510	510	510	510	506	506	506	506
LLR (d.f.)	31.59 (6) ***	23.64 (3) ***	8.78 (6) &	7.05 (6)	5.52 (5)	5.26 (5)	3.16 (5)	3.31 (5)	33.34 (7) ***	26.97 (7) ***	23.49 (7) **	34.74 (7)
(Female)												
Education												
Higher	-0.1538	-0.0612	0.0114	-0.0056	-0.6017 ***	-0.6605 ***	-0.6389 ***	-1.1274 **	0.0548	0.0700	0.0970	-0.2979
Lower	1.1974 ***	1.1963 ***	1.0232 **	0.4639		•	•	•	0.2984 *	0.3866 *	0.3630 *	0.2760
U/R (S:Race)			A A = A   A							A 1000 ±		. =
Metro(S:Malay)	-0.2163 #	-0.0797	-0.2501 &	-0.2885	-0.0036	0.0045	-0.2072 &	0.2547	0.6435 ***	0.4662 *	0.6758 **	0.5092 &
Rural(S:Indian)	-0.3629 *	-0.4395 *	-0.2983 &	-0.3549	0.1734	0.6250 *	0.7202 *	1.3824 *	0.8574 ***	0.8385 ***	1.0598 ***	1.6045 ***
Nationality (Sing.)									0.0500	0.0000	0.0004	0.0000
Expatriots	•	•	•	•	•	•	•	•	-0.0533	0.0068	-0.0984	-0.0220
Premarital Cohab	0.60/1 ***	0.0047 #	0.4000	0.4004	0.4070	0.0000	٥٥٥٥٢	40.7740 M	0.7040 **	4 0000 +++	0.7004 ±	0.0700
Yes Voo V higher adu	V.VV <del>1</del> 1	0.3647 #	-0.1396	0.4391	-0.4273	-0.3908	-0.0895	-13.7710 \$	0.7648 **	1.0392 ***		0.0792
Yes X higher edu	-0.1005	0.0204	0.2327	-0.6531			- 400	- 100	-0.7115 &	-1.2338 *	-0.8501 &	-12.3117 \$
II D (94)	491	491	491 12.12.(g) #	491 4 05 76)	486	486 20 62 (4) ***	486	486 44.00.74\ *	492	492 50.00 /7\ ***	492 50 55 77 ***	492 64.25 /7\ ***
LLR (d.f.)	40.21 (6) ***	26.15 (6) ***	12.12 (6) #	4.05 (6)	31.04 (4) ***	38.62 (4) ***	32.46 (4) ***	11.89 (4) *	55.07 (7) ***	59.28 (7) ***	58.55 (7) ***	61.35 (7) ***

& p < 0.20, # p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, \$ few cases CAO 2009 Survey Microdata (Note)

(Source)

Table 3	Proportional haz			timing of first ma	rriage and first t						•	
Independent Var			pan	I=			orea	I=	USA			
Category		First Birth	Second Birth	Third Birth	First Marriage	First Birth	Second Birth	Third Birth	First Marriage		Second Birth	Third Birth
(Male)	marriago	<b>5</b> 11 (11	J	J	marriage	J	Jii ui	J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	marriago	J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	<b>5</b>	
Education												
Higher	0.0124	0.0609	0.0210	0.0891	0.1053	0.1492	0.1266	-0.1860	-0.0492	-0.5135 ***	-0.2593 &	-0.1458
Lower	-0.2084	-0.3141	-0.9153 *	-14.0813 \$	0.2542	0.4085 &	0.3728 &	0.3035	1.0672 **	1.2909 ***	1.4845 ***	2.5117 ***
U/R Residence												
Metro	-0.0973	-0.1024	-0.1385	-0.9249 *	0.0773	0.0677	0.0522	-0.3796	-0.2429 &]	-0.2549 &	-0.4128 *	-0.3463
Rural	0.0739	0.2127 &	0.3756 *	0.2576	0.4192 *	0.1902	0.4772 *	0.5539	0.2867 *	0.2552 #	0.3161 #	0.1725
Premarital Cohab												
Yes	1.0896 **	0.7057 #	0.4367	0.3019	0.1310	0.2740	-0.5621 &	-0.3014	0.6600 **	0.0230	-0.5403 #	-1.6777 **
Yes X higher edu		0.0884	0.3420	1.9742 #	0.1090	-0.2074	1.2262 &	-11.7030 \$	-0.2296	0.1885	0.6411 #	1.9588 **
N (14)	498	498	498	498	509	509	509	509	428	472	472	472
LLR (d.f.)	11.40 (6) #	9.63 (6) &	14.93 (6) *	21.23 (6) **	5.52 (6)	4.08 (6)	9.24 (6) &	4.56 (6)	40.49(6) ***	45.89(6) ***	33.89(6) ***	26.23(6) ***
(Female)												
Education Higher	-0.2867 **	-0.1871 #	-0.0614	-0.3314 &	-0.3964 ***	-0.5411 ***	-0.5896 ***	-1.0477 *	-0.1147	-0.5712 ***	-0.4882 ***	-0.6603 **
Lower	0.8293 ***	0.8107 ***	0.9526 ***	1.1165 **	0.2175	0.2360	0.3407 &	-0.2272	0.2605	0.9180 ***	1.1082 **	0.2245
U/R Residence	0.0230	0.0101	0.3020	1.1100	0.2113	0.2300	0.0 <del>1</del> 01 <b>u</b>	-0.2212	0.2000	0.3100	1.1002	U.ZZ <del>T</del> U
Metro	-0.0053	0.0199	-0.0755	-0.1239	-0.1584 &	-0.1302	-0.3604 **	-0.6757 #	-0.1647	-0.1554	-0.2622 #	-0.1053
Rural	-0.1318	-0.0174	-0.0502	-0.0767	0.0660	-0.0089	-0.3268 &	0.0122	0.1861 &	0.0089	-0.1401	-0.2329
Premarital Cohab											• • • • • • • • • • • • • • • • • • • •	
Yes	0.5633 *	0.6820 **	0.6270 *	0.1066	-0.5973	-0.1154	-1.3016 &	-13.5483 \$	0.6295 **	0.3296 #	0.1663	0.3129
Yes X higher edu	ı -0.5077	-0.7587 #	-1.0361 #	-0.3401	-				-0.1768	0.0458	0.0070	-0.3599
N	612	612	612	612	495	495	495	495		528	528	528
LLR (d.f.)	33.96 (6) ***	26.02 (6) ***	18.45 (6) **	13.05 (6) *	19.92 (5) **	27.39 (5) ***		11.92 (5) *	30.09(6) ***	44.30(6) ***	27.84(6) ***	17.15(6)
Independent Var			ance				reden					
Category		First	Second	Third	First	First	Second	Third				
/M.L.\	Marriage	Birth	Birth	Birth	Marriage	Birth	Birth	Birth				
(Male)									•			
Education Higher								1	-			
•	-0.0477	_0 2217  *	_0.1001	-0.2606	0.3630 #	-0.2122 l			•			
I OWAT	-0.0477 -0.2375	-0.3317 *	-0.1901 -0.6351 **	-0.2606 0.0320	0.3620 # 0.1058	-0.2122 & 0.4160 *	-0.1620	-0.1097	•			
Lower 11/R Residence	-0.0477 -0.2375	-0.3317 * -0.4952 **	-0.1901 -0.6351 **	-0.2606 0.0320	0.3620 # 0.1058	-0.2122 & 0.4160 *			•			
U/R Residence	-0.2375	-0.4952 **	-0.6351 **	0.0320	0.1058	0.4160 *	-0.1620 0.1799	-0.1097 0.3540				
U/R Residence Metro	-0.2375 0.0553	-0.4952 ** -0.1102	-0.6351 ** -0.3618 &	0.0320	0.1058 -0.0415	0.4160 * -0.4191 **	-0.1620 0.1799 -0.3101 #	-0.1097 0.3540 -0.3462	•			
U/R Residence Metro Rural	-0.2375 0.0553 -0.0550	-0.4952 **	-0.6351 **	0.0320	0.1058	0.4160 *	-0.1620 0.1799	-0.1097 0.3540	•			
U/R Residence Metro	-0.2375 0.0553 -0.0550	-0.4952 ** -0.1102	-0.6351 ** -0.3618 &	0.0320	0.1058 -0.0415	0.4160 * -0.4191 **	-0.1620 0.1799 -0.3101 #	-0.1097 0.3540 -0.3462	•			
U/R Residence Metro Rural Premarital Cohab	-0.2375 0.0553 -0.0550 1.0382 ***	-0.4952 ** -0.1102 0.0735	-0.6351 ** -0.3618 & 0.1047	0.0320 -0.3223 0.3655 &	0.1058 -0.0415 0.0330	0.4160 * -0.4191 ** 0.1309 0.3887 * 0.2053	-0.1620 0.1799 -0.3101 # 0.1516	-0.1097 0.3540 -0.3462 0.1796				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N	-0.2375 0.0553 -0.0550 1.0382 *** 1 -0.1150 499	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 &	0.4160 * -0.4191 ** 0.1309 0.3887 * 0.2053 490	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.)	-0.2375 0.0553 -0.0550 1.0382 *** 1.0150	-0.4952 ** -0.1102 0.0735 0.6266 ** -0.1701	-0.6351 ** -0.3618 & 0.1047  0.4092 # -0.0333	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 &	0.4160 * -0.4191 ** 0.1309 0.3887 * 0.2053	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female)	-0.2375 0.0553 -0.0550 1.0382 *** 1 -0.1150 499	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 &	0.4160 * -0.4191 ** 0.1309 0.3887 * 0.2053 490	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edd N LLR (d.f.) (Female) Education	-0.2375 0.0553 -0.0550 1.0382 *** 1 -0.1150 499 46.12(6) ***	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501 27.29(6) ***	-0.6351 ** -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501 10.15(6) &	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) ***	0.4160 * -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) *	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6)				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edt N LLR (d.f.) (Female) Education Higher	-0.2375 0.0553 -0.0550 1.0382 *** 1 -0.1150 499 46.12(6) ***	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501 27.29(6) ***	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501 10.15(6) & -0.6807 *	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) ***	0.4160 * -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) *	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6)				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female) Education Higher Lower	-0.2375 0.0553 -0.0550 1.0382 *** 1 -0.1150 499 46.12(6) ***	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501 27.29(6) ***	-0.6351 ** -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501 10.15(6) &	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) ***	0.4160 * -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) *	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6)				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female) Education Higher Lower U/R Residence	-0.2375 -0.0553 -0.0550 1.0382 *** 1 -0.1150 499 46.12(6) *** -0.5487 ** 0.1812	-0.4952 ** -0.1102 0.0735  0.6266 ** -0.1701  501 27.29(6) ***  -0.4978 *** 0.1240	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **  -0.6446 *** 0.0410	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501 10.15(6) & -0.6807 * 0.1467	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) *** -0.1167 -0.3406	0.4160 *  -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***  -0.7069 *** 0.1129	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) *	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6) -0.2666 0.3613				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edi N LLR (d.f.) (Female) Education Higher Lower U/R Residence Metro	-0.2375 0.0553 -0.0550 1.0382 *** 1 -0.1150 499 46.12(6) *** -0.5487 ** 0.1812 -0.0807	-0.4952 **  -0.1102 0.0735  0.6266 ** -0.1701  501 27.29(6) ***  -0.4978 *** 0.1240  -0.2292 &	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **  -0.6446 *** 0.0410  -0.5618 **	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501 10.15(6) & -0.6807 * 0.1467 -0.7538 *	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) *** -0.1167 -0.3406 -0.0709	0.4160 *  -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***  -0.7069 *** 0.1129  -0.3343 *	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) * -0.7213 *** 0.1706	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6) -0.2666 0.3613 -0.4225 #				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female) Education Higher Lower U/R Residence Metro Rural	-0.2375  0.0553 -0.0550  1.0382 *** -0.1150  499 46.12(6) ***  -0.5487 ** 0.1812  -0.0807 0.0496	-0.4952 ** -0.1102 0.0735  0.6266 ** -0.1701  501 27.29(6) ***  -0.4978 *** 0.1240	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **  -0.6446 *** 0.0410	0.0320 -0.3223 0.3655 & 0.6184 * -0.3459 501 10.15(6) & -0.6807 * 0.1467	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) *** -0.1167 -0.3406	0.4160 *  -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***  -0.7069 *** 0.1129	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) *	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6) -0.2666 0.3613				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female) Education Higher Lower U/R Residence Metro Rural Premarital Cohab	-0.2375  0.0553 -0.0550  1.0382 *** 1 -0.1150  499 46.12(6) ***  -0.5487 ** 0.1812  -0.0807 0.0496	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501 27.29(6) ***  -0.4978 *** 0.1240  -0.2292 & 0.3394 **	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **  -0.6446 *** 0.0410  -0.5618 ** 0.3336 *	0.0320 -0.3223 0.3655 &  0.6184 * -0.3459 501 10.15(6) &  -0.6807 * 0.1467  -0.7538 * 0.6466 **	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) *** -0.1167 -0.3406 -0.0709 -0.0651	0.4160 *  -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***  -0.7069 *** 0.1129  -0.3343 * 0.3955 *	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) * -0.7213 *** 0.1706 -0.5365 *** 0.3311 #	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6) -0.2666 0.3613 -0.4225 # 0.4969 *	·			
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female) Education Higher Lower U/R Residence Metro Rural Premarital Cohab Yes	-0.2375  0.0553 -0.0550  1.0382 ***  1-0.1150  499 46.12(6) ***  -0.5487 ** 0.1812  -0.0807 0.0496  0.4979 ***	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501 27.29(6) ***  -0.4978 *** 0.1240  -0.2292 & 0.3394 **  0.0683	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **  -0.6446 *** 0.0410  -0.5618 ** 0.3336 *  -0.1358	0.0320 -0.3223 0.3655 &  0.6184 * -0.3459 501 10.15(6) &  -0.6807 * 0.1467  -0.7538 * 0.6466 ** -0.1661	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) ***  -0.1167 -0.3406 -0.0709 -0.0651 1.3026 ***	0.4160 *  -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***  -0.7069 *** 0.1129  -0.3343 * 0.3955 *  0.4749 *	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) * -0.7213 *** 0.1706 -0.5365 *** 0.3311 #	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6) -0.2666 0.3613 -0.4225 # 0.4969 *				
U/R Residence Metro Rural Premarital Cohab Yes Yes X higher edu N LLR (d.f.) (Female) Education Higher Lower U/R Residence Metro Rural Premarital Cohab	-0.2375  0.0553 -0.0550  1.0382 ***  1-0.1150  499 46.12(6) ***  -0.5487 ** 0.1812  -0.0807 0.0496  0.4979 ***	-0.4952 **  -0.1102 0.0735  0.6266 **  -0.1701  501 27.29(6) ***  -0.4978 *** 0.1240  -0.2292 & 0.3394 **	-0.6351 **  -0.3618 & 0.1047  0.4092 # -0.0333  501 17.83(6) **  -0.6446 *** 0.0410  -0.5618 ** 0.3336 *	0.0320 -0.3223 0.3655 &  0.6184 * -0.3459 501 10.15(6) &  -0.6807 * 0.1467  -0.7538 * 0.6466 **	0.1058 -0.0415 0.0330 1.5637 *** -0.4528 & 490 82.70(6) *** -0.1167 -0.3406 -0.0709 -0.0651	0.4160 *  -0.4191 ** 0.1309  0.3887 * 0.2053  490 37.48(6) ***  -0.7069 *** 0.1129  -0.3343 * 0.3955 *	-0.1620 0.1799 -0.3101 # 0.1516 0.2567 0.2673 495 14.98(6) * -0.7213 *** 0.1706 -0.5365 *** 0.3311 #	-0.1097 0.3540 -0.3462 0.1796 -0.2323 0.3088 495 5.05(6) -0.2666 0.3613 -0.4225 # 0.4969 *				

(Note) & p < 0.20, #p < 0.10, \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001, \$ few cases

(Source) CAO 2005 Survey Microdata

## REFERENCES (RÉFERENCES)

Hayford, Sarah R., and S. Philip Morgan (2008) "The Quality of Retrospective Data on Cohabitation." *Demography*, Vol.45, No.1, pp.129-141.

Kojima, Hiroshi (2009) "An Analysis of Survey Results." Section for Measures against Declining Birthrate, Director-General for Policies on Cohesive Society, Cabinet Office, ed., Report of Comparative Study of Family Policies in East Asia (South Korea, Singapore and Japan). (in Japanese)

Kojima, Hiroshi (2010) "Correlates of Cohabitation in East Asia: with special reference to the effects of education." *Jinko Mondai Kekyu [Journal of Population Problems]*, Vol.66, No.1, pp.17-48. (in Japanese)

Kojima, Hiroshi et Rallu, Jean-Louis(1997) "La fécondité au Japon et en France." *Population*, Vol.52, No.5, pp.1143-1172.

Löffler, Christin(2009) Non-Marital Cohabitation in Italy: A Mixed Method Study in Bologna and Cagliari. Saarbrücken, Südwestdeutscher Verlag für Hochschulschriften.

Rallu, Jean-Louis, and Hiroshi Kojima (2002) "Determinants of Non-Formation of Partnership: A French- Japanese Comparison." *Japanese Journal of Population*, special issue, pp.1-23.

Hayford and Morgan 2008

Smock, P., L. Casper and J. Wyse (2008) "Nonmarital Cohabitation: Current Knowledge and Future Directions for Research." *Research Report* 08-648, Population Research Center, University of Michigan.