estimate the following linear probability model:

$$\Pr(\text{Divorce in 5 years}) = \alpha_{agemar} u_{TS}^w + \beta_{agemar}(u_{TS}^h - u_{TS}^w) + \eta_S + \xi_T + \varepsilon_{iTS} \qquad (3)$$

where T is the year of marriage, S is the state of marriage, u^w and u^h are female and male unemployment rates, η_S is a marriage-state fixed effect and ξ_T is a marriage-year fixed effect. The effects of unemployment rates at age 18-20/19-21 are also estimated in the same way.

Table 6 reports the estimated coefficients of the female unemployment rate and the male-female gap at marriage. Since the effects of gender specific unemployment rates on the marriage hazard vary with the woman's age, I also try allowing coefficients of gender specific unemployment rates at marriage to vary with the wife's age at marriage. Although a few coefficients are statistically significant, there seems to be no systematic relationship between gender-specific unemployment rates at marriage and the likelihood of divorce in the subsequent five years. At least, there is no evidence that an increase in marriage incidence leads to an increase in future divorces.

Looking at observable characteristics of the spouse is an alternative way to assess whether marriages induced by labor market shocks are in poorer match. Specifically, I replace the dependent variable in equation (3) with the difference in age between spouses and years of schooling of the husband. The estimated coefficients presented in Table 7 show no systematic pattern. At least, there is no evidence that women who get married when the incidence of marriage increases are more likely to be in poor matches.

Since the information on spouses are available only for couples who are still in marriage at survey, we have to keep in mind that non-random selection into divorce may bias the estimated effect. Yet, I expect such biases to be negligible because the correlation between the divorce rate and gender specific unemployment rates at marriages or in youth is negligible. Though not reported, I have tried similar exercise using the National Longitudinal Survey of Youth 79 and the Panel Study of Income Dynamics and confirmed no evidence for poorer matches for marriages induced by the labor market shocks.

4.2 Implications for fertility and income

Even though the response of the marriage rate to changes in gender specific unemployment rates is more likely to be the matter of timing for those who would eventually marry without such

shocks, the timing of marriage per se may affect the woman's fertility decision. Since the year of birth of the second child is not available from the SIPP, I focus on the birth of the first child. As shown in Table 1b, there is substantial variation in the duration between the first marriage and the birth of the first child across individuals, although nearly half have a child within two years since marriage. The first question is whether gender specific labor market conditions at the time of marriage affect this duration between marriage and motherhood.

Specifically, I begin with the linear probability model of having a child by τ-th year since marriage:

$$\text{Pr(having a child by T+}\tau) = \alpha_{agemar} u^w_{TS} + \beta_{agemar}(u^h_{TS} - u^w_{TS}) + \eta_S + \xi_T + \varepsilon_{iTS} \quad (4)$$

where T is the year of marriage, S is the state of marriage, u^w and u^h are female and male unemployment rates, η_S is a marriage-state fixed effect and ξ_T is a marriage-year fixed effect. The first three columns of Table 8 present α and β estimated separately for 1 year prior to the marriage, 2 years after marriage and 5 years after marriage (i.e. $\tau = -1, 2, 5$). Although a number of coefficients are statistically significantly distinct from zero, there does not seem to be a systematic pattern or a clear relationship with the effects on the incidence of marriage.

The last column of Table 8 shows coefficients of gender specific unemployment rates in the following Cox's proportional hazard model:

$$F_{i\tau Ts} = \lambda(\tau).\exp(\alpha_{agemar} u^w_{TS} + \beta_{agemar}(u^h_{TS} - u^w_{TS}) + \eta_S + \xi_T + \varepsilon_{iTS}) \quad (5)$$

where $F_{i\tau Ts}$ is the probability of having a child in τ-the year since marriage conditional on not having had a child by then. Again, the effects of gender specific unemployment rate at the time of marriage are weak.

Recall that young women marry earlier if they face a high female unemployment rate and a relatively low male unemployment rate. Then, since the effects of gender specific unemployment rates at marriage on the time between first marriage and birth of first child are negligible, these earlier marriages due to gender specific labor market shock lead to earlier motherhood. To confirm this, Table 9 presents the effects of the female unemployment rate and the male-female gap that a cohort faced at age 18–20/19-21 on the fraction of women who have ever had a child in the cohort in subsequent years, in the same way as Table 5. Although the effect of the female

unemployment rate is not statistically significant for any age, the effects on fertility appear a few years later than that on marriage and fades away by the mid-thirties. Gender specific labor market conditions that a cohort experienced in youth shift the fertility timing of the cohort in parallel with the marriage timing.

The existing studies on "family gap" and fertility timing have shown that earlier motherhood leads to a permanent wage penalty (Blackburn, Bloom and Neumark, 1990; Taniguchi, 1999; Miller, 2007). Also, worse labor market conditions for women may make some newly marrying women withdraw from labor force. Thus, there are good reasons to suspect that gender specific unemployment rates at marriage would have long-term effects on the wife's labor supply and earnings. However, it is practically difficult to obtain meaningful estimates with the available data. Since the state-level male and female unemployment rates are not available prior to 1978 and majority of women marry by their early twenties, the sample has to be limited to those born in the 1960s or after, who had not completed fertility at the time of survey. Since women tend to have a child within a few years since marriage, years since marriage is correlated with the presence of an infant child, which affects labor supply and perhaps also wages. At the same time, however, the timing of marriage is endogenous and correlated with the woman's preference for labor supply and productivity and difficult to control appropriately.

Yet, it is possible to estimate reduced form effects of gender specific unemployment rates at age 18-20, which affect the timing of marriage at the cohort level. Table 10 shows effects of gender specific unemployment rates that a woman experienced at age 18-20 on various outcomes observed at age 30-35. Let us start with the upper panel a, which presents the estimates for all women including those who are not married. As already shown in Table 5, gender specific unemployment rates at age 18-20 do not affect the fraction of women who eventually marry. The second column is just to confirm gender specific unemployment rates at age 18-20 do not affect education, which could affect earnings independently from marital status. The last four columns show the effects on income and labor supply, with controls for education, age, year-of-birth fixed effects and state-of-birth fixed effects. Although the effects on labor supply are insignificant, women who experienced worse labor market conditions for themselves tend to have lower household income. Also, women who experienced relatively worse labor market conditions for men earn more on average. Turning to the lower panel b, which show the estimates for married women, the positive effect of relatively high male unemployment on earnings still

hold. Interestingly, a high female unemployment rate is negatively correlated with the husband's earnings, and positively correlated with the woman's labor supply as if to compensate the lower earnings of her husband.

5   Concluding Remarks

I have estimated the effects of the gender-specific unemployment rates on the changes in marital status using panel data of individual women's marriage history. Even though the incidence of marriage increases for women younger than 24 when the female unemployment rate is high and the male unemployment rate is low, these marriages induced by gender-specific labor market fluctuations do not seem to differ from other marriages in terms of the match quality. Moreover, the difference in the cumulative marriage rate in early twenties fades away by mid-thirties. Thus, the response of the marriage rate of young women to the gender specific unemployment rates is more likely to be an acceleration of marriage for those who would marry anyway, rather than a permanent increase of women who ever married.

These results cast doubt on the argument that further improvement of women's status in the labor market would lead to further decline in the marriage rate. It is true that women delay marriage to exploit better labor market opportunities and it lowers the marriage rate to population. However, women who were to marry eventually marry anyway, and there seems to be no effects on marriage stability. The implications for people's well-being should be quite different from an increase in the number of people who never marry. Even though shifts in the timing of marriage causes a parallel shift in the timing of motherhood, implications for female labor supply and household income are subtle.

Yet, what this paper has examined is the effects of temporary fluctuations in gender specific labor market conditions, which does not affect the permanent income or long-run labor market prospects by definition. Permanent shifts in labor market prospects of women may change the perceived value of marriage in the long run, although it is difficult to distinguish from other trend changes. Nonetheless, at least this study provides some evidence that financial gains cannot not substitute non-pecuniary, longer-term element of marriage.

A Data Appendix

A.1 Retrospective variables in the SIPP and the determination of the state of residence

The Wave 2 of the SIPP contains retrospective information of marriage history of up to three marriages, the dates of birth of the first and last children and limited migration history, as well as basic demographic information as of the date of survey. I format the dataset as if it were a set of panel surveys interviewed on January 1st every year since 1978.

The Migration History Topical Module includes information on: state of residence on the date of survey; the year and month when the respondents moved in this state; state of previous residence (if there is any), which can be the same state as the current residence; the year and month when the respondents moved into current and previous residences; and state or country of birth. Thus, the state of residence can be retrieved back to the earlier of the dates moving in the current state or moving in the previous residence. Also I assume those whose state of the previous residence is the same as the state of birth had lived in that state.

Appendix Table A1 shows the fraction of the observations in the base sample whose state of residence in the year is identified. The state of residence at marriage is determined for 75.7% (77.9% for still in the first marriage, 69.2% for divorced) of all first marriages in the base sample.

A.2 SIPP Core Panels

Variables in SIPP Core Panels are collected either on monthly basis or once in each wave. I collapsed the dataset in annual basis by taking value at January, average over year or sum of each variable, and merged it with the variables from the Wave 2 Topical Module. Consequently, the sample is restricted to those who were present in the household at both wave 2 interview and the first interview in the corresponding calendar year.

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Table 1 Summary Statistics

a. Base sample: non-Hispanic white women who had not married until age 16 or 1978

		(A) state t-1 available	(B) state of birth available & born in 1960 or after
Year of birth:	mean	1966.6	1968.0
	min	1956	1960
	max	1980	1980
Year of 1st marriage:	mean	1988.1	1989.3
	min	1978	1978
	max	2001	2001
Average age at first marriage		23.3	22.9
Average age at birth of 1st child		23.9	23.6
Sample size (persons)		39,949	36,770
% by schooling	Dropouts	8.3%	7.9%
	High school	29.3%	28.9%
	Some college	35.9%	37.0%
	College	26.5%	26.3%

Note: statistics of first marriage are based on those who married by the age of 35, and those of birth of first child are based on those who had a child by their last interview.

Subsamples:

b. Women who married in 1978 ~ 5 years prior to the survey

Sample size	22,234
Year of birth	1963.8
Age at marriage	22.4
5year divorce rate	14.0%
Timing of the birth of first child:	
Before marriage	11.4%
In 0-2 years	40.1%
In 3-5 years	23.3%
No child by the 5th year	25.2%

c. Currently married couples who married in 1978 or after

Sample size	20,668
Year of birth	1965.3
Wife's age at marriage	23.6
Husband's age at marriage	26.2
Wife's years of schooling	14.0
Husband's years of schooling	14.0

d. 30-35 years old women in the core panels

Sample size	25,631
Year of birth	1964.3
% married	85.0%
Age at marriage (if married)	22.7
Log household income	8.2
Log person earnings (zero earnings excluded)	7.2
Husband's log person earnings (if married)	8.0
% of weeks worked in the last calendar year	73.5%
Employed full-time	64.5%
Years of schooling	13.9

Figure 1: Transition of marital status of American women

A. % of women who have ever married, by age
non-Hispanic white women born in 1956-80; SIPP 90-04 (weighted)

B. % of women getting married at age t in those who
remained single until age t-1; non-Hispanic white
women born in 1956-80; SIPP 90-04 (weighted)

C. Histogram by age at marriage; non-Hispanic white women
born in 1960-70 who married at age 17-30; SIPP 01-04
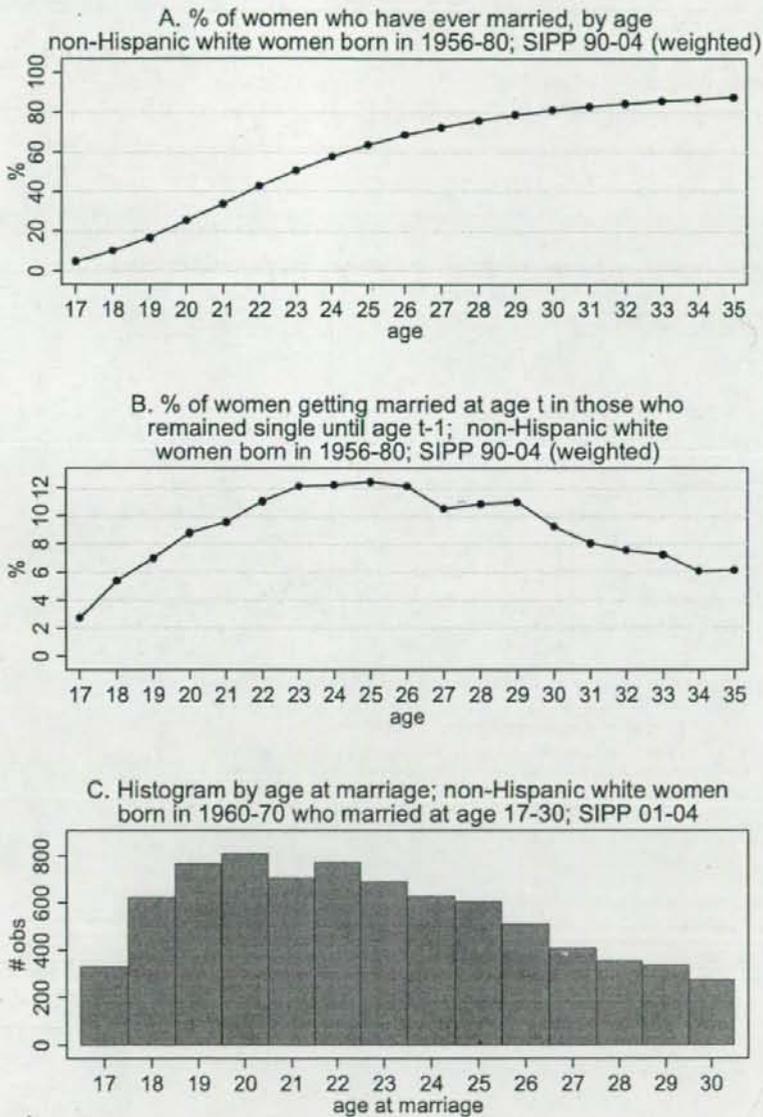
Table 2: Summary statistics of gender-specific unemployment rates, non-Hispanic white 16-40 years old, 45 states, 1978-2003.

	Mean	Standard Deviation	p75-p25
Female unemployment rate	6.61	2.12	2.75
residuals	-	1.04	1.27
Male unemployment rate	6.64	2.51	2.93
Male- Female gap	0.03	1.44	1.72
residuals	-	0.97	1.24
Number of obs	1,170		

Figure 2: Female unemployment rate and male-female gap for selected states
(Non-Hispanic whites, age 16-40, 1978-2003, CPS)

— Female unemployment rate (left axis)
----- Male-female gap in unemployment rate (right axis)
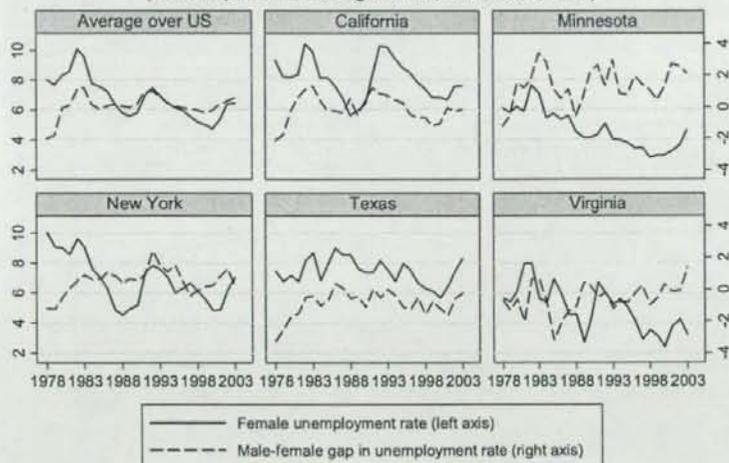
Table 3: Effects of the female unemployment rate and the male-female gap in the unemployment rate on the marriage hazard, by age.
(Cox's proportional hazard model)

|	All women	High school or less	Some college	BA or more (>=21 yrs old)	Not living in state of birth	Living in state of birth
Previous year's female unemployment rate* woman's age						
17-20 years old	0.125***	0.065***	0.123***	-	0.175***	0.094***
	[0.012]	[0.013]	[0.016]		[0.016]	[0.011]
21-23 years old	-0.004	-0.056***	-0.022	0.129***	0.021	-0.021*
	[0.010]	[0.014]	[0.014]	[0.012]	[0.013]	[0.011]
24-27 years old	-0.095***	-0.114***	-0.099***	-0.008	-0.113***	-0.068***
	[0.013]	[0.019]	[0.015]	[0.012]	[0.018]	[0.014]
28 or older	-0.217***	-0.214***	-0.202***	-0.159***	-0.302***	-0.110***
	[0.028]	[0.032]	[0.028]	[0.028]	[0.032]	[0.027]
Previous year's male-female gap* woman's age						
17-20 years old	-0.092***	-0.069***	-0.092***	-	-0.103***	-0.079***
	[0.020]	[0.020]	[0.022]		[0.027]	[0.018]
21-23 years old	0.01	0.016	0.038**	-0.054**	-0.007	0.024*
	[0.011]	[0.015]	[0.017]	[0.023]	[0.018]	[0.014]
24-27 years old	0.047***	0.092***	0.015	0.020	0.040**	0.052***
	[0.016]	[0.022]	[0.024]	[0.018]	[0.017]	[0.019]
28 or older	0.025	0.018	0.01	0.029	0.007	0.035
	[0.037]	[0.054]	[0.052]	[0.024]	[0.041]	[0.037]
Observations	269,621	89,812	94,513	58,249	83,871	185,750
Persons	39,949	17,240	14,333	10,135	15,898	27,626
Pseudo R2	0.01	0.01	0.01	0.01	0.02	0.01

Note: Standard errors in brackets are clustered by state of residence in the pervious year. The baseline hazard depends on age non-parametrically. Controls included in the exponential part but omitted from the table are dummy variables for year and for state of last year's residence.

Figure 3: Effects of gender-specific unemployment
rates on age specific marriage hazard

— ● — Female unemployment rate
— ✕ — Male-Female gap in the unemployment rate
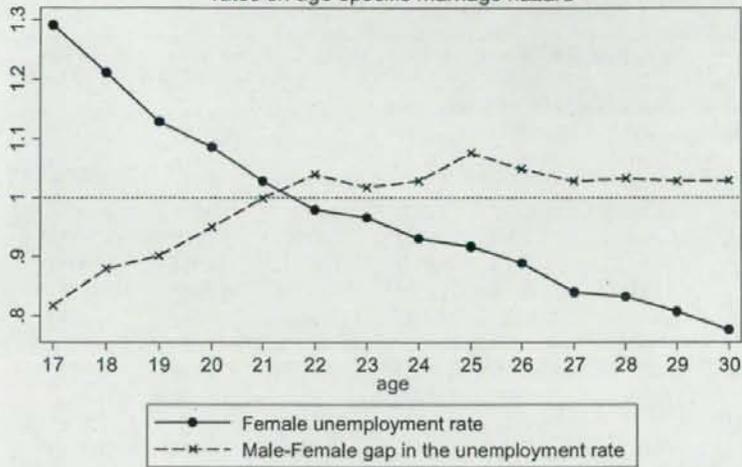
Note: Hazard ratio, i.e. exp(coefficient) in Cox's proportional hazard model.

Figure 4: Differences in the fraction ever married between cohorts that
experienced worse market for female at age 18-20 and the others
(Simple average without controls for state fixed effect or time trend)

— ● — (Female unemp. rate>median)-(Fem. u.<median)
— ✕ — (Male-female gap in u. rate<median)-(M-f gap>median)
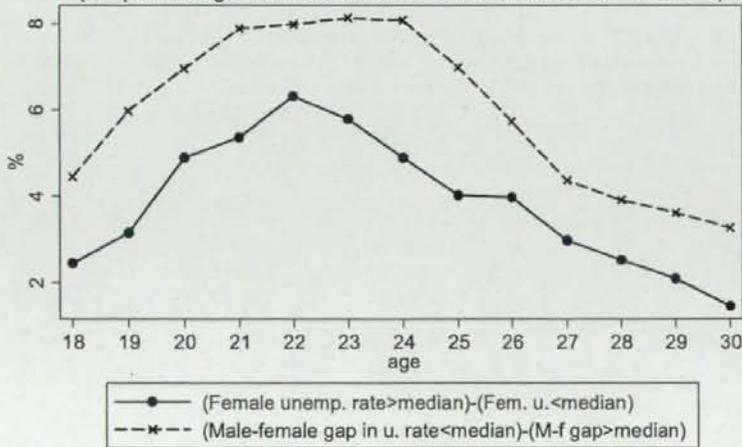
Table 4: Effects of gender-specific unemployment rates that the cohort faced at fixed ages on the fraction of women who have ever married in the cohort at different ages.
(Linear probability model, birth cohorts 1960-70 in SIPP 2001 and SIPP 2004)

Age	18	20	22	24	26	28	30
Female unemp. rate	0.0055	0.0027	0.0185***	0.0193***	0.0145**	0.0078	0.0071
at age 18-20	[0.0052]	[0.0065]	[0.0066]	[0.0065]	[0.0061]	[0.0061]	[0.0055]
Male – female u. rate	0.0015	-0.0106*	-0.0094	-0.013	-0.0087	-0.0084	0.0008
At age 18-20	[0.0057]	[0.0060]	[0.0071]	[0.0078]	[0.0082]	[0.0066]	[0.0066]
Observations	9536	9536	9536	9536	9536	9536	9536
R-squared	0.04	0.05	0.05	0.04	0.03	0.02	0.01

Age	18	20	22	24	26	28	30
Female unemp. rate	0.0049	0.0022	0.0164**	0.0138**	0.0141**	0.0096	0.0090
at age 19-21	[0.0048]	[0.0065]	[0.0066]	[0.0068]	[0.0060]	[0.0063]	[0.0055]
Male – female u. rate	0.0041	-0.003	0.0024	-0.0079	-0.0085	-0.0135*	-0.0047
At age 19-21	[0.0051]	[0.0084]	[0.0066]	[0.0077]	[0.0091]	[0.0075]	[0.0070]
Observations	9536	9536	9536	9536	9536	9536	9536
R-squared	0.04	0.05	0.05	0.04	0.03	0.02	0.01

Note: Standard errors in brackets are clustered by state of birth. Separate regressions by age. Controls included in the regressions but omitted from the table are dummy variables for year of birth and for state of birth.

Table 5: Effects of gender-specific unemployment rates that the woman faced at fixed ages on the subsequent marriage hazard. (Cox's proportional hazard model)

	Age 18-20	Age 19-21	Age 18-20
	State of birth	State of birth	State of actual residence
Female unemployment rate at fixed age* current age			
17-20 years old	0.042***	0.035***	0.034***
	[0.009]	[0.009]	[0.010]
21-23 years old	0.003	-0.005	0.003
	[0.011]	[0.011]	[0.012]
24-27 years old	-0.062***	-0.063***	-0.045***
	[0.012]	[0.010]	[0.013]
28 or older	-0.104***	-0.092***	-0.079***
	[0.019]	[0.017]	[0.018]
Male-female gap in the unemp. rate at fixed age * current age			
17-20 years old	-0.065***	-0.044***	-0.031*
	[0.013]	[0.012]	[0.016]
21-23 years old	0.007	0.000	0.017
	[0.015]	[0.016]	[0.013]
24-27 years old	0.078***	0.067***	0.067***
	[0.016]	[0.019]	[0.019]
28 or older	0.072***	0.057***	0.066***
	[0.024]	[0.022]	[0.020]
Observations	285,094	304,238	244,099
Persons	40,171	42,644	32,688
Pseudo R2	0.004	0.004	0.005

Note: Standard errors in brackets are clustered by state of birth/residence at age 19. The baseline hazard depends on age non-parametrically. Controls included in the exponential part but omitted from the table are dummy variables for year of birth and for state of birth/residence at age 19.

Table 6: Effects of the past gender-specific unemployment rates on the probability of divorce within 5 years (Linear probability model)

A. Pooling effects

Unemp. rates at:	Marriage	Age 18-20	Age 19-21
Female unemployment rate	-0.001	0.001	0.002
	[0.003]	[0.003]	[0.003]
Male-female gap in unemp. rate	-0.001	0.002	0.005
	[0.003]	[0.003]	[0.003]
Observations	19,997	19,544	21,375
R-squared	0.016	0.009	0.01

B. Effects by wife's age at marriage

Unemp. rates at:	Marriage	Age 18-20	Age 19-21
Female unemployment rate * wife's age at marriage			
20 or younger	-0.004	-0.004	-0.002
	[0.004]	[0.004]	[0.004]
21-23 years old	0.002	0.002	0.004
	[0.003]	[0.003]	[0.003]
24-27 years old	-0.001	0.001	0.002
	[0.003]	[0.004]	[0.003]
28 or older	-0.001	0.007*	0.007**
	[0.003]	[0.004]	[0.003]
Male-female gap in unemp. rate * wife's age at marriage			
20 or younger	0.001	0.003	0.006
	[0.004]	[0.004]	[0.004]
21-23 years old	-0.003	-0.001	0.005
	[0.003]	[0.004]	[0.003]
24-27 years old	0.001	0.007**	0.007*
	[0.004]	[0.003]	[0.004]
28 or older	0.005	-0.001	-0.001
	[0.005]	[0.005]	[0.006]
Dummy variable for wife's age at marriage			
21-23 years old	-0.120***	-0.121***	-0.117***
	[0.025]	[0.026]	[0.024]
24-27 years old	-0.139***	-0.154***	-0.144***
	[0.025]	[0.033]	[0.028]
28 or older	-0.146***	-0.207***	-0.186***
	[0.027]	[0.031]	[0.031]
Observations	19,997	19,544	21,375
R-squared	0.033	0.028	0.028

Note: Standard errors in brackets are clustered by state of residence at marriage/birth. Controls included in the regressions but omitted from the table are dummy variables for year of marriage/birth and for state of marriage/birth.

Table 7 Gender specific unemployment rates at marriage and spouses' characteristics
OLS

Dependent variables	Husband's age - wife's age		Husband's years of schooling	
Unemployment rates at:	At marriage	Age 18-20	At marriage	Age 18-20
Female unemployment rate * wife's age at marriage				
20 years old or younger	-0.008	-0.048	0.000	0.016
	[0.029]	[0.051]	[0.020]	[0.020]
21-23 years old	-0.019	0.008	-0.002	0.004
	[0.034]	[0.050]	[0.019]	[0.023]
24-27 years old	0.018	0.01	0.017	0.022
	[0.043]	[0.057]	[0.022]	[0.021]
28 years old or older	0.105*	-0.026	-0.021	0.000
	[0.062]	[0.056]	[0.028]	[0.026]
Male –female gap in unemp. rate * wife's age at marriage				
20 years old or younger	0.008	-0.039	0.027	0.019
	[0.045]	[0.053]	[0.024]	[0.035]
21-23 years old	0.024	-0.025	-0.025	-0.047
	[0.050]	[0.061]	[0.027]	[0.029]
24-27 years old	0.088*	-0.032	0.022	-0.065**
	[0.052]	[0.090]	[0.026]	[0.030]
28 years old or older	0.091	-0.06	-0.100***	-0.05
	[0.089]	[0.088]	[0.029]	[0.038]
Dummy variable for wife's age at marriage				
21-23 years old	-0.472*	-0.928***	0.449***	0.397***
	[0.273]	[0.215]	[0.136]	[0.129]
24-27 years old	-1.002***	-1.229***	0.493***	0.380***
	[0.307]	[0.311]	[0.144]	[0.137]
28 years old or older	-2.155***	-1.463***	0.900***	0.570***
	[0.377]	[0.380]	[0.166]	[0.203]
Wife's years of schooling			0.579***	0.608***
			[0.009]	[0.010]
Number of observations	17,305	16,726	17,084	16,520
	0.018	0.017	0.37	0.38

Note: Standard errors in brackets are clustered by state of residence at marriage/birth. Controls included in the regressions but omitted from the table are dummy variables for year of marriage/birth and for state of marriage/birth.

Table 8: Effects of gender-specific unemployment rates at the time of marriage on the duration between the marriage and the first child's birth

	Linear regression of dummy for having a child			Cox's proportional hazard of duration from marriage to the first child's birth
	1 year prior to marriage	2 years after marriage	5 years after marriage	
Female unemployment rate at marriage * wife's age at marriage				
20 or younger	0.000	0.000	-0.005	0.002
	[0.002]	[0.005]	[0.005]	[0.012]
21-23 years old	0.001	-0.001	-0.008**	-0.005
	[0.002]	[0.003]	[0.004]	[0.010]
24-27 years old	0.004	0.007*	-0.004	0.003
	[0.002]	[0.004]	[0.005]	[0.010]
28 or older	-0.004	-0.002	-0.007	-0.029
	[0.006]	[0.009]	[0.007]	[0.025]
Male-female gap in unemp. rate at marriage * wife's age at marriage				
20 or younger	-0.003	-0.006	0.000	-0.006
	[0.002]	[0.006]	[0.005]	[0.012]
21-23 years old	-0.005*	-0.004	0.000	0.004
	[0.003]	[0.005]	[0.005]	[0.012]
24-27 years old	0.001	-0.010*	-0.005	-0.020*
	[0.003]	[0.006]	[0.005]	[0.011]
28 or older	-0.001	-0.005	-0.005	-0.020
	[0.008]	[0.012]	[0.013]	[0.036]
Dummy variable for wife's age at marriage				
21-23 years old	0.027*	-0.128***	-0.054	-0.182**
	[0.015]	[0.043]	[0.034]	[0.077]
24-27 years old	0.027	-0.242***	-0.117***	-0.381***
	[0.021]	[0.044]	[0.042]	[0.087]
28 or older	0.128***	-0.144**	-0.060	-0.236
	[0.040]	[0.064]	[0.053]	[0.148]
Observations	16563	17900	17900	78433
R-squared	0.027	0.031	0.014	

Note: Standard errors in brackets are clustered by state of residence at marriage. Controls included in the regressions and exponential part of the hazard model but omitted from the table are dummy variables for year of marriage and for state of marriage. Baseline hazard depends on years since marriage.

Table 9: Effects of gender-specific unemployment rates that the cohort faced at fixed ages on the fraction of women who have ever had a child in the cohort at different ages.
(Linear probability model, birth cohorts 1960-70 in SIPP 2001 and SIPP 2004)

Age	20	22	26	28	30	32	34
Female unemp. rate	0.0016	0.0014	0.0018	0.0056	0.0035	0.0015	0.0019
at age 18-20	[0.0054]	[0.0072]	[0.0073]	[0.0066]	[0.0063]	[0.0063]	[0.0058]
Male – female u. rate	0.0018	-0.0023	-0.0196**	-0.0214**	-0.0192**	-0.0117	-0.0046
At age 18-20	[0.0058]	[0.0079]	[0.0093]	[0.0090]	[0.0080]	[0.0082]	[0.0081]
Observations	9536	9536	9536	9536	9536	9367	8268
R-squared	0.0186	0.0224	0.0262	0.0236	0.0184	0.012	0.0097

Age	20	22	26	28	30	32	34
Female unemp. rate	0.0048	0.0022	0.0001	0.0025	0.0041	0.0009	-0.001
at age 19-21	[0.0052]	[0.0075]	[0.0081]	[0.0072]	[0.0067]	[0.0070]	[0.0074]
Male – female u. rate	0.0057	0.0034	-0.005	-0.0108	-0.0140*	-0.0097	-0.0022
At age 19-21	[0.0057]	[0.0083]	[0.0096]	[0.0091]	[0.0081]	[0.0070]	[0.0077]
Observations	9536	9536	9536	9536	9536	9367	8268
R-squared	0.0188	0.0224	0.0256	0.023	0.0181	0.0119	0.0097

Note: Standard errors in brackets are clustered by state of birth. Separate regressions by age. Controls included in the regressions but omitted from the table are dummy variables for year of birth and for state of birth.

Table 10: Effects of gender-specific unemployment rates that a woman faced at age 18-20 on various outcomes observed at age 30-35

a. All women

	Pr (ever married)	Years of schooling	Log real personal earnings	Log real household income	Weeks worked last year (% in all weeks)	Full time employment
Female unemp. rate	0.000	-0.024	-0.008	-0.017**	0.008	0.002
at age 18-20	[0.005]	[0.027]	[0.014]	[0.008]	[0.006]	[0.005]
Male – female u. rate	0.006	-0.013	0.026*	0.024**	0.012	0.002
At age 18-20	[0.006]	[0.032]	[0.014]	[0.010]	[0.007]	[0.006]
Observations	24,638	24,465	17,463	21,949	21,976	21,976
R-squared	0.03	0.03	0.11	0.16	0.05	0.08

b. Women who have married

	Age at marriage	Log real personal earnings of the woman	Log real household income	Weeks worked last year (% in all weeks)	Full time employment	Log real personal earnings of the husband
Female unemp. rate	-0.067	-0.002	-0.013	0.013*	0.004	-0.021*
at age 18-20	[0.044]	[0.016]	[0.009]	[0.006]	[0.005]	[0.012]
Male – female u. rate	0.079	0.025*	0.011	0.010	0.003	0.004
At age 18-20	[0.049]	[0.014]	[0.012]	[0.007]	[0.007]	[0.012]
Observations	20861	14709	18822	18840	18840	15220
R-squared	0.207	0.093	0.184	0.043	0.085	0.095

Note: Standard errors in brackets are clustered by state of birth. Controls included in the regressions but omitted from the table are dummy variables for education (except for the regression of years of schooling), for current age, for year of birth and for state of birth.

Appendix Table A1: % of the observations whose state of residence is identified

Calendar year	2004	2001	1996	Panel 1993	1992	1991	1990
1978	63.0%	65.5%	65.2%	72.8%	73.5%	72.6%	75.1%
1979	63.8%	65.9%	66.6%	74.1%	74.3%	73.1%	76.7%
1980	63.9%	66.9%	67.7%	76.1%	75.6%	74.7%	78.5%
1981	65.0%	67.7%	68.3%	77.7%	76.6%	76.2%	80.2%
1982	65.4%	68.3%	69.6%	78.7%	78.0%	78.7%	81.6%
1983	66.0%	68.6%	70.6%	79.9%	79.2%	80.8%	83.1%
1984	67.0%	69.1%	71.7%	81.7%	80.1%	82.7%	84.3%
1985	67.8%	69.8%	72.8%	83.1%	82.5%	83.9%	85.6%
1986	68.7%	70.7%	73.8%	84.8%	84.8%	85.3%	88.1%
1987	69.2%	71.2%	75.3%	86.1%	86.8%	88.1%	89.4%
1988	70.3%	71.9%	76.7%	88.0%	88.8%	89.0%	91.3%
1989	71.3%	72.9%	78.3%	89.4%	89.5%	90.8%	91.6%
1990	72.5%	74.0%	80.2%	90.6%	91.7%	91.5%	
1991	73.8%	75.4%	82.1%	91.8%	92.2%		
1992	74.2%	76.2%	84.2%	92.9%			
1993	74.9%	77.0%	85.7%				
1994	75.4%	78.3%	87.6%				
1995	76.4%	79.4%	89.6%				
1996	77.4%	81.0%					
1997	78.5%	83.0%					
1998	80.0%	84.5%					
1999	81.7%	86.2%					
2000	83.8%	87.5%					
2001	86.1%						
2002	88.5%						
2003	89.8%						

正規と非正規の就業形態およびその賃金格差の要因に関する日中比較

馬　欣欣

はじめに

　1990 年代以後、日本においても、中国においても、非正規就業者が増加している。なぜならば、両国とも、非正規就業が主な就業形態の 1 つとして重視されてきたからである。しかしながら、日本と中国の両国は、経済発展過程、労働雇用制度、社会保障制度などが同じではないため、正規と非正規の就業状況は異なると考えられる。以下では、中国と日本における歴史的な正規と非正規の就業状況の変化を概観してみる。

　中国においては、計画経済時期（1949～1977 年）に重工業の発展を優先させる政策が重視された。この結果、都市者の就業と福利厚生を保障するため、1958 年以降、戸籍制度によって、農村と都市が分離され、中央政府が農村労働者を調達すること以外、農村から都市への労働移動が禁止された（宋・黄・刘 2006）。その時期には、国有部門（国有企業、集団企業、国家機関およびその関連部門）の従業員は、ほぼ全員が正規就業者であり、とくに文化大革命期（1966～1976 年）には、非正規就業者は存在しなかった（山本　2000；丸川　2002）。しかし、市場経済期（1978 年～現在）に入ると、戸籍制度の規制緩和とともに、農村から都市への労働力移動が徐々に増加し、国家統計局の資料によれば、2006 年に都市で 1 か月以上住居する出稼ぎ農民労働者の人数は約 1.3 億人であった。出稼ぎ農民者は、学歴が低く、彼らの大多数が非正規就業者として雇用され、日本的にいえば 「3K」[1]の職業につき、低い賃金しか獲得できていない