The Real Effects of Bankruptcy Forum Shopping^{*}

Preliminary and Incomplete, Comments Welcome

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Abstract: Many non-Delaware firms strategically file for bankruptcy in Delaware. For decades, policy makers and academics have debated whether this "forum shopping" is efficient. This debate has motivated six congressional bill proposals on forum shopping. We inform this debate using a natural experiment and Census-Bureau microdata. Within a Delaware-adjacent state, we show that firms are more likely to file in Delaware if they are physically closer to the state border. Combining this plausibly exogenous variation with extensive observable control variables, we show that filing in Delaware causally lowers liquidation rates, shortens bankruptcies, and increases post-bankruptcy employment. The effects are driven by characteristics of Delaware judges, which challenges alternative explanations.

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1 Introduction

Should firms be able to choose their legal environments? In many contexts, firms can take legal action in multiple potential courts.¹ For example, a U.S. firm filing for bankruptcy can file in any of the 90 bankruptcy district courts. In a practice known as "forum shopping," roughly 23% of bankruptcies are filed outside the state in which the filing firm is headquartered. Delaware is the most popular forum-shopping destination: over half of forum-shopping firms file in Delaware. This forum shopping to Delaware has drawn more policy attention than any other issue in corporate bankruptcy. We show causal evidence that forum shopping to Delaware preserves firms and saves jobs.

There is substantial disagreement about the social merits of forum shopping. Academics, practitioners, and policymakers have argued about whether the forum shopping trend benefits firms for over 25 years.² Proponents argue that firms forum shop to take advantage of expert bankruptcy judges and court-specific legal precedents, leading to more efficient and predictable bankruptcy processes (Ellias, 2018). Bankruptcy lawyers voiced this same opinion in a recent Government Accountability Office (GAO) survey commissioned by the U.S. Senate.³ Critics argue that this is an excuse to cover more insidious forum shopping motives. For example, LoPucki (2010) argues that lawyers, managers, and secured lenders collude to file in Delaware, where favorable judges allow them to extract value from other stakeholders such as employees.

Perhaps because of this disagreement, forum shopping has recently received more attention by policy makers than any other corporate bankruptcy issue. Senators Warren and Cornyn recently introduced the Bankruptcy Venue Reform Act of 2021 to limit forum shop-

¹See Guzman (2000); Enriques and Gelter (2006); Rasmussen (2006).

²See page 37 of https://govinfo.library.unt.edu/nbrc/report/03recomm.pdf.

³See https://www.gao.gov/assets/gao-15-839.pdf.

ping.⁴ Similar bills were introduced earlier in 2021,⁵ in 2019,⁶ in 2018,⁷ and 2011.⁸ As far back as 1997, the National Bankruptcy Review Commission's final report recommended limiting forum shopping, which motivated a 1998 congressional bill proposal (Ayotte and Skeel, 2004). We inform this debate with causal evidence that forum shopping to Delaware can be the difference between liquidation and continuation for distressed firms.

To conduct our analysis, we collect data from several sources to observe virtually all U.S. Chapter 11 corporate bankruptcy filings since the 1990s. Our novel dataset allows us to analyze forum shopping by both public and private firms of any size. We observe whether each case is converted from Chapter 11 reorganization to Chapter 7 liquidation. We also observe the duration of the bankruptcy and many other details, including the ZIP code of the bankrupt firm's headquarters. Merging this dataset with longitudes and latitudes at the ZIP code level, we measure the distance from each firm's headquarters to the Delaware bankruptcy court. To measure post-bankruptcy outcomes, we merge this bankruptcy data with administrative data from the U.S. Census Bureau. This allows us to measure employment and the creation of new establishments in the years after a firm files for bankruptcy.

Our identification strategy exploits proximity to the Delaware bankruptcy court as an instrument for forum shopping to Delaware. In other contexts, long travel times discourage managers and investors from monitoring firms (Bernstein, Giroud, and Townsend, 2016; Giroud, 2013). In our context, distance is likely to be relevant in the forum-shopping decision because 33% of bankruptcy professionals interviewed in the GAO survey "cited convenience

⁴See https://www.warren.senate.gov/newsroom/press-releases/warren-cornyn-introduce-bill -to-prevent-large-corporations-from-forum-shopping-in-bankruptcy-cases.

⁵See https://www.restructuring-globalview.com/wp-content/uploads/sites/21/2021/10/BVRA-House.pdf.

⁶See https://www.congress.gov/bill/116th-congress/house-bill/4421.

⁷See https://www.congress.gov/bill/115th-congress/senate-bill/2282/text.

⁸See https://www.govinfo.gov/content/pkg/CHRG-112hhrg68185/html/CHRG-112hhrg68185.htm.

or proximity of the parties involved to the court as a factor in venue selection." To maximize the relevance of the instrument, we focus our analysis on firms in states neighboring Delaware: Maryland, New Jersey, and Pennsylvania. Intuitively, the distance to Delaware is likely less relevant when managers and employees fly to the bankruptcy court. Within a Delawareadjacent state, we show that a one standard deviation decrease in the distance to Delaware leads to a 6 percentage point increase in the likelihood of filing in Delaware.

Our exclusion restriction requires that a bankrupt firm's distance to Delaware only influences its bankruptcy outcome through the decision to file in Delaware. Our empirical specification addresses many potential threats to this exclusion restriction. First, firms might strategically headquarter in a specific state to take advantage of differing state laws and taxes. The unobserved firm characteristics driving the state choice would then be correlated with the distance to Delaware. We address this by including state-by-year fixed effects in all our specifications. Comparing firms within a given state, we show that firms are more likely to forum shop to Delaware if they are closer to the Delaware border. Second, even within a state, distance from the Delaware border could be correlated with certain firm characteristics by chance, introducing bias if those characteristics influence firm outcomes. We use our bankruptcy data to tightly control for observable firm heterogeneity. Specifically, we use a battery of interacted fixed effects to only compare firms with the same total liabilities and the same total assets and the same number of creditors, as indicated on the bankruptcy filing petition. Third, even if firms in differing locations are observably similar, they face different local economic conditions. If firms further from the Delaware border systematically have worse local economics, that could create a correlation between the rate of liquidations and the distance to Delaware. We show our results are robust to controlling for several county-year level proxies for economic conditions.

We use our distance-to-Delaware instrument to estimate the causal effects of forum shopping to Delaware. Specifically, we estimate two-stage-least-squares (2SLS) regressions to estimate the local average treatment effect of filing in Delaware on various firm outcomes. Relative to the counterfactual of filing for Chapter 11 in another court, we find that filing for Chapter 11 in Delaware dramatically lowers the probability that a firm eventually liquidates in Chapter 7. Filing in Delaware also leads to much faster case resolution. Turning to our administrative Census-Bureau data, we find that filing in Delaware causally increases the likelihood that a firm opens new establishments after bankruptcy. In contrast to critics' claims that forum shopping harms employees, we find that filing in Delaware causally increases employment post bankruptcy. This increase in employment is driven by both the creation of new establishments after the bankruptcy filing and higher employment at establishments opened before the bankruptcy filing.

Finally, we examine why filing in Delaware causes such a stark improvement in bankruptcy outcomes. Following the views expressed by industry practitioners, we hypothesize that access to expert Delaware judges improves outcomes. To test this, we compare Delaware filers to non-Delaware filers that happen to draw a "Delaware-like judge." Following earlier literature, we characterize judges using their proclivity for liquidating firms. We find that our 2SLS estimates shrink dramatically and are statistically insignificant after controlling for judge liquidation tastes. In other words, Delaware bankruptcies have similar outcomes to non-Delaware bankruptcies overseen by Delaware-like judges. This result is inconsistent with the alternative hypothesis that our effects are driven by unobservable differences between firms close to Delaware and firms far from Delaware. Instead, it appears that firms file in Delaware to increase the likelihood of obtaining a liquidation-averse judge. We show that this works: in a 2SLS regression, filing in Delaware causally reduces the liquidation taste of the assigned judge. Consistent with the random assignment of judges, this effect disappears after controlling for court fixed effects. Finally, we conduct a similar test in our administrative Census-Bureau data. We find that Delaware bankruptcies have similar post-bankruptcy employment to non-Delaware filings after controlling for the case duration, another measure of judge efficiency.

1.1 Related literature

Relative to the existing literature, we contribute new causal evidence that forum shopping to Delaware leads to shorter bankruptcies and fewer liquidations. Evidence like this is essential for resolving the decades-long policy debate over how much flexibility firms should have in choosing their bankruptcy court.

We contribute to the finance literature studying the determinants of liquidation (Iverson, 2018; Bernstein, Colonnelli, Giroud, and Iverson, 2019; Bernstein, Colonnelli, and Iverson, 2019; Antill, 2022b; Müller, 2022; Dahiya, John, Puri, and Ramirez, 2003), the efficacy of corporate bankruptcy (Gilson, John, and Lang, 1990; Dou, Taylor, Wang, and Wang, 2021; Wang, 2021; Antill, 2022a; Antill and Hunter, 2023; Morrison, 2007; Ayotte and Morrison, 2009), post bankruptcy performance (Hotchkiss, 1995), and how bankruptcy rules and practices affect not only investors' welfare but also stakeholders outcomes (Araujo, Ferreira, Lagaras, Moraes, Ponticelli, and Tsoutsoura, 2021; Akey and Appel, 2021; Bellon, 2021; Ohlrogge, 2022; Chen, 2022; Ohlrogge, 2023; Graham, Kim, Li, and Qiu, 2023). Unlike all of these papers, we examine the policy relevant topic of forum shopping in bankruptcy.

We also build on a law literature examining correlations between forum shopping and various outcomes using small samples of large public firms (LoPucki and Kalin, 2001; Ayotte and Skeel, 2004; LoPucki and Doherty, 2006; Ellias, 2018). We contribute to this literature

with the first causal evidence that filing in Delaware leads to fewer liquidations and higher post-bankruptcy employment. While the correlations documented in these earlier papers are informative, our estimates use an instrumental-variables approach to account for selection into bankruptcy venues based on unobservable characteristics. This allows us to estimate the relevant counterfactual outcome a forum shopping firm would have had if it had filed in its home court. Importantly, an early version of Ayotte and Skeel (2004) included one specification in which the distance to Delaware is used as an instrument for filing in Delaware. However, the small sample size (165 observations) prevented that study from showing statistically significant causal evidence. Moreover, our larger sample size allows us to include far more controls (e.g., interactions of fixed effects for assets, liabilities, and number of creditors) than this earlier work, aiding our identification and making distance more plausibly exogenous. More broadly, we contribute to this earlier work by examining how forum shopping impacts all firms, not only the largest public firms. This comprehensive view is important for ensuring bankruptcy reforms are not designed solely for the largest firms.

2 Institutional details and data description

2.1 Institutional details

2.1.1 Forum shopping

According to 28 U.S.C §1408,⁹ firms have several options when choosing where to file for bankruptcy. A firm can file in the district court for the district in which: (i) it is headquartered; or (ii) its principal place of business is located; or (iii) its principal assets are located; or (iv) an affiliate has a pending bankruptcy. For a single-establishment firm, the first three

⁹See https://www.law.cornell.edu/uscode/text/28/1408.

options typically correspond to the same district court. Likewise, a single-establishment firm typically has no affiliates.

For firms with multiple establishments, these four options allow for substantial flexibility when choosing a bankruptcy court. The fourth option, allowing firms to file where an affiliate has a pending bankruptcy, is particularly broad. Firms regularly utilize this option in a twostep process. In the first step, a subsidiary or affiliate files for bankruptcy in the desired court. In a second step, the entire multi-establishment firm uses this "affiliate" option to file in the desired court. This allows a firm to pick a court in any district where an affiliate operates, regardless of where the firm is headquartered or conducts most of its business. In particularly stark examples, large firms have created subsidiaries in new locations for the sole purpose of filing for bankruptcy in those locations. For example, Purdue Pharma filed for bankruptcy in White Plains, New York to take advantage of its precedent regarding third-party releases. While Purdue's primary business was in Connecticut, it was nonetheless able to file in New York by having a non-equity general partner change its service of process address to an address in Westchester county.¹⁰ Importantly, our dataset correctly identifies a firm's principal address rather than the address it uses for forum-shopping purposes: Purdue lists a Connecticut ZIP code in our data.

Firms forum shop for many reasons. In 2015, the Government Accountability Office interviewed 39 bankruptcy attorneys and bankruptcy judges about their experience with forum shopping.¹¹ Most respondents identified the experience of Delaware judges and the predictability of Delaware cases, due to the high number of large historical bankruptcies filed in Delaware, as key reasons that firms forum shop. However, roughly a third of these

¹⁰See https://docs.house.gov/meetings/JU/JU05/20210728/113996/HHRG-117-JU05-Wstate-Levit inA-20210728.pdf.

¹¹See https://www.gao.gov/assets/gao-15-839.pdf

practitioners also indicated that firms consider convenience and physical proximity when choosing a bankruptcy court:

Twelve of 39 attorneys and judges cited convenience or proximity of the parties involved to the court as a factor in venue selection.¹²

Given this preference expressed by bankruptcy professionals, it is thus reasonable to expect that some marginal firms will decide whether to file in Delaware based on the physical distance to the court. It is worth mentioning that some policy makers and academics are skeptical of these responses, arguing that practitioners give innocuous responses like these to hide more nefarious forum-shopping motives. For example, these critics say that lawyers choose courts that approve high fee reimbursements and lenders choose courts that allow them to maximize recovery at the expense of workers (LoPucki, 2006; Ellias, 2018).

2.1.2 Random assignment of judges and conversion to Chapter 7

Chapter 11 allows firms to reorganize or liquidate. In contrast, Chapter 7 only allows for liquidation. Some firms file for Chapter 11 with hopes of reorganizing but are ultimately converted to Chapter 7 liquidation.

Different judges have different interpretations of the bankruptcy code. As a result, previous research has shown that some judges are more inclined to convert cases to Chapter 7 than others (Chang and Schoar, 2006; Bernstein et al., 2019; Bernstein, Colonnelli, and Iverson, 2019; Antill, 2022b).

While firms have substantial flexibility in choosing their bankruptcy court, firms cannot select their judge. Once a firm chooses a bankruptcy court, local rules determine which office

¹²See page 25 of https://www.gao.gov/assets/gao-15-839.pdf.

of that court handles the case. Conditional on the court and office, judges are randomly assigned to cases. A large empirical literature has shown that conditioning on the court and office, judge characteristics are uncorrelated with firm characteristics (Chang and Schoar, 2006; Bernstein et al., 2019; Bernstein, Colonnelli, and Iverson, 2019; Antill, 2022b). While Hüther and Kleiner (2022) argue that hedge funds are able to time their bankruptcy filings to increase the likelihood of obtaining a particular judge, this finding is mostly driven by selection into offices within a district.

2.2 Data

2.2.1 Federal Judicial Center

We begin with bankruptcy data from the publicly available Federal Judicial Center's Integrated Database (FJC).¹³ The FJC is maintained by the U.S. courts. Since 2008, the FJC covers every bankruptcy in the U.S. The FJC includes some earlier bankruptcies as well. Our sample begins with 153,461 Chapter 11 bankruptcies in the FJC.

For each bankruptcy, the FJC includes the court and office in which the bankruptcy was filed. It also includes the filing date and other information from the bankruptcy filing petition, such as the bankrupt firm's (i) total liabilities; (ii) total assets; (iii) estimated number of creditors. These variables are binned according to the bins on the standard bankruptcy filing petition. The FJC also contains an indicator for a Chapter 11 case getting converted to Chapter 7 liquidation. Finally, for concluded bankruptcies, the FJC contains the closing date.

The FJC also includes the bankrupt debtor's ZIP code. The ZIP code corresponds to the primary ZIP code listed for the debtor on the Public Access to Court Electronic Records

¹³See https://www.fjc.gov/research/idb

(PACER) site for the debtor. With rare exceptions, this is the ZIP code of the debtor's headquarters. We merge these ZIP codes with a comprehensive U.S. ZIP code database¹⁴ to determine the state, county, longitude, and latitude corresponding to each ZIP code.

For our main analysis, we focus on firms headquartered in the three states neighboring Delaware: Maryland, Pennsylvania, and New Jersey. We focus on these states because physical distance is more likely to drive bankruptcy forum shopping decisions when it is feasible to avoid a flight.

Our key distance variable Miles to DE is calculated as the straight line distance, in miles, between (i) the longitude and latitude associated with the ZIP code of the bankrupt firm's headquarters and (ii) the Delaware bankruptcy court.¹⁵ We calculate this distance using the stata command geodist.

2.2.2 PACER

The benefit of the FJC is that it is publicly available and comprehensive starting in 2008. The weakness of the FJC is that it has limited coverage before 2008 and it omits any directly identifying information about the bankrupt debtor. This identifying information is important for three reasons. First, we need identifiers to merge our bankruptcy records with administrative data from the U.S. Census Bureau. Second, while Chapter 11 is typically used by businesses, it is sometimes used by individuals. Obtaining identifying information allows us to see if a bankruptcy has an associated employer identification number (EIN), which ensures it is a business filing. Third, some of our tests rely on the identity of the bankruptcy judge, which is not contained in the FJC data.

¹⁴See https://www.unitedstateszipcodes.org/zip-code-database/.

 $^{^{15}}$ The Delaware bankruptcy court is located at 824 N Market St # 500, Wilmington, DE 19801, with latitude and longitude of 39.7440486,-75.550901.

To obtain identifying information, we merge our FJC dataset with PACER data. PACER is the official website for obtaining court records in the U.S. Each federal court has its own PACER site that is maintained by the court. The PACER site for a bankruptcy contains a summary of the case information and every document filed by any party during the bankruptcy.

The PACER case information summary for a given bankruptcy includes (i) the name and address of the debtor; (ii) the EIN of the debtor if it is a business; and (iii) the name of the bankruptcy judge. The summary also contains the bankruptcy court and office and a uniquely identifying case identifier. The FJC contains the same court information and case identifier. We can thus locate every FJC case in PACER, despite lacking other identifying information in FJC. Finally, the PACER case information allows us to measure outcomes even when the FJC data is missing, including: (i) the duration of the bankruptcy; and (ii) an indicator for a case getting converted to Chapter 7 bankruptcy.

While PACER is publicly available, there is a 10 cent charge for each page viewed. We are grateful to the 41 bankruptcy courts that granted us fee exemptions and permission to scrape their PACER sites. For these courts, we obtain data directly from PACER. For the remaining courts, we rely on Bankruptcydata.com, a data provider that sells cleaned PACER data to academics. We complement this with similar data from Lexis Nexis.

We obtain EINS and other identifying PACER information for 15,837 business cases headquartered in our three states of interest: Maryland, Pennsylvania, and New Jersey. We observe the FJC controls (liabilities, assets, and the number of creditors) for most cases starting in 2008. For cases that do not appear in the FJC (e.g., cases before 2008), we use the zip code and outcomes from the PACER data. This dataset comprises our main regression sample. In one set of tests, we use bankruptcies filed in all states other than Delaware over the period 2004-2007. This set of tests is based on the same PACER data described above.

2.2.3 County level Census aggregates

In some of our tests, we control for local economic conditions at the county-year level. We obtain county-year level proxies for economic conditions from the publicly available Business Dynamics Statistics (BDS) dataset from the U.S. Census.¹⁶ This dataset is only available prior to 2022. For bankruptcies filed before 2022, we merge each bankruptcy with the BDS variables in the bankruptcy filing year and the county of the bankrupt firm's headquarters, both obtained from the FJC or PACER. The BDS gives us county-year level aggregate estimates of: (i) the total number of establishments; (ii) the total number of employees; (iii) the number of closing establishments divided by the total number of establishments in the previous year; (iv) the number of new establishments divided by the total number of establishments in the previous year.

2.2.4 Census data

In some of our tests, we investigate the effect of forum shopping on employment, payroll, and the creation of new establishments. To measure these outcomes, we match the bankruptcy data to comprehensive establishment-level microdata from the U.S. Census.¹⁷ In particular, we rely on the Longitudinal Business Database (LBD). The LBD is the highest quality source of information on U.S. firms' establishment creations, closure, employment, and payroll. It is constructed using federal mandatory business surveys conducted by the U.S. Census

¹⁶See https://www.census.gov/data/developers/data-sets/business-dynamics.html.

¹⁷Disclosure of quantitative statistical output using Census data needs to go through a lengthy disclosure process. The current version contains the qualitative results. The point estimates will be disclosed in the coming version.

and administrative records from business tax filings shared with the Census Bureau by the Internal Revenue Service (IRS) (Chow, Fort, Goetz, Goldschlag, Lawrence, Perlman, Stinson, and White, 2021).

The LBD database is matched to the bankruptcy data using the business register (BR). The BR is a relational database that serves as the sampling frame for most economic surveys conducted by the Census Bureau. The data is regularly updated using administrative-records data and survey data. We match the bankruptcy data to the BR using the establishment's addresses (mailing and physical), the Employer Identification Number (EIN), and the establishment's name. After pre-processing the data, we define three matching scores using (1) the establishment's names, (2) the establishment's addresses, and (3) the EIN. Each matching score takes a value between zero and one, with higher values indicating more likely matches. All the matching scores are added with the same weight so that perfect matches have a score equal to three. We keep all matches with the highest score, then require a matching score above 1.5. The matching procedure is likely to match a bankruptcy filing to an establishment if the EINs are similar. However, we do not exclusively match on EIN for two reasons. First, we cannot conclusively rule out mistakes in the EINs collected in the bankruptcy data. Second, EINs can change over time.

Once we match an establishment to a bankruptcy filing, we use the BR to identify the firm that owns the establishment. We collect all establishments in the BR associated with that firm and match those establishments to the bankruptcy filing. In other words, if a bankruptcy involves one of a firm's establishments, we assume for simplicity that it involves all of the firm's establishments.

In a separate verification exercise, we verify the matching quality by matching Chapter 7 liquidations to establishments and comparing the firm-level exit dates. The intuition of

this test is that if a firm ceases to exist in the bankruptcy data, we should also observe that the firm exits according to the LBD. Using our linkage table, we validate that the two exit dates match for almost all of our observations, thus confirming the quality of the match between the Census Business Register and the bankruptcy data. Only matching using the EIN number does not produce the same concordance in the two distinct exit dates.

2.2.5 Summary statistics

At this point, we are unable to disclose any numeric estimates based on Census data. We will have permission to display these estimates soon. However, we are free to provide numeric estimates and summary statistics for our FJC-PACER sample.

Table 1 provides summary statistics for our sample. Of our 15,837 cases, 38% are headquartered in New Jersey, 41% are headquartered in Pennsylvania, and the remaining 21% are headquartered in Maryland. While none of these firms are headquartered in Delaware, 14% file for bankruptcy in the Delaware bankruptcy court.

On average, 14% of cases are converted to Chapter 7 liquidation. For the 14,623 cases that conclude before the end of our sample period, we can calculate the duration of the case as the closing date minus the filing date. The average case lasts 1,030 days with a median of 610 days. There is substantial variation in duration.

We observe the name of the judge in 14,981 cases. For some of our analyses, we use the tendency of the bankruptcy judge to convert cases to Chapter 7 liquidation. We calculate this variable as a leave-one-out average in our sample of 14,981 cases. Specifically, let J_i denote the judge in bankruptcy *i*. For each bankruptcy *i*, we calculate Judge Convert Rate by (i) counting the number of cases other than *i* in which the judge is J_i and the case is converted to Chapter 7 (ii) dividing by the number of cases other than *i* in which the judge is

 J_i . As expected, Table 1 shows that the average judge conversion rate is equal to the overall rate at which cases are converted to Chapter 7. However, there is meaningful variation, with a standard deviation of 0.11.

The median firm in our sample has its headquarters in a ZIP code that is 83 miles from the Delaware bankruptcy court. The distance is positively skewed, with an average distance of 93 miles. Importantly, there is meaningful variation in the distance. A one standard deviation increase in the distance to Delaware corresponds to an additional 63 miles for a one way trip.

The BDS data is available for the period prior to 2022. Averaging across counties and years, a typical county has 14,726 establishments and 278,696 employees. Both the number of establishments and the number of employees are positively skewed, with averages higher than the medians. In a typical county in a typical year, roughly 9.7% of establishments exit and the ratio of new establishments to existing establishments is roughly 9.8%.

The FJC contains binned information about the filing firm. Since the information is binned across many different values, we summarize this data graphically. Figure 1 displays the distribution of total liabilities in our sample. In our sample, 30% of firms have between \$1 million and \$10 million in total liabilities. Summing across bins, 43% of firms have less than \$1 million in total liabilities while 26% of firms have over \$10 million in total liabilities. Figure 2 displays the distribution of total assets in our sample. Because bankrupt firms are typically insolvent, bankrupt firms often have total liabilities that exceed total assets. In our sample, 23% of firms have between \$1 million and \$10 million in total assets. Summing across bins, 56% of firms have less than \$1 million in total assets while 22% of firms have over \$10 million in total assets. Figure 3 displays the distribution, across bankrupt firms in our sample, of the number of creditors. The vast majority — 72% — have between 1 and 49 creditors. Summing across bins, roughly 9% of cases involve more than 1,000 creditors.

Finally, we show that Delaware is by far the most common forum-shopping destination in our sample. To show this, we define a forum-shopping firm as a firm that files in a state other than the state of its headquarters. Within this subset of our sample, Figure 4 displays the fraction of firms filing in each of the top 8 forum-shopping destinations in our sample. We see that roughly half of forum-shopping firms in our sample file in Delaware.

3 Bankruptcy-level results

We conduct our analysis in three steps. First, we show that firms are less likely to forum shop to Delaware when the bankruptcy court corresponding to their headquarters becomes more efficient. The plausibly exogenous variation in bankruptcy-court efficiency comes from the passage of the Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA) (Iverson, 2018). Following Iverson (2018), we compare courts with a high number of nonbusiness filings with those with a low number of non-business filings, both before and after the passage of BAPCPA, in a difference-in-differences specification.

Second, we analyze our bankruptcy-level dataset described in Section 2.2. We show in this dataset that firms located further from Delaware are less likely to forum shop to Delaware. As a result, these firms are assigned judges with higher conversion rates, are more likely to be converted to Chapter 7, and have lengthier bankruptcies. Combining these results, our two-stage-least-squares (2SLS) estimates show the causal effects of filing for bankruptcy in Delaware. They are consistent with the view that filing in Delaware is associated with more favorable bankruptcy-related outcomes.

Third, we conduct the same analysis using administrative data from the Census to es-

timate how filing in Delaware impacts workers and individual establishments. We describe this analysis separately in Section 4.

3.1 Why do firms file in Delaware? The role of court efficiency

The goal of this section is to understand why firms forum shop to Delaware. We show that a firm is less likely to file in Delaware after the efficiency of its local bankruptcy court improves. This implies that firms file in Delaware to improve the efficiency of their bankruptcy process.

We proxy for bankruptcy-court efficiency using judge case loads. Bankruptcy judges who need to handle more cases take more time to make decisions and are more likely to make suboptimal decisions, which impact bankruptcy outcomes (Iverson, 2018).

Judge case loads are endogenous: they are correlated with unobservable local economic conditions, which creates an omitted-variable bias if those local economic conditions impact bankruptcy outcomes. Our ideal experiment would randomly assign high or low judge case loads.

To generate plausibly exogenous variation in judge case loads, we follow Iverson (2018) and exploit the passage of BAPCPA. This act increased the cost of filing for personal bankruptcy. It also made personal bankruptcy less attractive. In particular, earners above a certain income level were excluded from filing for Chapter 7 and homestead exemptions were capped. One consequence of this reform is that it significantly diminished the number of personal bankruptcy filings. This reduced judge case loads, as bankruptcy judges handle both personal and corporate cases. Our empirical design exploits the fact that bankruptcy courts with primarily personal bankruptcies experienced a large decline in judge case loads, relative to courts with primarily corporate cases.

Specifically, we estimate the following equation by OLS:

File in $DE_{i,s,t} = \gamma Low$ caseload court_{i,s,t} + Year FE_t + State $FE_s + \epsilon_{i,s,t}$ (1)

The dependent variable File in $DE_{i,s,t}$ is a dummy variable that takes the value one if the firm is filing in Delaware and zero otherwise. Low caseload court_{i,s,t} is the share of nonbusiness bankruptcy filings in courts in state s, interacted with a dummy variable that takes the value one after October 17, 2005, the passage date of the BAPCPA. In other words, Low caseload court_{i,s,t} is equal to zero prior to BAPCPA. After BAPCPA, it is equal to the fraction of bankruptcy filings in courts in state s that are filed by non-business debtors. A high value thus corresponds to a "treated" state, because these states experienced larger declines in case loads due to the higher relative prevalence of personal bankruptcies. We include state and year fixed effects to implement a difference-in-differences design. This accounts for other changes occurring after 2005 and any time-invariant differences between high-personal-bankruptcy states and low-personal-bankruptcy states. The coefficient γ represents the impact of a lower caseload on the probability that the firm *i* files in Delaware. We cluster standard errors at the headquarter-ZIP-code-by-filing-year level.

We focus on the sample of firms whose headquarters are outside Delaware that filed for bankruptcy two years before and two years after the passage of the BAPCPA.

Table 2 reports the results. Column (1) estimates the baseline specification, as described in equation (1). The coefficient is negative and statistically significant. The coefficient is equal to a -2.75 percentage point reduction in the probability of filing to Delaware. Given that 10.9% of bankrupt firms file in Delaware in this regression sample, this represents a decrease equivalent to 25% of the baseline rate.

Column (2) shows that the results are robust to adding county-year controls. Specifically, we add the following controls: (i) the number of establishments in the headquarter county

in the year of the bankruptcy filing; (ii) the number of employees in the headquarter county in the year of the bankruptcy filing; (iii) the rate of new establishments opening in the headquarter county in the year of the bankruptcy filing; and (iv) the rate of establishments closing in the headquarter county in the year of the bankruptcy filing.

Finally, in Column (3), we include bankruptcy-specific controls. We add liability-byasset-by-creditor bin fixed effects to equation (1). We observe these variables in the FJC, which primarily covers cases filed starting in 2008. As a result, the inclusion of these fixed effects reduces our sample size. With this caveat in mind, we observe a statistically significant negative estimate, and the point estimate is larger in magnitude than the one in the baseline specification.

Overall, our results are consistent with the view that firms are more likely to file for bankruptcy in Delaware if their local bankruptcy courts have more judges with a high case load. This test supports our view that firms file in Delaware to experience a more efficient bankruptcy process. In the next section, we show that firms that forum shop to Delaware experience better bankruptcy outcomes.

3.2 First stage

To estimate the causal effect of filing for bankruptcy in Delaware, we use a 2SLS approach. In a first stage, we instrument for filing in Delaware using the distance to Delaware. In a second stage, we use this plausibly exogenous variation in Delaware filings (filings by firms located near the Delaware border) to estimate the causal effect.

To begin, we show that firms located further from Delaware are less likely to file for bankruptcy in Delaware. Let i index bankruptcies of firms headquartered in state s filed in year t. We estimate the following regression by OLS:

File in
$$DE_{i,s,t} = \beta Log$$
 Miles to $DE_i + \delta_{st} + \epsilon_{i,s,t}$. (2)

The dependent variable is an indicator equal to one if firm i files for bankruptcy in Delaware. Since our sample consists of firms headquartered in MD, PA, or NJ, this is equivalent to an indicator for forum shopping to Delaware. The independent variable Log Miles to DE_i is the logarithm of the distance between (i) the ZIP code of the headquarter of firm i, based on the assigned longitude/latitude in the U.S. ZIP code database and (ii) the location of the Delaware bankruptcy court. The distance is measured in miles.

We include state-by-year fixed effects δ_{st} , where the state refers to the state of the headquarter of the bankrupt firm and the year is the year of the bankruptcy filing. This is important for our identification, as it ensures that we only compare firms facing the same state laws and the same home bankruptcy court option. Since our treatment, distance from Delaware, varies across ZIP codes in a state, we cluster standard errors at the headquarter-ZIP-code-by-year level.

Table 3 shows our OLS estimates of equation (2). Within a set of firms filing for bankruptcy in the same state and the same year, firms closer to the Delaware border are far more likely to file for bankruptcy in Delaware. The F statistic on our distance instrument is above 10, suggesting a weak-instrument problem is unlikely. The economic magnitude is meaningful: a one-standard-deviation increase in log distance lowers the likelihood of filing in Delaware by 6 percentage points. The magnitude of this instrument is consistent with practitioner responses in the GAO survey; distance is an important factor they consider when choosing a venue.

A natural concern is that distance from the state border might somehow be correlated with poor local economic conditions. These conditions might cause negative outcomes for firms further from the border, threatening our exclusion restriction. To address this concern, we augment equation (2) with the following controls: (i) the number of establishments in the headquarter county in the year of the bankruptcy filing; (ii) the number of employees in the headquarter county in the year of the bankruptcy filing; (iii) the rate of new establishments opening in the headquarter county in the year of the bankruptcy filing; and (iv) the rate of establishments closing in the headquarter county in the year of the bankruptcy filing. These are only available from the BDS for part of our sample — prior to 2022 — leading to a slight drop in the observation count. Column 2 of Table 3 shows an almost identical estimate after adding these controls.

Another concern is that distance from the state border might somehow be correlated with unobservable firm characteristics. If that unobservable characteristic impacts bankruptcy outcomes, our estimates will be biased. We address this concern in two ways. To begin, we include a tight set of fixed effects to control for observable firm characteristics. Recall we observe binned data on each firms' liabilities, assets, and the number of creditors. We augment the equation (2) with liability-by-asset-by-creditor bin fixed effects. In other words, we only compare firms that choose the same total-liabilities bin and the same total-assets bin and the same number-of-creditors bin. Column 3 of Table 3 shows that we continue to estimate a strongly significant first stage after adding these controls. The magnitude declines, likely because of the different sample period: these firm-level controls from the FJC are only widely available starting in 2008.¹⁸ We provide further evidence for our identification strategy in Section 3.4, after we show our main results.

 $^{^{18}\}mbox{Following standard conventions, we omit "singleton observations" that are the sole observation identifying a fixed effect.$

3.3 Main results

We have established that a firm's distance to the Delaware border impacts its likelihood of filing for bankruptcy in Delaware. This holds even when comparing observably similar firms in the same state. We now use this fact to identify the causal effects of forum shopping to Delaware.

We estimate the following equation by two-stage-least-squares (2SLS):

$$Convert_{i,s,t} = \gamma \overline{File \text{ in } DE}_{i,s,t} + \delta_{st} + \epsilon_{i,s,t}, \qquad (3)$$

The dependent variable is an indicator equal to one if bankruptcy *i* gets converted to Chapter 7. We instrument for the indicator File in $DE_{i,s,t}$ using Log Miles to DE_i as in equation (2). As before, we include state-by-year fixed effects δ_{st} and cluster standard errors at the headquarter-ZIP-code-by-year level.

Table 4 shows that filing in Delaware substantially lowers the likelihood that a firm will be converted to Chapter 7 liquidation. The estimate implies that compliers of our distance instrument are 25 percentage points less likely to be converted in Delaware than they are in their home court. Our estimate of γ is highly statistically significant with a p value below 0.01. Columns 2 and 3 show that this effect is robust to controlling for observable countyyear economic conditions and firm characteristics — liability-by-asset-by-creditor bin fixed effects. We find a similar coefficient in column 2. We find a much larger coefficient in column 3, likely because of the limited sample period in which the FJC controls are available.

Our dependent variable, conversion to Chapter 7, is binary. Our endogenous independent variable, filing in Delaware, is also binary. To match standard conventions, we report linear 2SLS estimates in Table 4 in spite of this fact. However, a logit regression is more appropriate given the binary variables. To implement this, we first estimate equation (2) as a logit regression. This requires us to drop many observations to avoid a perfect prediction problem. Specifically, we must drop all observations for any state-year pair in which: File in $DE_{i,s,t}$ is always one, or always zero; or $Convert_{i,s,t}$ is always one, or always zero. Table 5 shows a negative and highly statistically significant relationship between Log Miles to DE_i and File in $DE_{i,s,t}$. Next, we estimate the reduced-form second stage for the 2SLS equation (3) using a logit regression. Specifically, we estimate

$$Convert_{i,s,t} = \gamma Log Miles to DE_i + \delta_{st} + \epsilon_{i,s,t},$$
(4)

as a logit regression. Table 5 shows a positive and statistically significant relationship between distance to Delaware and the likelihood of conversion. Finally, we calculate the average marginal effect for Log Miles to DE_i in each equation and take the ratio. The average derivative of the probability of filing in Delaware, with respect to distance, is -0.0686. The average derivative of the probability of conversion, with respect to distance, is 0.0242. Taking a ratio, we arrive at a logit-based analog of the 2SLS estimate of -.35. In other words, a logit-based estimate of the local average treatement effect (LATE) implies filing in Delaware lowers the rate of conversion by 35 percentage points.

Finally, we look at the effect of filing in Delaware on the duration of a bankruptcy. We estimate:

$$\text{Log duration}_{i,s,t} = \gamma \overline{\text{File in DE}}_{i,s,t} + \delta_{st} + \epsilon_{i,s,t}, \tag{5}$$

where the right side of the equation has the same interpretation as equation (3). We find that filing in Delaware leads to shorter bankruptcies. The treatment effect is 23% of the sample mean (Table 1). We find a similar effect after introducing observable firm controls and county-year controls.

3.4 Controlling for judge efficiency

Our results thus far show that filing in Delaware leads to fewer liquidations and shorter cases. We now show evidence that these effects are driven by access to Delaware judges.

We first calculate each judge's rate of converting cases to Chapter 7. We calculate this as a leave-one-out average (Section 2.2.5) to avoid a mechanical correlation between the outcome in case i and the judge's conversion rate in case i. We then estimate a 2SLS regression to see how filing in Delaware impacts the assigned judge's preference for liquidation:

Judge Conversion Rate_{*i,s,t*} =
$$\gamma$$
File in DE_{*i,s,t*} + δ_{st} + $\epsilon_{i,s,t}$. (6)

Other than the new dependent variable, this is identical to equation (3) with the same fixed effects and standard-error clustering. Table 6 shows that firms that file in DE because of their proximity to the border receive a judge with a much lower rate of converting cases to Chapter 7. The effect is economically and statistically significant.

Next, we confirm a standard result in the literature: within firms filing in the same court in a tight time window, judges are randomly assigned. We estimate

Judge Conversion Rate_{*i*,*s*,*c*,*t*} =
$$\gamma$$
Log Miles to DE_{*i*} + δ_{st} + κ_{ct} + $\epsilon_{i,s,c,t}$, (7)

where κ_{ct} are court-by-filing-year fixed effects. As expected, Table 6 shows that distance has zero correlation with the assigned judge's liquidation preference. Combining these two findings, we see that firms closer to the state border get judges with lower liquidation rates, and this is entirely driven by the choice of filing court.

The above findings imply that our main result, filing in Delaware causally prevents liquidations, is driven by access to Delaware judges. An alternative explanation for our main result is that the distance from Delaware is correlated with unobservable firm characteristics that drive liquidations. In this alternative story, firms far from Delaware should be more likely to get liquidated than firms close to Delaware *regardless of the assigned judge*.

This suggests a falsification test. Consider two firms in Maryland. One is close to Delaware and files in Delaware and one is far from Delaware and files in Maryland. Suppose by chance the firm filing in Maryland draws the most liquidation-averse judge in Maryland, and as a result the two firms get judges with the same conversion rate. If distance from Delaware only drives liquidations through the reduced chance of filing in Delaware, then these firms should have similar probabilities of liquidation: the Maryland filer happened to draw a Delaware-like judge, so the Maryland filer had a Delaware-like bankruptcy. In contrast, if distance from Delaware drives liquidations through a correlation between distance and unobservable firm characteristics, then the fact that it drew a Delaware-like judge should be irrelevant.

We conduct this falsification test by estimating our 2SLS equation (3) and including the judge conversion rate as a control. Table 6 shows our estimates of equation (3) with and without the conversion rate as a control. We see that including the judge conversion rate — comparing firms that happened to draw similar judges — lowers the magnitude of the effect by roughly 90%. Moreover, the effect of filing in Delaware is statistically insignificant after controlling for the judge conversion rate. This is thus consistent with our effect being driven by the pool of judges available in Delaware. It is inconsistent with our results being driven by a correlation between distance and unobservable firm characteristics.

The final column of Table 6 shows that the decline in significance after controlling for the judge conversion rate is not driven by a change in the first stage; column (5) shows that our first stage is still strongly significant after controlling for judge conversion tastes.

4 Census results

Our results so far show that filing in Delaware leads to fewer liquidations and shorter cases. These effects are driven by access to Delaware judges. We now show evidence that filing in Delaware increases post-bankruptcy employment and the rate of establishment creation. We also show that the effects are driven by bankruptcy duration, a proxy for court efficiency.

The sample includes bankruptcies in Maryland, Pennsylvania, and New Jersey from 2008-2023. We match the bankruptcy data to the Census data, as described in Section 2.2. For this analysis, an observation is an establishment k of a firm i headquartered in state s filing for bankruptcy in year t. In some of our analysis, we only consider establishments open as of the bankruptcy filing (the "Existing" sample). In other tests, we include all establishments open as of year t + 2 (i.e., establishments open two years after a firm's bankruptcy filing). We call this the "Full" sample. Other than the shift to establishment-level data and establishment outcomes, our analysis is similar to the bankruptcy-level analysis. Specifically, we estimate the following equation by 2SLS:

$$Y_{k,i,s,t} = \gamma \overline{\text{Forum Shop to DE}}_{k,i,s,t} + FE_{i,s,t} + \epsilon_{k,i,s,t}, \qquad (8)$$

We consider three different outcomes $Y_{k,i,s,t}$: (1) a dummy variable that takes the value one if establishment k was opened between year t and t + 2 and zero otherwise,¹⁹ (2) the

¹⁹This variable is only considered in the "Full" sample since it is zero throughout the "Existing sample"

log of the total number of employees at the establishment k at time t + 2, and (3) the log of the average earnings at establishment k at time t + 2, where average earnings is the total earnings at the establishment divided by the total number of employees. The second two outcome variables are missing for establishments that close prior to year t + 2. We exploit the richness of the dataset by including a coarse set of fixed effects $FE_{i,s,t}$. Specifically, we include headquarter-state-by-year fixed effects, where the headquarter state refers to the state of the headquarter of the bankrupt firm and the year is the year of the bankruptcy filing. We also include liability-by-asset-by-creditor bin fixed effects. The decision to forum shop to Delaware is instrumented using the independent variable Log Miles to DE_i, constructed as in the previous section. We cluster the standard errors at the establishment-ZIP codefiling-year level to account for potential correlations in the errors coming from local business cycles affecting employment decisions.

We report the results of estimating equation (8) in Table 7. We have not yet received approval to disclose numeric output. However, we have received approval to report the sign and statistical significance of certain coefficients. We first consider the "Full" sample. Column (1) reports the sign of the coefficient γ when the dependent variable is the log of employment in year t + 2. The sign is positive and statistically significant, meaning that firms that file in Delaware because they are geographically closer have higher employment two years after their bankruptcy filing compared to those that do not file in Delaware because they are geographically farther. While we cannot currently disclose the numerical value of this coefficient γ , the coefficient is statistically significant with a p value less than 0.05.

We next decompose this effect on total employment by looking at whether this new job creation comes from new establishment openings or through an increase in hiring at by definition.

existing establishments. To that end, we first replicate the previous analysis on the sample of establishments open at the time of the bankruptcy filing (the "Existing" sample). Column (2) of Table 7 reports the results on this restricted sample and shows a statistically significant increase in employment at these establishments. Second, in column (3) of Table 7, we show in the Full sample that treated firms also open additional new establishments after the bankruptcy filing date. Overall, the increase in total firm employment is driven by both new establishments opening and hiring at existing establishments.

Columns (4) and (5) of Table 7 investigate whether forum shopping leads to higher average earnings at the establishment level. We estimate equation (8) where the dependent variable is Log(earnings), the log of the establishment average earnings, in year t+2. Column (4) contains the results when the equation is estimated on the full sample of establishments, while column (5) restricts the analysis to the establishments that were open at the time of the bankruptcy filings. While the coefficients are positive, they are not statistically significant, consistent with the view that employment earnings, on average, do not increase if the firm forum shops. While we cannot rule out differential effects according to employee skills and scarcity, this non-result is consistent with the view that the firms in this sample are price takers on the labor market.

Finally, we show that the differential effects on real outcomes between the firms that forum shop and those that do not are driven by case duration. Excess delays in bankruptcy impose significant costs on firms. These costs are direct; longer duration is associated with higher fees (LoPucki and Doherty, 2011). Moreover, longer case duration exposes firms to higher reputation damage and indirect costs (Wang, 2021). Using a structural model, Dou, Taylor, Wang, and Wang (2021) show that excess case duration is the most important friction that firms face in bankruptcy. If a firm faces higher costs in bankruptcy because of higher case duration, then it reduces its cash flows, which diminishes its ability to hire workers and open new establishments.

In Table 8, we replicate the baseline specification of equation (8) for the same outcome variables as in Table 7, except that we control for the case duration. We create a group decile for the variable duration and add it as an additional fixed effect. The idea is to compare the post-bankruptcy outcomes between firms filing for bankruptcy outside Delaware that obtained a "Delaware-like" prompt bankruptcy and those that filed for bankruptcy in Delaware. We find that the differential effects on real outcomes disappear once we control for the case duration. This non-result is consistent with the fact that filing in Delaware leads to quicker case resolution that positively affects post-bankruptcy firm outcomes.

5 Conclusion

Congress is currently considering legislation to limit forum shopping, a practice in which firms file for bankruptcy outside of their home state. When introducing the bill, Senator Warren wrote

"Wealthy corporations should not be able to run across the country to find a favorable court to file bankruptcy. While they manipulate the system to file for bankruptcy wherever they please, affected communities — like workers, creditors, and consumers — lose."

Contrasting this view, proponents of forum shopping argue that judges in districts like Delaware have more expertise and a large body of legal precedents that reduce bankruptcy uncertainty and excess delays, leading to more efficient outcomes for all stakeholders. We inform this debate by estimating the causal effects of forum shopping to Delaware, the most popular forum-shopping destination by a wide margin.

Within a Delaware-neighboring state, we show that firms headquartered closer to Delaware are more likely to file for bankruptcy in Delaware. We combine a comprehensive dataset of corporate bankruptcies in these Delaware-adjacent states with administrative data from the U.S. Census Bureau. We estimate 2SLS regressions in which we instrument for the endogenous forum-shopping decision using the distance to Delaware. To ensure our distance instrument is plausibly exogenous, we control for an extensive list of observable firm characteristics and local economic conditions. We also show our main results disappear after controlling for the efficiency of the bankruptcy environment (case duration or the liquidation preference of the judge), which is inconsistent with our results being driven by unobservable firm heterogeneity.

We show that forum shopping to Delaware causally lowers liquidation rates, shortens cases, and increases post-bankruptcy employment. Our results thus suggest that workers benefit from higher employment when firms forum shop to Delaware. If consumers benefit from fewer liquidations and creditors benefit from shorter bankruptcies, our results likewise imply that forum shopping improves outcomes for other stakeholders. Importantly, our paper is silent on the implications of forum shopping to courts other than Delaware.

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Table 1: Summary statistics

This table provides summary statistics. Converted is an indicator equal to one for bankruptcies that are converted to Chapter 7 liquidation. Duration is the length of the bankruptcy in days. Log duration is the natural logarithm of Duration. File in DE is an indicator equal to one for bankruptcies filed in Delaware. Miles to DE is the straight-line distance, in miles, between the ZIP code containing the filing firm's headquarters and the Delaware bankruptcy court. Judge Convert Rate is the rate at which the assigned judge converts cases to Chapter 7, calculated as a leave-one-out average for all the judge's other cases in our sample. Maryland HQ, New Jersey HQ, and Pennsylvania HQ are indicator variables for being headquartered in each state. Establishments - County is the total number of establishments in the county of the firm's headquarters in the year of the firm's bankruptcy. Employees - County is the total number of establishment Entry Rate - County is the ratio of (i) the number of new establishments to (ii) the number of establishments in the previous year, calculated in the county of the firm's headquarters in the year of the firm's headquarters in the year of the firm's bankruptcy. Establishments in the previous year, calculated in the county of the firm's headquarters in the year of the firm's bankruptcy. Establishment Entry Rate - County is the ratio of (i) the number of new establishments to (ii) the number of establishments in the previous year, calculated in the county of the firm's headquarters in the year of the firm's bankruptcy. Establishment Exit Rate - County is defined in the same way but replacing the numerator with the number of closing establishments.

| | Mean | SD | P50 | Ν |
|-----------------------------------|-----------|--------------|-----------|------------|
| Converted | 0.14 | 0.35 | 0.00 | 15,837 |
| Log Duration | 6.21 | 1.47 | 6.42 | $14,\!570$ |
| Case Duration (Days) | 1,030.39 | $1,\!174.47$ | 610.00 | 14,623 |
| File in DE | 0.14 | 0.35 | 0.00 | $15,\!837$ |
| Miles to DE | 93.33 | 63.45 | 83.12 | $15,\!837$ |
| Judge Convert Rate | 0.14 | 0.11 | 0.13 | 14,981 |
| Maryland HQ | 0.21 | 0.41 | 0.00 | $15,\!837$ |
| New Jersey HQ | 0.38 | 0.49 | 0.00 | $15,\!837$ |
| Pennsylvania HQ | 0.41 | 0.49 | 0.00 | $15,\!837$ |
| Establishments - County | 14,725.61 | 8,601.34 | 12,722.00 | $15,\!043$ |
| Employees - County | 278695.73 | 182974.97 | 237793.00 | $15,\!043$ |
| Establishment Entry Rate - County | 9.75 | 1.50 | 9.72 | 15,043 |
| Establishment Exit Rate - County | 9.68 | 1.42 | 9.73 | $15,\!043$ |

Table 2: Court congestion and forum shopping

This table displays estimates from OLS regressions in which the dependent variable is an indicator for filing in Delaware. The independent variable is the product of (i) an indicator for filing in the post-BAPCPA period (starting October 17, 2005) and (ii) the share of all bankruptcies filed by nonbusiness debtors in 2003, measured in the "home court" corresponding to the county of the debtor's headquarters. The sample covers bankruptcies filed by firms headquartered in all states except Delaware over the period 2004-2007. We include state-of-headquarter fixed effects and year fixed effects in all specifications. In the second column, we include county-year level controls: (i) the number of establishments in the headquarter county in the year of the bankruptcy filing; (ii) the number of employees in the headquarter county in the year of the bankruptcy filing; and (iv) the rate of new establishments closing in the headquarter county in the year of the bankruptcy filing. In the third column, we include interacted fixed effects for (i) the total assets of the bankrupt firm, (ii) the total liabilities of the bankrupt firm, and (iii) the total number of creditors of the bankrupt firm, as indicated by the firm's selected bin on the bankruptcy filing petition. We cluster standard errors at the headquarter-ZIP-code-by-filing-year level.

| | File in DE | | | |
|-------------------------------------|----------------------------|----------------------------|----------------------------|--|
| | (1) | (2) | (3) | |
| Low Caseload Home Court | -0.0275^{**} (0.0135) | -0.0271^{**} (0.0137) | -0.0426^{**} (0.0196) | |
| State FE | Y | Y | Y | |
| Year FE | Υ | Υ | Y | |
| County-Year Controls | Ν | Υ | Υ | |
| Assets X Liabilities X Creditors FE | Ν | Ν | Υ | |
| Observations Adj. \mathbb{R}^2 | $17204 \\ 0.0294$ | $16979 \\ 0.0302$ | $7628 \\ 0.214$ | |

Note:

p < 0.1, p < 0.05, p < 0.05, p < 0.01

Table 3: First stage

This table displays estimates from OLS regressions in which the dependent variable is an indicator for filing in Delaware. The independent variable is the natural logarithm of the straight-line distance, in miles, between the bankrupt firm's headquarters and the Delaware bankruptcy court. We include headquarter-state-by-filing-year fixed effects. In columns 2 and 3, we include the county-year controls described in Table 2. In column 3, we include interacted fixed effects for (i) the total assets of the bankrupt firm, (ii) the total liabilities of the bankrupt firm, and (iii) the total number of creditors of the bankrupt firm, as indicated by the firm's selected bin on the bankruptcy filing petition. We cluster standard errors at the headquarter-ZIP-code-by-filing-year level.

| | File in DE | | | |
|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|--|
| | (1) | (2) | (3) | |
| Log Miles to DE | -0.0880^{***} (0.0141) | -0.0821^{***} (0.0160) | -0.0420^{***} (0.0117) | |
| State X Year FE | Y | Y | Y | |
| County-Year Controls | Ν | Υ | Υ | |
| Assets X Liabilities X Creditors FE | Ν | Ν | Y | |
| Observations | 15834 | 15040 | 9507 | |
| Instrument F-Stat | 39.14 | 26.50 | 12.76 | |
| Adj. R ² | 0.305 | 0.318 | 0.533 | |

Note:

p < 0.1, p < 0.05, p < 0.05, p < 0.01

Table 4: IV estimates

This table displays estimates from 2SLS regressions in which the dependent variable is an indicator for conversion to Chapter 7 liquidation or the log duration of the bankruptcy. The endogenous independent variable is an indicator for the firm filing in Delaware. We instrument for this endogenous variable using the natural logarithm of the straight-line distance, in miles, between the bankrupt firm's headquarters and the Delaware bankruptcy court. We include headquarter-state-by-filing-year fixed effects. In columns 2, 3, 5, and 6, we include the county-year controls described in Table 2. In columns 3 and 6, we include interacted fixed effects for (i) the total assets of the bankrupt firm, (ii) the total liabilities of the bankrupt firm, and (iii) the total number of creditors of the bankrupt firm, as indicated by the firm's selected bin on the bankruptcy filing petition. We cluster standard errors at the headquarter-ZIP-code-by-filing-year level.

| | Convert to 7 | | | Log Duration | | |
|-------------------------------------|------------------------|-------------------|------------------------|--------------|--------------|--------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| File in DE | -0.25^{**} (0.09) | (0.10) ** -0.25** | -1.16^{**} (0.37) | (0.46) | (0.54) | -3.99*** (1.31) |
| State X Year FE | Y | Y | Y | Y | Y | Y |
| County-Year Controls | Ν | Υ | Y | Ν | Υ | Υ |
| Assets X Liabilities X Creditors FE | Ν | Ν | Y | Ν | Ν | Y |
| Observations | 15834 | 15040 | 9507 | 14567 | 14374 | 9064 |
| Note: | | | *, | v < 0.1, ** | p < 0.05, ** | **p < 0.01 |

Table 5: IV logit

This table displays estimates from logit regressions in which the dependent variable is an indicator for filing in Delaware (column 1) or an indicator for conversion to Chapter 7 liquidation (column 2). The independent variable is the natural logarithm of the straight-line distance, in miles, between the bankrupt firm's headquarters and the Delaware bankruptcy court. We include headquarter-state-by-filing-year fixed effects. We include the county-year controls described in Table 2. We cluster standard errors at the headquarter-ZIPcode-by-filing-year level.

| | File in DE | Convert to 7 |
|-------------------------------------|------------|-----------------------------|
| | (1) | (2) |
| main | | |
| Log Miles to DE | -0.7756*** | 0.2007^{***} |
| | (0.1572) | (0.0720) |
| State X Year FE | Y | Y |
| County-Year Controls | Υ | Υ |
| Assets X Liabilities X Creditors FE | Ν | Ν |
| Average Marginal Effect | -0.0686 | 0.0242 |
| Observations | 13536 | 13536 |
| Note: | | p < 0.1, p < 0.05, p < 0.05 |

 $p^* < 0.1, p^* < 0.05, p^* < 0.01$

Table 6: Forum shopping and judge conversion rates

This table shows that our main results no longer hold after controlling for the conversion rate of the assigned judge, suggesting that the effects of filing in Delaware are driven by the pool of Delaware judges. Columns 1, 3, and 4 display estimates from 2SLS regressions in which the endogenous independent variable, an indicator for filing in Delaware, is instrumented by the log distance between the firm's headquarters and the Delaware bankruptcy court. In column 1, the dependent variable is the assigned judge's rate of converting cases to Chapter 7 liquidation. In columns 3 and 4, the dependent variable is an indicator for the case being converted to Chapter 7 liquidation. Column 2 displays the results of an OLS regression of the judge conversion rate on the distance to Delaware, controlling for filing-court-by-year fixed effects. Column 3 shows the same regression depicted in column 1 of Table 4. In column 4, we control for the judge conversion rate. In column 5, we show our first stage (Table 3 column 1) is robust to controlling for the judge conversion rate. All regressions include state-by-filing-year fixed effects. We cluster standard errors at the headquarter-ZIP-code-by-filing-year level.

| | Judge Con | Judge Convert Rate | | Convert to 7 | | |
|----------------------|------------|--------------------|-----------|----------------|-------------------|--|
| | (1) | (2) | (3) | (4) | (5) | |
| File in DE | -0.2811*** | | -0.2539** | -0.0279 | | |
| | (0.0688) | | (0.1026) | (0.0950) | | |
| Log Miles to DE | | 0.0004 | | | -0.0811*** | |
| | | (0.0040) | | | (0.0158) | |
| Judge Convert Rate | | | | 0.7921^{***} | -0.0641 | |
| | | | | (0.0499) | (0.0695) | |
| State X Year FE | Y | Y | Y | Y | Y | |
| County-Year Controls | Υ | Υ | Υ | Υ | Υ | |
| Court X Year FE | Ν | Υ | Ν | Ν | Ν | |
| Estimator | 2SLS | OLS | 2SLS | 2SLS | OLS | |
| Observations | 14207 | 14088 | 15040 | 14207 | 14207 | |
| Note: | | | * | p < 0.1, **p < | 0.05, ***p < 0.01 | |

Table 7: IV estimates, Census outcome variables

This table displays the sign estimates and statistical significances from 2SLS regressions in which the dependent variable in columns (1) and (2) is Log(emp), the log of total employment at the establishment level. The dependent variable in column (3) is Establishment opening, which is a dummy variable that takes the value one if the establishment opened post-bankruptcy and zero otherwise. Finally, the dependent variable in columns (4) and (5) is the log of the average earnings in the establishment. The endogenous independent variable is an indicator for the firm filing in Delaware. We instrument for this endogenous variable using the natural logarithm of the straight line distance, in miles, between the bankruptcy firm's headquarters and the Delaware bankruptcy court. We include headquarter-state-by-filing-year fixed effects. We include interacted fixed effects for (i) the total assets of the bankrupt firm, (ii) the total liabilities of the bankrupt firm, and (iii) the total number of creditors of the bankrupt firm, as indicated by the firm's selected bin on the bankruptcy filing year. The columns (1), (3), and (4) restrict the analysis to establishments that are open at the time of the bankruptcy filings. The numerical values of the number of observations, the value of the coefficients, and the standard errors cannot be disclosed yet, as they are pending disclosure.

| | Log | g (emp) | Establishment opening | Log(| earnings) |
|----------------------|------|----------|--------------------------|------|-----------|
| | (1) | (2) | (3) | (4) | (5) |
| File in DE | +** | +** | +** | + | + |
| State X Year FE | Y | Y | Y | Y | Y |
| Assets X Liabilities | Υ | Y | Υ | Υ | Υ |
| X Creditors FE | | | | | |
| Observations | P.D. | P.D. | P.D. | P.D. | P.D. |
| Sample | F | Existing | F | F | Existing |

Note:

p < 0.1, p < 0.05, p < 0.05, p < 0.01

Table 8: IV estimates, Census outcome variables controlling for the bankruptcy-case duration

This table replicates the specifications of the previous table, except that we control for the duration of the case. This table displays the sign estimates and statistical significances from 2SLS regressions in which the dependent variable in columns (1) and (2) is Log(emp), the log of total employment at the establishment level. The dependent variable in column (3) is Establishment opening, which is a dummy variable that takes the value one if the establishment opened post-bankruptcy and zero otherwise. Finally, the dependent variable in columns (4) and (5) is the log of the average earnings in the establishment. The endogenous independent variable is an indicator for the firm filing in Delaware. We instrument for this endogenous variable using the natural logarithm of the straight line distance, in miles, between the bankruptcy firm's headquarters and the Delaware bankruptcy court. We include headquarter-state-by-filing-year fixed effects. We include interacted fixed effects for (i) the total assets of the bankrupt firm, (ii) the total liabilities of the bankrupt firm, and (iii) the total number of creditors of the bankrupt firm, as indicated by the firm's selected bin on the bankruptcy filing petition. Finally, we also include duration fixed effects constructed at the decile level. The sample in columns (1), (3), and (4) is the full sample of establishments two years after the bankruptcy filing year. The columns (1), (3), and (4) restrict the analysis to establishments that are open at the time of the bankruptcy filings. The numerical values of the number of observations, the value of the coefficients, and the standard errors cannot be disclosed yet, as they are pending disclosure.

| | Log | g (emp) | Establishment opening | Log(earnings) | |
|----------------------|------|----------|--------------------------|---------------|----------|
| | (1) | (2) | (3) | (4) | (5) |
| File in DE | - | + | - | - | - |
| State X Year FE | Y | Y | Y | Y | Y |
| Assets X Liabilities | Υ | Υ | Y | Υ | Υ |
| X Creditors FE | | | | | |
| Duration FE | Υ | Υ | Y | Υ | Υ |
| Observations | P.D. | P.D. | P.D. | P.D. | P.D. |
| Sample | F | Existing | \mathbf{F} | F | Existing |

Note:

p < 0.1, p < 0.05, p < 0.05, p < 0.01

Figure 1: Histogram of total liabilities

This histogram shows the distribution of total liabilities, as reported at the time of filing, across bankruptcies. It plots the fraction of cases, on the y axis, in which the debtor indicated the total-liabilities bin shown on the x axis.



Total liabilities

Figure 2: Histogram of total assets

This histogram shows the distribution of total assets, as reported at the time of filing, across bankruptcies. It plots the fraction of cases, on the y axis, in which the debtor indicated the total-assets bin shown on the x axis.



Total assets

Figure 3: Histogram of number of creditors

This histogram shows the distribution of the number of creditors, as reported at the time of filing, across bankruptcies. It plots the fraction of cases, on the y axis, in which the debtor indicated the number-of-creditors bin shown on the x axis.



Number of creditors

Figure 4: Histogram of the filing court for forum shoppers

We define a forum shopping firm as a firm that files in a state other than the state of its headquarters. Within this subset of our sample, this figure displays the fraction of firms filing in each bankruptcy court. For brevity, we only display the eight most common forum shopping destinations in our sample.

