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

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Provisional draft, this version September 12th 2018

Abstract

We study the mechanisms of intergenerational earnings inequality among Italian lawyers over the period 1994-2014, using a rich longitudinal dataset that combines administrative and survey data. After estimating that – within lawyers – a law family background (i.e., having a parent or a close relative working as a lawyer) is associated with a large annual earning premium, we use the 2004-2006 liberalization in the lawyers' sector to infer whether this advantage is related to skill transfers or nepotism. A liberalization should, indeed, asymmetrically affect these two channels of inequality transmission by reducing rents linked to nepotism while magnifying skill premia. Our favourite estimates show that the liberalization squeezed by around 3/4 the earning premium of lawyers with a law background, thus revealing the strength of nepotism. Importantly, the bulk of the effect occurred for the youngest and the top earners, breaking the glass ceiling for talented lawyers without family connections.

JEL classification: J24, J31, J44, I24

Keywords: social mobility, intergenerational inequality, nepotism, specific skills, regulation, top professions, Italy

1. Introduction

The observed high level of intergenerational income inequality is a matter of a lively debate in several developed countries. Is such a high level the unavoidable consequence of the transmission (by nature and nurture) of skills and abilities? Or is it mostly the outcome of an unfair society that prevents an efficient allocation

of talents? The particular strength of the intergenerational transmission in prestigious occupations, such as lawyers or doctors, is cited by previous studies as the pivotal case study to test these competing explanations (Laband and Lentz, 1983, 1992). Recently, the literature has demonstrated a renewed interest to assess the mechanisms that, beyond those associated with the transfer of human capital (e.g., Becker and Tomes, 1979, 1986; Cunha and Heckman, 2007; Mogstad, 2017), are at the root of intergenerational inequality in different societies, emphasizing the role of nepotism and family networks (e.g. Granovetter, 2005; Magruder, 2010; Calvó-Armengol and Jackson, 2009; Raitano and Vona, 2015 and 2018; Gagliarducci and Manacorda, 2016). However, especially in empirical research, it remains exceedingly difficult to disentangle the effect of nepotism, which creates positional rents and sets barriers to entry and career development for the most talented children without a good background, from that of human capital accumulation, which might be naturally magnified by the occupation-specific skill transfer (through both nature and nurture) when children follow the parent's footsteps in occupations that, such as lawyers, use intensively tacit and non-routine skills.

This paper offers a novel empirical contribution to the assessment of the key mechanisms that generate intergenerational inequality in top professions, notably within Italian lawyers, over two decades (1994-2014). To examine the relative incidence of nepotism vs. occupation-specific skill transfer, we exploit the process of liberalization in the lawyers' labour market that started in 2004 with a reform in the exam procedure which was closely followed by the removal of price and advertisement restrictions in 2006.

The key argument for our identification strategy is that a market liberalization asymmetrically affects these two channels of inequality transmission by reducing positional rents linked to nepotism (Mocetti, 2016; Mocetti et al., 2018), while magnifying skill premia (Guadalupe, 2007). As a result, a negative effect of liberalizations on the returns obtained by lawyers with a parent or a close relative working as a lawyer (henceforth, with a "law background") should be interpreted as an evidence of incidence of nepotism, while a positive effect should be interpreted as an evidence of compressed returns to skills in regulated sectors.

Our primary advantage compared to closely related research (Laband and Lentz, 1983, 1992; Pellizzari and Pica, 2010; Mocetti, 2016; Aina and Nicoletti, 2018; Mocetti et al., 2018) resides in the extremely high quality of our data. More specifically, we merged longitudinal data on lawyers' earnings, provided by the administrative archives of Cassa Forense (the mandatory social security fund for lawyers in Italy), with a survey on a sample of approximatively 1,300 lawyers, where, among the others, crucial information on parents' or close relatives characteristics is recorded. To the best of our knowledge, such very rich dataset allows us to examine novel issues on which previous literature remained silent due to data limitations.

First and foremost, we can investigate the existence and the source of a background-related earning premium within workers who achieved a certain top profession. Indeed, we can study intergenerational earnings' inequality within a highly homogeneous sample (i.e., those who achieved the lawyer profession), complementing previous research that focuses on the incidence of family background on the probability to enter a liberal profession, but is silent about the association between family background and children earnings within that profession. Furthermore, exploiting the occurrence of liberalizations, we can identify whether this type of intergenerational inequality is due to nepotism or to the background-related endowment of better skills. Using the rich set of information of the survey, we are also able to disentangle the earnings' effects of an occupational specific family background parents or close relatives working as a lawyer – from that of general family background (captured by parents' education).

Second, the longitudinal dimension of our data allows us to assess the effect of liberalization on earnings, controlling for lawyers' experience and for time invariant unobservable individual skills, thus sharpening the identification of nepotism vs. skill transmission.

Third, our work is connected with the active strand of research studying the role of occupational regulation and licensing on labour market outcomes (e.g., Kleiner and Krueger, 2013). More specifically, we are the first to study the effect of occupation-specific regulation on intergenerational earnings inequality within that occupation.

Our focus on earnings gaps within a certain profession is crucial to assess whether ensuring an equal access to that profession is enough to achieve an effective equality of opportunity: if a residual earnings inequality related to family background would persist upon entering the law profession, an effective equality of opportunity would not emerge. Moreover, if this residual inequality was due to nepotism rather than to background-related skills a clear distortion in the market efficiency would also emerge (Raitano and Vona, 2018).

The legal profession in Italy is heavily regulated, as concerns entry requirements, the supply of services and prices applied to consumers. However, two interventions at the beginning of the 2000s changed the regulatory environment: first, in 2003, rules about the accreditation exam to the lawyer profession were changed to avoid discretionary behaviours by those who managed the exam that often favoured better socially connected students; second, to adopt the EU guidelines on market competition, a liberalization reform that abolished price floors and lifted the ban on price bundling, contingent pricing and commercial advertising was introduced in 2006.

Various advantages uncorrelated to children's talents and skills are likely to be magnified in the particular regulatory framework that was prevalent in Italy before 2004, restraining access to the profession and limiting the rights to advertising and imposing price floors. To give a concrete example that is extensively discussed in Pellizzari and Pica (2010), the most important advantage for lawyers' children uncorrelated with one's talent, but correlated with their law background, is the access to a well-established portfolio of clients in the earlier and most uncertain phase of a lawyer's career. However, if the intergenerational transfer of occupation-specific skills makes on average lawyers' children more productive than non-lawyers' children, a competition shock, such as that induced by the reform, should have a positive effect on the returns to such skills (e.g. Guadalupe, 2007).

Therefore, since, as mentioned, a liberalization might have opposite effects on the association between family background and offspring's earnings according to the source of this association, evaluating the effect of the reform allows us to reveal the relative incidence of nepotism vs. specific skill transfer on the returns to a law

background. In particular, observing a decrease in the returns obtained by lawyers with a law background would reveal the existence of a strong nepotism that prevented an efficient allocation of talents before the liberalization. Vice versa, observing an increase in thes returns to occupational-specific parental background would imply that competition increased the returns to their skills, as it did in the context of international trade shocks (Guadalupe, 2007; Raitano and Vona, 2017). Our main findings are the following. First, conditional on standard covariates in wage equations, we estimate through OLS regressions a positive, significant and large (17.5% before the liberalization, 11.0% on the whole period) premium to a law family background within lawyers. Second, the liberalization squeezed such premium by around 3/4 in both OLS and FE specifications. This result thus reveals that a large share of the premium for a law background was due to nepotism and that, by limiting positional rents of incumbents, the liberalization strongly reduced the incidence of nepotism in the lawyers' labour market. Indeed, as mentioned, were the lack of competition preventing the full exploitation of the return to skills, we would have observed an increase in the returns to law background following the liberalization. Third, we corroborate this interpretation by showing that the bulk of the effect occurs for younger lawyers and at the top of the earnings' distribution, breaking the glass ceiling for talented lawyers without family connections.

The remaining of the paper is organized as follows. Section 2 briefly reviews the related literature. Section 3 presents the institutional background of the liberalization reforms. Section 4 describes the data and provides some initial evidence on the importance of family background within lawyers. Section 5 presents the empirical strategy and Section 6 the main results. Section 7 concludes summarizing the main findings and their policy implications.

2. Related literature

Evidence on social mobility in top professions is growing fast and covers quite a few countries. As concerns Italy, Pellizzari and Pica (2010) and Basso and Labartino (2010) focused on lawyers, Mocetti (2016) on pharmacists, Aina and

Nicoletti (2018) and Mocetti et al. (2018) on liberal professionals in general, and Abramo et al. (2014) and Durante et al. (2011) on university professors. As concerns the US, Lentz and Laband (1989) and Laband and Lentz (1992) focused on doctors and lawyers, respectively, Dunn and Holtz-Eakin (2000) on self-employed, Bell et al. (2017) on inventors and Dal Bó et al. (2009) on politicians), while for the UK Macmillan et al. (2015) and Gutierrez et al. (2014) focused on the association between parental networks and children attainment of managerial and professional jobs.

The main finding of this strand of the economic literature is that parental background plays a crucial role to access top professions, especially when the child remains in the same profession of her parents. Consistently, Corak and Piraino (2011) and Bingley et al. (2011) document a strong intergenerational transmission of employers (the company for which somebody works) in Canada and in Denmark. Over a general assessment of an intergenerational persistence in top occupations, some studies, – aim at disentangling the source of the persistence and specifically analyse the incidence of network vs. skill transfer using ad-hoc survey's questions to approximate the two transmission channels (Lentz and Laband, 1989; Laband and Lentz, 1992; Aina and Nicoletti, 2018; Macmillan et al., 2015; Gutierrez et al., 2014). The problem with such approach is that, empirically, it is virtually impossible to find two observable and orthogonal counterparts identifying these two mechanisms. Our empirical strategy overcomes this issue by letting the liberalization process to reveal the incidence of these competing explanations.

More closely related to our research strategy, Pellizzari and Pica (2010), Mocetti (2016) and Mocetti et al. (2018) use a competition shock to examine the intergenerational persistence of top professions in Italy. Pellizzari and Pica (2010) analyse the impact of the liberalization reform that we evaluate here focusing on the outflows of lawyers with different family background, as measured using the surnames' frequency in provinces (Güell et al., 2015). The main finding is that, while, before the reform, high-ability lawyers without the "right surname" were more likely to leave the profession, the opposite occurs afterwards.[1] Mocetti (2016)

[1] using a similar approach, Basso and Pellizzari (2010) find a negative correlation between the age when people become lawyer and the frequency of their family name in the local register.

exploits discontinuities in the number of pharmacy per residents in Italian cities to estimate the probability that a pharmacist's child opts for a pharmaceutical university programme finding that an exogenous increase in the pharmacy-to-population ratio, a proxy of an increase in competition, reduces the propensity of pharmacists' children to follow their parents' footsteps. Mocetti et al. (2018) exploit reforms in the regulation of professional services occurred in Italy since the 2000s to examine the impact on intergenerational persistence of occupations, finding that the liberalization of professional services led to a substantial decrease in the propensity of career following, especially for less able individuals; they, thus, show that the persistence in regulated occupations in Italy depends to a large extent on positional rents – linked to the lack of competition – advantaging children of liberal professionals rather than on the mere transfer of occupation-specific skills.[2] Overall, these three papers indicate a strong linkage between positional rents and the lack of social mobility in liberal professions, but do not investigate background-related earning gaps within certain occupations and the sources of these gaps, that are, instead, the topic of this article.

3. Institutional Background on the lawyer sector in Italy

The legal profession in Italy is heavily regulated. The lawyer sector is a licensed sector and the occupational licensing creates an entry barrier. To become a lawyer – i.e., to be formally qualified to represent clients in any type of legal proceeding – law tertiary graduates (the law degree has a 4-year legal duration) have to spend a compulsory two-year period of legal practice with a lawyer appointed as a mentor and, afterwards, to get the license, they have to pass an admission state examination organized by the local courts of appeal generally at the end of each calendar year and prepared by a ministerial commission. The examination commission is made by both judges and local lawyers. Only once passed the exam, they can be appointed as a lawyer and have to enrol to the lawyer professional association that is organized through 166 local associations. As concerns lawyers

[2] Mocetti et al. (2018) find that the liberalization reform process reduced the propensity of career following in liberal professions by about one third of the sample mean and the effect is relatively much larger in occupations in soft sciences (e.g., lawyers, accountants).

code of conduct, the professional association may impose rules and restrictions on pricing, advertising and the business structure of the law firm and is endowed with a disciplinary power to guarantee enforcement of these rules (Mocetti et al., 2018). Lawyers are also obliged to pay contributions to Cassa Forense, the social security fund for lawyers, that is privately managed by a board of lawyers.

As pointed out by Pellizzari and Pica (2010), historically, there have been very large differences in the pass rates of the qualification exam between the various local courts of appeal, and pass rates were usually much higher in the Southern than in the Northern regions of Italy. To avoid discretionary behaviours by those who managed the exam – that often favoured better socially connected students – the procedures of the accreditation exam changed at the end of 2003 (thus affecting those who has become a lawyer since 2004): from that date, indeed, local courts of appeal are randomly paired with one another and one marks the written papers of the other. As argued by Pellizzari and Pica (2010), this intervention reduced the local variation in pass rates.

As mentioned, the local lawyer association can sanction illegal, incorrect or unethical behaviours of their members according to the conduct code of the profession. Until July 2006 this code established, among the others, price floors for each legal service and a ban on advertising. Following a recommendation by the European Commission aimed at fostering competitions in licensed sectors, in 2006 the Government intervened – through the so-called Bersani reform (decree n. 223, 4th July 2006) – to liberalize the legal sector abolishing price floors and lifting the ban on price bundling, contingent pricing, commercial advertising and inter-professional cooperation. The aim of the reform was to ease the entry into the profession by younger workers and to increase the sector competition, though a combination of lower prices and advertising.

Therefore, legal sector in Italy has been characterized by two main reforms in the first decade of the XXI century, i.e., the 2003 reform on the rules of the accreditation exam and the 2006 liberalization.[3] In particular, the 2006 reform can

[3] The 2003 change in the exam's rule for the admission to the lawyer profession should have affected the options of law graduates to become lawyers rather than employees in other sectors. As clarified in following sections, we cannot exploit this reform to assess the effect of the probability of non-lawyers' children to become a lawyer since we do not have at disposal data on all law

be regarded as a sudden and unexpected change in the Italian legislation since it was approved via an emergency decree not long after a new Government took office and, thus, it can be confidently considered as exogenous with respect to the behaviours of incumbents in the lawyers' labour market (Mocetti et al. 2018).

The liberalization process of the lawyer sector in Italy is confirmed by the decrease in the OECD indicator that measures the regulatory environment for legal services, whose value decreased from 3.92 to 2.40 in the 1998-2013 period. However, it has to be noticed that the number of active lawyers (i.e., not retired) enrolled to Cassa Forense steadily increased since the mid of the 1990s, then before the liberalization process started (figure 1).[4] In real terms, on average, lawyers' gross earnings steeply increased from the mid of the 1980s until the beginning of the 1990s (mean earnings increased by 76% in the period 1985-1994), then remained fairly constant until 2008 – when the recession phase started in Italy – and decreased afterwards (figure 2).

4. Data and Descriptive Evidence

4.1 Data

We use a panel dataset built merging two different data sources for Italian lawyers, using the personal identification code of members of *Cassa Forense* as the matching key:[5]

i) The longitudinal administrative records collected yearly by *Cassa Forense*, based on annual tax files filled by lawyers when they pay contributions. In these files, demographic characteristics of each member (year of birth, gender, local professional association where the lawyer is enrolled and year

graduates. Instead, we can observe the effect of the changing composition of the lawyers' workforce and the effect of the liberalization on those who were already lawyers before the reform process started.

[4] Information provided by Cassa Forense show that the total number of individuals qualified as lawyers – also including pensioners and those not working as a lawyer since suspended by the activity (e.g., the enrolment to the lawyer association is frozen when lawyers work as an employee for a company) – rose from around 87,000 in 1996 to around 234,000 in 2014 and the share of lawyers on 1,000 inhabitants rose from 1.5 to 3.9 in the same period.

[5] Matching keys have then been anonymized for privacy reasons by the statistical office of Cassa Forense.

of enrolment to *Cassa Forense*) plus annual gross earnings and gross turnover are recorded.[6]

ii) An occasional survey performed by *Cassa Forense* in 2010 on a stratified sample of 4,000 lawyers, representative of the population of members of the social security fund in 2010.The response rate was relatively high (32.7%) with a final sample of 1,306 lawyers. As concerns the stratification variables (gender, age classes and geographical area of work), the sample of respondents has the same characteristics of the universe, thus non-responses appear randomly distributed across different strata (see Table A1.1 in Appendix 1, where the composition of our sample and the universe of active lawyers in 2008 – the latest available year – is shown).

The survey contains a wide range of questions that are useful to the aim of this article (see Appendix 2 for the questionnaire and the list of the questions used in the empirical analyses). In particular, it collects information on sociodemographic characteristics, educational path (e.g., the graduation mark, the year of graduation), career's and current job's characteristics (e.g., about the legal practice course after the graduation and the main sector of activity) and, most importantly to the aim of our article, parental background. In particular, the survey contains information on parents' education, on parents (own or of the partner) or a close relative working as a lawyer and on the inheritance of the law firm by lawyers' children.

Starting from the sample of 1,306 interviewed lawyers, our primary sample is composed by those who enrolled to *Cassa Forense* no later than in 2003, to focus on those already working as a lawyer at the moment of both the accreditation exam's procedures change in 2004 and the 2006 liberalization reform. We thus analyse the effect of the two reforms on the sub-sample of lawyers already enrolled in the *Cassa Forense* in 2004 to avoid compositional effects, and over the timespan 1994-2014 to be symmetric in the number of years before and after the start of the reform process. Our primary sub-sample is then composed by 872 individuals and

[6] Annual earnings and turnover are considered at constant prices by using changes in HICP values and are been top-coded (in real terms) at 1 million euros per year (18 income values are top-coded in our primary sample).

14,305 longitudinal observations with positive annual earnings. [7] As concerns the main variables of interest, 14.2% of the primary sample has at least a lawyer parent and 28.2% has at least a parent or a close relative working as a lawyer (see Table 1, where the sample composition is shown).

Our dataset has several advantages to perform an analysis of the causes of intergenerational inequality among lawyers. First, it is a highly homogeneous sample, composed by ex-ante similar individuals, i.e. those already working as a lawyer before the liberalization process started. Notice that this is an essential pre-requisite to ensure that the treatment and the control groups are similar in a quasi-experimental research design used to examine the effect of a reform process. Second, the sample size (872 individuals) is relatively large for a specific analysis on workers in a certain profession (for instance, Laband and Lentz 1992 and Azmat and Ferrer 2017 focus on US lawyers with a sample of 342 and around 1000 individuals, respectively). Third, the dataset merges detailed survey information on lawyers' self-reported characteristics at the year of the interview with administrative –thus accurately measured – data on their gross earnings and turnover from their entry into activity as a lawyer until the end of 2014. The longitudinal dimension of the sample is, therefore, extremely long: considering the time span 1994-2014, the median number of annual observations is 17 and 93.6% of the sampled individuals has at least 10 earnings records. Finally, the dataset allows us to run wage equations for lawyers controlling for key time-invariant (e.g., parental education, parents or close relatives working as a lawyer) and time-variant variables (age and experience as a lawyer).

A disadvantage of our dataset is that it only includes lawyers (i.e., those who perform the lawyer activity as a freelance professional); therefore, we cannot estimate the effect of the reforms on the probability that those who attain a law degree then become a lawyer. Furthermore, even if our primary sample is rather large compared to similar studies, detailed analyses for sub-samples (e.g., by gender or cohort of birth) should be taken with caution.

[7] We exclude annual observations when the lawyer is aged over 65.

4.2 Preliminary evidence on lawyers' education and career path

As a preliminary evidence on the relationship between lawyers' career and family background, we take our primary sample – i.e., lawyers enrolled to Cassa Forense before 2004 – and run a set of regressions on the link between outcomes during the educational and the entry career phase and their background, controlling for gender, birth cohort and the region of tertiary graduation (when we focus on educational outcomes and on the time from graduation to the job) or the region of work (when we focus on outcomes of the job activity; we use both regional dummies on the local association where the lawyer is enrolled, plus three specific dummies for those enrolled in the three greatest local associations, namely, Milan, Rome and Naples).

In these preliminary analyses, we do not control for parents' education and, as in all analyses in this article, we capture family background with the "law background" dummy, whose value is 1 when at least a parent or a close relative is a lawyer, 0 otherwise.

First, we carry out two separate OLS estimates focusing on time (measured in years) spent to attain the tertiary degree and on time afterwards spent to become a lawyer after the graduation, respectively (Figure 3). These estimates clearly show that a law background is associated with a statistically significantly shorter period both to attain the degree (around 5 months) and to enrol to the lawyers' association after the graduation (around 9 months). Moreover, predicted probabilities of attaining different marks at graduation in law (estimated by an ordered probit model where the law background is significantly associated with an increase in the mark) show that the share of those attaining a high mark is higher within children coming from a law background (Figure 4).

Looking at the features of the career as a lawyer, it is interesting to observe that those with a law background have a lower probability (predicted by a probit model) to start the lawyer activity in a law firm owned by them (also in association with other lawyers), consistently with the evidence that they often start to work in the firm owned by their parents or relatives (Figure 5, left panel). Likewise, the predicted probability to have worked in a single law firm during the career is higher for lawyers with a law background (Figure 5, right panel).

These preliminary estimates thus show that, on average, those with a law background are relatively advantaged along many dimensions: in particular, they graduate earlier and attain a better mark (thus, suggesting a possible better quality of their acquired education) and become lawyer earlier (getting earlier through the accreditation exam as a lawyer might depend both on better skills and nepotism). An earlier entrance in activity influences experience as a lawyer since the year of enrolment to the lawyer association, that is measured in years in our dataset. We have thus estimated through a pooled OLS the association between law background and experience controlling for a large set of covariates, namely gender, year dummies, interaction between gender and year dummies, age and age squared, region of work and dummies for the three largest local associations (Table 2).[8] We find that the law background is associated with an around 1 year increase in experience, but the estimated coefficient reduces and becomes not statistically significant when we control for parents' education.[9]

4.3 Preliminary evidence on lawyers' earnings

Our main aim is to investigate the influence on earnings of having a law family background. As a first step, it is thus important to determine the magnitude and the statistical significance of this influence, independently on the possible sources (i.e., nepotism or occupational related skills background-related).

For such descriptive purpose, we run a pooled OLS model to estimate the relationship between children annual gross log income and the characteristics of family background, controlling for the same covariates included in the estimate about experience, plus further dummies on marital status, the presence of at least a child and having interrupted the lawyer activity for at least 6 months in the past. We run estimates both including or not dummies about parents' education, for the whole 1994-2014 period and for the 10-year period before the reforms (1994-2003).

[8] All longitudinal estimates shown in this article are carried out clustering standard errors by individuals.

[9] Parents at most lower secondary educated is the omitted category of parents' education in all estimates.

A law background is associated with a significant increase in annual earnings even if, as expected, the estimated coefficient reduces when parents' education is controlled for, being law background and children's abilities correlated with parents' education (Table 3). However, it has to be stressed that – on top of the association with parents' education – a law background is associated with a further 11.0% increase in annual gross earnings of those with a parent or a close relative working as a lawyer in the period 1994-2014 and the size of the estimated coefficient rises to 17.5% when the decade before the reforms is considered.

Finding a positive and significant earning premium advantaging those with a law family background is the first important result of our paper, given the extreme homogeneity of our sample and the fact that we control for a rich set of covariates. Furthermore, our preliminary estimates clearly suggest that the relationship between law background and earnings might have changed after the reforms. Consistently, distinguishing by family background the sample of those who became lawyers before 2004 and computing their annual mean earnings, earnings gaps steadily reduce from 2004 until they vanish from 2010 (Figure 6).[10] The rest of the paper is then focused to inquire whether this reduction persists when proper longitudinal estimates are run.

5. Research Design

This section illustrates the quasi-experimental research design used to study mechanisms of intergenerational inequality among Italian lawyers. First, we present the baseline estimation equation that allows us to retrieve the causal effect of the liberalization process occurred between 2004 and 2006 (section 5.1). Second, we discuss how exploiting the liberalization shock allows us to disentangle the role of nepotism and specific-skill transfer (section 5.2). Third, we illustrate robustness exercises that test the reliability of our research design (section 5.3).

5.1 Baseline estimation equations.

[10] Note that Figures 2 and 6 cannot be compared since Figure 2 refers to all lawyers while Figure 6 considers only older lawyers, i.e. those enrolled to Cassa Forense before 2004.

We estimate through pooled OLS variants of a difference-in-difference specification of the form:

$$\ln(w_{it}) = \vartheta + \alpha Law\ Back_i + \beta \cdot post_{2004} \times Law\ Back_i + X_{it}\gamma + \varepsilon_{it} \text{ (eq. 1)}$$

where w_{it} is the annual gross income or the annual turnover of lawyer i in year t, and ε_{it} a standard error term.

Our main variable of interest is the law background dummy defined above ($Law\ Back_i$), where those with a parent or a close relative working as a lawyer are the treatment group. The coefficient of the interaction term between $Law\ Back_i$ and the post 2004 dummy captures the causal effect of the liberalization on the returns to parental background of Italian lawyers, or the Average Treatment Effect on the Treated (ATET, henceforth). Because, as documented in subsection 4.3, the influence of $Law\ Back_i$, on offspring's earnings is strong and statistically different from zero, β thus captures the extent to which the reform amplifies or mitigates the wage premium for lawyers that follow their parents' footsteps.

In the favourite specification, the vector X_{it} contains a set of standard covariates in wage equations,[11] while augmented specifications include the time to attain the degree and the graduation mark (to examine a possible influence of ability). Importantly, we include in all specifications two variables that help in identifying the causal effect of the reform. The first is parental education (coded through three categories: at most lower secondary, upper secondary and tertiary education) whose inclusion implies that we separately identify the returns to occupation-specific parental background and that of more educated, thus presumably wealthier and better connected, parents. Second, because, as pointed out in section 3, the number of lawyers per resident, a proxy of market competition, started increasing before 2004,our econometric models account for these pre-trends. More specifically, we include the growth rate in the number of lawyers in the lawyers' local association over the period 1994-2003, also interacted with year dummies. This variable allows us to capture changes in competition that occurred before the

[11] We consider the set of covariates used in subsection 4.3 – namely gender, year dummies, interaction between gender and year dummies, age and age squared, region of work, dummies for the three largest local associations, plus dummies on marital status, the presence of at least a child and having interrupted the lawyer activity for at least 6 months in the past – plus parental education and pre-trends in the growth of the number of lawyers enrolled in the local association.

2004 shock and had a persistent influence after the shock. As a result, the estimated ATET should not be confounded by pre-existing changes in the degree of competition in the local labour market of lawyers.

Exploiting the longitudinal dimension of our data, we also run fixed effects estimates, to control for unobservable time invariant lawyers' characteristics μ_i, which may be systematically related with $Law\ Back_i$:

$$\ln(w_{it}) = \vartheta + \beta \cdot post_{2004} \times Law\ Back_i + X_{it}\gamma + \mu_i + \varepsilon_{it}. \text{ (eq. 2)}$$

While the inclusion of individual fixed effects improves the reliability of the estimated ATET, it has the drawback of not estimating the pre-reform premium for a law family background. To overcome this drawback, we always present results obtained from both the FE (eq. 2) and the OLS (eq. 1) specifications.

Recall that, for sake of symmetry with respect to the reforms starting year, we estimate equation for the timespan 1994-2014.[12] Moreover, as pointed out, we evaluate the effect of the reform on those lawyers who enrolled to *Cassa Forense* no later than 2003. This is equivalent to perform a "cohort-style" analysis that singles out the price effect of the reform from induced compositional changes. The reason for this choice is that, since we cannot fully observe the counterfactual group of law graduates who did not work as lawyers, our sample only allows us to estimate the price-effect of the reforms on incumbents. Such price-effect is, in turn, the resultant of both the direct change on the choices of incumbents and of the indirect general equilibrium effects triggered by new entrants that were favoured by the reform (i.e., on the effect of new entrants on incumbents' rents).

5.2 Interpretation of the ATET: disentangling nepotism vs. skill transmission.

As discussed in section 1, nepotism and specific skill transfer are concomitant causes of intergenerational inequality: nepotism generates quasi-monopolistic rents for incumbents, while specific skill transfer makes them more productive in the same profession of their relatives. The family influence can occur through nepotism because, for a given level of skills, children with a law background have an easier access to the profession and an eased career development benefiting from

[12] Our findings do not change if we modify the time windows pre- and post-reform.

the relatives' connections, among the other things, in the accreditation exam and to build the clients' portfolio. At the same time, apart from a possible better quality of the acquired education, tacit knowledge is particularly important in professions that, such as that of lawyer, require discretion, persuasion and eloquence since these skills are mostly obtained through face-to-face interactions and are thus easier to acquire for children who have a lawyer in the family.

In absence of an exogenous shock affecting asymmetrically these two channels of intergenerational inequality, it is extremely difficult to disentangle their incidence. The idea of our identification strategy is that an increase in competition has opposite effects on these channels. On the one hand, it should reduce rents of incumbents; on the other hand, it should increase the returns to skills. While the former effect is well-established from basic textbooks, the latter can be derived under quite general theoretical assumptions as a consequence of the widening in the performance gap between low and high productivity firm following a competition shock (Boone, 2000).[13] It has indeed been shown that an increase in market competition has a positive effect on the returns to general (Guadalupe, 2007; Raitano and Vona, 2017) and specific skills (Macis and Schivardi, 2016). Therefore, depending on the incidence of nepotism or skill transmission before the reform, its effect can either dampen or magnify the returns of lawyers' children. Let us discuss these two cases in greater detail in relation to our research design.

Case 1: If the estimated ATET is negative, $\hat{\beta} < 0$, we can deduce that, before the reform, the lack of competition ensured rents to those with a law family background. Such rents were present because incumbent families restrained entry to high quality newcomers and transferred the clients' portfolio to the next generation. The 2004-2006 liberalization process unquestionably reduced these two sources of rents, removing price floors and the ban on lawyers' advertisement as well as discretional barriers to entry set by examination's rules.[14] In sum, estimating a decrease in returns to law background is a symptom of nepotism

[13] To illustrate the generality of this result, the positive effect of competition on returns to skills occurs also in models à la Melitz (2003). Indeed, competition increases the market size of highly productive firms and the wage premia of workers employed there (e.g., Helpman, Itskhoki, & Redding, 2010; Yeaple, 2005).

[14] Recall that, even holding fixed the cohort of lawyers before the reform, a change in the entry rules affects incumbents through changes in the number and the composition of competitors in the local market.

rather than of skill transmission, proving that (at least a portion of) the earning premium for lawyers with a law background was related to nepotism and social connections. In this case, the effect of the reform would be unquestionably good in terms of both efficiency and equality of opportunity.

Case 2: If the estimated ATET is positive, $\hat{\beta} > 0$, we can deduce that, before the reform, the talent of those with a law parental background was not exploited at its full potential. Since competition increases returns to skills, a positive ATET would reveal that the transfer of specific human capital is so strong to be the primary channel of intergenerational inequality among lawyers. In sum, an increase in the returns to law background would be a symptom of the strength of skill transmission rather than of nepotism. In this case, the effect of the reform would be positive in terms of efficiency, i.e. lower prices for consumers and a better quality of legal services, but negative in terms of effective equality of opportunity among those who enter in the lawyer profession.

5.3 Validity of our Research Design.

While previous discussion examines the use of a competition shock to disentangle skills vs. nepotism in the intergenerational transmission process, the validity of our experimental research design rests on a number of assumptions that are difficult to test formally and thus have to be corroborated by further analyses. Two are particularly important: i) the similarity of the control and the treated group; ii) the absence of pre-trends in the returns to law background.

First, recall that the treated and the control groups are very similar in terms of both observable and unobservable characteristics because we work with a selected sample of law graduates that have then chosen to become lawyers. However, the treated and the control groups contain individuals that are heterogeneous in terms of other dimensions of parental background (education in our case) and ability (roughly proxied by the graduation mark). Unbalances in these characteristics may lead to biased ATET estimates. For instance, the share of children of tertiary educated parents is 65.7% among those with a law background (our treated group) and only 24.7% among those without it (our control group). Adding these variables

to our estimated equations helps in accounting for these differences between treated and control groups, but imposes restrictions to the functional form through which they interact with annual earnings and with the law background dummy. To increase the similarity between the control and the treated group, we also estimate equations 1 and 2 for extremely homogeneous subsamples: children of parents holding a university degree, and high- and low-ability lawyers (according to graduation marks) separately.

Moreover, as discussed above, the effect of liberalization on the returns to law background can reflect pre-existing trends in competition, which are included in our main specification using as a proxy the past growth rates in the number of lawyer in the local association. However, the presence of pre-trends does not ensure that a structural break in returns to a law background occurred exactly at the beginning of the reform process. We tackle this issue through an event study analysis allowing returns to law background to change yearly in an unconstrained way, that is: replacing the term $post_{2004}Law\ Back_i$ in equations 1-2 with the full set of interactions between year dummies and law background, that is: $\sum_{t=1994}^{2014} \beta_t \times Law\ Back_i$.

Finally, since unobservable features of the local lawyers' labour market can contaminate the estimated effect of the reform, we also present results of a specification with a full set of "local association" fixed effects. The downside of using local labour market fixed effect is that, for small associations, the estimated ATET is obtained using a small number of observations, because of the limited size of our primary sample. Therefore, we prefer not to include local labour market fixed effects in our favourite specification.

6. Estimation Results

This section contains the main results of the paper. We focus on the effect of the reform on annual gross income reported to *Cassa Forense*, since the effects on annual turnover are qualitatively identical, although slightly smaller in size. The first sub-section reports the main results, while the second sub-section presents a series of extensions and robustness exercises.

6.1 Main Results

Table 4 shows main findings of this article.

OLS baseline estimate (Column 1) confirms in a difference-in-difference setting that the liberalization of the lawyers' labour market succeeded in mitigating the influence of a law family background on children's annual earnings. Our point estimate of the ATET (i.e., $\hat{\beta}$) indicates that, after the introduction of the reform (i.e., from 2004 to 2014), the premium to a law-specific background declines by approximatively 3/4. More specifically, controlling for parents' education, the children following the relatives' footsteps were earning 19.8% more than children without a law background before the reform. After the reform, this premium was squeezed to a modest and statistically insignificant 4.8%. According to our discussion in section 5.2, a negative estimated $\hat{\beta}$ reveals a strong incidence of nepotism among Italian lawyers before the reform process. This resonates with the widespread view of Italy as a country where family connections play a key role in finding a good job, both in top and in bottom positions (e.g., Pellizzari, 2010; Pellizzari and Pica, 2010; Raitano and Vona, 2015; Mocetti, 2016; Mocetti et al., 2018 Gagliarducci and Manacorda, 2016).

Such large effect of the liberalization process may be ascribed to the presence of unobservable cognitive skills positively correlated with both family background and earnings. Column 2 adds the two observable proxies of such skills in our dataset, i.e., dummies for graduation mark and the time to attain the degree. However, both the returns to an occupational-specific family background and the effect of the reform remains similar by adding these variables. Clearly, a plausible explanation for this result is that these variables are not accurate proxies of one's ability. For instance, graduation marks are usually higher in lower quality universities. Column 3 reports the results of the FE estimator of equation 2, which, by construction, fully switches off the influence of time-invariant individual characteristics including unobservable abilities. Not surprisingly, the absolute value of the ATET declines by around 1/5 compared to the OLS coefficient. However, the estimated effect remains very large and statistically significant.

Interestingly, our findings do not change if we proxy family background with the dummy about having at least a parent working as a lawyer instead than our preferred proxy (parents or relatives lawyer; Table A.3.1 in Appendix 3). Note also that, as mentioned, our findings do not change if we use annual gross (log) turnover instead than annual (log) earnings as the dependent variable, even if estimated effects are slightly smaller in size (Table A3.2 in Appendix 3).

6.2 Validation and Extensions

We start this subsection by presenting a series of exercises that illustrate the robustness of our results. First, an element of concern is that our sample is relatively small and that our results can be sensitive to changes in our estimation sample. Table 5 replicates our baseline specifications of equations 1 and 2 for two different samples: i) the lawyers observed for at least 3 years before and after the reform and enrolled in the *Cassa Forense* before 2004 (Col. 1 and 2); ii) all lawyers enrolled in the *Cassa Forense* at any time (Col. 3 and 4). Reassuringly, these alterations of the estimation sample have no effect on our main result.

Second, we perform robustness checks to validate our research design. Figures 7 and 8 plots he time-varying $\hat{\beta}_t$ estimated through the event-history analysis described above in the OLS and FE specifications, respectively. While the annualized ATET is not estimated precisely in some years before 2004 due to small sample sizes,[15] what visually emerges from the Figures is that 2004 represented a structural break. Before 2004 the annualized ATETs are generally significant, positive and large; after 2004 they become smaller and statistically insignificant. A formal statistical test of joint significance of the annualized ATETs in both OLS and FE models before and after the reform confirms this result. Returns to a law background are significantly higher than zero before the reform, but not after the reform.

Then, we run baseline specifications on extremely homogeneous sub-samples, according to parental education or the graduation mark attained by lawyers (Table 6). These estimates reveal that the reform was effective within the sub-

[15] Sample sizes decrease when we the distance from the survey year (2010) increases.

populations of lawyers with tertiary educated parents (Col. 1-2) and of lawyers with a medium-high graduation mark (at least 100; Col. 3-4), but not on the population of lawyers with a graduation mark below 100 (Col. 5-6). These findings provide initial insights on the channels through which the decline in the returns to a law background occurred. Rather than being widespread for both low- and high-ability lawyers, the main effect of the reform might have emerged through a break of the glass ceiling at the top.

Distinguishing lawyers by gender, only males are characterized by a statistically significant decrease in the law background earnings premium after the reform, while for females the estimated coefficient is negative but not statistically significant (Table 7). This is not surprising since barriers to become a lawyer are higher for women irrespective of the family background and thus, conditional on entry, the sub-sample of women should be more homogeneous than that of men in terms of unobservable skills. This important issue deserves further investigations in a separate paper. Moreover, the idea that positional rents and nepotism are higher for males is consistent with the idea that these rents also emerge because of economic relations socially embedded whose males are expected to benefit more (Granovetter, 2005).

Table 8 examines possible mechanisms behind this type of intergenerational inequality, first measuring the extent to which the estimated effect of the reform on the law background premium is mediated by labour market experience (Col. 1-2), as suggested by our analysis of section 4.2. In doing so, we add a third order polynomial in effective experience to equations 1 and 2. Experience account only for a modest portion of the annual premium of lawyers with a law background, since estimated ATETs very slightly reduce in both OLS and FE. This is, however, not surprising provided that we are considering a sample of incumbents with a quite strong attachment to the labour market.

To further understand the mechanisms at stake, it is important to differentiate the effect of the reform across cohorts of birth. To address this issue, we evaluate a variant of equations 1 and 2, in which we add the triple interaction between the post 2003 dummy, the law background dummy and a dummy equal one for lawyers

born since 1970 (15.5% of our sample). Columns 3 and 4 of Table 8 show that the reform falls mostly on the younger cohort for which the returns to law background further largely reduces after the reforms compared to the reduction experienced by those born before 1970. Since nepotism mostly affects entry conditions through, for instance the transfer of a portfolio of clients, this evidence corroborates our main findings that the reform significantly reduced the incidence of nepotism among Italian lawyers.

Table 9 (Col. 1-2) shows that our results are also robust to the inclusion among the covariates of possible trends linked to the returns obtained by lawyers with higher abilities (captured by interaction between the dummy about the graduation mark and the time dummies) and to the inclusion of a full set of local association fixed effects, which capture the characteristics of the local labour market of lawyers (Col. 3-4).

Finally, Table 10 and Figure 10 further examine the issue of heterogeneous effects of the reform looking at the effects along the distribution by using Recentered Influence Functions (RIF) regressions (Firpo et al., 2009), which are suitable to retrieve unconditional effects along the earnings' distribution (they are then named Unconditional Quantile Regressions – UQR). Estimates without individual fixed effects show that returns to a law family background increase along the earnings distribution and are not statistically different from zero in the two bottom deciles. Furthermore, the effect of the reform is also much stronger in the top deciles, and this effect still emerges when individual fixed effects are controlled for. Overall, these findings support our claim that the main mechanism induced by the reform has been a break of the glass ceiling advantaging those with a law family background.

7. Concluding Remarks

Using an innovative longitudinal dataset on a representative sample of Italian lawyers, we have sought to understand the mechanisms generating intergenerational income inequality within a subgroup of individuals who achieved a top profession. In more detail, we have exploited the lawyer sector

liberalizations introduced at the beginning of the 20th century in Italy to disentangle roles played by nepotism and background-related occupation-specific skills as causes of earnings gaps among lawyers.

Indeed, a market liberalization asymmetrically affects the association between family background and offspring's earnings according to the source of this association, since it reduces positional rents linked to nepotism, while magnifying skill premia. We have thus analysed changes in earnings premium obtained by lawyers with a "law background" (i.e., a parent or a close relative working as a lawyer) after the reforms to compare the strength of nepotism and of the intergenerational transmission of occupational specific skills as sources of intergenerational inequality. A decrease in the returns obtained by lawyers with a law background thus reveals the existence of a strong nepotism that prevented an efficient allocation of talents before the liberalization. On the contrary, a rise in the earnings premium to an occupational-specific family background implies that competition increased the returns to skills, that were instead compressed in a too much regulated sector.

After showing that lawyers with a law background benefit from a large and statistically significant earnings premium (+11.0%) over the observed period (1994-2014), we have developed a quasi-experimental research design exploiting the liberalization reform shock to disentangle nepotism and occupation-specific skill transfer. We find, through both OLS and FE estimates, that reforms largely squeezed (by around 3/4 in OLS) the earnings premium related to a law background, thus revealing that a large share of this premium in the pre-liberalization environment was due to nepotism and this result is robust to various specifications of the estimated models. Furthermore, we find that the bulk of the effect occurred for the youngest lawyers and the top earners, thus breaking the glass ceiling for talented lawyers without family connections.

Over allowing us to disentangle causal mechanisms behind the intergenerational inequality, our findings are also helpful to assert the effectiveness of the lawyer sector reforms introduced in Italy in 2004 and 2006 that, changing rules about the accreditation exam to the lawyer profession and abolishing price floors and lifting the ban on price bundling, contingent pricing and commercial advertising, aimed

at fostering competition in a licensed sector and reducing incumbents' positional rents linked to nepotistic behaviours.

Moreover, our analysis that, the best of our knowledge is the first focusing on sources of earnings gaps within individuals who achieved a certain top occupation, allows us to make statements about market efficiency and equality of opportunity in the Italian lawyer sector. Indeed, the evidence of large "within lawyers" earnings premia advantaging, especially before the reforms, those with a law background strongly questions the usual statement that ensuring an equal access to a certain profession is enough to achieve an effective equality of opportunity: the existence of a residual earnings inequality related to family background once entered the law profession clearly clashes, indeed, with the existence of an effective equality of opportunity. Moreover, the evidence of rents and rewarded nepotistic behaviours, at least before the reforms, is at odds with market efficiency, that would instead be guaranteed if earnings premia background-related – even if unequal in terms of opportunity – were due to better skills instead than to stronger social connections.

It has also to be pointed out that our paper presents a new dataset that can be used for other related research questions, such as the gender wage gap in top professions, the determinants of lawyers' career dynamics and the effect of liberalizations on these further dimensions of inequality. Our analysis makes a first step towards a full understanding of the determinants of earnings' differences among lawyers, and we plan to extend our work in these further directions. Finally, future works should also provide international comparisons to evaluate whether differences across countries in mechanisms engendering background-related earnings premia in top occupations emerge and, in case, what are the roles played by educational policies and market regulations in explaining these differences.

References

Abramo, G., D'Angelo, C.A., Rosati, F. 2014. Relatives in the same university faculty: nepotism or merit? Scientometrics, 101(1), pp. 737-749.

Aina, C. and Nicoletti, C., 2018. The intergenerational transmission of liberal professions. Labour Economics, 51, pp.108-120.

Azmat, G. and Ferrer, R., 2017. Gender gaps in performance: Evidence from young lawyers. Journal of Political Economy, 125(5), pp.1306-1355.

Basso, G. and Labartino, G., 2011. Family connections in accessing licensed occupations in Italy, in Pellizzari, M., Basso, G., Catania, A., Labartino, G., Malacrino, D. and Monti, P., eds, Family ties in licensed professions in Italy. A report for the Fondazione Rodolfo Debenedetti, Milan.

Basso, G., Pellizzari, M., 2010. Quelle barriere per gli aspiranti avvocati, www.lavoce.info.

Becker G., Tomes, N., 1979. An equilibrium theory of the distribution of income and intergenerational mobility, Journal of Political Economy, 87(6), pp. 1153-89.

Becker G., Tomes, N.,1986. Human capital and the rise and fall of families, Journal of Labor Economics, 43(3), pp. S1-S39.

Bell, A., Chetty, R., Jaravel, X., Petkova, N., Van Reenen, J., 2016. Who Becomes an Inventor in America? The Importance of Exposure to Innovation," NBER Working Papers, n. 24062.

Bingley, P., Corak, M., Westergård-Nielsen, N.., 2011. The Intergenerational Transmission of Employers in Canada and Denmark, IZA Discussion Papers, n. 5593

Boone, J., 2000. Competition. Discussion Paper no. 2636, Center for Economic Policy Research, http://cepr.org/active/publications/discussion_papers/dp.php?dpno=2636.

Calvó-Armengol, A., Jackson, M., 2009. Like Father, Like Son: Social Network Externalities and Parent-Child Correlation in Behavior, American Economic Journal: Microeconomics, 1(1), pp. 124-150.

Corak, M., Piraino, P., 2011. The Intergenerational Transmission of Employers, Journal of Labor Economics, 29(1), pp. 37-68.

Cunha, F., Heckman, J., 2007. The Technology of Skill Formation, American Economic Review, 97(2), pp. 31-47.

Dal Bó, E., Dal Bó, P., Snyder, J., 2009. Political Dynasties, The Review of Economic Studies, 76(1), pp. 115-142.

Dunn, T., Holtz-Eakin, D., 2000. Financial Capital, Human Capital, and the Transition to Self-Employment: Evidence from Intergenerational Links, Journal of Labor Economics, 18(2), pp. 282-305.

Durante, R., Labartino, G., Perotti, R., 2011. Academic Dynasties: Decentralization and Familism in the Italian Academia, NBER Working Paper, n. 17572.

Firpo, S., Fortin, N., and Lemieux, T., 2009. Unconditional Quantile Regressions, Econometrica, 77, pp. 953–73.

Gagliarducci, S. and Manacorda, M., 2016. Politics in the Family Nepotism and the Hiring Decisions of Italian Firms. CEPR Discussion Paper, n. 11277.

Granovetter, M., 2005. The Impact of Social Structure on Economic Outcomes, Journal of Economic Perspectives, 19(1), pp. 33-50.

Guadalupe, M. 2007. Product Market Competition, Returns to Skill, and Wage Inequality, Journal of Labor Economics, 25, pp. 439-474.

Güell, M., Pellizzari, M., Pica, G., Rodríguez Mora, J.V., 2015. Correlating Social Mobility and Economic Outcomes, CEPR Discussion Papers, n. 10496.

Gutierrez, M., Micklewright, J., Vignoles, A., 2014. Social Mobility and the Importance of Networks: Evidence for Britain, IZA Discussion Papers, n. 8380.

Helpman, E., Itskhoki, O., Redding, S., 2010. Inequality and unemployment in a global economy. Econometrica, 78(4), pp. 1239–1283.

Kleiner, M.M. and Krueger, A.B., 2013. Analyzing the extent and influence of occupational licensing on the labor market. Journal of Labor Economics, 31(S1), pp. S173-S202.

Laband, D.N., Lentz, B.F., 1983. Like father, like son: Toward an economic theory of occupational following. Southern Economic Journal, pp.474-493.

Laband, D.N. and Lentz, B.F., 1992. Self-recruitment in the legal profession. Journal of Labor Economics, 10(2), pp.182-201.

Lentz, B.F. and Laband, D.N., 1989. Why so many children of doctors become doctors: nepotism vs. human capital transfers. Journal of Human Resources, 24(3), pp.396-413.

Macis, M. and Schivardi, F., 2016. Exports and wages: rent sharing, workforce composition, or returns to skills?, Journal of Labor Economics, 34(4), pp.945-978.

Macmillan, L., Tyler, C., Vignoles, A., 2015. Who Gets the Top Jobs? The Role of Family Background and Networks in Recent Graduates' Access to High-status Professions, Journal of Social Policy, 44(3), pp. 487-515.

Magruder, J., 2010. Intergenerational Networks, Unemployment, and Persistent Inequality in South Africa, American Economic Journal: Applied Economics, 2(1), pp. 62-85.

Melitz, M.J., 2003. The impact of trade on intra-industry reallocations and aggregate industry productivity. Econometrica, 71(6), pp.1695-1725.

Mocetti, S., 2016. Dynasties in professions and the role of rents and regulation: Evidence from Italian pharmacies. Journal of Public Economics, 133, pp.1-10.

Mocetti, S., Roma, G., Rubolino E., 2016. Knocking on parents' doors: regulation and intergenerational mobility, Banca d'Italia Working Papers, n. 1182.

Mogstad, M., 2017. The Human Capital Approach to Intergenerational Mobility, Journal of Political Economy, 125(6), pp. 1862-1868.

Pellizzari, M., 2010. Do Friends and Relatives Really Help in Getting a Good Job?, Industrial and Labor Relations Review, 63(3), pp. 494-510.

Pellizzari, M. and Pica, G., 2011. Liberalizing professional services: Evidence from italian lawyers, IGIER Bocconi Working Papers, n. 372.

Pellizzari, M., Basso, G., Catania, A., Labartino, G., Malacrino, D. and Monti, P., eds. 2011. Family ties in licensed professions in Italy. A report for the Fondazione Rodolfo Debenedetti, Milan.

Raitano, M., Vona, F., 2015. Measuring the link between intergenerational occupational mobility and earnings: evidence from 8 European Countries, Journal of Economic Inequality, 13(1), pp. 83-102.

Raitano, M., Vona, F., 2017. Competition, Firm Size and Returns to Skills: evidence from currency shocks and market liberalizations, The World Economy 40, pp. 2676-2703.

Raitano, M., Vona, F., 2018. From the cradle to the grave: the effect of family background on the career path of Italian men, Oxford Bulletin of Economics and Statistics, https://doi.org/10.1111/obes.12237.

Yeaple, S., 2005. A simple model of firm heterogeneity, international trade, and wages. Journal of International Economics, 65(1), pp. 1-20.

Tables and Figures

Tab. 1: Sample composition by main features (percentage values)

	Full sample	Primary sample
Gender		
Males	57.6%	64.1%
Females	42.4%	35.9%
Year of birth		
Before 1955	13.4%	19.7%
1955-1964	24.3%	34.7%
1965-1974	44.3%	42.9%
After 1974	18.1%	2.6%
Area of work		
North	37.7%	35.9%
Center	22.7%	22.6%
South	39.5%	41.5%
Mark at graduation		
66-84	2.5%	2.3%
85-99	37.7%	34.8%
100-109	42.4%	42.5%
110	6.4%	7.4%
110 cum laude	11.0%	13.0%
Parents' highest education		
At most lower secondary	32.7%	33.3%
Upper secondary	30.9%	27.6%
Tertiary	36.4%	39.1%
Parents working as a lawyer		
No	89.0%	85.8%
Yes	11.0%	14.2%
Parents or close relatives working as a lawyer		
No	75.9%	71.8%
Yes	24.1%	28.2%
Obs.	1306	872

[a] The primary sample is composed by lawyers enrolled to Cassa Forense before 2004. Source: elaborations on Cassa Forense data

Tab. 2: 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
Parents upper secondary educ.		0.611*
		[0.346]
Parents tertiary educ.		1.519***
		[0.337]
Law background	1.011***	0.399
	[0.289]	[0.321]
Obs.	14305	14305
R^2	0.787	0.792

[a] Regressions run for the period 1994-2014; experience before 1994 is considered to compute the dependent variable. *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 3: OLS estimates of the association between parents' and relatives' characteristics and annual log earnings, in two sub-periods

	1994-2014		1994-2003	
Parents upper secondary educ.		0.139**		0.200**
		[0.069]		[0.082]
Parents tertiary educ.		0.172**		0.228***
		[0.068]		[0.076]
Law background	0.171***	0.110*	0.257***	0.175**
	[0.058]	[0.065]	[0.069]	[0.077]
Obs.	14305	14305	5652	5652
R^2	0.261	0.265	0.272	0.278

*** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 4: Effect of the liberalizations on earnings premia for lawyers with a parent or a close relative working as a lawyer. OLS and FE models

	OLS		FE
	Baseline	Ability[a]	Baseline
Par. upp. sec.	0.140**	0.096	.
	[0.069]	[0.066]	.
Par. tertiary	0.173**	0.005	.
	[0.068]	[0.065]	.
Law background	0.198***	0.224***	.
	[0.075]	[0.069]	.
Lawback*Post 2003	-0.150***	-0.165***	-0.118**
	[0.053]	[0.051]	[0.049]
Obs.	14305	14305	14305
R^2	0.266	0.323	0.274

[a] Dummies on graduation mark and the number of years spent to attain the degree are added to the covariates. *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 5: Effect of the liberalizations on earnings premia for lawyers with a parent or a close relative working as a lawyer. Robustness checks to the baseline model

	Lawyers with at least 3 obs. before and after the shock		Including lawyers Enrolled after 2003	
	OLS	FE	OLS	FE
Par. upp. sec.	0.161**	.	0.124**	.
	[0.078]	.	[0.057]	.
Par. tertiary	0.168**	.	0.175***	.
	[0.076]	.	[0.058]	.
Law background	0.248***	.	0.192***	.
	[0.080]	.	[0.073]	.
Lawback*Post 2003	-0.197***	-0.135***	-0.133**	-0.114**
	[0.051]	[0.050]	[0.056]	[0.049]
Obs.	12293	12293	17670	17670
R^2	0.255	0.285	0.276	0.257

*** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 6: Effect of the liberalizations on earnings premia for lawyers with a parent or a close relative working as a lawyer. Baseline model by lawyers' subgroups

	Children of tertiary graduates		Lawyers graduated with a medium-high mark [a]		Lawyers graduated with a low mark [b]	
	OLS	FE	OLS	FE	OLS	FE
Par. upp. sec.	.	.	0.091	.	0.164	.
	.	.	[0.091]	.	[0.106]	.
Par. tertiary	.	.	0.266***	.	0.03	.
	.	.	[0.088]	.	[0.103]	.
Law background	0.173*	.	0.142	.	0.272**	.
	[0.094]	.	[0.103]	.	[0.110]	.
Lawback*Post 2003	-0.169**	-0.132*	-0.186**	-0.122*	-0.093	-0.107
	[0.074]	[0.067]	[0.075]	[0.068]	[0.075]	[0.071]
Obs.	5622	5622	8228	8228	6077	6077
R^2	0.246	0.277	0.277	0.276	0.287	0.278

[a] Lawyers with a graduation mark equal or higher than 100 are considered. [b] Lawyers with a graduation mark lower than 100 are considered. *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 7: Effect of the liberalizations on earnings premia for lawyers with a parent or a close relative working as a lawyer. Baseline model by gender

	Males		Females	
	OLS	FE	OLS	FE
Par. upp. sec.	0.206**	.	0.074	.
	[0.091]	.	[0.100]	.
Par. tertiary	0.146*	.	0.296***	.
	[0.086]	.	[0.103]	.
Law background	0.218**	.	0.094	.
	[0.091]	.	[0.128]	.
Lawback*Post 2003	-0.168***	-0.129**	-0.086	-0.094
	[0.060]	[0.055]	[0.107]	[0.100]
Obs.	9427	9427	4878	4878
R^2	0.259	0.299	0.194	0.226

*** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 8: Effect of the liberalizations on earnings premia for lawyers with parents working as a lawyer, controlling for experience and for lawyers birth cohort

	Controlling for experience as a lawyer [a]		Distinguishing lawyers born before and since 1970	
	OLS	FE	OLS	FE
Par. upp. sec.	0.065	.	0.131*	.
	[0.062]	.	[0.070]	.
Par. tertiary	-0.04	.	0.166**	.
	[0.060]	.	[0.068]	.
Law background	0.173***	.	0.192**	.
	[0.064]	.	[0.078]	.
Law back*Since 1970	.	.	0.094	.
	.	.	[0.226]	.
Lawback*Post 2003	-0.136***	-0.107**	-0.096*	-0.092*
	[0.050]	[0.047]	[0.053]	[0.050]
Law back *Post 2003* Since 1970	.	.	-0.343*	-0.345*
	.	.	[0.203]	[0.193]
Obs.	14305	14305	14305	14305
R^2	0.386	0.291	0.268	0.277

[a] A third order polynomial on experience is added to covariates of the "Ability model". *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 9: Effect of the liberalizations on earnings premia for lawyers with parents working as a lawyer. Alternative specifications to the baseline model

	Controlling for trends in the premium for ability [a]		Controlling for local association fixed effects	
	OLS	FE	OLS	FE
Par. upp. sec.	0.096	.	0.131*	.
	[0.066]	.	[0.070]	.
Par. tertiary	0.005	.	0.166**	.
	[0.065]	.	[0.068]	.
Law background	0.224***	.	0.192**	.
	[0.069]	.	[0.078]	.
Lawback*Post 2003	-0.165***	-0.118**	-0.096*	-0.092*
	[0.052]	[0.049]	[0.053]	[0.050]
Medium/high mark*Post 2003	-0.015	0.007	.	.
	[0.047]	[0.043]	.	.
Obs.	14305	14305	14305	14305
R^2	0.323	0.274	0.268	0.277

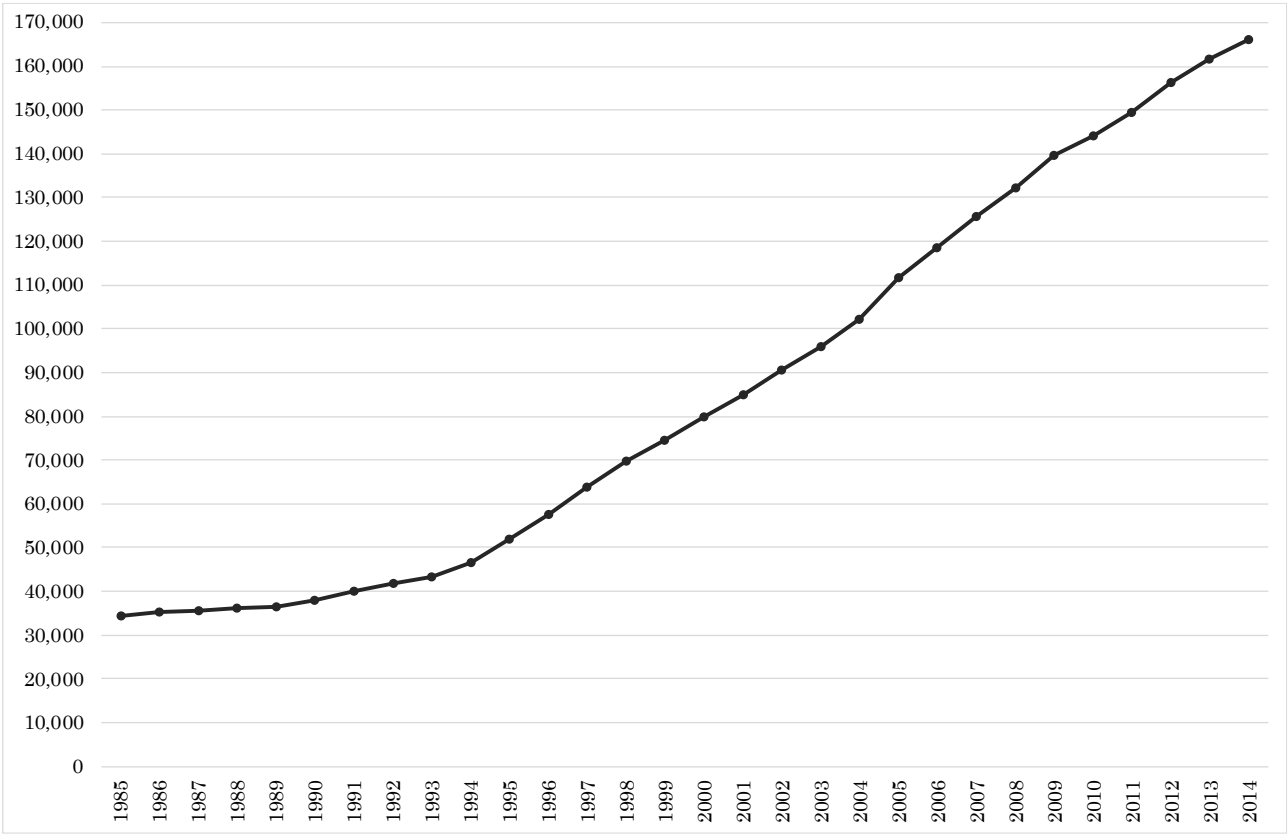
[a] Dummies on graduation mark and the number of years spent to attain the degree are added to the covariates plus the interaction between the dummies on post2003 period and at least 100 as the graduation mark. *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. 10: Effect of the liberalizations on earnings premia for lawyers with parents working as a lawyer along the earnings distribution. Unconditional quantile regressions

	10	20	30	40	50	60	70	80	90
				Not controlling for individuals' FE					
Par. upp. sec.	0.096*	0.059*	0.050*	0.077***	0.116***	0.117***	0.162***	0.231***	0.246***
	[0.051]	[0.032]	[0.030]	[0.026]	[0.028]	[0.024]	[0.030]	[0.035]	[0.038]
Par. tertiary	0.177***	0.198***	0.173***	0.172***	0.194***	0.222***	0.243***	0.261***	0.157***
	[0.046]	[0.033]	[0.031]	[0.027]	[0.024]	[0.023]	[0.028]	[0.032]	[0.044]
Law background	0.076	0.054	0.136***	0.108***	0.106***	0.112***	0.100***	0.231***	0.359***
	[0.077]	[0.048]	[0.045]	[0.033]	[0.034]	[0.034]	[0.037]	[0.046]	[0.065]
Lawback*Post 2003	0.070	-0.014	-0.118**	-0.110***	-0.123***	-0.139***	-0.116***	-0.269***	-0.416***
	[0.080]	[0.062]	[0.058]	[0.042]	[0.040]	[0.046]	[0.043]	[0.065]	[0.080]
				Controlling for individuals' FE					
Lawback*Post 2003	0.023	-0.014	-0.099**	-0.071**	-0.081**	-0.078**	-0.076*	-0.179***	-0.286***
	[0.095]	[0.047]	[0.043]	[0.034]	[0.033]	[0.033]	[0.042]	[0.040]	[0.058]
Obs.	14305	14305	14305	14305	14305	14305	14305	14305	14305

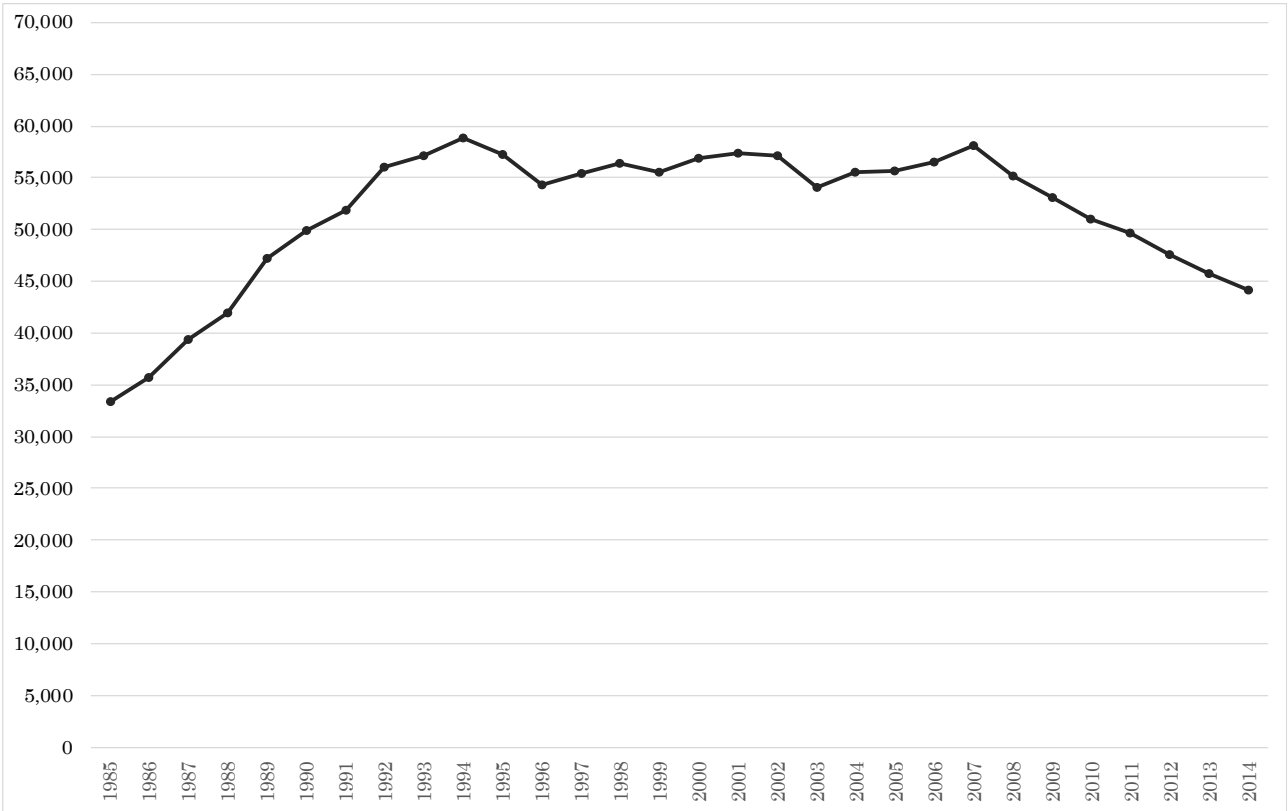
*** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Fig. 1: Number of active lawyers enrolled to Cassa Forense



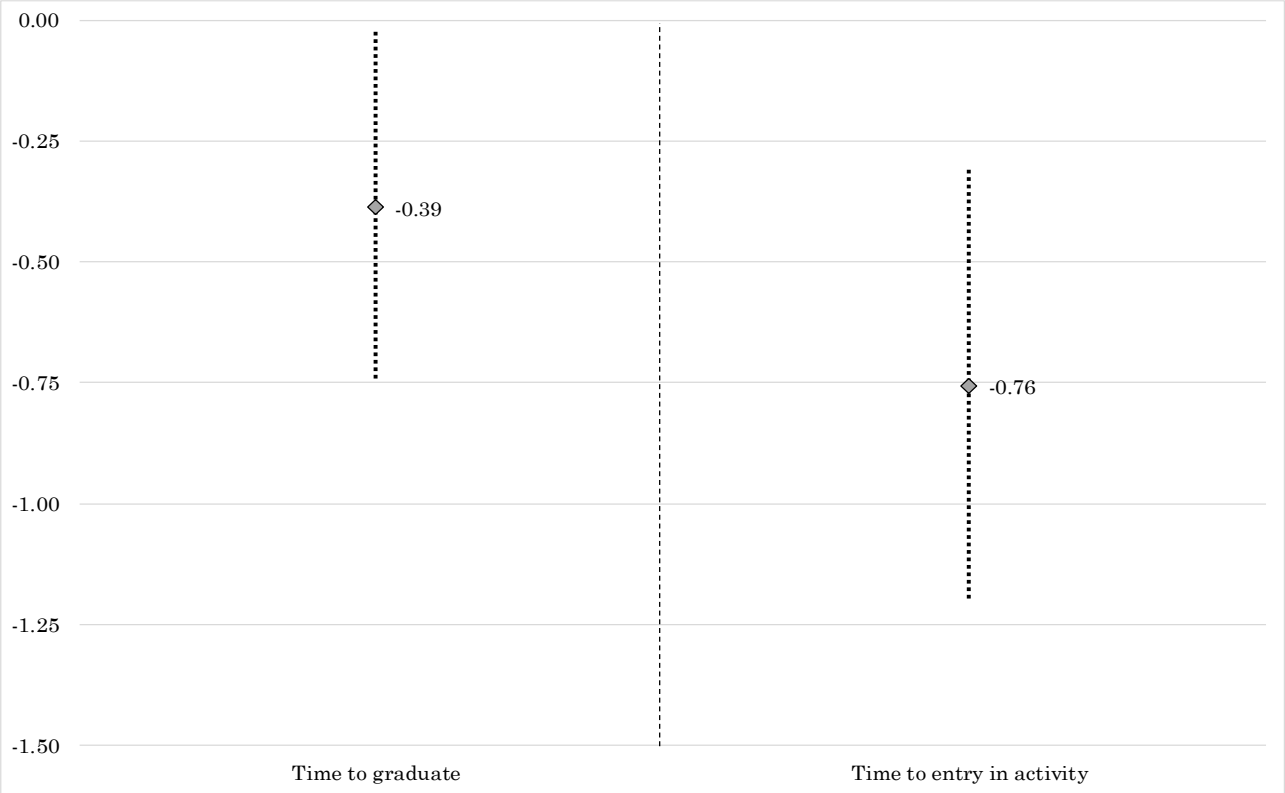
Source: elaborations on Cassa Forense data

Fig. 2: Mean annual real gross earnings of lawyers enrolled to Cassa Forense



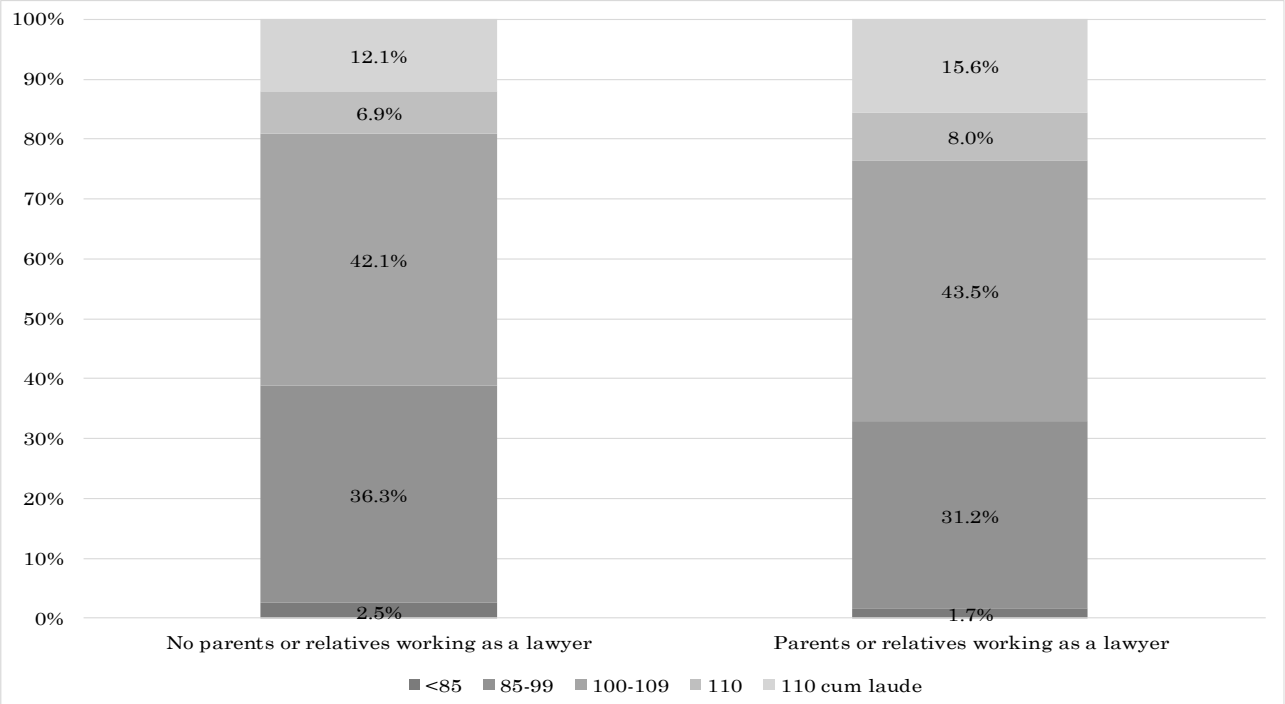
Source: elaborations on Cassa Forense data

Fig. 3: OLS estimated gaps in the time to graduate and to enrol to the professional association once graduated [a]



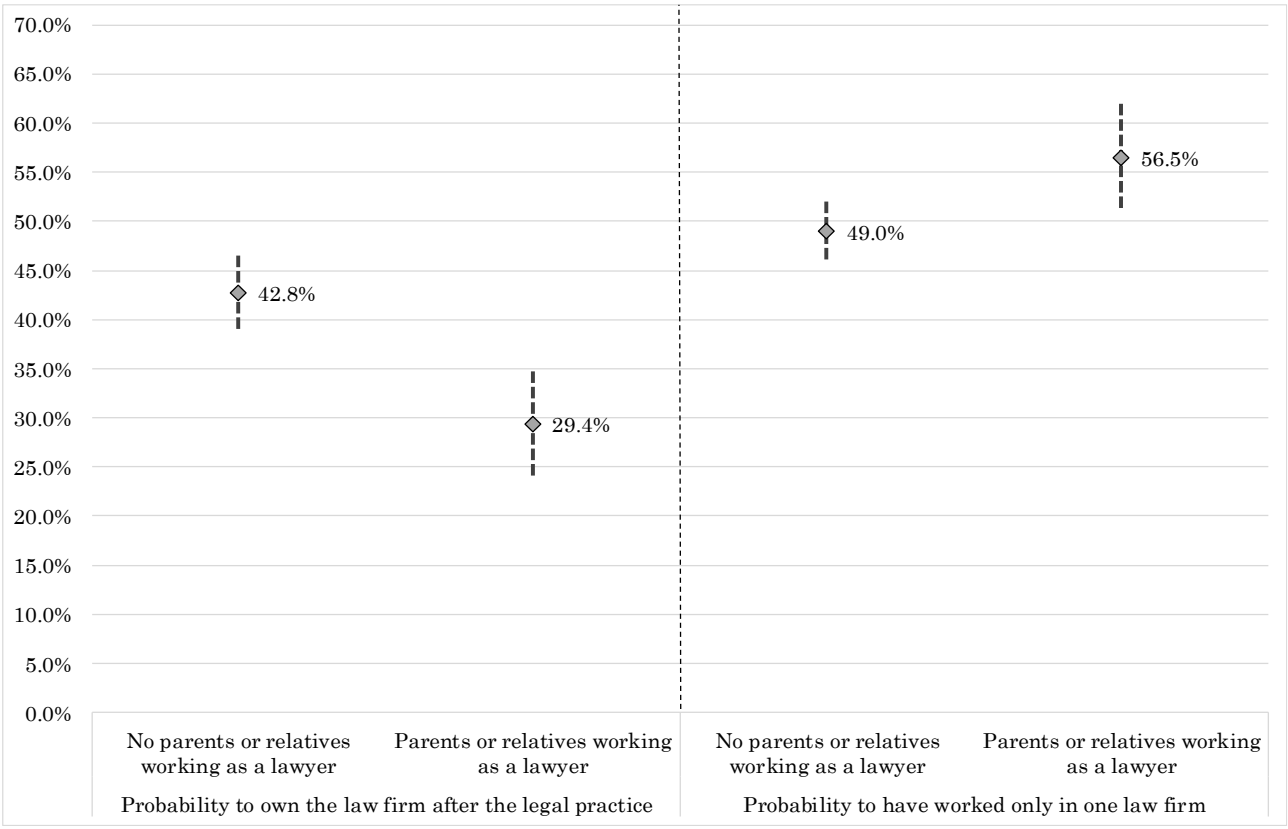
[a] No parents or relatives working as a lawyer as the reference category. 90% confidence intervals are shown. Source: elaborations on Cassa Forense data

Fig. 4: Predicted distribution of the mark at graduation according to background [a]



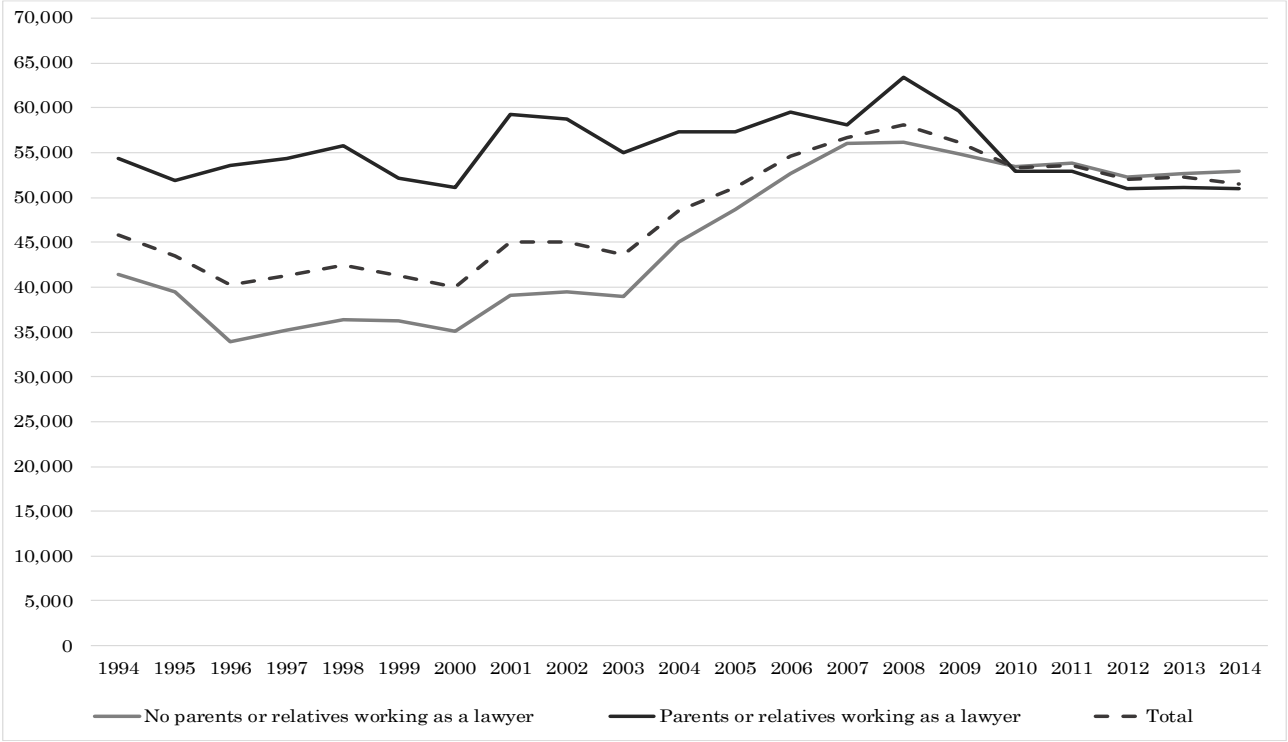
[a] Average marginal effects obtained by an ordered probit model. Source: elaborations on Cassa Forense data

Fig. 5: Predicted probability to own the law firm after the practice and to have worked in a single law firm during the career [a]



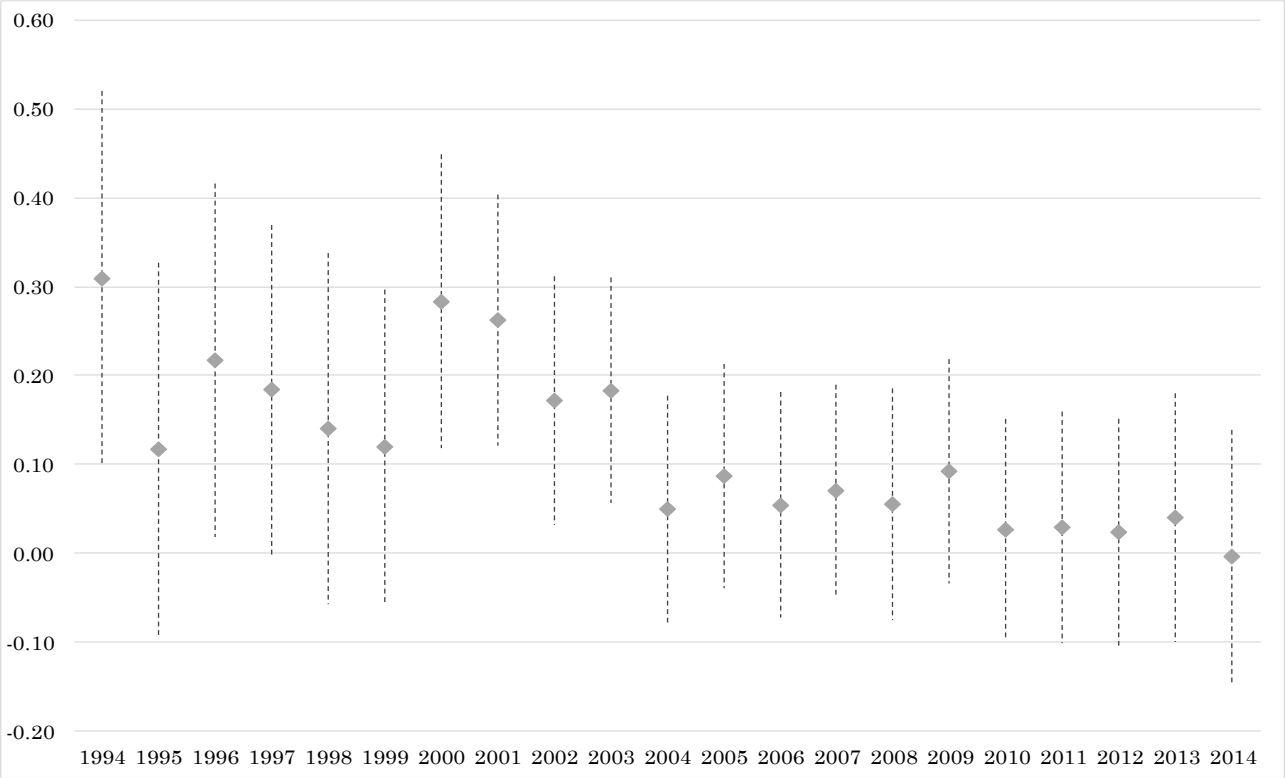
[a] Average marginal effects obtained by probit models. 90% confidence intervals are shown. Source: elaborations on Cassa Forense data

Fig. 6: Mean annual gross earnings of lawyers in our primary sample



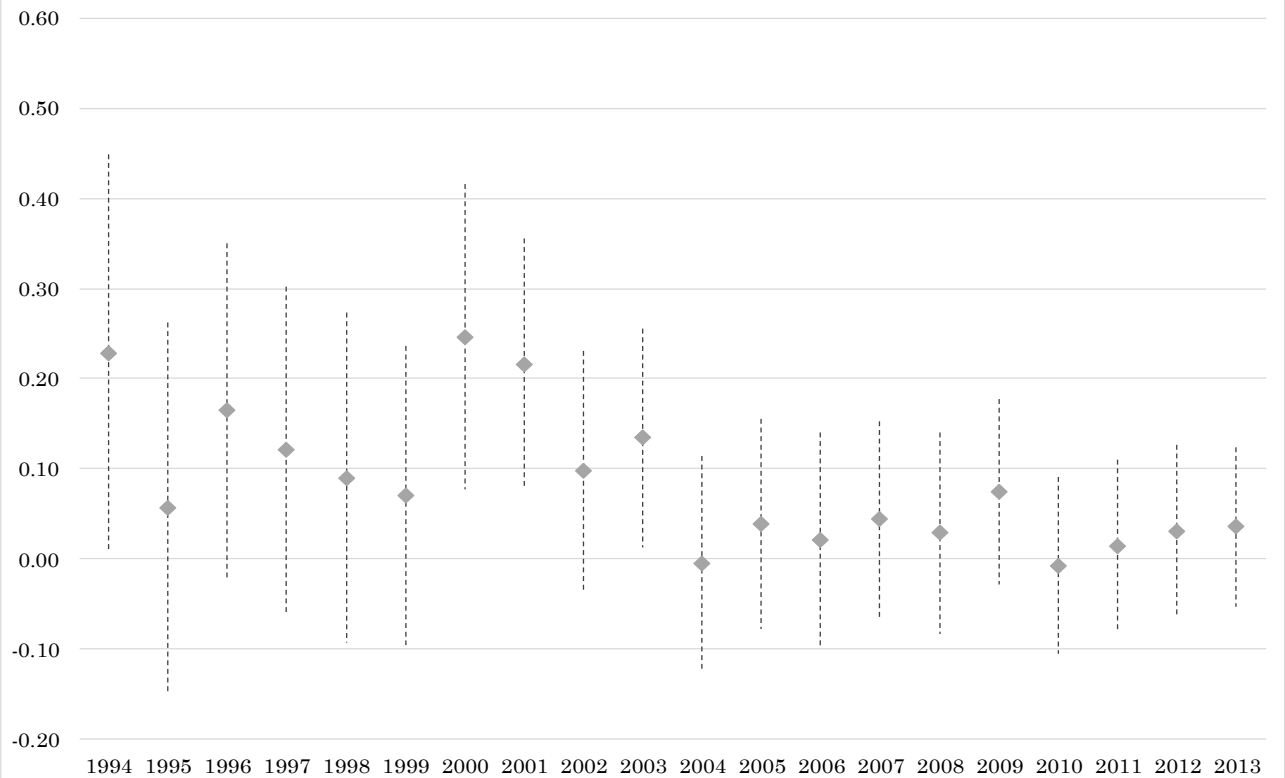
Source: elaborations on Cassa Forense data

Fig. 7: Estimated annual earnings premia for lawyers with a parent or a close relative working as a lawyer. Baseline model. OLS estimates [a]



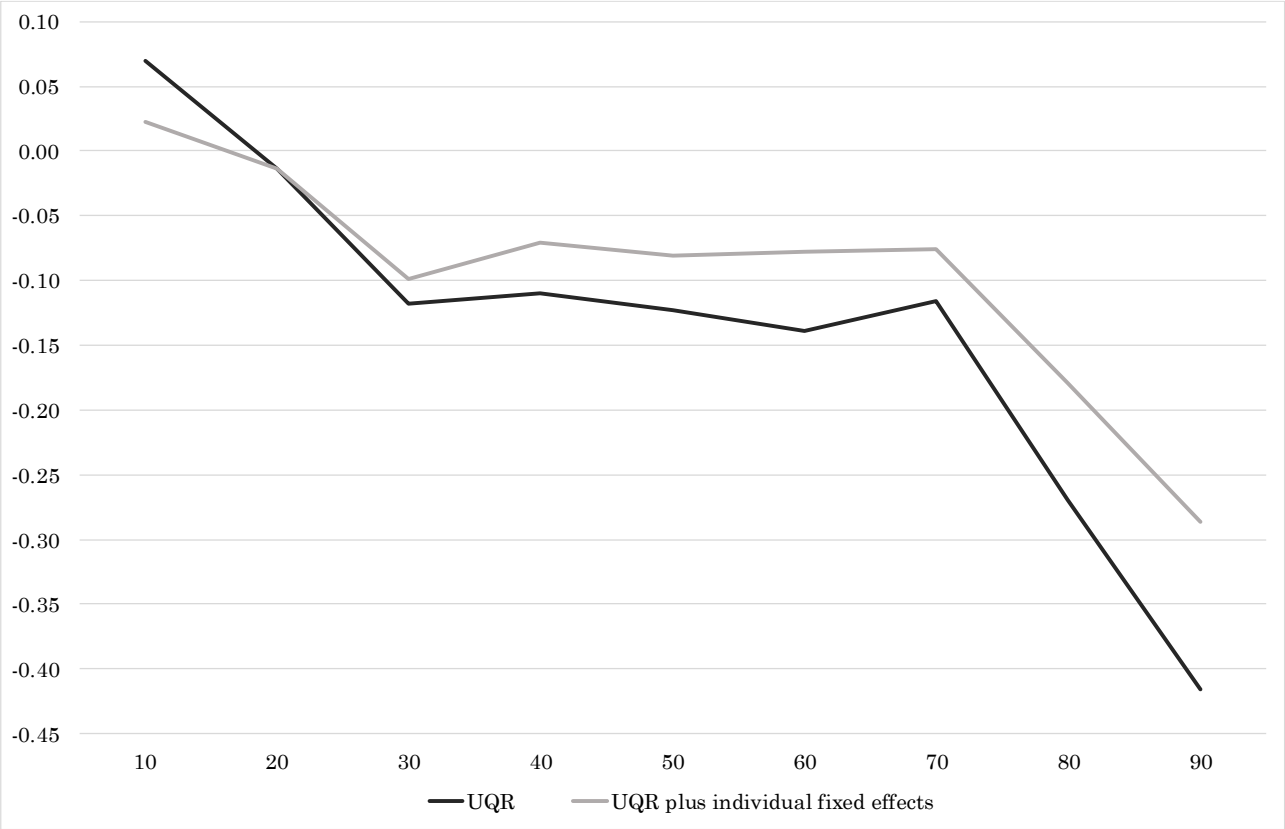
[a] 90% confidence intervals are shown. Source: elaborations on Cassa Forense data

Fig. 8: Estimated annual earnings premia for lawyers with a parent or a close relative working as a lawyer. Baseline model. FE estimates [a]



[a] Estimated effect in 2014 as the reference category. 90% confidence intervals are shown. Source: elaborations on Cassa Forense data

Fig. 9: Unconditional quantile regressions estimated coefficients of the effect of the liberalizations on earnings premia for lawyers with parents working as a lawyer



Source: elaborations on Cassa Forense data

Appendix 1: Survey representativeness

Table A1.1 shows the composition by the strata variables of our sample (extracted at the end of 2010) and the universe of lawyers in 2008 (the last available year with these detailed characteristics). The universe (and then the sample) only refers to active "not-retired" lawyers (i.e. to those not receiving an old age pension; 1230 individuals in our sample), since the composition of the universe of retired individuals still working as a lawyer in 2008 is not available. Note, however, that the share of retired-still-working lawyers is 5.8% in the sample, 7.6% in the universe of Members of Cassa Forense in 2008.

Table A1.1: Composition by main features of the sample and the universe of active lawyers in 2008 (percentage values)[1]

	Sample	Universe
Gender		
Males	55.7	56.3
Females	44.3	43.7
Area of work		
North	37.7	39.3
Center	22.6	23.5
South	39.7	37.2
Year of birth		
Before 1955	8.1	9.2
1955-1964	25.7	25.1
1965-1974	47.0	49.4
After 1974	19.2	16.3
Obs.	1,230	132,297

Source: elaborations on *Cassa Forense* data

Appendix 2: The survey's questionnaire

Information on annual gross earnings and turnover, on the local association where the lawyer is enrolled, on the distinction between active and retired (but still working) lawyers and on the year of enrolment to Cassa Forense are taken from the social security archive managed by the Cassa Forense. Gender and year of birth are recorded both in the survey and in the administrative archives (no discrepancies between values emerged).

Linkage between survey and administrative data were performed by the statistical office of the Cassa Forense, by mean of the personal identification number of each member. Linkage keys were then anonymised and blanked for privacy reasons.

The survey questionnaire has no missing values since lawyers had to answer to all questions before closing the questionnaire. Note, however, that some questions were made or not according to the values of previous answers (e.g., Q50 were made only to those who answered to have a parent working as a lawyer in Q48, Q52-Q56 were not made to non-married lawyers).

Questions from Q8 to Q22 are not reported below since they refer to qualitative questions about the knowledge of the rules and the assessment of reform proposals about social security for lawyers that are not relevant at all to the aim of this article. Detailed information is provided by the authors under request.

The detailed content of the questionnaire is reported below, while Table A2 summarizes the use of survey's questions in the empirical analyses of this paper.

I. Personal Data

Q1. Which is your gender?

Q2. Which is your year of birth?

Q3. Which is your marital status?
1. Married
2. Single
3. Separated
4. Divorced
5. Widow, widower

Q4. Who do you live with, if you are not married?
1. Alone
2. With a partner
3. Alone with at least a child
4. With a partner and at least a child
5. Only with one or both my parents
6. Other

Q5. Do you have children?

Q6. Which is the age of the smallest child?

Q7. Should provide assistance to elderly or sick relatives?
a. No
b. Yes, they live with me
c. No, they do not leave with me

II. Education

Q23. Which type of high-school diploma did you attain?
a. Liceo Classico
b. Liceo Scientifico
c. Other type of Liceo
d. Technical High-School
e. Vocational High-School

Q24. In which year did you obtain the law degree?

Q25. Which has been your graduation mark?
a. Less than 85/110
b. 85-95
c. 96-100
d. 101-105
e. 106-109
f. 110
g. 110 cum laude

Q26. In which type of university did you obtain your degree?
a. Public
b. Private

Q27. In which region was located the university of your tertiary degree?

III. Characteristics of the Past Work Experience

Q28. How did you get in touch with the law firm where you did your compulsory legal practice?
a. Law firm of relatives
b. Law firm of friends
c. Other law firms with help of relatives or friends
d. Advisor of the thesis
e. Other university professors
f. Sending CV to law firms to which you had no contacts before
g. Stage pre-graduation
h. Other channels

Q29. During the compulsory legal practice, did you get paid?
a. Yes
b. No, only reimbursement of expenses
c. No, even not reimbursement of expenses

Q30. After you obtained the qualification, you started working:
a. In the law firm where I did the training
b. I opened my own law firm
c. In another law firm

Q31. During your professional activity, except that of the legal practice, in how many law firms did you work?
a. Always in the law firm where I did the training
b. One, except that of the legal training
c. Two, except that of the legal training
d. Three or more, except that of the legal training

Q32. In the past years, did you interrupt your professional activity for at least 6 months?
a. Yes, to take care of children or relatives
b. Yes, sick leave
c. Yes, maternity or paternity leave
d. Yes, other reasons
e. No

IV. Characteristics of the Current Job

Q33. In which sector do you carry out your main activity?
a. Penal law
b. Civil law
c. Administrative law
d. Taxation

Q34. During your career, did you change the main sector of activity?
a. Yes
b. No
Not used in the econometric analysis

Q35. How many hours did you work per week?
a. <30
b. 30-40
c. 40-50
d. 50-60
e. >60

Q36. Are you enrolled in the list of attorney office?
a. Yes
b. No

Q37. Are you enrolled in the list of entitled to practice under state patronage?
a. Yes
b. No

Q38. Do you work alone or with others?
a. Alone
b. With other colleagues
c. With other professionals

Q39. With the persons with who you share the office, you are?
a. Associate
b. Collaborator
c. I simply share the expenses

Q40. With respect to your partner, you are?
a. Owner
b. Associate

Q41. Do you have at least one apprentice?
a. Yes
b. No

Q42. Do you have at least one secretary?
a. Yes
b. No

Q43. Among the person with who you share the office, there is your spouse or partner?
a. Yes
b. No

Q44. Among the person with who you share the office, there is one of your parents?
a. Yes
b. No

Q45. Among the person with who you share the office, there is one of your children?
a. Yes
b. No

Q46. Among the person with who you share the office, there is another close relative?
a. Yes
b. No

V. Family Background Information

Q47. Which is the highest educational attainment of your parents (father or mother)?
a. Lower secondary or less
b. Upper secondary
c. University

Q.48 Is/was one of your parents a lawyer?
a. Yes, both
b. Yes, my father
c. Yes, my mother
d. No

Q.49 Besides your parents, one of your close relatives is/was a lawyer?
a. Yes
b. No

Q.50 Did you inherit the law firm from your parents?
a. Yes
b. No

Q.51 Did you inherit the law firm from a close relative (except your parents)?
a. Yes
b. No

Q.52 Which is the highest educational attainment of your spouse or partner?
a. Lower secondary or less
b. Upper secondary
c. University

Q.53 Is your spouse or partner employed?
a. Yes
b. No

Q.54 Is your spouse or partner a lawyer?
a. Yes
b. No

Q.55 Is one of the parents of your spouse or partner a lawyer?
a. Yes
b. No

Q.56 Did your spouse or partner inherit the law firm by a close relative?
a. Yes
b. No

Table A2.1: Summary of questionnaire's variables used in the empirical analyses

Main variables of interest	Q48, Q49 used to build the dummy "law background"
Used in the vector of covariates X or to build variables and dummies for covariates and descriptive analyses	Q1, Q2, Q3, Q5, Q24, Q25, Q31, Q32, Q47
Used in the descriptive analyses but not in econometric analyses since unreported results show that the inclusion of this variable has no effect on our results	Q27, Q30, Q31
Not used in the econometric analyses since unreported results show that the inclusion of this variable has no effect on our results	Q23, Q26, Q28, Q33, Q44,Q46
Not used in the econometric analyses since: the variable's content is irrelevant to our aims or questions were only made to a subsample of lawyers[a]	Q4, Q6, Q7, Q29, Q34, Q35, Q36, Q37, Q38, Q39, Q40, Q41, Q42, Q43, Q45, Q50, Q51, Q52, Q53, Q54, Q55, Q56

[a] Q55 has not been used since only 12 individuals have the spouse or partner with a parent lawyer and the dummy "Law_background" equal to 0 (results are not affected by a different consideration of these individuals).

Appendix 3: Robustness Checks

Tab. A3.1: Effect of the liberalizations on earnings premia for lawyers with parents working as a lawyer. OLS and FE models

	OLS		FE
	Baseline	Ability[a]	Baseline
Par. upp. sec.	0.150**	0.108*	.
	[0.069]	[0.066]	.
Par. tertiary	0.168**	0.008	.
	[0.068]	[0.065]	.
Par. lawyer	0.225**	0.244***	.
	[0.091]	[0.085]	.
Par. Lawyer*Post 2003	-0.134**	-0.168***	-0.145**
	[0.064]	[0.061]	[0.060]
Obs.	14305	14305	14305
R^2	0.266	0.322	0.274

[a] Dummies on graduation mark and the number of years spent to attain the degree are added to the covariates. *** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data

Tab. A3.2: Effect of the liberalizations on premia for lawyers with a parent or a close relative working as a lawyer. OLS and FE models. Dependent variable: log annual gross turnover

	OLS		FE
	Baseline	Ability[a]	Baseline
Par. upp. sec.	0.137**	0.094	.
	[0.069]	[0.067]	.
Par. tertiary	0.205***	0.044	.
	[0.067]	[0.065]	.
Law background	0.172**	0.194***	.
	[0.073]	[0.067]	.
Lawback*Post 2003	-0.127**	-0.139***	-0.087*
	[0.052]	[0.050]	[0.047]
Obs.	14234	14234	14234
R^2	0.305	0.357	0.311

*** p<0.01, ** p<0.05, * p<0.10. Source: elaborations on Cassa Forense data