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*Descriptive Finding*

## **Entry into first marriage in China**

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## **Entry into first marriage in China**

**Li Ma<sup>1</sup>**

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### **Abstract**

#### **BACKGROUND**

China has experienced substantial socioeconomic and institutional changes over the past few decades. The literature has documented a variety of demographic changes during this time, including the delay and decline of marriage and the recent prevalence of cohabitation. However, we have little knowledge about how the Chinese enter into marriage.

#### **OBJECTIVE**

This study demonstrates the diversification of first marriage entry over time.

#### **METHODS**

We applied event-history analysis to longitudinal data from the China Family Panel Studies (2010–2012 waves) and estimated the competing risks of the identified marriage entry types. The observation covered the period from 1960 to 2012.

#### **RESULTS**

Our estimations from the competing models demonstrated four notable types of first marriage entry, including a general decline in the traditional ‘direct marriage,’ a rise and decline in ‘conception marriage,’ and two recently increasing innovative practices of ‘cohabitation marriage’ and ‘cohabitation and conception marriage.’ The 1980s marked a turning point when traditional family practices began to decay and innovative family practices began to emerge and spread.

#### **CONCLUSIONS**

The diversification of marriage entry in China since the 1980s occurred in tandem with the development of China’s economic reform and ‘opening-up’ policies. This simultaneity exemplifies the notion that socioeconomic changes at the macro level interact with family behavior changes at the individual level.

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## **CONTRIBUTION**

This study demonstrates an increasingly wide array of marriage entry types over time, reflecting the evolution of marriage behaviors from tradition to modernity in contemporary Chinese society.

## **1. Introduction**

A large body of literature has addressed marriage patterns and trends in China, especially for the economic reform periods after 1978. Earlier studies reflected on the universality of marriage (e.g., Frejka, Jones, and Sardon 2010; Zeng, Vaupel, and Yashin 1985), whereas more recent studies report a delay and decline in marriage rates (e.g., Mu and Xie 2014; Yeung and Hu 2013; Yu and Xie 2015a).

In recent years, cohabitation has drawn public attention as an innovative family behavior. Individuals with greater knowledge of Western societies, primarily highly educated individuals and urbanites, are forerunners in the practice of this behavior (Yu and Xie 2015b). In the Chinese context, however, cohabitation is more akin to a prelude to marriage rather than an alternative (Raymo et al. 2015). Cohabiting couples have a high likelihood of eventually marrying. Of the couples that married between 2010 and 2012, more than 40% cohabited prior to marriage (Yu and Xie 2015b).

Despite the rapid increase of cohabitation and premarital sexual behavior in Chinese society, childbearing outside marriage remains rare (Raymo et al. 2015; Yeung and Hu 2016). Lesthaeghe (2010) explains that in contexts with strong traditional moral codes, the level of extramarital fertility is low, whereas premarital pregnancy and shotgun marriages might not be uncommon. To the best of our knowledge, pregnancy as a pathway to marriage remains a topic that lacks exploration in the context of China.

In this study, we explore the diversification of first marriage entry in China. We identify alternative types of marriage entry beyond traditional direct marriage and demonstrate how this diversity has developed over time. We apply event-history analysis to longitudinal data from the China Family Panel Studies (CFPS, 2010–2012 waves).

The advantage of using the CFPS for analysis is that the dataset recognizes cohabitation as an important life domain in contemporary Chinese society. Respondents who were married, divorced, widowed, or cohabiting at the time of the interview were asked about their cohabitation experiences with their current spouse, former spouse, late spouse, or current partner, respectively. This information assists us in identifying whether the respondents' first marriage was preceded by cohabitation.

However, we have no access to these respondents' earlier cohabitation relationships that ended in separation, which restricts our ability to demonstrate the complete partnership trajectory prior to first marriage. In addition, no cohabitation information was collected from respondents who were single or non-cohabiting at the time of the interview, which makes it difficult for us to capture whether those who cohabited without eventually marrying their previous cohabiting partners might have a higher likelihood to enter a first marriage through cohabitation. Nonetheless, this limitation will not affect the reliability of our study, in which we apply event-history analysis to examine the types of first marriage entry: Those who were single or non-cohabiting at the time of the interview are included in the population at risk of all types of first marriage entry that we identify.

## **2. The Chinese contexts**

The economic reforms and 'opening-up' policies since the late 1970s have yielded remarkable socioeconomic and institutional changes in China. As the regime transformed from a centrally planned economy to a market-based system, China has witnessed rapid economic growth. This growth is accompanied by the expansion of education, which enhances women's employment opportunities and economic independence (Burnett 2010). Furthermore, China is becoming more open to Western culture, ideas, values, and lifestyles (Yeung and Hu 2013; Yu and Xie 2015b). These changes, and the more permissive attitudes toward cohabitation they inspire, may contribute to the spread of cohabitation and premarital sexual behavior (Yu and Xie 2015b).

In this study, we expect to find a growing diversity in marriage entry behaviors, from direct marriage only to a wider array of marriage types. In particular, we expect that traditional means of marriage formation (direct marriage) weaken over time, whereas nontraditional marriage behaviors (such as marriage preceded by premarital conception, cohabitation, or both) expand accordingly, especially after the economic reform and opening up of Chinese society.

## **3. Data and methods**

Data used for the analyses comes from the China Family Panel Studies (CFPS 2010 and 2012 waves) launched by the Institute of Social Science Survey of Peking University. CFPS is a nationwide, comprehensive, longitudinal social survey intended to serve researchers' needs in relation to a variety of subjects in contemporary China. The

survey gathers a wealth of information, including individuals' life history with regard to educational attainment, employment status, cohabitation, civil status change, and childbearing.

Table 1 shows how we identify traditional and nontraditional first marriage entry based on the CFPS. A marriage without a prior period of cohabitation or a premarital pregnancy with the first spouse is defined as a traditional direct marriage (Type 1). (We subtract nine months from the month of the first live birth to determine the timing of conception.) Otherwise, we identify a nontraditional marriage behavior. A marriage subsequent to pregnancy (without cohabitation) is defined as a conception marriage (Type 2). A marriage preceded by cohabitation (without premarital pregnancy) is specified as a cohabitation marriage (Type 3). A marriage preceded by both pregnancy and cohabitation, regardless of which comes first, is specified as a conception and cohabitation marriage, or a C+C marriage (Type 4). It is unfortunate that we do not have information regarding our respondents' partnership trajectories prior to first marriage, which would have allowed us to further refine first marriage entry types, such as marriage entry after multiple cohabitations.

**Table 1: Identification of traditional and nontraditional first marriage entry**

	First child conceived prior to marriage	Cohabitation prior to marriage	Entry into marriage	Types
Traditional	No	No	Direct marriage	Type 1
Nontraditional	Yes	No	Conception marriage	Type 2
	No	Yes	Cohabitation marriage	Type 3
	Yes	Yes	C+C marriage	Type 4

We apply event-history analysis to study the dynamics of first marriage entry in the Chinese context. Specifically, we estimate the competing risks of the four exclusive types of first marriage by applying four separate hazard regression models. Within each model, when estimating one outcome, we censor the occurrences of the other three. A unique feature of this method is that it allows us to take into account the covariates that change values over time within the observation window, which makes it possible to conduct a more dynamic analysis. Our observation begins when an individual turns 15 and ends in the month when the first marriage occurs. If no marriage event occurs, the observation terminates at the last interview or at age 49, whichever comes first.

Because of the small number of cases, observations before 1960 are left truncated. Therefore, our observation covers the period of 1960–2012. Altogether, 40,598 individuals are included in our observation (including 20,122 women and 20,476 men). 30,707 (including 15,761 women and 14,946 men) entered into a first marriage, amounting to 76% of the total sample. 60% of all first marriages during our observation

time were direct marriages, 31% were conception marriages, 5% were cohabitation marriages, and 4% were C+C marriages.

Table 2 presents descriptive statistics for the variables in our analysis in the four separate models. Age, a time-varying variable, is the basic time factor. Time periods, the variable of prime interest in this study, are grouped into five decades from 1960 to 2012. The first two decades represent the periods prior to China's economic reform, whereas the 1980s, 1990s, and 2000s represent the onset of economic reform and opening up, the period of rapid economic growth, and the period of economic boom.

Our socioeconomic measures rely on two time-varying variables: education and employment. Education is categorized into five levels: illiterate, primary, junior secondary, senior secondary, and college or above. Employment status is classified as employed, not employed, and engaged in other economic activities such as family businesses or agriculture. Given that information on employment history was collected in the 2012 wave, respondents who were interviewed in 2010 but left the study in 2012 are categorized as 'not available.' We control for our respondents' *hukou* (or rural/urban household registration), ethnicity, parents' education and political status, and gender. Given that we cannot trace our respondents' *hukou* status change prior to the first marriage and given the need to avoid the risk of anticipatory analysis caused by using *hukou* status at the time of the interview, we use *hukou* status at age 12 as a time-fixed variable to indicate our respondents' rural/urban origins.

**Table 2: Descriptive statistics for the variables used for analysis**

	Type 1 Direct marriage			Type 2 Conception marriage			Type 3 Cohabitation marriage			Type 4 C+C marriage		
	Person months	First marriages	%	Person months	First marriages	%	Person months	First marriages	%	Person months	First marriages	%
<b>Age</b>												
15–19	74,084	3,644	20%	76,551	1,177	12%	77,582	146	11%	77,613	115	10%
20–24	34,928	10,465	56%	39,496	5,897	61%	44,619	774	56%	44,727	666	60%
25–29	10,864	3,750	20%	12,554	2,060	21%	14,229	385	28%	14,338	276	25%
30–34	4,302	534	3%	4,457	379	4%	4,770	66	5%	4,796	40	4%
35+	6,416	156	1%	6,423	149	2%	6,557	15	1%	6,559	13	1%
<b>Period</b>												
1960–1969	9,365	2,456	13%	11,031	790	8%	11,809	12	1%	11,810	11	1%
1970–1979	19,695	3,349	18%	21,496	1,548	16%	23,014	30	2%	23,018	26	2%
1980–1989	24,519	5,262	28%	26,706	3,075	32%	29,672	109	8%	29,693	88	8%
1990–1999	24,962	3,929	21%	26,570	2,321	24%	28,651	240	17%	28,674	217	20%
2000–2012	52,053	3,553	19%	53,678	1,928	20%	54,611	995	72%	54,838	768	69%

**Table 2: (Continued)**

	Type 1 Direct marriage			Type 2 Conception marriage			Type 3 Cohabitation marriage			Type 4 C+C marriage		
	Person months	First marriages	%	Person months	First marriages	%	Person months	First marriages	%	Person months	First marriages	%
<b>Education</b>												
Illiterate	23,712	5,938	32%	26,815	2,835	29%	29,512	138	10%	29,530	120	11%
Primary	24,070	3,435	19%	25,589	1,916	20%	27,289	216	16%	27,279	226	20%
Junior	50,155	5,595	30%	52,357	3,393	35%	55,228	522	38%	55,289	461	42%
Senior	26,555	2,891	16%	28,121	1,325	14%	29,096	350	25%	29,204	242	22%
College or above	6,102	690	4%	6,599	193	2%	6,632	160	12%	6,731	61	5%
<b>Employment status</b>												
Employed	14,911	1,317	7%	15,636	592	6%	15,937	291	21%	16,048	180	16%
Not employed	12,826	42	0.2%	12,856	12	0.1%	12,840	28	2%	12,851	17	2%
Not available *	21,367	2,890	16%	22,911	1,346	14%	23,960	297	21%	24,031	226	20%
Family business or agriculture	81,490	14,300	77%	88,078	7,712	80%	95,020	770	56%	95,103	687	62%
<b>Hukou status at age 12</b>												
Rural	104,670	15,548	84%	111,786	8,432	87%	119,117	1,101	79%	119,227	991	89%
Urban	25,924	3,001	16%	27,695	1,230	13%	28,640	285	21%	28,806	119	11%
<b>Ethnicity</b>												
Han ethnic group	121,004	16,991	92%	129,026	8,969	93%	136,714	1,281	92%	136,990	1,005	91%
Other ethnic group	9,590	1,558	8%	10,455	693	7%	11,043	105	8%	11,043	105	9%
<b>Father's education</b>												
Illiterate or primary	71,033	12,202	66%	76,679	6,556	68%	82,554	681	49%	82,632	603	54%
Junior high or above	37,795	3,497	19%	39,515	1,777	18%	40,703	589	42%	40,893	399	36%
Missing	21,766	2,850	15%	23,287	1,329	14%	24,500	116	8%	24,508	108	10%
<b>Mother's education</b>												
Illiterate or primary	89,953	14,832	80%	96,784	8,001	83%	103,864	921	66%	103,967	818	74%
Junior high or above	22,748	1,676	9%	23,684	740	8%	24,047	377	27%	24,214	210	19%
Missing	17,893	2,041	11%	19,013	921	10%	19,846	88	6%	19,852	82	7%
<b>Father's political status</b>												
Communist/other party	18,960	2,448	13%	20,084	1,324	14%	21,193	215	16%	21,278	130	12%
General public	111,634	16,101	87%	119,397	8,338	86%	126,564	1,171	84%	126,755	980	88%
<b>Mother's political status</b>												
Communist/other party	5,567	525	3%	5,861	231	2%	6,016	76	5%	6,058	34	3%
General public	125,027	18,024	97%	133,620	9,431	98%	141,741	1,310	95%	141,975	1,076	97%
<b>Gender</b>												
Women	57,614	9,545	51%	62,177	4,982	52%	66,484	675	49%	66,600	559	50%
Men	72,980	9,004	49%	77,304	4,680	48%	81,273	711	51%	81,433	551	50%
<b>Total</b>	<b>130,594</b>	<b>18,549</b>		<b>139,481</b>	<b>9,662</b>		<b>147,757</b>	<b>1,386</b>		<b>148,033</b>	<b>1,110</b>	

Notes: \* "Not available" refers to respondents interviewed in 2010 but not in 2012, when information on employment history was collected.

Source: CFPS (2010–2012).

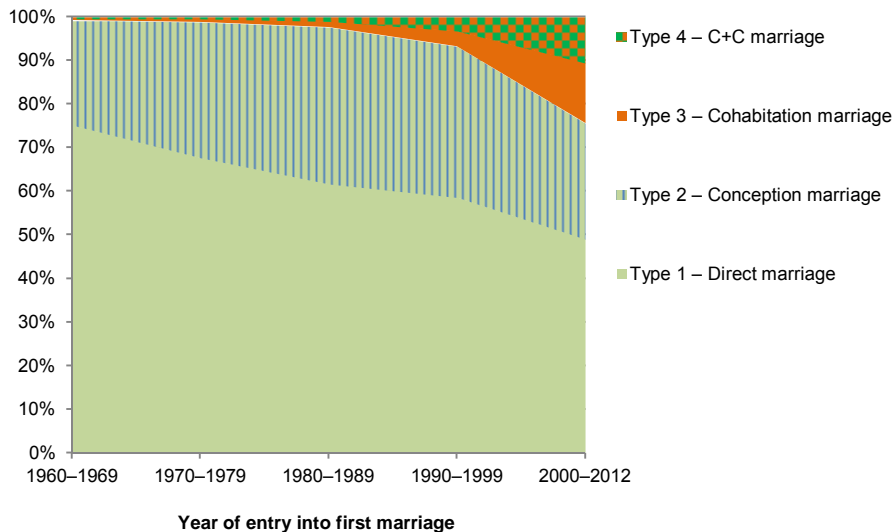


## 4. Results

### 4.1 Descriptive results

Figure 1 displays the distribution of first marriage by entry type during each time period. We can clearly see a growing diversity in marriage behaviors over time. In the 1960s, direct marriage was the predominant family formation behavior, covering approximately 75% of all marriages. However, the share of this traditional marriage behavior notably declined during our observation period. Strikingly, conception marriage was prominent in the 1960s. Its percentage increased from 25% in the 1960s to 36% in the 1980s. However, the rising trend shifted to a marginal decline toward the 1990s and a noticeable decline toward the 2000s. From the 1980s onward, novel marriage behaviors relevant to cohabitation became visible and spread quickly, with cohabitation marriage rising from 1.3% of all marriages in the 1980s to 14% in the 2000s and C+C marriage rising from 1% to 10% over the same period. During the most recent decade (2000–2012), 50% of first marriages were direct marriages, 26% were conception marriages, and the remaining 24% were preceded by cohabitation, regardless of whether a child was conceived in cohabitation.

**Figure 1: Distribution of first marriage by entry type during each time period, China**



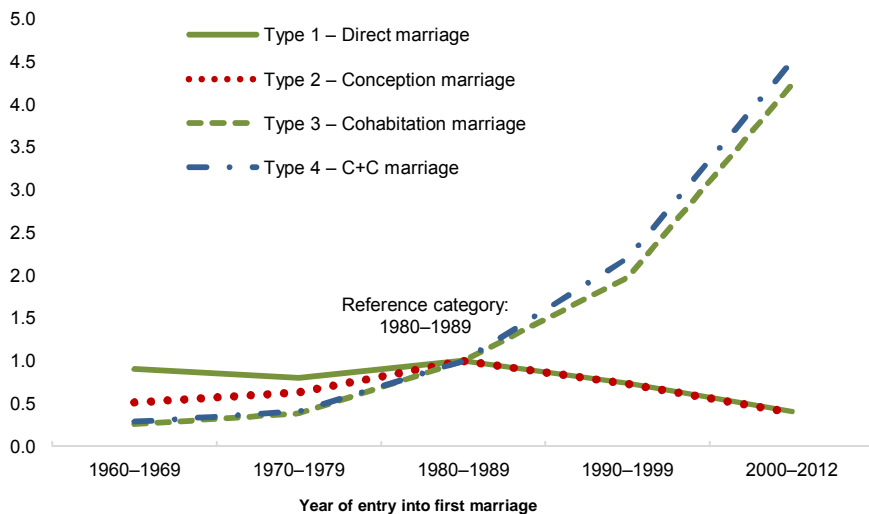
Source: Authors' own calculation based on CFPS (2010–2012).

## 4.2 Estimated results

Table 3 demonstrates the competing risks of the four marriage entry types in four hazard regression models. When we estimate one marital outcome, we censor the occurrences of the other three. Figure 2 visualizes the trend variations across time of the four marriage types. The estimated trend developments are in line with our descriptive findings.

The traditional marriage formation behavior – direct marriage (Type 1) – experienced a slight decline during the 1960s and 1970s. It visibly reversed in the 1980s and experienced a new decline in the 1990s and 2000s. The relative risk of conception marriage (Type 2) increased slightly in the 1960s and the 1970s. The trend reached a summit in the 1980s and fell into decay thereafter. During the 1960s and 1970s, cohabitation marriage (Type 3) and C+C marriage (Type 4) were rather uncommon. In the 1980s, these two marriage formation practices started to become prominent routes to marriage.

**Figure 2: Estimated competing risks of the four types of first marriage entry by time period, China (1960–2012), standardized for other covariates (separate model for each entry type; reference category: relative risk for all outcomes in 1980–1989)**



Source: Authors' own calculation based on CFPS (2010–2012).

The estimations for control variables in the four separate models are compelling (see Table 3). The college-educated have a notably low likelihood of conception marriage and C+C marriage. Entering marriage while unemployed, irrespective of marriage type, is uncommon. Rural-born people have a higher marriage likelihood than do urbanites. Compared to the majority Han ethnic group, other ethnic groups have a relatively higher propensity of direct marriage but a lower propensity of conception marriage. Individuals with more highly educated parents have a higher likelihood than others of entering marriage via cohabitation. The mother's educational level and political status reduce children's likelihood of conception marriage. Women's likelihood of first marriage is much higher than that of men, irrespective of entry type. This gap is partially due to the excess number of men in the marriage market (Poston and Glover 2005) as well as the difficulty experienced by poor and low-educated men in rural areas in finding a marriage partner (Jin, Li, and Feldman 2005).

**Table 3: Competing risks of the four types of first marriage entry, China (1960–2012), standardized for other covariates**

	Type 1 Direct marriage		Type 2 Conception marriage		Type 3 Cohabitation marriage		Type 4 C+C marriage	
	Haz. Ratio	P>z	Haz. Ratio	P>z	Haz. Ratio	P>z	Haz. Ratio	P>z
<b>Age</b>								
15–19	0.16	***	0.08	***	0.10	***	0.09	***
20–24	1		1		1		1	
25–29	1.26	***	1.31	***	1.71	***	1.49	***
30–34	0.36	***	0.49	***	0.66	***	0.44	***
35+	0.07	***	0.11	***	0.09	***	0.09	***
<b>Period</b>								
1960–1969	0.91	***	0.51	***	0.26	***	0.29	***
1970–1979	0.80	***	0.64	***	0.39	***	0.41	***
1980–1989	1		1		1		1	
1990–1999	0.74	***	0.73	***	1.99	***	2.21	***
2000–2012	0.41	***	0.39	***	4.24	***	4.51	***
<b>Education</b>								
Illiterate	0.93	***	0.73	***	0.50	***	0.44	***
Primary	0.97		0.89	***	0.78	***	0.86	*
Junior	1		1		1		1	
Senior	0.92	***	0.70	***	0.91		0.82	**
College or above	0.97		0.46	***	0.86		0.50	***
<b>Employment status</b>								
Employed	1		1		1		1	
Not employed	0.04	***	0.03	***	0.18	***	0.17	***
Not available*	1.23	***	1.57	***	1.73	***	2.09	***
Family business or agriculture	1.10	***	1.43	***	1.04		1.27	***

**Table 3: (Continued)**

	Type 1 Direct marriage		Type 2 Conception marriage		Type 3 Cohabitation marriage		Type 4 C+C marriage	
	Haz. Ratio	P>z	Haz. Ratio	P>z	Haz. Ratio	P>z	Haz. Ratio	P>z
<b>Hukou status at age 12</b>								
Rural	1.39	***	1.84	***	1.33	***	2.25	***
Urban	1		1		1		1	
<b>Ethnicity</b>								
Han ethnic group	1		1		1		1	
Other ethnic group	1.05	*	0.85	***	0.92		1.08	
<b>Father's education</b>								
Illiterate or primary	1		1		1		1	
Junior high or above	1.03		1.05		1.17	**	1.14	*
Missing	0.77	***	0.72	***	0.60	***	0.62	***
<b>Mother's education</b>								
Illiterate or primary	1		1		1		1	
Junior high or above	0.96		0.91	**	1.14	*	0.97	
Missing	0.56	***	0.51	***	0.44	***	0.42	***
<b>Father's political status</b>								
Communist/other party	1.04	*	1.09	***	0.93		0.80	**
General public	1		1		1		1	
<b>Mother's political status</b>								
Communist/other party	0.97		0.89	*	0.92		0.74	*
General public	1		1		1		1	
<b>Gender</b>								
Women	1.56	***	1.64	***	1.44	***	1.55	***
Men	1		1		1		1	
<b>Constant</b>								
No. of subjects	40,598		40,598		40,598		40,598	
No. of marriages	18,549		9,662		1,386		1,110	
Time at risk	4,558,400		4,558,400		4,558,400		4,558,400	
LR chi2(24)	19,764.07		14,119.13		2,986.24		2,459.36	
Prob > chi2	0.00		0.00		0.00		0.00	

Notes: \* "Not available" refers to respondents interviewed only in 2010 but not in 2012, when information on employment history was collected. Statistical significance: \*\*\*p<.01; \*\* .01<p<.05; and \* .05<p<.10.

Source: Authors' own calculation based on CFPS (2010–2012).

To test whether our results are robust, we estimated the competing risks of first marriage entry types through the model of Fine and Gray (1999). The analysis supported the results presented in Table 3. Separate models for women and men and for rural-born and urban-born individuals show that the decline of direct and conception marriages and the emergence and rise of cohabitation and C+C marriages occurred simultaneously and concurrently for all groups.

## **5. Discussion and conclusion**

In this study, we identified four exclusive types of first marriage entry based on the CFPS and estimated the competing models for the four marriage types to demonstrate how the diversification of marriage types has developed over time.

Our estimations from the competing models provided vivid pictures of the diversification of first marriage entry. The prevalence of traditional marriage behavior, direct marriage, has declined over time. Strikingly, conception marriage was vigorously present in the 1960s. The relative risk of conception marriage noticeably increased in the 1970s and 1980s and then declined in the 1990s and 2000s. The likelihood of cohabitation marriage and C+C marriage was rather low during the 1960s and 1970s. However, such marriage behaviors became more prominent in the 1980s. From the 1990s onward, the relative risks of entering into marriage in these two ways substantially increased. In the 2000s, entering marriage via cohabitation or a combination of cohabitation and conception became rather prominent marriage behaviors. In sum, the 1980s acted as a turning point when traditional direct marriage started its decline, the long-existing conception marriage shifted from being on the rise to being on the decline, and novel marriage behaviors relevant to cohabitation emerged and began to spread.

The findings of this study have important implications. First, the diversification of first marriage entry after the 1980s occurred in tandem with the process of China's economic development and opening up to the Western world. The dominant marriage patterns prior to the 1980s – direct marriage and conception marriage – have gradually lost ground to marriage preceded by cohabitation (either with or without premarital conception) since the 1980s. This simultaneity exemplifies the notion that socioeconomic changes at the macro level interact with family behavior changes at the individual level. The increasingly wide array of first marriage entry types over time reflects an evolution of marriage behaviors from tradition to modernity in contemporary Chinese society.

Second, the findings of this study suggest that the spread of innovative family behaviors may initiate family policy improvement. The term 'cohabitation' was first introduced into China's Marriage Law in its April 2001 amendment. This indicates that the causal pathway from social policies to individual practices can be reversed. Social policies may influence individual practices, and behavioral changes at the individual level may foster social policy adjustment.

Third, the surprisingly vigorous existence of conception marriage as a second dominant marriage behavior from the 1960s challenges our initial classification of it as a nontraditional marriage type. When we extend our observation to the 1950s, we find that conception marriage represented approximately 17% of marriages. Even though the

pattern of this marriage behavior has become less common since the 1980s, given the rise of cohabitation during the same period, we may argue that conception marriage has partially transformed into and given rise to C+C marriage.

These findings are cause for reflection on the prevalence of shotgun marriages in other Asian societies. Rindfuss and Morgan (1983: 259) define the rise of conception marriage in Korea, Taiwan, and Malaysia as a 'quiet revolution.' The shift from arranged marriage toward marriage based on the individual choice of a spouse and romantic love increases couples' opportunities to date prior to marriage, which arguably contributes to the rise of premarital sex and shotgun marriages. Further, the stable transition from engagements to weddings ensured by families in these societies may also create a favorable context for premarital sex and pregnancy (Rindfuss and Morgan 1983).

The notable existence of conception marriage in China may be understood in similar ways. The first Marriage Law in 1950 forbade arranged marriage and advocated marriage based on love and freedom of choice (Croll 1981). This provided young people with opportunities for courting and dating before marriage, which may have increased their risk of engaging in premarital sex. The 'later, longer, and fewer' policies of the 1970s, which encouraged young people to postpone marriage to later ages (Ye 1992), may have further increased young couples' exposure to premarital sex. In addition, engagement under the negotiations of both families is an indispensable part of the marriage process, especially in rural areas (Cong 2016). This special marriage preparation period may increase couples' opportunities for premarital sex and their likelihood of marriage entry following a pregnancy.

Finally, we must acknowledge the limitations of this study. We do not have access to our respondents' unsuccessful cohabitation experiences prior to first marriage. Nor do we have the cohabitation history of those who were single or non-cohabiting at the time of the interview. The lack of data on such partnership trajectories limits the scope of our analysis to the transition to first marriage. We were not able to demonstrate the complete pathways to marriage. Future research may address this issue when such data becomes available.

## **6. Acknowledgements**

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