

# Lawyers Steer Clients toward Lucrative Filings: *Evidence from Consumer Bankruptcies*

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Draft September 2009

## **Abstract**

Consumers often rely on lawyers to make complicated legal decisions, though in many cases, the lawyer's financial interests are at odds with those of the client. We consider this general problem in the context of consumers filing for bankruptcy. Lawyers advise debtors on whether to file the cheaper Chapter 7 filing or the more expensive, and more likely to be dismissed, Chapter 13 filing. We show that bankruptcy courts that allow lawyers to charge more for Chapter 13 bankruptcy filings see a larger fraction of Chapter 13 filings. This is true controlling for a host of demographic controls at the zip code level, as well as with state fixed effects.

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# 1 Introduction

Having a poorly informed buyer rely on the seller for market information seems like a recipe for disaster. Yet when faced with complicated decisions, many consumers rely on counsel from knowledgeable professionals who themselves have a financial stake in the outcome of the decision. A growing literature documents the problems this conflict of interest can cause in myriad services, from surgeons and obstetricians in medicine, to real estate agents, mutual fund managers, and funeral directors (Fuchs 1978; Gruber and Owings 1996; Levitt and Syverson 2008; Chevalier and Ellison 1997; Harrington and Krynski 2002). In each case, evidence suggested that professionals subordinated the welfare of their client to increasing their profit, a classic example of the principal-agent problem.

Here we document the same problem for one of the preeminent advice-giving occupations—lawyers.<sup>1</sup> Do lawyers, who are paid to give counsel, systematically do so in ways that are likely to increase their profits? We consider lawyers who advise consumer debtors about whether to file bankruptcy under the cheaper Chapter 7 or the more expensive, and riskier, Chapter 13. We show that the relative number of Chapter 13 filings is heavily affected by the size of the fee bankruptcy courts allow lawyers to receive for filing a Chapter 13. This fee varies greatly across bankruptcy districts, from a low of \$1000 in the southern district of West Virginia to a high of

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<sup>1</sup> We could find little empirical work on the steerage problem for lawyers. Work by Ashenfelter and Bloom (1993) modeled the prisoner's dilemma problem of retaining a lawyer, and Halla (2007) documents that retaining lawyers in a divorce case does little to change the final distribution of assets. Both these, and others like them, are about the decision to retain a lawyer, rather than the quality of counsel the lawyer gives.

over \$4400 in the district of Nevada. This in turn contributes to the massive variation across states in the ratio of Chapter 13 to Chapter 7 filings<sup>2</sup>.

Using data on bankruptcies in 2007, disaggregated to the zip code level, we show that bankruptcy district courts allowing lawyers to charge higher amounts for Chapter 13 filings see noticeably higher rates of Chapter 13 bankruptcies. This effect emerges after controlling for state fixed effects and an exhaustive array of socioeconomic factors at the zip code level. It is also robust to controlling for the pro-creditor or pro-debtor institutions of the individual bankruptcy courts, as proxied by the average required repayment rate on Chapter 13 plans. If we take the estimates as causal, we find that increasing the Chapter 13 fee by 10 percent increases the fraction of bankruptcies that are under the more expensive Chapter 13 filing by 2.7 percent. This steering effect may cost insolvent households thousands of dollars and can leave the debtor with no long-term debt relief when their case is dismissed.

A lawyer's job revolves around giving counsel to clients. To the extent that these results on bankruptcy apply across legal fields, it appears legal counsel is biased in exactly the way one would expect—towards generating revenue for the lawyer. Coupled with the pre-existing literature on induced demand, the results suggest professionals generally may be prone to subordinating the interests of their clients to their own financial interest. Additionally, our paper relates to the health economics literature showing that similar patients receive different treatments

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<sup>2</sup> The ratio of Chapter 13 to Chapter 7 filing fees ranges from 1.06 in the western district of Wisconsin to 5.91 in the southern district of Illinois.

based on their location or choice of physician.<sup>3</sup> The same appears to be true for those seeking debt relief through bankruptcy.

Personal bankruptcy is the constitutionally outlined mechanism for dealing with insolvent debtors. More than three out of every thousand people in the United States filed for personal bankruptcy in 2008 with the average household discharging approximately \$50,000 in debt.<sup>4</sup> In 2008, bankruptcy transferred about as much money as federal unemployment insurance programs (UI) and Temporary Assistance for Needy Families (TANF) combined.<sup>5</sup> Given the current economic crisis, the rate of filings has continued to rise quickly.<sup>6</sup>

The decision to file under Chapter 7 or Chapter 13 depends on the particulars of a debtor's financial situation. Under Chapter 7, often called liquidation, households may only keep exempt property. All other assets of value are sold and distributed to creditors. Most of the household's unsecured debts are then forgiven (discharged) and the debtor has no further obligations to his creditors. In a Chapter 13 filing, the debtor keeps all his assets in exchange for following a court approved repayment plan over a three to five-year period. At the end of this period, all remaining debt obligations are discharged. If the debtor fails to make the payments, the case is

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<sup>3</sup> Recent examples on variation in physician practice include Epstein, Ketcham and Nicholson (2005) and Grytten and Sørensen (2003) who show that choice of service provider plays an important role in the type of treatment patients receive. Chandra and Staiger (2007) and Allgood and Bachmann (2006) highlight the health benefits that patients receive from physician specialization.

<sup>4</sup> Culhane and White (1999) find in a sample of 1995 filings that the mean unsecured debt for a Chapter 7 is \$36,370. Adjusting for inflation to 2008 brings the average to about \$50,000. The median is lower at \$28,600 in 2008 dollars. Chapter 13 bankruptcies are likely to have as much debt as Chapter 7's.

<sup>5</sup>In 2008, federal UI payments totaled \$38.4 billion, while federal TANF payments were \$16.8 billion (Green Book, 2009).

<sup>6</sup> In the second quarter of 2009, 365,059 personal, non-business bankruptcies were filed, compared to 316,158 in the first quarter of 2009 and 288,416 in the fourth quarter of 2008 (U.S. Courts, 2009).

either dismissed and the remaining debts are not forgiven, or it is converted to a Chapter 7 filing.

We provide a simple model of the filing process that illustrates why filers are likely to be particularly insensitive to the list prices charged by lawyers. The intuition is fairly simple and is similar to the problems found in the health insurance market. Chapter 13 payments to lawyers typically occur as part of the overall debt repayment plan and, given the income constraint of the borrower, lawyers' fees end up supplanting payments to unsecured creditors, rather than coming out of the pocket of the debtor. Hence the widespread monitoring of Chapter 13 prices by bankruptcy courts. Of course, there is a rather crucial difference from the health insurance comparison. Whereas those who are insured don't face the full bill, about half of Chapter 13 repayment plans fail, leaving debtors financially liable to both their lawyer and their debtors.<sup>7</sup>

## **Background**

In the United States, households have two primary options in filing for bankruptcy: Chapter 7 or Chapter 13. Under both types of bankruptcy debtors receive instant relief from debt collection; creditors are forbidden from contacting them once they file and any garnishments upon their earnings are immediately suspended. Under Chapter 7 bankruptcy, households receive a complete discharge of most unsecured debts (exceptions include student loans and child support payments). They must,

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<sup>7</sup> In cases closed in 2005, 10% of Chapter 13 filings were converted to Chapter 7 filings and another 59% were dismissed. For cases closed in 2007, 10% were converted and 46% dismissed. (U.S. Department of Commerce, 2000-2007)

however, liquidate all their assets in excess of predetermined personal and homestead exemption rates, which vary dramatically across states.<sup>8</sup>

Since October of 2005, households with income above the state median (adjusting for household composition and the cost of secured debt payments) have generally been prohibited from filing under Chapter 7 and all households must receive financial counseling before filing. Additionally, United States trustees, who represent creditor interests, may attempt to force individuals to file under Chapter 13 if it is clear the debtors are able to repay a substantial fraction of their debts. After filing a Chapter 7 bankruptcy, individuals may not file under Chapter 7 again for eight years.

Under a Chapter 13 bankruptcy, households repay a portion of their debts through a payment plan approved and administered by the court. For secured debts, the amount owed is automatically reduced to the market value of the asset.<sup>9</sup> Filing households, with assistance from legal counsel, propose a budget to the court that allows for reasonable living expenses. Filers then pay the difference between their income and approved living expenses to the bankruptcy court trustee who in turn makes payments to the creditors. Filers continue to repay their debts through the

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<sup>8</sup> A personal exemption allows individuals to retain personal property up to a predetermined value. For example, under a \$1000 personal exemption a debtor could retain a wedding ring worth \$500 as well as a washer and dryer worth \$500. A homestead exemption allows debtors to retain equity with their residence up to a maximum amount. For example, in a state with a \$40,000 homestead exemption, a household would not be forced to sell their house to pay off creditors as long as the equity in their house was below this amount.

<sup>9</sup> Thus households whose car loan exceeds the market value of the automobile receive a benefit equal to the difference between the amount owed on the car and the amount the car is worth. Chapter 7 filers don't have this option but in some cases may redeem assets surrendered in bankruptcy by paying a lump sum equal to the current market value of the asset. This occurs only rarely, however. Under the 2005 bankruptcy reform, filing households who choose to retain recently purchased secured assets must repay the full amount owed on the asset—not just the value at the time of filing.

trustee for a period of three to five years. At the end of this period, any remaining debts are discharged. If a filing household does not meet the requirements of the plan, typically due to failure to keep up with the payments, the court may liquidate the debtor's assets under Chapter 7 or dismiss the case, leaving the household once again liable for its debts.

Current United States bankruptcy law allows for certain creditors to be paid before others during the repayment process. After the secured creditors have been paid, repayment is divided among the unsecured creditors, with the lawyer often paid early in this process. How the lawyer payments are administered varies by district, but it can substantially distort the repayment process.<sup>10</sup>

Lefgren et al (2009) look at 54 dismissed Chapter 13 filings drawn from the northern bankruptcy district of Texas. Although the cases were typically dismissed within 13 months, on average, lawyers collected 66% of their nominal fee as part of the repayment plan. Since lawyers are paid in full when repayment plans actually succeed, this suggests that lawyers in Chapter 13 plans get most of their requested price. The same could not be said for unsecured creditors in dismissed cases. They averaged \$300 in payments on approximately \$20,000 in debt. In 22 of the 54 dismissed cases, the lawyer was paid *more* than all other creditors, both secured and unsecured, combined.

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<sup>10</sup> Braucher (1993; 1997; 1999) discuss the effects of allowing households filing under Chapter 13 to pay their legal fees on credit. Braucher (1993) notes that in cases that last through the first payment distribution, lawyers collect at least as much as they do in a Chapter 7 case.

Of course, in a Chapter 7 filing those unsecured creditors would likely have received as little or less, and in the non-dismissed cases they likely receive more. On the other hand, debtors are likely worse off if their Chapter 13 is dismissed, as they've paid thousands to their lawyer but still owe their creditors.

Braucher (1993), Neustadter (1986) and Sullivan et al. (1988, 1994) all provide important qualitative evidence that lawyers often steer households to file under a particular chapter of the bankruptcy code.<sup>11</sup> Lefgren et al (2009) present household-level econometric evidence on the same question we consider here. Using distance to law firms as the instrument, they show debtors' filings are heavily swayed by the lawyer, and that those that are induced to file a Chapter 13 have worse outcomes. Lefgren et al's analysis, however, is specific to three bankruptcy districts, rather than a national sample, and relies upon a very different set of identifying assumptions. They take as given the behavior of the lawyer and seek to find out how it influences clients. In this paper, we show that lawyer behavior is being driven in part by the fees paid to the lawyer. Thus we consider Lefgren et al's work complementary to what we do here.

The remainder of the paper proceeds as follows. In Section 2, we outline a short model to guide the empirical work and show under what conditions clients are insensitive to the price of a Chapter 13 filing. Section 3 summarizes our data and

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<sup>11</sup> Nelson (1999), Domowitz and Sartain (1999), Sullivan and Worden (1990), Li and Sarte (2002), and Sullivan et al. (1988) all find that a *household's* finances play a role in the choice of bankruptcy chapter.

data sources. Section 4 gives the econometric specification and results and Section 5 concludes.

## 2 Model

In order to fix ideas for the empirical work, we provide a simple stylized model of the bankruptcy chapter choice decision and the incentives of the agents involved.<sup>12</sup>

Consider a model with three actors: debtors, lawyers, and courts. Debtors decide whether or not to discuss filing bankruptcy with a lawyer and which chapter to declare. Lawyers provide information to the client that may influence their Chapter decision. Courts set the legal parameters for filings.

A debtor has assets,  $a$ , wages  $w$ , and debts,  $d$ . His debt is discounted by the likelihood that he will actually be required to repay it, which depends on each state's debt collection and wage garnishment laws. For example, once a debtor receives a court order authorizing wage garnishment from his paycheck for repayment of debt, his expected debt payments rise dramatically. Define  $\theta d$  as the amount the debtor expects to pay where  $\theta$  is between zero and one and depends on state credit policies.

The debtor approaches a lawyer if his wages and assets minus his expected debt repayment,  $V_0 = a + w - \theta d$  is sufficiently low. He then interviews with a lawyer to determine his options and discovers he can file a Chapter 7, a Chapter 13, or not file.

A Chapter 7 bankruptcy involves forfeiting his assets,  $a$ , minus the state's exempted

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<sup>12</sup> Other researchers have developed models of bankruptcy including White (1987), White (2005), Athreya (2002), Athreya and Simpson (2003), and Livshits, MacGee, and Tertilt (2003).

asset limits,  $e$ , in exchange for absolution of debts,  $d$ . In practice, few debtors have substantial assets in excess of the limits, though they often have substantial debts.

The value to a debtor of choosing a Chapter 7 bankruptcy is:

$$(1) \quad V_7 = w + \min[a, e] - p_7 - \eta_7$$

where  $\eta_7 \geq 0$  is the utility shock for filing as well as any possible negative repercussions left unmodeled, such as a damaged credit rating or reputation effects.<sup>13</sup>  $p_7$  is the price paid to the lawyer.

A Chapter 13 bankruptcy is somewhat more complicated. The debtor still faces expected debts  $\theta d$ , but no longer has to forfeit assets. Instead he enters into an agreement to pay some amount,  $r$ , of his income towards his debts over the next three to five years in exchange for a discharge of the remaining debt. The payments are stretched out over the next several years so the debtor may be unsure he will be able to pay off his contracted fraction of the debts. Were we modeling the full dynamic process, the probability of making the payments would come from integrating out over the joint density of several years of future income and comparing this to the required repayment amounts. For simplicity, we abstract from this process and define  $\psi$  as the debtor's subjective evaluation of the probability he will follow through on the repayment. As a point of reference, we know from observing bankruptcy filings that over half of filers fail to follow through on their Chapter 13 repayment plans. We do not, of course, know what the debtor

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<sup>13</sup> We assume here that the debtor has more debts than non-exempt assets, so that the filing actually could be beneficial. Otherwise the debtor could simply purge the debt by selling off assets.

believes  $\psi$  to be, and given his likely limited exposure to bankruptcy filings it may be that his subjective belief is not the same as the empirical mean.<sup>14</sup>

If the debtor fails to repay the debts, assume the failure occurs after the first of  $T$  years and that the lawyer is still fully compensated. As discussed previously, these are reasonable approximations to reality. If the debt is not repaid, the debtor then expects to pay  $\theta$  of their remaining debts.

The payments are spread equally over  $T$  years, but the lawyer receives all her payments in the first year. Total payments under the plan are  $rT$ . Since lawyers are reimbursed fully in the first year, actual *debt* payments in the first year are  $r - p_{13}$ . Thus, if the agent defaults after one year the unpaid debt balance is  $d - r + p_{13}$ . Given this, the value of a Chapter 13 filing is:

$$(2) \quad V_{13} = a + w - \eta_{13} - \psi rT - (1 - \psi)[r + \theta(d - r + p_{13})]$$

where the disutility term,  $\eta_{13} \geq 0$  is comparable to the  $\eta_7$  considered above.  $\psi rT$  is the debt repayment, weighted by the probability of repayment,  $\psi$ . The final term, in brackets, tracks outcomes if the case is dismissed. It accounts both for the payments made in the first year as well as the debt the agent will have to repay after defaulting. Note that the price of the bankruptcy has been subsumed into the payment plan, so that it only matters if the filing is dismissed.

Given  $\psi$ ,  $\eta_7$ , and  $\eta_{13}$ , the debtor chooses the option best for him. He can choose not to file, and take the utility state normalized to  $V_0$ , or take either  $V_7$  or  $V_{13}$ . Thus in the

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<sup>14</sup> Furthermore, given that we are dealing with people filing bankruptcy, a debtor in the model may be more likely than average to systematically overestimate his future financial position.

common case where assets are less than exemptions and  $\max(V_{13}, V_7) > V_0$ , he files a Chapter 13 if:

$$(3) \quad -\psi rT - (1 - \psi)[(1 - \theta)r + \theta(d + p_{13})] - (\eta_{13} - \eta_7) + p_7 > 0.$$

The debtor whose case is dismissed not only pays the lawyer fee,  $p_{13}$ , as part of his repayment plan and faces the personal cost  $\eta_{13}$ , he also must pay as much as he would without bankruptcy,  $\theta d$ .<sup>15</sup> Thus, assuming the debtor has sufficient debts to make bankruptcy worthwhile in the first place, a debtor must either have a strong personal preference for Chapter 13 or he must believe his chance of repayment is reasonably high for a Chapter 13 to make sense.<sup>16</sup>

The inequality in (3) also shows the weakened price responsiveness of the debtor to the Chapter 13 lawyer fee. The partial derivative of the left side of (3) with respect to price is:

$$(4) \quad \frac{\partial(V_{13} - V_7)}{\partial p_{13}} = -(1 - \psi)\theta.$$

One would expect the debtor's financial value to drop one for one with rises in the price of a bankruptcy, but here the price response only equals -1 if debt collection is full ( $\theta = 1$ ) and the agent is sure they will *not* follow the payment plan ( $\psi = 0$ ). Since the debtor is not likely to file a Chapter 13 if they believe  $\psi = 0$ , and since  $\theta = 1$  seems implausible on its face, it appears that debtors are likely to be less than fully responsive to the price charged by the lawyer.

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<sup>15</sup> Although this is exactly true in the simple model, the reality is, as usual, more complicated. Debtors who file a chapter 13 can sometimes get debts written off permanently as part of the proceedings. This is the case, for example, when a debtor owes more than an item is worth, in which case the debt is written down to the value of the item.

<sup>16</sup> As noted earlier, the median bankruptcy has \$28,000 in unsecured debt.

Alternatively, if the debtor believes, or is convinced by his lawyer, that repayment is assured, then  $\psi=1$ ; in which case he is completely indifferent to the price charged by the lawyer. A Chapter 13 plan requires the debtor to make payments of a certain size to *someone*, and he is indifferent to whether the payments go to the lawyer or the creditors.<sup>17</sup>

Turning to the lawyer, she provides a free information signal to debtors about the expected value of  $\eta_7$ ,  $\eta_{13}$ , and  $\psi$ , and sells two services, Chapter 7 filings and Chapter 13 filings. She receives a competitive market price for the Chapter 7 filings but does not charge more than the trustee mandated fee for Chapter 13 filings. Thus a lawyer chooses her signal to the debtor with regard to what maximizes her profits between two filings. In the end, she provides whichever service the debtor asks for.

Although the information signal may be treated as uninformative, we allow that it moves the debtor's estimates of these values in a bounded way. This is the induced demand portion of the model. Given the insensitivity of the debtor to Chapter 13 fees, potentially exacerbated by a lawyer advising the client that they have a high repayment probability, the debtor's demand curve for Chapter 13 filings is not likely to slope down very quickly. In this case, the market will take on the appearance of a typical price ceiling model. If the lawyer could charge a higher price, she would

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<sup>17</sup> Since we use  $\theta$  in the empirical work, note the effect of changes in  $\theta$  on the value functions.  $V_7$  is unaffected by  $\theta$ ,  $\frac{\partial V_0}{\partial \theta} = -d$ , and  $\frac{\partial V_{13}}{\partial \theta} = -(1 - \psi)(d + p_{13} - r)$ . Assuming that  $\psi < 1$ , and noting that  $p_{13} < r$ , allowing more wage garnishment, and thus increasing  $\theta$ , should make all bankruptcies more attractive, with a stronger effect on Chapter 7's value than Chapter 13's. Of course, when we turn to aggregate data, what matters is the density of  $\eta_{13} - \eta_7$  on the margin for knowing whether  $\theta$  has a stronger effect on observed Chapter 7 or 13 filings.

move more debtors into Chapter 13 filings. This is the effect our empirical work is designed to recover.

We model courts as having developed a set of institutional precedents over time that favor either debtors or creditors and are distilled into three actions.<sup>18</sup> First, they pick the acceptable repayment rate,  $r$ , for a Chapter 13. Second, they choose the maximum Chapter 13 fee,  $p_{13}$ . Third, they have the ability to directly affect chapter choice, which is best thought of as an ability to affect  $\eta_{13} - \eta_7$ .

The repayment rate is the result of negotiation between the courts and the debtor, but an influential input to the process is the filed net income statement, which is the difference between reported income and allowable expenses (Evans and Lewis, 2008). Courts have a direct ability to influence what constitutes acceptable expenses, and thus repayment rate.

Courts can also deliberately push debtors toward one chapter or another, in essence shifting  $\eta_{13} - \eta_7$ . A debtor may prefer to file a Chapter 7, and his lawyer may agree, but the court may push him into a Chapter 13 filing if he does not offer sufficient repayment through the asset forfeiture. This power was strengthened by the 2005 bankruptcy reform law which required debtors with high incomes compared to their state average to file under Chapter 13 rather than Chapter 7.

Higher chapter 13 fees encourage lawyers to push debtors into chapter 13 plans, which may result in some payments to the creditor, but when  $\psi$  is low the debtor is

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<sup>18</sup> Lefgren et al (2009) documents the strong persistence over time in the fraction of filings that are chapter 13.

likely to fail in the plan and pay much of their money to the lawyer, leaving the creditor to attempt to collect remaining payments from a debtor who is even poorer than before. Thus courts may well be ambivalent about the value of chapter 13 fees for encouraging repayment, especially if they have alternative tools available for encouraging chapter 13 filings.

This simple model illustrates a number of points relevant to the empirical work. Debtors are unlikely to fully account for a lawyer's Chapter 13 fee, as these fees often substitute, or are expected to substitute, for paying creditors. On the other hand, the lawyer's benefits from higher fees are undiluted and their role as an advisor gives them the ability to steer clients to profitable filings. Empirical work in Lefgren et al (2009) suggests that the lawyer's advising role is extremely potent. Lastly, each bankruptcy court has a set of precedents that are likely to be favorable to either creditors or debtors. If those precedents include forcing debtors into Chapter 13 plans, a precedent for higher repayment rates will ostensibly benefit creditors. It is ambiguous whether creditors would favor or disapprove of higher allowable Chapter 13 fees.<sup>19</sup>

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<sup>19</sup> Note that, even if the debtor is fully informed, so there is no information problem, the statistical model can still estimate the extent to which lawyers move clients between chapters based on the lawyer's monetary incentives, rather than their clients' best interest. An alternative model, based simply on a price ceiling, would have debtors wanting to file chapter 13s but not being able to find a lawyer willing to file one. Lefgren et al (2009) show that larger firms file much larger fractions of chapter 13s, suggesting fixed costs of being able to file chapter 13 easily, in which case it seems unlikely that debtors would be turned away who wished to file a marginal chapter 13 filing.

### 3 Data

Our main source of data is zip-code level bankruptcy counts for 2007 obtained from Lundquist Consulting. Demographic information was taken from zip-code level Census data. Data on legal fees and repayment rates were taken from a random national sample of bankruptcy cases filed around February 2007 obtained through the U.S. court database, PACER.<sup>20 21</sup> Using 2007 data puts us more than a year after the 2005 legal reform, thus allowing time for adjustment to the new regime. We collected at least four filings from each district court, two Chapter 7 filings and two Chapter 13 filings, making sure each listed a non-zero fee paid to the lawyer. Negotiated repayment rates are not available in the initial filing, but we use the difference between the reported current monthly income and monthly expenditures overseen by the court as a proxy. The trustee can always demand this amount be paid into the plan and so this is the trustee's threat point in repayment negotiations (Evans and Lewis, 2008).

Table 1 shows summary statistics of this zip-code level bankruptcy and demographic information. We see that, on average for a given zip code, 2.77 households per thousand filed for personal bankruptcy in 2007. Of this number, 1.69 per thousand are Chapter 7 and 1.08 are Chapter 13. In the average zip code in

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<sup>20</sup> Thanks to Michelle Miller who provided additional PACER filings.

<sup>21</sup> We also gathered data on state garnishment and household exemption levels. We obtained wage garnishment information primarily from Fair Debt Collection.com (<http://www.fair-debt-collection.com/state-wage-garnishments.html>), double checking the information with The Commercial Bar (<http://www.commercialbar.com/sumcoltn.htm>) and BCS Alliance ([http://www.bcsalliance.com/y\\_debt\\_statelaws\\_garnishments.html](http://www.bcsalliance.com/y_debt_statelaws_garnishments.html)) to ensure accuracy. The laws we refer to are for wage garnishment of non-priority, private debts. Many states that we code as restricting wage garnishment still allow it in the case of, for example, child support payments. Andreas Lehnert (see Lehnert and Maki, 2004) kindly provided information on 2000 exemption levels.

which a 2007 filer lives, 61 percent of the population are married, 71 percent graduated from high school, 4 percent are unemployed, and 55 percent are homeowners—based on 2000 census data.

Table 2 reports data for states with two or more districts, as these are the ones relevant to our fixed effects identification strategy. The table gives the average fraction of bankruptcies that are Chapter 13 in the state, as well as the spread between the highest and lowest averages across the bankruptcy districts in the state. (For brevity's sake we will refer to the fraction of total filings that are Chapter 13 as fraction 13.) Table 2 also reports on filing fees, the log difference between Chapter 13 and Chapter 7 fees, and the in-state district spread. The last row reports the unweighted mean of these variables across the 64 districts.

In this sample, the average Chapter 13 filing costs \$2779, which averages 0.97 log points more than a Chapter 7 filing. Chapter 13 rates also differ a great deal within states—typically being \$779 lower in the lowest district than in the highest within a given state. One can also see that 12 states have at least three districts and about half of all states have at least two districts.

The distribution of Chapter 13 fees can give some indication if lawyers are in fact clumping at each court's suggested Chapter 13 fee. Figure 1 shows the kernel densities of log Chapter 13 fees and log Chapter 7 fees taken from our sample of filings, centered about the respective district's mean. The Chapter 13 fees in each district appear to be clumped far more tightly around the mean than the Chapter 7 fees; 65 percent of Chapter 13 fees lie within 10 percent of the district's mean, while

29 percent of Chapter 7 fees are within 10 percent of the mean. The noticeable clumping in the Chapter 13 fees suggests the court is influencing the lawyer’s fees for Chapter 13 bankruptcy filings, while Chapter 7 fees are determined by the market.<sup>22</sup>

## 4 Results

Consider the following regression equation:

$$(5) \quad \ln\left(\frac{f_i^{13}}{f_i^T}\right) = \delta p_d + \beta_1 r_d + \beta_2 i_d + \beta_3 X_i + \beta_4 W_s + \varepsilon_i$$

where  $i$  is the zip code,  $f_i^T$  is the number of total bankruptcies,  $f_i^{13}$  are those filed under Chapter 13, and  $p_d$  is the district's log price difference between filing a Chapter 13 and a Chapter 7.<sup>23</sup> The remaining covariates, chosen using the model in Section 3 and discussed below, are designed to deal with omitted variables bias due to differences in socioeconomics, state policies, or district court policies.

One may be concerned that Chapter 13 filings fees are correlated with the court’s unobserved policies favoring or disfavoring creditors, i.e. its ability to move  $\eta_{13} - \eta_7$ . In that case, the price variable would be correlated with the error term so, although one can still take the coefficients as a sign of the importance of legal

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<sup>22</sup> Lawyers can petition the court’s typical fee for unusually time-consuming filings, and of course they can always charge less than the maximum fee, thus we do see some variation in the reported fee.

<sup>23</sup> Although we present OLS and IV results here, we also tried Poisson and Negative Binomial specifications, which would better fit the data generating process and allow us to include observations with zero filings. The elasticities were identical to those reported here for the OLS estimation, with similar standard errors, and so we omitted them for the sake of simplicity. In unreported work we also ran regressions on the level of fraction 13, rather than the log value. The results were substantively similar to those presented here and omitting zip codes with zero Chapter 13 filings made no difference on the point estimates. Thus we do not believe that our specification creates any substantial bias due to it requiring us to exclude zero values.

institutions in determining which chapter is filed, it will not estimate the price elasticity.

As discussed in Section 2, it is not obvious that Chapter 13 filing fees are pro-creditor, though requiring higher repayment rates clearly is. Thus we include the average log repayment rate in our sample of Chapter 13 filings,  $r_d$ , as a proxy for how pro-creditor a court's precedents are. This value is the average difference between filers' reported monthly log income and (the court influenced) log expenditures and is important for determining how much the debtor can pay into a monthly plan.

It may be that this repayment variable is simply reporting a correlation between higher incomes and more Chapter 13 filings. We account for this in two ways: first, by including an extensive set of demographic variables,  $X_i$ , aggregated to the zip-code level to control for the distribution of household income and other demographics, and second, by controlling for the court's average reported log income from our sample of Chapter 13 filings,  $i_d$ .

The zip-code level demographic controls,  $X_i$ , are the same as those reported in Table 1: urban fraction, population size, marital status variables, household composition, unemployment, self-employment and homeownership rates, housing values, and the distributions of education, race, age, and income. These either directly control for, or proxy for, differences across areas in asset and debt levels, income, and the unobserved costs of filing bankruptcy,  $\eta_{13} - \eta_7$ , whether financial, social, or preference based.

Lastly, we add four explicit state-level controls,  $W_s$ , that proxy for the state's average value of  $\theta$  and  $e$ . We use two dummy variables for the state's wage garnishment laws to proxy for  $\theta$ ; Lefgren and McIntyre (2009) show these laws to be an important determinant of overall bankruptcy levels. The federal government requires wage garnishments for debt to be no more than 25 percent of the worker's paycheck. States that use the federal standard are the baseline, while the two dummy variables capture states that impose further restrictions on wage garnishing or make it essentially impossible. We also include two dummies for varying levels of homestead exemptions which may be pertinent to filing Chapter 7.

Given the constraints of the available aggregate data, Equation (5) accounts for all the major components of the model presented in the prior section and controls for major sources of potential bias. To account for state or district level correlation, we always cluster the standard errors at the state level. The regressions are weighted by the number of bankruptcies in the zip code in order to be representative of the bankrupt population.

Table 3, Column 2 reports on this basic specification. The price elasticity estimate is statistically significant at 0.18, indicating that higher fees lead to a higher fraction of Chapter 13 bankruptcies. The log repayment rate is positive, though small at 0.10.<sup>24</sup> Note that in the *debtor's* optimization problem repayment rates should drive *down*

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<sup>24</sup> Reported income is negatively related with chapter 13 filings—a peculiar outcome considering chapter 13 is typically associated with higher incomes. Of course, our unreported zip code controls include extensive household income controls, so the filing income variable is difficult to interpret by itself. Further, this result is insignificant in our later, preferred specifications. As we show in our robustness checks, the variable is also largely irrelevant to estimating the price elasticity.

Chapter 13 filings. Thus we take the positive coefficient as a sign that repayment rates are strongly correlated with the court's ability to affect  $\eta_{13} - \eta_7$ .

Although we do not report here on the dozens of coefficients in the demographic controls, the appendix reports on these for the preferred specification in column 5.

The restrictions on wage garnishment should lower the value of  $\theta$ , and so decrease the desire to file bankruptcy, but whether this has more of an effect on Chapter 13 or 7 filings depends on the marginal density of the unobserved preferences and how they interact with the other model parameters. Thus the relation of  $\theta$  to chapter choice is ambiguous, and so it is perhaps not surprising that the effect switches signs moving from medium to heavy restrictions on wage garnishment. We take up this question again in Table 4. Higher exemptions should cause a preference for Chapter 7 filings over Chapter 13 filings; the point estimates are in line with this, but neither exemption variable is large or significant. The small exemption effect is in line with Lefgren and McIntyre (2009) who found that few filers had sufficient assets to make the exemption differences relevant.

The state policy controls are an incomplete control for the full range of state policies or preferences that may affect bankruptcy choices. We thus resort to a more stringent identification strategy that replaces the state controls with state fixed effects.<sup>25</sup>

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<sup>25</sup> The state fixed effects should capture not only political economy variables, but any differences in the economic environment across states. Additionally, if state level demographics affected bankruptcy policy through political economy channels, this would also be captured by the fixed effects.

$$(6) \quad \ln\left(\frac{f_i^{13}}{f_i^T}\right) = \delta p_d + \beta_1 r_d + \beta_2 i_d + \beta_3 X_i + \mu_s + \varepsilon_i$$

The fixed effects estimate in column 3 is 0.30—higher than what we found before but not statistically different (p-value=0.14)—and indicates that a 10% increase in the price gap would lead to a 3% increase in the fraction of Chapter 13 filings. Also in this regression, the repayment rate estimate is 0.30 and statistically significant.

One difficulty with the OLS regressions is that although Chapter 13 fees are exogenous, Chapter 7 fees are market-determined and therefore likely to be endogenous. We account for this by instrumenting the price difference,  $p_d$  with the Chapter 13 court appointed fees. If our identifying assumption holds,  $\delta$  will measure the price elasticity for switching from a Chapter 7 to a Chapter 13.

Columns 4 and 5 re-estimate equations (5) and (6) but use the court mandated Chapter 13 price as an instrument for the price difference. Column 5 is the preferred specification, as it uses only differences within states across districts, and thus effectively controls for unobserved state characteristics. In this case, the price elasticity, 0.27, is essentially the same as the OLS estimate. In fact, the price elasticity estimates in column 4 and 5 are virtually identical, suggesting that when using IV regression the more modest state controls in column 6 are sufficient to control for biases from state policies. The coefficient on repayment rates is also essentially unchanged from the state fixed effects specification reported in column 3.

## Raw Filing Rates

The model allows for two mechanisms by which price can affect the fraction of filings that are Chapter 13—either by moving agents from 7 to 13, or by inducing new debtors to file. We test these two channels by estimating IV regressions of the form in equations (5) and (6), but replacing the dependent variable with  $\ln\left(\frac{f_i^j}{P_i}\right)$  where  $P_i$  is the population size for the zip code and  $j$  indexes either total filings, Chapter 7 filings, or Chapter 13 filings. If price, repayment rates, or state policies cause new entrants to bankruptcy, this will cause changes in total filings. The Chapter 7 regression catches movements out of Chapter 7 and presumably into Chapter 13. The total filings number is an agglomeration of the change in the two filing rates. Regressions are weighted by the population in the zip code, so that the results are representative of the U.S. population.

Table 4 reports the relative price elasticities on log Chapter 7, Chapter 13, and total bankruptcy filing rates, as fractions of the population. In all cases, the regressions include demographic controls and the price is instrumented with the Chapter 13 price.

The point estimates containing fixed effects in columns 2, 4, and 6 suggest that Chapter 7 filings decline and Chapter 13 filings go up but total filings are unaffected. None of these results, though, is statistically significant. The large standard errors make it impossible to make any definitive declarations about whether higher Chapter 13 filings are from those who would not file or from those who would have filed a Chapter 7.

If the repayment rate is acting as a proxy for pro-creditor court institutions, we would expect a shift out of Chapter 7 filings and into Chapter 13 filings, with possibly fewer overall filings. The coefficients on repayment rates bear out this story. Higher repayment rates predict fewer Chapter 7 filings, though the result is not statistically significant. The elasticity on Chapter 13 filings, 0.32, is positive and significant. Lastly, total bankruptcies may fall slightly, but the standard errors are far too large to make the claim with any confidence. Since typically twice as many people file Chapter 7 as Chapter 13, a complete substitution between the two with no change in total filings would require a Chapter 7 elasticity of about -0.16 (half that of the Chapter 13 elasticity). The regression point estimate is -0.20 with a standard error of 0.20, thus one cannot reject that this hypothesized substitution is taking place.

From the wage garnishment results in columns 1, 3, and 5, we see that the non-monotonic effect of wage garnishment on the fraction 13 is a result of medium restrictions moving Chapter 13 filers out of bankruptcy, and heavy restrictions moving Chapter 7 filers out of bankruptcy. Thus, the impact of restricting wage garnishment is first on the marginal chapter 13 filers, and then the marginal 7 filers.

Homestead exemptions now show a positive effect on bankruptcies, but with the wrong sign for Chapter 7. As we noted earlier, the variation across states in exemptions levels is all noticeably above the levels relevant to most bankruptcy filers. Thus this variable appears to be picking up other state policies or preferences correlated with the exemption rates.

## **Robustness**

The above results suggest that raising the price of a Chapter 13 bankruptcy 10% would lead to a roughly 3% increase in the relative number of Chapter 13 filings. Table 5 shows that the results are robust to a variety of possible changes in methodology. Column 1 simply repeats the preferred specification from Table 3, column 5. The following columns consider several possible specification modifications.

In the original specification, we weight the data to make it representative of the bankrupt population. This is the most reasonable specification, but an alternative would be to consider each district to be the relevant unit of analysis, as this is the level at which the variation occurs. As shown in Column 2, reweighting the data so that each district is given equal weight gives essentially the same estimate.

Including a control for reported filer income forces the variation in repayment rates to come from different allowed deductions for consumption. But it may be that the relevant variation is better recovered by looking at the difference between reported income and consumption. Thus Column 3 drops the control for reported log income in the bankruptcy filing so that the repayment rate uses these changes in log income as a legitimate source of variation in repayment rates. Recall that we include extensive zip code level controls for household income distributions, which we maintain in this regression. Using all the variation in repayment rates makes little

difference to the price elasticity estimate, although the standard error grows enough that the point estimate is no longer significant.

Column 4 drops both controls for district legal institutions—repayment rates and reported income. This has little effect on our estimate of the price elasticity, which is reassuring. Removing these controls increases the error in the regression, so the point estimate is no longer significant. But the robustness of the point estimate suggests that pro-creditor policies are not heavily related to the allowed Chapter 13 fee. We return to this question later.

Our baseline specification uses the difference between Chapter 13 and Chapter 7 prices and then instruments with the Chapter 13 price. Columns 5 and 6 show that our results are robust to changing this specification choice. Column 5 uses the log Chapter 13 fee directly as a regressor, rather than as an instrument and Column 6 includes the Chapter 7 prices as a control—so that variation in the fee difference comes only from the Chapter 13 fees. Neither of these changes has any substantive effect.

Although districts are created to be within states, some zip codes along state borders have a large number of debtors crossing over state lines to file in a neighboring court that is more conveniently located. Thus these zip codes have non-matching states and districts and so, were they numerous, could be affecting our results that use state fixed effects. Column 7 deals with this by defining each zip codes' state by the district where it does most of its filings (which is also how we assign it to a district). Redefining the state fixed effects in this way has no effect on

the point estimate or standard error, suggesting that these zip codes are not affecting the results.

One concern in the baseline specification is that the price variable is formed by averaging observations within districts, and in many cases the number of observations averaged is very small. In some cases we have only four observations on lawyer fees—two for Chapter 7 and two for Chapter 13. Potentially, measurement error could be biasing our coefficients towards zero. This is especially true in the presence of state fixed effects, where the fixed effects may decrease the signal to noise ratio.

Since we instrument the price difference with the Chapter 13 price, we only need to be worried about error in the Chapter 13 filings, but this will likely not be orthogonal to the sampling error in the fee difference. To correct for this, we split our underlying sample of data on Chapter 13 fees in half, reserving one half to use as an instrument and the other to form the estimate of the district fee difference. Column 8 reports on this exercise; the estimate of 0.41 is larger than our baseline estimate of 0.27, suggesting that our baseline estimate may be too low. Unfortunately the split-sample IV magnifies the imprecision, so that the standard error is too large to draw any strong inference.

Although our demographic and state controls go a long way in controlling for differences across localities; attitudes and other cultural factors at the local level may bias our results. For example, Chapter 13 may appeal to groups that feel it important to pay back one's obligations, and if these beliefs vary within a state,

across districts, and are correlated with lawyer fees, this would confound our results. We check for this by using county level cultural data on the percent of a given county that voted for George Bush in the 2004 election, the percent of the population that fall into one of seven religious categorizations (Mainline Protestant, Evangelical, Catholic, Orthodox, Other Christian, Jewish, and Islam), and the number of crimes reported in 2004 per 100,000 people (Association of Statisticians of American Religious Bodies, 1999-2001; U.S. Department of Commerce, 2000-2007). The regression results are reported in column 9. Our sample size drops somewhat due to missing data. Although many of these factors affected chapter choice, they did little to affect the price elasticity estimate, which was 0.24. Thus there is little evidence that unobserved cultural characteristics are biasing the results.

Braucher (1999) suggests that judges and trustees approve higher fees to induce attorneys to write plans with high repayment rates for their clients, even if the filing household is unlikely to fulfill the requirements of such a demanding plan. If this occurs as part of a district court policy, we should be able to observe a positive correlation between courts that approve higher fees and the associated repayment rates. In fact, if repayment rates are positive predictors of prices, one becomes concerned that the price elasticity is also recovering unobserved district policies to stimulate Chapter 13 bankruptcies.

We look at this in Table 6, which performs a regression similar to our baseline specification, but with prices as the dependent variable. In the first two columns, the dependent variable is  $p_d$ , the log price gap between Chapter 7 and Chapter 13.

In the last two columns the dependent variable is the Chapter 13 price. Both regressions include demographic controls and are run with and without state fixed effects. In all specifications, the log repayment rate is *negatively*, rather than positively, related to the price variables and the coefficients are insignificantly different from zero once we account for unobserved state effects. Thus we find no evidence of district-level effects biasing our elasticity estimates up.

We do find evidence of wage garnishment and homestead exemptions being correlated with the fee difference, though less so with our Chapter 13 fees instrument. Regardless, our state fixed effects strategy should be an effective control for both these and other unobserved states policies or state-wide cultural norms.

## **5 Discussion and Conclusion**

The results suggest that increased legal fees encourage lawyers to move clients into Chapter 13 filings. This is true controlling for a wide array of socioeconomic factors, the pro-creditor legal precedents of a district court and unobserved differences across states. Although it is always possible that the estimated elasticity is biased by some correlation with an unobserved causal factor, we find little evidence to support this notion. With the exception of state policies, which we are confident we can purge with fixed effects, none of our controls for possible bias had a significant effect on our preferred point estimate.

About 5% of the cross-district differences in Chapter 13 rates could be eliminated by harmonizing Chapter 13 fees.<sup>26</sup> Thus the fees by themselves do not explain the enormous cross-state variation in chapter choice. The model as a whole, though, does do a fairly good job of this; even without state fixed effects the model can explain 71% of the variation across districts.

The results support the notion that lawyers can and do manipulate their client's filings to increase their revenues. Of course, we don't observe lawyer profits, so our conclusions would be tempered if it was found that in states with higher Chapter 13 prices, Chapter 13 filings also required more work. We know of no evidence to support this and Chapter 13 filings appear to be fairly standardized forms, so we doubt this is a large problem given the enormous variation in Chapter 13 prices. Nevertheless it could be worth examining in future research.

Thus, it appears that with lawyers, as with many professionals, their advice is self interested, to the possible detriment of their client. While we feel confident in our positive results, it is more difficult to make normative statements about the optimal Chapter 13 rate. Even if we were sure that Chapter 13 is harmful to *most* debtors, this is certainly not true for *all* debtors. Furthermore, the debtors are filing in order to avoid repaying their creditors, thus their gain may be the creditor's loss, which could result in higher equilibrium interest rates for other borrowers. Though we have no definitive answer, we consider a few of the larger welfare issues for debtors, creditors, and lawyers.

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<sup>26</sup> To get this number, we estimate the change in district-level variation in the raw sample, then compare it to the variation that would exist if all fees were harmonized, using the baseline specification. This requires having a consistent estimate of the causal price elasticity.

A major concern for the debtor is that a Chapter 13 plan is far more likely to be dismissed. If we had disaggregated zip code data on dismissals we could look at how changing fees changed dismissals in each district. One could imagine the effect going either way. If, for example, lawyers who file more Chapter 13s are better at filing them and so secure a better deal for filers then this might, on the margin, overcome the much higher average dismissal rates of Chapter 13 filings vs. Chapter 7 filings.<sup>27</sup> Unfortunately, the only data we have available on dismissals is at the county level. Unreported results suggest that the estimates are too noisy to be informative. On the other hand, microdata evidence in Lefgren et al (2009) suggests that adding marginal Chapter 13 filings leads to higher dismissal rates for filers in their Texas sample.

The other financial benefit to the debtor is the “cram-down” whereby secured assets that have more debt than their current value automatically have their debt reset to the market value. For those with many assets, this can be a substantial benefit—at the expense of the creditors. Lastly, for many debtors there may be substantial differences in the emotional costs of two filings. The drawn-out Chapter 13 process may be more draining than the relatively quick Chapter 7 filing, though the 13 may appeal to those with a preference for repaying at least some of their obligations.<sup>28</sup>

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<sup>27</sup> Using this kind of model, Chandra and Staiger (2007) find evidence for benefits to patients who use services physicians have specialized in.

<sup>28</sup> Another possible difference would be differential effects on future credit access. Most people filing bankruptcy are likely to already have fairly low credit scores, thus the marginal effect of actually filing may not be that substantial. Furthermore, filing a chapter 7 assures that the debtor will be unable to file a further chapter 7 for eight years and their debt burden has been eliminated. A chapter 13 filing, on the other hand, signals to creditors that the filer may well be heading for a future chapter 7 filing. Consistent with this, anecdotal evidence from speaking with bankruptcy attorneys suggests that chapter 7 filings may actually be better for future credit than chapter 13 filings.

From the perspective of the creditors, Chapter 13 filings introduce a new debt owed to the lawyer that is given priority over the unsecured creditor, thus reducing the odds of receiving payment. Of course, unsecured creditors receive almost nothing in a typical Chapter 7 filing, so it seems unlikely they are made worse off by moving debtors from 7 to 13, especially since some debtors will, in fact pay off some fraction of their debt by fulfilling their repayment plan. Thus moving debtors to Chapter 13 may be a net gain for them.

One substantial difference between the two filings is the larger transfer of money from the debtor to the lawyer. On average, this will be a regressive income redistribution, and so not something the court has a strong interest in supporting for its own sake.

The typical way to solve this kind of principal-agent problem is to align the incentives of the two parties. In this case we'd like the lawyer to have an incentive to give accurate information to the filer. One mechanism to do this would be to further stretch out lawyer payments to occur over the life of the repayment plan, thus putting them in a position similar to the unsecured debtors, and thus more concerned about whether the debtor will complete the plan. Alternatively, the required credit counseling component of post-2005 bankruptcies could include information about Chapter 13 dismissal rates.

Whatever the optimal balance of Chapter 13 and Chapter 7 bankruptcies, the larger issue remains. Exactly as one would expect, the evidence suggests that in markets

for goods sufficiently complex to require outside advice, that advice may well be compromised when coming from sellers with a financial stake in the decision.

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