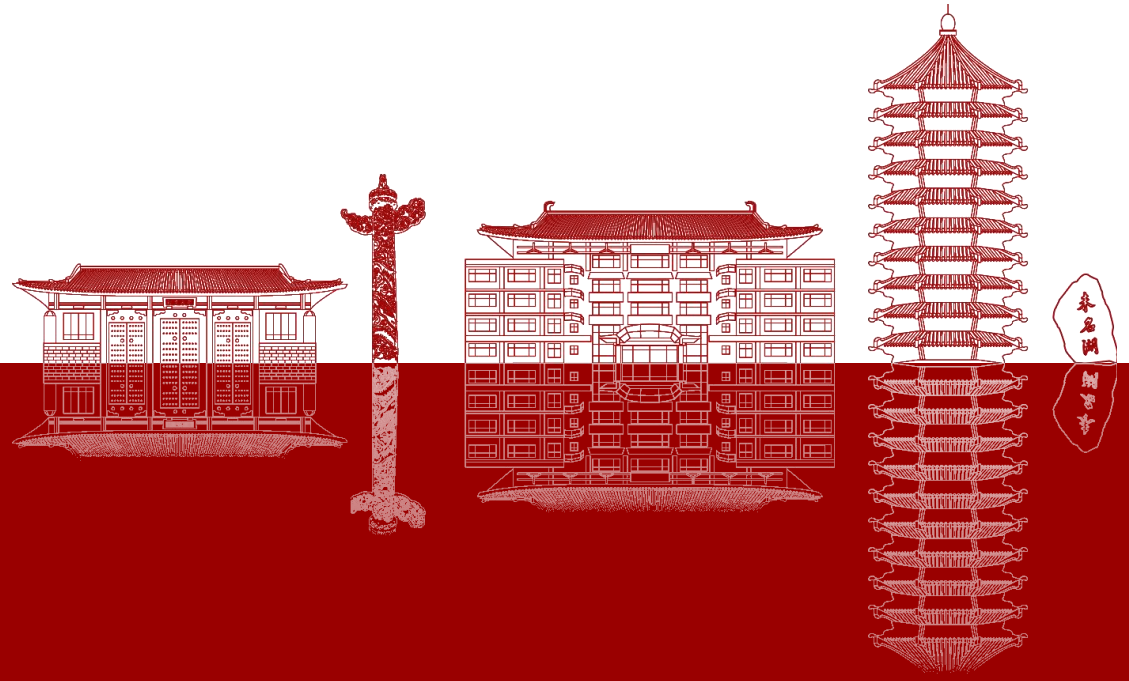
Analysis of the Personal Histories of the First Generation of Migrant Workers and Their Health and Retirement Conditions in Later Life

Instructor： Dandan Zhang

Reporter： Xinyuan Lyu



1

Data, Sample Definition, and Sample Overview

1.1 Data

- **CHARLS (China Health and Retirement Longitudinal Study Life History Survey Questionnaire 2014):**
- This dataset includes approximately 20,000 middle-aged and elderly individuals aged 45 and above, offering detailed life course data on their work history, migration history, hukou history, health history, and early life experiences. This rich data resource allows us to depict the life course of migrant workers and to investigate the impact of their experiences on their living conditions in later life.
- **CHARLS first wave (2011):**
- The database encompasses comprehensive data from various aspects of the respondents in 2011, including family, income, social interactions, economic status, health, medical care, and children.

1.2 Core Definations

- **1. Migrant workers (After 1990)：** Initially holding a rural hukou, and have engaged in non-steady non-agricultural employment or non-agricultural self-employment across counties, and their first cross-county work experience occurred after 1990.
- **2. Workers within the county with agricultural hukou:** Originally holding a rural hukou, and have engaged in non-steady non-agricultural employment or non-agricultural self-employment within the counties and do not have cross-county work experience.
- **3. Traditional Farmer:** Originally holding a rural hukou, and have never had any non-agricultural experiences.
- **4. Urban local residents:** The original (first) hukou was non-agricultural.

1.3 Sample size

- **Migrant workers of different generations:**
- Born before 1950: 94
- Born between 1950 and 1959: 233
- Born between 1960-1969: 561
- Born after 1970: 217
- Sum: 1,105

1.Migrant workers (After 1990)： 1,105

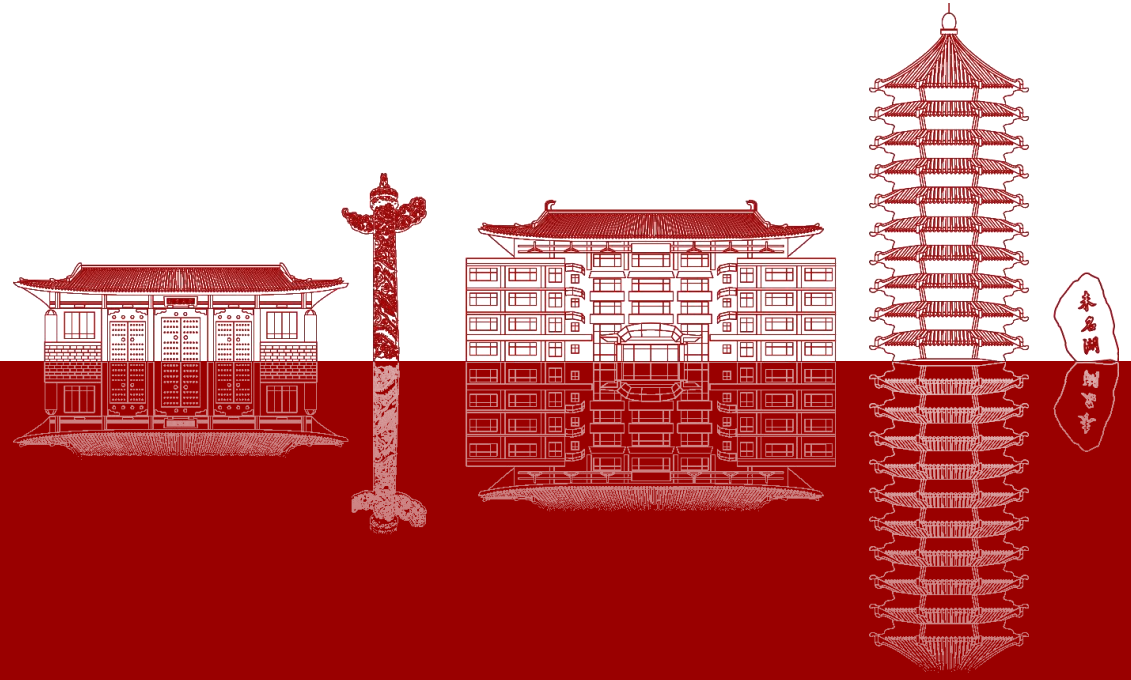
2.Workers within the county with agricultural hukou： 5193

3.Traditional Farmer： 10,338

4.Urban local residents： 1984

2

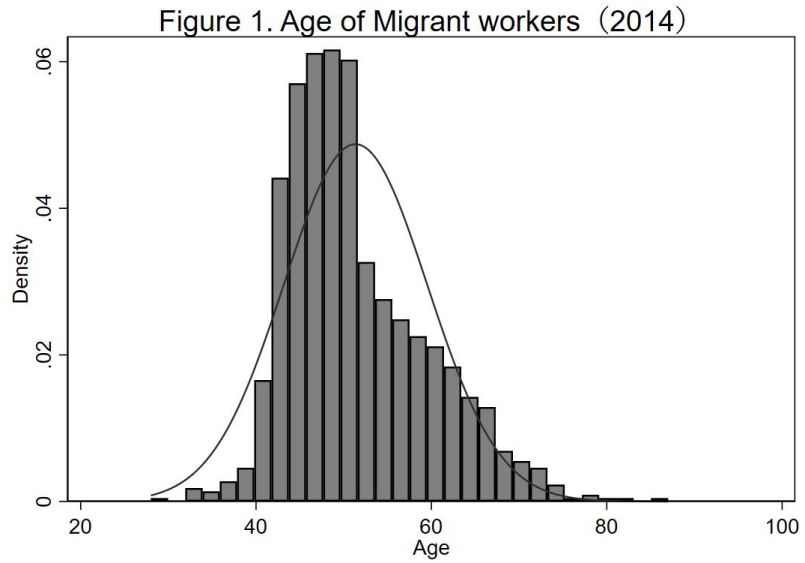
Basic Demographic Characterization of Migrant Workers



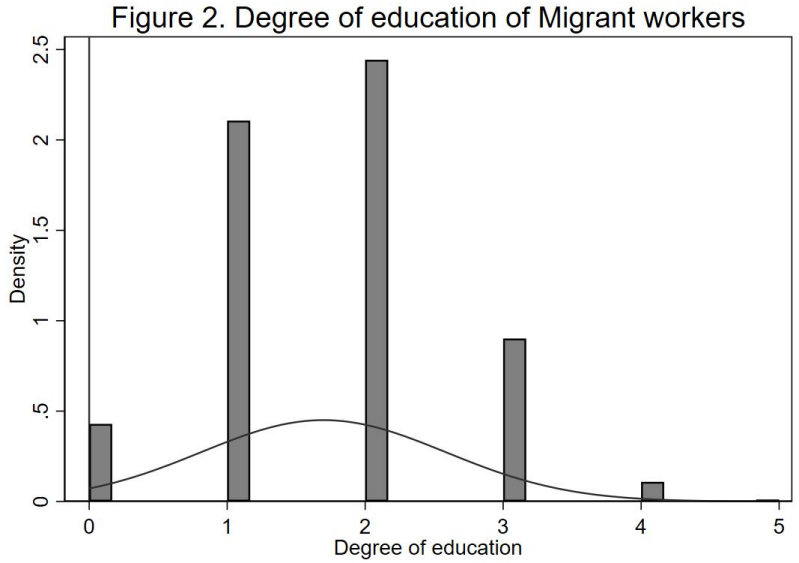
2.1 Gender

Gender： male 613 (55.48%)； female 492 (44.52%)

2.2 Current age（2014）



2.3 Degree of education



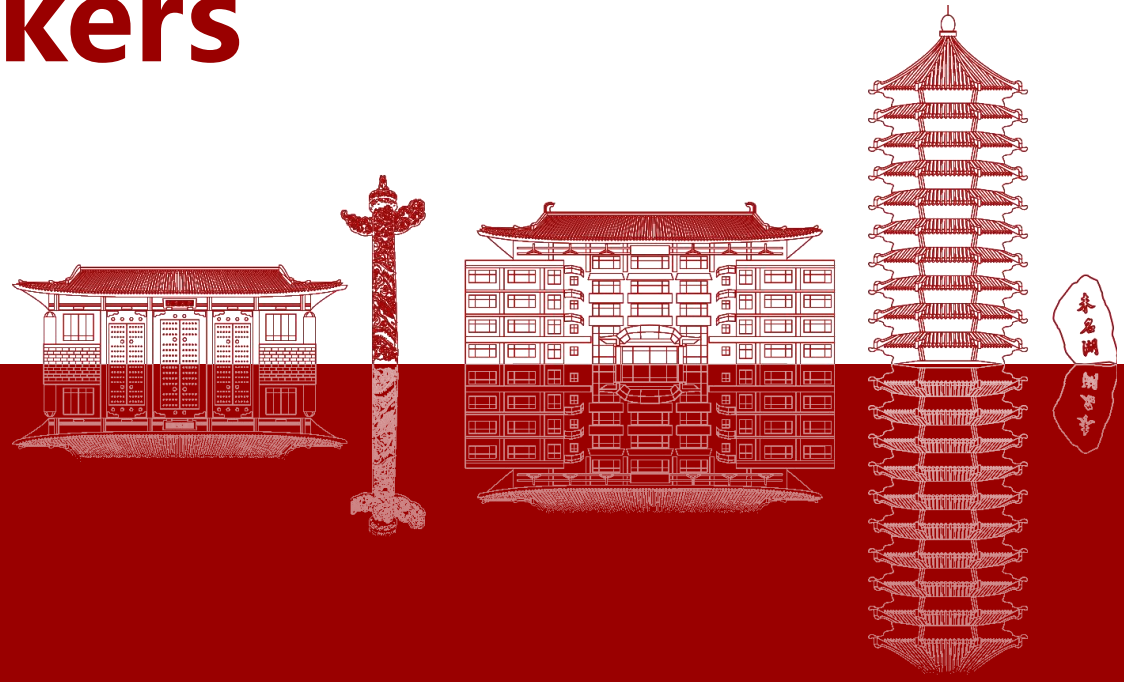
0：No formal education；
1：Primary school；
2：Junior high school；
3：High school；
4：Bachelor or college degree

2.4 The province currently living in

Province	Freq.	Percent
Sichuan	97	8.78
Guangdong	84	7.6
Anhui	82	7.42
Henan	81	7.33
Jiangxi	75	6.79
Zhejiang	72	6.52
Hunan	68	6.15
Shandong	68	6.15
Hebei	56	5.07
Neimenggu	50	4.52
Guangxi	44	3.98
Yunnan	41	3.71
Hubei	39	3.53
Jiangsu	33	2.99
Shaanxi	29	2.62
Liaoning	24	2.17
Shanxi	24	2.17
Gansu	22	1.99
Jilin	21	1.9
Fujian	19	1.72
Guizhou	17	1.54
Heilongjiang	15	1.36
Tianjin	15	1.36
Chongqing	13	1.18
Qinghai	7	0.63
Shanghai	4	0.36
Xinjiang	4	0.36
Beijing	1	0.09
Total	1,105	100

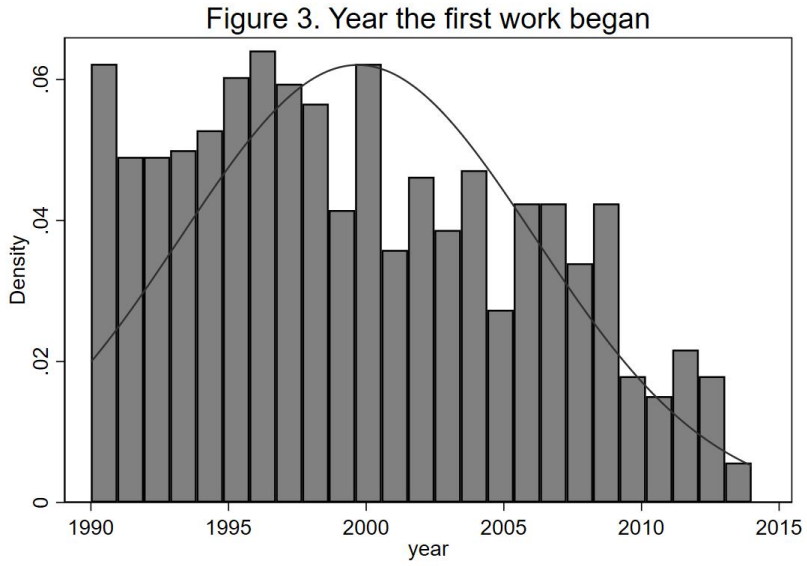
3

Personal history of migrant workers



3.1 Work history

3.1.1 Year the first work began



3.1.2 Age the first work began

3.1.3 Total number of works in the life

1：550（49.77％）；2：318 （28.78）；3 and above：237（21.45%）

3.1 Work history

3.1.4 The duration of one work

Figure 5.1 Duration of the first work

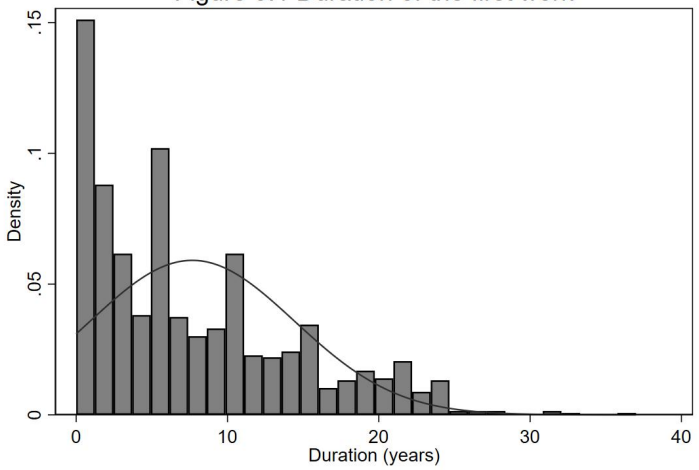


Figure 5.2 Duration of the second work

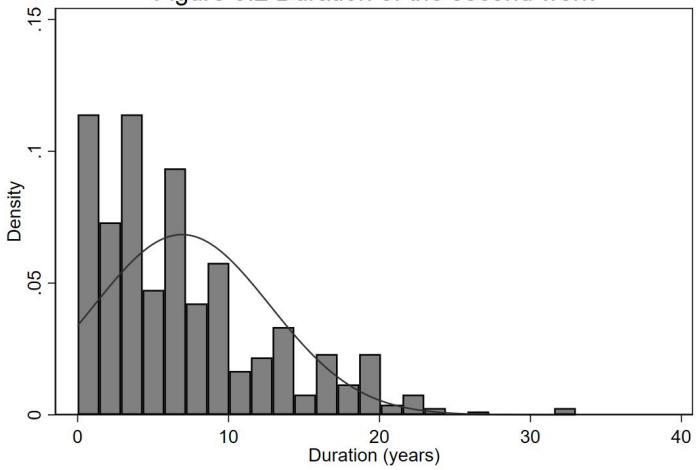


Figure 5.3 Duration of the third work

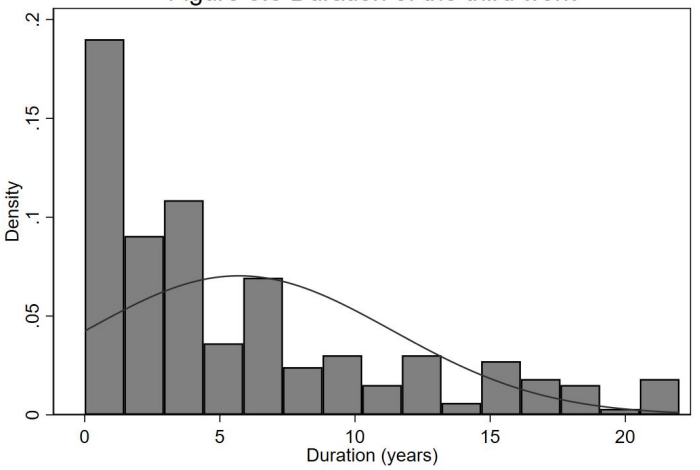


Figure 5.4 Difference in duration between work 2,1

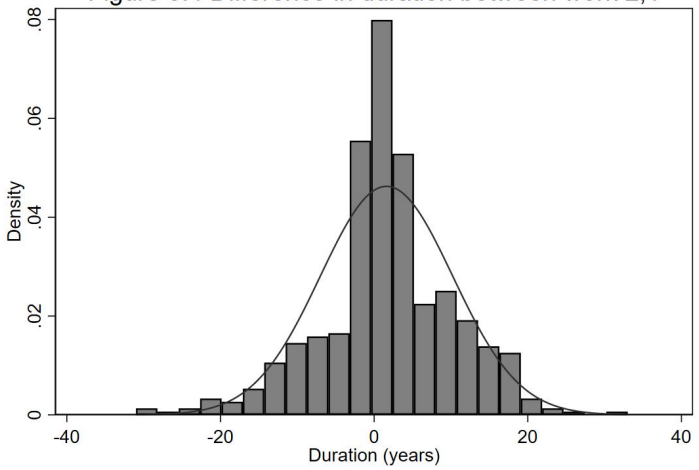
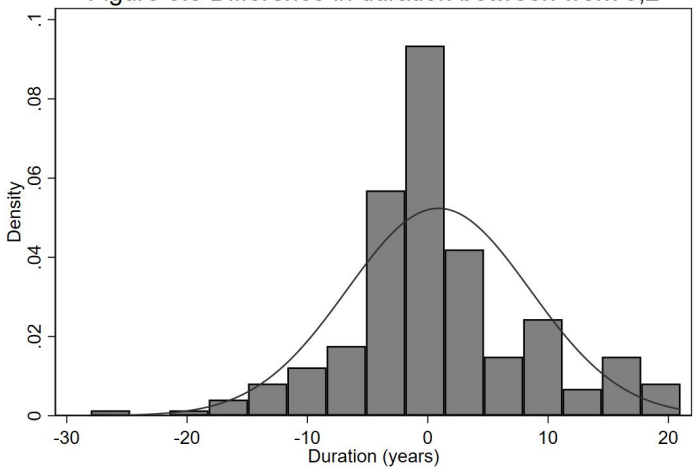


Figure 5.5 Difference in duration between work 3,2



less than one year are recorded as 0.

3.1 Work history

3.1.5 Wage distribution

Figure 6.1.1 early income work 1

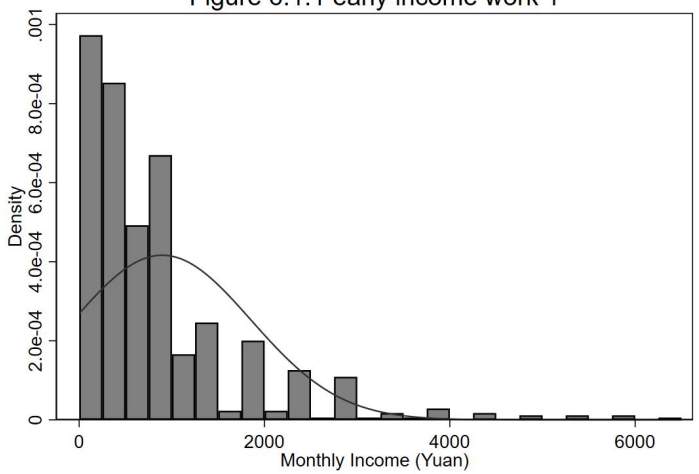


Figure 6.1.2 Defference in late and early income of work 1

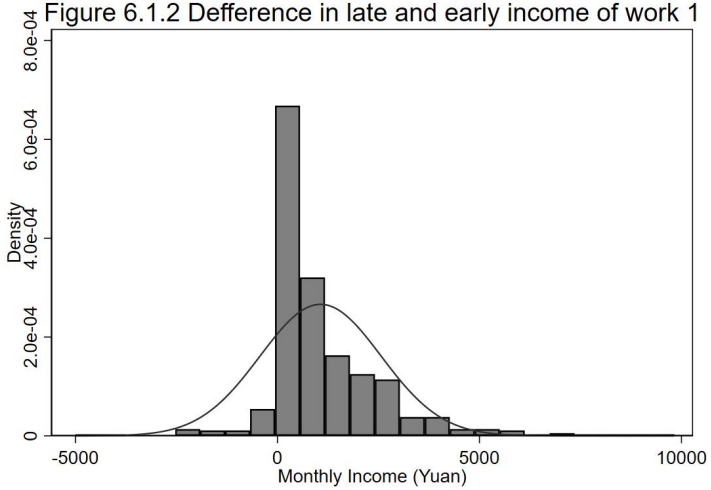


Figure 6.2.1 early income work 2

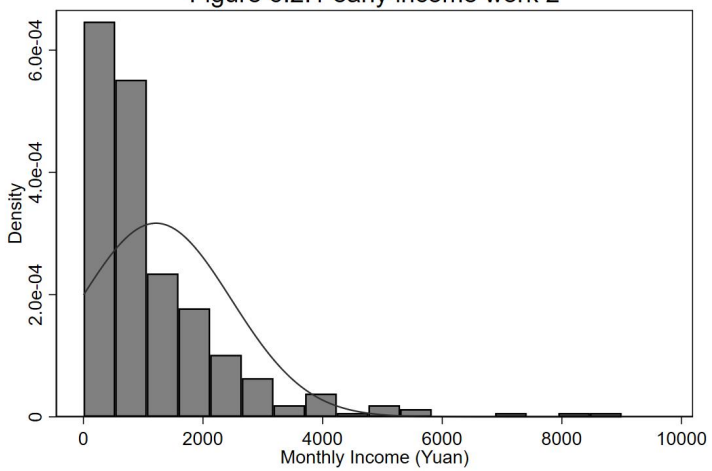
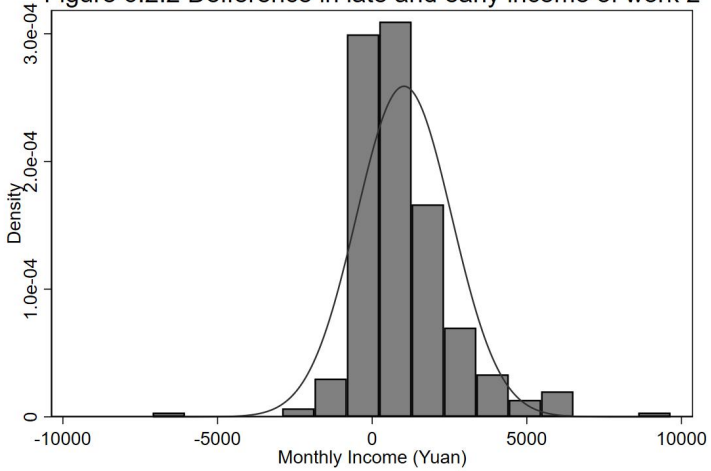


Figure 6.2.2 Defference in late and early income of work 2



3.1 Work history

3.1.5 Wage distribution

Figure 6.3.1 early income work 3

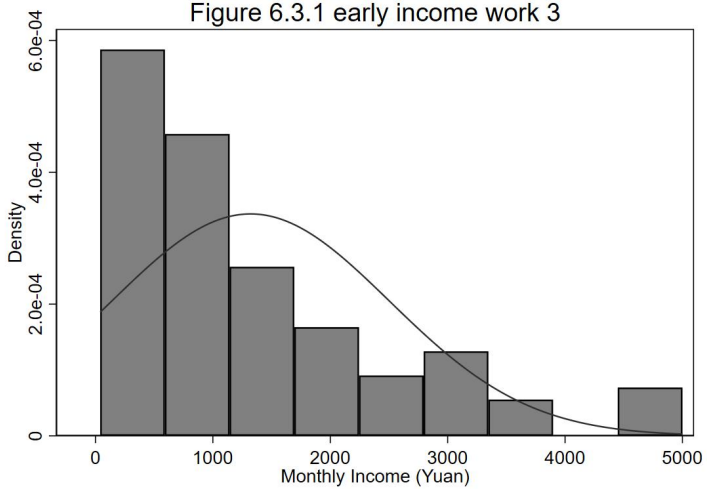


Figure 6.3.2 Defference in late and early income of work 3

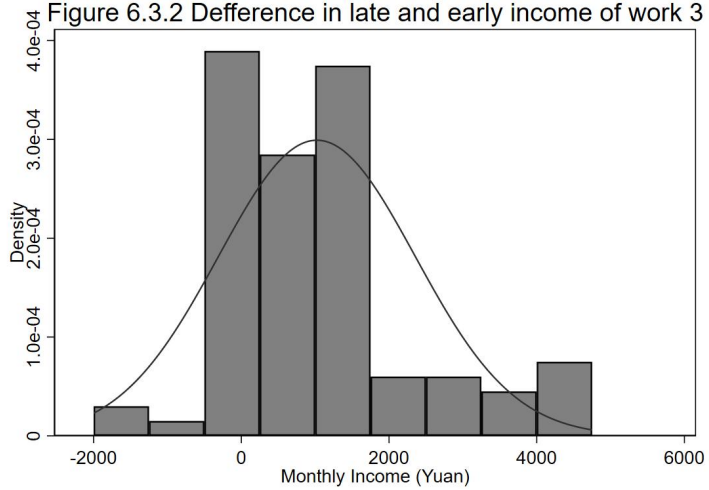


Figure 6.4 Defference in income of work 2,1

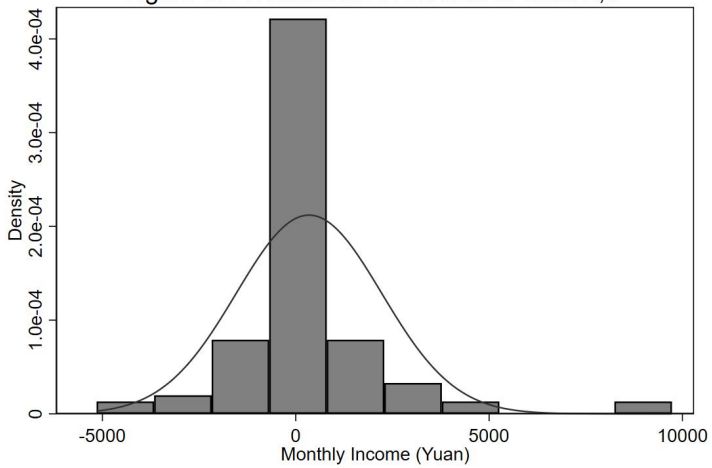
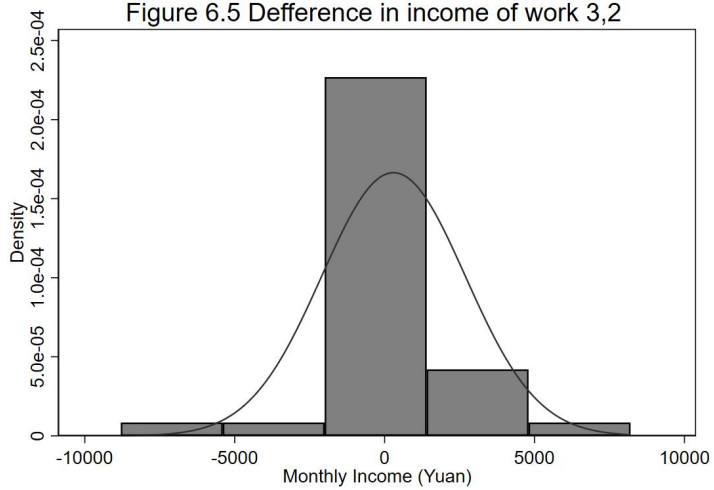


Figure 6.5 Defference in income of work 3,2



3.2 Health and injury history

3.2.1 Disability due to injury or illness

Disability due to injury or illness after Migrant workers experience： 70 （6.33%）
（Non migrant workers group is 8.21%）

Disabled by work injury： 25（2.26%）
（Non migrant workers group is 1.71%）

3.2.2 The direct negative result of disability

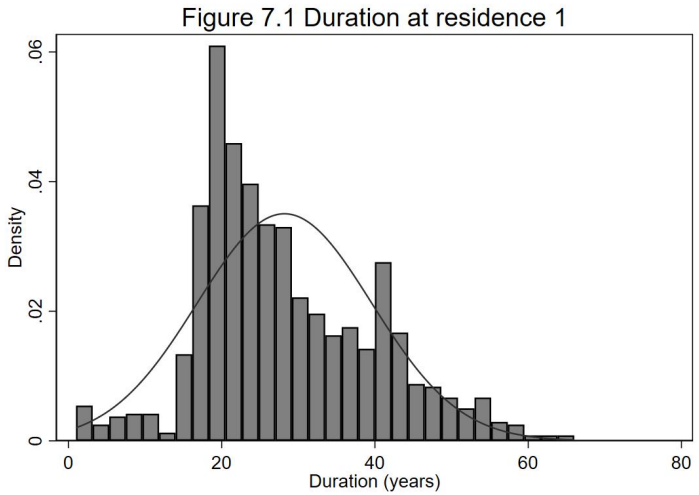
less income: 28
failed to get promoted: 8
fired: 12
reduced working responsibility: 66
Job and qualifications do not match: 10
bullying: 6

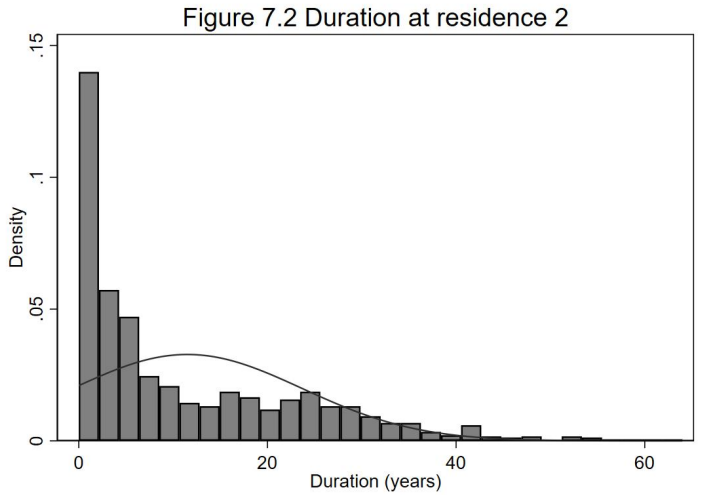
3.3 Residence Histoy

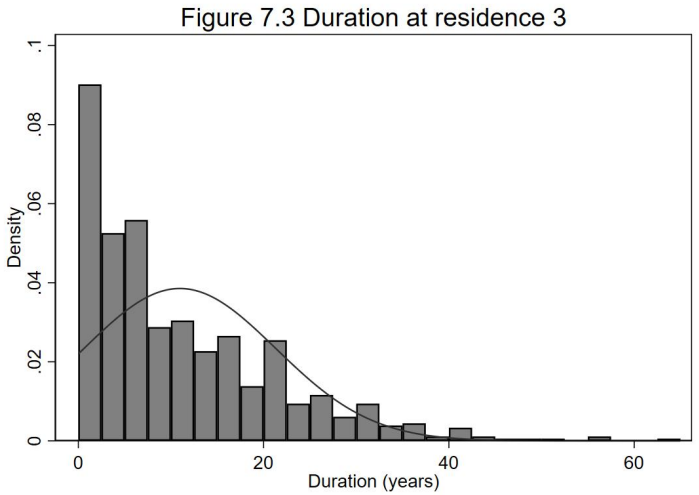
3.3.1 Number of places ever lived

2 places：378
3 places：399
4 places：123
5 places：110
6 places and above：94

3.3.2 Period of each residence







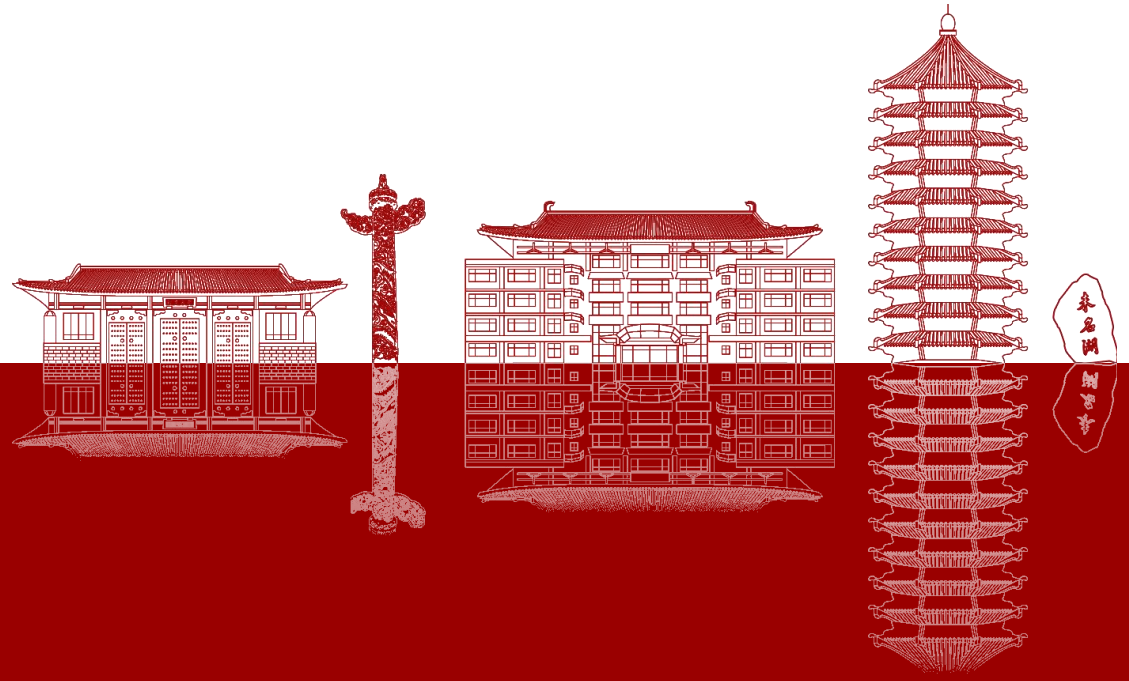
3.4 Hukou History

	initial	First change	Second change	Third change	Fourth change
Only hukou type change	N/A	66	20	1	0
Only hukou location change	N/A	235	54	10	2
Both change	N/A	109	19	2	1
Agricultural hukou	1105	930	891	888	887

eventually settled down as urban hukou：about 220/1105（19.91%）

4

Comparison of the situation in old age (2011)



4.1Comparable samples and matching variables

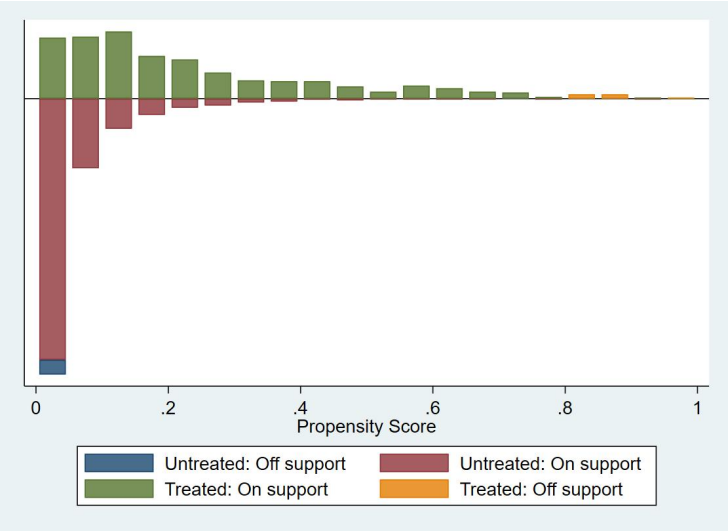
Migrant workers (After 1990) compared with：

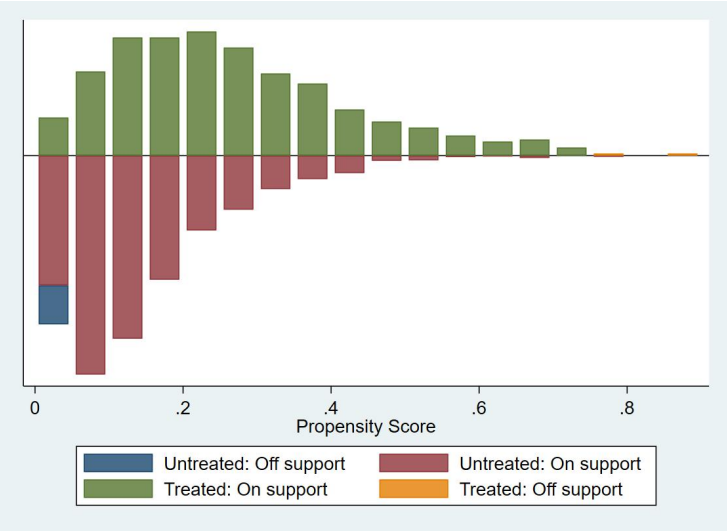
1.Traditional Farmer； 2.Workers within the county with agricultural hukou； 3.Urban local residents

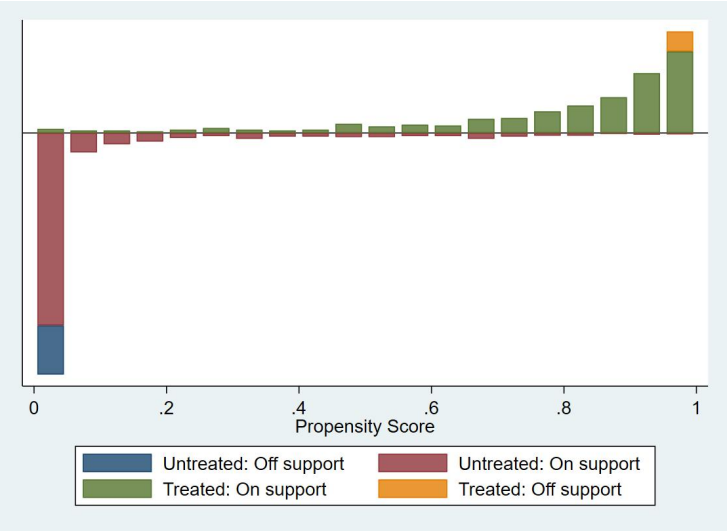
matching variables：

Individual level: gender, age, education level, first location, first residence type,

family level: parents' education level, whether parents are party member, number of siblings, early relationship with parents, whether have famine in childhood, family economic conditions in childhood







4.2 Results (All regressions controlled for early characteristic variables)

4.2.1 Work and retirement

	Compared to farming			Compared to worker within county			Compared to urban local residents		
Dependent Variables	migrant workers	Obs	R^2	migrant workers	Obs	R^2	migrant workers	Obs	R^2
Agricultural hukou	**-0.0545*****	6405	0.193	**0.0297***	2654	0.289	**0.5076*****	1014	0.744
	(0.0143)			(0.0158)			(0.0577)		
Ever steady non-agricultural employed	**0.0879*****	6405	0.154	0.0122	2654	0.155	**-0.2299*****	1014	0.525
	(0.0126)			(0.0149)			(0.0843)		
Ever non- agricultural self-employed	**0.4872*****	6405	0.490	**0.0854*****	2654	0.113	**0.1641****	1014	0.274
	(0.0248)			(0.0280)			(0.0797)		
Expect high retirement time point	**-0.2657*****	6371	0.133	-0.0247	2644	0.172	0.0031	1004	0.306
	(0.0228)			(0.0224)			(0.0558)		
Rely on children	**-0.0747*****	6197	0.131	-0.0158	2576	0.194	**0.2400*****	975	0.469
	(0.0224)			(0.0234)			(0.0712)		
Rely on saving	**0.0279****	6197	0.067	0.0152	2576	0.087	-0.0048	975	0.170
	(0.0131)			(0.0140)			(0.0391)		
Rely on pension	**0.0523*****	6197	0.174	-0.0090	2576	0.215	**-0.2641*****	975	0.525
	(0.0158)			(0.0178)			(0.0718)		
employee pensions	**0.0873*****	6366	0.108	0.0108	2642	0.153	**-0.2347*****	1009	0.550
	(0.0141)			(0.0163)			(0.0841)		
rural pension insurance	**-0.0290****	6365	0.291	**-0.0256***	2640	0.271	0.0213	1000	0.257
	(0.0122)			(0.0139)			(0.0234)		
Urban Residents' Pension Insurance	0.0072	6365	0.062	0.0017	2640	0.109	-0.0144	1000	0.148
	(0.0051)			(0.0061)			(0.0528)		

4.2 Results (All regressions controlled for early characteristic variables)

4.2.2 Income, expenditure and wealth

	Compared to farming			Compared to worker within county			Compared to urban local residents		
Dependent Variables (ln)	migrant workers	Obs	R^2	migrant workers	Obs	R^2	migrant workers	Obs	R^2
expenditure on non-durable goods PC	**0.2542***** (0.0375)	6329	0.185	0.0476 (0.0385)	2620	0.251	-0.0894 (0.1449)	993	0.357
expenditure on non-durable goods PC (exclude medicine)	**0.2750***** (0.0359)	6329	0.212	0.0521 (0.0371)	2620	0.278	-0.0986 (0.1479)	993	0.365
personal income	**2.0047***** (0.2224)	6333	0.315	-0.0706 (0.2267)	2623	0.228	-0.5406 (0.6854)	984	0.358
family income	**0.3863***** (0.0845)	6104	0.183	-0.0108 (0.0867)	2554	0.203	**-0.5761**** (0.2588)	959	0.283
family income PC	**0.3972***** (0.0778)	6103	0.179	-0.0262 (0.0801)	2550	0.207	**-0.5620**** (0.2226)	959	0.337
Family wealth	**0.2784***** (0.0669)	5911	0.216	0.0533 (0.0689)	2451	0.234	-0.1578 (0.2341)	928	0.337
Family wealth PC	**0.3029***** (0.0683)	5913	0.190	0.0793 (0.0705)	2452	0.214	-0.0856 (0.2390)	928	0.338

4.2 Results (All regressions controlled for early characteristic variables)

4.2.3 Health

	Compared to farming			Compared to worker within county			Compared to urban local residents		
Dependent Variables	migrant workers	Obs	R^2	migrant workers	Obs	R^2	migrant workers	Obs	R^2
Self-rated health GVG	**0.0525****	6378	0.084	-0.0053	2647	0.108	**-0.1678***	1006	0.181
	(0.0222)			(0.0245)			(0.0920)		
Number of chronic	-0.0467	6383	0.119	0.0291	2650	0.152	-0.0437	1008	0.234
	(0.0614)			(0.0611)			(0.2934)		
Moderate or higher pain	-0.0326	6370	0.121	0.0060	2647	0.114	-0.0057	1003	0.185
	(0.0206)			(0.0213)			(0.0653)		
Internal pain	-0.0225	6375	0.115	-0.0063	2647	0.116	-0.0086	1004	0.152
	(0.0156)			(0.0161)			(0.0522)		
ADL hard	-0.0119	6272	0.123	0.0072	2594	0.112	0.0010	988	0.194
	(0.0160)			(0.0160)			(0.0587)		
IADL hard	-0.0232	6277	0.126	0.0086	2594	0.144	0.0345	988	0.195
	(0.0171)			(0.0176)			(0.0592)		
CESD score	**-1.0428*****	5716	0.158	-0.0756	2337	0.158	0.7911	904	0.224
	(0.3171)			(0.3224)			(1.2451)		
Hypertension	-0.0208	6375	0.093	-0.0126	2646	0.120	-0.0117	1006	0.200
	(0.0229)			(0.0236)			(0.0986)		
Dyslipidemia	0.0117	6227	0.080	0.0122	2604	0.113	-0.0264	998	0.174
	(0.0135)			(0.0145)			(0.0715)		
Hyperglycemia	0.0017	6307	0.036	0.0022	2629	0.074	-0.0001	999	0.159
	(0.0102)			(0.0114)			(0.0564)		
Cancer or tumor	-0.0066*	6346	0.025	-0.0026	2638	0.048	-0.0309	1004	0.113
	(0.0039)			(0.0038)			(0.0195)		
Chronic lung disease	0.0152	6354	0.053	0.0201	2640	0.091	-0.0691	1002	0.165
	(0.0153)			(0.0158)			(0.0519)		
Chronic liver disease	-0.0037	6332	0.048	0.0016	2623	0.071	-0.0052	1001	0.101
	(0.0094)			(0.0104)			(0.0384)		
Cardiopathy	-0.0068	6339	0.095	-0.0026	2631	0.136	-0.0065	1000	0.215
	(0.0136)			(0.0133)			(0.0692)		
Stroke	-0.0032	6363	0.036	-0.0000	2640	0.063	-0.0091	1005	0.164
	(0.0058)			(0.0055)			(0.0182)		
Chronic nephrosis	-0.0011	6334	0.050	-0.0126	2633	0.082	0.0101	1005	0.143
	(0.0117)			(0.0129)			(0.0566)		
Chronic digestive tract diseases	-0.0290	6361	0.056	-0.0044	2643	0.084	0.0091	1007	0.131
	(0.0206)			(0.0214)			(0.0919)		
Smoke	-0.0265	6380	0.545	-0.0156	2650	0.457	-0.0031	1005	0.522
	(0.0178)			(0.0198)			(0.0814)		
Drink	0.0099	6378	0.271	0.0221	2648	0.263	0.0687	1004	0.363
	(0.0204)			(0.0223)			(0.0797)		

4.2 Results (All regressions controlled for early characteristic variables)

4.2.4 Medical utilization

	Compared to farming			Compared to worker within county			Compared to urban local residents		
Dependent Variables	migrant workers	Obs	R^2	migrant workers	Obs	R^2	migrant workers	Obs	R^2
Outpatient	0.0091	6342	0.066	0.0079	2633	0.081	**0.1601***	1000	0.157
	(0.0195)			(0.0209)			(0.0882)		
Inpatient	0.0120	6370	0.043	0.0173	2646	0.062	0.0116	1003	0.153
	(0.0137)			(0.0152)			(0.0621)		
High level outpatient	0.0107	6338	0.038	0.0040	2631	0.068	0.0065	1000	0.161
	(0.0120)			(0.0132)			(0.0695)		
Med insurance for urban employees	**0.0279*****	6355	0.103	-0.0020	2639	0.167	-0.1300	1000	0.485
	(0.0077)			(0.0096)			(0.0980)		
Med insurance for urban residents	**0.0173***	6355	0.216	-0.0045	2639	0.146	**-0.1512****	1000	0.253
	(0.0092)			(0.0113)			(0.0649)		
NCMS	**-0.0539*****	6355	0.120	0.0100	2639	0.218	**0.4331*****	1000	0.667
	(0.0176)			(0.0188)			(0.0664)		
Unified Residents' Med insurance	0.0056	6355	0.197	0.0036	2639	0.227	-0.0203	1000	0.357
	(0.0064)			(0.0071)			(0.0291)		
Free medical service	**0.0090***	6355	0.019	0.0027	2639	0.062	**-0.0888****	1000	0.232
	(0.0047)			(0.0057)			(0.0450)		

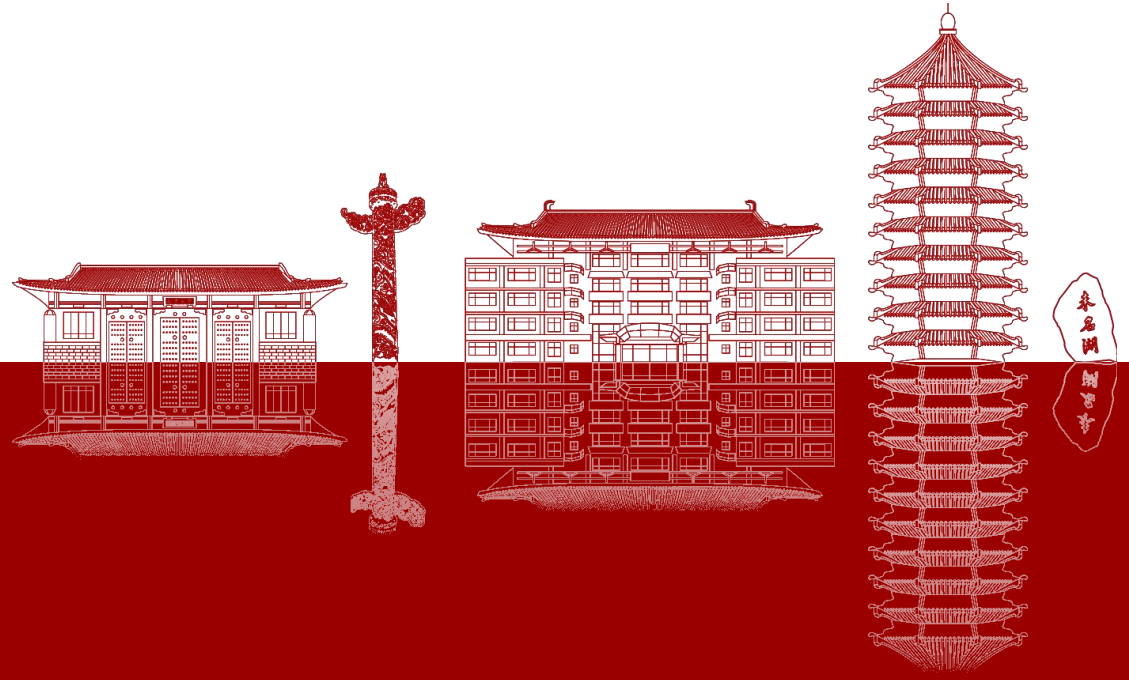
4.2 Results (All regressions controlled for early characteristic variables)

4.2.5 Reproductive decisions and children

	Compared to farming			Compared to worker within county			Compared to urban local residents		
Dependent Variables	migrant workers	Obs	R^2	migrant workers	Obs	R^2	migrant workers	Obs	R^2
Age of first bearing	**0.4871****	5995	0.129	**0.6901*****	2536	0.132	0.7922	967	0.232
	(0.2481)			(0.2579)			(0.9477)		
Number of children	**-0.1124****	6282	0.375	-0.0800	2608	0.422	0.1495	991	0.508
	(0.0500)			(0.0507)			(0.1724)		
Number of grandchildren	**-0.2019****	6282	0.556	-0.1356	2608	0.581	0.1816	991	0.600
	(0.0887)			(0.0905)			(0.2999)		
Number of children living with	-0.0018	4389	0.270	-0.0660	1950	0.307	0.1945	709	0.347
	(0.0467)			(0.0483)			(0.1514)		
Maximum income of children	-0.0425	4788	0.239	-0.0617	2043	0.278	-0.3157	827	0.413
	(0.0895)			(0.0959)			(0.4818)		
Maximum education of children	**0.4021*****	5466	0.158	-0.0202	2068	0.218	-0.3133	786	0.379
	(0.1013)			(0.1064)			(0.4010)		
Children as white-collar	0.0192	5816	0.100	**-0.0546***	2271	0.141	-0.0804	791	0.254
	(0.0260)			(0.0279)			(0.1364)		
Children as blue collar	**-0.0542***	5816	0.140	0.0077	2271	0.160	0.0462	791	0.312
	(0.0292)			(0.0301)			(0.1149)		
Children as farmer	**-0.0430***	5816	0.261	0.0062	2271	0.256	0.0995	791	0.327
	(0.0236)			(0.0236)			(0.0660)		
Children get non-agricultural hukou	**0.0772*****	5037	0.113	0.0146	1730	0.239	**-0.2648*****	624	0.573
	(0.0290)			(0.0313)			(0.0871)		

5

Comparison of migrant workers in different generations



5.1 Demographic

According to the start time of the first period of work, the migrant workers are divided into four groups: 90-95, 95-00, 00-05, 05 and after

	Junior high school or higher	Senior high school or higher	Male	Siblings
95-00	0.0425	0.0158	-0.0240	0.0120
	(0.0325)	(0.0122)	(0.0386)	(0.1468)
00-05	-0.0091	0.0062	**-0.0806***	0.1103
	(0.0327)	(0.0116)	(0.0418)	(0.1497)
05+	-0.0165	-0.0002	**-0.1182*****	0.1299
	(0.0315)	(0.0100)	(0.0394)	(0.1414)
Observations	1105	1105	1105	1096
R^2	0.004	0.002	0.009	0.001

5.1 Job characteristics (All regressions controlled for early characteristic variables)

	Age starting first work	Duration of the first work	Initial wages of the first work	Ever steady non-agricultural employed	Ever non-agricultural self-employed	Employers in private sector	Non-mainland enterprise
95-00	-0.4996	**-1.9802*** **	310.0408	0.0186	0.0089	-0.0131	0.0009
	(0.4077)	(0.6943)	(232.7966)	(0.0253)	(0.0509)	(0.0415)	(0.0263)
00-05	-0.2333	**-3.3509*** **	**341.6537** *	**0.0959*** **	-0.0280	-0.0425	-0.0063
	(0.4931)	(0.6614)	(152.8021)	(0.0307)	(0.0566)	(0.0438)	(0.0276)
05+	0.4217	**-6.9053*** **	**780.0656*** **	0.0224	-0.0258	-0.0517	**-0.0418** *
	(0.5287)	(0.6577)	(185.7697)	(0.0273)	(0.0542)	(0.0444)	(0.0248)
Observations	1018	1024	824	1024	1024	1023	1023
R^2	0.323	0.417	0.252	0.374	0.262	0.425	0.265

5.2 Characteristics of old age (All regressions controlled for early characteristic variables)

5.2.1 Work and retirement

Dependent Variables	95-00	00-05	05+	Obs	R^2
Agricultural hukou	-0.0582	-0.0586	0.0485	500	0.643
	(0.0425)	(0.0407)	(0.0358)		
Expect high	-0.0352	-0.1040	-0.1039	499	0.405
retirement time point	(0.0726)	(0.0715)	(0.0720)		
Rely on children	**-0.1627****	**-0.1474***	-0.0320	481	0.467
	(0.0794)	(0.0750)	(0.0740)		
Rely on saving	0.0665	0.0069	-0.0200	481	0.382
	(0.0529)	(0.0489)	(0.0445)		
Rely on pension	0.0537	0.0812	0.0336	481	0.512
	(0.0624)	(0.0581)	(0.0641)		
employee pensions	-0.0472	0.0704	-0.0523	560	0.559
	(0.0480)	(0.0527)	(0.0537)		
rural pension	-0.0135	-0.0018	0.0319	499	0.370
insurance	(0.0455)	(0.0465)	(0.0520)		
Urban Residents'	0.0023	-0.0056	-0.0088	499	0.426
Pension Insurance	(0.0233)	(0.0176)	(0.0220)		

5.2 Characteristics of old age (All regressions controlled for early characteristic variables)

5.2.2 Income, expenditure and wealth

Dependent Variables	95-00	00-05	05+	Obs	R^2
expenditure on non-durable goods PC	-0.1626	-0.1290	-0.0815	494	0.503
	(0.1154)	(0.1088)	(0.1180)		
expenditure on non-durable goods PC (exclude medicine)	-0.1321	-0.0343	-0.0197	494	0.518
	(0.1112)	(0.1074)	(0.1139)		
personal income	0.2755	-0.1670	**1.3238***	498	0.457
	(0.7493)	(0.7630)	(0.7343)		
family income	0.1233	**-0.4470***	0.1648	478	0.449
	(0.2369)	(0.2658)	(0.2248)		
family income PC	-0.0004	**-0.4655***	0.1201	478	0.473
	(0.2239)	(0.2464)	(0.2317)		
Family wealth	-0.0833	0.0169	-0.0727	453	0.512
	(0.2059)	(0.1808)	(0.1996)		
Family wealth PC	-0.1789	-0.0885	-0.1418	453	0.491
	(0.2061)	(0.1853)	(0.2162)		

5.2 Characteristics of old age (All regressions controlled for early characteristic variables)

5.2.3 Health

Dependent Variables	95-00	00-05	05+	Obs	R^2
Self-rated health GVG	-0.1003	0.0189	-0.0285	500	0.410
	(0.0786)	(0.0792)	(0.0793)		
Number of chronic	0.0906	-0.1423	-0.0571	500	0.407
	(0.2044)	(0.2068)	(0.1890)		
Moderate or higher pain	-0.0980	-0.1087	-0.1161	499	0.349
	(0.0696)	(0.0710)	(0.0796)		
Internal pain	-0.0414	-0.0283	-0.0341	499	0.355
	(0.0543)	(0.0501)	(0.0590)		
ADL hard	0.0091	**-0.0922***	-0.0412	490	0.372
	(0.0534)	(0.0480)	(0.0515)		
IADL hard	**-0.1237****	**-0.1622*****	**-0.1028****	490	0.439
	(0.0518)	(0.0523)	(0.0520)		
CESD score	0.0937	-1.1573	0.3810	416	0.487
	(1.0626)	(1.0375)	(1.2107)		
Hypertension	0.0252	0.0239	0.0215	498	0.406
	(0.0740)	(0.0727)	(0.0730)		
Dyslipidemia	-0.0031	-0.0631	-0.0385	494	0.376
	(0.0443)	(0.0468)	(0.0429)		
Hyperglycemia	-0.0059	-0.0067	-0.0118	496	0.383
	(0.0392)	(0.0362)	(0.0301)		
Cancer or tumor	0.0023	0.0230	0.0068	499	0.439
	(0.0070)	(0.0182)	(0.0076)		
Chronic lung disease	-0.0062	0.0611	0.0352	498	0.359
	(0.0517)	(0.0559)	(0.0512)		
Chronic liver disease	-0.0055	-0.0511	**-0.0545***	494	0.302
	(0.0372)	(0.0316)	(0.0300)		
Cardiopathy	0.0087	-0.0402	-0.0285	494	0.426
	(0.0421)	(0.0439)	(0.0422)		
Stroke	0.0075	-0.0056	-0.0090	498	0.534
	(0.0191)	(0.0144)	(0.0159)		
Chronic nephrosis	0.0432	0.0255	0.0256	498	0.371
	(0.0356)	(0.0349)	(0.0414)		
Chronic digestive tract diseases	0.0691	-0.0335	0.0436	500	0.326
	(0.0787)	(0.0746)	(0.0768)		
Smoke	-0.0599	-0.0365	-0.0900	500	0.661
	(0.0608)	(0.0565)	(0.0635)		
Drink	0.0496	-0.0373	-0.0052	499	0.524
	(0.0761)	(0.0713)	(0.0696)		

5.2 Characteristics of old age (All regressions controlled for early characteristic variables)

5.2.4 Medical Utilization

Dependent Variables	95-00	00-05	05+	Obs	R^2
Outpatient	-0.0406	0.0066	0.0573	494	0.344
	(0.0649)	(0.0721)	(0.0686)		
Inpatient	0.0223	-0.0470	-0.0328	498	0.423
	(0.0461)	(0.0422)	(0.0452)		
High level outpatient	-0.0037	-0.0022	0.0558	494	0.427
	(0.0296)	(0.0376)	(0.0345)		
Med insurance for urban	-0.0009	**0.0333***	-0.0008	497	0.674
employees	(0.0211)	(0.0197)	(0.0182)		
Med insurance for urban	-0.0023	-0.0351	-0.0320	497	0.456
residents	(0.0371)	(0.0329)	(0.0307)		
NCMS	0.0154	0.0053	**0.1038****	497	0.634
	(0.0539)	(0.0531)	(0.0483)		
Unified Residents' Med	-0.0019	0.0081	0.0026	497	0.630
insurance	(0.0231)	(0.0188)	(0.0174)		
Free medical service	-0.0022	0.0223	-0.0003	497	0.409
	(0.0077)	(0.0174)	(0.0079)		

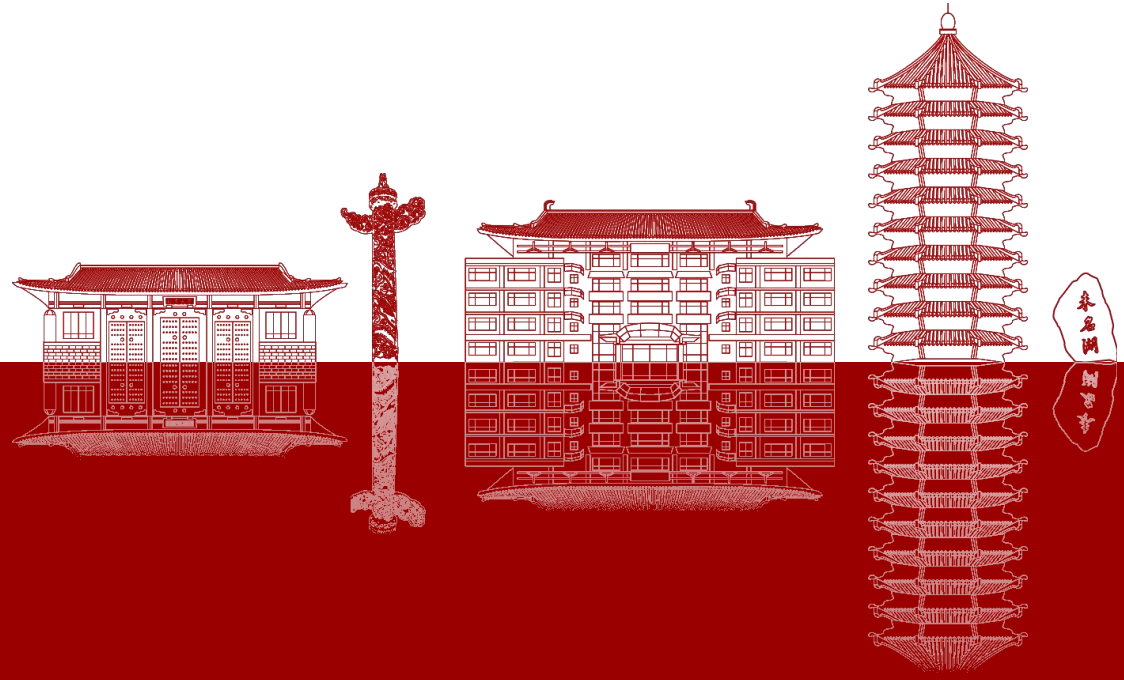
5.2 Characteristics of old age (All regressions controlled for early characteristic variables)

5.2.5 Children and reproductive decisions

Dependent Variables	95-00	00-05	05+	Obs	R^2
Age of first bearing	1.1965	0.8931	-0.1801	481	0.408
	(0.7412)	(0.8437)	(0.7654)		
Number of children	-0.2000	**-0.3179****	-0.0444	517	0.514
	(0.1372)	(0.1378)	(0.1598)		
Number of grandchildren	-0.0625	-0.0431	0.2575	517	0.684
	(0.2413)	(0.2606)	(0.2967)		
Number of children living with	-0.0064	**-0.2693****	0.0490	407	0.507
	(0.1610)	(0.1347)	(0.1786)		
Maximum income of children	-0.3627	0.0179	0.1031	407	0.605
	(0.2621)	(0.2616)	(0.3062)		
Maximum education of children	**-0.6384***	-0.3039	**-0.6086***	382	0.539
	(0.3581)	(0.3418)	(0.3419)		
Children as white-collar	-0.0442	0.0044	-0.0430	431	0.474
	(0.0858)	(0.0863)	(0.0872)		
Children as blue collar	0.0259	0.0080	0.0508	431	0.466
	(0.0962)	(0.0855)	(0.1012)		
Children as farmer	-0.0075	0.0194	0.0270	431	0.566
	(0.0686)	(0.0694)	(0.0686)		
Children get non-agricultural hukou	-0.0903	-0.0085	-0.1698	327	0.529
	(0.1033)	(0.1046)	(0.1062)		

6

Prospection and future work



6. Prospection and future work

First, until now we only merge CHARLS 2011 to the life history data. The future work will merge CHARLS 2011 2013 2015 2018 2020 together with life history data and see whether the old-age outcomes changes over years.

Second, we have not used non-open data yet, and the future work will also track and know the exact counties the migrant workers went and the exact industies they worked in, which means we can combine the county-level datas with indicidual-level datas.

Third, all the work now is just descriptive. We want to find ways to identify the causal implications that how the identity as migrant worker influences one person’s life.

Thanks for Listening!