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Intergenerational Mobility in the United States, 1880-1900

This abstract outlines a study that is in the early stages but for which preliminary results will be available in early 2011. The purpose is to understand intergenerational mobility in the United States in the period 1880-1900. Following the lead of what we regard as seminal work in this area (Landale and Guest, 1990; Ferrie, 2005), we propose to examine the relationships among three dimensions of mobility: 1) occupational mobility, 2) domestic migration, and 3) generational shifts in nativity.

The relationship between immigrant generation and occupational mobility is a critical subject in receiving countries like the United States. Utilizing the National Panel Study of white men in the age cohort of 5-14 (in 1880) and 25-34 (in 1900), Landale and Guest (1990) investigated the effects of nativity on occupational mobility between 1880 and 1900. They found that being in the immigrant generation is a weak predictor of occupational mobility, and that all groups enjoyed a relatively high chance of upward mobility at the time. However, their NPS sample could not link most interstate migrants, and this casts doubt about the findings because interstate migration was highly associated with occupational mobility in the U.S. during the late nineteenth century (Ferrie, 2005; Long and Ferrie, forthcoming).

Ferrie (2005) makes a cross-national comparison of occupational mobility between Britain and the U.S. in the late nineteenth century. His study found that America was less rigid than Britain in terms of father-to-son occupational mobility. The most

striking differences between the two countries were extremely high rates of geographic mobility and the greater distance of movement in the U.S. He suggests that migration was a more effective investment to socioeconomic mobility than education in the U.S. at the time. In a more recent and more rigorous study on the same topic (Long and Ferrie, forthcoming), high chances of upward mobility in the U.S. during the late nineteenth century are linked again to high rates of domestic migration.

By occupational mobility we mean father-son changes across broad occupational categories of farmer, unskilled worker, skilled worker, and white collar. A major structural shift that was in progress at this time was between farm and non-farm occupations, but scholars have also emphasized upward mobility within urban areas. By domestic migration we refer to migration across county lines that moved people from rural to rural, rural to urban, urban to urban, and urban to rural locations. Although the U.S. was in the process of becoming a more urban country at the end of the 19th Century, a considerable share of migration was from rural areas toward newer rural areas closer to the frontier. Finally, we plan to compare experiences of different generations of Americans – immigrant fathers with 1.5 or 2nd generation sons, 2nd generation fathers with 3rd generation sons, and 3rd and later generation fathers with their sons. We presume that mobility patterns of each category will have distinctive origins, destinations, and directions of change. This approach is based on the intuition that no one of these types of mobility can be understood properly without reference to the others. Our initial goal is simply to identify and describe the major patterns, providing a solid starting point for more detailed studies of this period of time.

Research Design

This study is based on the IPUMS 1880-1900 Linked Male File (Ruggles et al, 2010). This file links records for census years 1880 and 1900 for all male residents of the United States. The linked file consists of both household and individual records in the two census years including information of location (state, county, and urban/rural status), nativity (state or country of birth of the person and their parents), and occupation, as well as other demographic and family relation variables.

We analyze the records of fathers in 1880 with those of their sons in 1900. We first select the boys aged 0-15 in 1880 (who became 20-35 in 1900) who were coresiding with their father so that we can create father-son dyads. In order to examine occupational mobility, we further restrict the sample to dyads in which the father was employed in 1880 and the son in 1900. The IPUMS linked file with these sample restrictions includes 8082 father-son dyads.

1. **Immigrant generation** is measured by nativity of fathers (the 3+ generation, the 2nd generation, and immigrants). For parsimony we make no distinction among sons with immigrant fathers, between those who themselves were born in the U.S. (2nd generation) or who immigrated to the U.S. as children (1.5 generation).

2. **Geographic mobility** is based on six categories of location utilizing the variables of urban/rural residential status and within/between county migration. If the son lived in the same county with the same urban/rural status in both 1880 and 1900, we define him as a "stayer," otherwise a "mover". We further distinguished two kinds of stayers (urban and rural) and four different types of movers (rural to other rural, rural to

urban, urban to other urban, and urban to rural movers). "Urban" in either year is defined as a place of 2,500 or more population.

3. **Occupations** are grouped into four categories utilizing the 1950 Census Bureau occupational classification system provided by the IPUMS: 1) White Collar includes the 1950 occupations of "Professional, technical and kindred workers", "Managers, officials, and proprietors", "Clerical and kindred", and "Sales workers". 2) Farmers include "Farm owners and tenants" as well as "Farm managers" and "Farm laborers." 3) Skilled Workers are mainly "Craftsmen" and "Operatives" whereas 4) Unskilled Workers include "Service workers (domestic and non-domestic)" and other "Laborers."

Initial Findings

For the purpose of this abstract, we present three simple tabulations, each of which offers considerable material for discussion and interpretation. These are domestic migration by immigrant generation, occupational mobility by immigrant generation, and occupational mobility by domestic migration.

Table 1 provides the cross-tabulation of migration status (geographic mobility patterns) by fathers' nativity status (immigrant generation). Note first that an absolute majority of the sample (more than 81.1%) has a rural origin in 1880. Rural stayers (sons who lived with their father in a rural area in 1880 and remained in a rural area in the same county in 1900) are the single most common type. The two major geographic mobility patterns at the time, "rural to rural" and moving across counties (25.6%) and "rural to urban" (18.5%), also originated in rural America. While much scholarly attention has

been paid to "rural to urban" migration during the nineteenth century, "rural to rural"

migration has received somewhat less attention. In a separate tabulation (not provided

here), we found that more than a half of "rural to other rural" movers are actually longer

distance inter-state migrants – the sort of people who were settling the American frontier.

Table 1 shows that the sons with 3+ generation fathers are more than half the

sample (68%), followed by those with immigrant fathers (24%) and 2nd generation

fathers (8%). These proportions are consistent with cross-sectional data from the 1880

census 5% and the 1900 census 10% PUMS data.

The cross-tabulation shows that urban vs. rural origin varied greatly by immigrant

generation: About 40 percent of the sons of immigrant fathers' (the 1.5 and 2nd

generation) have urban origins whereas only slightly more than 10 percent of persons

those who have native-born grandparents (more than 3rd generation) have urban origins.

This large difference in initial urban/rural status has consequences for both subsequent

migration and occupational outcomes (Landale and Guest, 1990). With respect to

migration, Table 1 shows that sons with 3+ generation fathers were especially likely to be

rural stayers, and if they moved, they were more likely to move to another rural location

than to an urban place. In contrast, sons of immigrants were equally likely to be a rural

stayer or urban stayer. If they moved from a rural location, their destination was equally

likely to be rural or urban.

Table 1 about here

Table 2 shows occupational mobility patterns by different immigrant generations

– a simple 2-way table of father's and son's occupation tabulated separately for each

immigrant generation. Calculating the overall marginal distributions across all immigrant generations (not shown in the table), we can observe how occupational distributions changed from the father (1880) to son (1900). For example the percentage of farmers dropped from 56.4% to 41.0%. The pattern of structural mobility is consistent with the observations from other studies (Guest, 2005; Ferrie, 2005) characterized by a sharp increase in white collars jobs, a significant reduction of farmers, and a moderate growth in skilled and unskilled jobs.

The sons' distribution of occupations differs across immigrant generations in a way that is consistent with their geographic location. Sons of the 3+ generation are more likely to be farmers (45.6%) than sons of immigrants (30.1%). Surprisingly, sons of immigrants are not disproportionately found among unskilled workers – in fact, while being much less likely to be farmers, they are much more likely (45.9% vs. 22.3%) than 3+ generation sons to be skilled workers. It is difficult to evaluate whether a farmer was a better or worse occupation than an unskilled or skilled worker in this period. The average 1950-based SEI scores provided by IPUMS (White collar=58.1; Farmers=10.3; Skilled workers=23.2; Unskilled workers=9.5) suggest that farmers were hardly different than unskilled workers, but we do not believe these scores fully reflect the social position of farmers at a time when the nation was primarily rural and agricultural.

Shifts among the remaining occupational categories can more easily be interpreted in terms of upward and downward mobility. There seems to be a small advantage of sons of immigrant and 2nd generation fathers in staying in the white collar category, and also in moving from unskilled to skilled and from skilled to white collar. However a large part of the reason for this advantage is the disproportionate movement of

sons of unskilled fathers in the 3+ generation toward farming. In future analyses we will seek to discover whether this shift occurred mainly within rural America and whether it was related to Westward migration.

Table 2 about here

Although less concentrated in farming, the sons of immigrant farmers have a higher rate (65.7%) of inheritance of farming jobs than the sons of 3+generation famers (60.6%) and 2nd generation farmers (56.4%). Landale and Guest (1990) also found a similar tendency and they linked it to the tight-knit nature of immigrant agricultural communities.

How are domestic migration and geographic location associated with occupational mobility? In order to answer this question, Tables 3a and 3b display occupational mobility tables by different categories of domestic migration. Table 3a presents the occupational mobility patterns of the sons with rural fathers. A glimpse of the table suggests that "rural to urban" migration induces higher rates of occupational mobility, but it is not surprising that those who moved from rural areas into the cities were more likely to choose non-farming jobs.

The percentages in upper-left cells in each panel (from white collar fathers to white collar sons) suggest that the sons of white collars are most benefited from "rural to urban" migration and they have every reason to head to the cities: they not only retain their fathers' prestigious jobs in a higher proportion (62.0%) than "rural stayers" (46.5%) or "rural movers" (35.2%) but also have the lowest risk of stepping down to unskilled

workers (8.4%). The sons of skilled workers are also benefited from this type of migration since their chances of upward mobility to white collar jobs are almost tripled (32.7%) compared to those who stayed in rural areas (11.6% for rural stayers and 11.7% for rural movers). In addition, their risk of downward mobility (i.e. becoming famers or unskilled workers) is dramatically reduced (47.5 % for rural stayers; 48.6% for rural movers) to 15.3%.

Tables 3a-3b about here

For the sons of famers, the city is the land of opportunities as well as that of risk: although upward mobility chances (i.e. becoming skilled workers or white collars) are much higher when they move to the cities (74.6%) than move to other rural areas (24.4%), the risk of becoming unskilled workers is almost three times higher when they move to urban areas (21.7%) than to stay where they lived (7.4%). Moving to other rural areas can be a safer bet for the farmer's sons since the risk of downward mobility is much lower (12.1%) than urban movers and they still can have more opportunities for upward mobility than rural stayers (24.4% vs. 15.7%). It is also possible that frontier farmers have had unusual opportunities to enhance their wealth and income through farming, which cannot be captured in the occupational mobility analysis (Guest, 2005). Long and Ferrie (forthcoming) pointed out that farm sector was still the largest in the nineteenth century U.S. and it is not apparent that the inheritance of farming jobs, especially for frontier farmer sons, is whether an upward, downward, or immobility pattern.

Since farming is relatively a better option than unskilled jobs (as indicated by the mean SEI score) and there are more opportunities for the sons of unskilled workers to become a farmer in rural areas, staying in the rural areas are not a bad choice for them. The upward mobility chances for the sons of unskilled workers (i.e. the percentage of exiting unskilled jobs) is the greatest when they stay where they lived (72.3%) compared to when they move to other rural areas (71.1%) or urban areas (64.2%).

Table 3b is the corresponding table for those who with urban fathers (of whom naturally very few were farmers). For the sons of non-farming workers' (white collars, skilled workers and unskilled workers), occupational mobility patters for "urban stayer" and "urban movers" are not much different, suggesting that moving to another urban area did not result in occupational mobility. Not surprisingly, more sons of different origins become "farmers" among urban to rural movers than among urban stayers or inter-urban movers. Moving to rural areas is not a bad option for the sons of urban unskilled workers as indicated by the relatively lower percentage (23.1%) of the cell representing the inheritance of unskilled occupations than those for urban stayers (29.3%) and urban movers (34.0%). Urban to rural movers were more likely to have an "urban" occupation than to become a farmer.

Tentative Conclusions

Our initial findings can be summarized as follow. First, the sons of immigrant fathers are more upwardly mobile in occupation than the sons of US-born fathers. Second, the sons of more skilled fathers benefited more from "rural to urban" migration. Third, staying in rural areas or moving to other rural areas could be a better option for the sons

of farmers or unskilled workers. Finally, we hypothesize that the clearly different occupational mobility patterns by immigrant generation are largely due to the difference in initial settlement. Our descriptive tables provide some important information about intergeneration mobility patterns of occupation and geography, but a more sophisticated statistical analysis is required to investigate the association between the origin and the destination in precision. We plan to adopt log linear models and other statistical analyses in order to further examine how the inheritance of occupation across generation is different by immigrant generation and migration status.

References

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Tables

Table 1. Domestic migration (1880-1900) of sons by father's generation

Father's Gen	Rural Stayer	Rural to Rural	Rural to Urban	Urban Stayer	Urban to Urban	Urban to Rural	Total
3+	2243	1604	1033	308	162	116	5466
	41.0%	29.3%	18.9%	5.6%	3.0%	2.1%	100.0%
2nd	215	150	126	89	35	21	636
	33.8%	23.6%	19.8%	14.0%	5.5%	3.3%	100.0%
Immigrant	536	317	337	526	162	102	1980
	27.1%	16.0%	17.0%	26.6%	8.2%	5.2%	100.0%
Total	2994	2071	1496	923	359	239	8082
	37.0%	25.6%	18.5%	11.4%	4.4%	3.0%	100.0%

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Table 2. Intergenerational occupational mobility by father's generation

| | Fathers' | Sons' | | | | |
		White Collar	Farmer	Skilled	Unskilled	Total
3+	White Collar	346	71	164	61	642
		53.9%	11.1%	25.5%	9.5%	100.0%
	Farmer	435	2105	539	396	3475
		12.5%	60.6%	15.5%	11.4%	100.0%
	Skilled	182	143	389	106	820
		22.2%	17.4%	47.4%	12.9%	100.0%
	Unskilled	56	172	128	173	529
		10.6%	32.5%	24.2%	32.7%	100.0%
	Total	1019	2491	1220	736	5466
		18.6%	45.6%	22.3%	13.5%	100.0%
2nd	White Collar	51	6	19	8	84
		60.7%	7.1%	22.6%	9.5%	100.0%
	Farmer	41	184	55	46	326
		12.6%	56.4%	16.9%	14.1%	100.0%
	Skilled	45	21	76	19	161
		28.0%	13.0%	47.2%	11.8%	100.0%
	Unskilled	9	17	23	16	65
		13.8%	26.2%	35.4%	24.6%	100.0%
	Total	146	228	173	89	636
		23.0%	35.8%	27.2%	14.0%	100.0%
Immigrant	White Collar	182	16	80	29	307
		59.3%	5.2%	26.1%	9.4%	100.0%
	Farmer	95	499	100	65	759
		12.5%	65.7%	13.2%	8.6%	100.0%
	Skilled	163	53	336	94	646
		25.2%	8.2%	52.0%	14.6%	100.0%
	Unskilled	48	27	123	70	268
		17.9%	10.1%	45.9%	26.1%	100.0%
	Total	488	595	639	258	1980
		24.6%	30.1%	32.3%	13.0%	100.0%

Table 3a. Intergenerational occupational mobility by domestic migration of sons (rural origins)

	Fathers'	Sons' White Collar	Farmer	Skilled	Unskilled	Total
Rural stayer	White Collar	73	36	24	24	157
		46.5%	22.9%	15.3%	15.3%	100.0%
	Farmer	190	1793	178	172	2333
		8.1%	76.9%	7.6%	7.4%	100.0%
	Skilled	33	81	116	54	284
		11.6%	28.5%	40.8%	19.0%	100.0%
	Unskilled	13	109	37	61	220
		5.9%	49.5%	16.8%	27.7%	100.0%
	Total	309	2019	355	311	2994
		10.3%	67.4%	11.9%	10.4%	100.0%
Rural to rural	White Collar	50	39	40	13	142
		35.2%	27.5%	28.2%	9.2%	100.0%
	Farmer	142	967	231	185	1525
		9.3%	63.4%	15.1%	12.1%	100.0%
	Skilled	25	82	85	22	214
		11.7%	38.3%	39.7%	10.3%	100.0%
	Unskilled	10	92	33	55	190
		5.3%	48.4%	17.4%	28.9%	100.0%
	Total	227	1180	389	275	2071
		11.0%	57.0%	18.8%	13.3%	100.0%
Rural to urban	White Collar	170	3	78	23	274
		62.0%	1.1%	28.5%	8.4%	100.0%
	Farmer	227	25	277	147	676
		33.6%	3.7%	41.0%	21.7%	100.0%
	Skilled	120	8	191	48	367
		32.7%	2.2%	52.0%	13.1%	100.0%
	Unskilled	36	4	75	64	179
		20.1%	2.2%	41.9%	35.8%	100.0%
	Total	553	40	621	282	1496
		37.0%	2.7%	41.5%	18.9%	100.0%

Table 3b. Intergenerational occupational mobility by domestic migration of sons (urban origins)

| | Fathers' | Sons' | | | | |
		White Collar	Farmer	Skilled	Unskilled	Total
Urban stayer	White Collar	169	0	69	24	262
		64.5%	.0%	26.3%	9.2%	100.0%
	Farmer	6	0	2	3	11
		54.5%	.0%	18.2%	27.3%	100.0%
	Skilled	149	7	263	57	476
		31.3%	1.5%	55.3%	12.0%	100.0%
	Unskilled	35	1	87	51	174
		20.1%	.6%	50.0%	29.3%	100.0%
	Total	359	8	421	135	923
		38.9%	.9%	45.6%	14.6%	100.0%
Urban to urban	White Collar	90	1	32	11	134
		67.2%	.7%	23.9%	8.2%	100.0%
	Farmer	2	1	3	0	6
		33.3%	16.7%	50.0%	.0%	100.0%
	Skilled	41	1	105	25	172
		23.8%	.6%	61.0%	14.5%	100.0%
	Unskilled	11	0	20	16	47
		23.4%	.0%	42.6%	34.0%	100.0%
	Total	144	3	160	52	359
		40.1%	.8%	44.6%	14.5%	100.0%
Urban to rural	White Collar	27	14	20	3	64
		42.2%	21.9%	31.3%	4.7%	100.0%
	Farmer	4	2	3	0	9
		44.4%	22.2%	33.3%	.0%	100.0%
	Skilled	22	38	41	13	114
		19.3%	33.3%	36.0%	11.4%	100.0%
	Unskilled	8	10	22	12	52
		15.4%	19.2%	42.3%	23.1%	100.0%
	Total	61	64	86	28	239
		25.5%	26.8%	36.0%	11.7%	100.0%