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Intergenerational Transmission of Economic Inequality in China

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Abstract

It is new to study intergenerational income mobility in Peoples Republic of China. Here we study income as observed 2002 among people born 1965 to 1975 residing in urban China with their parents. The main conclusion is that we have shown the existence of a positive relation across generations in income. The magnitude of the intergenerational income elasticity is in the neighborhood of 0.4, which is similar to often quoted estimates for US. Most results point in the direction of income of fathers is more important than income of mothers. The results point in the direction that although educational attainment of the child is one part of transmission of income across generations this is not the only mechanism

1. Introduction

While the intergenerational relation in social position has attracted attention among social scientists for quite some time the issue of intergenerational relation of income is more recent. Based on a dozen of studies Becker and Thomes (1986) formulated the opinion that intergenerational mobility in advanced market economies is high. This could be interpreted as meaning that opportunities are rather equal within a cohort. However, those earlier studies could be questioned for methodological reasons. Samples were often not random. Estimates were based on single year's income for the child and the parent respectively. Those might not be typical for lifetime earnings which might produce large biases. When attempts to take such aspects into consideration intergenerational mobility in the U.S. appears much lower than according to earlier studies. (See Behrman and Taubman 1990, Solon 1992, Zimmerman , 1992, Aughinbaug, 2000).

Recent research in the field has developed in various directions (se also Solon, 1999 and Corak 2004). One is warnings of not reading in too much into results from single studies as often samples used are small, and found to be rather sensitivity to selection criteria. (Couch and Lillard, 1998) While most studies try to capture income mobility across generations in one single parameter access to a larger sample makes it possible to investigate if the relation differs across the distribution of income. Thus for example Österberg (2000) using data for Sweden report income mobility to be lowest at the top of the income distribution. Another example is Björklund and Chadwick (2003) also working with Swedish register data finding that that the association between sons' income and their biological fathers' income is weaker the less they live together.

Another development is comparisons. Those could be across cohorts. For example Östbacka (2004) find based on registerdata for Finland no significant difference for people born in the 50s respectively the 60. There are international comparisons. For

example Couch and Dunn (1997) finds similar relations between fathers and sons in Germany and the US. In contrast results in Björklund and Jäntti (1997) indicate income mobility in the US being lower than in Sweden. Intergenerational income mobility in US is compred to a large set of countries by Grewe (2004). Based on panel data for Malaysia and cross section data for Ecuador, Nepal, Pakistan and Peru he put forward that it might well be that the large international difference in intergenerational income mobility is between industrialised countries with relatively much intergenerational income mobility and developing countries with much less intergenerational income mobility.

Still another development in this research field is attempt to study other economic outcome than income. There are for example studies analyzing intergenerational association in social assistance receipt (Gottschalk 1996) and studies of intergenerational receipt of unemployment receipt (Corak et al 2000). A related and fast growing literature is analyzing the income situation of the second generation of immigrants. Very much related to the field are various attempts to trace the mechanisms behind intergenerational mobility. For example it is natural to think that education attainment should be of cental importance.

This paper looks at intergenerational income mobility in China. This is a country which up to now hardly has attracted attention in the literature on intergenerational income mobility. This is in contrast to a rapidly growing literature on inequality in the distribution of income in the Peoples Republic of China and its changes. We use data from a new survey. Actually the dataset has just been made available for analysis and our results are preliminary.

The main conclusion is that we find a positive relation across generations in income for urban China. The magnitude of the intergenerational income elasticity is in the neighborhood of 0.4, which is similar to often quoted estimates for US. Most results point in the direction of income of fathers is more important than income of mothers.

The results point in the direction that although educational attainment of the child is one part of transmission of income across generations this is not the only mechanism

The lay out of the paper is as follows: The next section describes the context while data is described in Section 3 where the layout of the analysis is described. Descriptive results are provided in Section 4 while results from regression models are documented in Section 4. Section 6 summarises the findings.

2. The context

Economic growth in Peoples Republic of China ahs been rapid since economic reform was introduced in the end of the 70s in its rural regions and the beginning of the 80s in its urban regions. A very important component is a rapid industrialization. The growth process has been uneven with the eastern regions moving ahead much more rapidly than the less developed western part. For several years income in urban areas has grown more rapidly than rural areas and the population has become more urbanized than before.

For long living conditions in urban and rural regions of China differ considerably. The system of *Hukou* (household registration) introduced in the 1950s means that people born in rural China are legally treated different from urban citizens, the privileged minority part of the population. In the pre-reform era an urban citizens after completed education was allocated a job at a work units and typically stayed there for the rest of his or her working life. The work unit provided the worker with not only a (admittedly low) wage but also housing at very low cost and social benefits such as pensions and sickness compensation. Wages were administratively designed. Empirical studies show that although a positive relation between education and earnings existed, it was rather week. Actually the relation was considerably weaker

than in Russia. (Gustafsson et al 2001) There were not much of out-of-pocket costs for education and health care was heavily subsidized.

Circumstances for the rural majority was, and are rather different. Most importantly income of rural persons have and is much lower than in the urban areas. (See for example Knight and Song, 1999) Rural inhabitants are farmers. During the 50s land was collectivized. This meant that at a given location economic possibilities were rather similar for the peasants, while there was much room for variation across locations. Economic reform meant that farmers were given user right to land. Still today access to land is often even at one location while climatic and historical reasons make rural people living in different locations rather different off.

Was intergenerational income mobility high or low in pre-reform China? As there seems to be no study we can only speculate. If for the sake of argument we observe a specific location one could argue that intergenerational incomemobility should have been large. Earnings in urban China were relatively equally distributed. It is true that intergenerational transmit ion of educations existed but as returns to education were rather low this should have meant little for income mobility across generations. Further in rural areas the situations was in many respects similar. Income was relatively equally distributed, and the pay off from having a long education was low.

However, this should not be the entire story. Families and relatives are important for many aspects of life in China so there might be other mechanisms than education making income of generations related. We can exemplify with some circumstances. First, during one period urban workers could actually inherit the job from their parents. Secondly some households have members that are also members of the Communist Party. A membership in the Communist Party can be economic rewarding by for example providing a passport to economic opportunities. Third, economic advantage in pre communist China could for political reasons be a serious burden on the opportunity set of the offspring. Sons and daughters of landowners were

discriminated against. Actually such a mechanism should lead to negative income mobility across generations.

When spatial differences are introduced the issue of intergenerational income mobility appears rather different in China. To see this assume the following model: Income in rural regions is evenly distributed as is income in urban regions. Income in urban areas is much higher so all urban people have higher income than all rural people. The overwhelming proportion of rural born people remain rural for their entire life and all persons born in an urban area remain in this part of the country. The only channel for intergenerational income mobility in this model is geographical mobility from rural to urban areas. A main avenue of geographical mobility is education making a few sons and daughters of farmers urban workers. This model might be a reasonably good approximation to not only to pre-reform China but also (and to a varying degree) other developing countries.

One insight from this discussion is that for studies of intergenerational income mobility is that spatially limited samples can give a distorted picture of intergnenrational mobility in the country as a whole. This should be kept in mind as the present study is limited to people living in urban areas. Our study concentrates on people born 1965 – 1975 having a *houko*. Our study is thus a study of intergenerational income mobility within the privileged minority.

Circumstances have changed rapidly in China. Some of the parents in the first generation under study were born in pre-communist China. We expect most of them to have been born in urban China only a few to be rural born. However, some of the urban born parents experienced rural life as they were sent down youth during the Cultural Revolution around the period the second generation were born. The second generation of the urban residents under study were thus born in pre-reform China. However, most of their live they have lived in a country in transition and rapid economic growth. The transition meant a labor market had emerged. A range of

possibilities their parents had not been exposed to had opened but also new risks have emerged. The system of life long relation with a work unit has disappeared and unemployment has surfaced in urban China. In such an environment social networks are probably important, perhaps more important then before.

Reform in urban China has also means housing reform. Access to subsidised hosing is no longer a part of the package of compensation for work. While many members of the first generation here under study were given the opportunity to buy their housing this was typically not the case for the second generation. This means that many young adults actually live with their parents.

3. Research Strategy

This study uses a subsample of the 2002 Urban Income Survey conducted by the research project "Income Distribution, Growth and Public Policy in China". This project involves a group of researcher at the Institute of Economics, Chinese Academy of Social Sciences, Beijing and scholars from other countries. The project is economically supported by the Ford Foundation, Beijing and SIDA (Swedish International Development Agency). The project was assisted by the General Team of Urban Survey at National Bureau of Statistics (NBS). Data was collected during 2003 and refer to the situation in 2002.

The urban survey covers 12 provinces or province level municipalities: Beijing, Shanxi, Liaoning, Jiangsu, Anhui, Henan, Hubei, Guangdong, Chongquin, Sichuan, Yunnan and Gansu. In total around 7 000 households were drawn from a larger survey annually conducted by NBS. (For more information on this see Gibson et al, 2003 and Bramall 2001) This means that rural migrants without urban *hukou* living in urban areas are not included. The respondents were sampled using a two-stage stratified systematic random sampling scheme. At the first stage cities and counties

are selected and in a second stage households. When included in the survey the household is visited by enumerators who ask questions and assist bookkeeping.

From the 2002 Urban Income Survey we draw a subsample of persons born 1965 - 1975 meaning they were 25 - 35 years of age in 2002. This gives us 2 005 observations. The definition of household income used in the analyses reported in this paper is based on official definitions of household income directly from the survey. Income is recorded for members in the household selected. In case a household has members of two generations we have this information which thus refers to the same year. However, for adults not living in the same household as their parents, information on parental income is not available.

Among the 2 005 observations of people born 1965 – 1975 855 are living in the same household as their parents, and they are the focus for our study. Of those 855 with income information for at least one parent 766 have income information for fathers and 741 income information for mothers while in 655 cases there is information on income of both mother and father.

How the children living with their parents relate to all in the age category? We answer this question by estimating a probi-model. The results reported in Table 1 show understandably that age is strongly and negatively related to living with parents. There is also a clear gender effect signifying that sons stay with their parents to a larger extent than daughters. This is expected as in China the pattern of family formation means that at marriage daughters move out and become a member of the family of their husband. As a consequence sons dominate the sample studied and daughters are much fewer. It is interesting to see that there seems to be no relation between education of the child and being member of the parents household while there is some variation across provinces: For example children in the capital of Beijing with a rather expensive housing market are more likely to live with their parents than children living elsevere.

/Table 1, Table 2, Table 3 and Table 4 about here/

The relation between age and living arrangements for people of different ages is further described in Table 2. As many as 83 percent of persons aged 25 live with their parents. At age 28 are those living with their parents in minority and at age 30 they make up less than one fourth. Slightly more than half of our sample are in the age interval 25 to 28 years. Table 3 shows that daughters in the sample under study are on average younger than sons. On the other hand Table 4 indicate little of gender differences when it comes to educational attainment and province in the sample.

4. Descriptive results

In this section we describe how income in the two generations varies with various characteristics starting with characteristics of sons and daughters in Table 5. It can be noted that there is no clear tendency for income to increase with age. This might be due to the household formation process so that after for example 30 years of age high earning children are less likely to live with their parents. Income is not generally higher for sons than for daughters of the same age. This is understandable as the gender earnings gap in urban China is rather small for those ages (Gustafsson and Li, 2000) However, there is a rather strong relation between education of the child and income. As can easily be understood income of sons and daughters living in Beijing are higher or much higher than income of children living elsewhere.

/Table 5 about here/

Table 6 describes income of parents with respect of characteristics of the child. It is clearly the case that longer educated children have parents with higher income. There

is also a tendency of younger children having parents of higher income and variation by province putting Beijing followed by the prosperous Guangdong in the lead.

/Table 6 about here/

After this background we are ready for the first results on the relation between income in the two generations. In Table 7 we have formed deciles according to the size of child income and report income of parents for each decile. For the first deciles of children there is not much of a relation with parental income, see also Figure 1. However, among higher deciles more of a tendency appears. Parent to children in the highest decile earn income which is about two times as large as parents of children belonging to the lowest decile.

/'Table 7 about here/

In Table 8 we tabulate parents in deciles after their income and report income of children. Again there are not much of difference between the first four deciles but higher up in the income distributions are the relations stronger. Sons having parents belonging to the higest decile have income that is 2.6 times larger than those parents that belong to the first decile and for girls is the corresponding number as high as 3.1 times. When defining the deciles not from average parental income but from income of fathers respectively mothers the relation becomes weaker. Actually it is only the highest deciles of fathers respectively mothers that stand out as exceptional compared to other deciles.

/Table 8 about here /

5. Regression results

/Table 9.1 about here /

Results from estimating the logarithm of child income on the logarithm of income of parent income are reported in Table 9.1. The specifications in the table differ due to choice of income variable in the first generation and also due to some differences in sample due to availability of income information for the first generation. All parameter coefficients reported in Table 9 are positive and have t-values larger than 2.0. The highest parameter estimate is found when we enter log of average parent income as explanatory variable. It amounts to 0.48 while in case log income of the father is included it is 0.34. The coefficient for log of mothers income is 0.21. Not surprisingly when income of mothers and income of fathers enter the same model coefficients are lower, but actually not much lower. Again income of father appears as having larger effect than income of mother.

/ Table 9.1 about here /

In the next step we add characteristics of the child to the specifications. In this manner we control for gender, age, party membership and province. Further we include education of the child. In case the only mechanism by with children of high income parents earn more is that they are longer educated we would expect the coefficients of parental income to approach zero. Results reported in Table 9.2 gives a mixed picture. On one hand in the first specification coefficients for log of average parental income is still positive and statistical significant although lower than its counterpart reported in Table 9.1. On the other hand in the other specifications parental income variables are all estimated with a low t-statistics.

/Table 10.1 about here /

Earlier research on intergenerational income mobility point in the direction that the relation can of different magnitude at different parts of the income distribution. To take this into consideration we utilize quartile regressions and report the results in

Table 10. 1. Some differences across quintiles are found. When one explanatory variable enters the specification the intergenerational relation appears somewhat weaker at the third quartile than at lower positions of the income distribution. Perhaps more interesting is that for the specification including income of both fathers and mothers the coefficients are rather similar at the first quartile, while at higher quartiles income of fathers are stronger related than income of mothers.

/ Table 10.2 a,b c about here /

The final step in the analysis is that we bring in variables measuring child characteristics in the specification for the various quartiles, see Table 10.2. We compare those results with the corresponding OLS estimates reported in Table 9.2 to se if they provide some new insight. Results in Table 10.2 and Table 9.2 agree on that it is difficult to find significant coefficients of mothers income when characteristics of the child is included in the analysis. A difference is that in Table 10.2 coefficients for fathers income have higher t-values than for the estimates reported in Table 9.2. We have thus found additional support for the opinion that intergenerational transmission of income in urban China is mediated not only by education.

6. Conclusions

It is new to study intergenerational income mobility in Peoples Republic of China. The preliminary results we report here refer to urban China where people born 1965 to 1975 and their incomes in 2002 have been studied. While the first generation experienced the large changes of the Cultural Revolution the second generation entered working life when a labour market was emerging. When we observe the two generations unemployment had surfaced in urban China.

Our study focuses on pairs of children and parents living in the same household. For data reasons we could not analyse children and parents living in different households.

Obviously to broaden the study of intergenerational income mobility in China to include rural people as well as urban persons not sharing households should be rather important futhre research tasks. In the paper we have argued that it might well be the case that evaluated over China as a whole intergenerational income mobility is considerably lower than the picture obtained here for urban China. The reason being the large differences in mean income between rural and urban China in combination with the limited (although existing) possibilities for rural children to urbanise.

The main conclusion of this paper is that we have shown the existence of a positive relation in income across generations. The magnitude of the intergenerational income elasticity is in the neighborhood of 0.4. This is similar to often quoted estimates for US reported in research during the 90s. How should one look at this information? It could be tempting to see it as a strong support of an idea that half a century of Communism has not led to more equality in opportunities than in found in the largest contemporary advanced Capitalist country. A less ideological touch is to remain of various methodological issues which can affect our results. Before jumping to broad statements one is advised to have results from more studies and at least important results from a true comparative study in which data for countries investigated have been harmonized as far as possible.

In the paper we also analysed if effects of father's income and mother income on income of the child differed. Further it was investigated if intergenerational effects differed in the income distribution. Finally we controlled for education of the child an some other characteristics in order to see if education was the only channel for intergenerational income mobility. From those exercise we found signs of income of a father to be more important than income of a mother. The exception was that at the lowest quartile it seems as the income of a mother is as important as income of fathers. The results also point in the direction that although educational attainment of the child is one part of transmission of income across generations, this is not the only mechanism.

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Table 1. Probit analysis for yong people aged 25-35 living with or without their parents

Dependent variable:		Number of obs	= 2505
1 if living with		LR chi2(18)	= 907.81
parents,		Prob > chi2	= 0.0000
0 otherwise	Log likelihood = -1055.8729		Pseudo
		R2	= 0.3006

Independent variable:	**Coef.**	**z-value**
sex1	0.7882	12.21
age	-0.2535	-23.04
edg1 (college or above)	0.0678	0.57
edg2	0.0489	0.47
edg4	0.1621	1.50
edg5	-0.0333	-0.29
edg6 (primary school or below)	0.1604	0.54
prov11	0.8744	5.18
prov14	-0.5041	-3.63
prov21	0.2099	1.65
prov34	0.0015	0.01
prov41	-0.1268	-1.02
prov42	-0.2489	-1.95
prov44	-0.2586	-1.86
prov50	-0.2357	-1.27
prov51	-0.4464	-2.97
prov53	-0.2465	-1.73
prov62	-0.2454	-1.69
constant	6.7942	19.74

Table 2. Frequency of people aged 25-35, by living with or without their parents

Age (observations row share column share)	Total sample of people aged 25-35	In which: those living with their parents	Those living independently
25	207 100.00 6.93	173 83.57 18.64	34 16.43 1.65
26	192 100.00 6.43	150 78.13 16.16	42 21.88 2.04
27	184 100.00 6.16	112 60.87 12.07	72 39.13 3.50
28	224 100.00 7.50	95 42.41 10.24	129 57.59 6.27
29	224 100.00 7.50	86 38.39 9.27	138 61.61 6.71
30	238 100.00 7.97	56 23.53 6.03	182 76.47 8.84
31	293 100.00 9.81	66 22.53 7.11	227 77.47 11.03
32	357 100.00 11.96	62 17.37 6.68	295 82.63 14.33
33	312 100.00 10.45	44 14.10 4.74	268 85.90 13.02
34	407 100.00 13.63	51 12.53 5.50	356 87.47 17.30
35	348 100.00 11.65	33 9.48 3.56	315 90.52 15.31
Total	2,986 100.00 100.00	928 31.08 100.00	2,058 68.92 100.00

Table 3. Frequency of children living with their parents, by age and gender

Age	Frequency		
	Total sample	Male	Female
25	18.13	13.82	26.17
26	16.37	14.36	20.13
27	11.93	11.85	12.08
28	10.06	10.05	10.07
29	9.94	11.49	7.05
30	5.38	6.10	4.03
31	7.25	8.62	4.70
32	6.78	7.72	5.03
33	4.91	4.67	5.37
34	5.50	6.28	4.03
35	3.74	5.03	1.34
Total	100	100	100
Number of obs.	855	557	298

Table 4. Frequency of children living with their parents, by gender and educational

Attainment, province

	Frequency		
	Total sample	Male	Female
Education attainment:			
4-year college and above	15.56	14.36	17.79
2-3-year college	30.76	26.93	37.92
Professional school	13.68	12.93	15.10
Upper middle	25.26	28.37	19.46
Lower middle	13.80	16.34	9.06
Primary and below	0.94	1.08	0.67
Province:			
Beijing	9.47	8.44	11.41
Shanxi	6.67	6.64	6.71
Liaoning	14.50	13.64	16.11
Jiangsu	13.92	16.34	9.40
Anhui	4.80	5.03	4.36
Henan	11.23	12.03	9.73
Hubei	9.94	9.34	11.07
Guangdong	7.60	6.82	9.06
Chongqing	3.63	3.59	3.69
Sichuan	4.44	4.31	4.70
Yunnan	7.02	7.18	6.71
Gansu	6.78	6.64	7.05

Table 5. Income of children living with their parents, by gender and other characteristics

	Total sample		Male		Female	
	Mean (yuan)	St. dev	Mean (yuan)	St. dev	Mean (yuan)	St. dev
Age						
25	10433	8086.2	10791	7863.4	10079	8336.0
26	10601	8573.1	10668	9664.1	10513	6934.7
27	10324	7914.3	10672	7296.4	9688	9013.4
28	10163	10008.3	10823	10934.6	8932	8026.5
29	9411	6557.7	9858	7085.2	8048	4460.3
30	10819	6861.9	10061	6473.2	12969	7752.6
31	8812	6732.4	8489	5839.7	9922	9363.4
32	7972	4812.8	8142	4789.2	7488	5016.0
33	8829	4644.9	7752	4020.3	10581	5171.9
34	10945	11268.0	11047	12968.8	10649	3311.4
35	6367	4851.2	7081	4770.7	1375	613.1
Education attainment:						
4-year college and above	14887	11336.9	15308	12404.9	14253	9580.6
2-3-year college	10360	7214.2	10642	6712.3	9985	7845.9
Professional school	10186	8603.0	10670	10070.1	9412	5522.0
Upper middle	8188	5408.5	8429	5676.0	7532	4582.4
Lower middle	6085	4063.5	6173	3925.4	5789	4565.9
Primary and below	5077	3034.0	4812	2644.5	5872	5271.2
Province:						
Beijing	21575	14115.8	22572	16309.4	20196	10435.0
Shanxi	7699	4544.1	8087	4641.5	6982	4382.6
Liaoning	9709	5908.5	10199	6255.8	8932	5282.8
Jiangsu	8635	5027.7	8702	4951.7	8417	5355.4
Anhui	6570	4764.6	5846	3553.0	8131	6588.4
Henan	7921	4700.4	8424	5151.0	6761	3228.4
Hubei	8347	5267.6	8739	5203.6	7729	5388.7
Guangdong	12312	6999.4	12290	7523.1	12344	6328.6
Chongqing	9922	8471.7	9402	4058.5	10870	13508.7
Sichuan	7947	5160.8	6969	4564.5	9624	5843.6
Yunnan	7488	3789.8	7292	3588.3	7882	4233.7
Gansu	7027	6820.3	7790	8187.9	5684	2988.2

Table 6. Parent's Income by children's characteristics

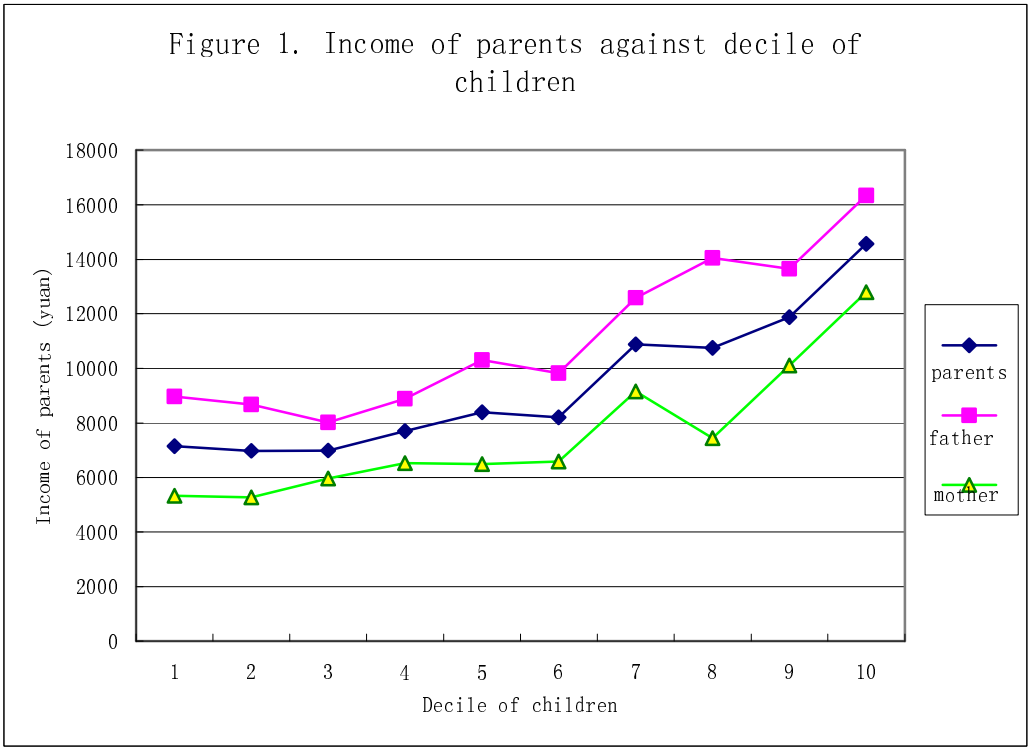
	Average income of parents		Average income of fathers		Average income of mothers	
Children's	Mean	St. dev	Mean	St. dev	Mean	St. dev

characteristics	(yuan)		(yuan)		(yuan)	
Gender						
Male	9106	5908.6	10977	9079.1	7235	5643.2
Female	9712	5623.6	11338	7750.5	8087	6952.7
Age						
25	10124	6456.8	11592	9107.9	8656	7446.4
26	10298	6316.7	12656	10584.1	7940	5486.1
27	9687	6126.1	10209	7504.2	9165	7414.8
28	9988	6382.4	13367	11104.7	6609	4709.7
29	8551	3918.7	11158	6328.6	5944	4761.7
30	9690	5770.5	11117	7463.0	8263	6647.1
31	8001	4995.5	9603	7180.7	6400	5231.7
32	7549	5208.1	8878	6678.8	6221	5466.5
33	8808	4369.9	11309	6563.3	6306	5551.4
34	8926	5824.3	9903	7602.6	7950	6106.1
35	6645	4308.1	6975	6374.8	6316	4744.9
Education attainment:						
4-year college and above	12413	6668.6	14382	9830.1	10443	6952.7
2-3-year college	10096	5433.5	11748	7478.4	8444	7209.5
Professional school	9406	5806.6	11413	9795.5	7400	4551.5
Upper middle	8104	5631.2	9829	9229.4	6378	4602.7
Lower middle	6383	3489.4	8237	5356.6	4530	4462.1
Primary and below	7036	6610.8	7517	8575.9	6555	5494.0
Province:						
Beijing	15213	6585.0	17181	12001.8	13245	5546.6
Shanxi	8006	4516.0	10689	6653.0	5324	5259.1
Liaoning	9279	4535.6	11148	7185.6	7411	4355.0
Jiangsu	9343	5656.6	10917	8636.1	7770	5001.9
Anhui	7636	4278.1	9182	7293.8	6090	3484.5
Henan	7005	3635.3	8934	5770.4	5076	4376.6
Hubei	8424	3897.1	9645	5884.2	7204	5067.5
Guangdong	11816	9649.6	13114	13365.8	10518	12060.5
Chongqing	8113	5117.5	9472	7653.0	6755	4917.2
Sichuan	8075	5363.0	9511	6603.5	6639	5472.7
Yunnan	8748	4378.8	9855	5632.4	7642	5335.9
Gansu	7974	5146.6	11346	9679.1	4602	3959.5

Table 7. Parent's Income by decile groups of children (yuan)

Decile of children (income group from the lowest to the highest)	Average income of Children	Average income of parents	Average income of fathers	Average income of mothers

1	1867	7150	8972	5328
2	3876	6975	8675	5274
3	5114	6991	8023	5958
4	6065	7706	8888	6524
5	7204	8397	10302	6492
6	8760	8204	9827	6581
7	10608	10874	12589	9160
8	12718	10749	14054	7443
9	15943	11878	13650	10106
10	27580	14570	16334	12806



Sources: Table 7.

Table 8a. Children's Income by decile groups of parents(yuan)

Decile of parents (income group from the lowest to the highest)	Average income of children	Average income of boys	Average income of girls
1	6661	6802	6335

2	7335	7572	6686
3	7090	7414	6204
4	7243	7683	6282
5	10431	11448	9084
6	9670	8998	10863
7	10344	10804	9707
8	10398	10653	9897
9	11665	12224	10925
10	18172	17386	19581

Table 8b. Children's Income by decile groups of fathers(yuan)

Decile of fathers (from the lowest to the highest)	Average income of children	Average income of boys	Average income of girls
1	10310	9716	11418
2	7839	8164	7263
3	6725	6917	6168
4	7681	7297	8566
5	8838	9329	7872
6	9180	10169	7739
7	9965	11091	8156
8	10650	10709	10507
9	11192	10622	12153
10	16535	16810	16175

Table 8c. Children's Income by decile groups of parents(yuan)

Decile of mothers (from the lowest to the highest)	Average income of children	Average income of boys	Average income of girls
1	7601	7942	6721
2	6818	7105	6075
3	8660	8721	8561
4	7001	6608	7498
5	8100	8334	7641
6	9710	9770	9572
7	12136	12689	11248
8	10361	10630	9774
9	11575	11430	11859
10	16978	17112	16803

Table 9.1. The results from regression model: predicting children's income with income of their parents, OLS

	Specification I		Specification II		Specification III		Specification III	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of ave. income of parents	0.4753	9.50						
Log of father's income			0.3407	4.68			0.2931	3.69
Log of mother's income					0.2096	3.85	0.1518	2.45
constant	4.5951	10.24	5.6969	8.45	7.0369	14.55		
Adj-R^2	0.0947		0.0266		0.0183		0.0349	
F-value	90.34		21.92		14.81		12.84	
Observations	855		766		741		655	

Table 9.2. The results from regression model: predicting children's income with income of their parents, OLS

	Specification I		Specification II		Specification III		Specification IV	
			Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of ave. income of parents	0.3437	6.58						
Log of father's income			0.1344	1.80			0.1115	1.39
Log of mother's income					0.0595	1.06	0.0508	0.81
Child's Characteristics:								
Male	0.1553	1.79	0.1258	1.36	0.0688	0.76	0.0749	0.74
Female	--	---	---	---	---	--	--	--
Age	-0.0027	-0.19	-0.0075	-0.50	0.0017	0.12	-0.0020	-0.12
4-year college and above	-0.0016	-0.01	0.0310	0.19	0.1135	0.74	0.0628	0.37
2-3-year college	-0.0468	-0.36	0.0289	0.21	0.1028	0.75	0.0973	0.64
Professional school	--	---	--	---	---	---	--	--
Upper middle school	-0.1797	-1.30	-0.2324	-1.57	-0.1937	-1.35	-0.2188	-1.36
Lower middle school	-0.3825	-2.39	-0.4024	-2.36	-0.3960	-2.29	-0.3038	-1.56
Primary school and below	-0.4723	-1.09	-0.5874	-1.17	-0.4262	-0.88	-0.3586	-0.59
Party member	0.1835	1.48	0.1919	1.49	0.1830	1.37	0.1894	1.31
Non-party member	--	---	--	---	---	---	--	--
Beijing	0.6853	3.94	0.8582	4.62	0.8062	4.65	0.8282	4.27
Shanxi	-0.1673	-0.88	-0.2081	-1.02	-0.3513	-1.62	-0.3815	-1.54
Liaoning	0.0079	0.05	0.0200	0.12	0.0483	0.32	0.0632	0.37

Jiangsu	--	--	--	--	---	---	--	--
Anhui	-0.3978	-1.86	-0.4485	-1.95	-0.4521	-2.09	-0.4634	-1.91
Henan	0.0532	0.33	-0.0351	-0.20	-0.0704	-0.40	-0.0453	-0.23
Hubei	-0.7266	-4.27	-0.6705	-3.70	-0.7253	-4.20	-0.7640	-3.99
Guangdong	0.3308	1.82	0.3570	1.86	0.3574	1.87	0.3377	1.60
Chongqing	0.1318	0.46	0.0903	0.30	0.1812	0.61	0.1238	0.38
Sichuan	-0.0433	-0.20	-0.0451	-0.19	-0.1517	-0.65	-0.0911	-0.35
Yunnan	-0.1046	-0.56	-0.0918	-0.46	-0.1865	-0.94	-0.1848	-0.83
Gansu	-0.3628	-1.92	-0.4595	-2.29	-0.2732	-1.34	-0.2876	-1.27
constant	5.8757	9.00	7.8462	9.45	8.3314	12.87	7.4616	7.57
Adj-R^2	0.1593		0.1139		0.1179		0.1447	
F-value	9.09		5.92		5.95		5.10	
Observations	855		766		741		655	

Table 10.1a. The results from regression model: predicting children's income with income of their parents, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of ave. income of parents	0.5134	4.86	0.4643	7.13	0.3808	6.39
constant	3.9882	4.17	4.8499	8.33.	5.9839	10.82
Pseudo-R^2	0.0548		0.0757		0.0687	
Observations	855		855		855	

Table 10.1b. The results from regression model: predicting children's income with income of their fathers, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of income of fathers	0.4290	5.17	0.4691	8.02	0.3324	6.74
constant	4.6166	6.06	4.6652	8.68	6.3091	13.80
Pseudo-R^2	0.0363		0.0708		0.0591	
Observations	766		766		766	

Table 10.1c. The results from regression model: predicting children's income with income of their mothers, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of income of mothers	0.3131	2.83	0.3027	5.36	0.2403	2.89
constant	5.8158	5.85	6.3212	12.61	7.3183	9.70
Pseudo-R^2	0.0254		0.0410		0.0307	
Observations	741		741		741	

Table 10.1d. The results from regression model: predicting children's income with income of their mothers, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of income of fathers	0.2808	4.13	0.4109	6.21	0.3025	7.01
Log of income of mothers	0.2739	4.03	0.1097	2.17	0.1562	2.88
constant	3.5986	5.34	4.2554	8.13	5.2227	9.95
Pseudo-R^2	0.0498		0.0781		0.0645	
Observations	655		655		655	

Table 10.2a. The results from regression model: predicting children's income with income of their parents, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of ave. income of parents	0.2217	1.55	0.1943	3.08	0.1217	3.29
Child's characteristics:						
Male	0.1095	2.09	0.1233	1.82	0.1209	1.63
Female	--	--	---	--	--	--
Age	0.0029	0.30	0.0055	0.61	0.0177	1.94
4-year college and above	0.2385	1.92	0.3163	2.94	0.3206	2.63
2-3-year college	0.0893	1.07	0.0606	0.72	0.0432	0.41
Professional school	--	--	---	--	--	--
Upper middle school	-0.0850	-0.87	-0.2033	-2.35	-0.1460	-1.21
Lower middle school	-0.3097	-2.49	-0.3475	-3.57	-0.4262	-3.61
Primary school and below	-0.5063	-1.67	-0.5467	-1.98	-0.9025	-2.70
Party member	0.1000	1.06	0.1171	1.27	0.1881	1.83
Non-party member	--	--	--	--	--	--
Beijing	0.8504	5.18	0.5805	4.64	0.8027	7.08
Shanxi	0.0554	0.34	-0.0691	-0.77	-0.0528	-0.54
Liaoning	0.2521	2.42	-0.0623	-0.71	0.0023	0.03
Jiangsu	--	--	--	--	--	--
Anhui	-0.2101	-1.57	-0.2928	-2.70	-0.2946	-2.28
Henan	0.2250	1.64	-0.0957	-1.13	-0.1780	-1.22
Hubei	0.0972	0.47	-0.0795	-0.90	-0.0571	-0.57
Guangdong	0.4152	2.64	0.2672	2.05	0.3576	2.51
Chongqing	0.0377	0.16	0.2419	1.10	0.2756	1.36
Sichuan	0.1029	0.33	-0.2162	-1.12	-0.1642	-1.03
Yunnan	0.1030	0.75	-0.0529	-0.51	0.0496	0.37
Gansu	-0.2426	-1.56	-0.3223	-2.98	-0.1997	-1.08
constant	6.3064	4.63	7.0615	12.04	7.6301	14.98
Pseudo-R^2	0.1318		0.1802		0.1951	
Observations	855		855		855	

Table 10.2b. The results from regression model: predicting children's income with income of their fathers, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of father's income	0.1883	2.34	0.2349	4.56	0.1923	3.92
Child's characteristics:						
Male	0.0939	1.91	0.1262	2.12	0.0770	1.12
Female	--	--	--	--	--	--
Age	0.0004	0.03	-0.0002	-0.01	0.0094	1.01
4-year college and above	0.1591	1.00	0.2705	2.77	0.3379	3.26
2-3-year college	0.0725	0.89	0.1119	1.47	0.0607	0.61
Professional school	--	--	--	--	--	--
Upper middle school	-0.1861	-2.17	-0.1966	-2.16	-0.1366	-1.22
Lower middle school	-0.3664	-3.88	-0.3623	-3.17	-0.3205	-3.02
Primary school and below	-0.7192	-4.27	-0.6207	-1.41	-0.6539	-1.40
Party member	0.0855	0.72	0.1483	1.87	0.2000	1.89
Non-party member	--	--	--	--	--	--
Beijing	0.9813	8.65	0.6943	6.26	0.7147	5.42
Shanxi	0.1280	0.71	-0.1340	-1.14	-0.1433	-1.13
Liaoning	0.3663	2.80	0.0149	0.18	-0.0413	-0.44
Jiangsu	--	--	--	--	--	--
Anhui	-0.1077	-0.48	-0.2849	-1.60	-0.2930	-2.44
Henan	0.2411	1.64	-0.0445	-0.51	-0.2166	-1.53
Hubei	0.1283	0.62	-0.0679	-1.02	-0.0727	-0.58
Guangdong	0.5089	3.08	0.2837	3.03	0.2877	1.95
Chongqing	-0.0161	-0.10	0.0729	0.41	0.0800	0.52
Sichuan	0.1688	0.88	-0.1185	-0.97	-0.1733	-1.11
Yunnan	0.1294	0.76	-0.0324	-0.23	-0.0689	-0.40
Gansu	-0.2469	-1.38	-0.3717	-5.72	-0.4394	-2.11
constant	6.6468	9.68	6.7242	12.59	7.2288	17.24
Pseudo-R^2	0.1370		0.1904		0.1957	
Observations	766		766		766	

Table 10.2c. The results from regression model: predicting children's income with income of their mothers, Quantile Regression

	Quantile25		Quantile50		Quantile75	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of mother's income	0.0636	0.89	0.0602	1.66	0.0754	1.96
Child's characteristics:						
Male	0.0934	1.40	0.0918	1.46	0.0692	1.44
Female	--	--	--	--	--	--
Age	0.0032	0.27	0.0015	0.16	0.0155	1.56
4-year college and above	0.2915	2.50	0.3610	3.98	0.3286	3.67
2-3-year college	0.1452	1.73	0.1603	2.58	0.0850	0.94
Professional school	--	--	--	--	--	--
Upper middle school	-0.1664	-1.85	-0.2091	-2.70	-0.1392	-1.41
Lower middle school	-0.3640	-4.28	-0.3859	-3.51	-0.4591	-3.62
Primary school and below	-0.1641	-0.91	-0.4823	-1.81	-0.8790	-2.00
Party member	0.1691	1.93	0.2217	2.67	0.2066	2.27
Non-party member	--	--	--	--	--	--
Beijing	0.8539	7.00	0.7171	6.49	0.7777	5.93
Shanxi	-0.0004	-0.00	-0.2319	-1.24	-0.1581	-1.56
Liaoning	0.2564	3.92	0.0579	0.91	-0.0175	-0.22
Jiangsu	--	--	--	--	--	--
Anhui	-0.0606	-0.27	-0.1728	-1.01	-0.3040	-2.57
Henan	0.1128	0.90	-0.0090	-0.10	-0.3148	-4.76
Hubei	-0.0418	-0.19	-0.0680	-0.65	-0.1753	-2.19
Guangdong	0.3498	3.09	0.2733	2.26	0.3448	3.27
Chongqing	0.0535	0.20	0.1574	0.99	0.2138	1.19
Sichuan	0.0161	0.06	-0.1819	-1.37	-0.2366	-2.31
Yunnan	0.0125	0.08	-0.0931	-0.55	-0.1157	-1.05
Gansu	-0.3259	-1.83	-0.3288	-2.93	-0.2759	-1.64
constant	7.7787	10.71	8.3126	17.36	8.2072	19.64
Pseudo-R^2	0.1301		0.1791		0.1957	
Observations	741		741		741	

Table 10.2d. The results from regression model: predicting children's income with income of their fathers and mothers, Quantile Regression

	Quantile25	Quantile50	Quantile75

	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Log of father's income	0.1363	2.55	0.1947	3.91	0.1759	3.07
Log of mother's income	0.0493	1.02	0.0196	0.48	0.0297	0.80
Child's characteristics:						
Male	0.0639	0.75	0.0981	1.76	0.0548	0.87
Female	--	--	--	--	--	--
Age	-0.0001	-0.01	0.0031	0.26	0.0131	1.22
4-year college and above	0.2259	2.18	0.2933	2.41	0.3629	3.42
2-3-year college	0.1287	1.28	0.1265	1.76	0.1051	1.18
Professional school	--	--	--	--	--	--
Upper middle school	-0.1965	-1.76	-0.1958	-2.04	-0.1141	-1.08
Lower middle school	-0.2826	-2.63	-0.3163	-3.24	-0.2936	-2.77
Primary school and below	-0.3250	-1.30	-0.4191	-1.14	-0.5766	-1.16
Party member	0.1813	1.66	0.2319	2.82	0.2143	2.17
Non-party member	--	--	--	--	--	--
Beijing	0.9107	9.25	0.6446	5.82	0.6827	6.62
Shanxi	-0.0139	-0.07	-0.2700	-2.04	-0.1869	-1.56
Liaoning	0.3268	2.65	-0.0446	-0.46	-0.0763	-0.61
Jiangsu	--	--	--	--	--	--
Anhui	-0.0418	-0.23	-0.2831	-1.67	-0.3273	-2.12
Henan	0.2308	1.30	-0.0918	-1.18	-0.2806	-2.42
Hubei	-0.0459	-0.24	-0.1170	-1.21	-0.1577	-1.11
Guangdong	0.3724	2.76	0.1655	1.28	0.3929	3.59
Chongqing	-0.0376	-0.19	0.0547	0.23	0.3204	1.63
Sichuan	0.1705	0.96	-0.1832	-1.19	-0.2970	-2.02
Yunnan	0.0172	0.07	-0.1654	-1.39	-0.1814	-1.04
Gansu	-0.3208	-1.76	-0.3879	-2.89	-0.5042	-2.16
constant	6.7326	12.30	6.8880	14.22	7.0365	11.24
Pseudo-R^2	0.1415		0.1893		0.1991	
Observations	655		655		655	