

Intergenerational Patterns in Land and Class Status in 19th-Century Sweden

Notes from Bobbi Low for St Fe Workshop Feb 2007(Working notes; please do not cite)

A. Data

Status. The Swedish Demographic Database, in Umea, Sweden, has historical records of birth, death, sex, occupational status, marriage age and marriage partner(s), and data can be linked to give intergenerational relationships (Low 1989, 1990, 1991, 1992, 1993, 1994; Low and Clarke 1992, 1993, Clarke and Low 1992). The data considered here come from seven parishes, and some have been analyzed previously in the papers cited above, especially Low 1990 and Low and Clarke 1992.

Land. For one parish, Tuna, in Medelpad, Sweden, land ownership records exist. Tuna was largely a proto-industrial farming parish, with a sawmill and an iron foundry. Sweden had many safeguards to ensure egalitarian treatment (e.g., socialized medicine from the 1600s), but actual access to resources varied with occupational/class status. Women seldom owned property or ran businesses; in the records, a woman's class status derives from her father's status, and if she married, then from her husband's status. Thus this analysis will focus on men, with the exception of a few notes on two women landowners, and on class stasis and mobility in marriage.

Sample.

Tuna Parish. The sample comprised all men married for the first time in Tuna Parish between 1824, when reliable records began, and 1840 (n=191), and their biological descendants (n=1841), to 1894, when records were terminated for privacy reasons. Two complete generations can be analyzed; because Swedes of the time married late (e.g., Low and Clarke 1990), generation 3 members could not be assumed to have completed fertility, but may have land records.

Seven-Parish Sample. Occupational status data exist for further parishes, so comparisons are made for a sample that includes Tuna parish, three other large parishes, and three small parishes in which geographic mobility rendered samples small. The large parishes are Tuna, Nedertorneå (201 men in G1), in the far north; Gullholmen (35 men in G1), a fishing island parish in the southwest; and Locknevi (186 men in G1), an agricultural parish with limited arable land. The smaller parishes were Svinnegarn (51 male founders), Trosa (86), and Flennige (45). The sample structures are identical to that of Tuna.

B. Parameter estimates

Three measures are available to examine intergenerational patterns: class status, land ownership records, and a combined status/land variable.

Occupational status, as recorded by the parish priest, was not standardized; there were 'more polite' and more straightforward ways to record occupation. The result is an occupational title list of many thousand occupations. More useful is the system used by the Swedish Demographic Database to construct a reflection of class status; these show a relationship to wealth and predictability of continued wealth. These are:

UMC: upper middle class. Includes diplomats, factory owners, wealthy families with household servants (and often land ownership as well)

LMC: the most mixed of categories. Basically small businessmen, artisans.

Bönder: farmers who own their own land.

Torpare: land-dwelling leaseholders; equivalent to the English cottars.

Statare: farm workers; most migrated to follow the crops

Proletariat: household servants. Impoverished people (utföttig) included here.

In some cases, the codes are reduced to 5 levels (statare and proletariat lumped), because so few statare, being migratory, show up consistently in the records. Upper middle class members were also few, and are sometimes missing from samples.

Land ownership, separate from class status, is reflected in the *Mantalslängder*, available from 1845-1875 for Tuna parish; 104/602 adult men landowners are in record (typically a man would be in his 30s before gaining land). One record, #706251, is a clear outlier, and may reflect a recording error. Two of 441 adult women were listed in the *Mantalslängder*. These women are unusual (see below).

Land was not measured by area, but by a utility measure, the *mantal*, which reflected a tax owed by landowners to the Crown. A *mantal* reflected the amount of land, under the ecological conditions of a parish, thought to be required to make a man and his family self-sufficient (Lext 1968). Clearly a *mantal* in the south of Sweden, with longer growing seasons and richer soils, would not be the same area as a northern *mantal*. Lext argued that within a parish the *mantal* reflected a consistent land portion. Larger tax reflects more land, although it is most reliable, as here, to keep comparisons within a parish.

Because class status and land ownership can interact, a “wealthy/poor” variable was also used. “Wealthy” individuals (here, men) were UMC, LMC, Bönder, and any landowners of lower status. “Poor” individuals were Torpare, Statare, or Proletariat and did not own land

The parish priests did catechism exams in their yearly rounds to households, but other scholars have found these an unreliable measure of degree of education. I have no measure of education in this sample.

B. Interpretation

Intergenerational correlations of land wealth

From 1686 to 1810, the Swedish nobility practiced *fedeicommiss*, a form of male primogeniture, with the constraint that the eldest son, upon inheritance, would continue the practice (Malmström 1981, Inger 1980). Until 1845, Swedish law mandated that sons inherit twice as much as daughters; after that date, daughters and sons were to inherit equally. However, the type of goods to be inherited was not specified, and sons had first choice of the land and goods that were to be their inheritance (Lo-Johansson 1981, Inger 1980). The typical pattern was for daughters to inherit movable property, and for the oldest surviving adult son to inherit land. In general, inheritance biased by birth order was common (Gaunt 1987, Low 1989, 1990). In the south of Sweden, was often divided among sons; in the north, the tendency was not to divide the land.

Of the 104 male landowners, the *mantal* distribution was as follows (Figure 1): 35.6% had *mantal* less than 200, 25% between 200 and 299, 18.3% between 300 and 399, and 21.1% greater than or equal to 400. One outlier held 601 *mantal*. Some landowners are sons of landowners, and probably inherited land as well as perhaps purchasing additional land. But sons of wealthy non-landowning men might have an advantage similar to sons of landowners in gaining wealth to acquire land; that is, class status and landownership might interact (Table 1): of 91 landowning men whose father’s status is known, 74 (81%) had “richer” fathers.

There is a relationship between the amount of land a man owned, and the amount his father owned. There are three outliers that reduce the r-square from 0.77 to 0.302, but examination of their personal data (birth order, number of sibs, etc) shows no reason to omit them. Among these men, there are four fathers who had more than one son get land (n=2, 2, 2, and 3 landowning brothers). Fathers with more than one land-owning son did not have more

land than father with only one land-owning son ($n=27$, $d.f.=12.564$, $t=-0.84$, $p=0.263$), and single sons with land did not own more than brothers who owned land ($n=27$, $d.f.=15.75$, $t=-1.047$, $p=0.7389$). In Figure 2, landowning brothers in four families are shown as solid circles; singletons are shown as open circles.

Calculating the intergenerational relationships gives the following (also see Figures 3a-3d).

All Cases		R ²
Raw data	Son's=99.935 + 0.626 Pa's + E	0.3024
Ln-Ln	Son's=2.405 + 0.5525 Pa's + E	0.2692
Minus #702431		
Raw data	Son's=52.595 + .7559 Pa's + E	0.5459
Ln-Ln	Son's=1.691 + 0.6764 Pa's + E	0.4401

The two women who appear in the *Mantalslängder* have different histories, and their ownership likely does not affect cross-generational inequalities. The first, #704612, was the first-born daughter of a torpare who owned some land (amount not in record). She was born in 1830, had five children (the first born when she was 25, the last when she was 46), and had a *mantal* in 1873 of 401.75. The second woman, #704654, was third-born of four children to a man whose father was proletariat, but who became LMC. His land amount is not recorded; her amount was 104 in 1865. She married at age 44 (to a 31-year old man), and had no children.

Intergenerational Correlations of Status

Men (here, men over age 18) tended to have the same class status as their fathers. The data in Table 2 and Figure 4 are from the 7-parish data set; the pattern is repeated within parishes, but numbers are sometimes low. There is mobility, both upward and down, in men's class status compared to their fathers'.

Wealth and Land May Interact Across Generations

Land and status both appear to affect resource access and acquisition in this sample, as in most societies. Of the six status classes, men who were in all classes except *statare* (migrant workers) and *proletariat* owned some land.

	UMC	UMC	Bönder	Torpare	Statare	Proletariat
< Ave	2	14	42	3	0	0
> Ave	0	4	39	0	0	0

Using the "wealthier/poorer" variable that combines class status and land ownership, there is a very strong intergenerational pattern (Table 4).

Other Sources of Intergenerational Inequalities

In addition to inheriting wealth or land from his father, a man might marry the daughter of a wealthy or landowning man, increasing his own chances of owning land. A man who married a Bönder's daughter might inherit land, for example. Because this sample was structured as a set of founders and their descendants, many spouses are not in this sample. There are 178 cases in which a man in the sample married a woman in the sample. To look at symmetrical agreement between a man's class status and his wife's father's status, four individuals (one

UMC, three statures) were omitted (Table 4). Two things are evident. First, there is considerable association across status: men tended to marry women who were from the same class strata. Second there is some mobility, and men of many status ranks marry Bønders' daughters, perhaps simply because these were largely farming parishes.

References

- Clarke, Alice L., and Bobbi S. Low. 1992. Resources and reproductive patterns: The role of migration. *Animal Behavior* 44: 677-693.
- Gaunt, D. 1987. Rural household organization and inheritance in northern Europe. *J. Family History* 12: 121-141.
- Inger, G. 1980. *Svensk Rattshistoria*. Liber Laromedal.
- Lext, Gosta. 1968. Mantalsskrivningen i Sverige före 1860. *Meddelanden Från Ekonomisk-historiska Institutionen vid Göteborgs Universitet*, 13.
- Lo-Johansson, F. 1981. *Sveriges Rikes Lag: Gillad och Antagen Parisdagen Ar, 1734, faksimilutgåva*. Giulunds, Malmö.
- Low, Bobbi S. 1989. Occupational status and reproductive behavior in 19th century Sweden: Locknevi parish. *Social Biology* 36: 82-101.
- Malmström, A. 1981. *Successionsrätt II*. Iustus Forlag, Uppsala.
- Low, Bobbi S. 1990. Occupational status, land ownership, and reproductive behavior in 19th century Sweden: Tuna parish. *American Anthropologist* 92(2): 457-468.
- Low, Bobbi S. 1991. Reproductive life in 19th century Sweden: An evolutionary perspective on demographic phenomena. *Ethology and Sociobiology* 12: 411-468.
- Low, Bobbi S. 1993. Ecological demography: A synthetic focus in evolutionary anthropology. *Evolutionary Anthropology* 1993: 106-112.
- Low, Bobbi S. 1994. Men in the demographic transition. *Human Nature* 5(3): 223-253.
- Low, Bobbi S., Alice L. Clarke, and K. Lockridge. 1992. Toward an ecological demography. *Population and Development Review* 18(1): 1-31.
- Low, Bobbi S., and Alice L. Clarke. 1990. Family patterns in nineteenth-century Sweden: Impact of occupational status and landownership. *J. Family History* 16(2): 117-138.
- Low, Bobbi S., and Alice L. Clarke. 1992. Resources and the life course: Patterns in the demographic transition. *Ethology and Sociobiology* 13(5-6): 463-494.
- Low, Bobbi S., and Alice L. Clarke. 1993. Historical perspectives on population and environment: Data from 19th century Sweden. Pp. 195-224 in Gayl Ness and William Drake (eds.). *Population-Environment Dynamics: Proceedings of the International Symposium on Population and Environment*. U. Michigan Press.

V4703:LAND * V1309:PASTAT Crosstabulation

			V1309:PASTAT		Total
			RICHER	POORER	
V4703:LAND	<AVE	Count	47	6	53
		Expected Count	29.1	23.9	53.0
		% within V4703:LAND	88.7%	11.3%	100.0%
		% within V1309:PASTAT	9.8%	1.5%	6.1%
	>AVE	Count	27	11	38
		Expected Count	20.9	17.1	38.0
		% within V4703:LAND	71.1%	28.9%	100.0%
		% within V1309:PASTAT	5.6%	2.8%	4.3%
	NO	Count	406	377	783
		Expected Count	430.0	353.0	783.0
		% within V4703:LAND	51.9%	48.1%	100.0%
		% within V1309:PASTAT	84.6%	95.7%	89.6%
Total	Count	480	394	874	
	Expected Count	480.0	394.0	874.0	
	% within V4703:LAND	54.9%	45.1%	100.0%	
	% within V1309:PASTAT	100.0%	100.0%	100.0%	

Table 1. Father's status was related to a man's landholdings ("richer"=UMC, LMC, Bönder, or lower status but owned land; "poorer"=torpare, statare, or proletariat and did not own land). N=874; Pearson chi-square=31.369, d.f.=2, p<0.0001; Kendall's tau-beta=.181, SE=.028, approximate t=5.826, p<0.0001. Note: 13 landowning men, and 214 non-landowners, had fathers whose wealth status was "unknown." Including them does not change the results.

V207:OWNCLS6 * V209:FATHCLS6 Crosstabulation

			V209:FATHCLS6						Total
			UMC	LMC	BONDER	TORPAR	STATAR	PROLET	
V207:OWNCLS6	UMC	Count	40	3	5	0	0	0	48
		Expected Count	.8	5.8	21.4	9.6	.5	9.9	48.0
		% within V207:OWNCLS6	83.3%	6.3%	10.4%	.0%	.0%	.0%	100.0%
		% within V209:FATHCLS6	70.2%	.7%	.3%	.0%	.0%	.0%	1.4%
	LMC	Count	6	300	61	12	0	10	389
		Expected Count	6.3	46.6	173.7	77.9	4.2	80.3	389.0
		% within V207:OWNCLS6	1.5%	77.1%	15.7%	3.1%	.0%	2.6%	100.0%
		% within V209:FATHCLS6	10.5%	70.6%	3.9%	1.7%	.0%	1.4%	11.0%
	BONDER	Count	9	88	1317	50	0	29	1493
		Expected Count	24.0	179.0	666.7	299.0	16.0	308.3	1493.0
		% within V207:OWNCLS6	.6%	5.9%	88.2%	3.3%	.0%	1.9%	100.0%
		% within V209:FATHCLS6	15.8%	20.7%	83.2%	7.0%	.0%	4.0%	42.1%
	TORPAR	Count	2	6	64	468	0	40	580
		Expected Count	9.3	69.5	259.0	116.2	6.2	119.8	580.0
		% within V207:OWNCLS6	.3%	1.0%	11.0%	80.7%	.0%	6.9%	100.0%
		% within V209:FATHCLS6	3.5%	1.4%	4.0%	65.9%	.0%	5.5%	16.4%
	STATAR	Count	0	3	16	6	29	6	60
		Expected Count	1.0	7.2	26.8	12.0	.6	12.4	60.0
		% within V207:OWNCLS6	.0%	5.0%	26.7%	10.0%	48.3%	10.0%	100.0%
		% within V209:FATHCLS6	.0%	.7%	1.0%	.8%	76.3%	.8%	1.7%
	PROLET	Count	0	25	120	174	9	647	975
		Expected Count	15.7	116.9	435.4	195.3	10.5	201.3	975.0
		% within V207:OWNCLS6	.0%	2.6%	12.3%	17.8%	.9%	66.4%	100.0%
		% within V209:FATHCLS6	.0%	5.9%	7.6%	24.5%	23.7%	88.4%	27.5%
Total	Count	57	425	1583	710	38	732	3545	
	Expected Count	57.0	425.0	1583.0	710.0	38.0	732.0	3545.0	
	% within V207:OWNCLS6	1.6%	12.0%	44.7%	20.0%	1.1%	20.6%	100.0%	
	% within V209:FATHCLS6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 2. A son's class status correlated with his father's. Pearson Ch-square=8670.692, d.f.=25, p<0.0001; Kendall's tau-b=.755, approximate t=67.682, p<0.00001.

Table 3. The combined land/status variable “richer/poorer” showed a strong intergenerational correlation (Pearson Chi-square=502.25, d.f.=1, p<0.00001; Kendall’s tau-b-.789, approximate t=35.745, p<0.0001).

V1307:OWNSTAT * V1309:PASTAT Crosstabulation

			V1309:PASTAT		Total
			RICHER	POORER	
V1307:OWNSTAT	RICHER	Count	392	34	426
		Expected Count	233.6	192.4	426.0
		% within V1307:OWNSTAT	92.0%	8.0%	100.0%
		% within V1309:PASTAT	88.5%	9.3%	52.7%
	POORER	Count	51	331	382
		Expected Count	209.4	172.6	382.0
		% within V1307:OWNSTAT	13.4%	86.6%	100.0%
		% within V1309:PASTAT	11.5%	90.7%	47.3%
Total	Count	443	365	808	
	Expected Count	443.0	365.0	808.0	
	% within V1307:OWNSTAT	54.8%	45.2%	100.0%	
	% within V1309:PASTAT	100.0%	100.0%	100.0%	

Table 4. A man’s status was correlated with his wife’s father’s status (Kendall’s tau-b .266, approximate t=3.017, p<0.0001; Spearman’s s=.292, approximate t=3.686, p<0.0001). McNemar Bowman, which compares the marginal distributions, was 17.505 (d.f.=6, p=0.008).

V207:OWNCLS6 * Sp1FathCl6 Crosstabulation

			Sp1FathCl6				Total
			LMC	BONDER	TORPAR	PROLET	
V207:OWNCLS6	LMC	Count	7	26	1	2	36
		Expected Count	3.5	25.9	3.7	2.9	36.0
		% within V207:OWNCLS6	19.4%	72.2%	2.8%	5.6%	100.0%
		% within Sp1FathCl6	41.2%	20.8%	5.6%	14.3%	20.7%
	BONDER	Count	8	73	9	3	93
		Expected Count	9.1	66.8	9.6	7.5	93.0
		% within V207:OWNCLS6	8.6%	78.5%	9.7%	3.2%	100.0%
		% within Sp1FathCl6	47.1%	58.4%	50.0%	21.4%	53.4%
	TORPAR	Count	0	13	4	4	21
		Expected Count	2.1	15.1	2.2	1.7	21.0
		% within V207:OWNCLS6	.0%	61.9%	19.0%	19.0%	100.0%
		% within Sp1FathCl6	.0%	10.4%	22.2%	28.6%	12.1%
	PROLET	Count	2	13	4	5	24
		Expected Count	2.3	17.2	2.5	1.9	24.0
		% within V207:OWNCLS6	8.3%	54.2%	16.7%	20.8%	100.0%
		% within Sp1FathCl6	11.8%	10.4%	22.2%	35.7%	13.8%
Total	Count	17	125	18	14	174	
	Expected Count	17.0	125.0	18.0	14.0	174.0	
	% within V207:OWNCLS6	9.8%	71.8%	10.3%	8.0%	100.0%	
	% within Sp1FathCl6	100.0%	100.0%	100.0%	100.0%	100.0%	

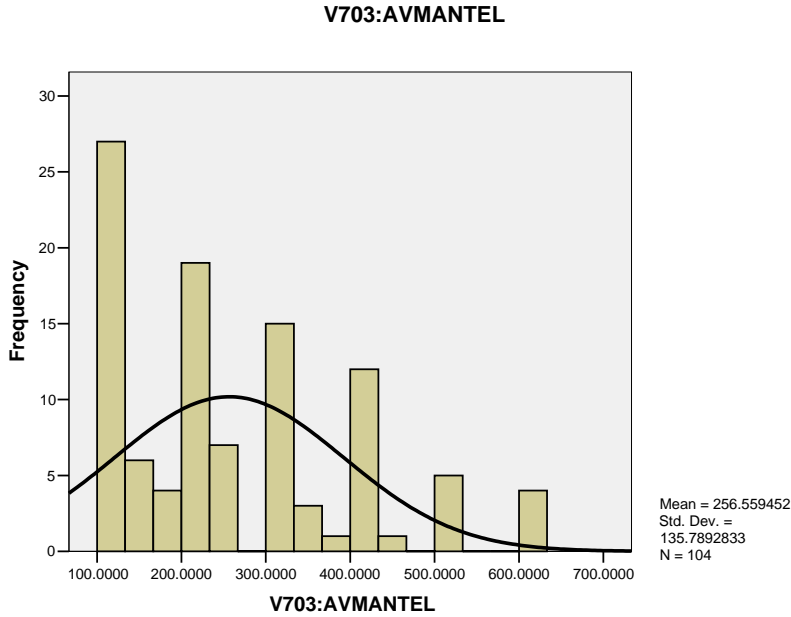


Figure 1. Distribution of landholdings (*mantal*) among 104 male landowners in Tuna Parish.

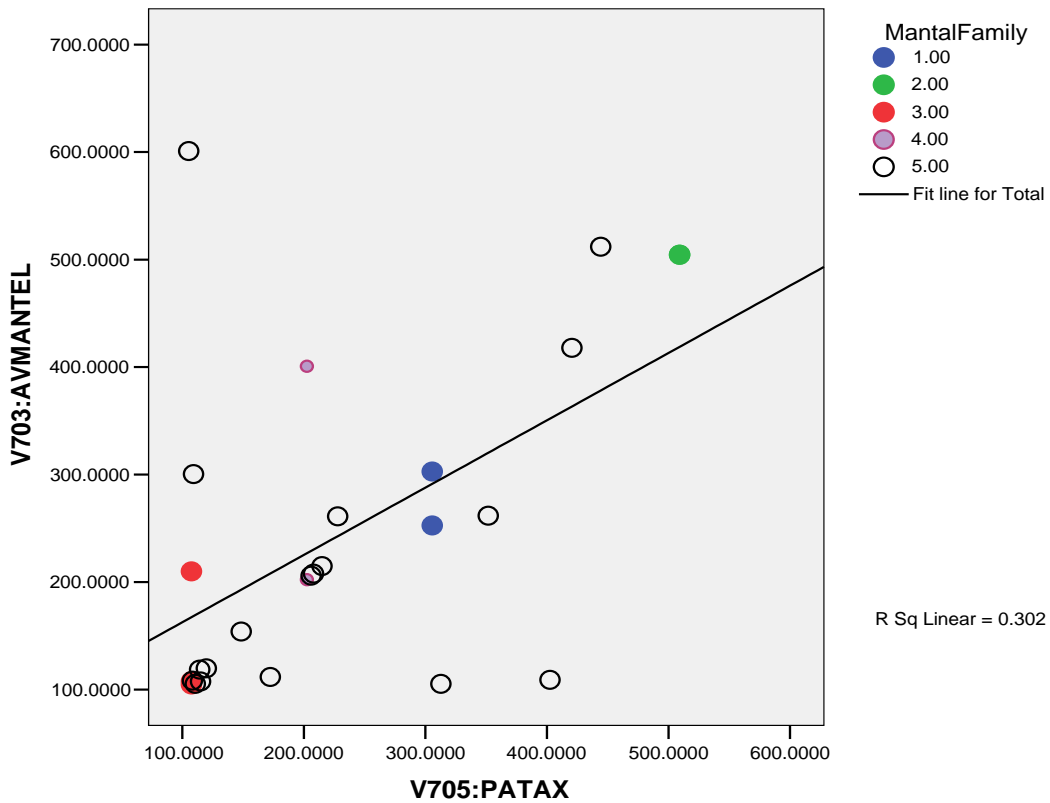


Figure 2. Scatter of men's landholdings (*mantal*) against their fathers'. When more than one son had land, those sons are shown as same-color solid circles. Removal of #706251 changed the slope, intercept, and R^2 .

Figure 3a. Father-Son Landholdings relative to mean (all cases):

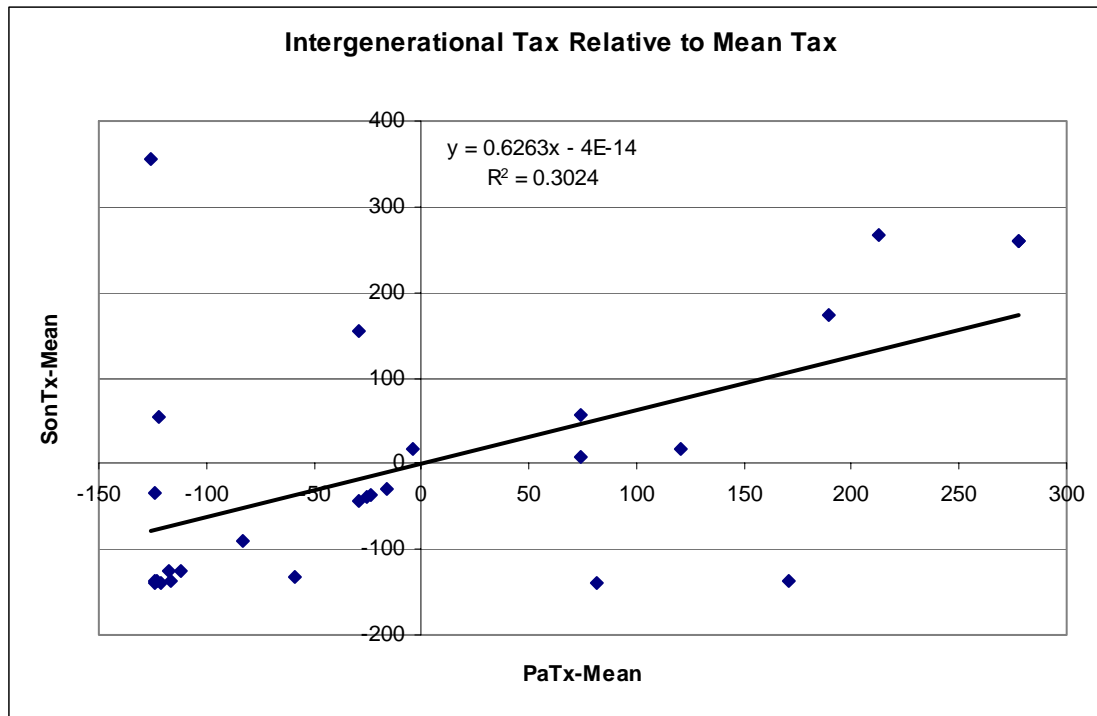


Figure 3b. Ln Father-Son Landholding relative to mean (all cases)

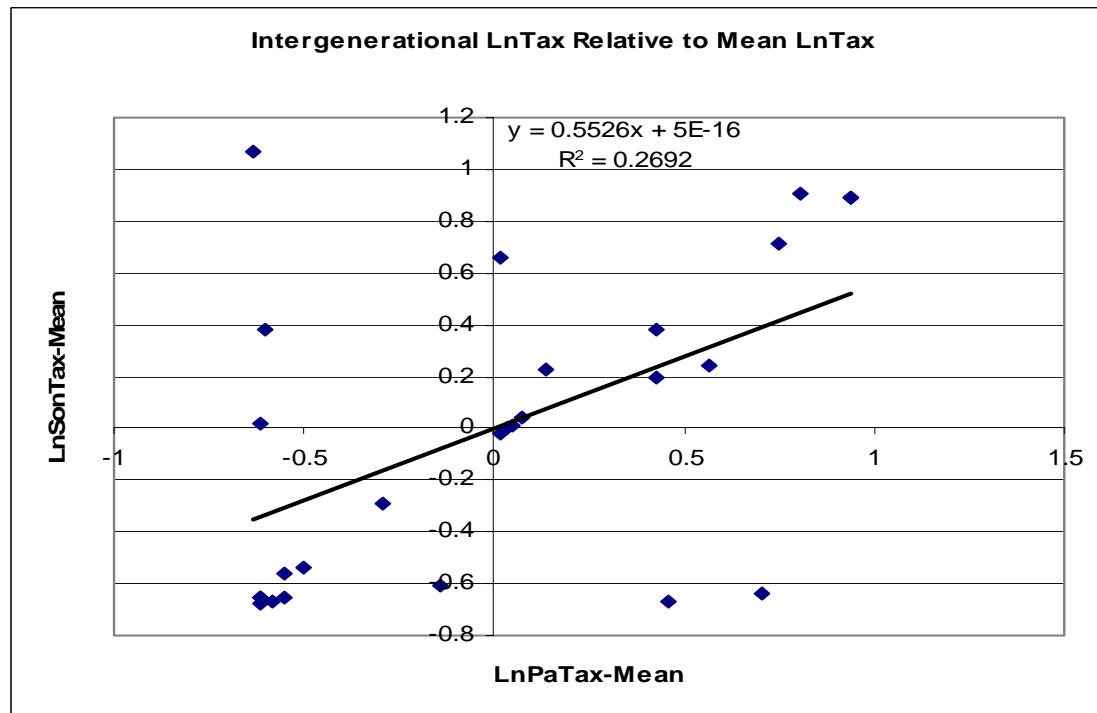


Figure 3c. Father-Son Landholdings relative to mean (when # 706251 is excluded):

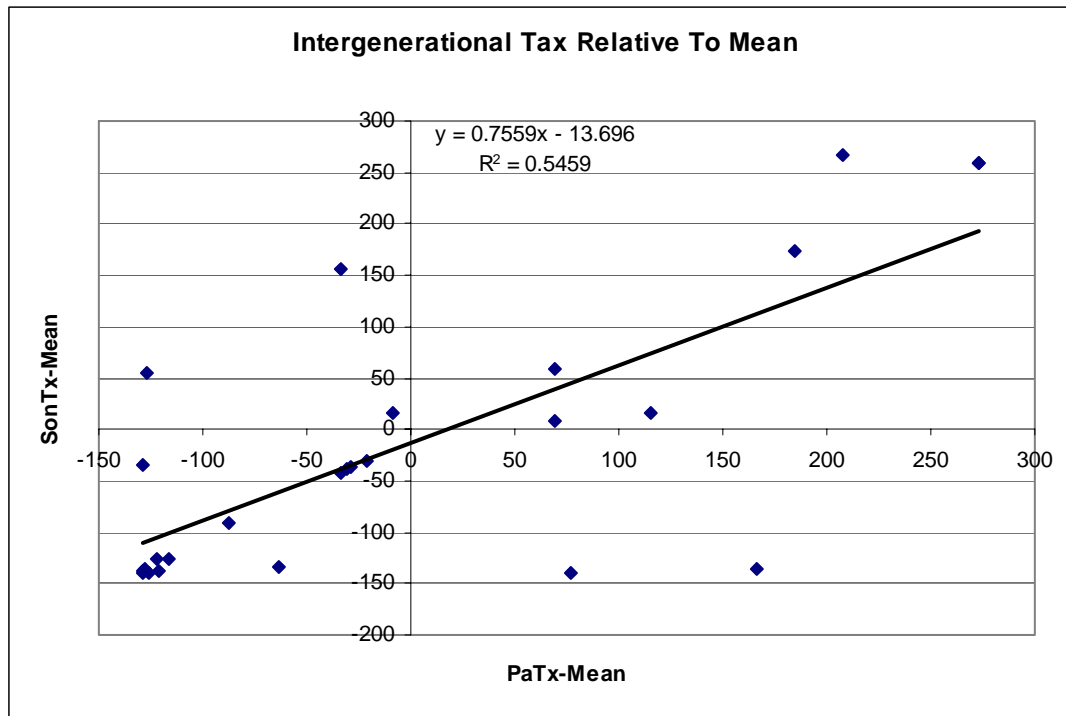


Figure 3d. Ln Father-Son Landholding relative to mean (when # 706251 is excluded):

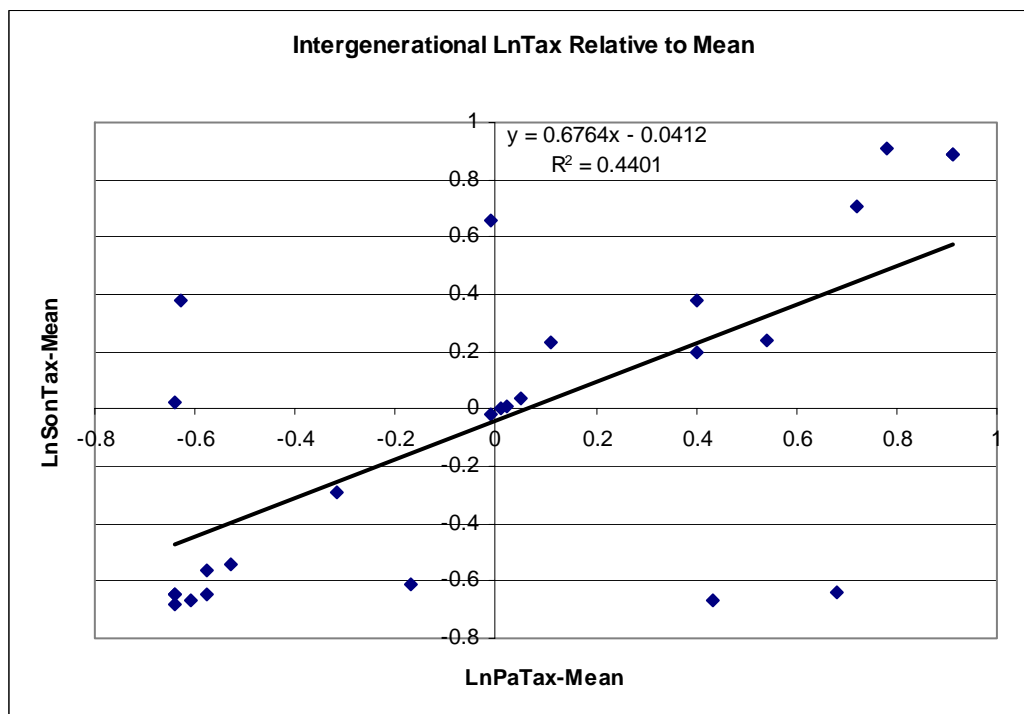


Figure 4. Son's class status was correlated with father's status, but there was some mobility.

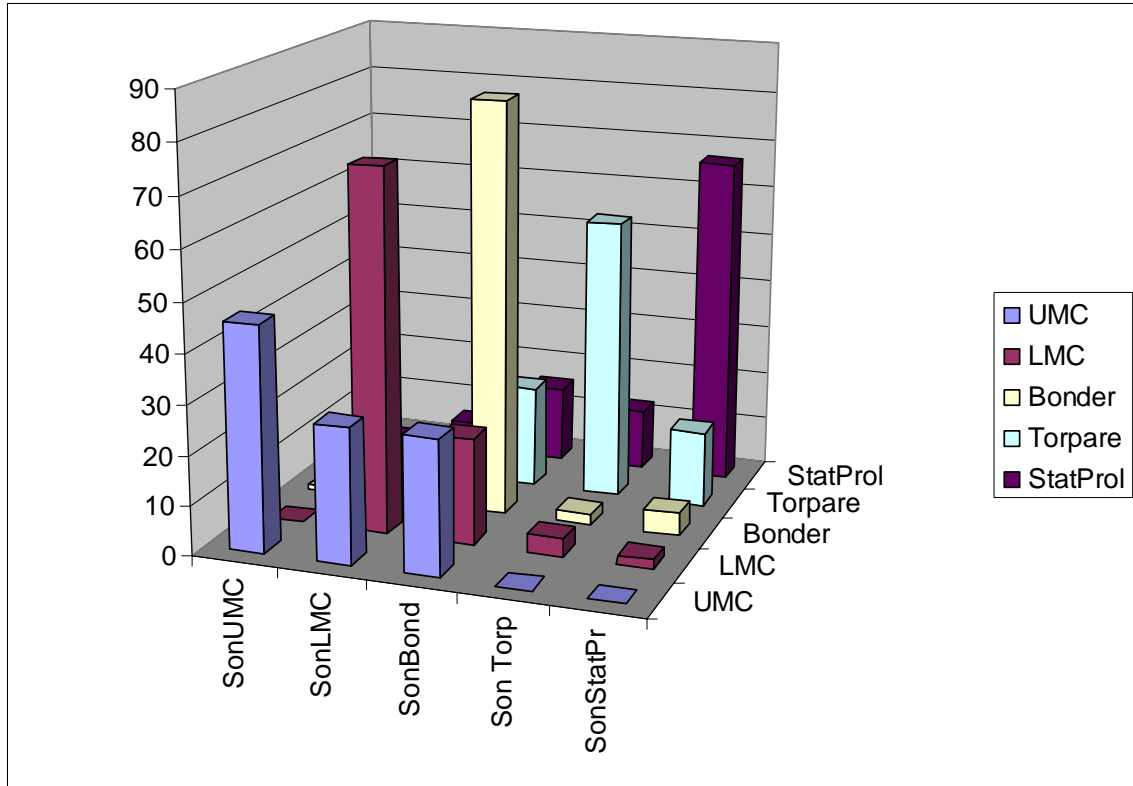


Figure 5. Men married daughters of men with similar class status. Bönders' daughters comprised a large proportion of wives.

