The Effect of Strengthening Common-law Marriage in B.C.

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Introduction & Background

- On March 18th, 2013, B.C.'s new Family Law Act started to allow the property division rights to apply on common-law couples who have lived together in a marriage-like relationship for at least two years.
- Research question: How does the enactment of the property division rights for common-law couples affect people's marital status choice in B.C.?

Number of New Marriages per capita in B.C.
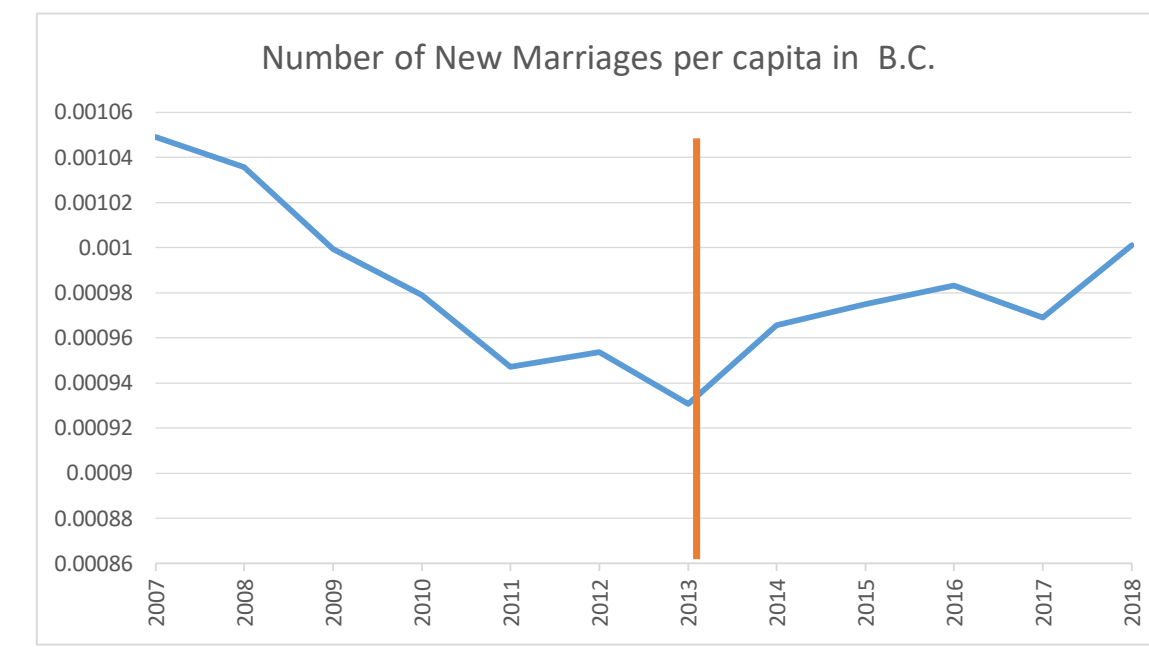
Contribution

- Few studies explore the case that while common-law couples have the same rights as married couples, whether this transformation alters people's view about their relationships?

- Some other provinces, like Ontario, are planning to give common-law couples the property division rights, so this study can help other provinces to predict the similar policy effect.

Data Description

- Statistics Canada: Canadian Labor Force Survey
  - 2007-2016
  - Participants aged from 20-54 in eight provinces (except Saskatchewan and Manitoba) in Canada.
- Statistics Canada : Population estimates by age and sex in 2007-2016.
- Immigration, Refugees and Citizenship Canada (IRCC): Admission of permanent residents aged from 20-54 in 2007-2016.

Summary Statistics

Table 1: Summary Statistics

	B.C.				Rest of Provinces			
	Before		After		Before		After	
Key Vars	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Married	0.509	0.500	0.476	0.500	0.468	0.500	0.439	0.500
Common-law	0.118	0.322	0.130	0.337	0.171	0.376	0.185	0.388
Single	0.288	0.453	0.314	0.464	0.279	0.448	0.301	0.459
ln(totalpopu)	14.616	0.012	14.653	0.009	14.710	1.251	14.709	1.264
ln(totalimmigrant)	10.190	0.089	10.118	0.049	9.875	1.633	9.991	1.502
Key Subgroups								
Age (1: 20-34; 0: 35-54)	0.374	0.484	0.400	0.490	0.376	0.484	0.390	0.488
Employed	0.787	0.410	0.790	0.408	0.788	0.410	0.790	0.407
Unemployed	0.052	0.223	0.050	0.217	0.061	0.239	0.059	0.236
Not in Labor Force	0.161	0.367	0.161	0.367	0.152	0.359	0.150	0.358
Observations		507,032		312,420		3,215,821		1,957,994

Methodology

- Regression equation (DD)

$$Y_{ipt} = \beta_0 + \boldsymbol{\beta_1} B.C._p * AFTER_t + \beta_2 YEAR_t + \beta_3 PROV_p + \beta_4 \ln(totalpopu)_{pt} + \beta_4 \ln(totalimmigrant)_{pt} + \beta_5 X_{ipt} + \varepsilon_{ipt}$$

- Variables
  - Y_{ipt}: 3 dummies --- whether married, in common-law or single
  - $B.C._p * AFTER_t$: Policy treatment in B.C. after 2013.
  - $\ln(totalpopu)_{pt}$ & $\ln(totalimmigrant)_{pt}$: log of estimated total population and immigrants.
  - X_{ipt}: a set of demographic and socioeconomic control variables
  - Subscripts i, p and t: varies by individual, province and year.

- Coefficient of interest: β_1 , α_1 (measurements of the policy effect in B.C.)

DD Regression

Table 2: Policy Effect on the Prob of Being Married, Common-law or Single

	(1) Policy Treatment	(2) Obs	(3) R^2	(4) Controls (Respondent)	(5) Controls (Spouse)
Married	-0.016***	4729626	0.032	No	No
	(-9.02)				
	-0.013***	3227589	0.292	Yes	No
	(-24.44)				
	-0.012**	1980442	0.247	Yes	Yes
	(-3.25)				
Common-law	0.002	4729626	0.056	No	No
	(1.40)				
	0.002*	3227589	0.090	Yes	No
	(2.05)				
	0.012**	1980442	0.247	Yes	Yes
	(3.25)				
Single	0.009***	4729626	0.001	No	No
	(4.18)				
	0.004***	3227589	0.379	Yes	No
	(8.46)				

Notes: t statistics are in parentheses *** p<0.01, ** p<0.05, * p<0.1
I always control for province, year, total population and immigrants fixed effects.
Control variables which describe respondents include gender, age, education level, wage per hour and youngest child respondent has. Control variables which describe respondent's spouse include age, education level and labor force status.
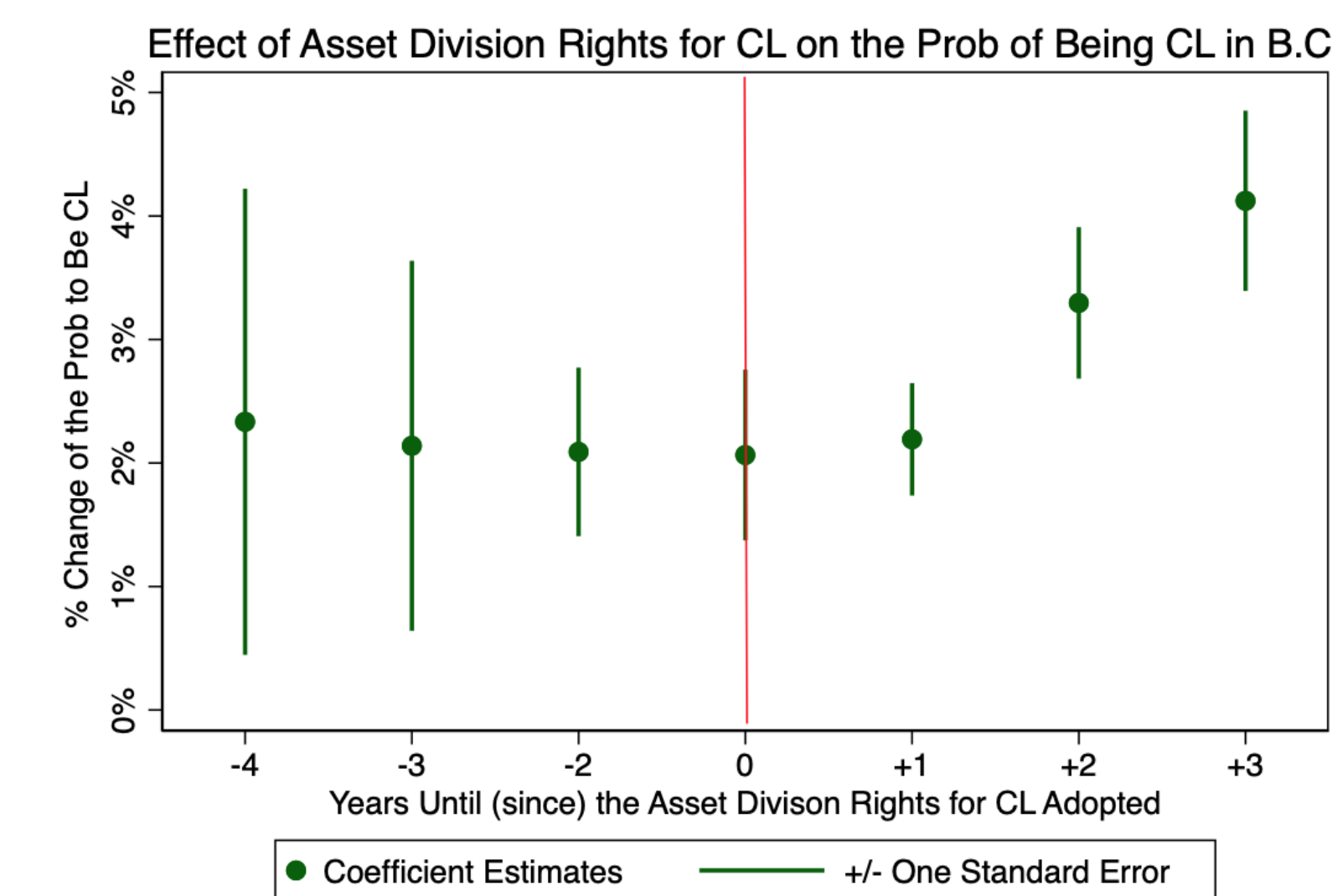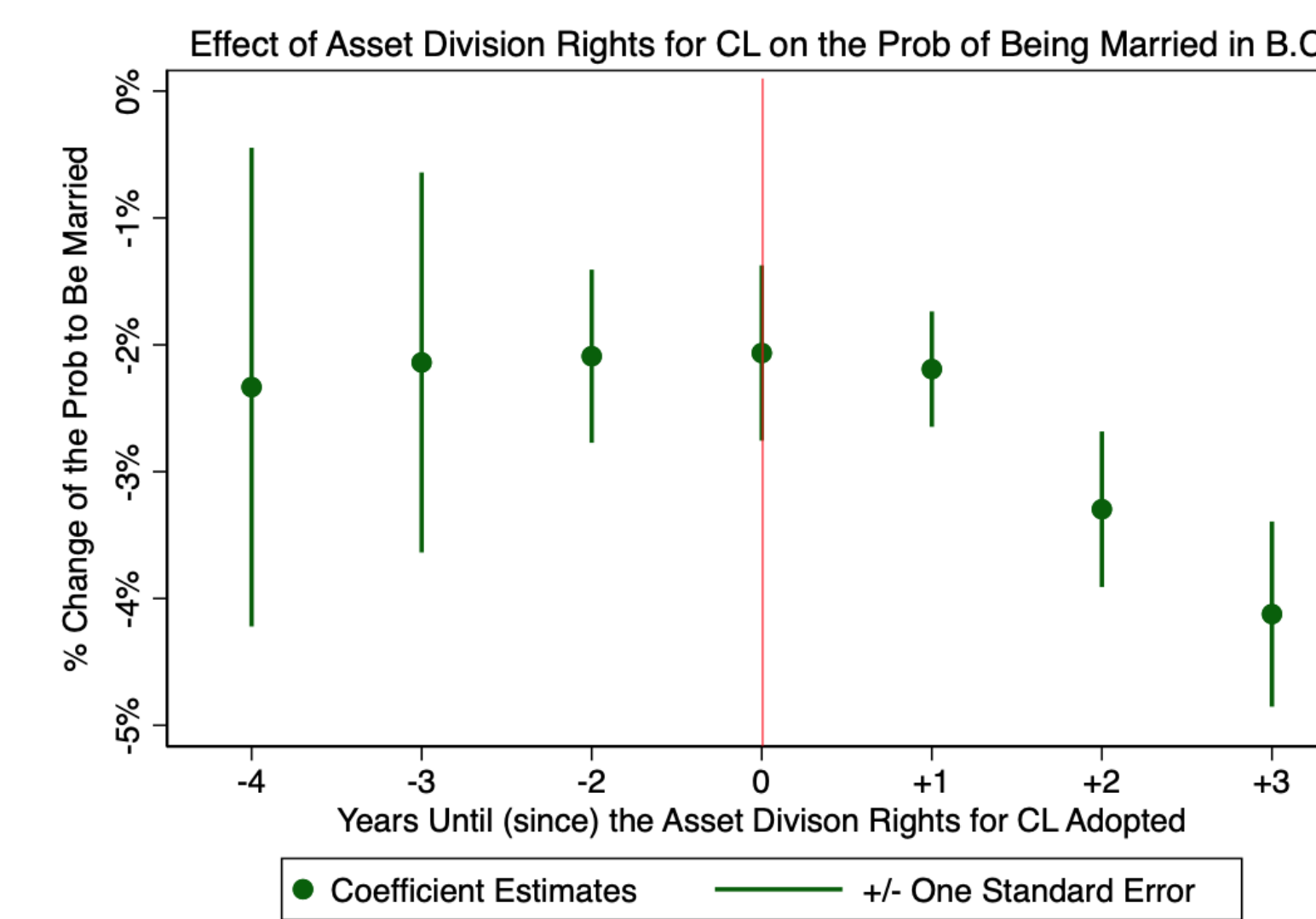
Key Results

- After the policy, the probability of people getting married in B.C. decreases approximately 1.5% (Table 2), so it means less people choose marriage to continue on their relationship.
- I found the policy positively affects the probability of living in common-law (Table 2). Therefore, people who change their mind about getting married due to the policy choose to stay in common-law.
- The probability of being single increases a little after the policy (Table 2). It means a small part of couples (cohabitation less than 2 years) breaks up before two years to avoid the policy applying on them.
- The above proves that rich side in a relationship determines whether entering into marriage before the policy, and after the policy, poor side benefits more from choosing to live in common-law.

Event Study Graphs

- Regression Equation (Event Study)

$$Y_{ipt} = \alpha_0 + \boldsymbol{\alpha_1} \cdot B.C._p \cdot I\{t=2009,2010,2011,2013...,2016\} + \alpha_2 YEAR_t + \alpha_3 PROV_p + \alpha_4 \ln(totalpopu)_{pt} + \alpha_4 \ln(totalimmigrant)_{pt} + \alpha_5 X_{ipt} + \varepsilon_{ipt}$$

Effect of Asset Division Rights for CL on the Prob of Being Married in B.C.

Effect of Asset Division Rights for CL on the Prob of Being CL in B.C.

Notes: Both respondents and their spouses' socioeconomic control variables are added into the regression.

Robustness Checks

- Standard errors are clustered by province.

- Placebo test:

	(1) Married	(2) Married	(3) Common-law	(4) Common-law	(5) Single	(6) Single
Policy Treatment	-0.002	0.007	-0.005	-0.007	0.005***	0.004***
	(-1.22)	(1.59)	(-1.82)	(-1.59)	(4.53)	(4.88)
Observations	3722853	1568996	3722853	1568996	3722853	3722853
R-squared	0.030	0.241	0.054	0.241	0.0013	0.379
Controls (respondents)	No	Yes	No	Yes	No	Yes
Controls (spouses)	No	Yes	No	Yes	No	No

Notes: t statistics are in parentheses *** p<0.01, ** p<0.05, * p<0.1

Robustness Checks

- Common trend check

Pre-trend Plot of the Prob of Being Married
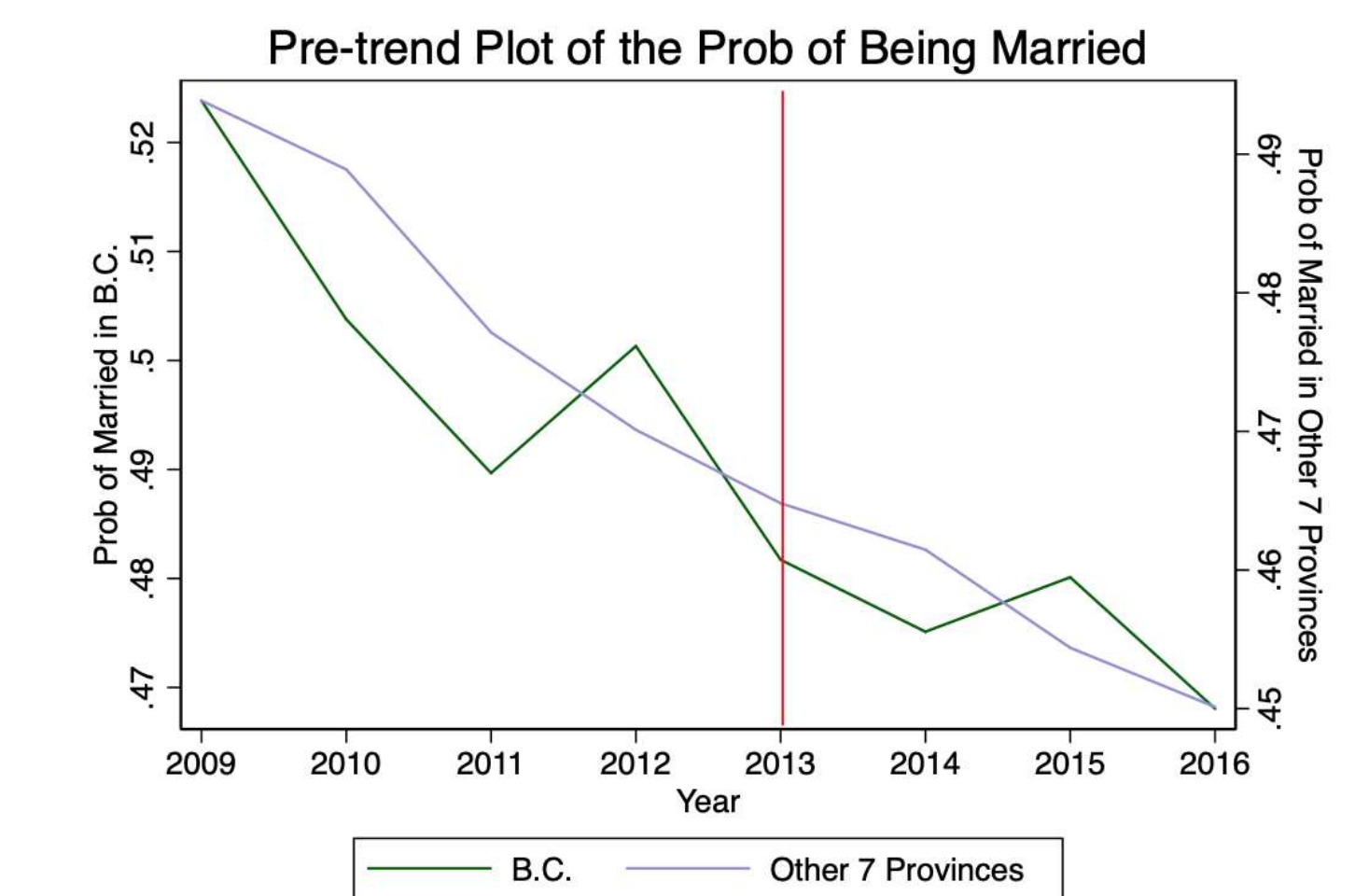
Subgroup Study

Table 3: The Interaction Effect of the Policy and Labor Force Status

	(1) Married	(2) Married	(3) Common-law	(4) Common-law	(5) Single	(6) Single
Policy Treatment * Employed	-0.019***	-0.009	0.000	0.009	0.013***	0.005**
	(-5.22)	(-1.64)	(0.01)	(1.64)	(4.50)	(3.09)
Policy Treatment * Unemployed	-0.028	-0.016	0.006	0.016	0.013	0.012**
	(-1.57)	(-1.47)	(0.42)	(1.47)	(1.40)	(3.40)
Policy Treatment * Not in labor force	-0.004	-0.011	0.012	0.011	-0.006	-0.005
	(-0.18)	(-0.72)	(0.63)	(0.72)	(-0.45)	(-0.75)
Observations	4729626	2816930	4729626	2816930	4729626	4729626
R-squared	0.042	0.232	0.058	0.232	0.018	0.386
Controls (respondents)	No	Yes	No	Yes	No	Yes
Controls (spouses)	No	Yes	No	Yes	No	No

Notes: t statistics are in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 4: The Interaction Effect of the Policy and Age Groups

	(1) Married	(2) Married	(3) Common-law	(4) Common-law	(5) Single	(6) Single
Policy Treatment *Age(<35)	-0.018	-0.015	-0.006*	-0.015	0.021	0.006
	(-1.26)	(-0.99)	(-1.93)	(-0.99)	(1.24)	(0.51)
Policy Treatment *Age(≥35)	-0.012	-0.019***	0.008***	0.019***	-0.004	0.003
	(-1.64)	(-5.54)	(0.41)	(5.54)	(-0.51)	(0.41)
Obs.	4729626	2816930	4729626	2816930	4729626	4729626
R-squared	0.187	0.232	0.069	0.232	0.260	0.390
Controls (respondents)	No	Yes	No	Yes	No	Yes
Controls (spouses)	No	Yes	No	Yes	No	No

Notes: t statistics are in parentheses *** p<0.01, ** p<0.05, * p<0.1

Key Findings

- The policy affects unemployed people more than people in other labor force statuses, because the effect of new assets division rights for common-law couples is greater when there exists unequal incomes between partners/spouses .
- The policy affects the probability of living in common-law oppositely in two age groups, so it means more couples (cohabitation less than two years) break up after the policy in 20-34 age group.

Next Step

- Compare results with Manitoba (1998) and Saskatchewan (2004)'s policy effect to furtherly evaluate the effect of property division rights for common-law couples when the data is available.

- Collect data about people's assets condition (housing and cars) to exclude confound from unprecise indications about people's assets based on their hourly wage.

- Use synthetic control strategy to construct a more similar pre-trend between control and treated groups.