



New Estimates of Intergenerational Economic Mobility Using Administrative Data

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Measuring intergenerational economic mobility

Intergenerational Elasticity (IGE):

Percent increase in income a child can expect to secure for each one percent increase in the income of his or her parents.

$$IGE = \frac{\partial \log E(y_c)}{\partial \log y_p}$$

Typically between 0 and 1, interpreted as the share of inequality between families persisting from one generation to the next

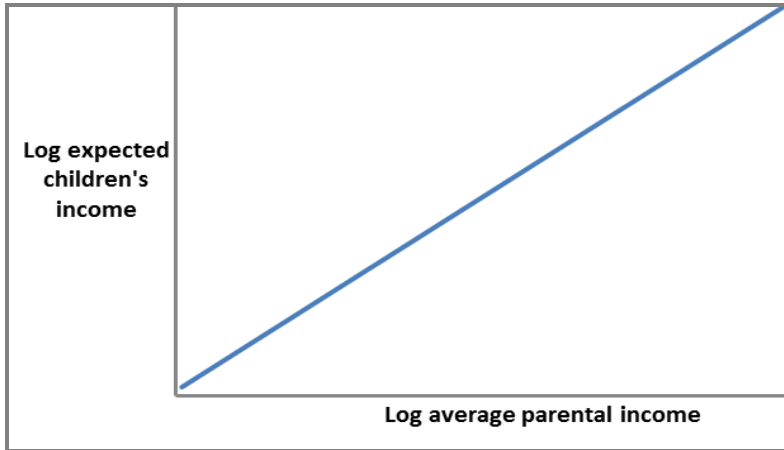
Higher IGE \longrightarrow Lower mobility

Statistics of Income Mobility Panel (SOI-M)

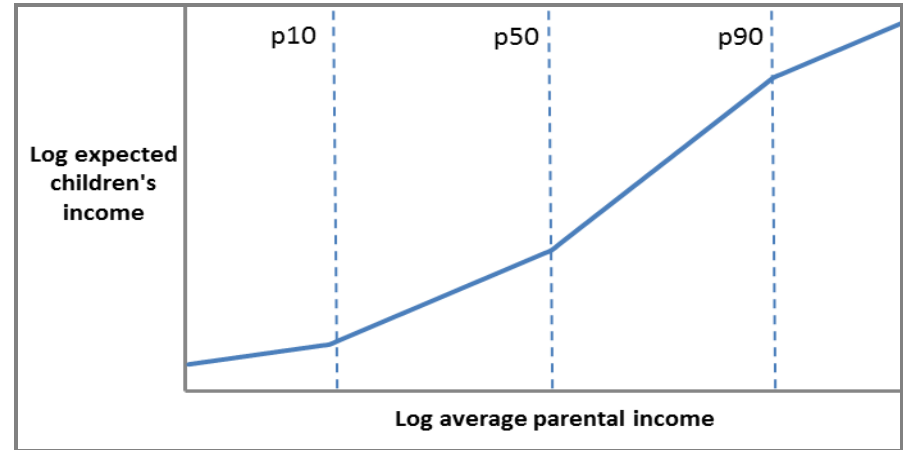
- Represented population:
 - Children born 1972-1975 who were living in U.S. in 1987
- Track children from age 26 to TY2010, when they were 35-38
 - Panel of children with 10 to 13 years of tax return and other administrative information (1998 – 2010)
 - Address lifecycle bias by observing children in their late 30s
 - Linked to parent tax returns from 1987 to 1998
 - Address attenuation bias by using 9 years of parental information (when children are 15 to 23 years old)
- Three income concepts: Total income, After-tax income, Earnings

Three approaches to estimating IGEs

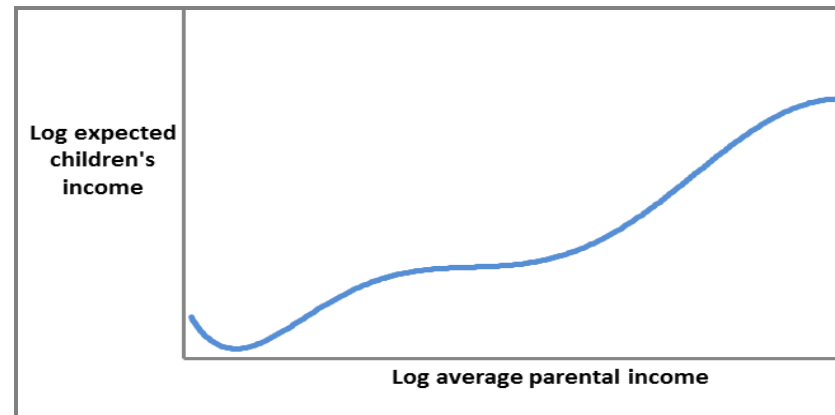
Constant elasticity PPML model



PPML model with linear spline



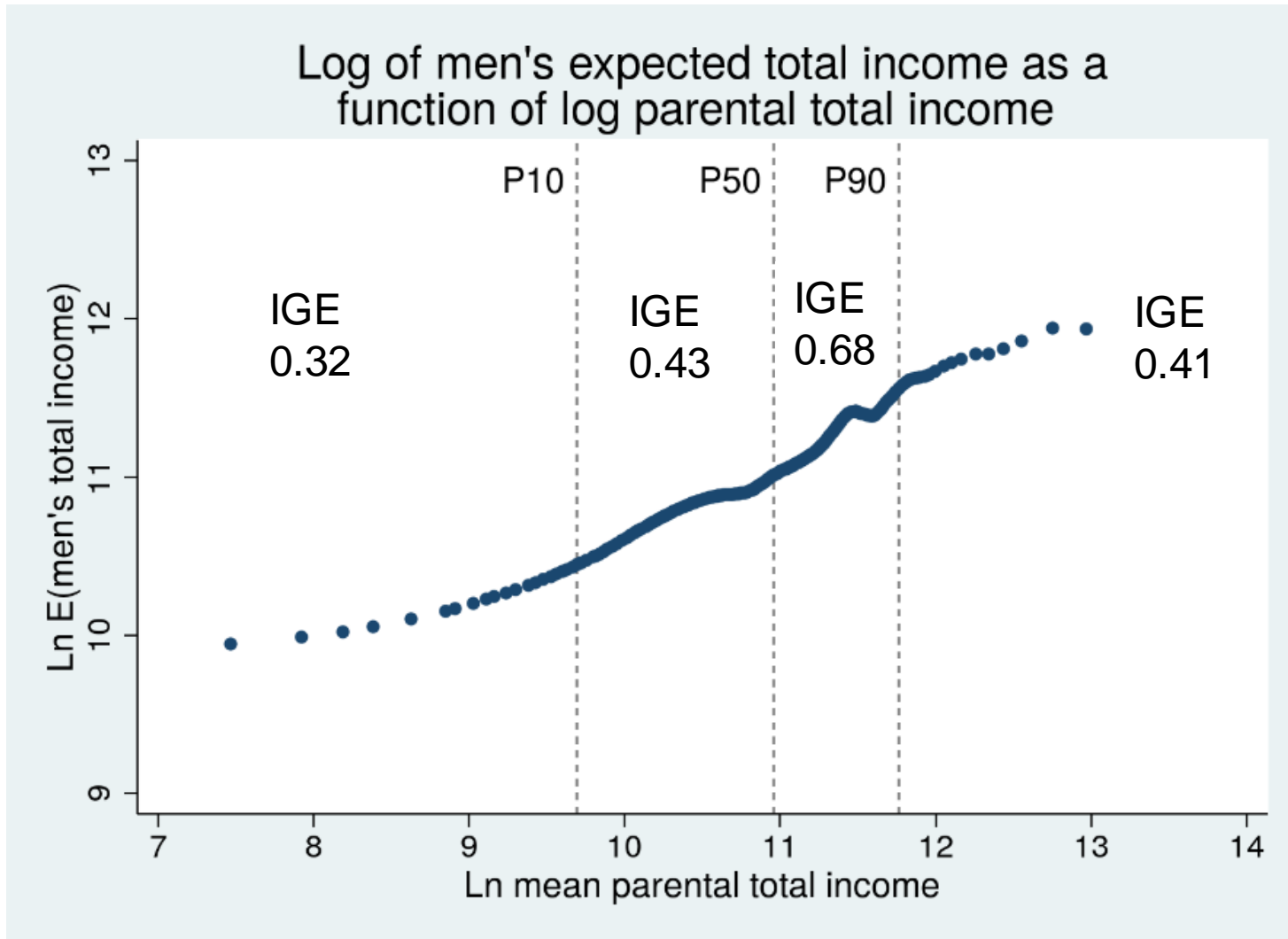
Nonparametric model



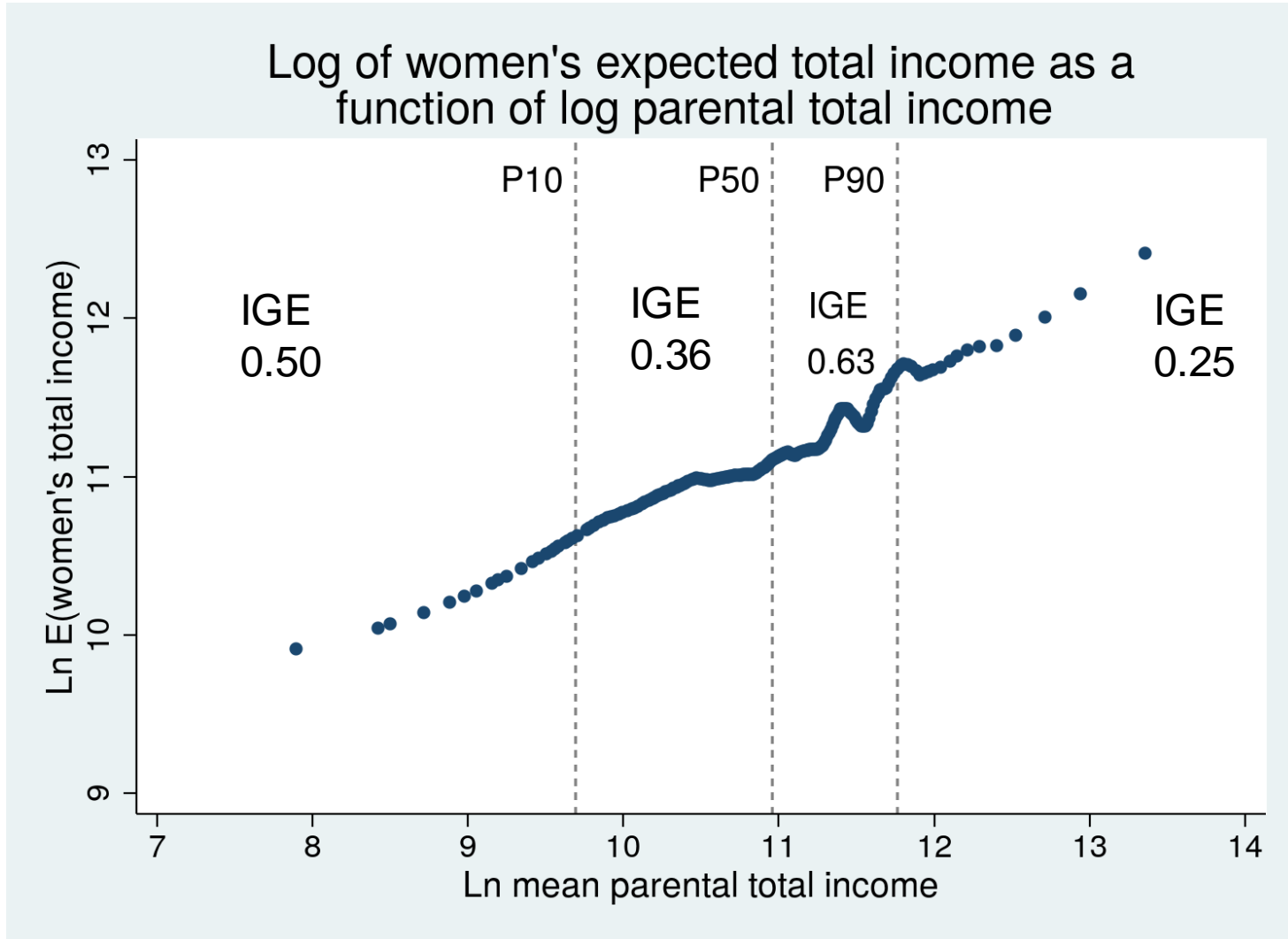
Key IGE estimates

	CE PPML		Spline PPML		Nonparametric	
	Point Estimate	CI	Point Estimate	CI	Point Estimate	CI
Total Income						
Men	0.47	(0.43 - 0.52)	0.51	(0.45 - 0.57)	0.52	(0.46 - 0.56)
Women	0.45	(0.41 - 0.49)	0.46	(0.41 - 0.52)	0.47	(0.41 - 0.52)
After-tax Income						
Men	0.46	(0.42 - 0.51)	0.49	(0.43 - 0.55)	0.50	(0.44 - 0.56)
Women	0.44	(0.40 - 0.48)	0.46	(0.40 - 0.51)	0.46	(0.41 - 0.53)
Earnings						
Men	0.49	(0.43 - 0.55)	0.54	(0.49 - 0.61)	0.56	(0.49 - 0.62)
Women	0.27	(0.22 - 0.33)	0.31	(0.25 - 0.37)	0.32	(0.27 - 0.38)

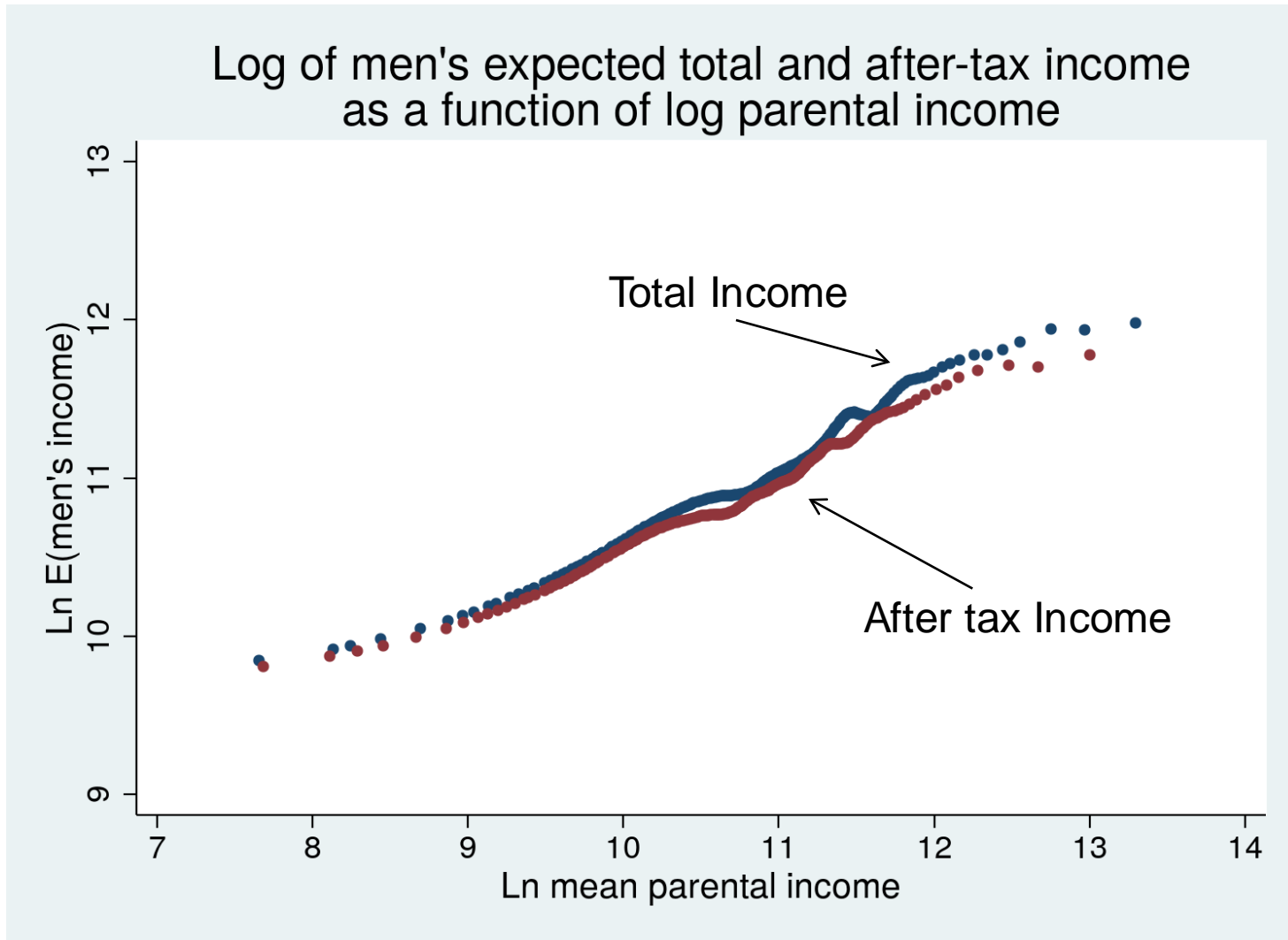
Total Income Nonparametric Curve (Men)



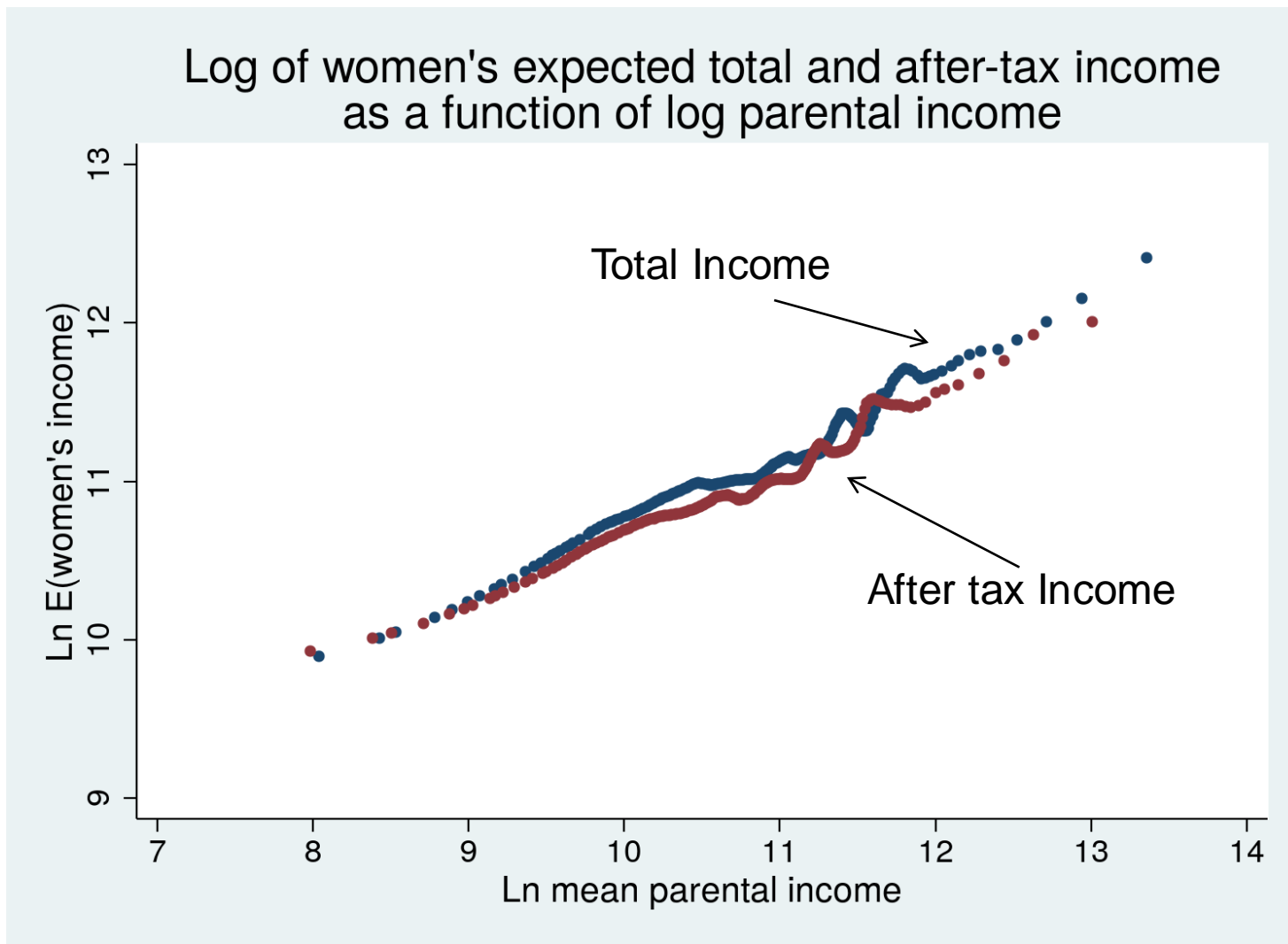
Total Income Nonparametric Curve (Women)



Total and After-tax Nonparametric Curves (Men)

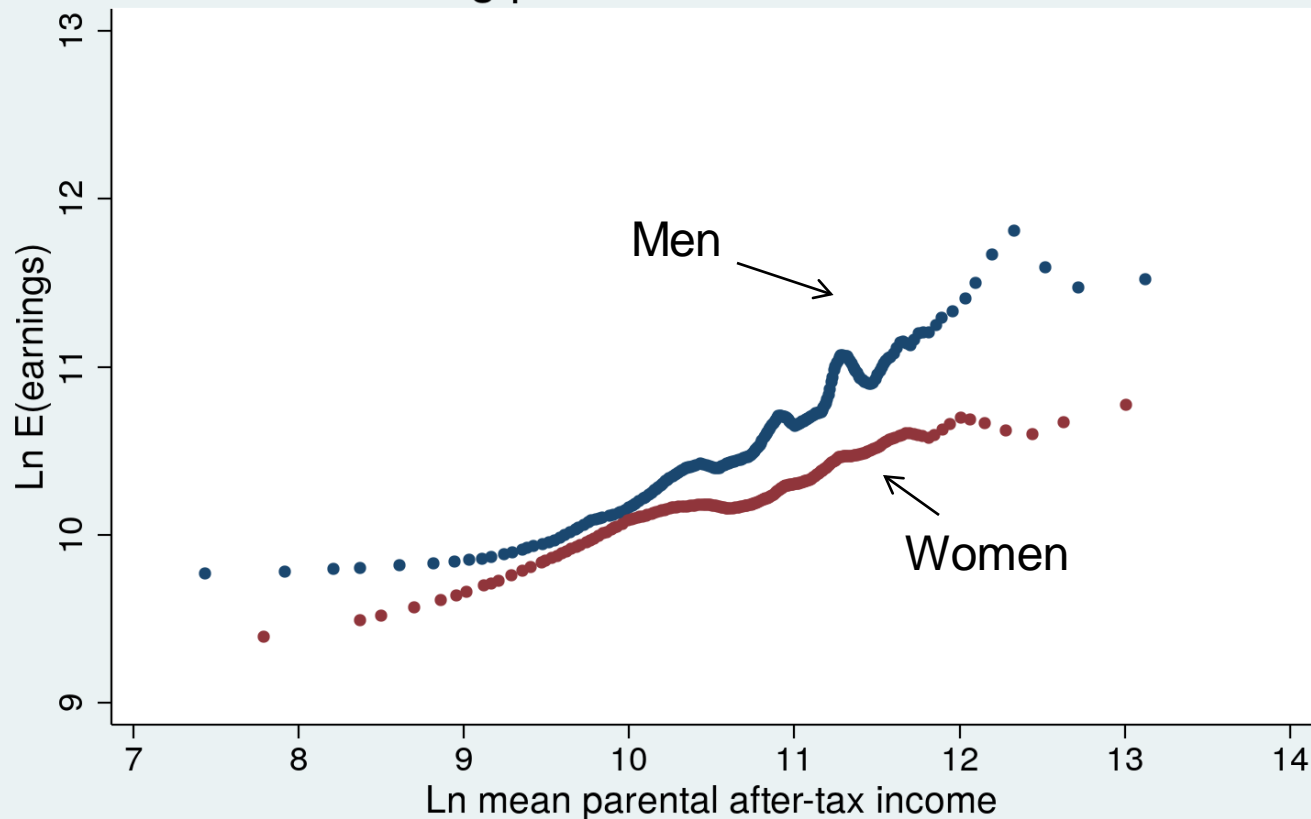


Total and After-tax Nonparametric Curves (Women)



Earnings Nonparametric Curves

Log of expected earnings as a function of log parental after-tax income



Constant IGE:

M: 0.49 (0.43 - 0.55)

W: 0.27 (0.22 - 0.33)

Spline IGE:

M: 0.54 (0.49 - 0.61)

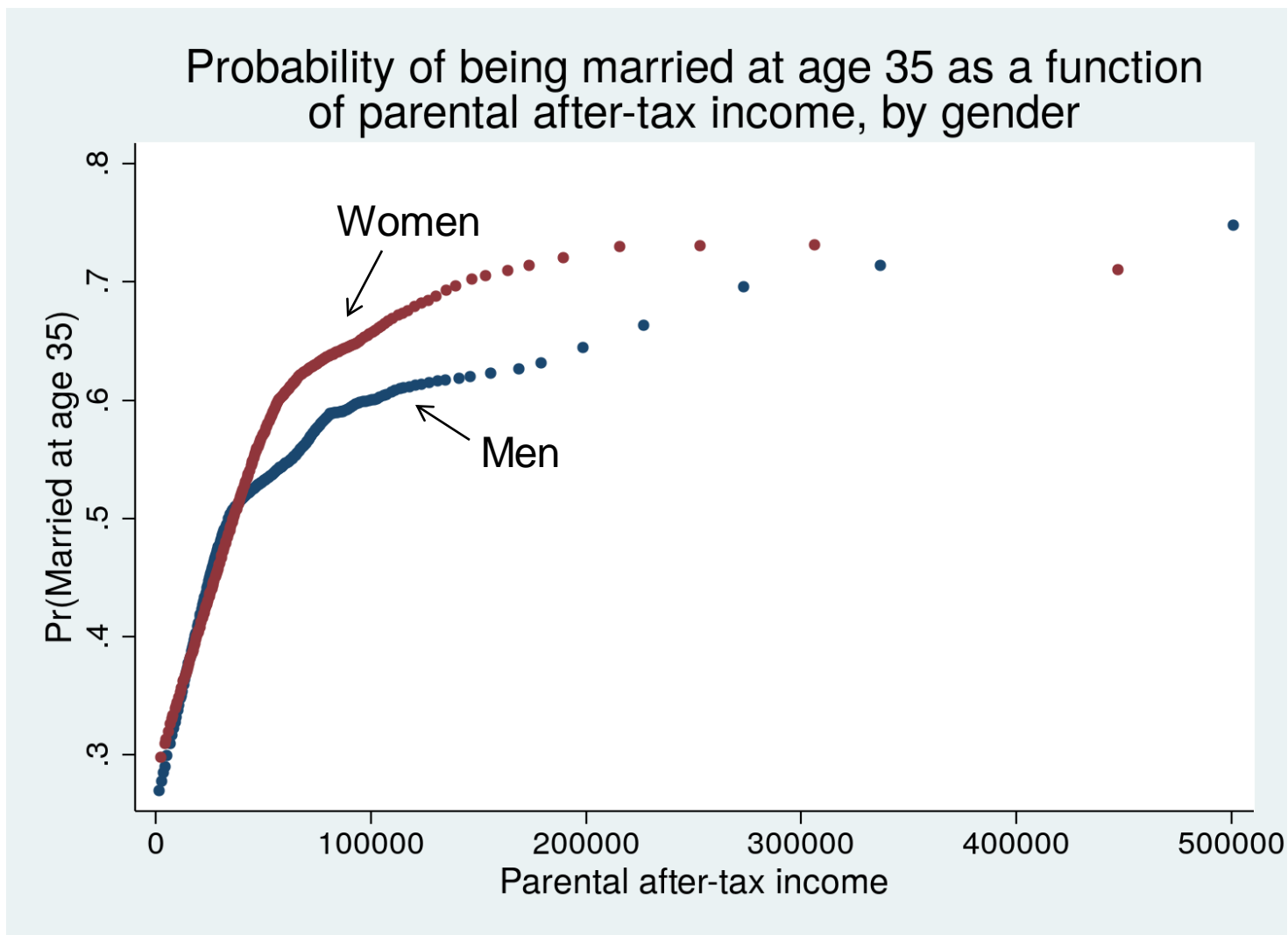
W: 0.31 (0.25 - 0.37)

Nonpar IGE:

M: 0.56 (0.49 - 0.62)

W: 0.32 (0.27 - 0.38)

The Role of Marriage



Spousal Earnings Nonparametric Curves

Log of expected earnings from spouse as a function of log parental after-tax income



Key findings

- Total income IGEs reveal high persistence of income differences
 - About half are passed from parents to children
- IGEs are heterogeneous across the parental income distribution
 - About two-thirds of income differences are transmitted from parents to children in the upper-middle region of the parental distribution
- After-tax income IGEs are slightly lower than total income IGEs
 - Total and after-tax income curves have similar shapes
 - Total income IGE provides good representation of economic mobility
- Women's lower earnings IGE is compensated by
 - Higher marriage probability
 - Higher spousal earnings IGE