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Régis Blazy
Bertrand Chopard
Eric Langlais
Ydriss Ziane



UMR 7235

Université de Paris Ouest Nanterre La Défense
(bâtiments T et G)
200, Avenue de la République
92001 NANTERRE CEDEX

Tél et Fax : 33.(0)1.40.97.59.07
Email : nasam.zaroualete@u-paris10.fr

université
Paris | Ouest

Nanterre La Défense

Personal Bankruptcy Law, Fresh Starts, and Judicial Practice

Régis Blazy, Bertrand Chopard, Eric Langlais, Ydriss Ziane

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Abstract: We explore the ways French judges respond to the possibility of discharging personal debts in exchange for liquidation of debtors' assets. We present empirical results on the determinants of judicial selection between debtors whose debts are wiped out and those who have to reimburse them. We find that French judges tend to disqualify debtors with multiple creditors from debt discharge, and are sensitive to regional labor market conditions. These empirical results help us understand better how French personal bankruptcy laws perform compared to other national systems. Finally, our results serve to fill the gap between bankruptcy rules and judicial practice.

Keywords: *Personal bankruptcy, over-indebtedness.*

JEL: G33, K29

Régis Blazy

Affiliation : LARGE, Université de Strasbourg and EM Stasbourg Business School
Address : PEGE
Avenue de la forêt noire
67000 Strasbourg, France
Mail : regis.blazy@unistra.fr

Bertrand Chopard, *corresponding author*

Affiliation: BETA (CNRS, Université de Strasbourg and Nancy Université)
Address : Faculté de droit, sciences économiques et gestion
13, place Carnot,
54035 Nancy Cedex, France
Mail : Bertrand.Chopard@univ-nancy2.fr

Eric Langlais

Affiliation : EconomiX (CNRS, Université Paris Ouest Nanterre la Défense)
Address : Université Paris Ouest Nanterre la Défense
200, avenue de la république
92001 Nanterre, France
Mail : elanglais@u-paris10.fr

Ydriss Ziane

Affiliation : GREGOR (Université Paris 1 Panthéon Sorbonne)
Address : IAE de Paris
21, rue Broca
75005 Paris, France
Mail : ziane.iae@univ-paris1.fr

1. INTRODUCTION

France, like other European countries, faces a recent and substantial increase of personal bankruptcy filings. The annual number of filing records increased from 188,485 in 2008 to 226,582 in 2009 (BANQUE DE FRANCE [2008]). Several factors are thought to be responsible for this steady rise: the development of credit debt and revolving debt with high interest; an increase in major expenses, such as domestic rental and personal costs (especially following divorce or separation); and significant job losses. When such an adverse event occurs, some people are unable to repay the debts (which are often revolving debts) they have accumulated with their creditors. In this kind of financial context, it is necessary to understand (and test) whether personal bankruptcy law may have an impact on debtors' and creditors' incentives before the events that provoke financial distress. For instance, let's assume that the prime objective of bankruptcy law is to protect creditors' interests against debtors': the rules stress that debtors must repay their debts with their future incomes and assets. This would be a means of reducing the risk of over-indebtedness, as it may discourage consumers from over-borrowing, with loans issued against borrowers' rational anticipation of the future evolution of their income. Alternatively, we might assume that a stronger level of creditor protection against bankruptcy filing might give them an incentive to offer more credit, as credit becomes more profitable. So, a solution to the problem of growing personal debt might be to penalize lenders who take advantage of consumers' tendency to over-borrow and their ignorance of credit conditions and prices.

The current focus of empirical studies in the area of personal bankruptcy law is mainly on (1) whether the design of U.S. personal bankruptcy law (especially the difference in bankruptcy exemptions across U.S. states) plays a role in the evolution of consumers' bankruptcy filings; and (2) whether and how U.S. bankruptcy law may affect the supply of credit.

In the first strand of research, FAY, HURST, AND WHITE [2002] explore whether, before filing for bankruptcy, debtors would compare their financial benefit from filing under Chapter 13 (a debt reschedule plan) to their financial benefit from filing under Chapter 7 (a liquidation). As American debtors can freely choose between these two procedures, they would *a priori* file for the one that gives them the higher financial benefit. In fact, FAY, HURST, AND WHITE give some empirical evidence that such strategic behavior has an impact on the number of bankruptcy filings, all else being equal. For instance, the more debtors' assets are exempted from liquidation under Chapter 7, the more financially distressed debtors are motivated to file for such a bankruptcy procedure.¹ More interestingly, the authors also find little support for the assumption that debtors would rather file for

¹ More extremely, FAN AND WHITE [2003], WANG AND WHITE [2000], WHITE [1998a, 1998b, 2006] look at the risk of an opportunistic use of U.S. personal bankruptcy law. For instance, anticipating lenient treatment of their financial distress, some debtors might divert their assets prior to the bankruptcy filing in order to obtain partial debt clearance without any liquidation of their assets. Debtors could also accumulate credit cards by anticipating that their future financial distress would force creditors to accept some debt discharge. Furthermore, some borrowers might raise new, unsecured credit in order to reimburse other secured debts that would have to be repaid whatever the bankruptcy process initiated. Finally, some American debtors might choose their state of residence according its personal bankruptcy rules.

bankruptcy when an adverse event occurs (*i.e.* the non-strategic view of bankruptcy law). This is quite surprising because we know that over-borrowing results mainly from an exogenous shock (such as loss of job, illness, or divorce—see GAN AND SABARWAL [2005]), the misuse of credit debt, or debtors' inability to manage their budget (LUSARDI AND TUFANO, 2008). Further, in the time series, DICK AND LEHNERT [2010] shed light on the fact that evolution in bankruptcy exemptions is too small to explain the rise in U.S. bankruptcy filings. Rather than the design of personal bankruptcy law, DICK AND LEHNERT explore the extent to which consumers file in response not only to adverse events but also to changes in lending practices (credit card, technology to estimate credit risk, or commercial practices) encouraged by bank deregulation.

The second strand of empirical research explores the links between U.S. personal bankruptcy and the credit market. GROPP, SCHOLZ AND WHITE [1997] demonstrate that American debtors, who live in states with the higher exemption levels on assets and future incomes (*i.e.* the most pro-debtor states), have logically more difficulty accessing credit than others and pay a higher price for it. Now, if we focus only on debtors who have been quick to file for bankruptcy in the past, there are no clear-cut empirical results. On the one hand, MUSTO (2004), FILER AND FISHER [2005, 2007] provide some evidence that American debtors who file for bankruptcy suffer from credit rationing later. On the other hand, COHEN-COLE, DUYGAN-BUMP AND MONTORIOL-GARRIGA [2009] use U.S. micro-econometric data to demonstrate that the most reckless American borrowers, who benefited from a debt reschedule payment after their bankruptcy filing, would have quickly access to credit afterward.

It is more complex to address these questions in European countries, and more particularly to produce cross-country empirical analysis, because each European country has developed its own policy toward over-indebtedness. One solution to the problem of heterogeneity among European countries might be to evaluate the specific laws for each individual country. Here, there is a risk of misrepresenting some laws, in particular the gap between the rules and practices of bankruptcy courts. For instance, when the World Bank ran cross-country comparisons in the area of corporate bankruptcy law, its legal index (based on a set of four variables) did not cover all the legal possibilities of resolving firms' financial distress, in particular the ways that bankruptcy courts worked. Further, to our knowledge, there are neither legal indicators nor specific cross-country comparisons that could serve to test the expected effects of personal bankruptcy law on credit markets or bankruptcy filings in Europe. Only JAPPELLI, PAGANO, AND DI MAGGIO [2010] try to link empirically household default rates to some institutional factors in a sample of European countries (by using World Bank indicators on the extent of credit information sharing between lenders, and judicial efficiency). WHITE [2007] initiates a more precise comparison between the U.S., Canada, England, France, and Germany. Her work relies on seven variables: the amount of debt discharged, the level of asset exemption, the level of income exemption, the fraction of income above the exemption that debtors must use to repay their debts, the length of the repayment obligation, bankruptcy costs, and the

bankruptcy punishment (for example, debtors' inscription on default records that could limit their future access to credit).² According to these variables, a personal bankruptcy law is said to favor creditors if (1) the amount of debt discharged is lower, (2) the exemption levels on debtors' future incomes (or assets) are lower, (3) debtors' penalties are higher, (4) the length of the repayment period is shorter, or (5) fewer assets are exempted from liquidation or debt collection.

Following WHITE [2007], in comparison to the U.S., Canada, U.K., and Germany, French bankruptcy procedure seems to be the most pro-creditor in this set of countries. Indeed, the average duration of repayment plans is quite long, approximately eight years (BANQUE DE FRANCE [2008]). The levels of exemption on assets/future incomes are very low. This means that bankrupts will have to adjust their net income to a minimal poverty-level standard of living during the debt reschedule plan. Moreover, before filing for bankruptcy, individuals will have to sell their assets (if they have any) if they want to benefit from a bankruptcy procedure. However, this approach to personal bankruptcy law is severely limited. For instance, French judges can impose some delays in payment or reduction in interest charges on creditors (the latter possibility is not included in the index indicated above). This applies when financial creditors have made loans to debtors who were already over-indebted, or when they did not sufficiently verify that debtors were able to reimburse their loan. Further, as WHITE [2007] noted, some bankrupts may file for a liquidation procedure, or "*procédure de rétablissement personnel*" (PRP), in order to obtain a full debt discharge in exchange for the liquidation of their non-exempt assets (similar to the U.S. liquidation process). Here, the crucial point is what determines judges' decisions to discharge (or not) personal debts, that is, judges' practices. So, our paper may also be linked to the behavioral law and economics literature, through our common focus on how judges apply the law. In the area of personal bankruptcy law, RACHLINSKI, GUTHRIE, AND WIRSTRICH [2007] explore whether there is room for emotional influence in judges' decision making in the U.S. They show that debtors' apologies (for excessive accumulation of debts) has little effect on judges' choices whether or not to discharge debts, even after controlling for judges' characteristics (gender, judicial experience, and political affiliation). Instead, they give some evidence that Republican judges are more likely than Democrat judges to make decisions in favor of creditors.

An economic analysis of personal bankruptcy law reveals that there are two procedures for resolving financial distress. The first aims at elaborating a restructuring debt schedule plan through debt renegotiation between the debtor and the main creditors under the supervision of a judge or an administrative authority. This bankruptcy process generally orders an automatic stay on creditors' pursuits in order to protect the debtors. Nevertheless, some creditors (in particular, secured creditors) are far from powerless when individual debtors cannot meet their debt obligations. In France, they can

² We could add other characteristics. For example, we could test whether or not consumers choose freely between the various existing bankruptcy procedures. We could also analyze the conditions under which secured creditors can collect their claims even after the bankruptcy filing, especially their order in the absolute priority rule in the case of liquidation.

use specific procedures to repossess or foreclose on some assets (such as homes or cars), debit money from debtors' wages, stop debtors' bank accounts, or impose penalties for late credit repayment. Failing that, if the debt renegotiation succeeds, debtors usually have to reimburse their debt (whole or in part) from their future income within a fixed period. Generally, the law decrees that part of future earnings is exempt from debt reimbursement, depending on family size, location, and so on. In some cases (for example, in France), a judge can also authorize delays in debt repayment when creditors do not reduce their claims sufficiently, or when lenders paid insufficient attention to individual borrowers' ability to repay loans. The second bankruptcy procedure allows for personal debts to be discharged under the supervision of a judge. This alternative procedure is intended to discharge debts and liquidate debtors' non-exempt assets—in other words, it requires bankrupts to repay from the proceeds of liquidation. However, for bankrupts to benefit from this fresh start, a judge has first to gauge whether or not they have a chance of repaying their debts in the future. If they do, the judge may order a new schedule of repayment of creditors, or ask for debtors and creditors to renegotiate a debt reschedule plan.

As WHITE [2007] noted, it is generally agreed that France is clearly pro-creditor, in the sense that bankruptcy laws tends to protect creditors' interests rather than debtors'. Although France introduced the possibility of discharging debts in exchange for liquidation of non-exempt assets in 2003, it is debatable whether this modification really does work in favor of borrowers, because debt discharge ultimately depends a judge's ruling on a case. In this paper we explore how French judges decide whether or not debts are discharged and non-exempt assets are liquidated through PRP. To do so, we examine how this move toward a more pro-debtor bankruptcy system is implemented and whether it constitutes a means of promoting a fresh start for bankrupts. We argue that French bankruptcy judges face a particular dilemma, having implicitly to arbitrate between the right of creditors to recover their claims and the right of debtors to ask to benefit from a release from debt. Based on an empirical study of 1069 French bankruptcy filings in the period 2004–5, we report three observable results. First, we describe how judges allow debt discharge according to the legal criteria of *bona fide* (“*bonne foi*”) and over-indebtedness (“*situation irrémédiablement compromise*”). Second, we find evidence that judges not only discharge debts for the most financially distressed, but they also block debt release for debtors who have over-borrowed or failed to balance their budget. Third, we also consider, from the perspective of behavioral law and economics, how bankruptcy judges are influenced by labor market conditions. More precisely, we report evidence that judges' decisions are significantly influenced by the level of unemployment rate in their locality.

The rest of this paper is organized as follows. In section 2 we report the basic features of French bankruptcy law; section 3 presents our data and regression results; section 4 concludes.

2. FRENCH PERSONAL BANKRUPTCY LAW: AN OVERVIEW

Before benefiting (or otherwise) from a debt discharge, financially distressed debtors generally have to file for bankruptcy before an administrative authority, the “*commission de surendettement*” (CSUR). This initial bankruptcy filing is automatically associated with the debtor’s record in a national file of debtors who fail to reimburse their debts. The CSUR will either accept or reject the debtor’s bankruptcy filing: more precisely, the CSUR authorizes debtors to continue the bankruptcy process only if they appear (1) to have significant difficulties in repaying their debts from their current incomes and assets; and (2) are *bona fide*. All creditors’ pursuits (for example, assets seizing) are put on hold during this bargaining process. After examining the debtor’s situation (i.e., debts, resources, charges, and the structure of claims), the CSUR (rather than the debtor) has the right to choose between two different bankruptcy procedures, the “*plan de redressement*” and the PRP. However, debtors can stop both these procedures whenever they have financial incentive to do so.

The “*plan de redressement*.” This procedure aims at elaborating a restructuring debt schedule through debt renegotiation with debtors and their main creditors. The crucial point is that the CSUR calculates a standard level of charges for each debtor, based on a scale that takes into account family size, living expenses, medical and school bills. Debts will be reimbursed from the difference between the debtor’s resources or assets and this standard level of charges over a fixed period. When this renegotiation fails, a judge may enforce a debt restructuring schedule by ruling that debtors do not have to reimburse their debts for a maximum of two years. The judge can also partly reduce the debts or elaborate a schedule of repayment for creditors (on condition that debts will be totally reimbursed during a period of ten years at most).

The “*procédure de rétablissement personnel*” (PRP). When, in a first step, the CSUR estimates that there is no (or very little) chance of debts being reimbursed from future income and assets, a judge (with the debtor’s authorization) has to decide in a second step whether debts (except for specific debts such as secured loans, fines, or child support fees) will be discharged or not. In exchange, all the debtor’s non-exempt³ assets are liquidated, and the liquidation proceeds are divided among creditors according to a strict priority rule. However, liquidation values are generally very low because debtors who have non-exempt assets will oppose this procedure whenever the value of debt discharged is less than the value of those assets (plus some direct and indirect bankruptcy costs). To order a debt to be discharged, judges have to verify that debtors are unable to repay their debts with their future income and assets, and are *bona fide*. The first of these criteria means that the debtor’s capacity to reimburse the debts should be negatively and significantly related to the probability of a discharge of debt in the PRP. The second excludes debtors who use the bankruptcy procedure strategically to discharge their debts when they have accumulated too many debts in the past.

³ Exempt assets are mainly vehicles and other goods essential to life.

3. EMPIRICAL FINDINGS

In this section, we test how judges handle the discharge of debts in exchange for the liquidation of non-exempt assets within the PRP, beginning with our data on PRP.

3.1. DATA DESCRIPTION

Our research project studied the practices of courts ruling on personal bankruptcy law. Even though this subject is attractive, due to the steady rise of over-indebtedness in European countries, only limited information is available on the subject of the legal treatment of financial distress. In order to improve the quality of the work delivered by the courts, or at least to understand judicial practices better, the French Ministry of Justice ordered a large data collection on PRP for the period 2004–5. Information was gathered manually from documents in 158 French courts, including bankruptcy declarations, court decisions and motivations, lists of claims, and characteristics of bankrupts. Using this information, we obtained a database of 4098 judgments delivered in the period 2004–5 in 20 regions (out of a global set of 22 regions), representing nearly 11% of the entire population of debtors filing for a PRP during this period. For each bankruptcy case, we gathered data about the debtor's financial situation at the triggering time: total amount of claims due; total income (including wages, unemployment benefit, family income support, housing benefit, rent allowance, sickness benefit, and old-age pension); total amount of expenses (debt service, dependents, tax, rent, plus additional expenses calculated by the judge on the basis of family size); asset list (exempt or not); and the total number of claims. We regrouped creditors in two sets: financial claimants (banks and firms specializing in consumer credit), and other (rent, taxes, energy or communication bills, private debts, commercial debts, unpaid alimony, tuition fees, fines). We controlled our results according to length of procedure (i.e., the time between the date of PRP filing and the date of judgment) as judicial delay can be considered a proxy for court congestion. After controlling for lack of responses on some of the variables described here, the sample size falls into 1120 observations on a set of 20 French regions.

In this paper, we focus only on *bona fide* debtors, excluding from the sample 36 debtors who were judged *mala fide* for the following reasons: falsification of information, voluntary over-indebtedness in order to file for bankruptcy, and checks without funds. As a consequence, we analyzed data only for individuals who do not voluntarily become bankrupts in order to benefit from full debt discharge by a judge (or, at least those who have not been identified by the judge). Finally, in designing our analysis, we only retained data for individuals who reported no real estate assets at the triggering time. Of our sample of 1105 debtors, 15 are owners (occupier or not). So, a very large majority of bankrupts have no assets to liquidate in order to benefit from debt release in exchange. Overall, this figure indicates either that debtors with some real estate assets refuse to file for this bankruptcy procedure, or that such debtors have restricted access to this procedure, meaning that some CSUR impose a debt reschedule plan on these debtors. However, this does not mean that individuals have no assets at all. Of the 1069 individuals, 917 clearly have no assets but 152 own a car and/or

furniture. More precisely, 106 bankrupts own a car and no furniture, 11 bankrupts own both a car and furniture, and 35 bankrupts own furniture but no car. However, these assets (cars and furniture) are generally exempt from liquidation because people need cars to get to work, and furniture has a very low liquidation value. As a consequence, we do not take account of debtors' assets in our analysis because debtors are either exempted or have none.⁴

Table 1 – Variable means and standard deviations for the bankruptcy sample according to the judgment (debt discharge or not)

Statistics on the sample (N=1069)					
Variables	mean	stand.dev.	Variables	mean	stand.dev.
Total debts (euros)	20775.07	37086.46	Nb. creditors	7.63	4.78
Resources (euros)	904.16	361.39	Nb. financial creditors	2.69	2.16
Current expenses (euros)	1006.58	358.16	Nb. ordinary creditors	4.94	4.44
Duration (days)	34.52	16.66			
Analysis of judgment: <i>Debt discharge</i> (N=798) versus <i>no debt discharge</i> (N=271)			Total debts (euros)	No debt discharge	Debt discharge
			<i>mean</i>	21873.74	20401.97
			<i>t</i>	0.6700	
			<i>p value</i>	0.5030	
			<i>stand. dev.</i>	27758.80	39767.93
			<i>F</i>	0.4872	
			<i>p value</i>	<.0001	
Resources (euros)	No debt discharge	Debt discharge	Current expenses (euros)	No debt discharge	Debt discharge
<i>mean</i>	1033.69	860.17	<i>mean</i>	1003.81	1007.52
<i>t</i>	6.2001		<i>t</i>	-0.1365	
<i>p value</i>	<.0001		<i>p value</i>	0.8914	
<i>stand. dev.</i>	419.06	328.46	<i>stand. dev.</i>	400.00	343.06
<i>F</i>	1.6277		<i>F</i>	1.3595	
<i>p value</i>	<.0001		<i>p value</i>	0.00075	
Nb. creditors	No debt discharge	Debt discharge	Duration (days)	No debt discharge	Debt discharge
<i>mean</i>	8.15	7.45	<i>mean</i>	37.46	33.51
<i>t</i>	2.0773		<i>t</i>	3.1251	
<i>p value</i>	0.0380		<i>p value</i>	0.0019	
<i>stand. dev.</i>	4.94	4.72	<i>stand. dev.</i>	18.78	15.78
<i>F</i>	1.0966		<i>F</i>	1.4161	
<i>p value</i>	0.1713		<i>p value</i>	0.00016	
Nb. financial creditors	No debt discharge	Debt discharge	Nb. ordinary creditors	No debt discharge	Debt discharge
<i>mean</i>	2.9077	2.6215	<i>mean</i>	5.4235	4.8320
<i>t</i>	1.7116		<i>t</i>	1.3179	
<i>p value</i>	0.0877		<i>p value</i>	0.1878	
<i>stand. dev.</i>	2.4830	2.0384	<i>stand. dev.</i>	4.5712	4.3953
<i>F</i>	1.4838		<i>F</i>	1.0816	
<i>p value</i>	<.0001		<i>p value</i>	0.2093	

Note: in first part of Table 1, we report summary statistics on the sample. In second part, we make a distinction between the group of debtors that benefits from a debt discharge and the group that does not. For each group, we compute both the mean and the standard deviation for the following set of variables: size of the debt, resources, current expenses, number of creditors, number of financial creditors, number of ordinary creditors, and duration of the legal process. We also report the results of *t*-tests to evaluate the difference in means between the two groups of debtors. The equality of variances is verified with the *F* test. Finally, the *p*-level reported for both tests represents the probability of error involved in accepting the hypothesis about existence of a difference (in mean or variance).

Table 1 shows that the mean amount of debtors' monthly resources is €904.17, the mean amount of debts is €20775.07 and the mean amount of monthly expenses €1006.58. As a result, debtors have a mean negative capacity to reimburse their debts (here, the difference between resources

⁴ In the regression analysis we verified that there was no significant interaction between a judge's decision to cancel debts and a dummy variable that equals 1 if the bankrupt has some assets (car and/or furniture) and zero if none. We do not report this result in this paper.

and expenses). More precisely, 758 debtors have a strictly negative capacity to reimburse, and 311 debtors have a positive one. Further, debtors are indebted to 7.63 creditors at mean, with a minimum of one creditor and a maximum of 35 (median value = 7). The mean number of financial (other) creditors is 2.69 (4.94). Finally, the mean length of the procedure is 34.52 days with a maximum duration of 147 days. Now, if we compare debtors whose debts are discharged by the judge to other bankrupts, we find that 25.35% of debtors in our sample who filed for PRP did not benefit from a debt discharge (note that this ratio is equivalent to 33.2% for the entire population, BANQUE DE FRANCE [2008]). In Table 1, we stress several differences between the two sets of debtors. First, bankrupts whose debt discharge is refused by the judge present the highest values for resources, number of creditors, number of financial creditors, and duration (see *t* test in Table 1). Second, there is no significant difference between the means (in terms of in debt size, current expenses and number of ordinary creditors) of debtors who benefit from a debt release and those who do not. We explore these differences in the following section and take a closer look at the way judges deal with personal bankruptcy.

3.2. DO JUDGES “PUNISH” DEFAULT?

Table 1 indicates that decision making in courts is largely influenced by the financial situation of bankrupts. In this section we examine the possibility that judges “punish” debtors for over-indebtedness—that is, they could penalize some debtors by denying them debt discharge if they have too many debts. We note also that, from an economic point of view, debt discharge may be interpreted as a punishment for creditors, for example, because they offered too many credit.

To study these effects, we first control for the debtor’s capacity to reimburse debt from (future) income, computing the ratio *Reimbursement capacity* in the following way. First, for each debtor we calculate the difference between annual resources and annual expenses, divided by the total amount of debts. Second, we multiply each of these values by the median duration of the debt reschedule plans elaborated by the CSURs (approximately five years, BANQUE DE FRANCE [2008]). Recall that when judges decline debt discharge, debtors generally benefit from a reorganization plan under the supervision of a CSUR. Notice also that calculated values are either positive or negative because, for some debtors, expenses are higher than resources. Third, for each debtor we keep the maximum value between zero and the value calculated above. As explanatory variables, we use the structure of claims (number of creditors, number of financial creditors, and number of ordinary creditors) to explore first whether a larger number of claims may significantly influence the bankruptcy court’s decision and, second, to what extent judges might consider the case of debtors who seem to have over-borrowed in terms of the number (rather than the amounts) of their claims. We showed in Table 1 that there is no significant difference between the mean amount of debt of debtors who benefit from a debt release and those who do not.

In order to monitor judicial practice, we run a Logit regression analysis where the dependent variable equals 1 if the judge discharges all the debt and zero otherwise. In a first set of models, shown in Table 2, we control the judgment with the debtor's reimbursement capacity, the duration of the legal procedure, and some indications about debt structure. More precisely, we run two models. Model 1 includes reimbursement capacity, the log of duration of the procedure and the log of the number of creditors. Model 2 distinguishes between the log of financial creditors and the log of ordinary creditors (see our earlier definition of these groups). In Table 3, we report a second set of regressions in which we analyze the robustness of our results, repeating our analysis after introducing the variable *Ind(Unemployed)*, which equals 1 when the debtor is unemployed and zero otherwise.

Table 2 – Explanation of debt discharge

Variables	Model 1: 1069 obs.		Model 2: 1069 obs.	
	Debt discharge vs. no debt discharge		Debt discharge vs. no debt discharge	
	Estimation	Prob. >khi2	Estimation	Prob. >khi2
<i>Constant</i>	3.3133 ***	<.0001	3.0718 ***	<.0001
<i>Reimb. Cap.</i>	- 1.6314 ***	<.0001	- 1.6347 ***	<.0001
<i>Log duration</i>	- 0.3475 **	0.0108	- 0.3513 **	0.0107
<i>Log Nb. Creditors</i>	- 0.3411 **	0.0150		
<i>Log Nb. Fin Creditors</i>			- 0.2173 *	0.1000
<i>Log Nb. Ordin. Creditors</i>			- 0.1224	0.2072
Logit Regression	<i>Nb. debt disch.:</i>	798	<i>Nb. debt disch.:</i>	798
	<i>Nb. debt resch.:</i>	271	<i>Nb. debt resch.:</i>	271
	% concordant:	73.4	% concordant:	73.3
	Condition index:	13.85 (<30)	Condition index:	14.89 (<30)
Estimation method:	Test	khi2 Pr > Khi2	Test	khi2 Pr > Khi2
maximum likelihood	Likelihood	132.96 <.0001	Likelihood	130.76 <.0001
	Score	30.17 <.0001	Score	27.62 <.0001
	Wald	76.42 <.0001	Wald	74.98 <.0001

Note: Table 2 reports the results of Logit regression analysis of the determinants of judicial decisions to discharge debts on the decision to (implicitly) order the borrower to repay debts from future income and assets. We report the reimbursement capacity, which is the maximum between zero and the following ratio: at the numerator, we have the product between the difference (annual resources – annual expenses) and the median duration of the debt reschedule plans elaborated by the CSUR. The denominator equals the total amount of debts. The other variables are the log of the length of the judicial procedure, the log of the number of creditors, the log of the number of financial creditors, and the log of the number of ordinary creditors. Collinearity diagnostic: if condition index > 30 then there is strong collinearity. The sample is described in subsection 3.1. Coefficients significant at the 1%, 5%, and 10% levels are indicated by ***, **, and *, respectively.

Table 3 – Explanation of debt discharge including debtor’s employment status

Variables	Model 3: 1069 obs.		Model 4: 1069 obs.	
	Debt discharge vs. no debt discharge		Debt discharge vs. no debt discharge	
	Estimation	Prob. >khi2	Estimation	Prob. >khi2
<i>Constant</i>	3.1612 ***	<.0001	2.8867 ***	<.0001
<i>Ind(Unemployed)</i>	0.3363 **	0.0279	0.3205 **	0.0411
<i>Reimb. Cap.</i>	- 1.5721 ***	<.0001	- 1.782 ***	<.0001
<i>Log duration</i>	- 0.3561 ***	0.0091	- 0.3594 ***	0.0084
<i>Log Nb. Creditors</i>	- 0.3462 **	0.0138		
<i>Log Nb. Fin Creditors</i>			- 0.1646	0.2279
<i>Log Nb. Ordin. Creditors</i>			- 0.1434	0.1424
Logit Regression	<u>Nb. debt disch:</u>	798	<u>Nb. debt disch:</u>	798
	<u>Nb. debt resch:</u>	271	<u>Nb. debt resch:</u>	271
	% concordant:	72.8	% concordant:	72.7
	Condition index:	15.09 (<30)	Condition index:	16.55 (<30)
Estimation method:	Test	khi2 Pr > Khi2	Test	khi2 Pr > Khi2
maximum likelihood	Likelihood	137.78 <.0001	Likelihood	134.92 <.0001
	Score	41.62 <.0001	Score	38.92 <.0001
	Wald	81.99 <.0001	Wald	79.67 <.0001

Note: In comparison to the regressions depicted in Table 2, we add *Ind(Unemployed)*, a dummy variable that equals 1 if the debtor is unemployed and zero if not (i.e., employed or retired). All other explanatory variables are the same as in Table 2. Collinearity diagnostic: if condition index > 30 then there is strong collinearity. The sample is described in subsection 3.1. Coefficients significant at the 1%, 5%, and 10% levels are indicated by ***, **, and *, respectively.

Obviously, reimbursement capacity is the most important and significant factor to explain the probability of debt discharge. It suggests that those debtors who are least able to repay their debts (or those who are more financially distressed) have a greater probability of benefiting from a fresh start. In addition, we have controlled for the amount of resources, expenses, and debt separately but did not include these variables in the same regression model because of the high degree of correlation between resources and expenses. In this way, we did not find any significant relation between the likelihood of debt discharge and the total amount claimed whatever the set of regressions (regression results are not reported in the paper—note that this result appears in Table 1). Our explanation is as follows. Before filing for this bankruptcy procedure, debtors would have attempted to renegotiate their debts privately, or under the supervision of a CSUR, and have failed. So, these debtors are significantly financially distressed, meaning that the outstanding amount owed does not constitute a way for judges to discriminate between them.

The main finding in Tables 2 and 3 is that the coefficient of the log of number of creditors is negative and statistically significant. This means that having a large number of creditors reveals more than the debtors’ level of financial distress. Judges might consider that having multiple creditors indicates that debtors have failed to balance their budget, or over-borrowed. In Model 2 we show that it is the number of financial creditors, rather than the number of ordinary creditors (controlling with the reimbursement capacity and the log of duration of the procedure), that tends to disqualify debtors from debt discharge. This result gives some insight into the intuition that it is the number of financial debts (mainly debt consumption or credit cards) that may motivate bankruptcy courts to refuse debt

discharge due to over-borrowing.⁵ In other words, our data illuminate the extent to which specialized judges are influenced by their sense that debtors are responsible for their financial situation.

In addition, we show in Table 3 that this last result is not robust to the inclusion of a dummy variable— *Ind(Unemployed)*—indicating whether or not the debtor is unemployed. In Model 4 adjusted for the variables *Ind(Unemployed)*, *Reimbursement capacity*, *Log duration*, *Log number of financial creditors*, and *Log number of ordinary creditors*, it appears that the log of financial creditors is not yet significantly associated with the likelihood of debt discharge. We also note in Model 3 that the number of creditors always plays a significant role in the judge’s decision, suggesting that a large number of debts may prevent some debtors from a fresh start. As a consequence, our model suggests that the effect of capital structure is not so trivial. Unemployed debtors are more likely to benefit from debt clearing than employed debtors, controlling with debt structure. This result undermines the intuition that the number of financial debts (mainly debt consumption or credit cards) may motivate bankruptcy courts to refuse debt discharge. More simply, it is less clear how the difference between financial and ordinary debts affects the judge’s decision. However, this last finding is more in line with the objective to offer financially distressed debtors a fresh start.

Finally, Table 3 contains another interesting result that has to be interpreted with care. It appears that the log of the duration of the procedure plays a role in the court’s decision making. Here, we consider that the duration of the legal procedure is closely correlated with the overwhelming number of personal bankruptcy filings with which the courts have to deal. In effect, we are testing whether debtors can throw themselves on the mercy of the judge if their case takes a long time. As a consequence, we do not consider any strategic behavior by lenders or borrowers within the procedure, such as voluntary delays in furnishing information or documents, or claimants’ requests to set out the judge’s decision. Table 3 shows clearly that the longer the length of the procedure, the smaller the likelihood of debt discharge. So, contrary to the hypothesis described above, debtors do not benefit from judges’ leniency when judicial delays increase due to the rise in personal bankruptcy filings.

3.3. JUDGES’ DECISIONS AND MACROECONOMIC/SOCIAL CONTEXT

To complete our analysis, we explore whether judges’ decisions to discharge debts are influenced by the external environment of the bankruptcy case. More precisely, we test a judge’s sensibility to the unemployment rate in the court’s locality. To do this, we first report the difference between the unemployment rate in the court’s locality (one of 20 French regions) and the mean national unemployment rate (the variable (*Unemployment rate* – *Av*)). Second, we construct a dummy variable that equals 1 if the unemployment rate in the court’s locality is superior to the mean unemployment rate (the variable *Ind(Unemployment rate > Av)*). This variable allows us to test whether there is a

⁵ We have also included the number of creditors squared as regressors in our models in order to test for nonlinearities in the effect of the structure of claims on the judgment (results are not reported in this paper). We found a U-shaped relation between the probability of debt discharge and the number of creditors.

judicial bias in favour of bankrupts when unemployment is relatively high. Table 4 shows this new set of regressions.

Table 4 – Explanation of debt discharge related to external environment

Variables	Model 5: 1069 obs. Debt discharge vs. no debt discharge		Model 6: 1069 obs. Debt discharge vs. no debt discharge	
	Estimation	Prob. >khi2	Estimation	Prob. >khi2
<i>Constant</i>	2.9530***	<.0001	2.7658***	<.0001
<i>Ind(Unemployed)</i>	0.3587**	0.0203	0.3368**	0.0295
<i>Reimb. Capacity</i>	-1.5417***	<.0001	-1.6002***	<.0001
<i>Log duration</i>	-0.2799**	0.0381	-0.3021**	0.0245
<i>Log Nb. Creditors</i>	-0.3284**	0.0198	-0.3599**	0.0107
<i>(Unemp. Rate - Av)</i>	29.6725***	<.0001		
<i>Ind(Unemp. Rate > Av)</i>			0.8388***	<.0001
Logit Regression	<u>Nb. debt disch:</u>	798	<u>Nb. debt disch:</u>	798
	<u>Nb. debt resch:</u>	271	<u>Nb. debt resch:</u>	271
	% concordant:	75.8	% concordant:	75.2
	Condition index:	15.32 (<30)	Condition index:	16.10 (<30)
Estimation method:	Test	khi2 Pr > Khi2	Test	khi2 Pr > Khi2
maximum likelihood	Likelihood	155.93 <.0001	Likelihood	161.35 <.0001
	Score	59.08 <.0001	Score	60.88 <.0001
	Wald	95.99 <.0001	Wald	96.93 <.0001

Note: In comparison to regressions depicted in Table 3, we introduce in Model 5 the variable (*Unemployment rate - Av*). Model 6 includes the variable *Ind(Unemployment rate > Av)*. See subsection 3.3 for a description of these variables. Collinearity diagnostic: if condition index > 30 then there is strong collinearity. The sample is described in subsection 3.1. Coefficients significant at the 1%, 5%, and 10% levels are indicated by ***, **, and *, respectively.

It appears in Table 4 that the macroeconomic context proxied by the unemployment rate (in comparison to the mean rate) plays a significant role in judicial decision making. The regression estimates indicate that the higher the regional unemployment rate (in comparison to the mean rate), the higher the likelihood of debt discharge. In other words, judges are more likely to enforce debt discharge when there is a clear shortage of employment, or when debtors face increased risk of an adverse event (job loss) in the future (by controlling for the current debtor's employment status). Again, we use Table 4 to confirm that judges also tend to disqualify debtors with multiple debts from full debt discharge. Our findings complete empirical results showing that economic conditions influence judges' decisions. For instance, ICHINO, POLO AND RETTORE [2003] demonstrate that judges acting in Italian labor courts are more likely to decide in favor of workers when and where unemployment is higher. Further, MARINESCU [2008] gives empirical evidence from British employment courts that judges are more pro-firm when the unemployment rate is raised. All these results support the idea that judges do not only enforce debt or employment contracts, but that they maximize either the welfare of the trial parties or social welfare.

4. CONCLUSION

Our observations in the French legal system show that even if all countries appear to be acting similarly in their treatment of personal bankruptcy law (reorganization versus liquidation), we need to run more realistic studies to assess better the work of courts in each country. Indeed, cross-country

comparisons generally suffer from a gap between bankruptcy rules and judicial practice. For instance, a first reading of the French personal bankruptcy rules indicates that this system has been more pro-debtor since 2003, in the sense that it allows for debt discharge (in exchange for liquidation of non-exempt assets) under the supervision of a specialized judge. In this paper, we show that this conclusion may be wrong for two reasons. First, in the period 2004–5, we note that more than one-third of borrowers who filed for such a procedure were denied debt discharge. More surprising, all these debtors were previously identified as financially distressed by an administrative authority or CSUR (meaning that there was no chance of elaborating a rescheduled debt payment, on the assumption that CSUR makes no filtering errors). Second, we find in our sample that a great majority of debtors who filed for PRP had no assets to liquidate.

To better assess the impact of the French bankruptcy procedure on debtors and creditors, we also explore judicial criteria. After eliminating *mala fide* debtors, we show that a debtor's reimbursement capacity is the judge's dominant consideration in the decision to discharge debts. More interestingly, we find that judges refuse debt discharge when debtors are indebted to multiple creditors, especially financial ones. As a consequence, judges consider that some borrowers are responsible for their financial distress or over-borrowing. In that case, the lower the probability of discharging the debt, the more creditors (financial or not) are protected from default. This could give financial creditors some incentive to increase access to credit with the risk of increasing the probability of over-borrowing when an adverse event occurs. Finally, we show that it is necessary to control our estimate of the probability of debt discharge with some indicators on the macroeconomic context in which judges view the case. In particular, we find great statistical support for the hypothesis that French judges are influenced by local and regional labor market conditions.

This analysis is somewhat incomplete. There is still quite a large set of questions to address. To our knowledge, there is no cross-country analysis that relates the various national personal bankruptcy systems with specific forms of bank debt contracts (size of loan, level and type of collateral, interest rate, duration). As in corporate bankruptcy law, the differences in lenders' legal protection across these countries should correlate with significant differences in lenders' strategies and outcomes. More simply, the design of personal bankruptcy law might help us to understand lenders' recovery rates or the success of informal renegotiations (preceding a bankruptcy filing). Future research efforts are needed to clarify these questions.

REFERENCES

BANQUE DE FRANCE [2008], *Enquête typologique 2007 sur le surendettement*, DSRP.

COHEN-COLE E., B. DUYGAN-BUMP AND J. MONTORIOL-GARRIGA [2009], "Forgive and forget: who gets credit after bankruptcy and why?," Quantitative Analysis Unit Working Paper, QAU09-2, Federal Reserve Bank of Boston.

- DICK, A. AND A. LEHNERT [2010], “Personal bankruptcy and credit market competition,” *Journal of Finance*, 65, 655–686.
- FAN, W. AND M. J. WHITE [2003], “Personal bankruptcy and the level of entrepreneurial activity,” *Journal of Law and Economics*, 46[2], 543–567.
- FAY, S., E. HURST, AND M. J. WHITE [2002], “The household bankruptcy decision,” *American Economic Review*, 92[3], 706–718.
- FILER, L.H. AND J. D. FISHER [2007], “Do liquidity constraints generate excess sensitivity in consumption? New evidence from a sample of post-bankruptcy households,” *Journal of Macroeconomics*, 29[4], 790–805.
- FILER, L.H. AND J. D. FISHER [2005], “The consumption effects associated with filing for personal bankruptcy,” *Southern Economic Journal*, 71[4], 837–854.
- GAN, L. AND T. SABARWAL [2005], “A simple test of adverse events and strategic timing theories of consumer bankruptcy,” *NBER Working Paper Series*, n°11763.
- GROPP, R.J., K. SCHOLZ, AND M. J. WHITE [1997], “Personal bankruptcy and credit supply and demand,” *Quarterly Journal of Economics*, 112[1], 217–252.
- ICHINO, A., M. POLO, AND E. RETTORE [2003], “Are judges biased by labour market conditions?,” *European Economic Review*, 47, 913–944.
- JAPPELLI, T., M. PAGANO AND M. DI MAGGIO [2010], “Households’ Indebtedness and Financial Fragility,” *CSEF working paper n°208*.
- LUSARDI, A. AND P. TUFANO [2008], “Debt literacy, financial experiences, and overindebtedness,” *NBER Working Paper Series*, n°4808.
- MARINESCU, I. [2008], “Are judges sensitive to economic conditions? Evidence from the U.K. employment tribunals,” Working paper submitted for publication.
- MUSTO, D. K. [2004], “What happens when information leaves a market? Evidence from post-bankruptcy consumers,” *Journal of Business*, 77[4], 725–748.
- RACHLINSKI, J., GUTHRIE C. AND H. WIRSTRICH [2007], “Heuristics and biases in bankruptcy judges,” *Journal of Institutional and Theoretical Economics*, 163, 167–186.
- WANG, H-J. AND M. J. WHITE [2000], “An optimal personal bankruptcy procedure and proposed reforms,” *Journal of Legal Studies*, 29[1], pages 255–286.
- WHITE, M. J. [2007], “Bankruptcy reform and credit cards,” *Journal of Economic Perspectives*, 21 [4], 175–199.
- WHITE, M. J. [2006], “Abuse or protection? Consumer bankruptcy reform under BAPCPA,” *Public Economics*, 18–19, 3–27.
- WHITE, M. J. [1998a], “Why it pays to file for bankruptcy: a critical look at incentives under U.S. bankruptcy laws and a proposal for change,” *University of Chicago Law Review*, 65, 685–732.
- WHITE, M. J. [1998b], “Why don’t more households file for bankruptcy?,” *Journal of Law, Economics and Organization*, 14[2], 205–231.