

Appendix Table A1. OLS regression estimates of famine effects on later-life cognitive decline during 2011-2013 after multiple imputations for missing data.

Cognitive change during 2011-2013	TICS		Episodic memory		Draw pentagons		General cognition	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
Model 1 (reference cohort: 1963) <sup>a</sup>								
$\beta_{1958}(CSSI \times 1958 \text{ cohort})$	0.005 (-0.023, 0.033)	0.742	0.005 (-0.027, 0.037)	0.734	0.002 (-0.004, 0.008)	0.561	0.012 (-0.028, 0.052)	0.540
$\beta_{1959}(CSSI \times 1959 \text{ cohort})$	-0.027 (-0.059, 0.005)	0.101	-0.022 (-0.051, 0.007)	0.128	-0.005 (-0.013, 0.002)	0.181	-0.042 (-0.080, -0.003)	0.033
$\beta_{1960}(CSSI \times 1960 \text{ cohort})$	0.000 (-0.025, 0.024)	0.979	0.010 (-0.015, 0.035)	0.421	-0.002 (-0.007, 0.008)	0.548	0.003 (-0.035, 0.041)	0.875
$\beta_{1961}(CSSI \times 1961 \text{ cohort})$	0.013 (-0.015, 0.041)	0.361	-0.007 (-0.032, 0.018)	0.559	0.000 (-0.007, 0.008)	0.962	0.005 (-0.040, 0.050)	0.819
$\beta_{1962}(CSSI \times 1962 \text{ cohort})$	-0.013 (-0.035, 0.009)	0.244	0.007 (-0.020, 0.035)	0.560	-0.001 (-0.007, 0.005)	0.645	-0.008 (-0.042, 0.025)	0.616
Model 2 (reference cohort: 1963) <sup>b</sup>								
$\beta_{1958}(CSSI \times 1958 \text{ cohort})$	0.008 (-0.024, 0.039)	0.619	0.004 (-0.024, 0.033)	0.737	0.002 (-0.005, 0.009)	0.499	0.016 (-0.025, 0.056)	0.441
$\beta_{1959}(CSSI \times 1959 \text{ cohort})$	-0.024 (-0.059, 0.011)	0.176	-0.022 (-0.046, 0.001)	0.062	-0.005 (-0.013, 0.004)	0.255	-0.042 (-0.084, 0.000)	0.048
$\beta_{1960}(CSSI \times 1960 \text{ cohort})$	0.002 (-0.024, 0.028)	0.872	0.011 (-0.015, 0.037)	0.395	-0.001 (-0.007, 0.005)	0.650	0.005 (-0.038, 0.048)	0.802
$\beta_{1961}(CSSI \times 1961 \text{ cohort})$	0.012 (-0.016, 0.040)	0.392	-0.010 (-0.042, 0.021)	0.474	0.000 (-0.008, 0.007)	0.953	0.005 (-0.036, 0.045)	0.822
$\beta_{1962}(CSSI \times 1962 \text{ cohort})$	-0.013 (-0.035, 0.010)	0.277	0.002 (-0.020, 0.024)	0.828	-0.001 (-0.007, 0.005)	0.647	-0.008 (-0.041, 0.026)	0.641

Notes:

Coef. denotes coefficient.

CSSI denotes mean-centered cohort size shrinkage index at the prefecture level.

Numbers in the parentheses are 95% confidence intervals.

<sup>a</sup>Adjusted for cohort, CSSI, gender, marital status, provincial fixed effects.

<sup>b</sup>Model 1 + additionally adjusted for education.

Appendix Table A2. OLS regression estimates of famine effects on later-life cognition in 2011: Urban sample.

Cognition in 2011	TICS		Episodic memory		Draw pentagons		General cognition	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
<b>Model 1 (reference cohort: 1963)<sup>a</sup></b>								
$\beta_{1958}(CSSI \times 1958 \text{ cohort})$	-0.029 (-0.078, 0.020)	0.241	0.004 (-0.035, 0.043)	0.846	-0.002 (-0.008, 0.004)	0.536	-0.028 (-0.085, 0.030)	0.343
$\beta_{1959}(CSSI \times 1959 \text{ cohort})$	-0.010 (-0.049, 0.030)	0.628	-0.031 (-0.080, 0.018)	0.217	-0.005 (-0.010, 0.001)	0.087	-0.035 (-0.103, 0.032)	0.296
$\beta_{1960}(CSSI \times 1960 \text{ cohort})$	-0.020 (-0.071, 0.031)	0.432	0.028 (-0.010, 0.067)	0.145	0.000 (-0.007, 0.007)	0.930	0.013 (-0.050, 0.077)	0.676
$\beta_{1961}(CSSI \times 1961 \text{ cohort})$	-0.020 (-0.072, 0.032)	0.450	-0.002 (-0.046, 0.041)	0.916	0.000 (-0.005, 0.005)	0.960	-0.013 (-0.070, 0.045)	0.659
$\beta_{1962}(CSSI \times 1962 \text{ cohort})$	-0.058 (-0.114, -0.001)	0.045	-0.023 (-0.056, 0.011)	0.182	0.000 (-0.006, 0.007)	0.930	-0.057 (-0.113, -0.001)	0.047
<b>Model 2 (reference cohort: 1963)<sup>b</sup></b>								
$\beta_{1958}(CSSI \times 1958 \text{ cohort})$	-0.011 (-0.054, 0.031)	0.590	0.007 (-0.030, 0.045)	0.703	0.001 (-0.005, 0.006)	0.761	-0.006 (-0.057, 0.045)	0.800
$\beta_{1959}(CSSI \times 1959 \text{ cohort})$	-0.003 (-0.040, 0.034)	0.890	-0.029 (-0.077, 0.020)	0.240	-0.004 (-0.009, 0.001)	0.120	-0.030 (-0.095, 0.036)	0.368
$\beta_{1960}(CSSI \times 1960 \text{ cohort})$	-0.027 (-0.074, 0.021)	0.266	0.030 (-0.009, 0.069)	0.127	-0.002 (-0.009, 0.005)	0.576	0.001 (-0.060, 0.063)	0.966
$\beta_{1961}(CSSI \times 1961 \text{ cohort})$	-0.020 (-0.073, 0.033)	0.457	-0.001 (-0.044, 0.041)	0.951	-0.001 (-0.006, 0.004)	0.723	-0.017 (-0.075, 0.042)	0.570
$\beta_{1962}(CSSI \times 1962 \text{ cohort})$	-0.055 (-0.106, -0.004)	0.036	-0.021 (-0.054, 0.013)	0.221	0.000 (-0.006, 0.006)	0.953	-0.054 (-0.107, -0.002)	0.043

Notes:

Coef. denotes coefficient.

CSSI denotes mean-centered cohort size shrinkage index at the prefecture level.

Numbers in the parentheses are 95% confidence intervals.

<sup>a</sup>Adjusted for cohort, CSSI, gender, marital status, provincial fixed effects.

<sup>b</sup>Model 1 + additionally adjusted for education.

Appendix Table A3. OLS regression estimates of famine effects on later-life cognitive decline during 2011-2013: Urban sample.

Cognitive change during 2011-2013	TICS		Episodic memory		Draw pentagons		General cognition	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
<b>Model 1 (reference cohort: 1963)<sup>a</sup></b>								
$\beta_{1958}(CSSI \times 1958 \text{ cohort})$	0.022 (-0.044, 0.089)	0.504	-0.032 (-0.087, 0.022)	0.237	0.003 (-0.006, 0.012)	0.533	-0.018 (-0.095, 0.059)	0.642
$\beta_{1959}(CSSI \times 1959 \text{ cohort})$	0.015 (-0.042, 0.072)	0.596	0.012 (-0.038, 0.062)	0.642	-0.005 (-0.016, 0.007)	0.432	0.012 (-0.053, 0.076)	0.716
$\beta_{1960}(CSSI \times 1960 \text{ cohort})$	0.035 (-0.038, 0.108)	0.343	-0.096 (-0.144, 0.048)	0.000	0.003 (-0.007, 0.014)	0.527	-0.057 (-0.162, 0.049)	0.288
$\beta_{1961}(CSSI \times 1961 \text{ cohort})$	0.004 (-0.082, 0.090)	0.926	-0.050 (-0.104, 0.004)	0.070	0.004 (-0.020, 0.028)	0.731	-0.051 (-0.143, 0.041)	0.269
$\beta_{1962}(CSSI \times 1962 \text{ cohort})$	0.018 (-0.054, 0.090)	0.614	-0.033 (-0.078, 0.012)	0.153	-0.007 (-0.018, 0.004)	0.223	-0.028 (-0.131, 0.074)	0.582
<b>Model 2 (reference cohort: 1963)<sup>b</sup></b>								
$\beta_{1958}(CSSI \times 1958 \text{ cohort})$	0.023 (-0.041, 0.087)	0.473	-0.019 (-0.069, 0.030)	0.438	0.004 (-0.005, 0.013)	0.421	-0.002 (-0.074, 0.070)	0.952
$\beta_{1959}(CSSI \times 1959 \text{ cohort})$	0.012 (-0.044, 0.068)	0.663	0.013 (-0.041, 0.066)	0.633	-0.004 (-0.016, 0.009)	0.555	0.013 (-0.053, 0.078)	0.702
$\beta_{1960}(CSSI \times 1960 \text{ cohort})$	0.028 (-0.042, 0.099)	0.423	-0.098 (-0.148, -0.049)	0.000	0.005 (-0.007, 0.017)	0.440	-0.062 (-0.169, 0.046)	0.255
$\beta_{1961}(CSSI \times 1961 \text{ cohort})$	0.006 (-0.083, 0.094)	0.898	-0.058 (-0.115, -0.002)	0.044	0.004 (-0.020, 0.027)	0.763	-0.060 (-0.152, 0.033)	0.203
$\beta_{1962}(CSSI \times 1962 \text{ cohort})$	0.015 (-0.056, 0.085)	0.677	-0.036 (-0.080, 0.008)	0.103	-0.006 (-0.018, 0.005)	0.283	-0.033 (-0.136, 0.071)	0.532

Notes:

Coef. denotes coefficient.

CSSI denotes mean-centered cohort size shrinkage index at the prefecture level.

Numbers in the parentheses are 95% confidence intervals.

<sup>a</sup>Adjusted for cohort, CSSI, gender, marital status, provincial fixed effects.

<sup>b</sup>Model 1 + additionally adjusted for education.