The Human Capital Effects of Access to Elite Jobs: Online Appendix

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A Additional Results

Table A1: The Proportion of Migrants and *per capita* Quota Size

Province	Population in 1948 (*million*)	Number of Migrants in Taiwan	Migrants (*per million*)	Quota size (*per million*)	
				pre-reform	post-reform
Fujian	11.14	197,611	17,734	65.8	59.9
Zhejiang	19.96	114,950	5,759	191.4	59.9
Guangdong	28.34	93,635	3,304	299.0	59.9
Jiangsu	41.82	124,611	2,979	353.1	59.9
Jiangxi	12.51	30,814	2,464	486.8	59.9
Shandong	39.72	95,917	2,415	437.9	59.9
Hunan	25.56	54,268	2,123	516.0	59.9
Anhui	22.46	44,616	1,986	537.9	59.9
Hubei	21.70	37,851	1,745	634.1	59.9
Hebei	32.21	49,319	1,531	689.4	59.9
Henan	29.65	41,768	1,409	766.1	59.9
Liaoning	11.57	14,096	1,218	993.2	59.9
Guangxi	14.64	11,631	795	1,461.6	59.9
Sichuan	48.42	37,436	773	1,335.6	59.9
Others	97.42	33,669	346	4,484.8	59.9
Taiwan				1.2	59.9
Migrants				559.8	59.9

Notes: This table reports the proportion of people migrating from mainland provinces to Taiwan, and *per capita* quota sizes they enjoyed before and after the reform. The proportion of migrants in total population is defined as $M_{j,1956}/P_{j,1948}$, where $M_{j,1956}$ is the number of people from province j who resided in Taiwan in 1956 and $P_{j,1948}$ is the total population of province j in 1948. Pre-reform *per capita* quota size is defined as $Q_j/M_{j,1956}$, where Q_j is the quota size allocated to province j. Post-reform *per capita* quota size is the sum of quota size over all provinces divided by total population residing in Taiwan in 1956.

Table A2: Effects of Civil Exam Quotas on High School Initiation, ages 12–18

VARIABLES	High School Initiation					
	(1)	(2)	(3)	(4)	(5)	(6)
lnQuota × Pre-Reform	.007***	.008***	.008***			
	(.001)	(.002)	(.002)			
	[.000]	[.002]	[.002]			
Migrant × Pre-Reform				.036***	.045***	.043***
				(.007)	(.009)	(.009)
				[.000]	[.003]	[.006]
Province of Origin FE	Y	Y	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y	Y	Y
Family background	N	Y	Y	N	Y	Y
Town of Residence	N	N	Y	N	N	Y
Mean of dep.	.353	.353	.353	.353	.353	.353
Observations	187,266	187,266	187,266	187,266	187,266	187,266

Notes: The dependent variable is an indicator that takes the value 1 if an individual has ever attended (initiated) high school. Migrant is a dummy for individuals from mainland provinces. Sample includes males aged 12–18 in the year of the reform 1962. All regression models control for province of origin fixed effects and cohort fixed effects. Columns 2 and 4 additionally control for father's education and its interaction with an indicator for pre-reform cohorts. Columns 3 and 6 further includes town of residence fixed effects. Robust standard errors clustered by province of origin are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A3: Effects of Civil Exam Quotas on High School Initiation – Migrants Only

VARIABLES	High School Initiation			
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	.017***	.006*	.013***	.007**
	(.003)	(.004)	(.004)	(.003)
	[.000]	[.151]	[.001]	[.094]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Family background	N	Y	N	Y
Town of Residence	N	N	Y	Y
Mean of dep.	.843	.843	.843	.843
Observations	30,234	30,234	30,198	30,198

Notes: The dependent variable is an indicator that takes the value 1 if an individual has ever attended (initiated) high school. Sample includes male migrants aged 10–20 in the year of the reform 1962. All regression models control for province of origin fixed effects and cohort fixed effects. Columns 2 controls for father's education and its interaction with an indicator for pre-reform cohorts. Columns 3 controls for town of residence fixed effects. Column 4 includes the full set of controls. Robust standard errors clustered by province of origin are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A4: Province-level Predictors of *per capita* Quota Size

VARIABLES	per capita Quota Size									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Distance	.027***									
	(.010)									
Order		.011								
		(.007)								
Population			-.012*							
			(.007)							
Pop density				-.002*						
				(.001)						
%Farmers					-.242					
					(.152)					
Arable land						.023				
						(.014)				
Grain output							-.021			
							(.017)			
Coal reserves								.003		
								(.011)		
Iron reserves									-.406	
									(1.085)	
Banks										-.298
										(.330)
Observations	38	38	36	36	35	35	35	35	35	35
R-squared	.172	.056	.080	.088	.072	.077	.047	.003	.004	.024

Notes: This table reports point-estimates and standard errors from cross-province regressions of *per capita* quota size on provincial characteristics measured in 1948. Distance is defined as the straight-line distance from each province's capital city to Taiwan, where the distance for Taiwan is defined as zero. Order is the order in which each province's capital city was occupied by the Communist Army, where the order of occupation for Taiwan is top-coded. The other variables are total population, population density, share of farmers in total population, *per capita* arable land, *per capita* grain output, *per capita* coal reserves, *per capita* iron reserves, and *per capita* banks ($***p<0.01$, $**p<0.05$, $*p<0.1$).

Table A5: Effects of Civil Exam Quotas on High School Initiation – Men vs. Women

VARIABLES	Survey data				Census data	
	Men		Women		Men	
	(1)	(2)	(3)	(4)	(5)	(6)
Mainlander × Pre-Reform	.062**	.061**	-.004	-.003	.059***	.056***
	(.031)	(.031)	(.036)	(.036)	(.010)	(.011)
Main effect	Y	Y	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y	Y	Y
Additional Ctrl's	N	Y	N	Y	N	Y
Mean of dep.	.427	.427	.270	.270	.377	.377
Observations	10,163	10,163	9,724	9,724	346,944	346,944

Notes: The dependent variable in each column is an indicator that takes the value 1 if an individual has ever attended (initiated) high school. The key explanatory variable is the interaction between a dummy for mainlander and an indicator for pre-reform cohorts. Columns 1–4 use data from Social Image Survey (SIS) and Taiwan Social Change Survey (TSCS) conducted during 1984–2000. Columns 5–6 use data from the 1980 Taiwanese population census. All samples are restricted to individuals aged 10–20 in the year of the reform 1962, where Columns 1–2 and 5–6 restrict the sample to men, and Columns 3–4 restrict to women. Columns 1, 3, and 5 are baseline specifications which control for cohort fixed effects and a dummy for mainlander. Columns 2 and 4 additionally control for survey (whether it is SIS or TSCS) by interview year fixed effects. Column 6 controls for province of origin, cohort, and town of residence fixed effects, father's education and its interaction with an indicator for pre-reform cohorts. Robust standard errors are reported in parentheses in Columns 1–4. Robust standard errors clustered by province of origin appear in parentheses in Columns 5–6. (***p<0.01, **p<0.05, *p<0.1).

Table A6: Effects of Quota Size on the Number of Applicants and Success Rate

VARIABLES	Log num. of Applicants		Success Rate	
	(1)	(2)	(3)	(4)
Log num. of Slots	.506***	.563***	.037***	.034***
	(.062)	(.058)	(.005)	(.005)
Position type FE	Y	Y	Y	Y
Exam level FE	Y	N	Y	N
Year FE	Y	N	Y	N
Exam level-Year FE	N	Y	N	Y
Mean of dep.	6.773	6.773	.074	.074
Observations	126	126	126	126

Notes: The dependent variables in Columns 1–2 are the number of applicants for each position type in each exam. The dependent variables in Columns 3–4 are the success rate, defined as the number of civil exam slots divided by the number of applicants. Sample period is 1950–1970. Regressions in Columns 3–4 are weighted by the number of applicants. Robust standard errors are reported in parentheses (***p<0.01, **p<0.05, *p<0.1).

Table A7: Effects of Civil Exam Quotas on Schooling Decisions over the Life Cycle

VARIABLES	Secondary Completion	HS Completion	College Initiation	College Completion
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	.009***	.009***	.011***	.010***
	(.001)	(.002)	(.002)	(.002)
	[.000]	[.000]	[.000]	[.000]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y
Mean of dep.	.480	.359	.166	.160
Observations	346,944	346,944	346,944	346,944

Notes: Dependent variables in Columns 1–4 are an indicator for secondary school completion, high school completion, college initiation, and college completion, respectively. Sample includes males aged 10–20 in the year of the reform. All regression models presented in this table control for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. The key explanatory variable is the interaction term between log *per capita* quota size and an indicator for pre-reform cohorts. Robust standard errors clustered at the native province level are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A8: Effects of Civil Exam Quotas on Schooling Decisions over the Life Cycle, ages 12–18

VARIABLES	Secondary Completion	HS Completion	College Initiation	College Completion
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	.007***	.006***	.007***	.006***
	(.001)	(.001)	(.001)	(.002)
	[.001]	[.004]	[.007]	[.017]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y
Mean of dep.	.458	.335	.155	.149
Observations	187,266	187,266	187,266	187,266

Notes: Dependent variables in Columns 1–4 are an indicator for secondary school completion, high school completion, college initiation, and college completion, respectively. Sample includes males aged 12–18 in the year of the reform. All regression models presented in this table control for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. The key explanatory variable is the interaction term between log *per capita* quota size and an indicator for pre-reform cohorts. Robust standard errors clustered at the native province level are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A9: Schooling Decisions over the Life Cycle – Controlling for Prov Characteristics

VARIABLES	Secondary Completion	HS Completion	College Initiation	College Completion
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	.009***	.012***	.012*	.009
	(.003)	(.004)	(.007)	(.006)
	[.027]	[.026]	[.175]	[.302]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y
Mean of dep.	.480	.359	.166	.160
Observations	346,840	346,840	346,840	346,840

Notes: Dependent variables in Columns 1–4 are an indicator for secondary school completion, high school completion, college initiation, and college completion, respectively. Sample includes males aged 10–20 in the year of the reform. All regression models presented in this table control for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts, and the pre-reform dummy interacted with provincial characteristics (population size, population density, and the straight-line distances from each province to Taiwan, where the distance for Taiwan is defined as zero). The key explanatory variable is the interaction term between log *per capita* quota size and an indicator for pre-reform cohorts. Robust standard errors clustered at the native province level are reported in parentheses (***$p<0.01$, **$p<0.05$, *$p<0.1$). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A10: Robustness – Heterogeneous Effects of Quotas on Life Cycle Human Capital Investment

VARIABLES	Secondary Completion	HS Initiation	HS Completion	College Initiation	College Completion
	(1)	(2)	(3)	(4)	(5)
lnQuota*pre-Reform*Below	.001	-.007**	-.006**	-.010***	-.009***
	(.002)	(.003)	(.003)	(.002)	(.002)
	[.611]	[.058]	[.056]	[.002]	[.005]
lnQuota*pre-Reform	.006***	.009***	.008***	.012***	.011***
	(.000)	(.001)	(.001)	(.001)	(.001)
lnQuota*Below	.039***	.034***	.031***	-.007**	-.006**
	(.004)	(.004)	(.004)	(.003)	(.003)
pre-Reform*Below	-.016	-.082**	-.071*	-.074**	-.062*
	(.030)	(.038)	(.036)	(.033)	(.033)
Province of Origin FE	Y	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y	Y
Mean of dep.	.480	.377	.359	.166	.160
Observations	346,944	346,944	346,944	346,944	346,944

Notes: Dependent variables in Columns 1–5 are an indicator for secondary school completion, high school initiation, high school completion, college initiation, and college completion, respectively. Sample includes males aged 10–20 in the year of the reform 1962. All regression models presented in this table control for province of origin fixed effects, cohort fixed effects, and town of residence fixed effects. The key explanatory variable is the triple interaction between log per capita quota size, an indicator for pre-reform cohorts, and a dummy for below median father's education. The double interactions and the main effects are also included in each regression. Robust standard errors clustered at the native province level are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A11: Robustness – Effects of Civil Exam Quotas on Labor Market Outcomes

VARIABLES	Employed	Formal Employment	Occupation Status Score	Occupation Income Score
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	-.000	.009***	.275***	.241***
	(.001)	(.001)	(.050)	(.041)
	[.889]	[.000]	[.000]	[.000]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y
Mean of dep.	.949	.586	32.86	23.10
Observations	346,944	329,306	322,581	322,581

Notes: Dependent variables in Columns 1–4 are an indicator for being employed at the census time, an indicator that equals one if an individual is working for pay in the formal sector, Siegel's occupational prestige score, and occupational income score constructed by the IPUMS, respectively. Sample includes males aged 10–20 in the year of the reform, 1962. All regression models presented in this table control for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. Robust standard errors clustered at the native province level are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.

Table A12: Effects of Civil Exam Quotas on Additional Labor Market Outcomes

VARIABLES	Professional		Agricultural	
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	.003***	.004***	-.013***	-.005***
	(.001)	(.001)	(.001)	(.001)
	[.016]	[.004]	[.000]	[.001]
Origin Province FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	N	Y	N	Y
Mean of dep.	.071	.071	.245	.245
Observations	323,969	323,969	323,969	323,969

Notes: The dependent variables in Columns 1–2 are an indicator for professional jobs. The dependent variables in Columns 3–4 are a dummy that equals one if an individual works in the agricultural sector. Sample includes males aged 10–20 in the year of the reform 1962. All specifications control for province of origin fixed effects and cohort fixed effects. Even columns additionally control for town of residence fixed effects, father's education and its interaction with an indicator for pre-reform cohorts. Robust standard errors clustered by province of origin are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.
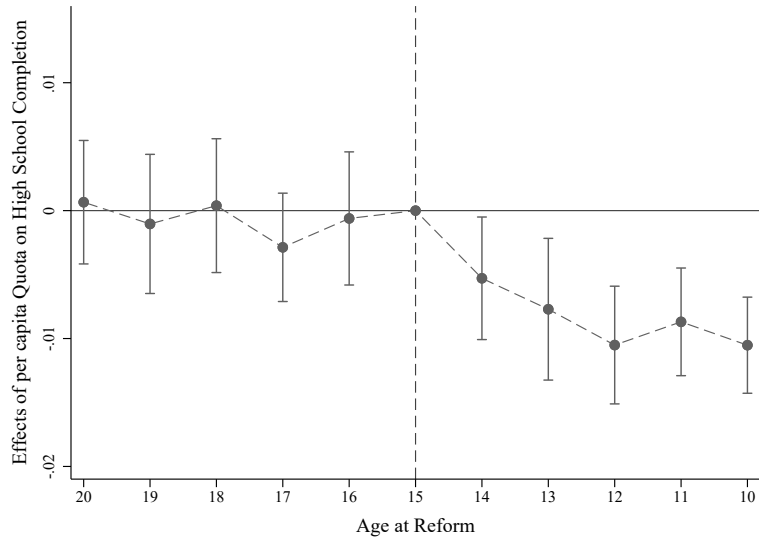
Table A13: Effects of Civil Exam Quotas on Family Outcomes

VARIABLES	Ever Married	Age at Marriage	Num of Children	Partner HS Diploma
	(1)	(2)	(3)	(4)
lnQuota × Pre-Reform	.010***	.117***	-.054***	.014***
	(.002)	(.010)	(.005)	(.002)
	[.000]	[.000]	[.000]	[.000]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y
Mean of dep.	.743	24.99	2.086	.225
Observations	346,944	158,817	158,817	158,817

VARIABLES	Partner Employed	Partner Formal emp.	Partner Occ. Status	Partner Occ. Income
	(5)	(6)	(7)	(8)
lnQuota × Pre-Reform	-.003	.015***	.372***	.147***
	(.002)	(.002)	(.078)	(.045)
	[.241]	[.000]	[.006]	[.023]
Province of Origin FE	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y
Additional Ctrl's	Y	Y	Y	Y
Mean of dep.	.264	.575	34.27	20.59
Observations	158,817	41,905	41,723	41,723

Notes: Dependent variables in Columns 1–8 are an indicator for being ever-married, age at marriage (conditional on being married), number of children at the census time, an indicator for whether female partner has completed high school, an indicator for female partner's employment status, and an indicator for whether female partner is working for pay in a formal sector (conditional on working), female partner's occupational status score, and female partner's occupational income score, respectively. Sample includes males aged 10–20 in the year of the reform 1962. All regression models presented in this table control for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. Robust standard errors clustered at the native province level are reported in parentheses (***p<0.01, **p<0.05, *p<0.1). P-values obtained via wild bootstrap as in Cameron, Gelbach and Miller (2008) with clustering at the provincial level, based on 999 repetitions, appear in brackets.
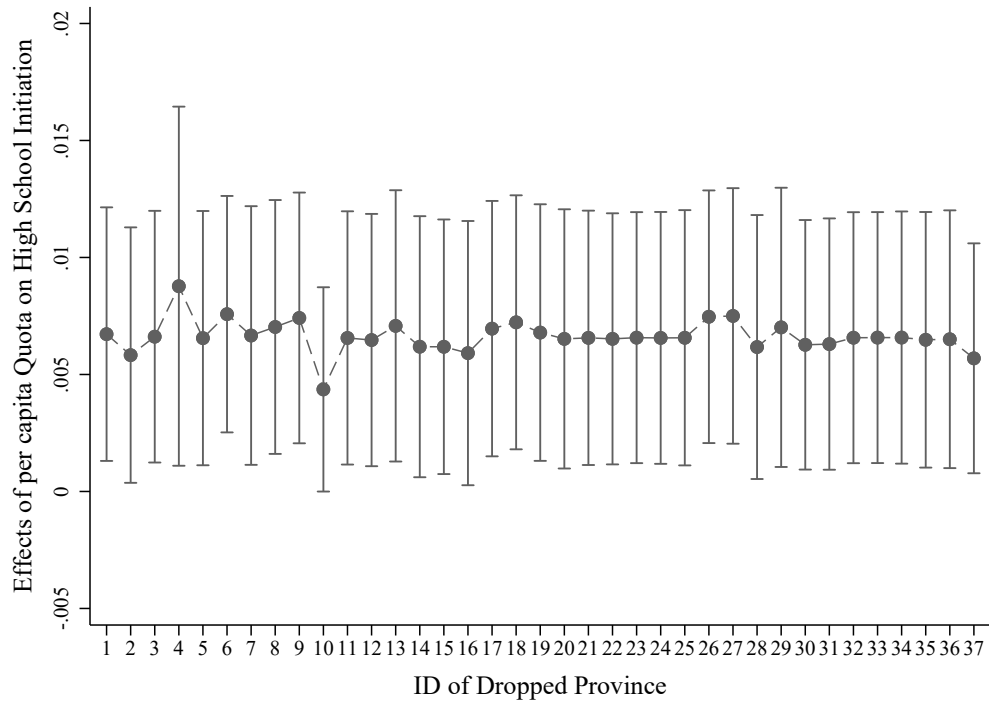
Figure A1: Robustness to Dropping Each Province at a time

Note: This figure plots coefficient estimates and 90% confidence intervals for the interaction term between log *per capita* quota and the pre-reform dummy. The dependent variable is an indicator for high school initiation. The estimating equation controls for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. Standard errors are clustered by province of origin. We restrict our sample to migrants only and exclude each mainland province at a time.

Panel A: High School Completion

Panel B: College Completion
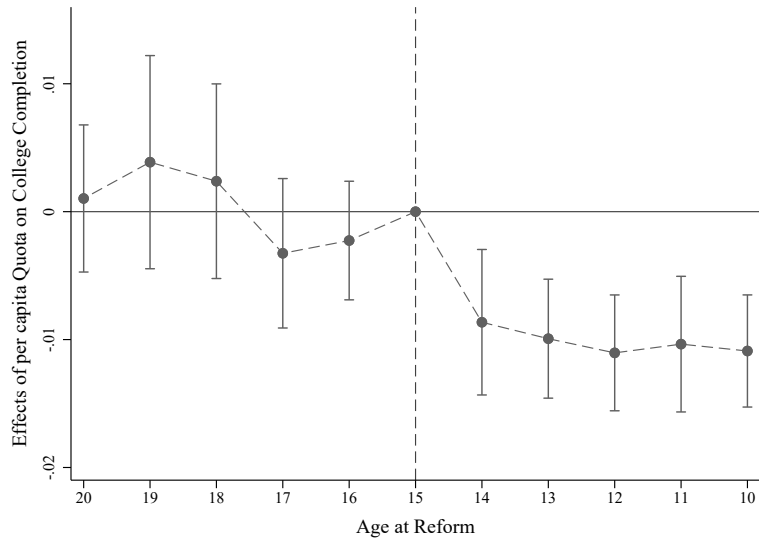
Figure A2: Effects of Civil Exam Quotas on Further Human Capital Accumulation

Note: This figure plots coefficient estimates and 95% confidence intervals for the log of *per capita* quota interacted with cohort dummies. Ages in the year of the reform are indicated on the x-axis. The dummy for age 15 is omitted to make the estimated effects relative to that exposure period. The dependent variables in Panels A and B are dummies for high school completion and college completion, respectively. The estimating equation controls for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. Standard errors are clustered by province of origin.

Panel A: Formal Employment
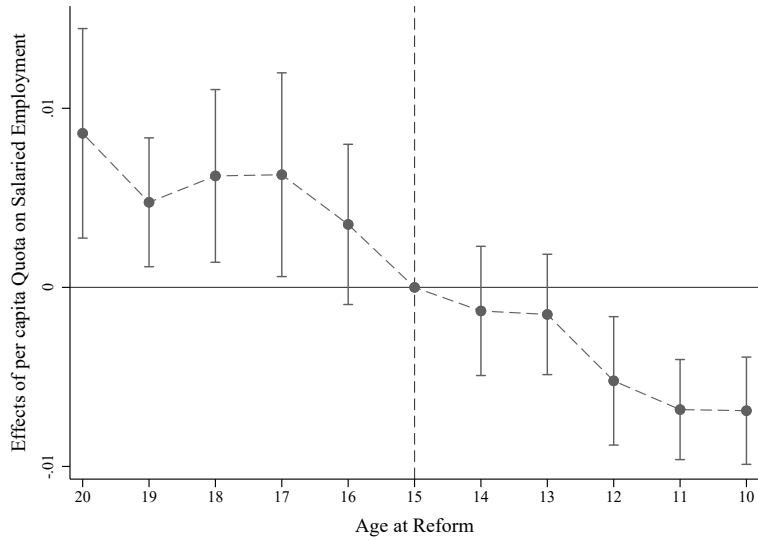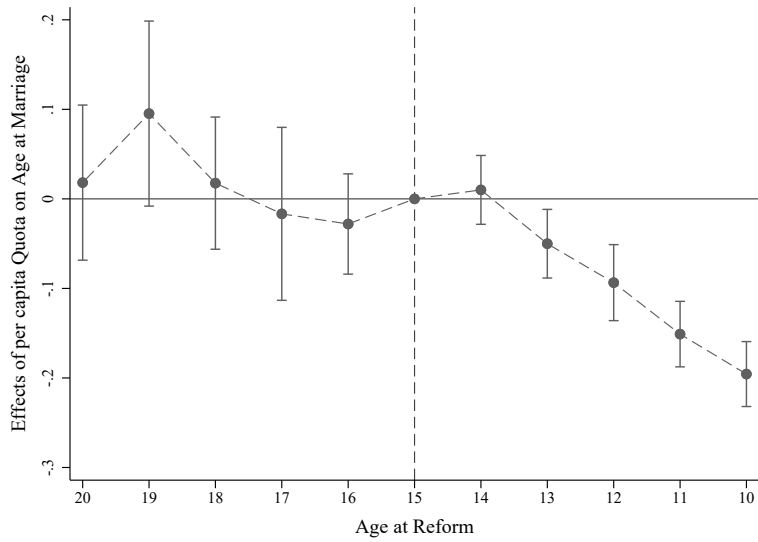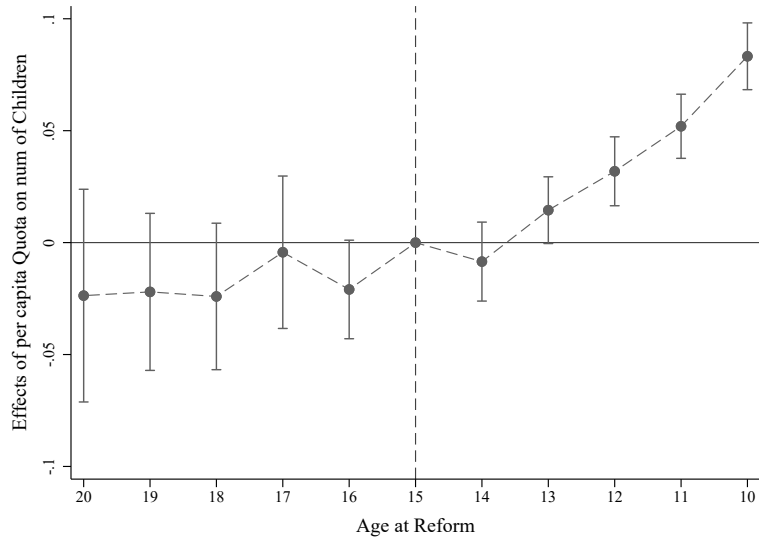

Panel B: Age at Marriage

Figure A3: Effects of Civil Exam Quotas on Labor Market and Family Outcomes

Note: This figure plots coefficient estimates and 95% confidence intervals for the log of *per capita* quota interacted with cohort dummies. Ages in the year of the reform are indicated on the x-axis. The dummy for age 15 is omitted to make the estimated effects relative to that exposure period. The dependent variables in Panels A-D are a dummy for salaried employment, age at marriage, number of children, and a dummy for partner's high school completion, respectively. The estimating equation controls for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. Standard errors are clustered by province of origin.

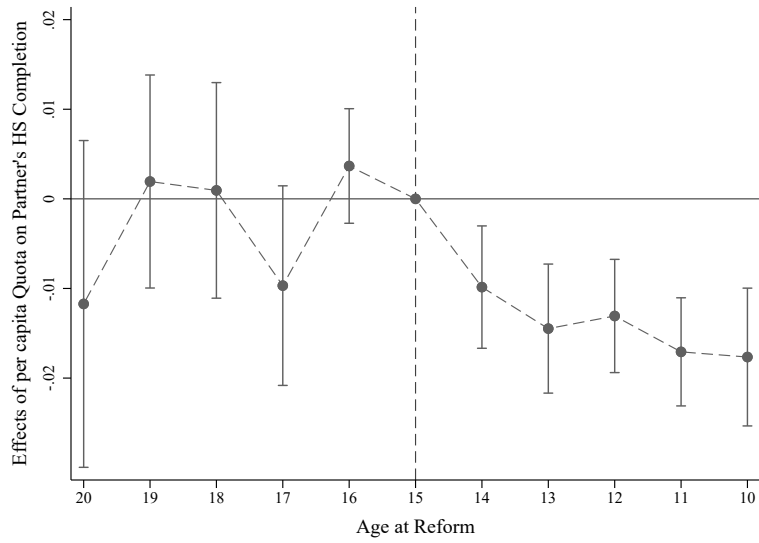*Panel C: Number of Children*

Panel D: Partner Education

Figure A3: Effects of Civil Exam Quotas on Labor Market and Family Outcomes (*continued*)

Note: This figure plots coefficient estimates and 95% confidence intervals for the log of *per capita* quota interacted with cohort dummies. Ages in the year of the reform are indicated on the x-axis. The dummy for age 15 is omitted to make the estimated effects relative to that exposure period. The dependent variables in Panels A–D are a dummy for salaried employment, age at marriage, number of children, and a dummy for partner's high school completion, respectively. The estimating equation controls for province of origin fixed effects, cohort fixed effects, town of residence fixed effects, father's years of schooling and its interaction with an indicator for pre-reform cohorts. Standard errors are clustered by province of origin.

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