

Intergenerational Income Mobility:
Persistence in income between
parents and children

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Why Inequality and Mobility

- During the period of economic growth:
 - People more or less received “fruit of growth.”
 - Better life for children than parents’ generation.
 - People moved across regions and occupations.
- In matured and stagnant economy:
 - Allocation increasingly matters for people.
 - Children might not be better-off than parents.
 - Tertiary education heavily financed by household.

Studies of Intergenerational Mobility

(Sociology) “Social Mobility”

Persistence in social class between parents and children

(Economics) “Mobility of Economic Status”

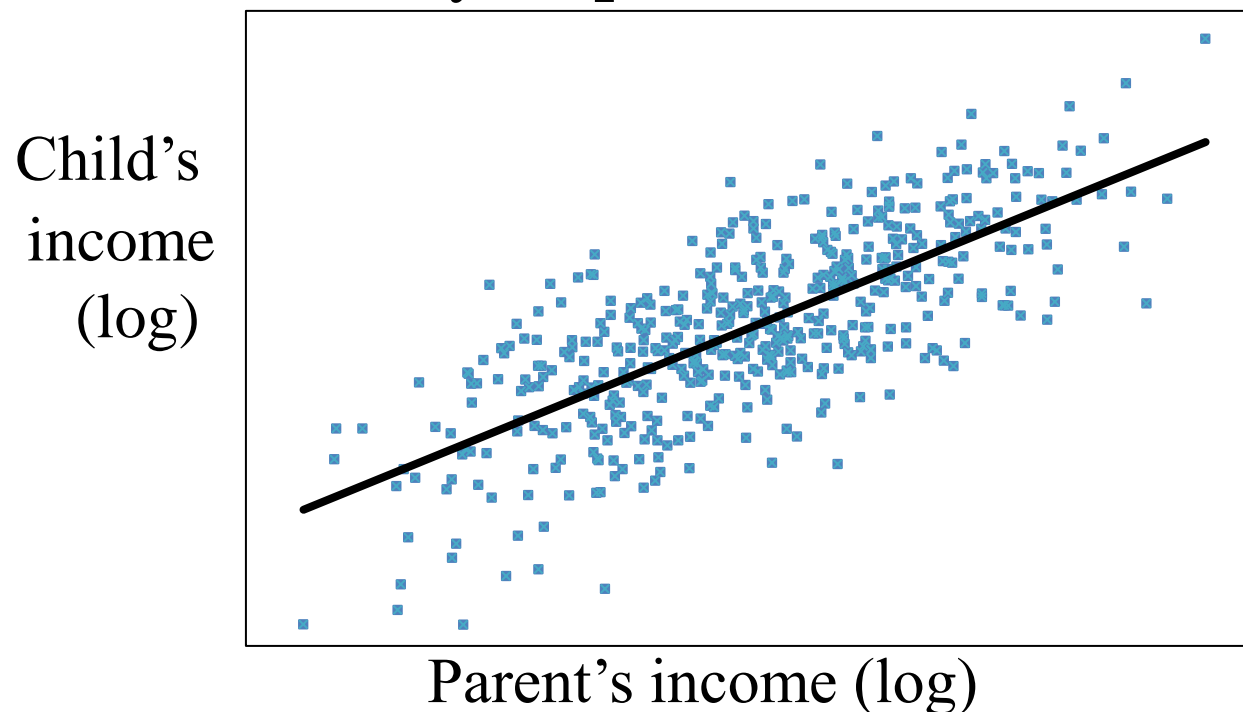
Persistence in life-time economic status

(represented by income)

between parents and children

Inter-Generational Elasticity (**IGE**)

IGE is measured by **Slope** of the fitted line:



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- IGE is between 0 and 1. When slope=0.5, child's income rises 5% with a 10% increase in parent's income.
 - High IGE indicates low mobility, or high persistence.

Estimation issues

Analyzing household survey data:

- “Life-long” income is preferable but not observed.
 - ➡ One-time incomes are adjusted by age.

- Incomes for parent-child pairs are rarely observed.
 - ➡ Parents’ incomes are estimated from their education, occupation, or social status.

- Other issues: measurement errors, ages at the point of observation, personal income or family income, ...

International Studies in IGE in Economics

- High mobility (low persistence): $IGE \cong 0.2$
Nordic countries, Canada, Australia
- Low mobility (high persistence): $IGE \cong 0.4 - 0.5$
USA, Britain, Italy
- Very low mobility (very high persistence) :
Chile, Brazil $IGE \cong 0.6 - 0.7$

East Asian societies

- *Japan, Korea, Taiwan*: $IGE \cong 0.3 - 0.4$
- *China*: $IGE \cong 0.4 - 0.7$

IGE in Japan

IGE estimates on Japan:

- Ueda (2009)
Japan Panel Survey of Consumers (JPSC)
0.41-0.46 (married sons), 0.3-0.38 (daughters)
- Lefranc et al. (2013)
Japanese Social Stratification and Mobility Survey
0.35 (both sons and daughters)
- Ueda (2015, current work)
Japan Household Panel Survey by Keio Univ.
0.32-0.34 (father-son relation)
0.22 (parents-daughters, couple's total income)

New result from JHPS data

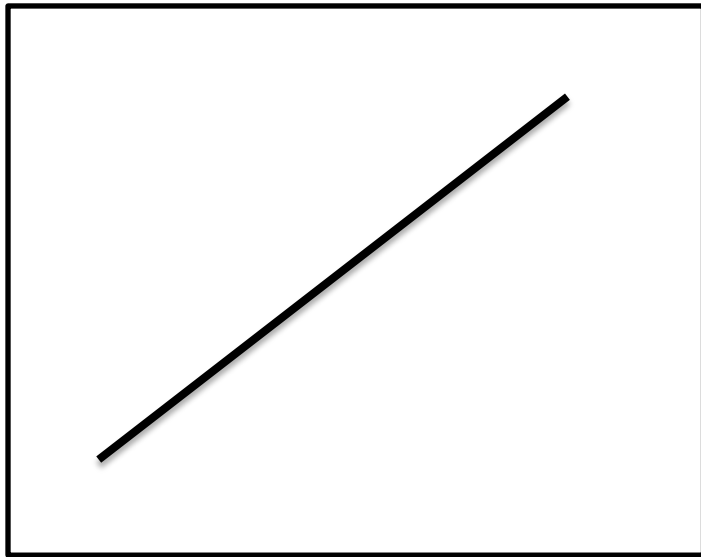
Children in the thirties (born in the 1970s)

	Income type	Estimate (st.err.)		N
Father - son	Labor income	0.340	(0.078)	302
	Total income	0.321	(0.088)	352
Father -	Labor income	0.386	(0.082)	251
married son	Total income	0.353	(0.094)	289
Parents -	Labor income	0.223	(0.087)	307
married daughter	Total income	0.146	(0.094)	403

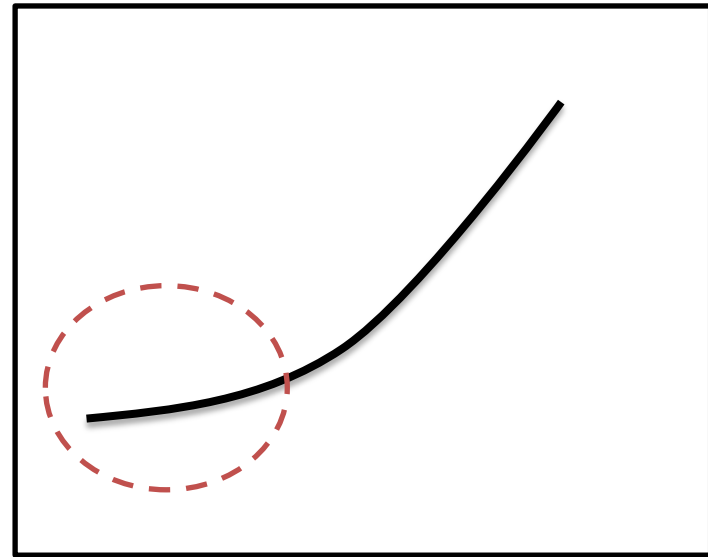
* Total income includes non-labor incomes.

IGE differs between poor and rich families?

Nonlinear relationship according to parent's income



Linear type (US, UK)

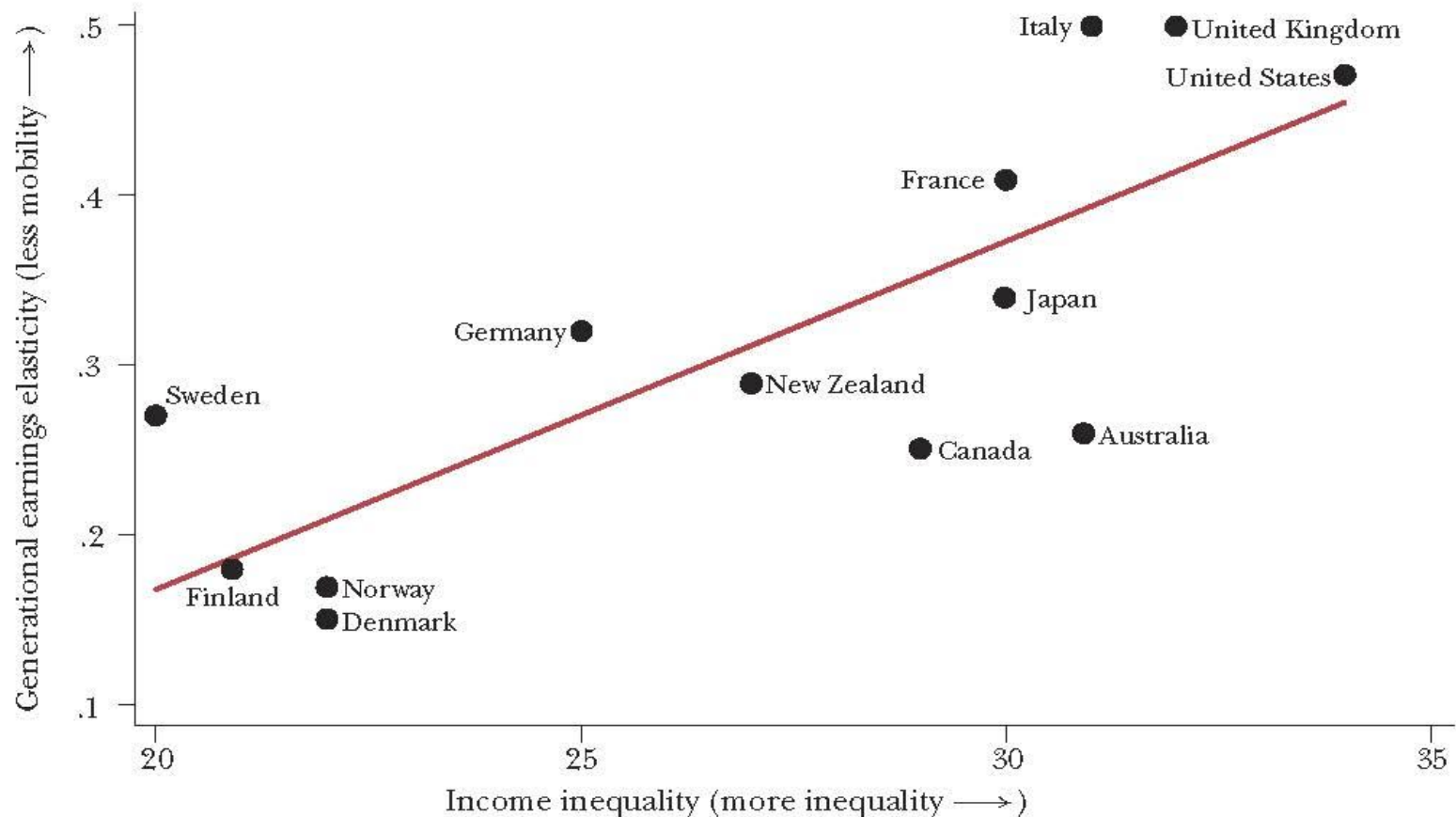


Non-linear type (Nordic)
Support poorest families?

High income inequality, Less mobility

Figure 1

The Great Gatsby Curve: More Inequality is Associated with Less Mobility across the Generations

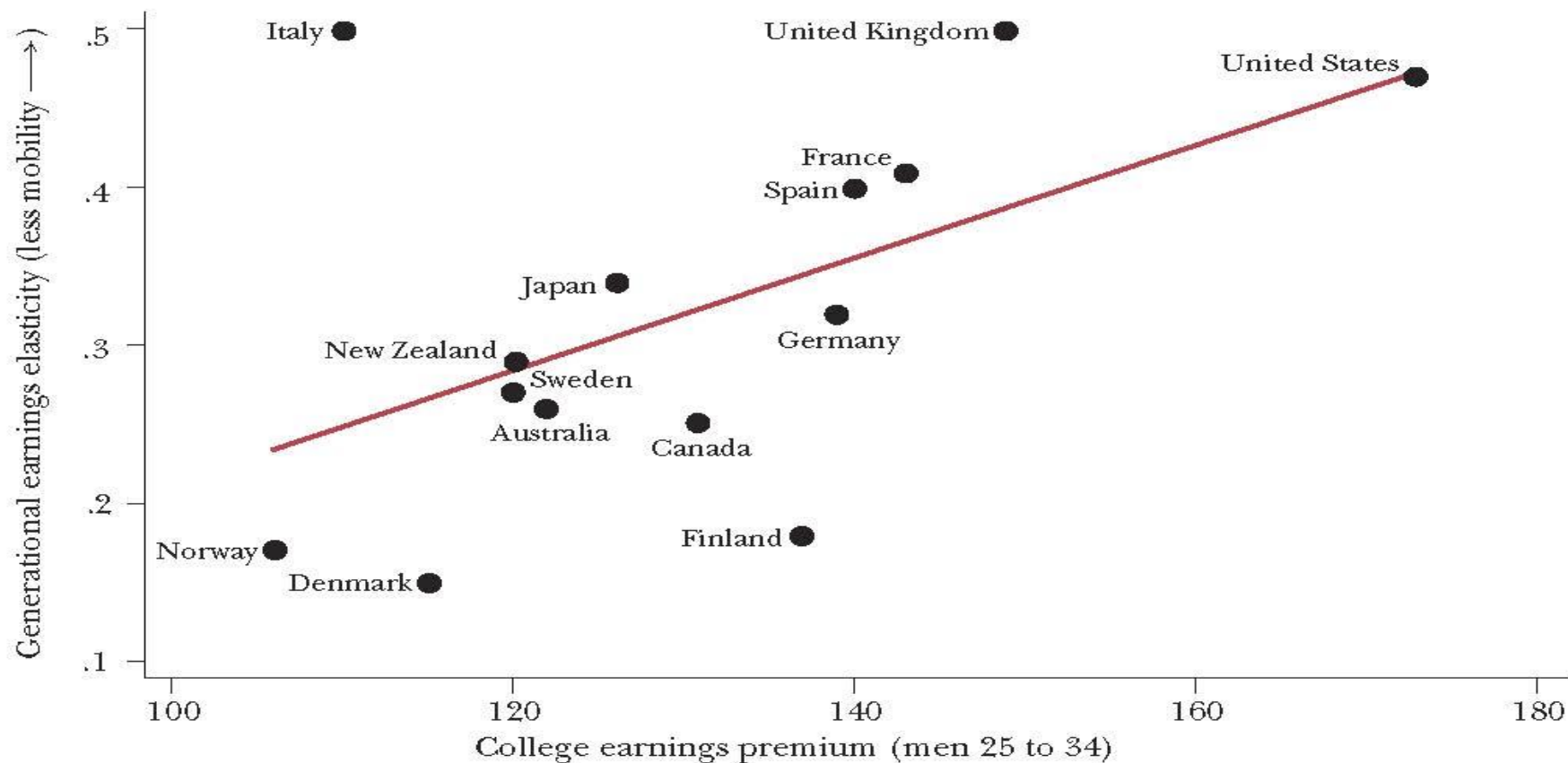


M. Corak (J. of Econ. Persp. 2013, Figure 1)

High returns to education; Less mobility

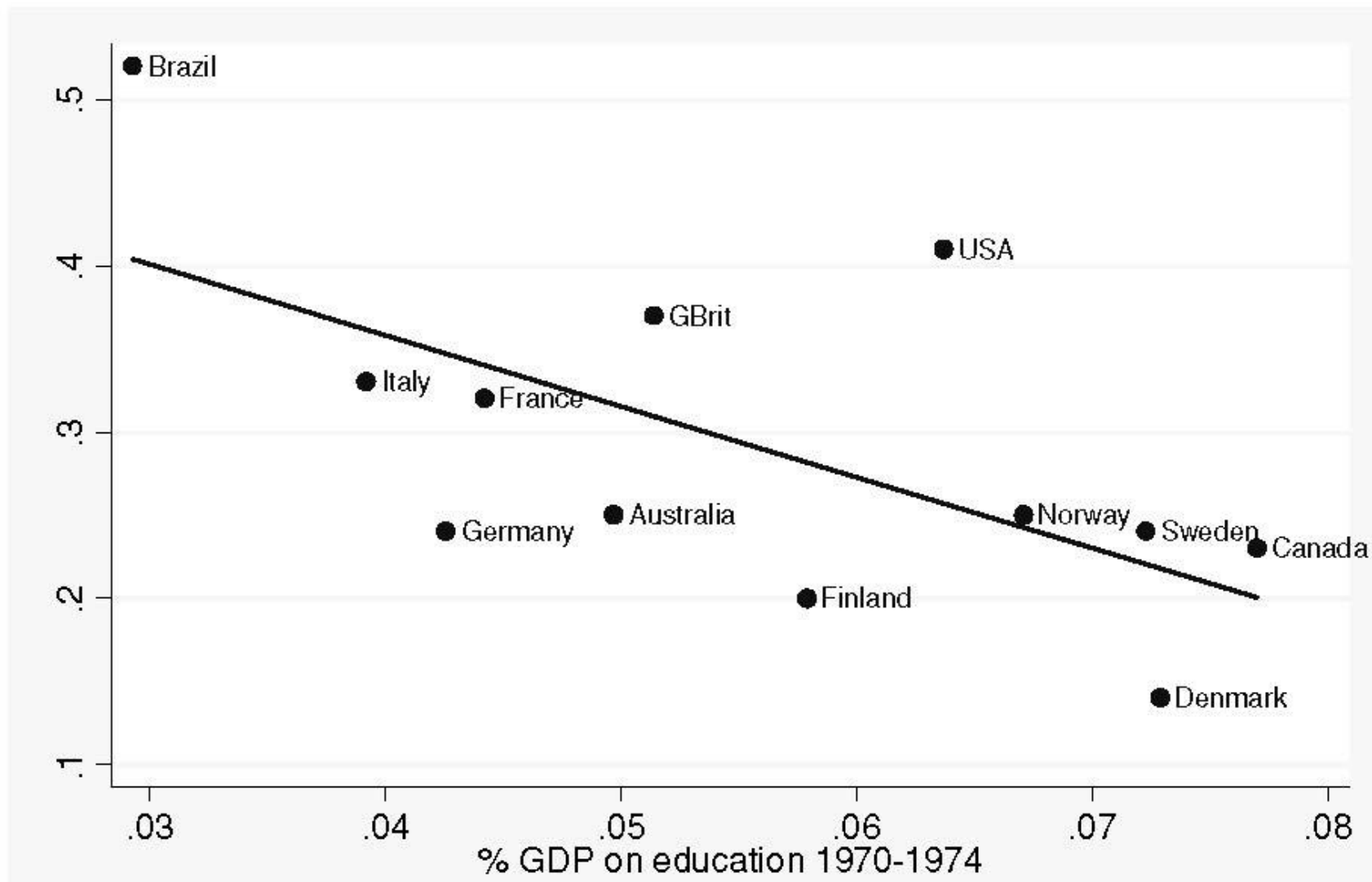
Figure 4

Higher Returns to Schooling are Associated with Lower Intergenerational Earnings Mobility



M. Corak (J. of Econ. Persp. 2013, Figure 4)

Low education expenditure in GDP, Low mobility



J.Blanden (J. of Econ. Surveys 2013, Figure 7)

Channels of Intergenerational Transmission

“*Nature or Nurture*” ?

- Genetic inheritances (cognitive and other abilities)
- Family background (home education, neighborhood, blood and social connection, etc.)
- School education

Accounting studies indicate that school education accounts for 1/3 to 1/2 of the transmission.

Intergenerational Relation in Education (JHPS)

Father's education		Son's education					Total
		Junior high school	Senior high school	Junior college	University	Graduate school	
		(1.7%)	(42.0%)	(10.5%)	(41.6%)	(4.3%)	
Junior high school	(33.8%)	2.9%	58.2%	9.0%	26.6%	3.3%	100.0%
Senior high school	(47.0%)	1.5%	41.9%	12.1%	41.3%	3.2%	100.0%
Junior college	(1.9%)	0.0%	42.9%	0.0%	50.0%	7.1%	100.0%
University and more	(17.3%)	0.0%	10.4%	10.4%	70.4%	8.8%	100.0%

Notes: Calculated from JHPS. Marginal distributions are in parentheses. Sample size is 722.

Channels of Intergenerational Transmission: Japan's Result

		(A) IGE	(B)without education	(B)/(A)	Sampe size
Labor	30-49	0.321	0.218	32.2%	648
income	30-39	0.340	0.214	37.1%	302
Total	30-49	0.267	0.157	41.1%	746
income	30-39	0.321	0.163	49.2%	352

Thank you.