



The CV effect: To what extent does the chance to reorganize depend on a bankruptcy judge's profile?

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ABSTRACT

This study explores the link between the individual profiles of French commercial judges and the bankruptcy cases they supervised between 2006 and 2012. A “*Curriculum Vitae* effect” prevails: the chance to reorganize after filing for bankruptcy varies with the composition of the chambers. We also confirm the existence of a limited (but not marginal) appointment bias, suggesting that bankruptcy cases are not fully randomized across judges. Several variables accounting for the judges' profiles are found to be significant. The presence of female judges increases the chances of a successful plan (for continuation). We find a similar influence of the judges' managerial skills and of the highest academic profiles. However, a mismatch between the judges' profiles (mostly oriented toward big businesses) and bankrupt firms (closer to small and medium-sized enterprises) undermines the probability of reorganizing. We also focus on the two main filters for reorganization: i) the decision to open an observation period, and ii) the court supervision of such a period. Our findings provide normative recommendations to better align lay justice with litigants' needs. The results from France can be extended to other mixed bankruptcy systems.

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1. Introduction

The literature on corporate bankruptcy has extensively explored the features (costs, duration, and recovery) of reorganization versus liquidation (Bris et al., 2006; LoPucki and Doherty, 2004). In that vein, several studies have also surveyed the determinants of both outcomes. Among them, the design of bankruptcy procedures has been thoroughly scrutinized, especially regarding how creditors' rights are protected after bankruptcy filing (Baird, 1986; Franks et al., 1996; La Porta and Lopez-de-Silanes, 2001; Brouwer, 2006; Stef, 2017). Other scholars have analyzed the influence of debt enforcement (Wihlborg et al., 2001; Wang, 2012) and of judicial efficiency of Russia's regional courts (Lambert-Mogiliansky et al., 2007) on the chance to reorganize. Notwithstanding, these studies mostly rely on macroeconomic indicators to measure the “qual-

ity of justice,” which excludes a microeconomic examination of individual bias.

Few studies have investigated judges' role – as individuals – in the bankruptcy process, and even fewer have relied on actual rulings. Rachlinski et al. (2006) examined behavioral bias among U.S. bankruptcy judges, but the data used for that research originate from experimental questionnaires that may be subject to declaration bias. A recent study (Iverson et al., 2019) addresses this question more directly by examining the accumulated experiences of U.S. judges in their bankruptcy districts. In this work, the judges' characteristics are outlined by seven individual variables.¹ Nevertheless, to the best of our knowledge, research on Europe is even more scarce, especially studies on how lay justice performs regarding corporate bankruptcy. Lazega et al. (2006) analyzed the network structures among commercial judges in France, but the authors did

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¹ These variables are: two experience measures, political affiliation, number of years before coming onto the bench, gender, military service, and previous experience in the public sector.

not relate these judges to the cases/disputes they supervised. Probing this latter issue is of utmost importance in the context of lay justice. Indeed, the heterogeneity of profiles between commercial judges is more pronounced than that between professional judges. Hence, one might suspect that a firm's chance to reorganize also depends on the profile of the judge that supervises it.

The spirit of lay justice stems from the early *Renaissance* era, following the principle that conflicts between merchants should be solved by merchants themselves (Jean, 2007). Today, several European countries have converged toward a balanced system (*échevinage*) whereby the bankruptcy chambers are composed of professional and non-professional judges (the latter also being called lay or commercial judges). Mixed bankruptcy chambers notably prevail in Belgium and Germany (Sénat, 1998). In France however, the commercial courts charged with bankruptcy cases are exclusively made up of commercial judges,² which is an extreme application of lay justice. Thus, France appears as a notable exception in Europe regarding the arbitration of commercial conflicts and the way corporate bankruptcies are supervised (Legendre, 2013).

Lay justice has several pros and cons that observers have delved into quite extensively (Diesen, 2001; Ipsos MORI, 2011; UJCB, 2016). On the one hand, professional judges have better knowledge of legal issues and of the “spirit of the law,” which makes their decisions better rooted in jurisprudence. Their common academic background makes them more homogenous, which is an additional guarantee of equal treatment for litigants. Further, professional judges can also be considered outsiders with a minimized risk of collusion with the cases they oversee. Last, the legal system does not have to invest in substantial training programs to familiarize them with legal concepts and procedures. On the other hand, commercial judges benefit from better knowledge of the practices within the business community. One might view them as insiders. *ceteris paribus*, this should make them more reactive to changes altering the economy. The level of technicity in complex cases may also justify their (partial or complete) presence on panels of judges. However, such proximity with the business community can create conflicts of interest and collusion that might undermine the overall quality of judicial services.

This paper does not aim to question the advantages and disadvantages of the French system against alternative ones. Rather, we determine to what extent supervision from commercial judges (with heterogeneous *résumés*) influences firms' chances of survival after filing for bankruptcy. We refer to this as the “*Curriculum Vitae* effect.” A CV effect (if any) means that the chance of reorganizing does not depend exclusively on financial, economic, or social considerations, but also on subjective factors that reflect judges' individual characteristics. Such factors are expected to vary from one judge to another, which calls into question Aristotle's principle of fair justice (Renoux, 1993). Nevertheless, from a normative perspective, the identification of CV-variables influencing (positively or not) the likelihood of reorganization is of utmost importance for research. Namely, it helps identify pragmatic measures to improve the effectiveness of non-professional bankruptcy systems. Practically, this can take the form of training programs targeted at lay judges to reinforce their skills. Such investigation may also provide additional arguments to address the gender imbalance within the courts.

Our contribution is two-fold. First, we inspect a mechanism that has hardly been addressed by the literature on corporate bankruptcy—the link between judges' profiles and the conse-

quences of their decisions on the ultimate outcomes of bankruptcy. Second, unlike previous empirical works based on experiments or interviews, our data i) directly account for judges' real decisions, and ii) use genuine *résumés*, which eliminates the risk of biased responses.

The original data used for this research originate from the Paris Commercial Court (*tribunal de commerce de Paris*). We hand-collected data from 230 bankruptcy files opened between 2006 and 2012 (terminated in 2019). A second data collection phase applied to 134 judges working for that court in the same time period. We used publicly available information to reconstruct their CVs. The merging of both datasets helps relate bankrupt firms with the panel of judges charged with their supervision. We run logistic regressions to scrutinize the influence of the judges' profiles on the probability of reorganization (versus liquidation). We estimate five models, including two robustness checks. For all regressions, we confirm the existence of a CV effect.

The paper is arranged as follows. Section 2 introduces commercial justice in France. Section 3 presents our data, the sample structure, and provides a set of descriptive statistics. Section 4 tests for the existence of appointment bias that may alter the distribution of bankruptcy cases among the judges. Section 5 proposes regression analysis to link the judges' profiles with the probability of reorganization. Sections 6 and 7 refine the analysis by focusing on two successive filters for reorganization. The last section contains the conclusion.

2. Commercial justice in France

In France, 134 commercial courts (*tribunaux de commerce*)³ arbitrate commercial conflicts between companies and their stakeholders: disputes between associates, litigations, post-sales conflicts, and bankruptcy (*art. L.721–1, code du commerce*).⁴ Commercial courts encompass more than 3300 judges across the country. Each court is chaired by a president.⁵ In France, apart from the region of Alsace-Moselle, which follows local laws, one of the most notable specificities of commercial courts lies in the profile of their judges, who are not professional ones, but commercial (lay) judges⁶ (*juges consulaires*).

Commercial judges are elected through a two-step process: merchants⁷ elect their representatives (*délégués consulaires*), who in turn choose the judges. Once elected, they can work in a court for up to 14 years. The conditions to be eligible are legally restricted. First, commercial judges must be over 30 years old. In practice, they are 61 years old on average, 50% of them being retired (Paris, Colcombet and Montebourg, 1998). Second, commercial judges must be registered with the Trade and Companies Register and/or have headed a firm for at least five years. Despite these constraints, commercial judges may exert (or have exerted) a wide range of activities. This distinguishes France from other bankruptcy systems where judges' CVs are more homogenous, given that they are all professional judges.

³ This figure includes seven commercial chambers of *Tribunaux de Grande Instance* located in Alsace-Moselle.

⁴ URL link (Law n°2005–846, July 26th, 2005): <https://www.legifrance.gouv.fr/affichCode.do?idArticle=LEGIARTI000006240352&idSectionTA=LEGISCTA000031013337&cidTexte=LEGITEXT000005634379&dateTexte=20190811>

⁵ In Paris, the commercial court has around 170 commercial judges and is divided in 20 chambers that specialize in commercial litigation (*chambres de contentieux*) or corporate bankruptcy (*chambres de traitement des difficultés des entreprises*).

⁶ In this paper, bankruptcy judges are called commercial judges, which is the most adequate translation of *juge consulaire*.

⁷ “Merchants” are registered corporate entities or individuals that make commercial transactions, irrespective of the sector of activity.

² The commercial courts in other French cities (such as Bordeaux, Nevers, etc.) are organized in the same way as in Paris. The region of Alsace-Moselle is the sole exception, allowing for *échevinage* within the bankruptcy courts (Esquerré, 2017).

Commercial judges' role varies based on the bankruptcy procedure involved. The French bankruptcy code (*loi de sauvegarde*)⁸ contains a set of three main procedures⁹: i) *liquidation judiciaire*, ii) *redressement judiciaire*, and iii) *sauvegarde*, which account for 68%, 30%, and 2% of all cases, respectively (over the considered years: see Despiere et al., 2018). In Paris, these figures are 88%, 11%, and 1%, respectively (OCED, 2019). The relatively low occurrence of *sauvegarde* is not surprising, as this procedure mostly attracts the biggest cases, while the bulk of bankruptcies involve small and medium-sized enterprises (SMEs) (Infostat Justice©, 2014).

When a firm defaults (*cessation des paiements*)¹⁰ and files for bankruptcy, a deliberation audience (*délibéré*)¹¹ gathers three (or more) judges of the chamber in charge of bankruptcies (20 chambers in Paris, each headed by a judge-president). During this opening judgment (*jugement d'ouverture*), the judges (*juges du délibéré*, JDELIB) decide collegially. First, they appoint an administrator and a representative of the creditors. Second, they arbitrate between *liquidation judiciaire* and *redressement judiciaire*. The chamber opts for *liquidation judiciaire* when its members deem that the debtor has no obvious chance of rescue and should be liquidated directly.¹² Otherwise, *redressement judiciaire* is chosen, which can be viewed as an attempt at reorganization. In that case, an observation period (*période d'observation*)¹³ is triggered and monitored by a specific judge (*juge commissaire*, JC) who consequently plays a key role in preparing for reorganization (if any).¹⁴ The observation period can last for up to 20 months and terminates with the closing judgment (*jugement de fermeture*). A new chamber deliberates on the opportunity to either rescue the firm through a plan (continuation) or to convert the procedure into *liquidation judiciaire*. This deliberation takes place after having received written and oral reports from the administrator and from the JC. Unlike some other European countries (Senbet and Wang, 2012), the creditors do not make the final decision, which ultimately lies in the hands of the court.¹⁵ Even if continuation is decided during the closing judg-

ment, the plan may fail afterward and eventually lead to *liquidation judiciaire* anyway. In the opposite scenario, if the plan succeeds, a further judgment validates the successful execution, acknowledging that the firm successfully reorganized.

In 2005, the French bankruptcy reform added a new procedure (*sauvegarde*) mostly dedicated to prevention. The legislators' objective was to mimic Chapter 11 of the U.S. bankruptcy code to facilitate reorganization in the early stages. The function of *sauvegarde* is very close to that of *redressement judiciaire*, but applies to companies that are experiencing difficulties but are not yet in default.¹⁶ The main aim is to prepare a plan. As with *redressement judiciaire*, an observation period applies with similar legal provisions (stay of claims, *statutory moratorium*) and is supervised by the JC, whose role remains comparable to *redressement judiciaire*.¹⁷ When this period is over, the court may validate the plan. However, if the debtor's financial situation has worsened, the procedure may be converted into *redressement judiciaire* or *liquidation judiciaire*. In practice, the validation of a plan does not mean that it will succeed: Obviously, plans may be aborted and lead ultimately to *liquidation judiciaire*.

In a nutshell, judges' role varies with the bankruptcy path. Some decisions are made collegially by the chambers, composed of JDELIB. We identify them as "JDELIB" hereafter. Their foremost decision is whether to liquidate the firm (direct liquidation) or to begin an observation period (an attempt at reorganization). During this period, the appointed JC individually¹⁸ allows/rejects the restructuring measures implemented by the administrator and forwards a report to the chamber for the closing judgment. Then, the chamber validates (or rejects) the plan, the alternative option being liquidation. Several other rulings may influence the bankruptcy path as well, especially when a procedure is transformed, depending on how the debtor's situation changes (for instance, *sauvegarde* may be converted to *redressement judiciaire* or *liquidation judiciaire*). An ultimate ruling terminates the procedure, either because the plan ends successfully (*retour in bonis*) or because liquidation is over (*clôture pour insuffisance d'actifs*).

Overall, five outputs can arise after bankruptcy filing: 1) direct liquidation (*liquidation judiciaire*), 2) *redressement judiciaire* with an approved/successful plan, 3) *redressement judiciaire* with a rejected/failed plan, 4) *sauvegarde* with an approved/successful plan, or 5) *sauvegarde* with a rejected/failed plan. In this study, we arrange these outputs into three main bankruptcy paths. We first isolate direct liquidations (LIQ-DIR) from renegotiation attempts via an observation period.¹⁹ Such attempts may eventually succeed (reorganization, TRY-REO) or fail (liquidation, TRY-LIQ). In practice, the bankruptcy path "TRY-REO" corresponds to successful plans, fully achieved or aborted prematurely because all creditors are repaid before the term ends. In contrast, the bankruptcy path "TRY-LIQ" means that, despite an observation period being started (under *redressement judiciaire* or *sauvegarde*), the firm is liquidated, either because the chamber finally rejects the plan after the observation period, or because the approved plan eventually fails. Thus, the entire population of liquidated firms (LIQ) corresponds to paths LIQ-DIR and TRY-LIQ, while the population of reorganized firms (REO) corresponds with the path of TRY-REO.

⁸ URL link: <https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000632645&categorieLien=id>

⁹ Two of them (*mandat ad-hoc* and *conciliation*) go beyond the scope of this research since they are not collective procedures: both are confidential (no data are publicly available) and mostly dedicated to prevention.

¹⁰ That is, when the market value of its liquid assets (*actif disponible*) is less than its due debts (*passif exigible*). Without an informal agreement, defaulted firms must file for a judiciary procedure (*liquidation judiciaire*, *redressement judiciaire*).

¹¹ There are two types of audiences: the deliberation (*délibéré*) and the delivery (*prononcé*). The judges of *délibéré* make decisions on the bankruptcy case itself: their role is central to the procedure. The judges of *prononcé* only deliver rulings made during the deliberation audience. The current study clearly focuses on decisions made by the former judges.

¹² Direct liquidation should be as fast as possible: The chamber appoints an administrator, a representative for the creditors, and an auctioneer. One judge of the chamber is designated as the *juge commissaire*. His/her role mostly consists of i) protecting the interests of the various stakeholders involved, ii) allowing/rejecting measures initiated during the procedure, iii) ruling on the regularity of the claims, and iv) supervising the liquidation process (Art. L621-9 of the Commercial Code, CC). A Parisian bankruptcy practitioner we met during the preparation phase of this research elegantly summarized the role of the *juge commissaire*: "(s)he is the conductor of the procedure" ("*il/elle agit tel un chef d'orchestre de la procédure*"). Under liquidation however, the role of the *juge commissaire* remains quite limited, as few decisions are made, except those related to piecemeal liquidation.

¹³ During the observation period, a *statutory moratorium* and a stay of claims apply (except for post-default claims that benefit from new money privilege). The administrator helps, advises, or replaces the manager(s): (s)he prepares an audit report on the firm (*bilan économique et social*), assesses the chances of continuation through a plan, and undertakes restructuring measures. The *juge commissaire* approves/rejects the latter through *requêtes* and *ordonnances*.

¹⁴ Saudeau (1994) considers this role to be not that important, at least for SMEs. Still, we do not confirm this view (see *infra*).

¹⁵ The court informs the creditors and listens to their advice on debt restructuring. For the biggest bankruptcies (more than 150 employees, with turnover exceeding €20 million), some claimholders (mostly bankers and trade creditors) are gathered in committees (*comités de créanciers*). Within each committee, the creditors vote on

the debt restructuring (delays and claim forgiveness), and on the plan's approval. The court has the final word.

¹⁶ Contrary to *redressement judiciaire*, only the debtor can trigger *sauvegarde*.

¹⁷ During the observation period, a plan is prepared to restructure debts. New money privilege may also arise from this period.

¹⁸ We include here their deputies (*juges commissaires suppléants*).

¹⁹ Those are initiated under *redressement judiciaire* or *sauvegarde*.

3. Data, sample, and descriptive statistics

This section presents our data and sources (Section 3.1), our sample (Section 3.2), and discusses the corresponding descriptive statistics (Section 3.3).

3.1. Data and sources

Testing for the existence of a “judge effect” requires merging three kinds of statistical sources. Table A1 (in the appendix) provides a complete list of variables stemming from these sources.

The first set of data comes from bankruptcy files, which are retrievable at the registry of commercial courts (*greffe du tribunal de commerce*). There, hard copies of documents with detailed information on the bankruptcy process are gathered, tracing the early stages of difficulties to financial distress. A central document is the managers' declaration of default (*déclaration de cessation des paiements*), which contains an initial assessment of a firm's assets (market value), claims (due and not due), and an identification of the firm and its managers. This document may also provide a brief description of the origins of distress. Another useful document is the administrator's report (*bilan économique et social*). This report, written during the observation period, thoroughly describes the actual causes of default and the restructuring measures undertaken during the procedure.²⁰ It also checks the value of the assets and gathers the buyout offers (if any), and ends with some recommendations to the court.²¹ One last important record is prepared by the creditors' representative (*état des créances*). It identifies the claimholders, their checked/accepted claims (including direct bankruptcy costs),²² their priority levels, and the recovered amounts. Several variables used for this research are built out of the documents mentioned above.²³ We first collect information on basic characteristics of the debtor: the firm age, legal form, business sector, and total assets (at the beginning of the procedure). Those assets are measured in market value (thousands €) and out of the total due claims, which leads to the firm's “coverage rate.”²⁴ We further analyze the structure of assets by computing the weight of liquid assets (inventory and cash) out of the total assets (market value, when the procedure begins). We also examine the structure of claims, that is, the weight of senior claims (preferential, secured) out of the total claims.²⁵ Last, we build dummy variables on the direct causes of default. We consider six groups of difficulty: 1) production, 2) finances, 3) strategy-management, 4) accidents, 5) outlets, and 6) the macro-environment. This codification is based on the written content of the bankruptcy files stored at the registry of the commercial courts. Each file contains a section that outlines the challenges stemming from the origin of default. For the first step, the managers provide this information. Next, for the second step, the bankruptcy practitioners check it (when an observation period is triggered, this information is stored in the administrator's report). Several codes can accumulate depending on the complexity of the case. The abovementioned codes derive from an overall

list of 52 individual codes,²⁶ identical to the one used in Blazy et al. (2011, 2018).

The second set of data relates to the official CV (or *résumé*) of commercial judges. Reconstituting complete CVs is a complex task *per se*. Hopefully, in Paris, many judges have developed visible professional careers.²⁷ There are 10 types of official data sources used for this research: 1) public personal webpages (when fully available), 2) biographical websites, 3) business-oriented online services (LinkedIn®, Viadeo®), 4) professional organizations (ADEC, CNAJMJ), 5) *alumni* directories (educational institutions), 6) online information services on firms/managers,²⁸ 7) the French registry of companies (Infogreffe®), 8) the bulletin of civil and commercial announcements (BODACC), 9) the specialized press,²⁹ 10) materials broadcasted by the firms where some judges have (had) positions in (annual reports, “about us” pages, etc.). These sources were finally cross-checked with materials from bankruptcy practitioners. Table A2 (see the appendix) lists all the sources used to compile CVs. Overall, the previous investigation led to three types of variables regarding the judges. We first have a set of 24 variables dealing with the judges' intrinsic characteristics: gender, year of birth, year of nomination at the Paris Commercial Court, position in the court (president of chamber), number of awards (*Légion d'Honneur*, *Ordre du mérite*, etc.), and domains of expertise (17 codes³⁰ encompass the judges' specialties and skills). The second set of 14 variables deals with the judges' academic background (i.e., general human capital): number of diplomas (French and foreign), years of study (post-baccalaureate), academic institutions (*école*, *grande école*, university, other), and fields of study (6 cumulative codes).³¹ The third set of 18 variables relates to the judges' professional profile (i.e., specific human capital), comprising the most important steps in their entire career: number of jobs (up to five), network size (number of mandates and LinkedIn® connections³²), job positions (9 cumulative codes),³³ job locations, types of firms (local/foreign firms, groups, administrations, bankrupt firms), and firm size (number of employees).

The third set of data stems from the judgments (*minutes*) mentioning the judges' identity, their role in the procedure, and the firms' registration numbers. Over the period, all of the opening judgments were available for our sampled firms. The court also provided us with most of the subsequent rulings: for example, the closing judgment at the end of the observation period, the conversion judgments from one procedure to another (if any), and the

²⁰ These measures must be approved by the *juge commissaire* (*requêtes et ordonnances*).

²¹ When the company is liquidated directly, similar information can be found in a shorter document (*rapport L.13*).

²² Those costs correspond to the practitioners' fees (administrators, creditors' representatives, liquidators, etc.).

²³ All these variables (except for dummies) are subject to logarithm-transformation when used in our models.

²⁴ The coverage rate is considered in the early stages of the procedure. Hence, it excludes bankruptcy costs.

²⁵ As for the coverage rate, the debt structure ratios are the net result of bankruptcy costs.

²⁶ For instance, the aggregated code “production” covers the following codes reporting on the origins of default: “impairment of assets,” “excessive operating costs (external expenses),” “excessive personnel expenses,” “sudden loss of a supplier and/or refusal to accept late payments,” “unsuitable production process,” and “underinvestment.”

²⁷ Several publicly available CVs mention one's position as a lay judge, which helped to eliminate homonyms (if any). Still, each identity was checked twice by crossing various sources of information on age, location, diploma(s), and career (etc.).

²⁸ Those websites provide the list of managers, the number of employees, the business sector, and financial reports. They also provide information on the managerial network (mandates in various firms; governance relations built up with other managers).

²⁹ The specialized press helps to identify/check firms that went bankrupt or that experienced serious financial troubles.

³⁰ That is, direction-management, competition-B2B (business to business), business growth, international affairs, preventive litigation, business law, real estate law, law (other), acc.-finance, trade services, the transportation industry, real estate business, innovation research, public affairs (politics), culture-art-fashion, bio-medicine, teaching-expertise-consulting, agric.-environment, and communication.

³¹ That is, law, economics and finance, management, technology and biology, history and politics, and literature and language.

³² The number of connections with other LinkedIn® members can be viewed as a size proxy of their digital network (Spiegel et al., 2013; Banerji and Reimer, 2019).

³³ That is, one's own manager, associate, CEO, board member, executive, employee, non-governmental organization (NGO) member/politician, expert, judge/liquidator.

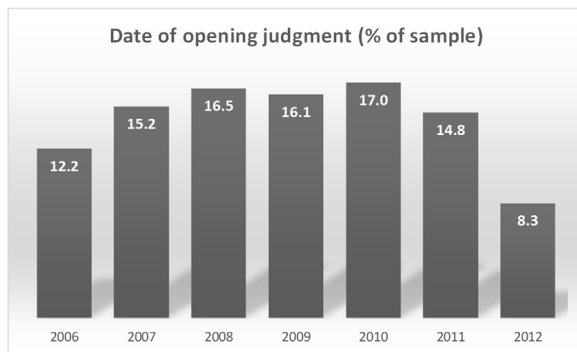


Fig. 1. Time repartition of the sample (%).

Source: Research sample (authors' computation).

termination judgments (i.e., definitive closure of the file). These decisions are needed to estimate the duration of the procedure and to identify successful/failed plans. We used the latter to pinpoint our main bankruptcy paths (LIQ-DIR, TRY-LIQ, and TRY-REO). The judgment distinguishes between two types of judges: judges of the chamber (JDELIB) and JC. We emphasize three practical features regarding the latter.³⁴ First, the JC is one of the judges of the chamber supervising the case (JDELIB).³⁵ Second, a deputy JC (*juge commissaire suppléant*) may be nominated as well: (s)he replaces the JC in case of unavailability. Third, more than one JC may be nominated for the biggest cases. However, this remains a scarce practice. Among all bankruptcy judgments, the opening one is key to this research, as it allows us to connect the judges with the cases they oversee. [Picture A1](#) in the Appendix illustrates the general content of an opening judgment (to preserve confidentiality, the names and addresses have been hidden from the scanned document).

3.2. Sampled observations

We hand-collected and merged previous sources of information³⁶ in a set of 230 bankruptcy cases (companies)³⁷ founded in Paris between 2006 and 2012 (closed before 2019).³⁸ The Paris Commercial Court is the biggest commercial court in France, with an average flow of 3,630 bankruptcy cases opened every year (OCED, 2019). This represents 7% of the French procedures started during the same period. The sampling method follows a stratified random selection process. We defined two strata for random selection. The first and second strata respectively deal with i) the year of bankruptcy filing and ii) the type of procedure launched.

Regarding the year, we focus on bankruptcy procedures begun between 2006 and 2012. As shown in [Fig. 1](#), each year represents between 8% and 17% of the sampled bankruptcies. This time period covers the first seven years after the last bankruptcy reform was implemented in France (July 26, 2005). Notwithstanding, this does

not mean that all files are economically closed in 2012. Indeed, liquidation can be a long process. For similar reasons, each continuation plan must be tracked until it is terminated or aborted (in our sample, these plans last about seven years on average). Overall, the “security margin” of several years between 2012 and 2019 guarantees that nearly all our bankruptcy cases are economically closed at the time of the study.

A second stratum deals with procedures. *Liquidation judiciaire* (LJ) represents the bulk of bankruptcies in France, followed by *redressement judiciaire* (RJ) and *sauvegarde* (SA). Hence, a non-stratified random selection of several hundred files would have led to an insignificant presence of the two latter procedures. To avoid this, our sample is split between three balanced strata: 36% for LJ, 37% for RJ, and 27% for SA. Within each stratum, bankruptcy files are randomly selected from the registry of the Paris Commercial Court (*greffe du tribunal*). Practically, this selection process was based on a random draw in a list containing the identification numbers of the bankruptcy cases opened during the period. Due to stratification, the statistics on the overall sample are reweighted to rebuild the actual structure of Parisian bankruptcy procedures.³⁹ [Fig. 2](#) shows the evolution of general bankruptcy filings in Paris between 2006 and 2019/2020 (the entire population). Over the period, in Paris, LJ, RJ, and SA procedures account for 3,057, 379, and 42 new bankruptcy filings, respectively, on average per year.⁴⁰ Preventive procedures (*sauvegarde*) logically show a peak in the aftermath of the subprime and Greek crises. [Fig. 2](#) also displays a vertical dashed line: on the right, the years 2006 through 2012 cover the dates when our sampled cases were opened. On the left, the following years cover the dates when they were supervised until the end.

Regarding our dataset on judges, *ex ante* sampling was not necessary as we worked on the complete directory of registered judges in charge of bankruptcy cases at this time. Over the period, we gathered information on a total of 134 Parisian judges. As a benchmark, the Paris Commercial Court now comprises about 170 commercial judges.⁴¹ The reason for the difference between both figures is two-fold.⁴² First, the Paris Commercial Court has several chambers: one dealing with trade litigation, and another dealing with corporate bankruptcies. Our 134 judges all depend on the latter chamber. Second, we lost a few judges due to a lack of data on their careers. These are a minority of cases, but we still decided to exclude them from the analysis, rather than using partial information. We acknowledge that such exclusion due to missing data might generate some bias, but this does not affect the econometric analysis of our bankrupt firms, as we have almost the entirety of the judges involved in their supervision. In total, 61 out of the 134 Parisian judges were appointed to supervise one (or more) of them. Section 4.1 explores the representativeness of these appointed judges in greater depth.

3.3. Descriptive statistics

[Table 1](#) outlines the univariate statistics of our sampled firms. Means and standard deviations are displayed by procedure (*liquidation judiciaire*, *redressement judiciaire*, *sauvegarde*) and by output (liquidation, successful reorganization). The last column provides reweighted figures for the total.

³⁴ For more details, see <https://www.pernaud.fr/info/glossaire/9206775/juge-commissaire-et-juge-commissaire-suppleant->

³⁵ Such double hatting has been forbidden since July 1, 2014 (ordonnance, March 12, 2014). Our sample is not impacted by this reform anyway, as it covers the years 2006 to 2012.

³⁶ This data collection phase took place between 2013 and 2016 (bankruptcy files) and 2017 and 2018 (judges). Regarding the former, the complexity of the files explains the limited size of our sample, which calls for a certain amount of caution in the exercise of generalization.

³⁷ Personal insolvencies (i.e., individuals) follow a distinct path outside the jurisdiction of commercial courts.

³⁸ For those files, the closing judgment (after the observation period, if any) stops in 2014. This does not mean that the file is economically terminated. Indeed, one must take into account the time needed to liquidate a firm's assets (in the case of liquidation) or to complete the plan (in the case of continuation).

³⁹ The actual weights are 1% for *sauvegarde*, 11% for *redressement judiciaire*, and 88% for *liquidation judiciaire* (OCED, 2019).

⁴⁰ Our sampled LJ, RJ, and SA represent 0.4%, 3.2%, and 26.8% of the overall Parisian procedures opened during the period, respectively. The small sampling percentage on LJ simply reflects the huge predominance of direct liquidations in Paris.

⁴¹ Source: <https://www.tribunal-de-commerce-de-paris.fr/fr/juge-consulaire>

⁴² In addition, both figures are not exactly comparable, as they do not apply to the same time period.

Table 1
Univariate statistics (Sample #1): Bankrupt firms.

Variables	Bankruptcy procedure (beginning)						Economic output (ending)				Total weighted sample (N = 230)	
	Direct liquidation judiciaire (N = 83)		Redressement judiciaire (N = 86)		Sauvegarde (N = 61)		Liquidation, direct + after obs. per. (N = 176)		Reorganization (N = 54)			
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Firm age (years)	2.4	5.5	8.4	10.1	6.2	6.4	5.4	8.5	6.5	6.6	3.1	3.9
Legal form: Limited liability	100.0%	0.0%	98.8%	10.8%	98.4%	12.8%	100.0%	0.0%	96.3%	19.1%	99.9%	2.3%
Number of employees	3.6	8.5	7.0	8.0	15.1	40.2	5.8	8.9	14.8	42.5	4.0	5.5
Part of a group	2.4%	15.4%	3.5%	18.5%	11.5%	32.1%	2.3%	14.9%	14.8%	35.9%	2.6%	9.6%
Sector: Services	51.8%	50.3%	65.1%	47.9%	68.9%	46.7%	59.1%	49.3%	68.5%	46.9%	53.4%	30.0%
Sector: Manufacturing	27.7%	45.0%	18.6%	39.1%	8.2%	27.7%	22.7%	42.0%	7.4%	26.4%	26.6%	26.6%
Sector: Trade	20.5%	40.6%	16.3%	37.1%	23.0%	42.4%	18.2%	38.7%	24.1%	43.2%	20.0%	24.1%
Total assets (market value, thousands-€)	100	132	450	808	6,166	15,713	403	1,199	6,522	16,615	186	910
Due claims (net of bank. costs, thousands-€)	305	310	669	894	4,095	12,534	568	805	4,308	13,317	374	738
Coverage rate (assets / total claims)	38.1%	42.9%	72.3%	64.4%	485%	1462%	57.9%	59.4%	533%	1548%	45.4%	85.5%
% Inventory (out of tot. assets, mrkt. value)	7.8%	20.6%	8.6%	16.8%	7.9%	16.6%	7.6%	17.8%	9.7%	19.1%	7.9%	12.1%
% Cash (out of tot. assets, mrkt. value)	5.4%	13.0%	6.4%	14.7%	16.5%	25.6%	6.8%	14.0%	15.1%	27.2%	5.6%	8.0%
% Other assets (out of tot. assets, mrkt. value)	86.8%	23.3%	85.0%	21.1%	75.6%	27.4%	85.6%	21.6%	75.3%	29.4%	86.5%	13.9%
% of junior claims (out of total claims)	44.8%	31.1%	40.4%	26.7%	43.2%	34.8%	43.1%	29.4%	41.6%	34.2%	44.3%	18.4%
% of preferential claims (out of total claims)	41.3%	32.4%	37.8%	26.5%	25.4%	28.5%	37.6%	29.0%	29.8%	32.0%	40.8%	19.0%
% of secured claims (out of total claims)	12.5%	23.2%	15.4%	24.1%	28.2%	38.6%	14.8%	24.9%	27.4%	38.3%	13.0%	14.1%
Cause of default: Production	14.5%	35.4%	25.6%	43.9%	19.7%	40.1%	19.9%	40.0%	20.4%	40.7%	15.7%	21.9%
Cause of default: Finance	38.6%	49.0%	25.6%	43.9%	42.6%	49.9%	32.4%	46.9%	42.6%	49.9%	37.2%	29.1%
Cause of default: Strategy-Management	20.5%	40.6%	33.7%	47.6%	24.6%	43.4%	27.8%	44.9%	22.2%	42.0%	22.0%	24.9%
Cause of default: Accident	21.7%	41.5%	44.2%	50.0%	16.4%	37.3%	30.1%	46.0%	24.1%	43.2%	24.1%	25.8%
Cause of default: Outlets	66.3%	47.6%	59.3%	49.4%	54.1%	50.2%	64.2%	48.1%	48.1%	50.4%	65.4%	28.7%
Cause of default: Macro-environment	60.2%	49.2%	50.0%	50.3%	47.5%	50.4%	55.7%	49.8%	44.4%	50.2%	59.0%	29.6%
Bankruptcy costs (paid, thousands-€)	13.1	21.2	29.8	19.1	44.3	60.0	23.8	31.5	40.1	50.4	15.2	13.4
Bkptcy. duration (years, incl. liq. process or plan)	2.8	1.3	4.6	2.0	5.9	3.3	3.7	1.8	6.4	3.4	3.1	0.9
Number of comm. judges (JDELIB + JC, per case)	3.9	0.6	5.6	1.7	6.2	1.8	5.2	1.9	4.9	1.1	4.1	0.6

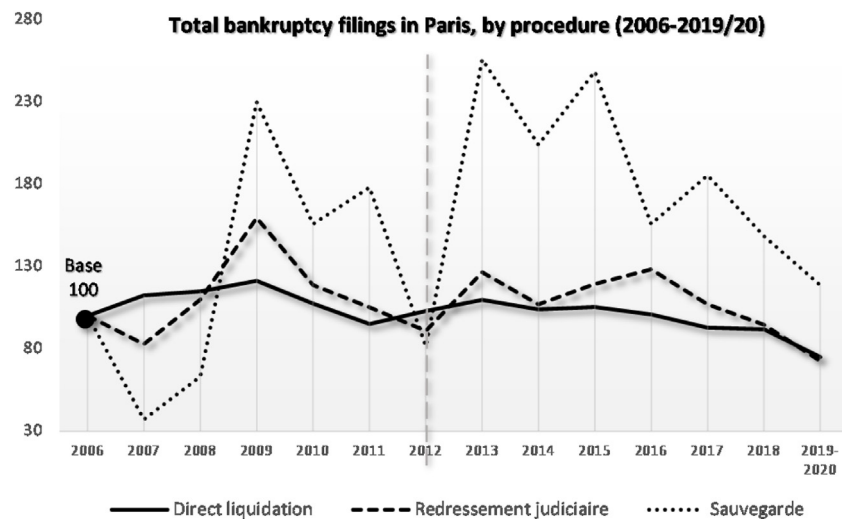


Fig. 2. Paris, total bankruptcy filings (base 100).

Source: OCED (2019) (authors' computation).

Overall, our sample has traits similar to those of previous studies conducted in France (Altares© and Deloitte©, 2018): Most of the bankrupt corporations are young (3 years of existence on average)⁴³ and small (4 employees on average). Nearly all of them are protected by limited liability (SA and SARL). These features are more pronounced with direct liquidations. By contrast, reorganization procedures are associated with bigger, more mature firms, which is more perceptible when it comes to *sauvegardes*. This suggests that prevention⁴⁴ misses the smallest/youngest businesses. Several reasons can explain this. First, corporations that file for curative procedures (*liquidation* and *redressement judiciaire*) may have already fired employees and/or sold some assets, which decreases the likelihood that they will reorganize. Second, the managers of young/small firms might ignore the bankruptcy code, including its rather complex preventive arm. The sectorial breakdown reflects the Parisian location of our study, with a higher proportion of services representing 53% of our sample, against 35% in all of France (2013 figures; see Despiere et al., 2018). However, the proportion of the trade sector (around 20%) remains similar between Paris and the rest of France.

The analysis of the balance sheet structure is quite informative, especially when comparing liquidated and reorganized firms (columns 7–10 in Table 1). Clearly, the mean coverage rate is higher for reorganized firms (despite noticeable discrepancies, as reflected by standard deviations for this variable). Even more remarkable, the chances to reorganize correspond to firm size: On average, reorganized corporates have assets 16 times bigger than liquidated ones. Among those assets, the mean weight of liquid items (i.e., inventory and cash) is also higher. Interestingly, reorganization appears as a more appropriate output when the financial stakes are high (on average, the total due claims are 7.6 times bigger). Despite the pro-liquidation bias of secured creditors identified by Bergström et al. (2002), we do not observe a higher proportion of secured claims under liquidation. Since the 2005 reform, banks' expanded role within creditors' committees (prior to a plan) might explain this finding. However, reorganization is a more expensive output on average (direct and indirect costs). For *redressement judi-*

ciaire and *sauvegarde*, the mean practitioner fees equal €30,000 and €44,000, respectively, per case (against €13,000 for *liquidation judiciaire*). The same trend is observed when considering the overall duration⁴⁵ of bankruptcy: successful reorganization takes up to 6.4 years, versus 3.7 years for liquidated firms.

The mean occurrence of the causes of default (six codes) shows that bankrupt firms face issues mostly related to a decrease in outlets (65% on average) and a poor environment (59%).⁴⁶ This may relate to the considered time period encompassing two crises in Europe (2008 and 2010). This also reinforces the importance of controlling for these causes and for economic growth in our regressions.

The last row of Table 1 connects our first dataset (bankrupt firms) to the second one (judges). In the reweighted sample, each bankruptcy case involves 4.1 judges on average. Unsurprisingly, the longer the procedure, the higher the number of appointed judges. This leads to the transition to Tables 2–4, which provide statistics on the judges that worked in Paris during the period.

Table 2 focuses on the judges' characteristics. Between 2006 and 2012, the average birth date (1944) is in accordance with the mean age found by Colcombet and Montebourg (1998)—from 62 to 68 years. The time of nomination (shown in column 1) is 2000, which means that the judges were elected for the first time at the age of 56 years on average. Another common feature deals with gender, with a notable underrepresentation of female judges: only 14% of commercial judges are women.

Commercial judges have a wide variety of skills, which is one of the rationales of lay justice. Table 2 lists 19 specialty dummies in decreasing order of occurrence (each judge may have developed several skills, so that the accumulated specialties exceed 100%). Predictably, the most recurrent skill deals with direction and management (65%), which is a sufficient condition for eligibility (see Section 2). Next, the most frequent specialties are, in decreasing order: accounting and finance; industry and transport; real estate business; business law; teaching, expertise, and consulting; and prevention (all of them have a frequency rate higher than 25%). The first two fields simply reflect the duality of profiles between industrial and financial careers. Lazega et al. (2006) identify such

⁴³ In France, the third year of existence leads to the highest probability of default. This feature seems structural, as already highlighted a few decades ago by several studies (Combiere, 1994; Marco and Rainelli, 1986).

⁴⁴ This remark applies to *sauvegarde* only, since no information is available on *mandat ad-hoc* and *conciliation*.

⁴⁵ Duration encompasses the complete bankruptcy path, including the actual duration of the plan or of the liquidation process (depending on the bankruptcy output).

⁴⁶ Since default may be due to several causes, the sum of all occurrences exceeds 100%.

Table 2
Univariate statistics (sample #2): Judges' intrinsic characteristics.

Sample: 134 commercial judges (Paris) Variables:	Mean	Lower 5% Conf. Interval	Upper 5% Conf. Interval	Min	Max	Std. Dev.
Intrinsic characteristics						
Year of nomination (Paris)	2000	1999	2000	1992	2009	4.4
Year of birth	1944	1943	1945	1930	1966	7.1
Number of awards	0.6	0.4	0.7	0.0	5.0	0.9
President of chamber	52.2%	43.7%	60.8%	0.0%	100.0%	50.1%
Woman	14.2%	8.2%	20.2%	0.0%	100.0%	35.0%
Spec. (skills): Direction and management	64.9%	56.7%	73.1%	0.0%	100.0%	47.9%
Spec. (skills): Accounting and finance	48.5%	39.9%	57.1%	0.0%	100.0%	50.2%
Spec. (skills): Industry and transport	44.8%	36.2%	53.3%	0.0%	100.0%	49.9%
Spec. (skills): Real estate business	32.8%	24.8%	40.9%	0.0%	100.0%	47.1%
Spec. (skills): Business law	32.1%	24.1%	40.1 %	0.0%	100.0%	46.9%
Spec. (skills): Teaching, expertise, and consulting	29.9 %	22.0%	37.7%	0.0%	100.0%	45.9%
Spec. (skills): Prevention, resol. litigations	27.6%	19.9%	35.3%	0.0%	100.0%	44.9%
Spec. (skills): Trade and services	25.4%	17.9%	32.8%	0.0%	100.0%	43.7%
Spec. (skills): Innovation and research	25.4%	17.9%	32.8%	0.0%	100.0%	43.7%
Spec. (skills): Public affairs and politics	17.9%	11.3%	24.5%	0.0%	100.0%	38.5%
Spec. (skills): Business growth	17.2%	10.7%	23.6%	0.0%	100.0%	37.8%
Spec. (skills): International affairs	16.4%	10.1%	22.8%	0.0%	100.0%	37.2%
Spec. (skills): Real estate law	14.9%	8.8%	21.0%	0.0%	100.0%	35.8%
Spec. (skills): Law (other)	14.9%	8.8%	21.0%	0.0%	100.0%	35.8%
Spec. (skills): Culture, art, and fashion	14.9%	8.8%	21.0%	0.0%	100.0%	35.8%
Spec. (skills): Communication	14.9%	8.8%	21.0%	0.0%	100.0%	35.8%
Spec. (skills): Competition, B2B	10.4%	5.2%	15.7%	0.0%	100.0%	30.7%
Spec. (skills): Medicine and biology	7.5%	3.0%	12.0%	0.0%	100.0%	26.4%
Spec. (skills): Agriculture, nature, and environment	6.7%	2.4%	11.0%	0.0%	100.0%	25.1%

Table 3
Univariate statistics (sample #2): Judges' academic background.

Sample: 134 commercial judges (Paris) Variables:	Mean	Lower 5% Conf. Interval	Upper 5% Conf. Interval	Min	Max	Std. Dev.
Academic background						
Accumulated years of studies (post-BAC)	8.3	7.4	9.3	0.0	22.0	5.6
Highest diploma (years, post-baccalaureate)	4.4	4.1	4.8	0.0	9.0	2.0
Number of diplomas	1.9	1.7	2.1	0.0	4.0	1.2
Number of foreign diplomas	0.1	0.0	0.1	0.0	2.0	0.3
Diplomas from university	61.2%	52.8%	69.6%	0.0%	100.0%	48.9%
Diplomas from <i>grande école</i> (Mines, SciencesPo, HEC...)	49.3%	40.7%	57.8%	0.0%	100.0%	50.2%
Diplomas from <i>école</i> (IAE, commerce, ingénieur...)	23.1%	15.9%	30.4%	0.0%	100.0%	42.3%
Diplomas from other training institutions	13.4%	7.6%	19.3%	0.0%	100.0%	34.2%
Dipl. field: Law	50.0%	41.4%	58.6%	0.0%	100.0%	50.2%
Dipl. field: Management (incl. marketing, accounting)	44.8%	36.2%	53.3%	0.0%	100.0%	49.9%
Dipl. field: Economics and finance	35.8%	27.6%	44.0%	0.0%	100.0%	48.1%
Dipl. field: History and politics	23.1%	15.9%	30.4%	0.0%	100.0%	42.3%
Dipl. field: Technology, engineering, and biology	20.1%	13.3%	27.0%	0.0%	100.0%	40.3%
Dipl. field: Literature and language	6.0%	1.9%	10.0%	0.0%	100.0%	23.8%

Table 4
Univariate statistics (sample #2): Judges' professional careers.

Sample: 134 commercial judges (Paris) Variables:	Mean	Lower 5% Conf. Interval	Upper 5% Conf. Interval	Min	Max	Std. Dev.
Professional career						
Number of jobs in one's entire career (most notable, 5 max.)	3.6	3.3	3.8	1.0	5.0	1.4
Network: No. of mandates in corp. and with other managers	3.5	2.6	4.3	0.0	22.0	5.0
Network: No. of LinkedIn® connections (500 max., 2017–2018)	80.1	54.6	105.5	0.0	500.0	148.7
Job: CEO	72.4%	64.7%	80.1%	0.0%	100.0%	44.9%
Job: Executive	44.8%	36.2%	53.3%	0.0%	100.0%	49.9%
Job: One's own manager	42.5%	34.1%	51.0%	0.0%	100.0%	49.6%
Job: Board member	28.4%	20.6%	36.1%	0.0%	100.0%	45.2%
Job: NGO member, politician	21.6%	14.6%	28.7%	0.0%	100.0%	41.3%
Job: Employee	20.1%	13.3%	27.0%	0.0%	100.0%	40.3%
Job: Expert (incl. consulting)	14.9%	8.8%	21.0%	0.0%	100.0%	35.8%
Job: Associate	13.4%	7.6%	19.3%	0.0%	100.0%	34.2%
Job: Liquidator judge	12.7%	7.0%	18.4%	0.0%	100.0%	33.4%
Number of jobs in a foreign location	0.1	0.1	0.2	0.0	2.0	0.4
Number of jobs in a foreign company (excl. French ones)	0.5	0.3	0.6	0.0	4.0	0.9
Number of jobs in a group	1.5	1.3	1.7	0.0	5.0	1.2
Number of jobs in an administration	0.7	0.5	0.8	0.0	3.0	0.9
Number of jobs in a firm that went bankrupt	0.3	0.2	0.4	0.0	2.0	0.5
Mean. no. of employees in the firms where the judge worked	19,450	12,873	26,027	0	240,000	38,491
Min no. of employees in the firms where the judge worked	6,113	1,132	11,094	0	240,000	29,038
Max no. of employees in the firms where the judge worked	45,139	32,278	58,001	0	377,757	74,984

duality among judges. One third of Parisian judges have taken part in real estate business over the period (mostly in *sociétés civiles immobilières*). This finding was predictable, as the years 2006–2012 correspond to an increase in real estate prices, particularly in Paris and its suburbs.⁴⁷ Like many other entrepreneurs, the judges have taken advantage of this structural trend through real estate investments. The next specialization fields reflect expertise developed during one's professional career, namely, expertise in business law (32%, as a corollary of managerial activities) and in consulting and teaching (30%). Interestingly, a rather high proportion of judges has developed skills in prevention (mostly before their election to the court). The recruitment of judges specializing in prevention is coherent with the policy of the Paris Commercial Court, which was one of the first courts to implement prevention units (*cellules de détection-prévention*) to discern early difficulties experienced by managers (Reins, 2003). The other specialization fields (trade and services; innovation and research; public affairs and politics, etc.) are less frequent (less than 25%) but reflect the large diversity of profiles among commercial judges.

Table 3 displays univariate statistics on the judges' academic backgrounds. One noteworthy feature is their high level of education (8.3 accumulated years of graduate studies on average). Most of the academic profiles stem from reputed academic institutions (*grandes écoles*: 49%; universities: 61%), while averagely reputed programs (*écoles*) are less frequent (23%). Despite not being professional judges, half of our sampled judges have diploma(s) in law, followed closely by diploma(s) in management (45%) and economics and finance (36%). The highest-level diploma corresponds to the mid-term of a master's degree (4.4 years), which appears quite elevated given the judges' demographic cohort.⁴⁸ Overall, every judge has nearly two diplomas on average. Not all of them share this academic profile, but the moderate standard deviations in Table 3 confirm that most judges' situations correspond with this general outline. Even if some judges eventually engaged in an international career, the initial studies are mostly completed in the country, since the mean number of foreign diplomas remains marginal.

One of the most noteworthy findings comes from Table 4, which presents statistics on the judges' overall professional careers. Indeed, while the great majority of French bankrupt firms are SMEs (Altares© and Deloitte©, 2018), most commercial judges have spent their careers in large corporate entities or administrations (more than 19,000 employees on average⁴⁹) and/or in groups of firms (1.5 occupied jobs during their entire career). When focusing on standard deviations however, their individual situations vary quite a lot. Anyway, this apparent mismatch between the judges' professional experience and the bankruptcy cases they arbitrate may generate inefficiencies (which seem confirmed hereon in this paper).

During their careers, our sampled judges have had up to 3.6 jobs, which is on par with the French cohort born between 1940 and 1950⁵⁰ (Rouxel and Virely, 2012). The types of jobs occupied clearly reflect the entrepreneurial bias of commercial judges: 42%

have been (or currently are) managers, and/or have been involved in corporate governance as CEOs (72%) or board members (28%). Besides, the frequency of positions as employees (20%) is twice less than higher positions (45% as executives).

Table 4 contains interesting information on the judges' networking and social capital. This latter point was originally analyzed by Lazega et al. (2006), who used interviews with several judges to reconstitute their subjective "advice networks" (i.e., the informal, trusting relationships they have built among themselves). Our approach follows this avenue but considers more objective proxies, such as the number of mandates in other companies or with other managers (governance networks) and the number of LinkedIn® connections (digital networks). This latter variable was previously considered by Spiegel et al. (2013) and Banerji and Reimer (2019) to explore the importance of digital networking in entrepreneurship and fundraising. Both kinds of networks (respectively 3.5 and 80 relationships on average) show a rather high discrepancy among commercial judges, who have not invested equally in networking. One might wonder to which extent such a disparity (among other variables) can create noise regarding a firm's chance to reorganize. We address this question in the following sections.

4. Are commercial judges appointed randomly?

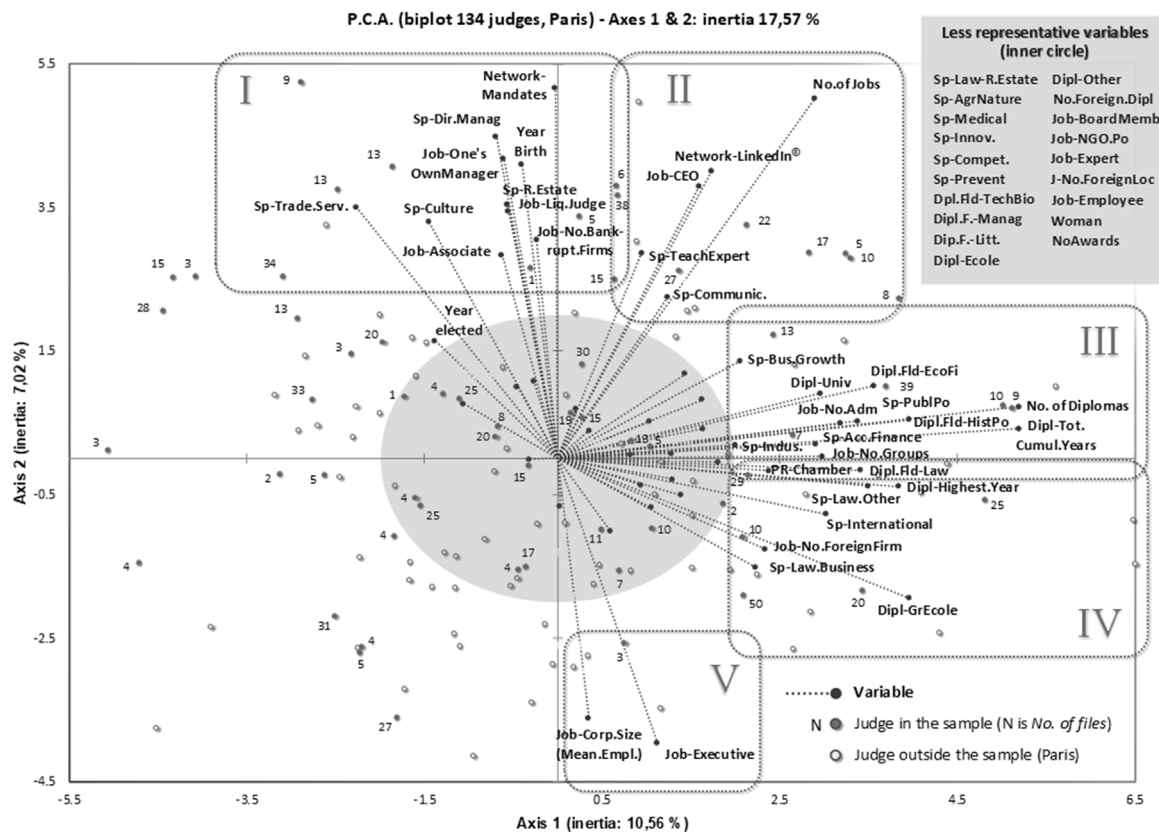
Prior to any decision, the first step to get reorganized (or liquidated) depends on how bankruptcy cases are attributed to i) the members of the court panels (JDELIB), and ii) the judges supervising the observation period (JC). According to Badó and Guemar (2015), such attribution should stem from an "automatic case assignment"—a pure random attribution process—thus ensuring the litigants' right to impartial, independent "natural judges" (Renoux, 1993). This approach relates to Aristotle's principle of justice (Chroust and Osborn, 1942), whereby "equals should be treated equally, and unequals unequally," a principle that Velasquez et al. (2014) translates as "individuals should be treated the same, unless they differ in ways that are relevant to the situation in which they are involved." This question is crucial for bankruptcy cases. Namely, should bankruptcy cases be attributed randomly to ensure equal treatment of the litigants, or in contrast, should lay justice take advantage of the variety of judges' profiles to offer services better suited to the specificities of the litigants? French positive law does not answer this question explicitly: The practical attribution of judiciary cases to court panels mostly remains a question of internal organization, which the presidents and heads of courts appreciate with some degree of freedom (Jeuland, 2008). In every commercial court, the registry (*greffe du tribunal*) is charged with distributing the cases among the judges. Usually, the registry follows a purely sequential appointment process and allocates the cases in chronological order. However, depending on the case, some informal considerations may arise within the chamber regarding the composition of the court panel and the identity of the appointed judges (as JDELIB or JC). Such organization raises a set of questions related to deontology (art. R721–11-1 of the French Commercial Code). In 2018, the National Council of Commercial Courts (*Conseil national des tribunaux de commerce*) published a *vade-mecum*, gathering deontological recommendations for French commercial judges (Belloubet, 2018). This document defines a set of core values dealing with independence, dignity, impartiality, integrity, and reserve duty. A second set of deontological principles complements these primary ones, and discusses commitments related to legality, competence, confidentiality, loyalty, diligence, and caring for others. To some extent, these principles are similar to the ones followed by professional judges. A recurrent suggestion forbids, for instance, appointing judges that have prior relations with the debtor (conflicts of interest). Besides, their decisions cannot be influenced by

⁴⁷ Of our sampled judges, 62% live in Paris, 36% live in *Ile de France*, and 2% live in the countryside (i.e., provinces).

⁴⁸ Several statistical sources verify the increasing level of education for the most recent generations in France. See: <https://www.data.gouv.fr/fr/datasets/les-diplomes-universitaires-evolution-00000000/>

⁴⁹ When the judge has worked (often as a CEO or executive) for a group (e.g., global companies), we consider the number of employees in the entire group. The same applies to public administrations.

⁵⁰ People belonging to this cohort have had 3.2 jobs on average before they reach 40 years of age. Nevertheless, our statistics on commercial judges encompass their complete careers, with no age limit. Still, we restrict the number of jobs to the five most important positions they have held (in practice, few judges exceed this limit).



Graph 1. PCA analysis: Judges in the Parisian population (134 judges).

any subordinate ties with employer(s) and/or professional associations (independence).

In a nutshell, investigating how the judges' profiles influence the chance to reorganize requires that we first consider the attribution process of bankruptcy cases. Our research does not aim to set any normative recommendations for the fundamental principles of justice. Neither do we construe the existence of appointment bias as a source of inefficiency. In fact, our main goal is to test for the existence of such bias, which might eventually impact the likelihood of reorganization.

We follow a two-step strategy to examine appointment bias that may alter our sample. Obviously, not all of the 134 commercial judges have been charged with overseeing our 230 sampled firms: Over the period, 61 of them are appointed either as JDELIB or as JC. We first determine to what extent those appointed judges are good representatives of our population of Parisian judges (step 1). To answer this question, we run a principal component analysis (PCA) to draw up a map of the most notable characteristics of appointed judges within the overall Parisian group (Section 4.1). Next, we focus more specifically on the subset of 61 judges (step 2). We run several logistic regressions to test whether the firms' initial features explain, for each judge, the likelihood of being appointed. We find significant relationships (which reflects appointment bias) for one third of the judges (Section 4.2).

4.1. Studying the representativeness of appointed judges

The previous section suggests that the average profile of Parisian judges is somewhat specific, with a notable proportion of high-skilled judges having mostly worked in big companies or administrations. Notwithstanding, this univariate approach does not reveal the most informative correlations among them. In addition, we expect commercial judges to differ from one another,

which requires isolating homogenous groups of belonging. This entails a multivariate approach. This is the primary objective of the PCA displayed in [Graph 1](#). Further out of the 134 Parisian judges, almost half (61) supervised at least one of our 230 sampled procedures. Thus, we must check the representativeness of this subset of appointed judges within the population of Parisian judges. This is the second purpose of [Graph 1](#).

The PCA explains 18% of the inertia among the 134 Parisian judges. This percentage of explained inertia is satisfactory since it corresponds to the most relevant information from our dataset.⁵¹ [Graph 1](#) illustrates direct and dual PCA analyses ([Table A1](#) in the appendix explains the meaning of the variable names). The projected observations (judges) and variables (characteristics) are rescaled to appear simultaneously on the same biplot. Among the observations, the grey points denote appointed judges ("judges in the sample," i.e., nominated in our sampled cases). The number next to them (from 1 to 50) signals the quantity of supervised bankruptcies during the period. The white points (without a number) relate to the other Parisian judges ("judges outside the sample"). The black points around the origin correspond to our variables of interest (characteristics, academic background, professional career). Typically, the peripheral variables are the most readable ones, while the variables close to the origin (i.e., appearing within the inner circle) cannot be interpreted directly, as they may be flattened by the PCA projection⁵² (their names are listed anyway). Observations and variables are linked via duality relationships ([Rodriguez et al.,](#)

⁵¹ The scatterplots for the subsequent components (beyond axes 1 and 2) are available upon request.

⁵² Alternatively, commercial judges might not oppose on these variables. In that case, the considered variables should be close to the origin before being projected onto the PCA subspace.

2000). First, a judge located near (far away from) variable Y has a higher (lower) value for this variable than the average. Second, two judges located in the same area have a similar profile. Third, two variables close to each other (in opposite directions) are positively (negatively) correlated.

We isolate five areas of correlations (from I to V) in Graph 1. The horizontal axis shows, on its right side, variables dealing mostly with education (areas III and IV). The judges in area III have more diplomas than average, mostly obtained at university. The years of study are longer, generally in the social sciences (economics, finance, and politics). Area IV also deals with advanced education, with a higher proportion of law diplomas (including business law), coupled with diplomas from *grandes écoles*. In France, these institutions have offered well-known international programs for decades. Logically speaking, the judges in area IV specialize in international affairs and have worked predominantly in foreign companies. Overall, the frequency of presidents of chambers is higher in areas III and IV, which shows that this position in the Paris Commercial Court is more tied to education than to managerial skills. By contrast, the academic background of commercial judges, projected on the left side of Graph 1, is below average.

On the upper side of the vertical axis, area I covers variables mostly involving managerial skills. The judges in this area are older than the average and benefit from a wider governance network (number of mandates). Interestingly, this managerial experience is accompanied by stronger proficiency in companies that experienced serious difficulties and/or went bankrupt. Area II reflects managerial skills as well, but with more mature career profiles: the number of jobs and proportions of positions as a CEO is above average. Unsurprisingly, the judges in this area have a broader digital network (LinkedIn® connections). Such a profile goes hand in hand with expertise and teaching (for instance, as external lecturers). Overall, areas I and II primarily reflect diversified careers focused on management and direction. This contrasts with area V, which encompasses judges who have worked as executives at big companies. Due to their opposition along the vertical axis, variables of area V are anti-correlated with those of areas I/II. Thus, Parisian commercial judges have mostly developed their managerial experience (as CEOs, associates, their own managers) in SMEs.

Graph 1 also points to the representativeness of our appointed judges (grey points) among the population of Parisian judges (white points). Overall, both kinds of points are equally widespread across the PCA biplot, which demonstrates that the judges supervising our 230 bankruptcies are good representatives of the population of Parisian judges during the period. However, the representativeness is lower in area V, with fewer grey points than white ones. Hence, the share of executives (compared to managers and directors) is slightly underrepresented amid our appointed judges.

Apart from this, regardless of the area considered, the most notable features of the Parisian commercial judges are well represented among the subsample of 61 appointed judges. Now, this does not mean that the process of appointment is free of selection bias. In contrast, such a process might not be purely random for the most important cases. This question is addressed in the next section.

4.2. Testing for appointment bias

In this section, we focus on the subset of 61 appointed judges. These judges have been appointed as JDELIB and/or as JC to supervise the procedure of one (or more) of our 230 sampled firms. Each bankruptcy case is described by three dimensions: *i*) the size of the business, proxied by the total assets (market value), *ii*) the social stakes (number of employees), and *iii*) the financial burden

(total outstanding debts; i.e., net claims).⁵³ These dimensions are measured at the beginning of the procedure. They are in line with the criteria set by French legislators (Perben, 2004), stating that bankruptcy procedures should (in decreasing order): *i*) facilitate business, *ii*) protect employment, and *iii*) repay claims.

An “appointment bias” means that some judges have a higher/lower chance of being appointed to supervise cases that exhibit high/low challenges regarding one (or more) of these dimensions. On the contrary, an automatic appointment process severs any relationship between them and the likelihood of being appointed. To test for this, we merge our two datasets (61 judges and 230 firms) and run 61 logistic regressions (one per appointed judge [labeled “J”]). These stem from Eq. 1. $P(\text{appoint}_j|X_i)$ is the j ’ probability of being appointed to a case (*i*) outlined by vector (X_i). Here, the coordinates of (X_i) are the dimensions mentioned previously (a firm’s assets, employees, and debts). There is no significant selection bias when the parameters ($\beta_1, \beta_2, \beta_3$) are all null. In contrast, a significant coefficient for one (or more) dimension(s) means that the probability of being appointed is not independent from the considered case. A positive (negative) parameter implies that the higher (lower) the dimension, the greater the likelihood of being appointed.

$$\ln \left(\frac{P(\text{appoint}_j|X_i)}{1 - P(\text{appoint}_j|X_i)} \right) = \beta_0 + \beta_1 \ln(\text{assets}_i) + \beta_2 \ln(\text{employees}_i) + \beta_3 \ln(\text{debts}_i) \quad \forall i \in [1; 230] \quad \forall j \in [1; 61] \quad (1)$$

Until 2014, double hatting was an allowed practice: Commercial judges could serve as both JDELIB and JC for the same bankruptcy case.⁵⁴ To account for this, Eq. 1 is estimated twice, depending on the considered position. Table 5 summarizes the most significant outcomes. Recurrent bias (positive or negative) is generally associated with firm size (assets) and employees, while a financial burden (debts) generates less regular bias. Overall, 20 sampled judges are characterized by appointment bias, which represents one third of our appointed judges. This proportion remains less than half of the cases, but is not marginal. These findings hint that the appointment process is random in most cases, which rather supports Aristotle’s principle of justice. However, the court clearly introduced a certain pragmatism in this process: The presidents of chambers may target a subset of judges for the biggest/smallest bankruptcies.⁵⁵ As suggested by Lazega and Mounier (2007), such targeting certainly depends on learning-by-doing, in accordance with the judges’ reputation accumulated over the years.

The existence of appointment bias does not necessarily affect the ultimate chance to reorganize. Following a strict financial view, the choice to reorganize should only depend on the discounted value of future cash flows (financial efficiency, White, 1989). A broader perspective may advocate for the inclusion of social considerations as well (social efficiency; Korobkin, 1991). Irrespective of the definition of efficiency, in a judiciary scheme guaranteeing Aristotle’s principle of Justice, no “CV effect” should disturb that process; namely, the individual profiles of appointed judges should not influence the debtor’s bankruptcy path. Notwithstanding, this neutral standpoint may undermine efficiency whenever the judges’ individual skills and accumulated knowledge fit well with the debtor’s specificities, thus improving their supervision of

⁵³ These claims do not include practitioners’ fees, as they are valued in the early stages of the procedure.

⁵⁴ In our sample, double hatting happens with 223 cases out of 230 (when including deputy JC).

⁵⁵ Here, the “size” of each case depends on the most critical dimension(s): economic, social, and/or financial.

Table 5
Measure of appointment biases.

Explanatory variables (initial dimensions of affair)	Econometric results (61 LOGIT models, one per judge)			
	Judge's position: JDELIB		Judge's position: JC	
	Amount of significant appointment bias (10% significance level)		Amount of significant appointment bias (10% significance level)	
	Positive influence for $P.(appoint X)$	Negative influence for $P.(appoint X)$	Positive influence for $P.(appoint X)$	Negative influence for $P.(appoint X)$
ln (assets)	9 bias	5 bias	9 bias	5 bias
ln (employees)	5 bias	–	5 bias	–
ln (debts)	1 bias	3 bias	1 bias	3 bias
► No. of judges (JDELIB or JC) with appointment bias: 20 judges	► No. of judges (JDELIB) with appointment bias: 16 judges		► No. of judges (JC) with appointment bias: 14 judges	

the procedure. Taking such a pragmatic perspective may produce CV effects that can impact the likelihood of reorganizing. This is even more likely when the judges are granted most of the decision-making power. In France, this is the case both at the beginning of the procedure, when a particular bankruptcy path is triggered (*liquidation judiciaire* versus *redressement judiciaire*), and at the end of the procedure, when arbitration occurs between continuation/liquidation. In addition, the judges appointed as JC play a major role in the procedure by allowing/rejecting managerial decisions during the observation period. Thus, one may expect some discrepancies among bankruptcy paths depending on who is appointed, which we refer to as the CV effect. This latter question is investigated in the following sections.

5. Does an appointed judge's profile influence the chance to reorganize?

This section examines the determinants of corporates entities' bankruptcy path regarding their chance to reorganize (the alternative output being liquidation). The presence of a CV effect means that the likelihood of successful reorganization also depends on the profile of the judge appointed to oversee the bankruptcy procedure.

We consider two kinds of variables to scrutinize the determinants of corporate reorganization. A first set of corporate variables accounts for a firm's initial characteristics. These control variables are measured at the time of bankruptcy filing (refer to Table A1 in the appendix for a comprehensive list). They encompass i) firm size and age (in log), ii) the coverage rate (%), iii) the causes of default (6 dummies), iv) the structure of claims (by level of priority, %), v) the structure of assets (by level of liquidity, %), and vi) economic growth⁵⁶ (annual change in gross domestic product [GDP]). A second set of judge variables contains the profiles of appointed judges (characteristics, education, career). These test variables are also gauged in the early stages of bankruptcy (see Table A1 in the appendix).⁵⁷ For each case, we compute two additional variables that relate to the judges. A first variable follows the avenue proposed by Iverson et al. (2019) by measuring the judges' experience when the firm enters the procedure. We compute the difference (in years) between the filing date (opening judgment) and the date when the judge is nominated at the Paris Commercial Court for the first time. This proxy can be interpreted as the judges' judicial "human capital," as defined by Ball and Kesan (2010). A second variable establishes the judge's proximity to the case (s)he supervises. We build a dummy variable that equals one (zero if otherwise) if the firm's sector matches one(s) the judge has worked in during his/her

career. To do so, we use and adapt the level 17 APE/NAF sectorial codification of INSEE (the French National Institute of Statistics and Economic Studies). This nomenclature has the same structure as the European nomenclature of activities, NACE. Level 17 APE/NAF codification arranges business activities into 17 main sectors.⁵⁸ We compare these codes between firms and judges. Our dummy variable⁵⁹ equals one whenever the debtors and their judges have mutual knowledge of the sector.

In our econometric models, both corporate and judge variables are log transformed (except for dummy variables, marked with "D" in the regression tables).

In France, several judges are appointed to supervise one bankruptcy case. As shown in our descriptive statistics, this represents an average of 4.1 commercial judges per case, either as JDELIB⁶⁰ or as JC⁶¹. Hence, we must aggregate the panel of judges charged with supervising the same bankrupt firm, either as JDELIB or as JC. With two exceptions,⁶² such aggregation is performed by computing the average values of the individual judge variables (characteristics, education, career). Thus, for each observation (i.e., case), the aggregated judge variables displayed in our regressions depict the average profile of the panel of appointed judges. Such a

⁵⁸ The 17 grouped sectors are: A) agriculture and forestry, B) fishing, C) mining, energy, water supply, sewage, waste management, D) food manufacturing, beverages, tobacco, coke, petroleum products, electrical and electronic equipment, computers, transport and machinery equipment, E) production, transportation, and the distribution of electricity, gas, and water, F) construction, G) wholesale and retail trade, the repair of motor vehicles and motorcycles, H) accommodations and food service activities, I) transport, storage, information and communication, J) financial and insurance activities, K) real estate activities, professional, scientific, technical, administrative and support service activities, L) public administration and defense, M) education, N) human health and social work activities, O) the activities of other services (including NGOs), P) the activities of households as employers or for their own use, Q) the activities of extraterritorial organizations and bodies. The complete codes can be downloaded here: https://www.insee.fr/fr/statistiques/fichier/2028155/int_eng_na.2008.xls

⁵⁹ In the econometric outputs, this variable is denoted as "SECTN17CONCORD."

⁶⁰ The composition of the chamber may change over time (usually, several years), depending on the considered judgment (opening, closing, etc.). As we have almost all the judgments for every bankruptcy case, we can work on the quasi-entire list of commercial judges, having handled the procedure as JDELIB.

⁶¹ Most of the bankrupt firms are supervised by one unique JC. However, in some cases, this judge is helped by a deputy JC. In that case, we consider the procedure to be supervised by two judges. Further, for the longest procedures, the judges working as the JC can be replaced by another JC (remember that the judges' mandate is time-limited). In that case, we consider the procedure to have been supervised by both judges over the years.

⁶² The judges' skills (specializations) make an initial exception to this aggregation method. Indeed, the number of skills is quite important (up to 17 codes), which make use of the dummies for a more relevant choice. Practically, instead of computing the average frequency of skills, we consider a panel of judges to be specialized in one field if at least one of them has this skill. A second exception relates to the dummies accounting for the judges' proximity with the firm's sector: these dummy variables equal one if at least one of the appointed judges has worked in the same sector during his/her professional career.

⁵⁶ The inclusion of economic growth controls for the disturbed times over the period (i.e., the subprime and Greek crises).

⁵⁷ For example, the judge's age is updated depending on the time when the procedure was triggered.

profile is computed for all appointed judges, regardless of their role in the procedure. Later in the paper, we specify their roles, either as JDELIB or as JC.

In this research, reorganization corresponds to the actual continuation of business. This excludes firms that have benefited from a plan that failed. In other words, contrary to other studies on reorganization that ignore the sequence of events after a plan is approved, we consider the entire bankruptcy path until termination.

Section 5.1 explores the determinants of the probability of reorganization. We examine to what extent the corresponding models are robust for the inclusion of judge variables, suggesting the presence of a CV effect. We use a stepwise approach (Broersen, 1986) to identify the judge variables that have the strongest predictive power (if any). Section 5.2 proposes two alternative regression methods as robustness checks to address: *i*) the appointment bias identified previously, and *ii*) the risk of quasi-complete separation stemming from a small sample size.

5.1. Testing for the CV effect

We explore here the determinants of the probability of successful reorganization (the alternative path being liquidation, either directly or after the attempt at reorganization). To test for the existence of the CV effect, we model such probability $P(reo|X_i)$ as a function of (X_i) , a vector composed of corporate variables and judge variables (for each debtor $[i]$ supervised by a specific panel of judges). This leads to Model 1. First, 14 corporate variables (denoted as “CorpVar” and indexed by $[j]$) account for the firm’s main features in the early stages of bankruptcy. Second, vector (X_i) includes our aggregated judge variables (denoted as “JudgeVar” and indexed by $[k]$). Clearly, the inclusion of all 47 judge variables in the same model would lead to serious multicollinearity issues and/or the risk of quasi-complete separation. To avoid this, one must select a subset of judge variables in our regressions. To avoid any apriorism in that process, we use a stepwise automatic selection⁶³ of the full set of judge variables (Broersen, 1986).⁶⁴ We consider three entry/stay thresholds⁶⁵ 0.10, 0.15, and 0.20. These values correspond to the range of thresholds suggested by In Lee and Koval (1997) for stepwise logistic regression. In a nutshell, Model 1 combines corporate variables (control variables) and stepwise-selected judge variables (test variables). This leads to Eq. 2. The absence of the CV effect would imply that the stepwise selection would keep none (or very few) of the judge variables. By contrast, their selection through the stepwise iterations would confirm the existence of such an effect, especially in terms of whether the resulting model is globally significant.

$$\ln \left(\frac{P(reoX_i)}{1 - P(reoX_i)} \right) = \beta_0 + \sum_{j=1}^{14} \beta_j CorpVar_{ji} + \sum_k \beta_k JudgeVar_{ki} \forall i \in [1; 230] \quad (2)$$

The parameters of Model 1 are estimated based on the entire sample (230 observations) and shown in column 1 of Table 6. The

number of stars near each estimate indicates the chi-square significance at the 10%, 5%, and 1% levels. Table A3 in the appendix displays the corresponding marginal effects (all models): On average, the influence—in absolute terms—of the judge variables is five times bigger than of the corporate variables (see Model 1, Table A3).

Table 6 (column 1) confirms negligible multicollinearity as the highest VIF statistic for all variables (2.59) is lower than 5. Regarding the goodness of fit, the Hosmer–Lemeshow test⁶⁶ does not reject the null hypothesis; the model is well-calibrated in that expected and observed event rates in population subgroups are similar.⁶⁷ Both the likelihood ratio and the score test reject the global null hypothesis, which indicates that Model 1 is significant as a whole. We also run regressions without any judge variables (i.e., with corporate variables only). For conciseness, the estimates are not displayed here, but are available upon request. The resulting “benchmark model” remains globally significant, but displays a lower likelihood ratio (96.6) and score test result (63.0) than in Model 1 (194.1 and 108.6, respectively). The adjusted R^2 is also lower without (0.52)—versus with (0.86)—judge variables.

We first discuss the influence of corporate variables (control variables). Model 1 supports a previous finding from the empirical literature on bankruptcy (Fisher and Martel, 1995): A firm’s coverage rate increases the likelihood of reorganization (at the 1% level). This is logical, as this ratio accounts for the firm’s health at the time of default. *ceteris paribus*, the more the assets in comparison to outstanding debts, the higher the chance of recovering from financial distress. Interestingly, the proportion of liquid assets among the total assets increases the probability of reorganization. This finding is somewhat surprising, since continuation mostly requires fixed assets to survive in the long run. We can argue, however, that the presence of cash is a prerequisite for implementing restructuring measures, and acts as a positive signal for stakeholders, especially financial partners. The positive influence of secured creditors (mostly banks at the 10% level) supports this latter argument. Further, claimholders do not vote on the outcomes of bankruptcy in France; this moderates liquidation bias, especially from secured creditors (Bergström et al., 2002; Blazy and Chopard, 2012). In such a context, the presence of secured claims should not undermine the chance of recovery. In contrast, their presence can be a major source of support for a plan’s success. The pro-continuation bias of French legislation—which favors employment (Blazy et al., 2011)—can also explain why the presence of preferential claims (including unpaid employees) increases the chance of reorganizing. Finally, accumulated experience (firm age) is a significant factor for successful reorganization (at the 5% level). The influence of other control variables is less clear: Only half of the causes of default are significant (i.e., the positive influence of “production,” the negative influence of “strategy-management” and the problems of “outlets”), while annual growth remains non-significant.

We now turn to the stepwise selection of judge variables (test variables). The presence of a significant CV effect is questionable if none/very few of them are selected by the stepwise iterations. We adopt a restrictive approach by setting moderate values for entry/stay thresholds for the stepwise selection, from 0.10 to 0.20 (In Lee and Koval, 1997). The estimates are presented in column 2 of Table 6. Regardless of the thresholds, 14 judge variables are

⁶³ The stepwise selection method sequentially adds the most significant variables in the model and removes those that do not meet the significance level anymore (the Wald chi-square test). At every step, the model inserts (removes) a new (judge) variable showing the highest (lowest) significance level.

⁶⁴ Of course, this selection process does not apply to our corporate variables that have the status of control variables. All of them are kept in all steps of the stepwise regressions. In SAS®, this requires an “include” option in the “logistic” procedure.

⁶⁵ In SAS®, the “logistic” procedure allows for this by setting the options *slentry* and *slstay* at the desired level.

⁶⁶ For this test, data are regrouped into 10 groups by sorting the predicted probabilities. Small p-values (lower than 10%) indicate significant chi-square statistics; this means that the model is not a good fit (Hosmer et al., 2013).

⁶⁷ The percentage of concordant classifications between predicted probabilities and observed responses is very high as well. However, we explore hereafter (Firth regressions) the risk of quasi-complete separation of data points that might boost this percentage. Most of our findings are preserved when accounting for this risk, and the percentage of concordant classifications declines from 99% (Logit) to 95% (Firth), which remains satisfactory.

Table 6
The Influence of Judges' Profiles on Successful Reorganization (230 firms).

Observations: N = 230 All liquidations (ref. categ.): N ₁ = 176 Successful reorganization (modelled): N ₂ = 54		Model 1 (Logit Stepwise 0.10 to 0.20)	Robustness checks	
		Estimates	Model 2 (IPTW) Estimates	Model 3 (Firth) Estimates
Corporate variables	Intercept	−43.895***	−60.908***	−12.709***
	Total assets (log)	0.128	0.384	0.487***
	Coverage rate	6.153***	9.016***	0.048
	% Preferential due claims	4.829**	6.960***	1.478
	% Secured due claims	4.129*	6.345***	1.172
	% of liquid assets: Inventory	7.108**	11.681***	1.387
	% of liquid assets: Cash	11.493***	17.444***	2.804**
	Firm age (log)	1.058**	1.660***	0.410*
	Cause of default (D): Production	5.314***	7.385***	1.208**
	Cause of default (D): Finance	0.835	0.567	0.240
	Cause of default (D): Strategy-Management	−4.517***	−6.888***	−0.882
	Cause of default (D): Accident	−0.094	−1.168	0.182
	Cause of default (D): Outlets	−2.820**	−4.085***	−0.561
	Cause of default (D): Environment	−0.431	−1.766*	−0.263
	Growth: change in GDP	0.114	0.283	−0.073
Judge variables (stepwise selection)	Specialization (D): Business growth	−8.654***	−12.828***	−2.312***
	Specialization (D): International affairs	−7.973***	−11.819***	−2.197***
	Specialization (D): Real estate	−5.660***	−8.570***	−1.015
	Specialization (D): Innovation	−3.524**	−5.289***	−0.455
	Average% of women (log)	18.345**	30.877***	5.832**
	Avg. % of diplomas from <i>grande écoles</i> (log)	11.935***	18.423***	3.362**
	Avg. % of diplomas from universities (log)	19.126***	23.937***	5.135**
	Avg. % of diplomas in Tech-Bio. (log)	−15.232***	−20.713***	−2.305
	Avg. number of job positions in a group (log)	−10.883***	−17.174***	−2.057*
	Avg. % of job positions as Öne's own manager(log)	−22.214***	−34.818***	−5.278***
	Avg. % of job positions as Associate(log)	35.535***	54.073***	10.22***
	Avg. % of job positions as CEO(log)	56.188***	82.221***	12.836***
	Avg. % of job positions as Executive(log)	19.189***	29.023***	1.985
	Avg. % of job positions as Judge-liquidator(log)	9.083*	14.773***	0.743
	Multicollinearity analysis: Maximum VIF (OLS)	2.59	2.59	2.59
	Model fit statistics (convergence: AIC)	114.65	141.42	145.02
	Global null hypothesis: Likelihood ratio	194.05***	414.65***	116.55***
	Global null hypothesis: Score test	108.56***	226.34***	102.54***
	Classification rate: Percentage concordant	99.1%	98.6%	95.2%
	Goodness of fit: Hosmer-Lemeshow test (Chi ²)	2.23	7.33	4.85
	R ² ■ Adjusted R ²	0.57 ■ 0.86	0.84 ■ 0.94	0.40 ■ 0.68

eventually chosen (this represents 30% of the entire set of judge variables, which is not marginal): 5 variables⁶⁸ deal with the judges' average profile, 3⁶⁹ relate to their education, and 6⁷⁰ account for their professional careers. These test variables are all significant and identical regardless of the entry/stay thresholds, which reflects stable results. This first finding is essential, as it validates the existence of the CV effect and the crucial role played by the judges' profiles in the chance of reorganizing.⁷¹ To some extent, this contradicts Aristotle's principle of justice, but confirms the pragmatic approach adopted by lay justice: a merchant justice that aims to fit the merchant's specificities. Contrary to professional judges, whom Rachlinski et al. (2006) consider to be generalists, commercial judges are specialists in their field of expertise. They are hence in a position to deliver customized judiciary services to litigants. A corollary finding deals with the judges' experience through learning-by-doing in the court, as studied by Iverson et al. (2019). Our regressions do not detect any significant influence of past experience within the court, proxied here by the average time lapse between the opening judgment and the judges' nomination. In our view, this outcome does not deny the importance of experience,

but suggests that the skills accumulated over a judge's entire professional career are more vital than the time spent as a commercial judge in the court.

A sign analysis of the estimates in Model 1 also provides interesting results. We first focus on the judges' most significant characteristics.

A noteworthy result relates to gender: Bankrupt firms have more of a chance of surviving with a higher proportion of female judges within the panels. This does not mean that female judges are biased toward reorganization *per se*, since the modelled probability deals with successful renegotiations only (i.e., economic recovery under *redressement judiciaire* or *sauvegarde*). Relating this finding with previous Law & Economics research on gender effects is challenging, given that very few such studies involve bankruptcy, and even fewer examine reorganization. However, several studies propose helpful arguments to interpret our empirical findings. Based on voluntarily filled out questionnaires, Rachlinski et al. (2006) confirm the existence of gender bias: The proclaimed amount of discharge is (nearly significantly) greater with female bankruptcy judges. We acknowledge that granting a discharge differs from facilitating reorganization. Notwithstanding, both decisions move in a similar direction, favoring the debtor's fate. Peresie (2004) hints that the gender effect is rooted in the composition of the panels of judges. That study deals with different types of litigation, since it connects to sexual harassment and gender discrimination affairs (the author states that female judges tend to be more pro-plaintiff in that regard). However, commercial courts are also organized

⁶⁸ This represents 28% of the set of variables dealing with the judges' general profiles.

⁶⁹ This represents 25% of the set of variables dealing with the judges' education.

⁷⁰ This represents 35% of the set of variables dealing with the judges' careers.

⁷¹ We do not aim to discuss the (financial/social) efficiency of such influence on reorganization.

in panels, such that we can refer to some arguments of [Peresie \(2004\)](#), especially those mentioning the collegial nature of decision-making within panels. The author first implies that the minority presence⁷² of female judges might move a majority toward more moderate compromises incorporating pro-plaintiff arguments. A second claim relates to the “logrolling effect,” signaling that male judges might align with female judges in the hope that they would follow their views in upcoming cases. Of course, we cannot validate these assertions directly in the present study, but we believe that these effects might play a role in any collegial decision, including those made within commercial/bankruptcy courts.

Another notable finding concerns the judges' fields of specialization: skills in four selected areas (international affairs, innovation, business growth, and real estate)⁷³ exert a negative influence on the chance of successfully reorganizing (skills in other realms are neutral because they are not selected by the stepwise procedure). From our perspective, this finding highlights the importance of an adequate match between the judges' profiles and the basic nature of corporate entities filing for bankruptcy. Judges specialized in “international affairs” are probably not in line with the usual business of bankrupt French companies. Indeed, our previous descriptive statistics have underlined the small size of these businesses, which are unlikely to become globalized, a finding confirmed by most studies conducted in France ([Altares© and Deloitte©, 2018](#)). In such a population, skills dealing with international affairs might not be of great help. Likewise, knowledge in “business growth” and “innovation” are crucial skills, but probably not in the context of restructuring in the aftermath of financial distress.⁷⁴ Overall, our data suggest that mismatched skills may undermine the chance of recovering, rather than being useful for reorganization. To some degree, this corroborates the observed gap between the mean profile of Parisian judges with the cases they supervise (see Section 3). Notwithstanding, things change considerably when turning to variables involving the judges' education and careers.

The stepwise selection procedure identifies three variables regarding the judges' education (average proportion of diplomas) 1) from *grandes écoles*, 2) from universities, and 3) in the technological and biological sciences). *Grandes écoles*⁷⁵ are selective institutions that offer the most valued diplomas in France. For their part, French universities deliver higher academic diplomas, up to the PhD level.⁷⁶ The significant (1% level) and positive influence of both variables implies that the judges' general human capital, accumulated in strong academic institutions, eventually boosts a firm's chance of successfully reorganizing. To some extent, this supports Ball and Kesan's (2010) view, such that the “quality” of judges stems from their human capital and goes beyond the sole question of “impartiality.” Nevertheless, nearly all variables accounting for the fields of studies are not stepwise-selected (except for the technological and biological sciences). Thus, the judges' academic

specializations appear quite neutral when tied to the likelihood of reorganization. This signals that the quality of education (acquired in reputed institutions) matters more than the content of the curriculum itself. At the extreme end, we find a negative influence of diplomas in technology and biology that correspond to very specialized, technical know-how, while most bankruptcy cases require versatility and adaptability, two major qualities that are commonly taught and acquired in top academic institutions.

Our regressions also isolate six variables for the specific human capital that the judges have developed during their professional lives. We discuss these variables hereafter. One of them deals with the log number of job positions in a corporate group. This variable significantly decreases the chance of reorganizing. We link this finding with previous arguments on the suspected mismatch of profiles between bankrupt firms and their judges. Again, working for large groups does not help much in overseeing the bankruptcy process of very small businesses.

The judges, having had the highest executive/managerial positions during their careers (as CEOs, associates, executives, etc.), exert a significant and positive influence on the chance for recovery. However, the judges, having been their own managers (*gérants*), have the opposite (negative) effect on the chance for successfully reorganizing. This finding is not surprising when referring to the literature dealing with owner-managers' behavioral bias. [Morrison \(2007\)](#) states that “continuation bias (...) arises from the control incumbent managers exercise over the bankruptcy process.” Even if [Morrison \(2007\)](#) refers to debtors-in-possession, one might expect type 1 errors⁷⁷ to also arise with judges being experienced as owner-managers. We suggest that the judges, having such a profile, might replicate the well-known continuation bias of owner-managers, even in their functions as commercial judges. *ceteris paribus*, the likelihood of a failed plan is expected to be higher under such circumstances. This debatable interpretation requires further investigation. This is one purpose of Section 6, which focuses on the arbitration between direct liquidation or attempts at reorganization. This next section provides an additional body of evidence supporting our interpretation. In contrast, the judges, being experienced as “liquidators” in other corporate entities, do not seem biased toward liquidation. On the contrary, their relative presence increases the chance of launching a successful plan. From our standpoint, practice of the liquidation process is of great help in discriminating between profitable projects (that should be saved) and unprofitable ones (that should be liquidated).

The next section investigates the robustness of these findings. We use the regressions of the inverse probability of treatment weights (IPTW; see [Rosenbaum and Rubin, 1983](#)) to address the appointment bias described in Section 4.2. We also run Firth logit regressions to account for the risk of quasi-complete separation that the sample might generate.

5.2. Robustness checks

One may wonder if confounding issues might alter the estimates shown in column 1 of [Table 6](#). Indeed, as discussed in Section 4.2, one third of the appointed judges are subject to appointment bias (denoted hereafter as “biased judges”). Hence, firms might not be entirely randomized regarding the panel of judges charged with supervising them. We assert here that appointment bias affects a panel of judges (denoted as a “biased panel”) when at least one of its members is a “biased judge.”⁷⁸

⁷² Like our sample of commercial judges, women are underrepresented (21%) in the sample of [Peresie \(2004\)](#).

⁷³ We do not extensively discuss the specialization in “real estate,” which is of lesser importance in our view. Indeed, nearly one third of the Parisian judges have such a specialty. Most of them have built personal businesses in real estate, apparently for reasons related to the steep increase in French real estate prices (especially in Paris) since the mid-2000s.

⁷⁴ This interpretation is confirmed when considering the negative influence of the average number of judges' positions held in groups. Again, the typical profile of bankrupt firms does not align with corporate groups.

⁷⁵ For example: *Ecole Polytechnique, Ecole des Mines de Paris, Ecole Centrale, Sciences Po Paris, HEC, ESSEC, ESCP Europe, EDHEC, and ENS Paris (Ulm)*.

⁷⁶ Over the period, the French *grandes écoles* could not deliver doctorates by themselves, which was the prerogative of universities. Of our sampled Parisian judges, 9% reached the PhD level (more than eight years of post-baccalaureate study). For comparison, 61% of them reached the master's level (five years of post-baccalaureate study).

⁷⁷ A type 1 error arises when reorganization is approved, whereas liquidation should have been chosen instead ([Fisher and Martel, 2004](#)).

⁷⁸ Under this assumption, 71% of panels are affected by appointment bias. Clearly, this restrictive view tends to overestimate the prevalence of appointment bias. A

Controlling for the average⁷⁹ characteristics of these panels can reduce confounding issues, but might not fully eradicate heterogeneity among the firms supervised by biased (versus unbiased) panels. IPTW regressions are commonly used⁸⁰ to address confounding issues (Rosenbaum and Rubin, 1983).

A decisive advantage of IPTW over alternative methods is that it does not eliminate observations from the sample. In the first step, the IPTW protocol⁸¹ requires computing the propensity scores of each bankrupt firm. Here, the propensity score (P_i) is the probability of being supervised by a biased panel of judges (resp. unbiased: $[1 - P_i]$) given the firm's initial traits (i.e., when the procedure begins). We use logistic regressions to calculate the propensity scores of each bankrupt firm.⁸² In the second step, those are inverted⁸³ to increase the weight of the firms that are "underrepresented" in the sample. Practically speaking, a firm supervised by a biased panel is given a weight of $1/P_i$, while a firm in the opposite situation is given a weight of $1/(1 - P_i)$. The purpose of IPTW transformation is to reinforce the sample's random structure. For instance, let us consider firms that are supervised by a biased panel of judges: The IPTW method *i*) reduces the weight of firms with *ex ante* features that make them more likely to be supervised by such a panel, and *ii*) increases the weight of firms that are *a priori* less likely to be supervised by a biased panel. Similar reweighting applies alternatively to firms that are supervised by unbiased panels. In a nutshell, rebalancing the sample with inverse propensity scores reduces the appointment bias and makes the observations comparable to each other, no matter the panel of judges that supervises them. A histogram comparison of the firms' propensity scores⁸⁴ shows that IPTW transformation increases the overlap between groups, which makes both subsamples much more balanced.

A logistic regression is estimated for the rebalanced observations. The resulting IPTW estimates are displayed in column 2 of Table 6 (*supra*). Generally speaking, our previous findings are preserved. The values of the estimated parameters are logically affected by IPTW transformation, but their signs and significances remain the same when compared to column 1, regardless of the explanatory variables used. The significance levels are even reinforced (all the judge variables are now significant at the 1% level).

The second robustness check handles the risk that the sample size and/or nature of some explanatory variables might generate quasi-complete separation of the data points (Albert and Anderson, 1984). Convergence issues emerge when the outcome is predicted perfectly, or when all observations have identical status for some combination of predictors (this may happen with interrelated predictors or when the outcome has extreme occurrences). Firth (1993) suggests the use of penalized likelihood methods

in such circumstances to address quasi-separation and to obtain more accurate estimates. The author proposes counterbalancing the usual log likelihood bias toward zero over iterations by adding to it one half of the logarithm of the information matrix.⁸⁵ Heinze and Ploner (2003) demonstrate that this adjustment leads to finite solutions, despite the presence of quasi-separation. Hopefully, the penalized likelihood approach does not destroy the significance of the parameter estimates. Indeed, as indicated by Zorn (2005), both estimates and their variances are generally shrunk toward zero after this correction, which maintains the relevance of the significance analysis.

Column 3 of Table 6 (*supra*) encompasses the Firth logistic estimates. The prior findings are mostly preserved. Regarding corporate variables (which act as control variables here), we still find a positive influence of firms' assets on the probability of reorganization. However, this influence is now significant in value, but not in percentage (i.e., the coverage rate). We confirm the importance of liquid assets, but this effect is now restricted to cash. The structure of claims is also not significant: Penalized estimates cancel out the influence of secured and preferential claims. The last control variables deal with firm age (still significant and logically positive) and the causes of default. We find that only causes related to production remain significant under Firth's approach. We now turn to our test variables, which account for the judges' features. The significant influence of 9 variables (out of the 14 stepwise-selected ones) remains unaltered by Firth's correction (4 of them have a lower critical probability, but remain significant up to the 5% level). Nevertheless, among fields of specialization, we lose the negative influence of "innovation,"⁸⁶ which attenuates (for this variable at least) the suspected mismatch between the firms and their judges. However, this argument remains valid for skills accounting for "business growth" and "innovation" (both still exert a negative influence on reorganization). Regarding the judges' academic backgrounds, the positive effect of diplomas from *grandes écoles* and universities remains valid, while the (unique) selected field of study ("tech-bio") has no impact on reorganization any longer. Last, for the group of variables accounting for the judges' careers, the Firth regressions confirm the contrasted influence of managerial positions (negative for one's own manager, positive for CEOs and associates), while the other selected positions are now either less significant (job positions in a group) or not significant at all (positions as executives or judge-liquidators). From a relative perspective, this confirms the primary importance of positions involving management and direction when it comes to supervising the bankruptcy path of distressed businesses. Overall, the Firth regressions appear more selective than the other logistic regressions, but move in the same direction and confirm the most remarkable findings.

This first set of regressions deals with the definitive outcome of bankruptcy (successful reorganization versus liquidation). In France, this outcome stems from two prior "filters" that are crucial in this process. First, for curative procedures,⁸⁷ the chance to reorganize initially depends on the judges' arbitration between direct liquidation and attempts at reorganization. This decision, made by the JDELIB, takes place during the opening judgment, when the time comes to trigger an observation period (or not).⁸⁸ We model

less restrictive approach would consider a panel of judges as biased when more than 50% of its members are biased judges. Here, the percentage of "biased panels" falls to 43%. We run IPTW regressions under this alternative assumption. The corresponding results are available upon request.

⁷⁹ Panels composed of several judges are synthesized by average prior to any regression. We thus work on aggregated panels.

⁸⁰ IPTW regressions are useful in medical research when the question arises of comparing groups of patients treated in different hospitals or with different medical services (Hogan and Lancaster, 2004).

⁸¹ For an SAS® implementation of IPTW methods, refer to Schreiber-Gregory and Moorhead (2016), SAS® support document n°11901–2016. URL: <https://mwsug.org/proceedings/2015/PH/MWSUG-2015-PH-07.pdf>

⁸² The explanatory variables are the firms' primary features at the beginning of the procedure: total assets (log), number of employees (log), due debts (log), coverage rate (%), firm age (log), proportion of preferential claims (% of total debts), proportion of secured claims (%), proportion of inventory (% of total assets), and proportion of cash (%).

⁸³ Lanehart et al. (2012) propose rescaling these weights. Notwithstanding, rescaling was not helpful for our data.

⁸⁴ The histograms presenting the distribution of propensity scores (computed for both groups, depending on the panel of judges) are available upon request.

⁸⁵ Refer to Miller and Miller (2011) for an SAS® application.

⁸⁶ Skills related to real estate are also no longer significant. However, as explained in previous footnotes, we do not regard this variable as a crucial one, considering the relatively high share of commercial judges involved in real estate, mostly for cyclical reasons.

⁸⁷ This excludes "sauvegarde" procedures, which always lead to an observation period.

⁸⁸ In this study, we do not focus on the ultimate choice made by judges during the closing judgment, when the time comes to validate the plan (versus liquidation or

this choice in Section 6. Second, when such a period is started, the judges play a major role in supervising the procedure until the closing ruling. This function is endorsed by JC, whose role consists (among other tasks) of allowing/rejecting the decisions made during the observation period. Clearly, the profile of judges appointed as JC is likely to influence the eventual chance to reorganize. We investigate this question in Section 7.

6. An initial filter for reorganization: Direct liquidation versus attempts at reorganization

To get reorganized, a debtor must be allowed to enter an observation period (see Section 2). In France, this period lasts up to 20 months. During the opening judgment, the appointed judges (JDELIB) arbitrate between a direct liquidation⁸⁹ (leading to *liquidation judiciaire*, denoted as “LJ”) and an attempt at reorganization (leading to *redressement judiciaire*, denoted as “RJ”). In the latter case, by opening an observation period—with the aim of preparing a plan—the judges take the risk of a type 1 error by extending business activity for several months without avoiding liquidation in the end.⁹⁰ By contrast, such a choice may be relevant for firms that end up reorganizing (i.e., successful plan).⁹¹ In this section, we question to what extent a judge’s CV shifts the probability of an attempt at reorganization (TRY) versus direct liquidation (LIQ-DIR). From a methodological perspective, this preliminary filtering mechanism involves a double restriction. First, preventive procedures such as *sauvegarde* must be excluded from the analysis, as they always lead to an observation period (i.e., direct liquidation is not an option under *sauvegarde*). Since our sample contains 61 *sauvegardes*, the number of observations falls to 169 firms. Second, the choice between “LIQ-DIR” and “TRY” takes place during the opening judgment. Hence, for each considered case, we must exclude the judges being appointed for the closing judgment only. This mechanically changes the way the panel of judges is aggregated; namely, the judge variables appearing in the regressions of this section relate to the sole judges appointed for the opening judgment.

We model $P(\text{try}|X_i)$, the probability that a firm is granted the opening of an observation period (i.e., an attempt at reorganization). The consequent Eq. 3 is derived from Eq. 2. The control variables are our 14 corporate variables (CorpVar), while the test variables (JudgeVar) are once again selected through stepwise iterations (the entry/stay thresholds remain the same as before).

$$\ln \left(\frac{P(\text{try}|X_i)}{1 - P(\text{try}|X_i)} \right) = \beta_0 + \sum_{j=1}^{14} \beta_j \text{CorpVar}_{ji} + \sum_k \beta_k \text{JudgeVar}_{ki} \forall i \in [1; 169] \quad (3)$$

Table 7 contains the estimates of three logistic regressions attached to Eq. 3 (Models 4a, 4b, and 4c). Columns 1, 2, and 3

sale). This choice was explored by Ayadi (2012) in France. Further, in most cases, such a choice is rather predictable: Blazy et al. (2011) showed that the judges’ final decision follows the administrators’ recommendation in more than 90% of cases. In addition, this would require having all closing judgments for every case (we have nearly all of them, but a few are still missing). We consider this an avenue for future research.

⁸⁹ Such a decision may generate a type 2 error each time a firm’s continuation value (the discounted value of future cash flows) exceeds its winding-up value (piecemeal liquidation of the firm’s assets).

⁹⁰ In that case, liquidation may happen either at the end of the observation period (if the plan is not approved by the judges) or several months/years afterward, before the normal termination of the (failed) plan.

⁹¹ This is under the assumption that the continuation value exceeds the liquidation value. In practice, the valuation of both is a challenge for bankruptcy practitioners.

correspond to the stepwise thresholds of 0.10, 0.15, and 0.20, respectively. All models are globally significant and have good classification rates, while the estimates are exempt from multicollinearity issues (VIF statistics are at most equal to 3.09).

The parameter estimates dealing with corporate variables corroborate that having more assets at the beginning of the procedure (either in terms of value or as a percentage of claims) increases one’s chance of accessing the observation period. Nevertheless, the liquid portion of these assets does not have such an influence, probably because the *a priori* chance to reorganize requires owning fixed assets as well. The structure of claims does not exert notable effects either,⁹² with one exception: Preferential claims increase the likelihood of an attempt at reorganization, but for Model 4c only (at the 5% significance level). Further, young firms have a greater chance of getting liquidated immediately. This finding might be surprising, as the decision to explore continuation should exclusively depend on a firm’s future cash flows, regardless of its age. However, one might consider that new businesses are more fragile than those benefiting from a well-established reputation and/or from a wider business network. Last, we find three causes of default being significant in all models: “production,” “accidents,” and the “environment.” The latter has a negative effect on the modeled probability, suggesting that commercial judges tend to opt for direct liquidation when firms’ (bad) environment undermines their chance of recovering from default.⁹³

We now turn to the aggregated judge variables. The number of variables selected by the stepwise iterations increases substantially with the entry/stay thresholds, from 5 (Model 4a) to 14 variables (Model 4c). A CV effect is thus confirmed once again (even for the lowest thresholds), but its magnitude is more sensitive to the ranges chosen for automatic selection.

Unlike Models 1–3—which advocate for alignment between the judges’ skills and the specificities of bankrupt firms—the decision to open an observation period henceforth depends chiefly on the judges’ sectorial knowledge. Precisely, Table 7 suggests that panels composed of judges who specialize in services and trade are more disposed to open an observation period, thus offering firms a chance to reorganize.⁹⁴ We relate this finding to our focus on the Parisian area. As pointed out by the Parisian CCI (*Chambre de Commerce et d’Industrie Paris Ile-de-France*), services and trade are relatively overrepresented in Paris. This is especially true when compared to industry and transport.⁹⁵ Our Parisian sample also reflects such an imbalance, with an average proportion of 73% firms belonging to services and trade (see Section 3). We claim that, when facing service/trade businesses, a “familiarity bias” emerges that might reinforce clemency favoring the continuation of business. Obviously, this hypothesis should not be validated without further experimental investigations. However, we can link this argument to previous works (Cao et al., 2009; Chew et al., 2012) that have identified familiarity bias in decision-making. In particular, Chaib-draa (1996) shows that, in multi-agent systems, coordination is easier to achieve in routine, familiar environments. Let us recall that French bankruptcy law prioritizes continuation over liquidation.

⁹² This is particularly true for secured claims; their presence is neutral regarding the choice to open an observation period. This confirms that, in France, the functioning of bankruptcy procedures is rather immune to any influence from banks, at least during the opening judgment.

⁹³ This does not mean that direct liquidations are pro-cyclical. Indeed, economic growth does not have any kind of impact on attempts at reorganization during the period.

⁹⁴ In the last column of Table 7, we find an inverse relationship for judges who specialize in industry and transport.

⁹⁵ As of 2012, service activities account for 76% of the added value in Paris and its suburbs. Retail and gross trade also create added value, but in a lower proportion (11%), while industry and transport (8%) and real estate (5%) rank last. URL: <http://www.cci-paris-idf.fr/etudes/organisation/crocis/fiches-sectorielles-crocis>

Table 7
Influence of the Judges' Profiles on Renegotiation Attempts (169 firms).

Observations: N = 169 Direct liquidation (ref. categ.): N ₁ = 83 Reorg. attempt (RJ only) (modelled): N ₂ = 86		Model 4a Logit Stepwise (thresh.: 0.10)	Model 4b Logit Stepwise (thresh.: 0.15)	Model 4c Logit Stepwise (thresh.: 0.20)
		<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
Corporate variables	Intercept	−10.461***	−16.796***	−25.05***
	Total assets (log)	0.743***	0.967***	1.510***
	Coverage rate	1.059	1.400**	1.633**
	% Preferential due claims	0.558	1.381	3.653**
	% Secured due claims	0.393	0.795	0.711
	% of liquid assets: Inventory	−0.923	−0.074	−0.933
	% of liquid assets: Cash	0.686	1.045	2.513
	Firm age (log)	1.681***	2.203***	2.533***
	Cause of default (D): Production	1.273*	1.695**	2.716**
	Cause of default (D): Finance	0.372	0.583	0.695
	Cause of default (D): Strategy-Management	0.547	0.291	0.630
	Cause of default (D): Accident	2.038***	2.546***	2.478**
	Cause of default (D): Outlets	0.748	1.086	1.717
	Cause of default (D): Environment	−1.623*	−2.585**	−4.182***
	Growth: change in GDP	−0.070	−0.125	−0.165
	Specialization (D): Competition, B2B	−	−	1.811**
	Specialization (D): Trade and services	1.198**	2.646***	4.125***
	Specialization (D): Industry and transports	−	−	−2.548*
	Specialization (D): Real estate business	−	−	−1.922
	Specialization (D): Public affairs, politics	−2.038***	−3.013***	−3.380***
	Avg. number of granted awards (log)	−	−	−2.777*
	Avg. % of diplomas in law (log)	4.914***	6.097***	9.610***
	Avg. % of diplomas in literature, language (log)	−	4.983	5.570
	Avg. number of job positions in a group (log)	−3.714***	−3.644***	−4.045***
	Avg. % of job positions as One's own manager(log)	−	3.384**	5.181**
Judge variables (stepwise selection)	Avg. % of job positions as CEO(log)	10.068***	16.061***	26.433***
	Avg. % of job positions as Executive(log)	−	−	4.243**
	Avg. % of job positions as NGO member(log)	−	4.224**	7.634***
	Avg. number of mandates (network) (log)	−	−1.847***	−2.861***
	Multicollinearity analysis: Maximum VIF (OLS)	2.51	2.67	3.09
	Model fit statistics (convergence: AIC)	143.54	138.13	136.90
	Global null hypothesis: Likelihood ratio	130.69***	144.10***	155.33***
	Global null hypothesis: Score test	94.19***	96.99***	98.86***
	Classification rate: Percentage concordant	94.0%	95.3%	96.5%
	Goodness of fit: Hosmer-Lemeshow test (Chi ²)	7.60	4.61	2.29
	R ² ■ Adjusted R ²	0.54 ■ 0.72	0.57 ■ 0.77	0.60 ■ 0.80

tion (Blazy et al., 2011). *ceteris paribus*, if we accept that i) most judges align their objectives with French legislators' view, and ii) coordination is facilitated in familiar situations, then a panel of Parisian judges facing a firm similar to the usual profile of Parisian businesses should agree more easily to facilitate its continuation by opening an observation period.⁹⁶

The other explanatory variables dealing with individual skills are more straightforward to interpret. Namely, attempts at reorganization have a greater chance of prevailing when judges have good knowledge of competition and B2B relations, whereas the opposite is true for profiles similar to public affairs and politics. This result reflects the usual inclination toward continuation among managers familiar with competition (Morrison, 2007). Such bias has little chance of being applicable to judges who specialize in politics, who might place greater weight on the collective consequences of lengthening the activity of distressed businesses.⁹⁷ At this stage of the analysis, the stepwise iterations do not select the

judge variables that account for gender. We previously revealed that the chance for recovery was higher for firms supervised by panels of judges with an increased share of women. Here, the presence of female judges seems neutral regarding the risk of type 1/type 2 errors arising from the decision to open an observation period (or not). Therefore, we expect the positive influence of gender to play a role afterward, once the observation period has started, which corresponds to the second filter (to be explored in the next section).

The stepwise iterations select two variables for the judges' education: i) diplomas in literature and language, and ii) diplomas in law. Only the latter significantly increase the likelihood that the appointed judges open an observation period during the opening judgment. This result appears logical because legal studies give a decisive advantage when ruling on the orientation of the French bankruptcy code that promotes continuation. In other words, judges with an initial background in legal issues are better able to understand the core spirit of the law, beyond the mere application of text. The subsequent risk is that more attempts at reorganization increase the occurrence of a type 1 error.

We now turn to the variables describing the judges' professional careers. Like Models 1–3, Models 4a/b/c show a negative influence of the judges' earlier positions in corporate groups. This corroborates the mismatch argument: The judges, having worked in large groups, might not care enough about the fate of distressed SMEs. Further, our estimates signal that the presence of judges who

⁹⁶ However, this kind of “familiarity” is not directly related to the judges' professional skills, which each of them developed throughout their careers, but rather to their Parisian environment. This may explain why the dummy variable “SECTN17CONCORD” (accounting for the sectorial proximity of a judge with a bankrupt firm) is not selected in the model. In other words, familiarity should be distinguished from proximity.

⁹⁷ Another variable has a negative influence in Model 4c (significant at the 10% level): the log number of awards received by judges during their careers. These awards correspond to national, ministerial, or military honorary distinctions such as *Légion d'Honneur* and *Ordre du Mérite*. Although interesting, this variable is more difficult to interpret. One might explain the negative influence of awards because of

prestige. Decorated judges benefit from an acknowledged social status that might encourage them to behave more severely, hence favoring liquidation.

have had jobs in management (as executives, CEOs, or their own managers)⁹⁸ increases the chance of an attempt at reorganization. Let us focus on the latter job position (i.e., one's own manager). Our prior estimates (see Models 1–3) indicate that the chance of successfully reorganizing is ultimately lower with judges who once ran their own businesses. We previously suggested that this might be due to the well-known pro-continuation bias of owner-managers, since they are more prone to take the risk of a type 1 error. This initial interpretation is validated here: The greater the proportion of owner-managers within the panel of judges, the higher the probability that this panel offers a chance of continuation by opening an observation period. Clearly, the results of Models 1–3 verify, in hindsight, that those openings generate type 1 errors and decrease the eventual chance for recovery.

We also find a significant influence of networking (i.e., judges' social capital). We have two proxies of social capital. First, the log number of LinkedIn® connections. Notwithstanding, this variable is never selected by the stepwise iterations, implying that digital reputation is of minor importance here. Second, the log number of mandates in other firms or with other managers (governance networks). Interestingly, this latter variable decreases the chance of opening an observation period in Models 4b and 4c. In other words, the broader the governance network within a panel of judges, the higher the chance of immediate liquidation. This result is not surprising when recalling that networking generally improves the quality of information (Burt, 2000; Inkpen and Tsang, 2005). Let us follow that avenue and relate networking to the judges' information on the Parisian business community. Our regressions signal that well-informed judges (thanks to a vast business network) are more inclined to liquidate, despite the pro-continuation orientation of French law. We interpret this behavior as a sign of pragmatism. Indeed, many European studies indicate that distressed firms generally have low chances of being saved after bankruptcy filing (Couwenberg, 2001; Armour et al., 2008). A recent study in France supports that finding (Blazy et al., 2018). Well-informed judges are likely to be aware of this phenomenon also characterizing the Parisian business community, which makes reorganization an outcome with genuinely low chances of success. *ceteris paribus*, this undermines the rationale for attempts at reorganization.

7. A second filter for reorganization: Supervision of the observation period

Once an observation period begins (which excludes *de facto* direct liquidations), a judge is appointed as a JC, whose role is to supervise the procedure until the closing judgment. The judges, being JC, have a much more operational role than JDELIB. As explained before, their decisions are crucial, especially regarding i) the restructuring measures that they allow during the observation period, ii) the preparation of the plan to be assessed at the end of the procedure. Usually, one sole JC supervises the observation period, sometimes with the help of a deputy JC. In this section, we ask to what extent the CVs of judges appointed as JC may alter the probability of a successful (versus failed) attempt at reorganization.⁹⁹ Both are denoted respectively as “TRY-REO” (successful) and “TRY-LIQ” (failed). The present analysis is confined to firms that have avoided direct liquidation (i.e., those for which the judges have tried to explore continuation via an observation period). From a methodological perspective, this focus changes the composition of our sample. First, the targeted judges are restricted to those appointed

as JC (JDELIB are not considered here). Thus, the judge variables appearing in the regressions of this section deal exclusively with JC and (if any) their deputies. Second, direct liquidations¹⁰⁰ are logically excluded from the analysis.¹⁰¹ Third, *sauvegardes*¹⁰² are part of the current focus, as they always go hand in hand with an observation period. Overall, the subsample of firms that enter an observation period is lowered to 147 observations. The resulting model (Model 5) is described by Eq. 4, similar to Eqs. 2 and 3 (same labels and identical entry/stay thresholds). However, Eq. 4 is limited to judges acting as JC. The corresponding variables are thus denoted as “JCVar.” In Eq. 4, $P(\text{try.reo}|X_i)$ is the probability that a firm, having benefited from an observation period, reorganizes successfully.

$$\ln \left(\frac{P(\text{try.reo}|X_i)}{1 - P(\text{try.reo}|X_i)} \right) = \beta_0 + \sum_{j=1}^{14} \beta_j \text{CorpVar}_{ji} + \sum_k \beta_k \text{JCVar}_{ki} \forall i \in [1; 147] \quad (4)$$

The estimates of Eq. 4 appear in Table 8. Model 5a corresponds to the 0.10 entry/stay thresholds, while Model 5b relates to the 0.15 and 0.20 thresholds (both values lead to identical estimates with the same set of selected variables).

Our control variables (i.e., corporate variables) produce results quite close to Model 1 (see Section 5.1). This is coherent, as both models deal with the likelihood of successful reorganization, despite a different focus on samples and judges. We thus limit our comments to the main changes found in Model 5b (see column 2 of Table 8) when compared to Model 1. The positive impact of the total assets on reorganization is confirmed, this time both in terms of value and in the percentage of claims. Firm age no longer has an influence. This finding is expected, since it seems logical that the question of age is not crucial once the judges have given the firm the opportunity to reorganize. Indeed, at this stage of the bankruptcy path, the chance to rescue a firm's activity depends on factors that affect its solvency and profitability more directly. For their part, the causes of default exert an influence close to Model 1, except for difficulties related to “finance” and “outlets,” which do not seem to impede reorganization. In contrast, the attempt to reorganize has a greater chance of failing when financial distress is attributable to a firm's (bad) environment (at the 5% significance level).¹⁰³

We now turn to the judge variables computed for JCVar in Eq. 4. The stepwise iterations once again establish the CV effect in our sample. Between 7 and 15 judge variables are selected, depending on the considered entry/stay thresholds. Column 2 of Table 8 shows that, among those variables, eight of them are significant at the 1% level and five at the 5% level.

We start by discussing the judges' characteristics. We speculate how they might influence bankruptcy proceedings during the observation period, which ultimately determines the chance of survival.

⁹⁸ Remember that the decision to immediately liquidate a firm is made during the opening judgment.

¹⁰¹ In practice, JC are also appointed, even in the absence of an observation period (i.e., under *liquidation judiciaire*), but their role is drastically less decisive since direct liquidation remains the sole bankruptcy outcome.

¹⁰² As explained before, *sauvegarde* is a collective bankruptcy procedure targeting prevention.

¹⁰³ The negative sign of economic growth in Model 5b (significant at the 10% level) may be surprising at first glance. However, this variable accounts for the firm's environment at the time it enters the procedure, while our regression applies to the period that takes place afterward. Clearly, in the short run at least, the firm cannot benefit from economic growth if the increase in GDP occurs when the firm's activity is frozen due to bankruptcy filing. The firm's activity might suffer even more if its (solvent) competitors take advantage of economic growth.

⁹⁸ However, only the position of CEO is always stepwise-selected, regardless of the chosen threshold.

⁹⁹ An “attempt” means that the JDELIB opted for an observation period during the opening judgment.

Table 8
Influence of the Judges' Profiles on Effective Renegotiation Attempts (147 firms).

	Observations: N = 147 Failed reorg. attempt → LIQ (ref. cat.): N1 = 93 Success. reorg. attempt (RJ + SA) (model.): N2 = 54	Model 5a Logit Stepwise (thresh.: 0.10) <i>Estimates</i>	Model 5b Logit Stepwise (thresh.: 0.15–0.20) <i>Estimates</i>
Corporate variables	Intercept	−3.538*	−35.569***
	Total assets (log)	0.276	1.756**
	Coverage rate	2.093***	7.332***
	% Preferential due claims	1.666	12.471**
	% Secured due claims	0.922	5.890**
	% of liquid assets: Inventory	4.485*	18.176**
	% of liquid assets: Cash	8.304***	33.827***
	Firm age (log)	0.538	0.085
	Cause of default (D): Production	1.146	3.489**
	Cause of default (D): Finance	2.214***	9.466***
	Cause of default (D): Strategy-Management	−3.366***	−15.046***
	Cause of default (D): Accident	−0.523	−1.661
	Cause of default (D): Outlets	0.940	5.483**
	Cause of default (D): Environment	−1.409	−4.969**
	Growth: change in GDP	−0.420**	−0.961*
	Specialization (D): Prevention	−2.450***	−7.756**
	Specialization (D): Real estate	–	−4.865*
	Specialization (D): Communication	3.910***	18.368***
	Average % of women (log)	–	15.302**
	Avg. % of diplomas from <i>école</i> (log)	−4.208**	−16.460***
Judge variables (stepwise selection)	Avg. % of diplomas from universities (log)	–	11.426**
	Avg. % of diplomas in economics and finance (log)	6.715***	19.573***
	Avg. no. of job positions in an administration (log)	–	11.845**
	Avg. number of employees of occupied firms (log)	−0.728***	−3.355***
	Sector proximity judge-corporate (NAF lev.17) (D)	–	−3.976**
	Avg. % of job positions as CEO(log)	–	35.420***
	Avg. % of job positions as Employee(log)	−8.137***	−64.310***
	Avg. number of positions as NGO member(log)	–	−25.412***
	Avg. number of positions as Expert(log)	5.531***	27.952***
	Avg. % of job positions as Judge-liquidator(log)	–	6.752
	Multicollinearity analysis: Maximum VIF (OLS)	2.23	3.94
	Model fit statistics (convergence: AIC)	123.92	108.39
	Global null hypothesis: Likelihood ratio	113.40***	144.92***
	Global null hypothesis: Score test	60.37***	64.41***
	Classification rate: Percentage concordant	94.8%	98.1%
	Goodness of fit: Hosmer-Lemeshow test (Chi- ²)	3.98	0.79
	R ² ■ Adjusted R ²	0.54 ■ 0.73	0.63 ■ 0.86

First, our regressions justify the importance of gender in that process: Model 5b (column 2) indicates that the probability of reorganizing increases with the proportion of female judges supervising the observation period. This finding is decisive in validating our previous interpretations. Indeed, Model 1 (*supra*) suggests that female judges have a positive influence on reorganization in general. As demonstrated by Model 4 (*supra*), this finding does not come from the fact that women may be more prompt in opening an observation period. Model 5 signals that female judges, when acting as JC, increase the chances of successfully reorganizing. Overall, the link between the three models implies that the impact of female judges mostly stems from the way they supervise the observation period.

Second, regarding the judges' skills, our regressions show that firms have a greater chance of survival when overseen by judges who specialize in communication. This finding reflects the crucial role played by JC during the procedure. Indeed, French law describes them as conductors of the bankruptcy process. During the observation period, the judges appointed as JC are at the crossroads of conflicting interests between various stakeholders (managers, employees, creditors, and practitioners). Having skills and knowledge in communication is key in that process, giving more chances to solve conflicts of interest. By contrast, judges who specialize in prevention have a reverse influence on reorganization. This is logical since the observation period is much more of a curative tool than a preventive one.

We now analyze the influence of the judges' education. Table 8 underscores the importance of recognized diplomas. Those granted by universities are still a major advantage in preparing a plan,

whereas diplomas from *écoles* (less reputed than *grandes écoles*) have a reverse (negative) impact on reorganization. Table 8 also indicates that an academic background in economics and finance is of great help in preparing a plan. Indeed, the observation period is the most technical phase in a bankruptcy procedure. During this stage, an audit identifies the origins of default and assesses the firm's continuation value. Several managerial and restructuring measures are also undertaken during this time (investment changes, wage reductions, dismissals, etc.). The claims must be checked and approved, while some collateralized assets may be reintegrated within the balance sheet. The firm must also pursue business with "new money" financing. Last, buyout offers may be submitted during the observation period. These measures are not undertaken by the JC directly, but initiated by the administrator and the creditors' representative. Nevertheless, each measure must be approved *ex ante* via *ordonnances*. Clearly, this role devoted to JC requires technical knowledge, especially in economics, finance, and management.

The job positions around direction and management appear, for the third time, as significant adjuvant factors for reorganization.¹⁰⁴ Model 5b implies this, as the probability of reorganizing is higher

¹⁰⁴ The judges, having worked for administrations, exert a similar positive influence on the chance of reorganizing. In France, public administrations offer substantial top-management positions to some of their staff (which is verified for our sampled judges). *ceteris paribus*, such experiences should contribute to more efficient supervision during the observation period.

with judges who have been CEOs (nevertheless, positions as associates or executives are not stepwise-selected here). Logically, being an expert is another major advantage that fits well with the technical questions that arise during the observation period. At the opposite end of the spectrum, more basic job experiences as employees tend to reduce the chance of reorganizing. We observe the same negative influence for judges with experience in NGOs. Model 4 (*supra*) signals that the presence of judges who have had job positions as members of NGOs boosts attempts at reorganization during the opening judgment. However, the more operational, succeeding phase does not benefit from such profiles, despite a supposed inclination toward continuation.

Last, Model 5b reveals an interesting negative influence of the dummy variable, accounting for the sectorial proximity between the judge(s) and the firm in question.¹⁰⁵ Two contradictory mechanisms come into play here. On the one hand, the “familiarity bias” mentioned previously (see Section 6) should boost continuation, as it seems easier to comprehend and oversee more familiar businesses (yet without anticipating the actual chances of successful continuation). On the other hand, “proximity bias” might have a reverse influence. Indeed, a judge supervising a firm that operates in the same sector as him/her might be subject to ineffective behavioral bias. For instance, (s)he might not have enough distance from the situation to make the best decisions during the observation period, (s)he might be excessively permissive with the debtor, and/or exhibit altered behavior due to cronyism. Our estimates validate the second set of arguments. Nevertheless, the exclusion of such variables in Model 5a indicates that great caution should be taken.

8. Conclusion

In this paper, we propose an original exploration of the link between the individual profiles of commercial judges with several bankruptcy cases they supervised between 2006 and 2012 (mainly closed in 2019). We show that there is a “CV effect” in that firms’ actual chance of reorganizing after bankruptcy filing varies with the composition of the panels of judges overseeing the procedure. We also established the existence of a limited (but not marginal) appointment bias, suggesting that bankruptcy cases are not fully randomized across judges. On the one hand, this contradicts the “natural judges” approach, which may undermine Aristotle’s principle of fair justice. On the other hand, attribution bias may improve efficiency from a more pragmatic perspective, especially for the most critical bankruptcies.

Several judge variables exert major influence on reorganization (versus liquidation). First, the gender of judges appears to be fully part of the CV effect; in other words, the proportion of women within the panels of judges increases a firm’s chance of successfully reorganizing via a plan. We also highlight the positive influence of judges’ managerial skills on reorganization. We find a similar impact for the highest academic profiles. Nevertheless, the observed mismatch between the commercial judges’ traits

(mostly oriented toward big businesses) and the average identity of bankrupt firms (closer to SMEs) can undermine a firm’s chance for recovery.

We have also refined our analysis by focusing on the two main filters for reorganization: *i*) the decision to open an observation period during the opening judgment, and *ii*) the way such a period is supervised by the judges acting as JC. Their operational role in the procedure appears to be vital for achieving a successful plan.

Our results should not fuel the debate between the pros and cons of lay justice. We do not consider our data to be helpful in addressing this old dispute. Further, our findings on reorganization are not complete enough to test for the efficiency of French bankruptcy procedures (to do this, one would need to compare continuation and liquidation values, which is not our purpose here). However, by modeling the probability of successful plans, our approach provides useful suggestions for improving the approach to reducing type 1 errors (i.e., the continuation of businesses that are wound up in the end). In sum, we believe that our findings can lead to normative recommendations to better align lay justice with *i*) litigants’ needs and *ii*) the orientation (e.g., pro-continuation versus pro-liquidation) of bankruptcy law. Despite the honorable performance of French procedures in Europe (Blazy et al., 2018), we advocate for an enhanced matching process between commercial judges and the cases they oversee. Practical measures such as training sessions, outreach programs on the specificities of SMEs, and a gender rebalance within the courts may be relevant avenues to follow.

Finally, our results from France can be extended to other mixed bankruptcy systems, even if the expected effects may be attenuated by the presence of professional judges among lay judges. The next step for research requires examining the actual influence of bankruptcy practitioners in that process, which would lead to a comprehensive outline of the corporate bankruptcy process.

Declaration of Competing Interest

The authors report no declarations of interest.

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Appendix A.

¹⁰⁵ This variable is denoted as “SECTN17CONCORD” in the regression outputs.

[Barcode]

LPAE
 LPAE
 Cédex
 120
 75001 Paris
 Tribunal de Commerce

TRIBUNAL DE COMMERCE DE PARIS

JUGEMENT PRONONCE LE [Date] 2012

12EME CHAMBRE (PROCEDURES COLLECTIVES)

REDESBEMENT JUDICIAIRE

SUR DECLARATION DE CESSATION DES PAIEMENTS

EURL [Nom], dont le siège social est [Adresse] Paris
 (RCS PARIS [Numéro]) représentée par Monsieur [Nom] Paris,
 Gérant présent assisté de Maître [Nom], Avocat (E1719), présent.
 - Madame [Nom] Représentant des salariés de la dite société,
 présente.
 - L'ordre National [Nom], non comparant.

FAITS ET PROCEDURE

L'entreprise débitrice a déposé le [Date] 2012 au greffe de ce tribunal une déclaration de cessation des paiements, aux fins d'une ouverture de redressement judiciaire.
 La EURL [Nom] est inscrite au Registre du Commerce et des Sociétés de Paris sous le numéro [Numéro] et exerce une activité [Activité], sous la forme de Société à responsabilité limitée à associé unique. Le siège social est situé au [Adresse] Paris. Elle est donc commerciale par sa forme et son objet.
 Le représentant légal de la société, les représentants des salariés, les représentants du comité d'entreprise ou à défaut les délégués du personnel, l'Ordre [Nom] ont été invités à se présenter en chambre du conseil le [Date] 2012.
 Madame [Nom] vice Procureur de la République a été entendue en ses observations, a requis l'ouverture d'une procédure de redressement judiciaire et une période d'observation plus courte.

SUR CT :

Il résulte des pièces produites et des informations recueillies en chambre du conseil que :
 - EURL [Nom] emploie 2 salariés.
 - son chiffre d'affaires annuel s'élève à 1 448 459,00 euros dont 450,096 euros exigibles.
 - le passif s'élève à 1 510 717,00 euros dont 10 348 euros disponibles.
 - l'actif s'élève à 1 406 844,00 euros.
 - le débiteur se présente et sollicite le redressement judiciaire.
 L'entreprise est manifestement dans l'impossibilité de faire face à son passif exigible avec son actif disponible, se trouve en conséquence en état de cessation des paiements, notamment du fait d'une indisponibilité passagère du dirigeant.
 Un redressement peut être envisagé pour les motifs suivants :
 Attendu que l'entreprise présente des objectifs de chiffre d'affaires raisonnables et que la trésorerie sur la période est positive.
 Attendu que cette [Nom] qui est décidé à la sauver de la liquidation judiciaire.
 En vue de continuation.
 Attendu que le dirigeant souhaite présenter à terme un plan de continuation.
 Attendu que les prévisions d'exploitation et de trésorerie établies par le dirigeant laissent penser qu'il ne devrait pas être créé de dettes nouvelles pendant la période d'observation. Les salariés sont favorables à la poursuite d'activité.
 Le dirigeant pense que les clients et les fournisseurs sont prêts à suivre l'entreprise.

Greffier du Tribunal de Commerce de Paris CC [Date] 2012 14:31:29 Page 1/3 (1)

Il conviendra dans ces conditions d'ouvrir une procédure de redressement judiciaire et dira y avoir lieu à nomination d'un commissaire-priseur judiciaire.

PAR CES MOTIFS :

Le Tribunal, après en avoir délibéré et après communication de la procédure au Ministère Public, Statuant par Jugement contradictoire en premier ressort,
 Ouvre une procédure de redressement judiciaire à l'égard de :
 EURL [Nom]
 Activité : [Activité]
 au [Adresse] Paris
 N° RCS PARIS : [Numéro]

Nomme Madame [Nom] juge-commissaire.
 Nomme Monsieur [Nom] juge-commissaire suppléant.
 Désigne la SCP [Nom] en la personne de Me [Nom] Paris, administrateur judiciaire lequel aura pour mission, outre les pouvoirs qui lui sont conférés par la loi d'assister le débiteur pour tous les actes relatifs à la gestion.
 Désigne la SELARL [Nom] Mandataires judiciaires pris en la personne de Maître [Nom] Paris, mandataire judiciaire.
 Désigne la SELARL [Nom] LA VARENNE SAINT HILAIRE, commissaire-priseur judiciaire, aux fins de réaliser l'inventaire et la prise prévue à l'article L.622-6 du code de commerce.
 Fixe le délai du dépôt de l'inventaire à trois semaines à compter du présent jugement.
 Fixe provisoirement la date de cessation des paiements au [Date] 2012 qui correspond à la date de la première inscription de privilège.
 Fixe à 4 mois la période d'observation et dit que l'affaire sera évoquée devant le Tribunal le [Date] 2012 à 10:00 en Chambre du Conseil 12ème Chambre - Section 02, afin de statuer sur le maintien de la période d'observation.
 Invite le comité d'entreprise ou à défaut les délégués du personnel ou les salariés s'il en existe à désigner au sein de l'entreprise un représentant dans les conditions prévues par les articles L.621-4 et L.621-6 du code de commerce à communiquer le nom et l'adresse de ce représentant au greffe.
 Fixe le délai de déclaration des créances imparti aux créanciers à deux mois à compter de la publication au Bulletin officiel des annonces civiles et commerciales du présent jugement.
 Fixe le délai de dépôt de la liste des créances par le mandataire à 12 mois à compter de la publication au Bulletin officiel des annonces civiles et commerciales du présent jugement.
 Dit que le présent jugement est exécutoire de plein droit.
 Dit que les dépenses du présent jugement liquidées à la somme de 93,24 euros TTC dont 15,06 euros de TVA, ainsi que les frais de publicité et de notification à venir seront portés en frais de redressement judiciaire.

Retenu à l'audience de la Chambre du Conseil du [Date] 2012 où siégeaient :
 Monsieur [Nom], Monsieur [Nom], Monsieur [Nom].
 Délibéré par les mêmes juges en prononcé à l'audience publique où siégeaient :
 Monsieur [Nom] juge président l'audience, Monsieur [Nom] juge, Monsieur [Nom] juge, assistés de Madame [Nom] greffier.
 La minute du jugement est signée par le Président du délibéré et par le Greffier.

Le Greffier Le Président

En l'absence du Président du délibéré empêché,
 le présent jugement est signé par M. [Nom]

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Picture A1. Anonymized content of a bankruptcy opening judgement (Paris, France).

Table A1
List of variables (corporates and judges).

Variable name	Signification (bankrupt firm)	Variable name	Signification (judge, 2/2)
Age	Firm age (in years)	Sp-PublPo	Dummy var. = 1 if judge specialized in: Public affairs and politics
LTD	Dummy var. = 1 if the firm has limited liability (SA, SARL. . .)	Sp-Culture	Dummy var. = 1 if judge specialized in: Culture, art, and fashion
Emp	Number of employees (last information before default)	Sp-Medical	Dummy var. = 1 if judge specialized in: Medicine and biology
Group	Dummy var. = 1 if the firm is part of a group	Sp-TeachExpert	Dummy var. = 1 if judge specialized in: Teaching, expertise, and consulting
Services	Dummy var. = 1 if sector is: Services	Sp-AgrNature	Dummy var. = 1 if judge specialized in: Agriculture, nature, and environment
Manuf	Dummy var. = 1 if sector is: Manufacturing	Sp-Communic	Dummy var. = 1 if judge specialized in: Communication
Trade	Dummy var. = 1 if sector is: Trade	Woman	Dummy var. = 1 if the judge is a woman
Assets	Total assets (market value when the procedure starts, thousand-€)	YearBirth	Year of birth
Due	Total net due claims (checked, net of bankruptcy costs, thousands-€)	NoAwards	Number of granted awards (<i>legion d'honneur, ordre du mérite</i> . . .)
Coverage	Coverage rate: total assets / total due claims (net of bankruptcy costs)	No. of Diplomas	Number of diplomas (beyond <i>baccalauréat</i>)
WInventory-Entry	% Inventory (out of total assets, market value when the proc. starts)	Dipl-Ecole	Dummy var. = 1 if diploma from <i>école</i> (IAE, commerce, ingénieur. . .)
WCash-Entry	% Cash (out of total assets, market value when the proc. starts)	Dipl-GrEcole	Dummy var. = 1 if diploma from <i>grande école</i> (Mines, Sc.Po, HEC. . .)
WOther-Entry	% Other balance sheet items (out of assets, market val., proc. starts)	Dipl-Univ	Dummy var. = 1 if diploma from university
WDueJunior	% of junior claims (out of total net due claims)	Dipl-Other	Dummy var. = 1 if diploma from other training institutions
WDuePreferential	% of preferential claims (employees + State) (out of net due claims)	Dipl-Highest.Year	Highest diploma (number of years beyond <i>baccalauréat</i>)
WDueSecured	% of secured claims (out of total net due claims)	Dipl-Tot.Cumul.Years	Cumulated number of years of study (beyond <i>baccalauréat</i>)
Cause-Production	Dummy var. = 1 if the direct cause of default relates to: Production	Dipl.Field-Law	Dummy var. = 1 if diploma's field is: Law
Cause-Finance	Dummy var. = 1 if the direct cause of default relates to: Finance	Dipl.Field-EcoFi	Dummy var. = 1 if diploma's field is: Economics and finance
Cause-StratManag	Dummy var. = 1 if the direct cause of default relates to: Strategy-manag.	Dipl.Field-Manag	Dummy var. = 1 if diploma's field is: Management (incl. marketing, account.)
Cause-Accident	Dummy var. = 1 if the direct cause of default relates to: Accident(s)	Dipl.Field-TechBio	Dummy var. = 1 if diploma's field is: Technology, ingeneering, and biology
Cause-Outlets	Dummy var. = 1 if the direct cause of default relates to: Outlets	Dipl.Field-HistPo	Dummy var. = 1 if diploma's field is: History and politics
Cause-Macro	Dummy var. = 1 if the direct cause of default relates to: Macro-envir.	Dipl.Field-Litt	Dummy var. = 1 if diploma's field is: Literature and language
Beta	Bankruptcy costs, practitioners' fees (paid, thousand-€)	No.ForeignDipl	Number of foreign diplomas (out of France)
DurPath	Overall bankruptcy duration (in years, including liq. process or plan)	Network-LinkedIn©	Size of network: number of LinkedIn© connections (500 max.)
NoALLJ	Number of appointed commercial judges (JDELIB + JC, per case)	Network-Mandates	Size of network: number of mandates in corporates / with other managers
Variable name	Signification (judge, 1/2)	No. of Jobs	Number of (most important) jobs throughout the professional life (5 max.)
Year-Elected	Year of appointment to court (Paris)	Job-OwnManager	Dummy var. = 1 if judge has been (during prof. life): One's own manager
PR-Chamber	Dummy var. = 1 if the judge heads a chamber (Paris)	Job-CEO	Dummy var. = 1 if judge has been (during prof. life): CEO
Sp-Dir.Manag	Dummy var. = 1 if judge specialized in: Direction and management	Job-Associate	Dummy var. = 1 if judge has been (during prof. life): Associate
Sp-Compet	Dummy var. = 1 if judge specialized in: Competition and B2B	Job-BoardMember	Dummy var. = 1 if judge has been (during prof. life): Board member
Sp-BusGrowth	Dummy var. = 1 if judge specialized in: Business growth (M&A, etc.)	Job-Executive	Dummy var. = 1 if judge has been (during prof. life): Executive
Sp-Internat	Dummy var. = 1 if judge specialized in: International affairs	Job-Employee	Dummy var. = 1 if judge has been (during prof. life): Employee
Sp-Prevent	Dummy var. = 1 if judge specialized in: Prevention and litigations	Job-NGO.Po	Dummy var. = 1 if judge has been (during prof. life): NGO member
Sp-Law-Business	Dummy var. = 1 if judge specialized in: Business law	Job-Expert	Dummy var. = 1 if judge has been (during prof. life): Expert (incl. consulting)
Sp-Law-R.Estate	Dummy var. = 1 if judge specialized in: Real estate law	Job-Liq.Judge	Dummy var. = 1 if judge has been (prof. life): Judge, arbitrator, liquidator
Sp-Law-Other	Dummy var. = 1 if judge specialized in: Law (other fields, incl. tax law)	Job-No.ForeignLoc	Number of jobs in a foreign location (out of France)
Sp-AccFinance	Dummy var. = 1 if judge specialized in: Accounting and finance	Job-No.ForeignFirm	Number of jobs in a foreign company (except French ones)
Sp-TradeServ	Dummy var. = 1 if judge specialized in: Trade and services	Job-No.Group	Number of jobs in a group
Sp-Industry	Dummy var. = 1 if judge specialized in: Industry and transports	Job-No.Adm	Number of jobs in an administration (or organization)
Sp-Restate	Dummy var. = 1 if judge specialized in: Real estate business	Job-No.BankruptFirms	Number of jobs in a company that went bankrupt
Sp-Innov	Dummy var. = 1 if judge specialized in: Innovation and research	Job-MeanEmployees	Average number of employees in the firms where the judge has worked

Table A2

Data sources (CVs).

Type of information	Source	Website (URL)
Judges' public personal websites	Varies	Varies
Biographical websites	LesBiographies.com	https://www.lesbiographies.com
	Who's Who (France)	https://www.whoswho.fr
Business/employment-oriented online services	LinkedIn®	https://www.linkedin.com
	Viadeo®	https://viadeo.journaldunet.com
Professional organizations	Association d'arbitres D'Expérience Consulaire(ADEC)	http://www.adecarbitrage.fr
	Conseil National des Administrateurs Judiciaires et des Mandataires Judiciaires (CNAJMJ)	https://www.cnajmj.fr/fr
Alumni directories	Universities, Grandes écoles, écoles (etc.)	Varies (ex.): https://sciencespo-alumni.fr ■ https://www.hecalumni.fr ■ https://www.essecalumni.com ■ https://alumni.edhec.edu/fr ■ https://www.escpalumni.org ■ https://www.mines-paris.org/fr ■ https://www.dauphine-alumni.org ■ etc.
Online info. services on companies/managers	Societe.com	https://www.societe.com
	Dirigeant.com	https://dirigeant.societe.com
	Verif.com	https://www.verif.com
French registry of companies	Registre du commerce et des sociétés, Infogreffe®	https://www.infogreffe.fr
Bulletin of civil and commercial announcements	Bulletin officiel des annonces civiles et commerciales, BODACC	https://www.bodacc.fr
Specialized and local press	Les Echos®, La Tribune®, Reuters® (France), other specialized or local journals (etc.)	Varies (ex.): https://www.lesechos.fr ■ https://www.latribune.fr ■ https://fr.reuters.com ■ https://www.lsa-conso.fr ■ etc.
Materials broadcasted by the firms	Corporates' annual reports, About Us pages (etc.)	Varies

Table A3

Marginal effects (all models).

Observations (models 1–3): N = 230 Observations (model 4c): N = 169 Observations (model 5b): N = 147		Model 1 (Logit Stepwise)	Model 2 (IPTW)	Model 3 (Firth)	Model 4c (Logit Stepwise)	Model 5b (Logit Stepwise)
		<i>Marginal effects*</i>				
Corporate variables (all models)	Total assets (log)	0.005	0.011	0.047	0.111	0.095
	Coverage rate	0.244	0.253	0.005	0.120	0.397
	% Preferential due claims	0.191	0.195	0.142	0.269	0.676
	% Secured due claims	0.164	0.178	0.112	0.052	0.319
	% of liquid assets: Inventory	0.282	0.327	0.133	−0.069	0.985
	% of liquid assets: Cash	0.455	0.489	0.269	0.185	1.832
	Firm age (log)	0.042	0.047	0.039	0.186	0.005
	Cause of default (D): Production	0.211 ■ 0.757	0.207 ■ 0.090	0.116 ■ 0.133	0.200 ■ 0.532	0.189 ■ 0.098
	Cause of default (D): Finance	0.033 ■ 0.042	0.016 ■ 0.000	0.023 ■ 0.020	0.051 ■ 0.172	0.513 ■ 0.525
	Cause of default (D): Strategy-Management	−0.179 ■ −0.137	−0.193 ■ −0.002	−0.084 ■ −0.061	0.046 ■ 0.155	−0.815 ■ −0.999
	Cause of default (D): Accident	−0.004 ■ −0.004	−0.033 ■ −0.000	0.017 ■ 0.015	0.182 ■ 0.535	−0.090 ■ −0.105
	Cause of default (D): Outlets	−0.112 ■ −0.195	−0.115 ■ −0.003	−0.054 ■ −0.048	0.126 ■ 0.401	0.297 ■ 0.531
	Cause of default (D): Environment	−0.017 ■ −0.019	−0.050 ■ −0.001	−0.025 ■ −0.021	−0.308 ■ −0.777	−0.269 ■ −0.384
	Growth: change in GDP	0.005	0.008	−0.007	−0.012	−0.052
Judge variables: ENTIRE PROCEDURE	Specialization (D): Business growth	−0.343 ■ −0.677	−0.360 ■ −0.067	−0.221 ■ −0.185	–	–
	Specialization (D): International affairs	−0.316 ■ −0.481	−0.331 ■ −0.023	−0.210 ■ −0.156	–	–
	Specialization (D): Real estate	−0.224 ■ −0.840	−0.240 ■ −0.265	−0.097 ■ −0.111	–	–
	Specialization (D): Innovation	−0.140 ■ −0.325	−0.148 ■ −0.005	−0.044 ■ −0.039	–	–
	Average % of women (log)	0.727	0.866	0.559	–	–
	Avg. % of diplomas from <i>grande école</i> (log)	0.473	0.516	0.322	–	–
	Avg. % of diplomas from universities (log)	0.758	0.671	0.492	–	–
	Avg. % of diplomas in Tech-Bio. (log)	−0.603	−0.581	−0.221	–	–
	Avg. number of job positions in a group (log)	−0.431	−0.481	−0.197	–	–
	Avg. % of job positions as One's own manager (log)	−0.880	−0.976	−0.506	–	–
	Avg. % of job positions as Associate (log)	1.408	1.516	0.979	–	–
	Avg. % of job positions as CEO (log)	2.226	2.305	1.230	–	–
	Avg. % of job positions as Executive (log)	0.760	0.814	0.190	–	–
	Avg. % of job positions as Judge-liquidator (log)	0.360	0.414	0.071	–	–

Table A3 (Continued)

Observations (models 1–3): N = 230 Observations (model 4c): N = 169 Observations (model 5b): N = 147		Model 1 (Logit Stepwise)	Model 2 (IPTW)	Model 3 (Firth)	Model 4c (Logit Stepwise)	Model 5b (Logit Stepwise)
		Marginal effects [#]				
Judge variables: OPENING JUDGEMENT	Specialization (D): Competition, B2B	–	–	–	0.133 ■ 0.407	–
	Specialization (D): Trade and services	–	–	–	0.303 ■ 0.749	–
	Specialization (D): Industry and transports	–	–	–	–0.187 ■ –0.518	–
	Specialization (D): Real estate business	–	–	–	–0.141 ■ –0.401	–
	Specialization (D): Public affairs, politics	–	–	–	–0.249 ■ –0.687	–
	Avg. number of granted awards (log)	–	–	–	–0.204	–
	Avg. % of diplomas in law (log)	–	–	–	0.707	–
	Avg. % of diplomas in literature, language (log)	–	–	–	0.410	–
	Avg. number of job positions in a group (log)	–	–	–	–0.297	–
	Avg. % of job positions as One's own manager (log)	–	–	–	0.381	–
	Avg. % of job positions as CEO (log)	–	–	–	1.944	–
	Avg. % of job positions as Executive (log)	–	–	–	0.312	–
	Avg. % of job positions as NGO member (log)	–	–	–	0.561	–
Judge variables: OBSERVATION PERIOD	Avg. number of mandates (network) (log)	–	–	–	–0.210	–
	Specialization (D): Prevention	–	–	–	–	–0.420 ■ –0.668
	Specialization (D): Real estate	–	–	–	–	–0.264 ■ –0.266
	Specialization (D): Communication	–	–	–	–	0.995 ■ 0.905
	Average % of women (log)	–	–	–	–	0.829
	Avg. % of diplomas from école (log)	–	–	–	–	–0.892
	Avg. % of diplomas from universities (log)	–	–	–	–	0.619
	Avg. % of diplomas in economics and finance (log)	–	–	–	–	1.060
	Avg. no. of job positions in an administration (log)	–	–	–	–	0.642
	Avg. number of employees of occupied firms (log)	–	–	–	–	–0.182
	Sector proximity judge-corporate (NAF lev.17) (D)	–	–	–	–	–0.215 ■ –0.239
	Avg. % of job positions as CEO (log)	–	–	–	–	1.919
	Avg. % of job positions as Employee (log)	–	–	–	–	–3.484
	Avg. number of positions as NGO member (log)	–	–	–	–	–1.377
	Avg. number of positions as Expert (log)	–	–	–	–	1.514
	Avg. % of job positions as Judge-liquidator (log)	–	–	–	–	0.366

(#) For continuous variables, the figures are average marginal effects (AME). For dummy variables (see symbol 'D' nearby their names), these are of two types. The figures on the left correspond to partial derivatives (AME). The figures on the right are differences in the explained probabilities (i.e. when the considered dummy changes from 0 to 1). The latter figures are marginal effects at the means (MEM).

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