

The rocky road to post-compulsory education in Turkey: Intergenerational educational mobility

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MOBILITY

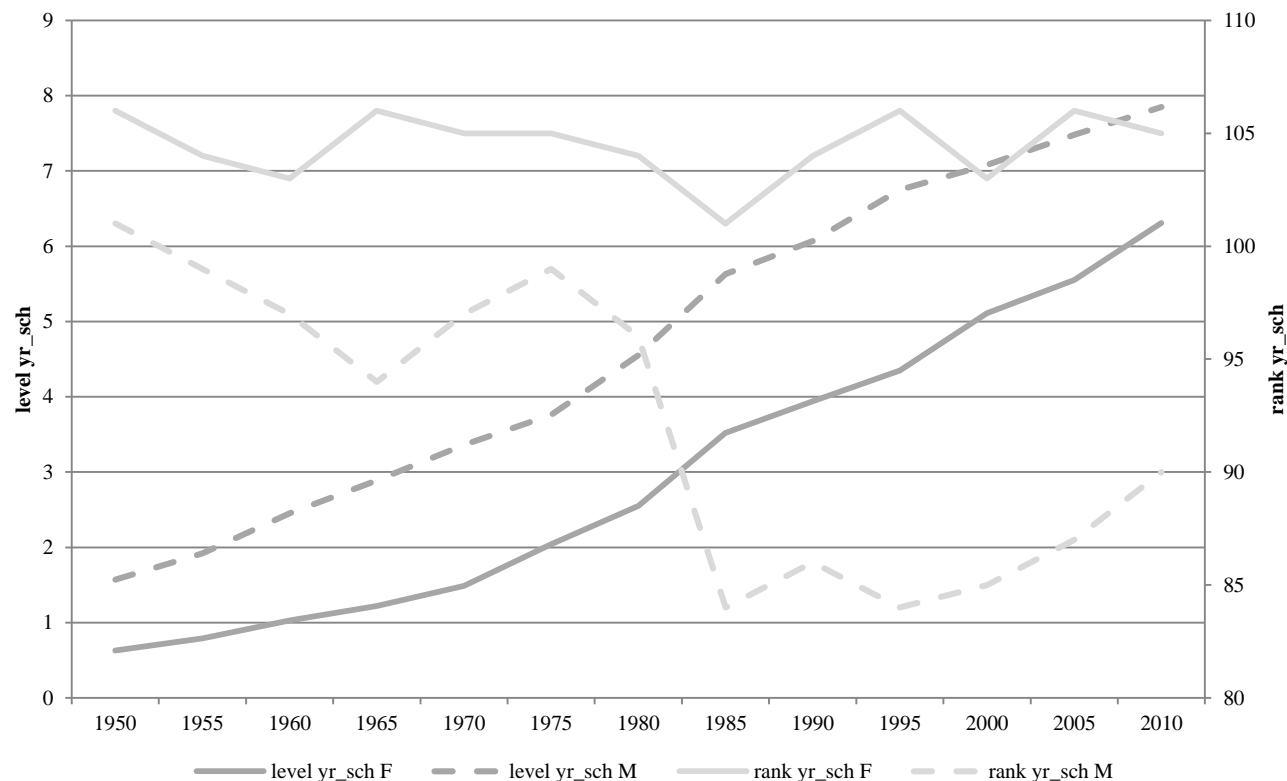
- Mobility – benefits
 - equality of opportunities (fairness, meritocracy, inclusiveness) → efficiency
- Mobility - measures
 - income
 - wage
 - occupation
 - other forms of societal belongings (class, network, religiosity, ethnicity, etc.)
 - **education**
- Education increases human capital and productivity
- Indirectly, education enhances awareness (e.g. health) which also contributes to productivity

EDUCATION - TURKEY

- Turkey has achieved much in decreasing illiteracy and increasing years of schooling...
- ... but this has been less impressive in comparative terms
- especially for women

Average years of schooling

Source: Barro-Lee



Rank among 146 countries. yr_sch years of schooling, F female, M male, population 15 years of age and over.

Intergenerational educational mobility

- Mobility – across cohorts
- **Mobility – across generations:**
 - Correlates – yes, but:
 - Causality necessitates identifying factors underlying the transmission process in order to distinguish:
 - the ability dimension that may be inherent to more educated parents (nature),
from
 - environmental factors (nurture)

Black and Devereux (2011) and Holmlund et al. (2011) - three approaches that overcome the issue and at the same are not subject to the omitted variable bias criticisms:

- twins
- adoptees
- **instrumental variable (IV) estimates**
(educational reform)

Intergenerational educational mobility

Devereux (2014), Black and Devereux (2011) and Holmlund et al. (2011) – Mixed evidence on:

- existence?
- magnitude
- importance of father *vs.* mother → mother more important for poorer/ lower educated households
- effect on daughters *vs.* sons

Aim

- Estimate intergenerational educational mobility in Turkey...
 - ... estimate the probability of having obtained at least one post-compulsory diploma (middle/junior high school diploma) – child
- identify the causal effect of parental education (IV) + controls

Turkey - literature

- Educational outcomes – no IV
- Educational outcomes – with IV but not parents
- (Non-educational outcomes – using the 1997 reform – IV / Discontinuity Regression)
 - Most include parents but as correlates only
 - No study on the causal effect of parental education on child's education

Aim - IV

- Not enough parents have undergone a substantial/ effective educational reform
 - 1997 – not affecting all parents yet
- The few *de jure* changes have not always been matched by *de facto* change, due to relatively weaker enforcement and physical capacities
- **IV adopted here- local enrollment rates: primary school enrollment ratios at parent's birth province – a *de facto* / *continuous* measure**

Data - Sources

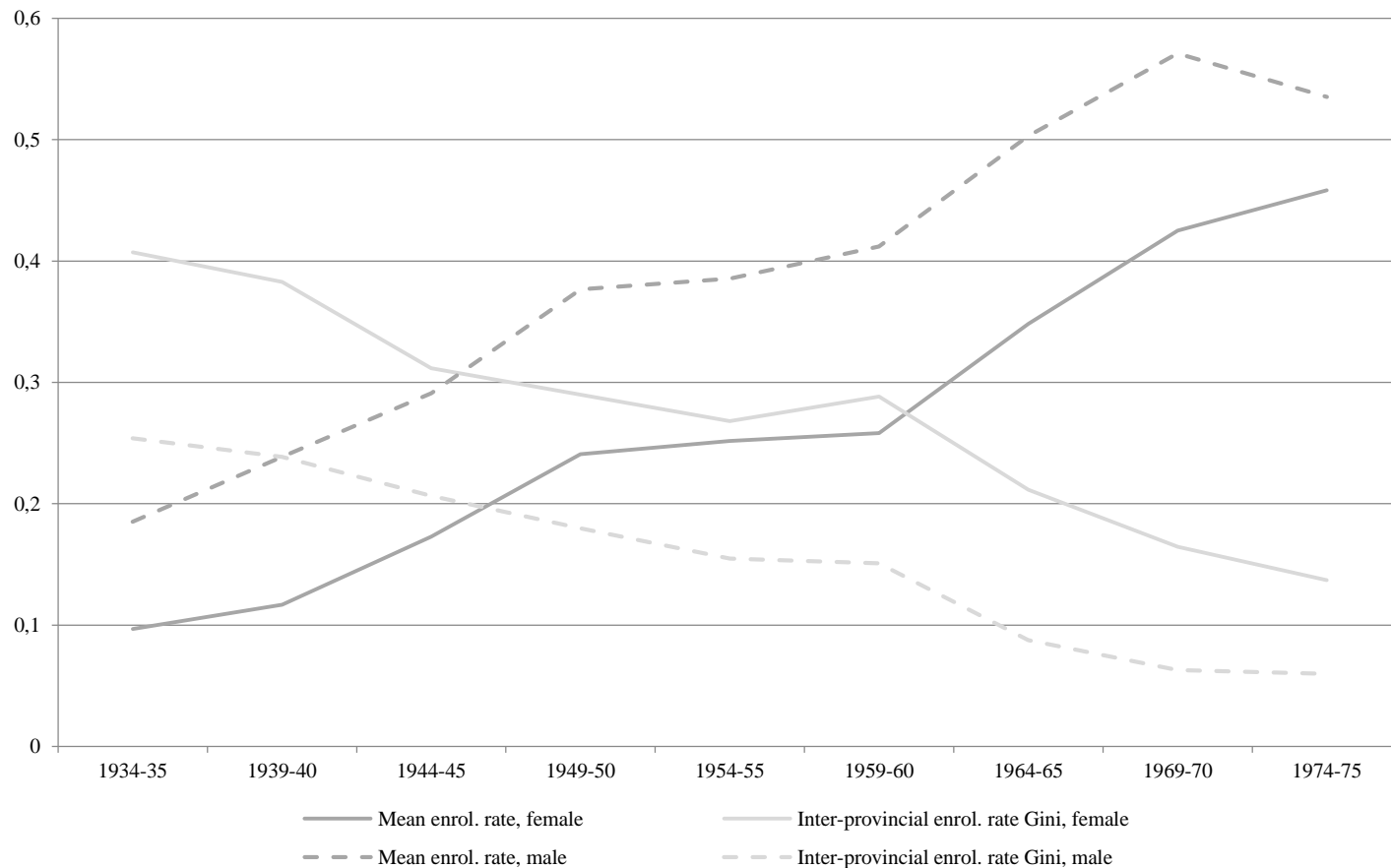
- **Census surveys** – 1990 and 2000 5% sample
 - Only source containing birth place info + detailed provincial level info at the representative level
- IV → local primary school enrollment ratio at provincial (*il*) level (67 provinces) by gender:
 - National Education Statistics → enrolled population
 - **Censuses** [every five year] → population at school age

Data - Limitations

- Census → limited number of controls
 - Income
 - Child education level: no distinction between lower secondary, higher secondary and post-secondary (co-residence issue)
 - Total number of siblings
- IV and dependent variable → results are likely to reflect households with lower education (and income)

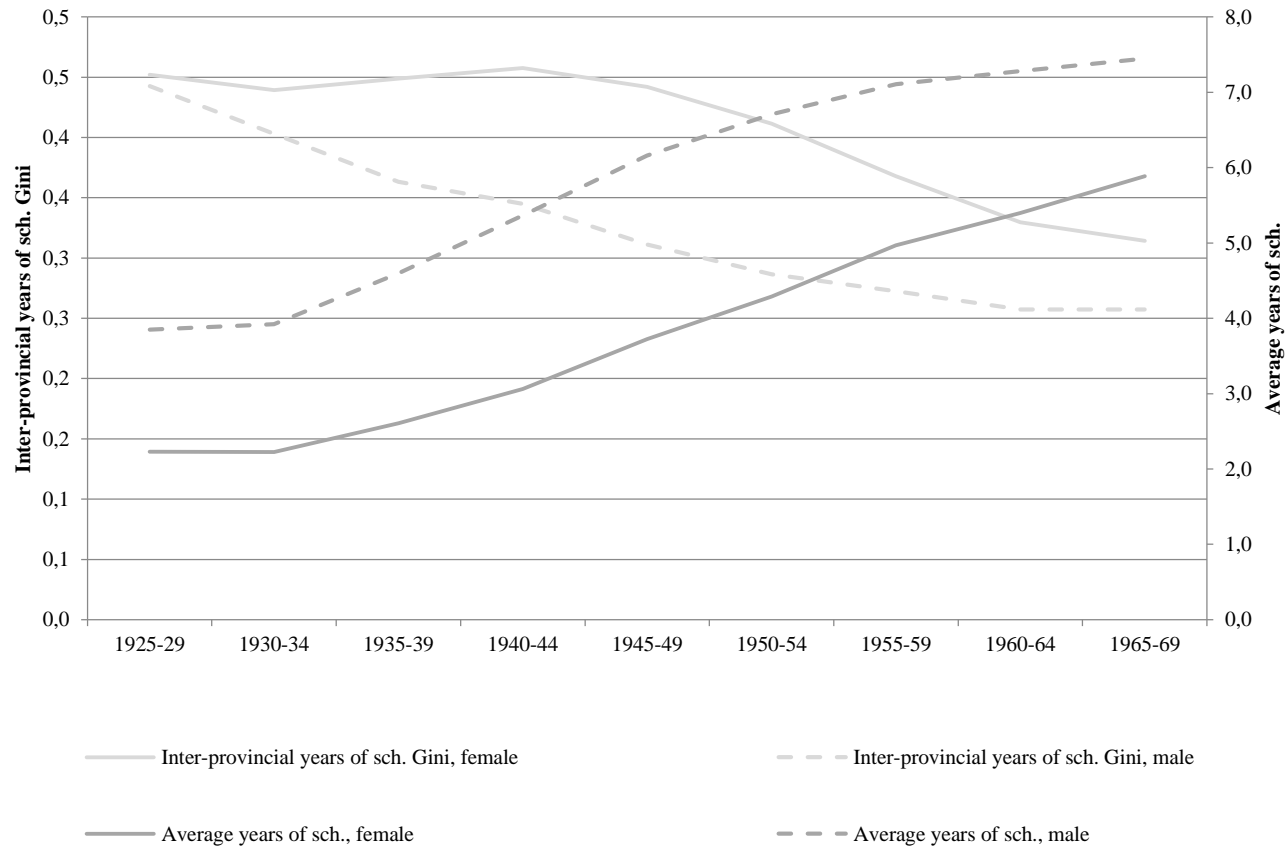
Evidence on provincial level heterogeneity - enrolment rates

Source: National Education Statistics



Evidence on provincial level heterogeneity - completed schooling years

Source: 2000 census survey



Data – Basic restrictions

Age	Child 16-17	Mother 31-54 Mother at 14-38	Father 31-64 Father at 14-48
Criteria	Min. Age: Finishing lower secondary Max. age: Co-residing with parents*	Marriage Fecundity	Marriage Father age
Born census 1990	1974-75	1936-59	1926-59
Born census 2000	1984-85	1946-69	1936-69
Omitted households	Missing information on child or parent Child born abroad Households other than 1 mother and 1 father omitted – polygamous or single parent households		
Omitted children (16-17)	If child is grand-child (parent unknown)		

*military service, marriage, higher education, etc.

Data - IV

$$E_{(g,r,c)} = \left(\frac{\text{enrolled primary school population}}{\text{population at schooling age}} \right)$$

k , r and t respectively stand for gender, province and year

- Enrolled primary school pop, incl. all types of public schools at compulsory level
 - normal, boarding and special
- Population at schooling age from censuses
 - categorical, age groups 5-9 & 10-14 → 5-14
- Provincial classification changes varies over time
 - harmonized (IV and residence variables for parents & children)

Data – IV

Parental cohorts (*annual*) and corresponding enrollment ratios (*every 5 yrs*)

1990 census							
Age	31-34	35-39	40-44	45-49	50-54	55-59	60-64
Birth date	1956-59	1951-55	1946-50	1941-45	1936-40	1931-35	1926-30
School starting year	1963-67	1958-62	1953-57	1948-52	1943-47	1938-42	1933-37
Corresponding enroll. ratio	1964-65	1959-60	1954-55	1949-50	1944-45	1939-40	1934-35
2000 census							
Age	31-34	35-39	40-44	45-49	50-54	55-59	60-64
Birth date	1966-69	1961-65	1956-60	1951-55	1946-50	1941-45	1936-40
School starting year	1973-77	1968-72	1963-67	1958-62	1953-57	1948-52	1943-47
Corresponding enroll. ratio	1974-75	1969-70	1964-65	1959-60	1954-55	1949-50	1944-45

Parental residence location – additional restrictions

Census information on locality	Defined as
current = birth = five years ago	born local
current = birth \neq five years ago	born local
current \neq birth = five years ago	new migrant
current = five years ago \neq birth	omitted parent
current \neq birth \neq five years ago	omitted parent
birth abroad	omitted parent

Data - controls

- Standard
 - siblings by gender
 - current residence location (city center, district, village)
 - house ownership (interacts with residence / qlty)
 - migration information (being born at the local residence location vs having moved within the last five years from birth location)
 - province fixed effects

Data - controls

- Indicator of employment prospects - probability of finding a job/working

- Labor demand conditions
- Neighborhood effect inhibiting LFP – esp. female
- Definition

share of employed population having a post-compulsory diploma in the active population at the local level (district - *ilçe*) and by gender

- respectively 20.2 and 4.7 percent for men and women in 1990 and 27.7 and 7.1 percent for the year 2000

<i>Variables</i>	1990 census						2000 census					
	All Basic Rest.		Mother Rest.		Father Rest.		All Basic Rest.		Mother Rest.		Father Rest.	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Post-comp. Grad.	0.36	0.48	0.32	0.46	0.31	0.46	0.50	0.50	0.47	0.50	0.47	0.50
Gender (female=1)	0.50	0.50	0.50	0.50	0.50	0.50	0.48	0.50	0.49	0.50	0.49	0.50
Age	16.46	0.50	16.45	0.50	16.45	0.50	16.48	0.50	16.48	0.50	16.48	0.50
<i>Mother</i>												
No schooling	0.52	0.50	0.54	0.50	0.55	0.50	0.37	0.48	0.39	0.49	0.39	0.49
5 Years Primary	0.43	0.50	0.42	0.49	0.42	0.49	0.52	0.50	0.52	0.50	0.52	0.50
Lower Secondary	0.02	0.14	0.01	0.12	0.01	0.12	0.04	0.20	0.04	0.19	0.04	0.19
Upper Secondary	0.02	0.14	0.01	0.11	0.01	0.11	0.05	0.22	0.04	0.20	0.04	0.20
Post-secondary	0.01	0.10	0.01	0.08	0.01	0.08	0.02	0.14	0.01	0.12	0.01	0.12
<i>Father</i>												
No schooling	0.22	0.41	0.24	0.43	0.24	0.43	0.12	0.32	0.13	0.33	0.12	0.33
5 Years Primary	0.64	0.48	0.65	0.48	0.65	0.48	0.60	0.49	0.62	0.48	0.62	0.49
Lower Secondary	0.06	0.23	0.05	0.22	0.05	0.22	0.11	0.31	0.10	0.30	0.10	0.31
Upper Secondary	0.04	0.21	0.03	0.18	0.03	0.18	0.11	0.31	0.10	0.30	0.10	0.30
Post-secondary	0.04	0.20	0.03	0.16	0.03	0.16	0.07	0.25	0.05	0.22	0.05	0.22
<i>Siblings</i>												
No girl sibling	0.27	0.44	0.26	0.44	0.25	0.44	0.34	0.47	0.32	0.47	0.32	0.47
Sibling 1 girl	0.33	0.47	0.32	0.47	0.32	0.47	0.34	0.48	0.34	0.47	0.34	0.47
Sibling girls \geq 2	0.40	0.49	0.42	0.49	0.43	0.49	0.31	0.46	0.34	0.47	0.34	0.47
No boy sibling	0.20	0.40	0.19	0.39	0.19	0.39	0.27	0.44	0.26	0.44	0.26	0.44
Sibling 1 boy	0.34	0.47	0.33	0.47	0.33	0.47	0.38	0.48	0.36	0.48	0.36	0.48
Sibling boys \geq 2	0.46	0.50	0.48	0.50	0.48	0.50	0.35	0.48	0.38	0.49	0.38	0.49
City centre	0.39	0.49	0.27	0.44	0.26	0.44	0.45	0.50	0.33	0.47	0.33	0.47
District	0.20	0.40	0.21	0.41	0.22	0.41	0.21	0.41	0.25	0.43	0.25	0.43
Village	0.42	0.49	0.52	0.50	0.53	0.50	0.33	0.47	0.43	0.49	0.43	0.49
House Ownership	0.80	0.40	0.84	0.37	0.84	0.36	0.76	0.43	0.81	0.40	0.81	0.40
Born local	0.82	0.39	0.94	0.24	0.94	0.24	0.79	0.40	0.94	0.24	0.94	0.24
Emp. prospects	12.51	10.16	10.78	9.14	10.70	9.09	17.76	12.86	15.50	12.08	15.48	12.04
No. Obs.	71,069		52,774		52,089		85,434		57,768		58,260	

Number of observations

		BOYS				GIRLS			
		1990	2000	1990	2000	1990	2000	1990	2000
		Mother edu.		Father edu.		Mother edu.		Father edu.	
Observations		26,288	29,671	25,938	29,968	26,486	28,097	26,151	28,292

Estimation

- Probit

$$S_{i,j}^c = \delta_0 + \delta_p S_{i,j}^p + \delta_k X_{i,j} + v_{i,j}^c \quad (1)$$

- $S_{i,j}^c$ indicator of having obtained at least a lower secondary level diploma (binary).
- i child, j household
- $S_{i,j}^p$ parental education
- $X_{i,j}$ controls
- $v_{i,j}^c$ error term

Estimation

Stage 1

$$S_{i,j}^p = \alpha_0 + \alpha_p E_{i,j}^p + \alpha_k X_{i,j} + u_{i,j}^p \quad (2)$$

$E_{i,j}^p$ is primary school enrollment ratio at parent's (p) province at age 7

Stage 2

$$S_{i,j}^c = \delta_{0,iv} + \delta_{p,iv} \widehat{S}_{i,j}^p + \delta_{k,iv} X_{i,j} + v_{i,j}^{cp} \quad (3)$$

→ Continuous parental education (2SLS - OLS + IV probit)

→ Categorical parental education (2SRI - ordered probit + IV probit)

Marginal effects of the probability of having completed at least lower secondary school - restricted sample, continuous parental education

	1990		2000		1990		2000	
Girls	Probit	IV	Probit	IV	Probit	IV	Probit	IV
Mother Sch. Years	0.030*** (0.001)	0.039*** (0.004)	0.030*** (0.001)	0.029*** (0.004)				
Father Sch. Years					0.033*** (0.001)	0.024*** (0.003)	0.031*** (0.001)	0.016*** (0.006)
Boys								
Mother Sch. Years	0.032*** (0.001)	0.032*** (0.005)	0.023*** (0.001)	0.022*** (0.004)				
Father Sch. Years					0.042*** (0.001)	0.032*** (0.004)	0.027*** (0.001)	0.016** (0.007)

Probit estimations

- Intergenerational educational mobility has increased for boys while it has remained fairly stable for girls
- Paternal impact is greater (\approx earlier findings)

Marginal effects of the probability of having completed at least lower secondary school - restricted sample, continuous parental education

	1990		2000		1990		2000	
Girls	Probit	IV	Probit	IV	Probit	IV	Probit	IV
Mother Sch. Years	0.030*** (0.001)	0.039*** (0.004)	0.030*** (0.001)	0.029*** (0.004)				
Father Sch. Years					0.033*** (0.001)	0.024*** (0.003)	0.031*** (0.001)	0.016*** (0.006)
Boys								
Mother Sch. Years	0.032*** (0.001)	0.032*** (0.005)	0.023*** (0.001)	0.022*** (0.004)				
Father Sch. Years					0.042*** (0.001)	0.032*** (0.004)	0.027*** (0.001)	0.016** (0.007)

IV estimations [except girls 1990]

- The improvement in educational environment → greater mobility, incl. girls
- The improvement has been more beneficial as regards paternal education
 - Probit vs IV → decrease in the impact of paternal edu > decrease in the impact of maternal edu

Marginal effects of the probability of having completed at least lower secondary school – categorical parental education

	Boys				Girls			
	1990		2000		1990		2000	
	Probit	IV	Probit	IV	Probit	IV	Probit	IV
<i>Mother</i>								
No schooling	-0.412*** (0.025)	-0.370*** (0.044)	-0.239*** (0.015)	-0.171*** (0.036)	-0.481*** (0.027)	-0.549*** (0.045)	-0.360*** (0.016)	-0.333*** (0.036)
5 Years Primary	-0.265*** (0.025)	-0.251*** (0.027)	-0.109*** (0.015)	-0.085*** (0.019)	-0.338*** (0.027)	-0.369*** (0.029)	-0.191*** (0.015)	-0.180*** (0.020)
Upper Secondary	0.068** (0.032)	0.057 (0.041)	0.004 (0.021)	-0.022 (0.023)	-0.003 (0.041)	0.024 (0.039)	-0.028 (0.020)	-0.039 (0.026)
Post-secondary	0.122*** (0.038)	0.100* (0.053)	0.008 (0.027)	-0.055 (0.041)	0.057 (0.055)	0.108** (0.051)	-0.023 (0.035)	-0.050 (0.048)
<i>Father</i>								
No schooling	-0.436*** (0.015)	-0.351*** (0.032)	-0.309*** (0.012)	-0.137*** (0.052)	-0.325*** (0.013)	-0.261*** (0.029)	-0.293*** (0.011)	-0.176*** (0.041)
5 Years Primary	-0.256*** (0.014)	-0.218*** (0.019)	-0.152*** (0.009)	-0.086*** (0.022)	-0.215*** (0.013)	-0.179*** (0.018)	-0.167*** (0.009)	-0.115*** (0.020)
Upper Secondary	0.088*** (0.021)	0.058** (0.024)	0.016 (0.012)	-0.046** (0.022)	0.157*** (0.021)	0.121*** (0.025)	0.073*** (0.013)	0.023 (0.018)
Post-secondary	0.172*** (0.020)	0.113*** (0.034)	0.055*** (0.015)	-0.092** (0.045)	0.257*** (0.025)	0.182*** (0.039)	0.132*** (0.017)	0.019 (0.040)

Similar findings, additionally:

- Parental education has a threshold effect: having a parent below eight years of education produces a clear disadvantage in achieving post-compulsory education
 - Greater mother vs father
 - Greater on daughters vs sons
 - → greatest for mother-daughter pairs
- Why?
 - Both parents - complement a child's home learning and cognitive development, and provide an environment that is relatively more conducive to schooling
 - Esp. Mother - organization of daily life schedules (for example, meal and sleeping time) at early stages of child development
 - Esp. Mother-daughter - mothers' education may minimize the participation of daughters in household chores and dependent care, leaving more time for education-related activities

	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
Sibling 1 girl	-0.019*** (0.007)	-0.036*** (0.007)	-0.021*** (0.008)	-0.038*** (0.007)	-0.015** (0.006)	-0.016*** (0.006)	-0.019*** (0.006)	-0.017*** (0.007)
Sibling girls ≥ 2	-0.062*** (0.007)	-0.070*** (0.007)	-0.068*** (0.007)	-0.074*** (0.008)	-0.051*** (0.006)	-0.046*** (0.007)	-0.057*** (0.006)	-0.049*** (0.007)
Sibling 1 boy	-0.047*** (0.008)	-0.047*** (0.007)	-0.044*** (0.008)	-0.050*** (0.007)	-0.044*** (0.007)	-0.028*** (0.007)	-0.048*** (0.007)	-0.028*** (0.008)
Sibling boys ≥ 2	-0.128*** (0.009)	-0.106*** (0.009)	-0.123*** (0.008)	-0.117*** (0.008)	-0.100*** (0.007)	-0.081*** (0.009)	-0.108*** (0.006)	-0.089*** (0.009)

- Negative siblings effect that increases with the number of siblings, on both genders for both years → resource constraints
- Gender biased effects:
 - the negative externality of male sibling(s) is higher than that of female sibling(s)
 - the negative externality of siblings is higher on boys
→ behavioral factors (relatively more disruptive behavior)? Boys affect more and are more affected by their brothers
- Greater improvement girls vs boys

	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
District	0.075*** (0.010)	0.059*** (0.009)	0.067*** (0.010)	0.057*** (0.009)	0.022** (0.011)	0.029*** (0.010)	0.029*** (0.010)	0.031*** (0.010)
Village	-0.156*** (0.010)	-0.093*** (0.009)	-0.136*** (0.010)	-0.092*** (0.012)	-0.213*** (0.009)	-0.185*** (0.009)	-0.200*** (0.009)	-0.185*** (0.012)

- The effect of residing in a village is negative and very strong
- Rural areas → low-skilled farming activities → lower private returns to education
- Limited education supply
- Higher cost of schooling
 - Commuting
 - Lower relative income of rural households

	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
District	0.075*** (0.010)	0.059*** (0.009)	0.067*** (0.010)	0.057*** (0.009)	0.022** (0.011)	0.029*** (0.010)	0.029*** (0.010)	0.031*** (0.010)
Village	-0.156*** (0.010)	-0.093*** (0.009)	-0.136*** (0.010)	-0.092*** (0.012)	-0.213*** (0.009)	-0.185*** (0.009)	-0.200*** (0.009)	-0.185*** (0.012)

- Greater effect on girls vs boys
- Negative impact on boys is decreasing faster
 - Girls caught up in household chores and are extensively engaged in unpaid family work
 - Post-compulsory education in rural areas available at physically remote places → transportation or boarding schools → more common practice among boys vs girls
 - the greater opportunity/possibility for boys of moving out for employment or higher education purposes → motivates post-compulsory schooling attainment

	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
District	0.075*** (0.010)	0.059*** (0.009)	0.067*** (0.010)	0.057*** (0.009)	0.022** (0.011)	0.029*** (0.010)	0.029*** (0.010)	0.031*** (0.010)
Village	-0.156*** (0.010)	-0.093*** (0.009)	-0.136*** (0.010)	-0.092*** (0.012)	-0.213*** (0.009)	-0.185*** (0.009)	-0.200*** (0.009)	-0.185*** (0.012)

- Residing in a district (*ilçe*) has a positive impact
- District centers have the optimal scale and provide a better school environment than villages or cities.
 - Villages → remote and lack enough students or teachers to have proper classes at each level
 - Large cities → more segregated in terms of class size and school quality (over-sized classes, an insufficient number of teachers for separate classes, higher drop-out rates...)

	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
Born local	-0.007	0.049***	0.003	0.046***	-0.006	0.033***	0.027***	0.055***
	(0.013)	(0.012)	(0.011)	(0.012)	(0.010)	(0.012)	(0.009)	(0.014)

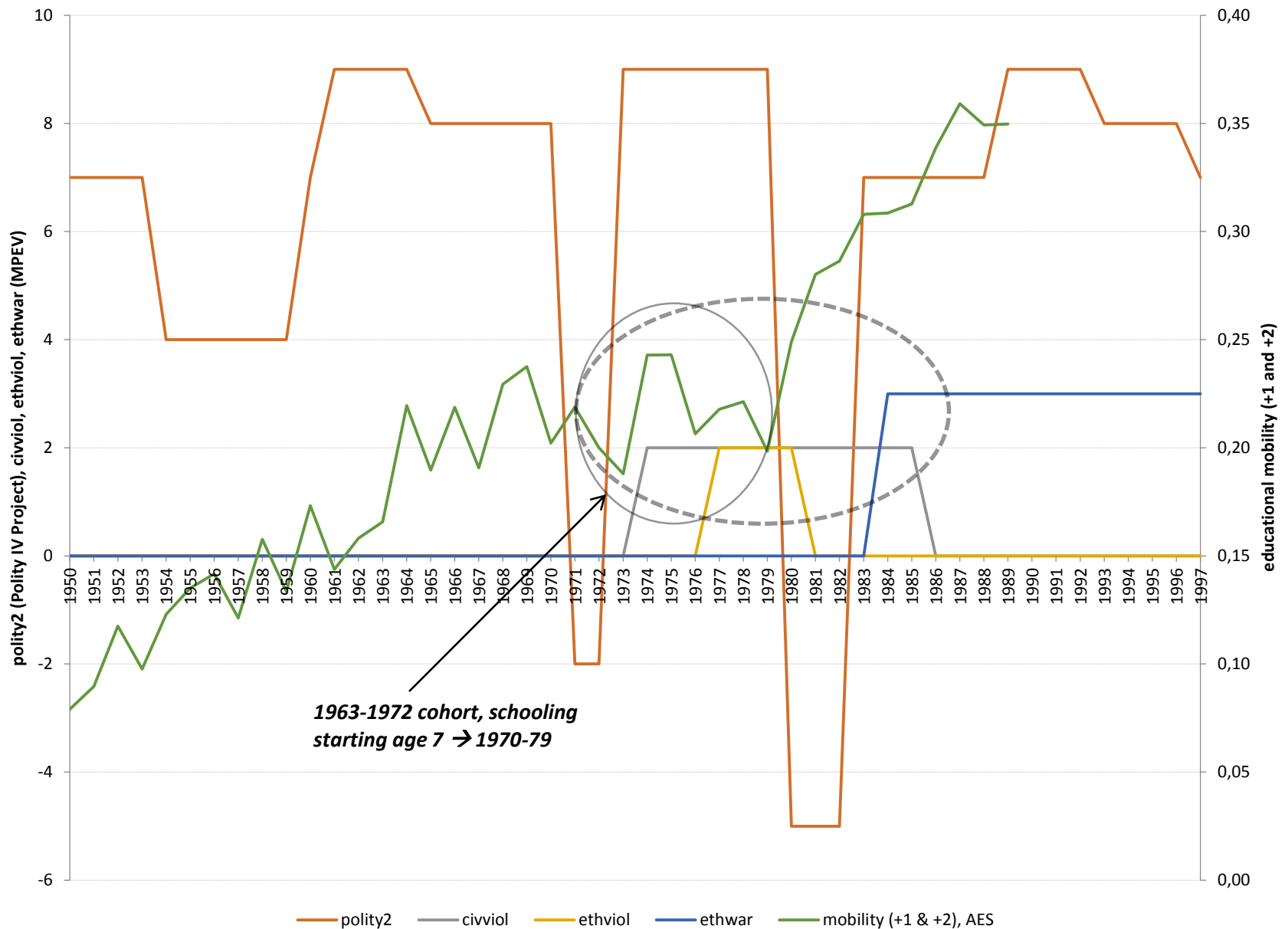
- The effect of being a native *vs* a recent migrant turns positive and significant for the 2000 census – although limited
- migration of disadvantaged households (push factors)
 - 1990s → forced migration and population displacements due to violent conflicts in the eastern regions
 - 1990s → poor regional policies and decreases in agricultural subsidies affecting other less-developed regions

	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
Emp. prospects	0.007***	0.006***	0.006***	0.006***	0.011***	0.009***	0.013***	0.011***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

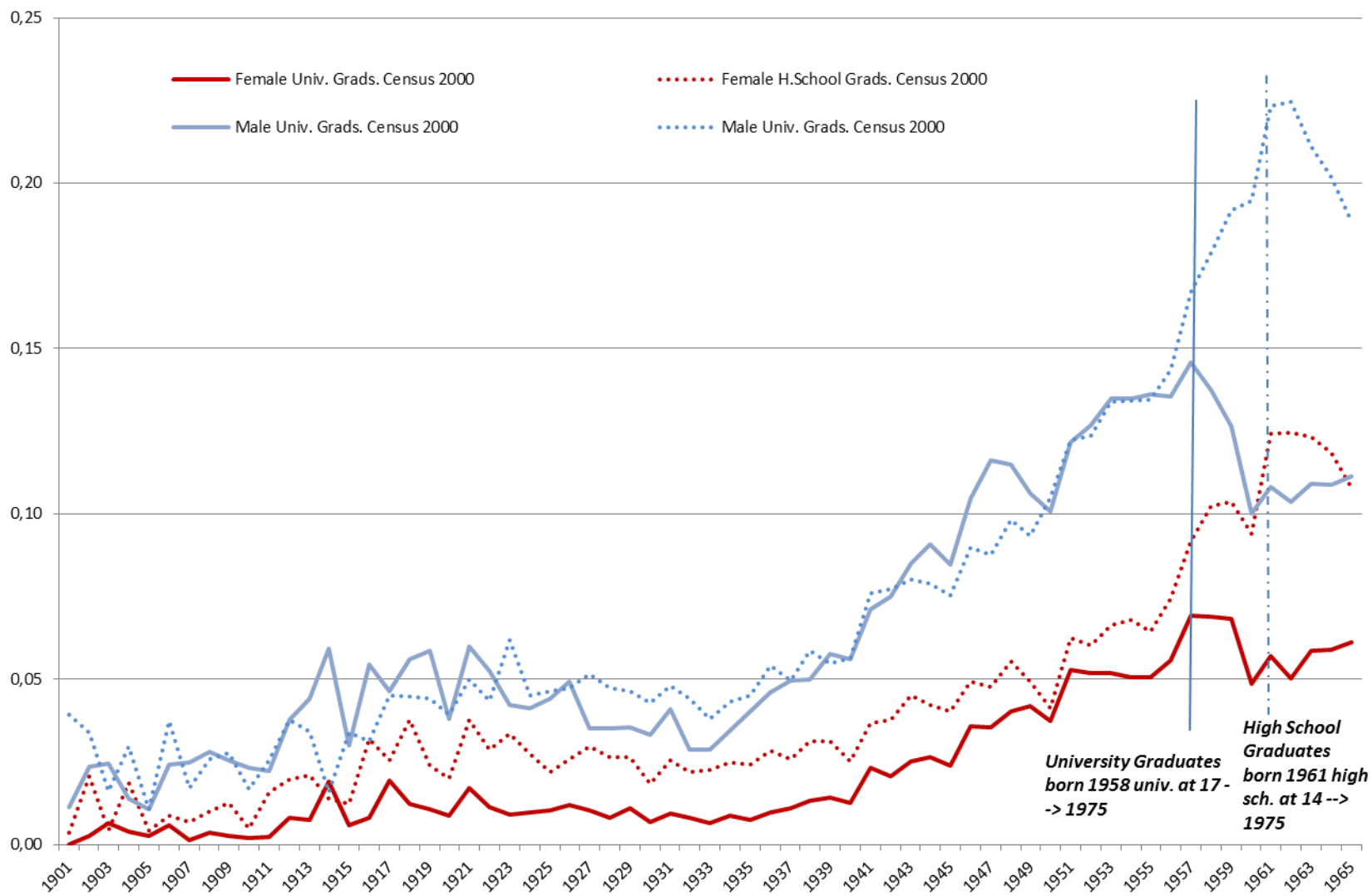
- Employment prospects
 - aspirations of post-compulsory graduates in terms of job opportunities/returns in the local non-agricultural labor market.
- Greater effect on girls vs boys
 - neighborhood effect

Summary

- Education supply, esp. girls → daughters → girls
- Rural development
 - Greater supply
 - development of non-rural wage activities → increase the expected returns to education
 - Would also decrease migration from push factors
- Greater resources to districts → complement with migration policy
- Birth rates and family policy?
- Enhance FLFP



AES DATA, Center for Systemic Peace, Major Episodes of Political Violence, 1946-2013, Polity IV Project, Political Regime Characteristics and Transitions, 1800-2013



	BOYS				GIRLS			
	1990	2000	1990	2000	1990	2000	1990	2000
	Mother edu.		Father edu.		Mother edu.		Father edu.	
<i>Siblings</i>								
Sibling 1 girl	-0.019*** (0.007)	-0.036*** (0.007)	-0.021*** (0.008)	-0.038*** (0.007)	-0.015** (0.006)	-0.016*** (0.006)	-0.019*** (0.006)	-0.017*** (0.007)
Sibling girls>=2	-0.062*** (0.007)	-0.070*** (0.007)	-0.068*** (0.007)	-0.074*** (0.008)	-0.051*** (0.006)	-0.046*** (0.007)	-0.057*** (0.006)	-0.049*** (0.007)
Sibling 1 boy	-0.047*** (0.008)	-0.047*** (0.007)	-0.044*** (0.008)	-0.050*** (0.007)	-0.044*** (0.007)	-0.028*** (0.007)	-0.048*** (0.007)	-0.028*** (0.008)
Sibling boys>=2	-0.128*** (0.009)	-0.106*** (0.009)	-0.123*** (0.008)	-0.117*** (0.008)	-0.100*** (0.007)	-0.081*** (0.009)	-0.108*** (0.006)	-0.089*** (0.009)
District	0.075*** (0.010)	0.059*** (0.009)	0.067*** (0.010)	0.057*** (0.009)	0.022** (0.011)	0.029*** (0.010)	0.029*** (0.010)	0.031*** (0.010)
Village	-0.156*** (0.010)	-0.093*** (0.009)	-0.136*** (0.010)	-0.092*** (0.012)	-0.213*** (0.009)	-0.185*** (0.009)	-0.200*** (0.009)	-0.185*** (0.012)
House Ownership	-0.023** (0.010)	-0.009 (0.010)	-0.016* (0.010)	-0.012 (0.009)	-0.039*** (0.008)	-0.057*** (0.008)	-0.041*** (0.008)	-0.059*** (0.009)
Born local	-0.007 (0.013)	0.049*** (0.012)	0.003 (0.011)	0.046*** (0.012)	-0.006 (0.010)	0.033*** (0.012)	0.027*** (0.009)	0.055*** (0.014)
Emp. prospects	0.007*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.011*** (0.001)	0.009*** (0.001)	0.013*** (0.001)	0.011*** (0.001)
Observations	26,288	29,671	25,938	29,968	26,486	28,097	26,151	28,292

Discussion - wealth

- Why negative wealth effect on daughters?
 - Our estimation captures HH least endowed in terms of education...(LATE)
 - ... where wealth further discourages post-compulsory schooling of girls...
 - ...whose expected returns of education are lower (lower LF participation)
- Policy implication: CCT may not be the best instrument for enhancing post-compulsory female schooling → enhance female LF participation and expected returns to education

Marginal effects of the probability of having completed at least lower secondary school – categorical parental education

	Boys				Girls			
	1990		2000		1990		2000	
	Probit	IV	Probit	IV	Probit	IV	Probit	IV
<i>Mother</i>								
No schooling	-0.412*** (0.025)	-0.370*** (0.044)	-0.239*** (0.015)	-0.171*** (0.036)	-0.481*** (0.027)	-0.549*** (0.045)	-0.360*** (0.016)	-0.333*** (0.036)
5 Years Primary	-0.265*** (0.025)	-0.251*** (0.027)	-0.109*** (0.015)	-0.085*** (0.019)	-0.338*** (0.027)	-0.369*** (0.029)	-0.191*** (0.015)	-0.180*** (0.020)
Upper Secondary	0.068** (0.032)	0.057 (0.041)	0.004 (0.021)	-0.022 (0.023)	-0.003 (0.041)	0.024 (0.039)	-0.028 (0.020)	-0.039 (0.026)
Post-secondary	0.122*** (0.038)	0.100* (0.053)	0.008 (0.027)	-0.055 (0.041)	0.057 (0.055)	0.108** (0.051)	-0.023 (0.035)	-0.050 (0.048)
<i>Father</i>								
No schooling	-0.436*** (0.015)	-0.351*** (0.032)	-0.309*** (0.012)	-0.137*** (0.052)	-0.325*** (0.013)	-0.261*** (0.029)	-0.293*** (0.011)	-0.176*** (0.041)
5 Years Primary	-0.256*** (0.014)	-0.218*** (0.019)	-0.152*** (0.009)	-0.086*** (0.022)	-0.215*** (0.013)	-0.179*** (0.018)	-0.167*** (0.009)	-0.115*** (0.020)
Upper Secondary	0.088*** (0.021)	0.058** (0.024)	0.016 (0.012)	-0.046** (0.022)	0.157*** (0.021)	0.121*** (0.025)	0.073*** (0.013)	0.023 (0.018)
Post-secondary	0.172*** (0.020)	0.113*** (0.034)	0.055*** (0.015)	-0.092** (0.045)	0.257*** (0.025)	0.182*** (0.039)	0.132*** (0.017)	0.019 (0.040)

Discussion - father

- Bargaining
- If we are capturing mostly low educated HHs then higher educated father scarce and proba of wife having much less edu high...
- ... weak proba of wife having bargaining power

