Figures and tables using Stata.

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How are economic disadvantages transmitted from parents to children?

There are several studies documenting how wealth is transferred and inherited. But what about poverty and debt?

Smythe, A. looks at the change in wealth over a year and shows that children who spend more money on their parents do not experience an increase in wealth.

This is done using the fact that at age 62 parents become eligible for social security support.

In this lecture we will go beyond the paper's analysis and explore the story in depth. In the process we will use some trick that make figures and tables more readable and compelling.

Useful tool for RA's: https://www.ctan.org/pkg/excel2latex

Getting to know your data:

Lets start with a very simple exploratory analysis. Just enlist the main variables and report their basic descriptive statistics.

- Summarize: For ovious reasons
- For loop: To iterate over variables
- Putexcel: To export tables to excel

Other approaches: esttab, estout, regression only on the constant.

Getting to know your data:

Variables	(1) Mean	(2) Standard deviation	(3) First quartile	(4) Median	(5) Third quartile
Parent is white	0.703	0.457	0.000	1.000	1.000
Parent's age at birth	29.465	6.758	25.000	29.000	33.000
Parent's years of education	14.445	11.916	12.000	13.000	16.000
Parent's marital status	2.094	1.325	1.000	1.000	3.000
Child's years of education	15.281	14.076	12.000	14.000	16.000
Parent's real income	78654.284	103550.241	26764.282	53663.594	99371.141
Child's real income	94959.037	122711.314	38623.900	71868.129	116069.313

Is there a simple story in your data? Is it a clear one?

Now lets explore differences in the sample. Is there any simple evidence that suggest what we think its happening?

- Summarize: For ovious reasons
- For loop: To iterate over variables
- Putexcel: To export tables to excel
- Useful trick: Loop over alphabet letters.

Other approaches: Regression on indicators, t-tests, graphical approaches (see next slides)

Is there a simple story in your data? Is it a clear one?

Sample	All		Black between 52 and 72	
Variables	Parent recieved trans.	Parent not recieved trans.	Parent recieved trans.	Parent not recieved trans.
	(1)	(2)	(3)	(4)
Parent is white				
Mean	0.577	0.712	0.032	0.018
Standard deviation	0.494	0.453	0.177	0.132
Parent's age at birth				
Mean	29.274	29.479	27.879	28.392
Standard deviation	7.034	6.738	7.029	7.413
Parent's years of education				
Mean	13.648	14.503	14.446	14.082
Standard deviation	15.132	11.645	16.801	12.868
Parent's marital status				
Mean	2.709	2.049	2.827	2.486
Standard deviation	1.254	1.319	1.301	1.440
Child's years of education				
Mean	15.357	15.275	14.863	13.297
Standard deviation	15.191	13.992	14.711	10.759
Parent's real income				
Mean	45855.831	81050.530	32547.489	52017.855
Standard deviation	56100.227	105792.576	30329.129	44634.965
Child's real income				
Mean	77361.656	96244.697	46422.292	56559.055
Standard deviation	102312.740	123975.893	39698.522	45236.729

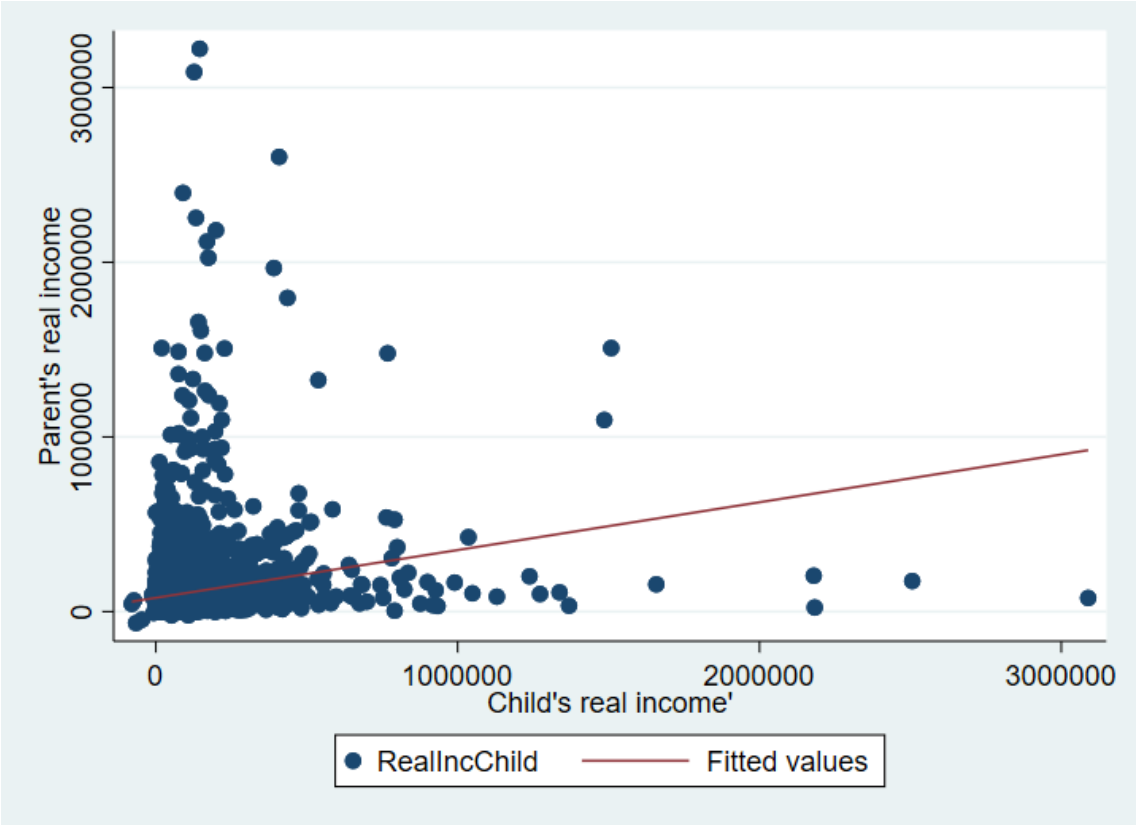
Are means sufficiently rich? How can we look at the whole population whithout getting lost?

We can plot all the observations (if we are willing to look at just a few variables). The story is not always more clear.

1. Scatter: To observe joint distribution
2. lfit: Graphical regression
3. Several aesthetic options for the figures.
4. Are outliers preventing us from looking at the places where the action happens?

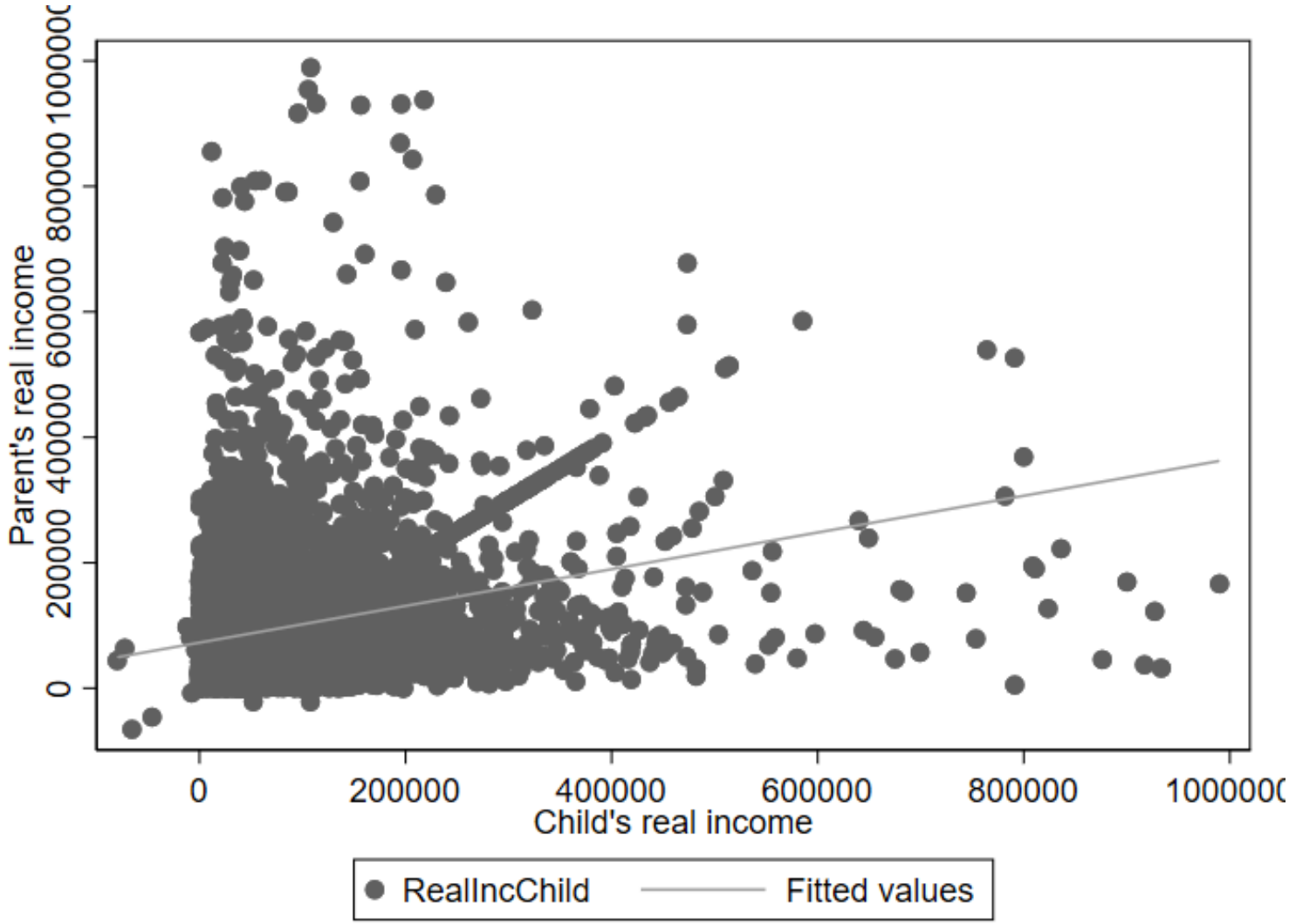
Other approaches: Bar graphs, boxplots.

Are means sufficiently rich? How can we look at the whole population whithout getting lost?



Are those big numbers messing with the figure?

Are means sufficiently rich? How can we look at the whole population whithout getting lost?



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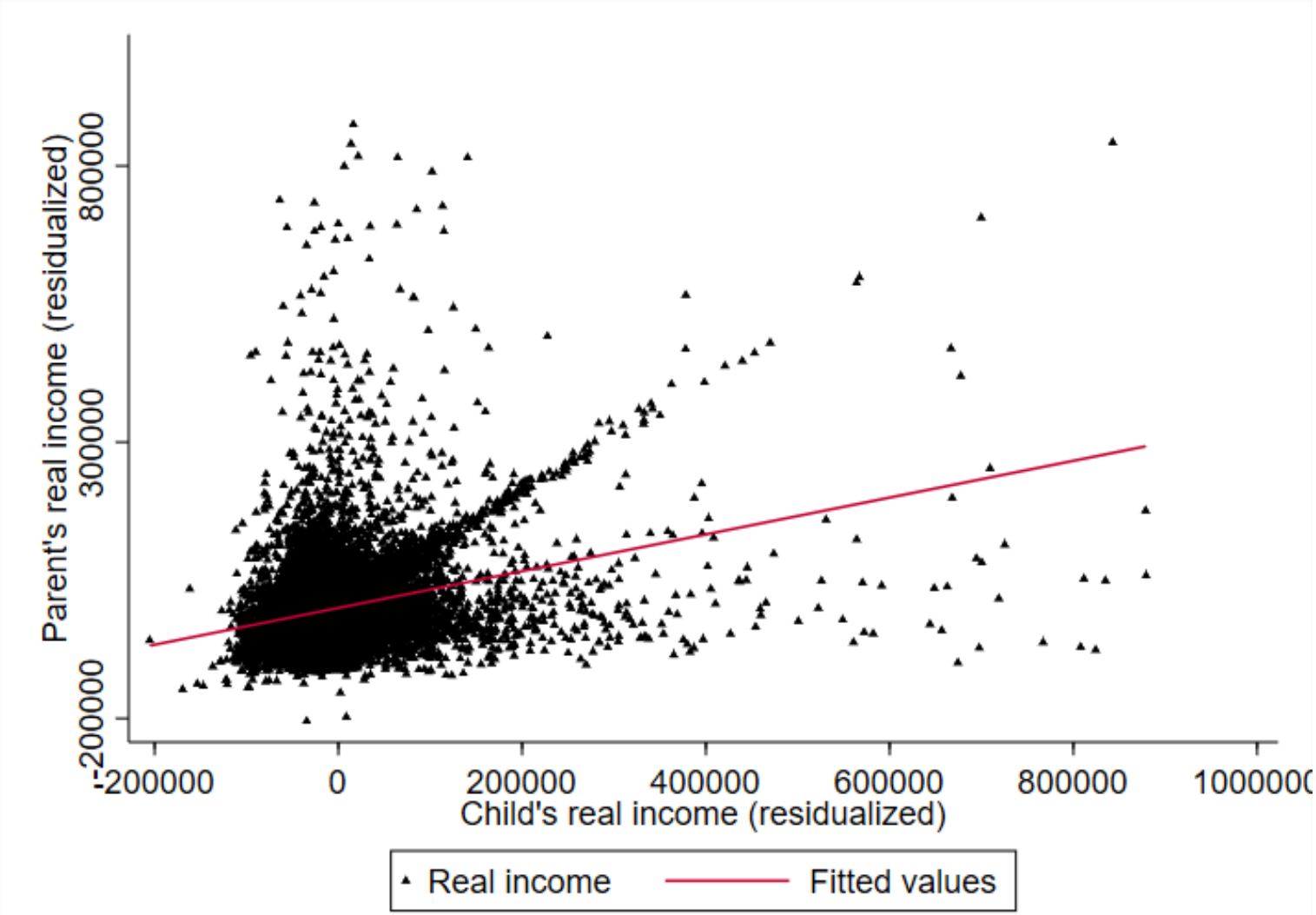
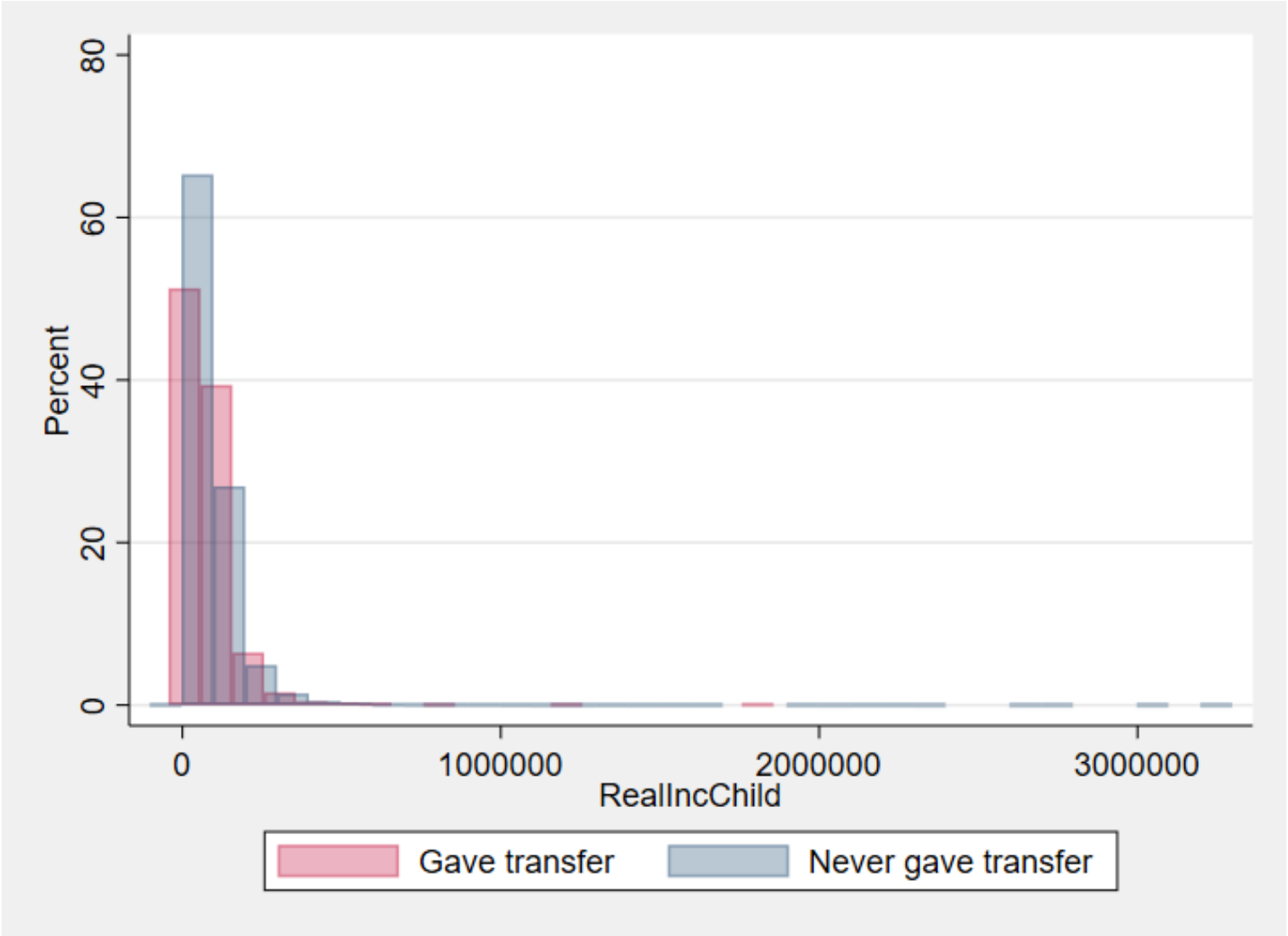


A simple but powerful tool: comparing uni-variate densities



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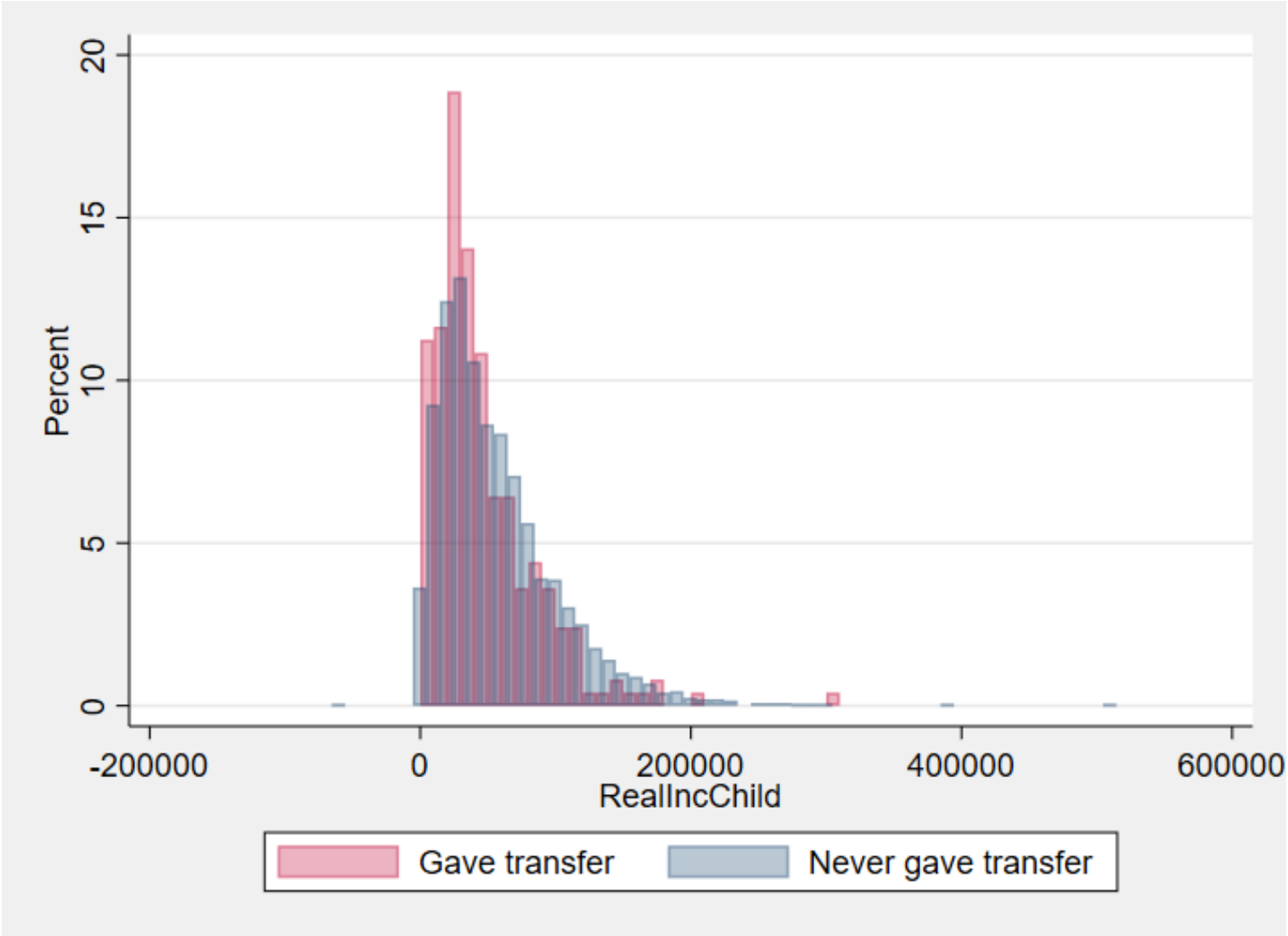

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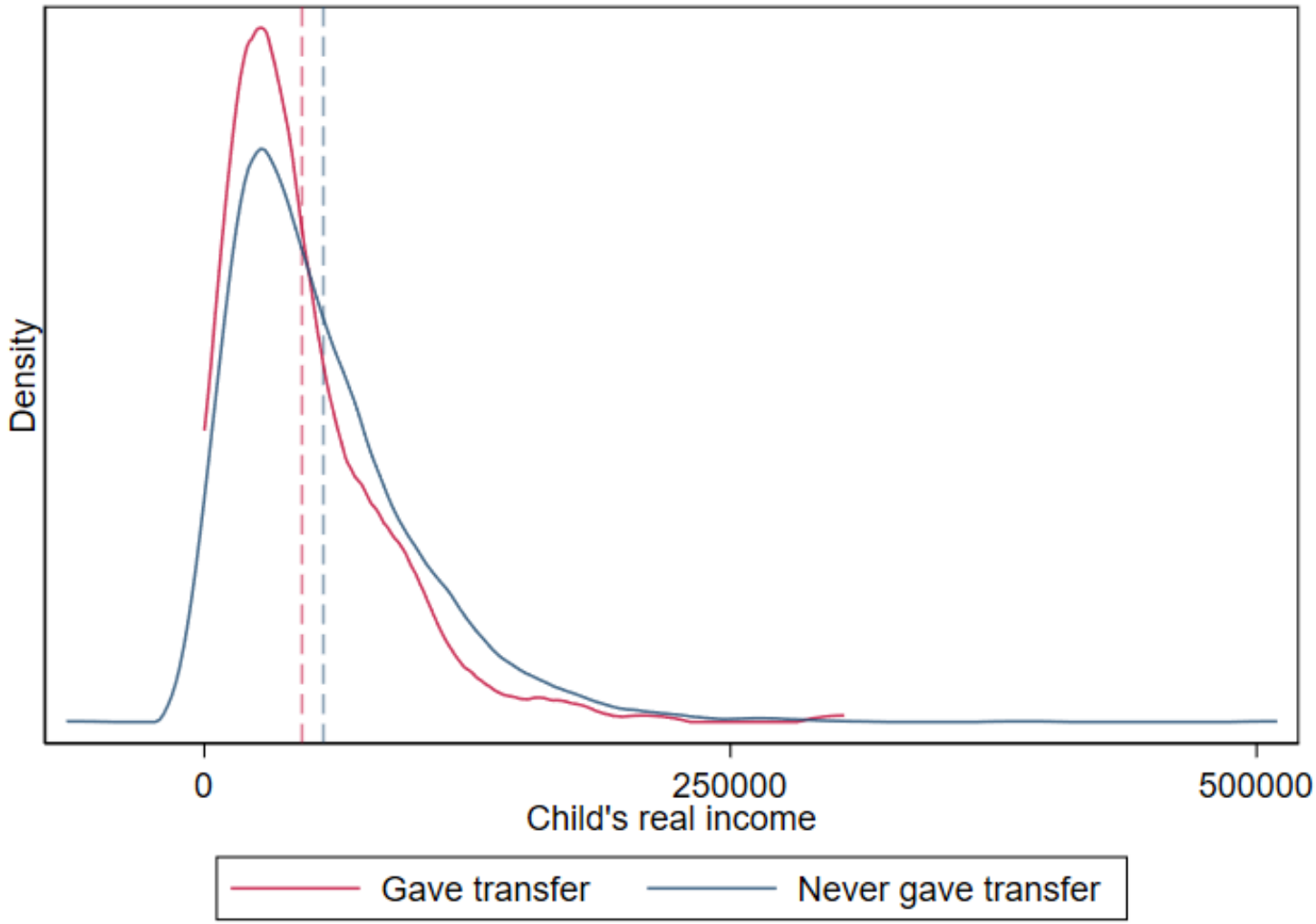


Regression analysis

Do transfers patterns change when parents turn 62?

If yes, we can use this change to explore the effect of parents wealth on childrens' wealth.

- outreg2
- Indicators and loops for an organized robustness analysis.

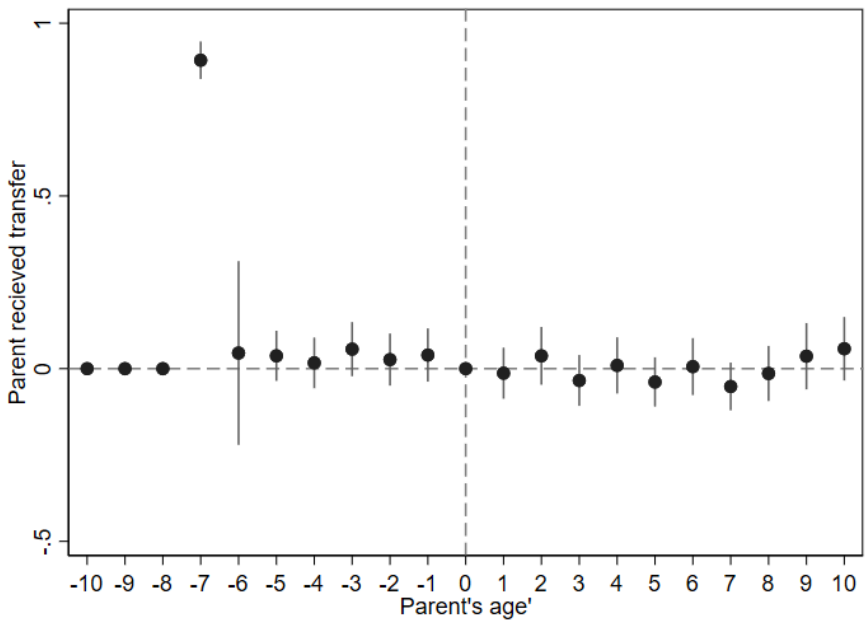
Other approaches (for importing results): Loop that writes a latex table, putexcel.

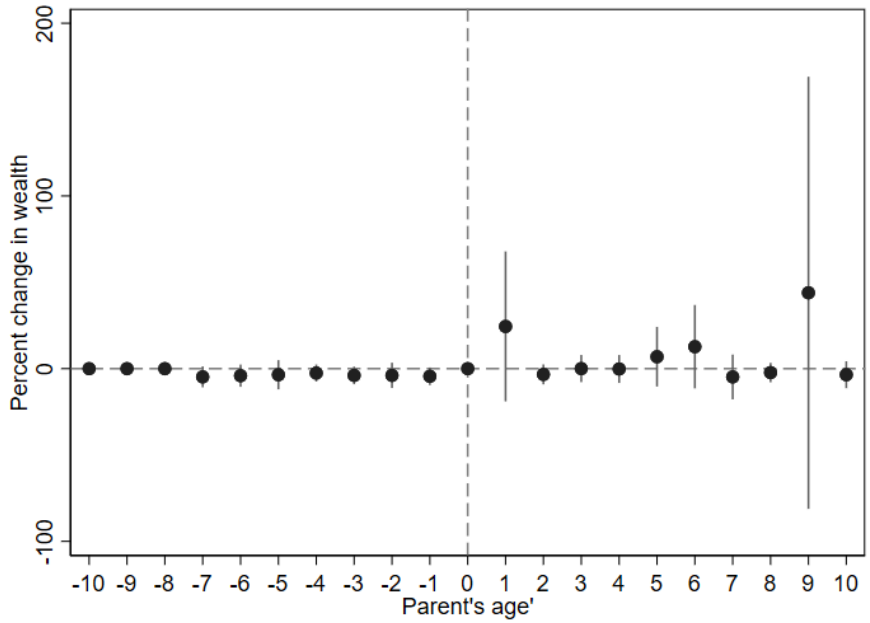
Regression analysis

Variables	Transfer	Wealth change	Transfer	Wealth change	Transfer	Wealth change	Transfer	Wealth change
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Above 62	-0.0285*	10.64*	-0.0280*	11.11*	-0.0309**	11.01*	-0.0785***	10.72*
	(0.0147)	(5.878)	(0.0149)	(6.574)	(0.0150)	(6.400)	(0.0190)	(6.494)
Parent is black			0.0228	10.14	0.0227	9.971	0.0318*	9.286
			(0.0157)	(8.420)	(0.0158)	(8.283)	(0.0164)	(8.326)
Female child			-0.0294*	-10.93*	-0.0279*	-10.99*	-0.0241	-9.675*
			(0.0153)	(6.070)	(0.0153)	(6.072)	(0.0157)	(5.355)
Included variables								
Parent 'syears of educ.			Yes	Yes	Yes	Yes	Yes	Yes
Child's years of educ					Yes	Yes	Yes	Yes
Parent's age							Yes	Yes
Child's age							Yes	Yes
Dep. Var mean.	0.0591	13.42	0.0591	13.42	0.0591	13.42	0.0591	13.42
R-squared	0.002	0.002	0.005	0.004	0.008	0.005	0.018	0.005
Observations	1,797	1,797	1,797	1,797	1,797	1,797	1,797	1,797

Regression analysis: Richer patterns

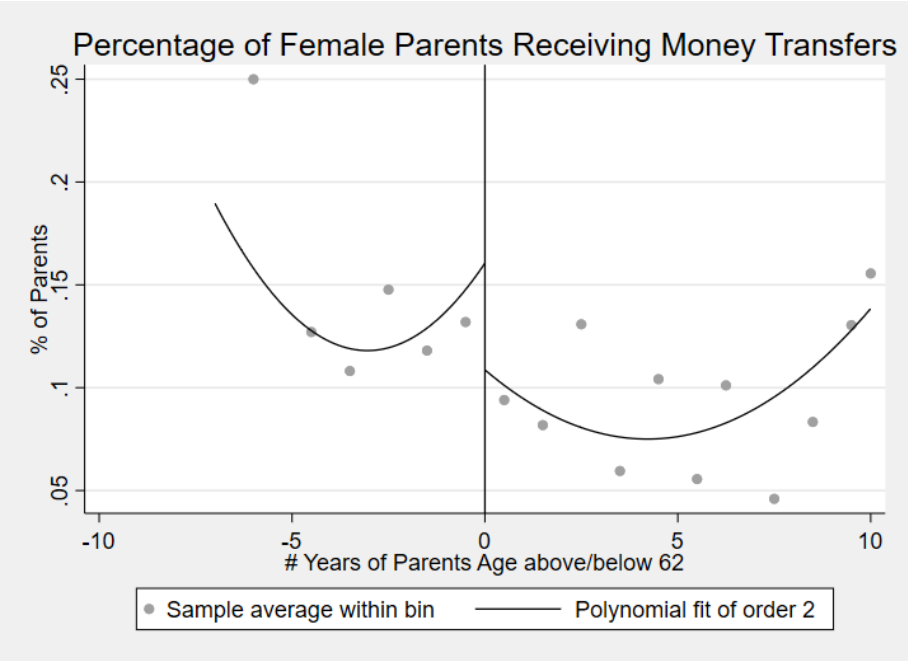
We can look at how the effect evolves as parents age.

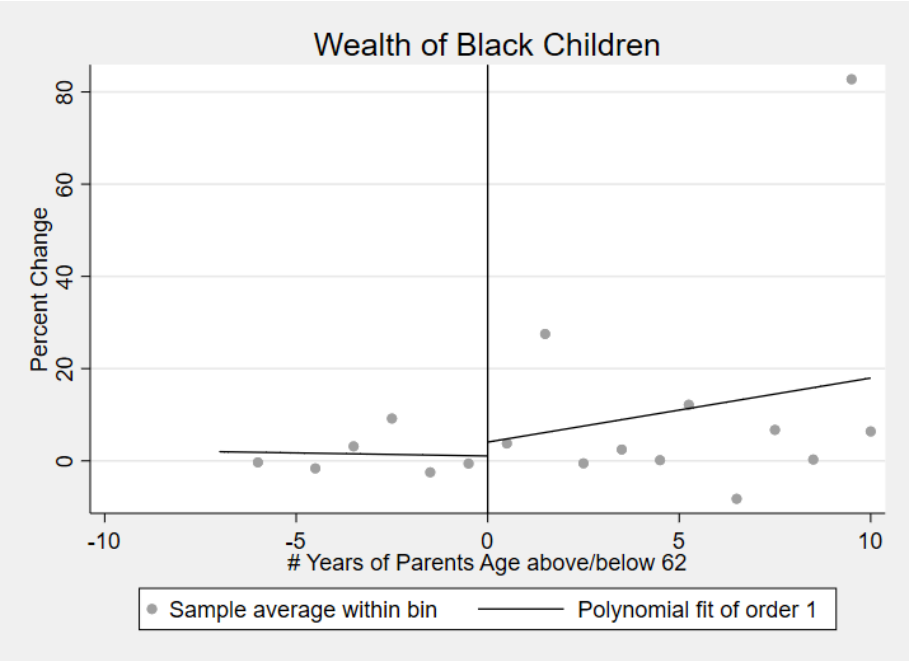




A bit beyond regression analysis: Regression discontinuity

We can look at how the effect evolves as parents age in an even more flexible way.





Refference:

Smythe, A. (2022, May). Child-to-Parent Intergenerational Transfers, Social Security, and Child Wealth Building. In AEA Papers and Proceedings (Vol. 112, pp. 53-57). 2014 Broadway, Suite 305, Nashville, TN 37203: American Economic Association.