Nepotism vs. Specific Skills: the effect of liberalizations on returns to parental background of Italian lawyers

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Aims and research question

- Analysing differences in career prospects of Italian lawyers according to their parental background.
- Exploiting a liberalization of the lawyer sector to identify the source of a possible wage gap between lawyers according to their background, i.e. analysing whether a possible wage gap advantaging lawyers' children is mainly related to unobservable abilities inherited from their parents or to nepotism and social connections.

Are dynasties in top professions a consequence of nepotism and labour market networks rather than of the unavoidable (formal and informal) transfer of specific skills that are valuable to perform efficiently the tasks required by the profession?

Background (1)

- Recent studies show that a large and significant «residual» association between parents' characteristics and children earnings persists in the most unequal EU countries when mediating factors – e.g. education, occupation – are controlled for (Raitano and Vona JOEI).
- This association might depend on both unobservable abilities background related and social connections (Hudson and Sessions EL 2011), with clear differences in terms of efficiency and equality of opportunity.
- Identifying the source of this association is very complex but recent evidence for Italy supports the idea that social connections have a role since an advantage for children who downgrade with respect to their parents or work in less competitive sectors emerges (Raitano and Vona OBES 2018, Franzini, Patriarca and Raitano R&R).

Background (2)

- Literature in dynasties in top professions (Laband and Lentz JHR 1989, JOLE 1992).
- Italy is well known as a country where family connections have a considerable effect on both job finding rates and the probability of joining top occupational groups, particularly in liberal professions (Basso and Labartino, 2011; Pellizzari and Pica, 2011; Aina and Nicoletti LE 2017; Mocetti JPE 2016, Mocetti et al., WP 2018).
- But these studies mostly focus on access to professions, instead than on long-term earnings.

Why are background related earnings advantages stronger in top occupations?

- **Nepotism**
  - Monopolistic rents for the incumbents' children regardless of their skills
  - Barriers to entry for the most talented children without a good family background
- **Transfer of occupation-specific skills**
  - Skills largely unobservable and background related (e.g. quality of education)
  - Occupation-specific skills correlated with family background, especially in jobs where social, linguistic and soft skills are more important

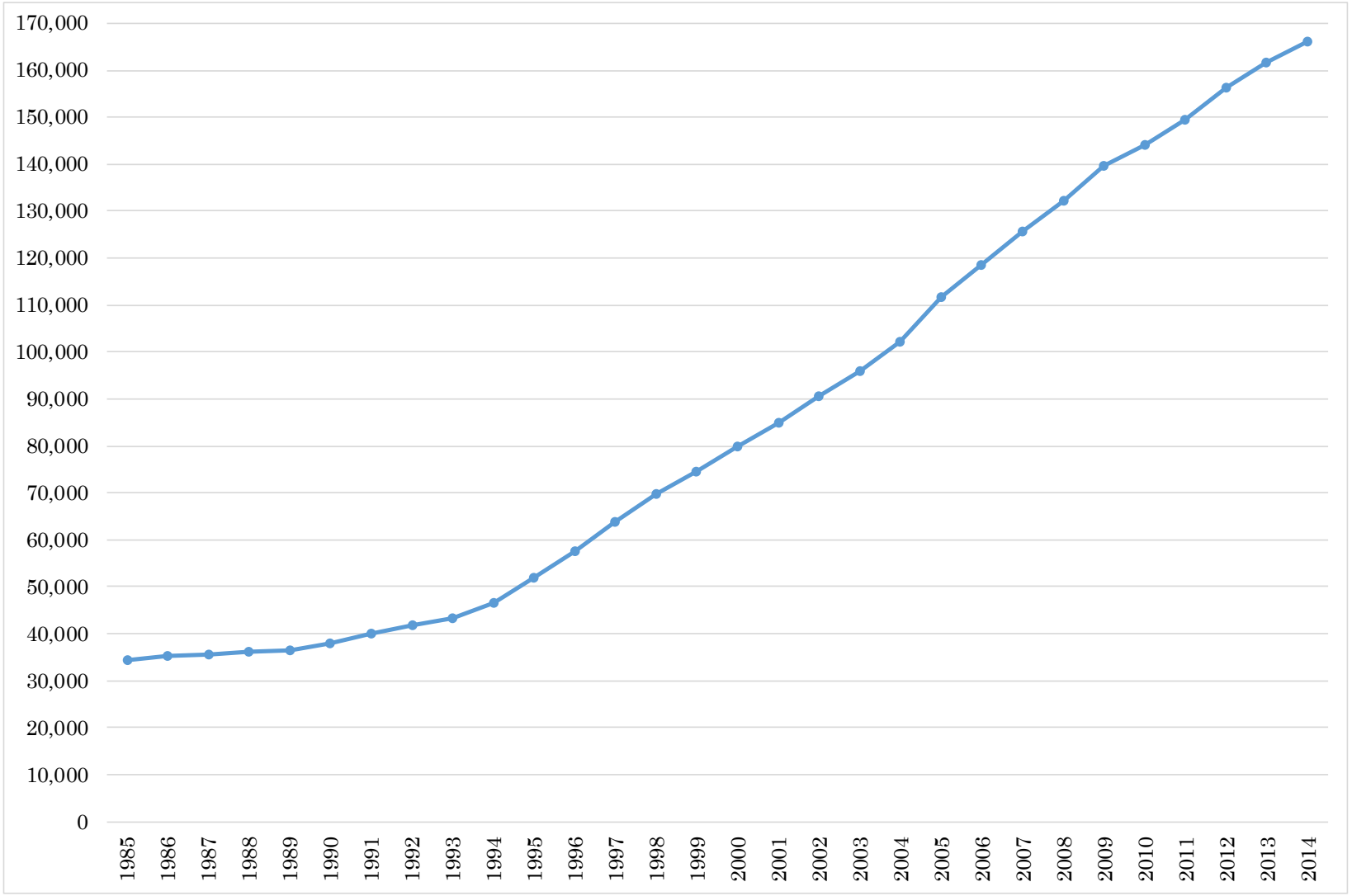
This paper

- Focus on an iconic case to test these competing explanations: the lawyers in Italy over decades 1994-2014
- Panel data on around 900 lawyers, built merging administrative data on earnings and survey data on lawyers' characteristics
- **Contribution I**: estimate returns to a law background upon entry, while previous literature studied influence of family background on entry (e.g., Laband and Lentz, 1989, 1992; Pellizzari, Pica 2011; Mocetti, 2016, Aina and Nicoletti, 2017)
- **Contribution II**: exploit the liberalization in the law profession to reveal the incidence of nepotism vs. specific skills, while previous literature evaluated the impact of the reform on entry (e.g., Mocetti, 2016; Mocetti et a., 2018)
- This paper also contributes to the literature on sources of wage premia in licensed sectors.

The liberalization of the Italian lawyers labour market

- Highly regulated sector, with a license acting as an entry barrier.
- Increasing number of new entrants since the 1990s (due to pension financing needs?).
- Changing rules about the bar exam in 2004 (random pairing exams and correctors from different courts to level difference in pass rates across courts).
- Liberalization in 2006 to adopt the EU guidelines on market competition (i.e. a shock with respect to lawyers' behaviours). The reform abolished price floors and lifted the ban on commercial advertising.
- Being aimed at increasing competition, a liberalization, if effective, should reduce the room for nepotism.

Trend of number of lawyers



Our idea for identification

- An increase in competition can:
  - Either reduce monopolistic rents and so the room for nepotism (Microeconomics I)
  - Or increase skill premia including those for unobservable skills (e.g., Guadalupe, 2007 and Melitz-type of models)
- Exploiting an exogenous change in competition reveals the main source of the earnings advantage, if any

The research idea in detail (a)

- Using a dataset built merging administrative and survey data on lawyers we use a competition shock that should affect asymmetrically the return to occupation-specific skills and that to nepotism.
- While the compositional effects of a competition shock should be straightforwardly negative for incumbents, the impact on earnings can be either positive or negative according to the driver of wage gap (unobservable abilities vs social ties).
- Observing a decrease in the returns to occupation-specific background reveals the existence of nepotism that prevented an efficient allocation of talents before the liberalization.
- Observing an increase in the returns to occupational-specific parental background implies that competition increased the returns to occupational specific skills.

The research idea in detail (b)

- Parents' characteristics for those who were already lawyers at the moment of the reform are exogenous to the reform and social connections are clearly higher for those with a parent or a close relative working as a lawyer.

$\Rightarrow$ we test how returns to background (e.g. to have a parent lawyer) changed after the reform to infer whether these returns were mostly due to unobservable skills - if they remain constant or increase if the reform allows lawyers to fully exploit possible better skills endowed by lawyers' children – or to nepotism and social connections – if returns to background reduce.

Data (1)

- Longitudinal administrative data on annual gross earnings and turnover of Italian lawyers recorded in the administrative archives of the pension fund of lawyers, from the entry in the lawyers category up to 2014. This data also record gender, age, experience and the local professional association.
- A specific survey carried out in 2010 on 1300 lawyers recording their characteristics, e.g., mark at graduation, details about the career as a lawyer, parental education, a parent or a relative working as a lawyer, ownership of the law firm.
- Merge using lawyers codes.

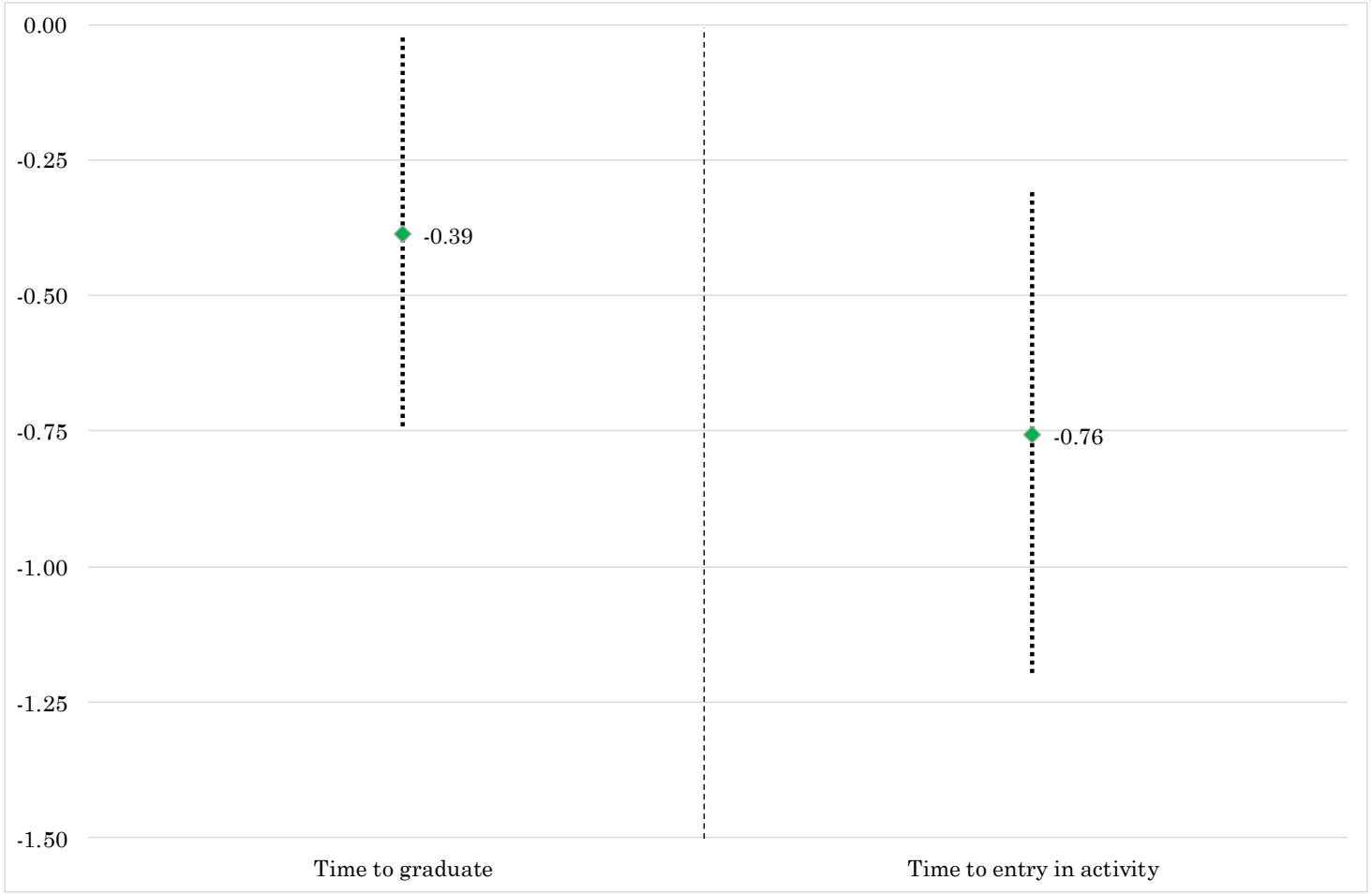
Data (2)

- Focus on 1994-2014 and on the subsample of those already working as a lawyer at the end of 2003 (872 individuals).
- Focus on annual earnings; results confirmed using turnover as a proxy of lawyers' economic success.
- Non lawyers not observed => no estimate on entry rates.
- 14.3% of our main sample has a parent who worked as a lawyer; 28.4% of our main sample has a parent or a close relative who worked as a lawyer (lawyers are 0.5% of the Italian population)
- We define "$Law\ Back$", as the independent variable, i.e. those with a parent or a close relative working as a lawyer.
- Results confirmed when proxying background through the "parent lawyer" dummy

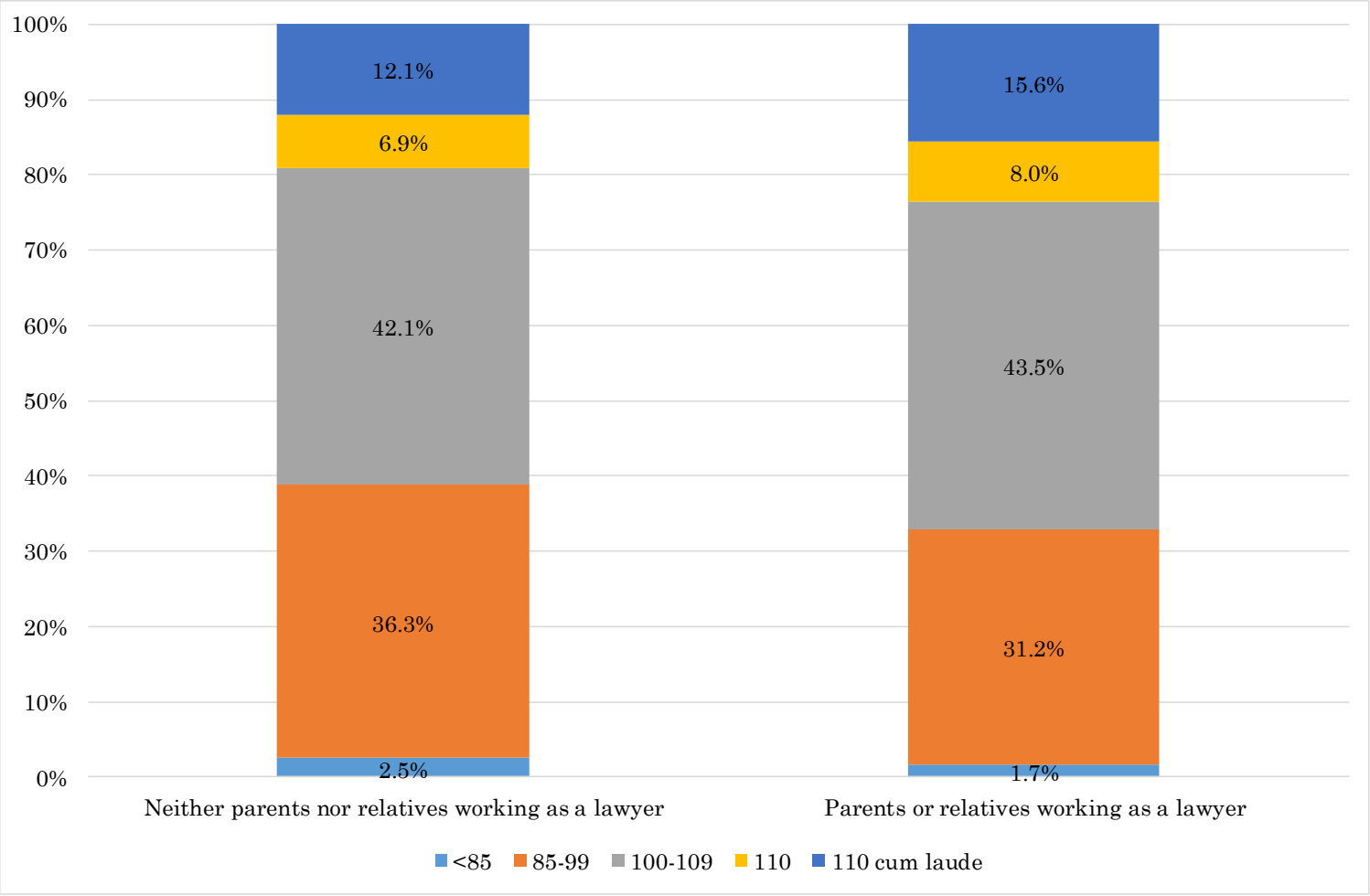
Preliminary estimates

- Preliminary estimates show that law background children have a large and significant advantage in terms:
  - Years spent to attain the degree
  - Years from the graduation to the enrolment to the lawyer association => they have a higher experience
- They also:
  - Attain a mark higher than non law background children
  - Have a much lower (27 vs 43%) predicted probability to own the law firm after the practice
  - Have a less fragmented career
  - Have, on average, higher earnings, but the gap reduces after 2003

A law background speeds up the time to graduate and to entry in activity



A law background is associated with slightly higher graduation marks



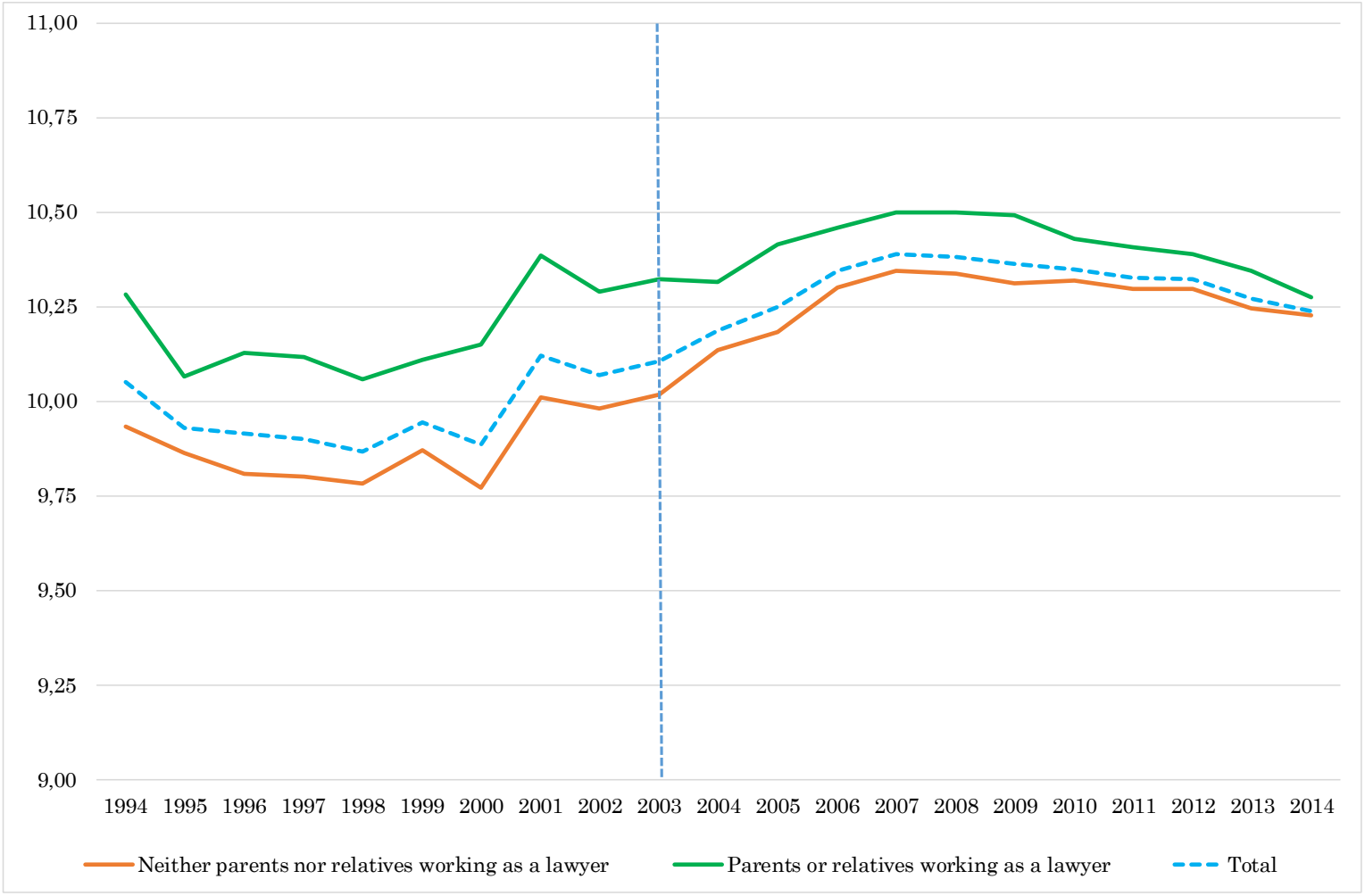
A law background is associated with more experience as a lawyer, but only not controlling for parental educ.

OLS estimates of the association between parents' and relatives' characteristics and years of experience as a lawyer [a]

	Not controlling for parents' education	Controlling for parents' education
Law background	0.994***	0.362
	[0.287]	[0.320]
Parents upper secondary educ.		0.604*
		[0.344]
Parents tertiary educ.		1.564***
		[0.338]
Obs.	14305	14305
Number of individuals	872	872
R^2	0.790	0.795

[a] Regressions run for the period 1994-2014; experience before 1994 is considered to compute the dependent variable. Additional covariates: gender, year dummies and their interactions; age and age squared; dummies on marital status and having children; dummies on the region of work and for the three largest local associations (Rome, Milan and Naples). Standard errors clustered at the individual level. *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

The trend of annual log earnings in our subsample



A law background is associated with higher earnings conditional on entry

OLS estimates of the association between parents' and relatives' characteristics and annual log earnings, whole period vs. pre-reform period

	1994-2014		1994-2003	
Law background	0.170***	0.106*	0.248***	0.163**
	[0.059]	[0.063]	[0.071]	[0.079]
Parents upper secondary educ.		0.143**		0.204**
		[0.070]		[0.083]
Parents tertiary educ.		0.179***		0.238***
		[0.069]		[0.078]
Obs.	14,305	14,305	5,652	5,652
Number of individuals	872	872	872	872
R^2	0.246	0.250	0.256	0.262

Note: Additional covariates are gender, year dummies and their interactions; age and age squared; dummies on marital status, on the region of work and for the three largest local associations (Rome, Milan and Naples). Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10.
Source: Elaborations on Cassa Forense data.

Empirical strategy

- Difference-in-Differences specification, through OLS and FE:

$$\ln(w_{it}) = \vartheta + X'\gamma + \alpha Law\ Back_i + \beta post_{2005} Law\ Back_i + \varepsilon_{it}$$

- X is a vector of standard controls (e.g., parental education, gender, time dummies, pre-trends in local lawyers LM, graduation marks, age, regional and local dummies).
- $post_{2005}$ is a dummy equal 1 in the years after the second reform (excluding 2004 and 2005 in the main analyses)
- Treatment group: $Law\ Back$, those with a parent or a close relative working as a lawyer
- Control group: all others, in some specifications sample split by gender, geographical area, graduation mark or parental education
- Note that neither parental education and graduation marks are mere proxies of unobservable abilities

Expectations

1. If the children of non-lawyers are more talented and have better unobservable skills than lawyers' children: $\beta<0$ => the increase in competition reduced earnings premium for lawyers' children, thus proving that (at least part of) the earning premium for lawyers' children was related to nepotism and social connections.
2. If the lawyers' children are more talented and have better unobservable skills $\beta >0$ => the increase in competition raised earnings premium for lawyers' children, thus proving that (at least part of) the earning premium for lawyers' children was related to their better unobservable skills background-related.

- Different implications for efficiency and eq. opp.

Main result: the reform reduced the returns to a law background

Effect of the liberalizations on earnings premia. Main specifications.

	M0		M1 - Baseline	
	OLS	FE	OLS	FE
Law background	0.252***	.	0.185***	.
	[0.060]	.	[0.062]	.
Law back*Post 2006	-0.145***	-0.117***	-0.142***	-0.118***
	[0.045]	[0.041]	[0.044]	[0.041]
Par. upp. sec.			0.136*	.
			[0.073]	.
Par. tertiary			0.182**	.
			[0.071]	.
Obs.	12,699	12,699	12,699	12,699
Number of individuals	872	872	872	872
R2	0.240	0.279	0.246	0.279

Note: In all models, additional covariates are gender, year dummies and their interactions; age and age squared; dummies on the region of work and for the three largest local associations (Rome, Milan and Naples). In the baseline model dummies on parents' education and marital status plus the percentage change in the number of lawyers in the local area in the period of 1990-2003 interacted with year dummies are added to the covariates. Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10. Source: Elaborations on Cassa Forense data

Allowing the effect of ability proxies to vary with the shock

Effect of the liberalizations on earnings premia, including proxies of abilities.

	M2 – Adding proxies of abilities		M3 – Proxies of abilities interacted with the shock	
	OLS	FE	OLS	FE
Law background	0.228***	.	0.223***	.
	[0.062]	.	[0.060]	.
Law back*Post 2006	-0.162***	-0.118***	-0.152***	-0.094*
	[0.043]	[0.041]	[0.053]	[0.051]
Par. tertiary	0.043	.	0.056	.
	[0.055]	.	[0.064]	.
Par. tertiary *Post 2006			-0.022	-0.052
			[0.061]	[0.048]
High mark (>=110/110)	0.480***	.	0.490***	.
	[0.057]	.	[0.060]	.
High mark*Post 2006			-0.019	-0.043
			[0.043]	[0.037]
Obs.	12,699	12,699	12,699	12,699
Number of individuals	872	872	872	872
R^2	0.271	0.279	0.271	0.279

Note: In all models, additional covariates are gender, year dummies and their interactions; age and age squared; dummies on marital status, on the region of work and for the three largest local associations (Rome, Milan and Naples) plus the percentage change in the number of lawyers in the local area in the period of 1990-2003 interacted with year dummies. In model 2, a dummy for high graduation marks is added. In model 3, the effects of the high graduation dummy and of the high parental education dummy are allowed to change following the liberalization reform. Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10. Source: Elaborations on Cassa Forense data.

Robustness: different samples and time windows

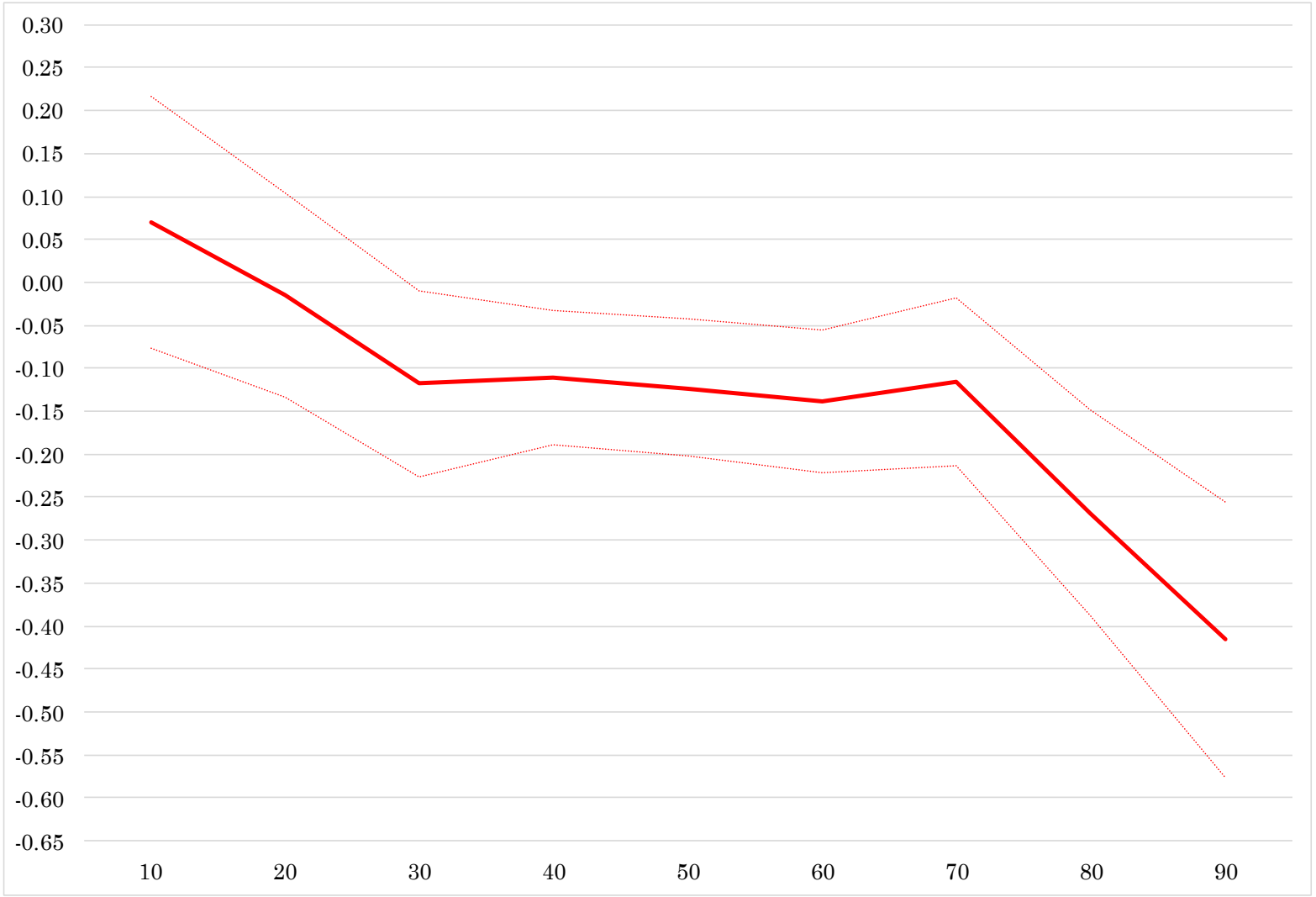
	At least 3 obs. before and after the shock		Excluding the crisis (1999-2008)	
	OLS	FE	OLS	FE
Law background	0.216***	.	0.211***	.
	[0.069]	.	[0.063]	.
Law back*Post 2006	-0.182***	-0.132***	-0.137***	-0.133***
	[0.046]	[0.043]	[0.051]	[0.044]
Par. upp. sec.	0.162**	.	0.165**	.
	[0.077]	.	[0.082]	.
Par. tertiary	0.184**	.	0.159*	.
	[0.077]	.	[0.081]	.
Obs.	10,798	10,798	5,816	5,816
Number of individuals	665	665	861	861
R^2	0.244	0.294	0.271	0.261

Note: In all models, additional covariates are gender, year dummies and their interactions; age and age squared; dummies on marital status, on the region of work and for the three largest local associations (Rome, Milan and Naples) plus the percentage change in the number of lawyers in the local area in the period of 1990-2003 interacted with year dummies. Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10. Source: Elaborations on Cassa Forense data.

Heterogeneous effects

A. Gender				
	Male		Female	
	OLS	FE	OLS	FE
Law background	0.216**	.	0.099	.
	[0.089]	.	[0.116]	.
Law back*Post 2006	-0.156***	-0.120**	-0.106	-0.115
	[0.054]	[0.056]	[0.109]	[0.128]
Obs.	8,394	8,394	4,305	4,305
Number of individuals	560	560	312	312
R^2	0.245	0.302	0.167	0.233
B. Geographical area of work				
	North/Centre		South	
	OLS	FE	OLS	FE
Law background	0.112	.	0.225**	.
	[0.079]	.	[0.087]	.
Law back*Post 2006	-0.167**	-0.103*	-0.118**	-0.125**
	[0.074]	[0.059]	[0.053]	[0.052]
Obs.	5,675	5,675	7,024	7,024
Number of individuals	399	399	473	473
R^2	0.263	0.329	0.209	0.252
C. Birth cohort				
	Before 1969		From 1969	
	OLS	FE	OLS	FE
Law background	0.186***	.	0.157	.
	[0.067]	.	[0.150]	.
Law back*Post 2006	-0.110**	-0.100**	-0.319**	-0.335**
	[0.047]	[0.040]	[0.153]	[0.155]
Obs.	10,419	10,419	2,280	2,280
Number of individuals	666	666	206	206
R^2	0.239	0.259	0.306	0.415

UQR: effects along the earnings distribution



Validity of the research design

- Two main issues:

1. Absence of a reform's effect within the control group, i.e. homogeneity of the control group's response to the reform (group unconfoundness assumption) => fake experiments on pseudo-treated, i.e. within those without a lawyer background
2. Absence of similarity of control and treated groups => estimates also for homogenous subsample by parental education and graduation mark

- Our dataset allows us to control for several covariates plus trend in competition in the local area

"Pseudo-treatment" effects

Pseudo-treatments on the subgroup of lawyers without a law background.

	Pseudo treatment 1 – Parental education		Pseudo treatment 2 – Graduation mark	
	OLS	FE	OLS	FE
Par. tertiary	0.134	.	0.088	.
	[0.082]	.	[0.077]	.
Par. tertiary*Post 2006	-0.007	-0.042		
	[0.069]	[0.061]		
High mark (>=110)			0.468***	.
			[0.065]	.
High mark*Post 2006			0.067	0.002
			[0.051]	[0.045]
Obs.	9,015	9,015	9,015	9,015
Number of individuals	626	626	626	626
R^2	0.250	0.307	0.281	0.307

Note: In all models, additional covariates are gender, year dummies and their interactions; age and age squared; dummies on marital status, on the region of work and for the three largest local associations (Rome, Milan and Naples) plus the percentage change in the number of lawyers in the local area in the period of 1990-2003 interacted with year dummies. Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10. Source: Elaborations on Cassa Forense data.

More homogeneous subsamples

A. Parental Education	Upper secondary or less		Tertiary	
	OLS	FE	OLS	FE
Law background	0.208*	.	0.171**	.
	[0.112]	.	[0.084]	.
Law back*Post 2006	-0.096	-0.062	-0.169**	-0.121*
	[0.079]	[0.080]	[0.079]	[0.073]
Obs.	7,702	7,702	4,997	4,997
Number of individuals	531	531	342	342
R^2	0.270	0.282	0.227	0.282
B. Graduation Mark	Medium/Low Marks (<110/110)		High Marks (>=110/110)	
	OLS	FE	OLS	FE
Law background	0.194***	.	0.296*	.
	[0.072]	.	[0.158]	.
Law back*Post 2006	-0.104**	-0.074	-0.374***	-0.262***
	[0.050]	[0.048]	[0.100]	[0.091]
Obs.	9,994	9,994	2,705	2,705
Number of individuals	693	693	179	179
R^2	0.246	0.267	0.339	0.336

Conclusions

- Conditional on standard covariates, parental educ. and on entry, we estimate a significant and large (16.3% before the liberalization) premium to a law background within lawyers.
- Liberalization and increasing competition reduce such premium, by around 3/5.
- Results robust to several specifications, to robustness checks and to different background variables.
- Effects are not mediated by labour market experience and are stronger for males, high-ability lawyers and at the top of the distribution, allowing talented but unconnected lawyers to break the glass ceiling.
- Evidence that the existing premium was due (at least partly) to nepotism and social connections.

Thanks for your attention!

Augmented specifications

	Full covariates model		Saturated	
	OLS	FE	OLS	FE
Law background	0.174***	.	0.147***	.
	[0.053]	.	[0.049]	.
Law back*Post 2006	-0.139***	-0.104***	-0.116**	-0.081*
	[0.044]	[0.038]	[0.055]	[0.048]
Obs.	12,699	12,699	12,699	12,699
Number of individuals	872	872	872	872
R2	0.395	0.295	0.362	0.299

Note: In all models, additional covariates are gender, year dummies and their interactions; age and age squared; and dummies for the region of work and for the three largest local associations (Rome, Milan and Naples). In the baseline model, dummies for parents' education and marital status plus the percentage change in the number of lawyers in the local area in the period of 1990-2003 interacted with year dummies. In the "full covariates" model, the following variables are added to the baseline model: dummies on graduation marks, a dummy for those with minor children and a dummy for those who interrupted their careers as a lawyer for at least 6 months, the time to attain the degree and a cubic polynomial on experience as a lawyer. In the "saturated" model, all covariates of the baseline model plus a cubic polynomial on experience as a lawyer are interacted with the "Post 2006" dummy. Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10. Source: Elaborations on Cassa Forense data.

Saturated specifications

	Trends in parental education		Trends in year of graduation	
	OLS	FE	OLS	FE
Law background	0.172***	.	0.193***	.
	[0.060]	.	[0.061]	.
Law back*Post 2006	-0.120**	-0.085*	-0.139***	-0.104***
	[0.052]	[0.051]	[0.045]	[0.036]
Obs.	12,699	12,699	12,699	12,699
Number of individuals	872	872	872	872
R^2	0.246	0.280	0.313	0.294

Note: In all models, additional covariates are gender, year dummies and their interactions; age and age squared; dummies on parents' education, on marital status, on the region of work and for the three largest local associations (Rome, Milan and Naples) plus the percentage change in the number of lawyers in the local area in the period of 1990-2003 interacted with year dummies. In the first two columns, interactions between parental education and year dummies are added to the covariates, while in the third and fourth columns, interactions between year of graduation and year dummies are added to the covariates. Standard errors clustered at local lawyers' association level. *** p<0.01, ** p<0.05, * p<0.10. Source: Elaborations on Cassa Forense data.