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Women’s access to credit increases women in bankruptcy: Evidence from Maryland since 1940

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WOMEN'S ACCESS TO CREDIT INCREASES WOMEN IN BANKRUPTCY: EVIDENCE FROM MARYLAND SINCE 1940[1]

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Little is known about women's use of consumer bankruptcy in the US before 1980. We use new data from Maryland to show that women who petitioned for bankruptcy without a spouse were twice as common in the 1970s as they were in the 1950s and 1960s. We explore the extent to which the growing supply of credit to women explains their growing representation in bankruptcy. To do this, we examine the effect of a 1974 federal law that barred sex discrimination in lending, increasing the supply of credit to women relative to men. After the law, the probability that a bankrupt was a woman was 30 percentage points higher. Additionally, while the number of creditors reported by women filers grew to match men's, the amount of debt female filers owed did not grow relative to male filers. Together these results imply that the law increased the supply of credit to women on the extensive margin, that is, it increased the number of women who received credit. The patterns suggest that earlier low rates of bankruptcy among women were largely a result of the low supply of credit to them.

[1] This paper was the winner of the 2020 James Soltow Award for Best Paper Published in Essays.

Introduction

Although much has been uncovered about the history of women's economic lives,[2] little is known about the use of consumer bankruptcy by women. In the US, courts do not systematically collect demographic data about the people in bankruptcy. A scattering of studies fills the gap in court data by determining the gender of petitioners from the names on court records or from surveys of petitioners. However, each of the studies uses a different sampling scheme, samples a different geographic area, and samples a short time.[3] Moreover, existing studies cover only years after about 1980, after many of the most significant changes in women's modern economic lives had already taken place. To study the history of women in bankruptcy, we construct the first consistent, long-run data set on consumer bankruptcies from 1940 to 2003 from the federal court serving the state of Maryland. The new data show that the steady rise in the share of women filing for bankruptcy, especially women filing without a spouse, began earlier than previous studies can document. For example, the share of women filing without a spouse rose from about 10 percent in the 1950s and 1960s to 20 percent in the 1970s.

We use the data to explore a potential cause of the increase. We show that increases in women's access to credit contributed significantly to the rise of women in bankruptcy. Of course, the decades we study were marked by rapid change in many aspects of economic and social life. For example, growth in labor force participation of women and growth in the divorce rate were highest in the 1970s (Francine Blau and Lawrance Kahn 2007, US Census Bureau 2019). Both of these changes, as well as others, could be associated with bankruptcy. Reverse causality is also possible. In this article, we begin to establish a clearer link between women's representation in bankruptcy and their access to credit by studying the impact of the Equal Credit Opportunity Act (ECOA) of 1974. The ECOA prohibited lenders from discriminating against borrowers on the basis of gender or marital status, which increased the supply of credit to women

[2] For a summary of themes in women's economic history, see Jane Humphries (2018).

[3] For a summary of the papers, see Teresa Sullivan and Elizabeth Warren (1999).

relative to men. Our data suggest that the ECOA increased the number of women that received credit (that is, it increased the supply of credit to women at the extensive margin) but that it did not increase the indebtedness among women with credit (it did not increase the supply of credit to women at the intensive margin). These patterns suggest that earlier low rates of bankruptcy among women were largely a result of the low supply of credit to them. As more women got credit, more women were, by definition, "at risk" for bankruptcy, and women's representation in bankruptcy court rose. Our data show that the ECOA increased the probability that a bankrupt person was a woman by 30 percentage points.

The article is organized as follows. The next section provides background on consumer bankruptcy in the United States and on the ECOA. We then describe the new data. In the central section of the article, we establish a statistical link between the ECOA and an increase in the share of women among petitioners for bankrupts. In the final section, we examine the debts and creditors of the bankrupts to show that the ECOA's main effect was to increase women's access to credit at the extensive margin, putting them more on par with men.

Background

To provide institutional context, we first explain how consumer bankruptcy works in the US, and we briefly summarize the existing debate on the causes of bankruptcy in general and among women, including the role of increases in the supply of credit. We then describe the ECOA and what is known about its effectiveness in increasing access to credit among women relative to men.

Consumer Bankruptcy in the US

In the US, the governance of creditor-debtor relations is mostly left to states. State laws address usury, garnishment, foreclosure, and other creditors' remedies. Bankruptcy is an exception; it is federal law. The bankruptcy law in effect from 1940 (when our sample begins) to 1978 was passed in 1898 and amended in 1938.[4] In the debate over the 1898 law,

[4] This brief history of bankruptcy law and procedures draws from the works of Edward J. Balleisen (2001), Bradley A. Hansen (1998), Bradley A. Hansen and

Congress rejected the administrative processes used abroad and continued the US practice of handling bankruptcy in adversarial court proceedings. The debate over process was reprised in the 1930s and the 1960s. Each time, Congress rejected an administrative approach.

Insofar as they relate to the issues addressed in this article, the path to bankruptcy for consumers and the core of bankruptcy procedure have not changed much since 1898. Consumers take the first step on a path that can lead to bankruptcy when they apply for a loan. The creditor approves or denies the loan. Only consumers who apply for a loan and have it approved can be "at risk" for bankruptcy, so an increase in the supply of credit at the extensive margin (that is, an increase in the number of people who get any credit) has the potential to increase bankruptcy.

Among consumers who gain access to a loan, only those who default continue along the path that can lead to bankruptcy. Default may be the result of an unexpected adverse event such as unemployment, illness, or divorce, or it may be a consequence of imprudent borrowing or imprudent lending. An increase in the likelihood of encountering an adverse event – often called "vulnerability" – has the potential to increase bankruptcy, as can an increase in the supply of credit at the intensive margin (that is, an increase in the indebtedness among those with credit).

In the US, creditors typically cannot initiate bankruptcy proceedings against a consumer-debtor who is in default.[5] Instead, creditors can only take actions under state law. Of the state laws, garnishment of wages is the most important, though state laws on seizure of real and personal property also matter.[6] If a creditor does not pursue collection under state law, a debtor in default has little reason to petition for bankruptcy under the federal law. Two aspects of state collection laws are important. The first

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Mary Eschelbach Hansen (2007), Mary Eschelbach Hansen and Bradley A. Hansen (2012), David A. Skeel (2001) and Charles Jordan Tabb (1995). For conciseness, we omit many details that are not directly relevant to the current analysis.

[5] The situations are so limited that only 0.4 percent of filings in the 1920s and 1930s were ones in which creditors initiated bankruptcy proceedings against a consumer (Hansen and Hansen 2012). Today they are even rarer. None of the consumer bankruptcies in our sample was initiated by creditors.

[6] Real property is real estate. Personal property is assets other than real estate, such as cash, vehicles, jewellery, and furniture.

aspect is whether the state makes it procedurally simple for a creditor to collect. Bankruptcy rates are highest in states where it is procedurally simple for a creditor to collect. Bankruptcy is also more sensitive to changes in macroeconomic conditions in such states (Mary Eschelbach Hansen and Bradley A. Hansen 2012). The second aspect is whether the state exempts (i.e. protects) a large portion of wages from garnishment or a large amount of assets from seizure in that state (Lars Lefgren and Frank McIntyre 2009). Because federal law allows bankrupts to claim the exemptions they are allowed under state law, bankruptcy rates are also higher in states where either a large portion of wages or a large amount of assets are protected. To the best of our knowledge, there is no evidence of disparate treatment of women in collections. However, because we focus on Maryland, cross-state differences in collection law cannot affect the results here.

When a debtor petitions for bankruptcy, the court stops collection initiated previously under state law. Debtors in bankruptcy may choose between liquidation or repayment.[7] If the debtor chooses liquidation, the court authorizes sale of the debtor's assets that are not exempt from collection under state law, and it distributes the proceeds among creditors. The debtor can then apply for a discharge of most remaining unsecured debt.[8] If the debtor chooses repayment, the court supervises a repayment plan. Repayment is limited to income not exempted by state law, and repayment plans typically last three to five years. If the debtor successfully completes the plan, he or she can obtain a discharge of remaining unsecured debt. The court grants the discharge unless creditors prove the debtor engaged in fraud.

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[7] In 2005, Congress limited the ability of middle-class debtors to choose liquidation.

[8] Most unsecured debts (that is, debts that are not backed by an underlying asset that can be seized in default) are dischargeable in bankruptcy, but there are exceptions. For example, student loans are not dischargeable. Though secured debt (that is, debts that are backed by collateral such as mortgages and car loans) can be part of a repayment plan, it cannot be discharged in bankruptcy. Instead, the creditor typically seizes (repossesses) the asset (collateral) if the debtor fails to make the payments. Additionally, some debts (for example, unpaid taxes) have priority over other debts in the distribution of proceeds.

In 1978, Congress "repealed and replaced" the 1898 law. The 1978 Bankruptcy Reform Act (BRA) changed corporate bankruptcy significantly, but it changed consumer bankruptcy only on the margins. Most important for this article, the BRA allowed spouses to file on a single petition, submitting one set of paperwork, whereas the 1898 law required each spouse to file his or her own petition and paperwork, which detailed his or her individual financial position.

The 1898 bankruptcy law was drafted by an interest group of manufacturers and wholesalers who wanted more efficient collection of trade credit across their growing national markets. Though they did not prevent consumers from using the bankruptcy law, they did not predict that so many people would eventually use the law to get protection from creditors' collection efforts and to discharge their consumer debts. The consumer bankruptcy rate increased from one per 10,000 people annually in the middle of the twentieth century to about 43 per 10,000 people at the turn of the twenty-first. In Maryland, the state we study here, the bankruptcy rate was less than one per 10,000 in 1950, but it was about 60 per 10,000 in 2000.[9]

A large literature seeks to identify the determinants of increases in the consumer bankruptcy rate.[10] Did the increasing vulnerability of middle and lower class households increase the default rate and therefore increase the bankruptcy rate (for example, Teresa Sullivan, Elizabeth Warren and Jay Lawrence Westbrook 2000)? Did the stigma of default or bankruptcy decline over time, or did social networks degrade (for example, Ethan Cohen-Cole and Burcu Duygan-Bump 2009; Michelle M. Miller 2015)? Did a generous bankruptcy law encourage households to overspend, safe in the knowledge they could get a discharge (Thomas A. Durkin, et al. 2014)? The most recent contributions to this literature come from macroeconomic studies that highlight the role of increases in the supply of credit to people who applications for loans were (or would have been) denied previously, or (again) increases at the extensive margin (Igor

[9] Authors' calculations from Mary Eschelbach Hansen, Matthew Davis, and Megan Lynn Fasules (2015) and Michael R. Haines et al. (2010).

[10] For a review of research that covers the period we study, see Michelle J. White (2006).

Livshits, James MacGee, and Michele Tertlit 2016). The several explanations are not mutually exclusive. There is evidence for each, and each probably contributed to some extent.

Of particular relevance to this article is evidence that improvement in information technology in the 1980s and 1990s provided a way for credit card companies to expand the supply of credit by tailoring the terms of solicitations to prospective applicants (Livshits, MacGee, and Tertlit 2016). Applicants with lower credit ratings were offered credit cards with higher interest rates. Cardholders, card debt, and bankruptcy all rose. This is the first study to consider whether an increase the supply of credit to a demographic group had an impact on bankruptcy among members of the group.

The literature on women in bankruptcy emphasizes the vulnerability of women to divorce (for example, Angela C. Lyons and Jonathan Fisher 2006). Elizabeth Warren (2002, 26) describes the survey evidence. The majority of women in bankruptcy, she says, “have had a serious interruption in income… Nearly half have had to deal with a serious medical problem—either their own or that of a child or parent for who they provide care.” However, in a time series analysis, the timing of increases in women in bankruptcy does not match up with the timing of the growth in women’s labor force participation, unemployment, divorce, or other demographic trends (Mary Eschelbach Hansen and Michelle McKinnon Miller 2016). Instead, the credit market conditions, proxied by the prime rate, are the most important predictor of the share of women in bankruptcy. A lower interest rate increased bankruptcy among women, suggesting again that changes in credit markets have a more important role than is currently recognized. In order to contribute to our understanding of the role of increases in the supply of credit, and to separate it from the impact of other social or economic factors that may have contributed to an increase in indebtedness, default, and bankruptcy among women, we measure the impact of a particular law that increased the supply of credit to women, the ECOA of 1974.

The ECOA

The ECOA of 1974 barred discrimination in credit transactions based on gender or marital status. An amendment in 1976 barred discrimination based on race.[11] The ECOA was part of a series of Congressional attempts to promote fairness in consumer credit markets. Congress saw credit markets as particularly important because access to consumer credit was expanding rapidly. Total consumer credit in the US grew from 30 to 36 percent of GDP over the course of the 1970s, the largest increase in any decade during the study period. Over the whole 1940-2003 study period, there were few years in which consumer credit did not grow (Òscar Jordà, Moritz Schularick, and Alan M. Taylor 2016). As consumer credit evolved from a way to finance luxuries to a way to finance everyday transactions (for example, Louis Hyman 2011a), Congress came to see access to credit, like access to a job, as a civil right.

As early as 1960, there were federal bills that aimed to require creditors to disclose terms of credit clearly (Edward L. Rubin 1991). Congress merged the disclosure requirements with proposals to fight illegal lending and money laundering and with proposals to limit the ability of states to allow easy garnishment and passed them in 1968 as the Consumer Credit Protection Act (CCPA). In hearings that preceded the CCPA, there was passionate testimony by Sargent Shriver, Director of the Office of Economic Opportunity, citing the National Advisory Commission on Civil Disorders, which found that low supply of credit to the urban poor was one cause of race riots in the 1960s.[12]

Because of the testimony of Shriver and others, the CCPA established the National Commission on Consumer Finance to recommend further reforms to credit markets. At the hearings of the commission, women who had been organizing for equal rights in all matters bought their complaints about credit to the national stage (Louis Hyman 2011b; US Senate 1973). They reported that creditors denied credit to women or offered it to women only on worse terms than men. For example:

- Unmarried women, but not unmarried men, had to provide a male relative as a co-signer of a loan.
- Married women had difficulty establishing their own individual credit histories because department stores required newly-married

[11] Other classes, such as recipients of public assistance, are also protected by the ECOA and its amendments.

[12] US House of Representatives 1967, 242.

women to close their accounts and reapply for credit in their husbands' names.

- Because they lacked individual credit histories, divorced and widowed women who had paid their bills diligently for years were denied credit.
- Lenders discounted the wages of women by as much as 50 percent for the purposes of underwriting a loan.

The commission's evidence of discrimination in access to credit was anecdotal, not statistical. Still, Congress acted on it, passing the ECOA for women in 1974. The ECOA applied to all entities that regularly engaged in extending credit. Congress set substantial penalties for non-compliance, and it charged the Federal Reserve Board, which supervises many banks in the US, with rule writing. The Fed wrote nearly 200 rules that went into effect from October 1975 to June 1976 (James F. Smith 1977). Congress delegated the implementation of the rules for any particular transaction to the agency that had the closest contact with businesses that typically made that type of transaction, and it delegated enforcement to the Federal Trade Commission.[13] The Fed's reports to Congress on the ECOA (for example, Board of Governors 1979) summarizes its work writing the rules and revising the procedures and manuals used by examiners and working with the Federal Trade Commission, the Department of Justice, the Comptroller of the Currency, the Small Business Administration, and other agencies.

Many of the rules regulated the information that creditors could require applicants to disclose; for example, applications could not require a report of sex or marital status. Other rules required creditors to provide information to debtors; for example, creditors were required to tell applicants that, if they were denied credit, they were entitled to know the reason for the denial. Creditors also had to provide applicants with information about the ECOA and the responsible agency. Complaints were not numerous. The Fed reported only 304 in 1978 (Board of Governors 1979, 5). Several years after the rules went into effect, only 48 court decisions on cases had been issued (John H. Matheson 1984, 377). Although a lack of cases may suggest a weak law, it may also reflect

[13] Enforcement authority was transferred to the Consumer Financial Protection Bureau after it began operating in 2011.

significant efforts to comply. By 1981, full compliance was at 51 percent, and substantial compliance was at 80 percent (Board of Governors 1982, 2). Banks and businesses did make an effort to alter their practices to comply (Smith 1977; W. J. Boyes, Dennis Hoffman, and Stuart Low 1986).

After the ECOA was passed, several studies suggested that women's claims of sex discrimination in lending were overstated.[14] Because the ECOA and its rules focused on the disparate treatment of specific applicants rather than the disparate impact on women as a group, the evaluations of the effectiveness of the ECOA focused on showing whether women who were previously denied loans would get them under the new rules. But the changes to application processes under the ECOA probably encouraged more women, and later more African-Americans (Clifford B. Hawley and Edwin T. Fujii 1991), to apply for credit.

Contemporary narrative accounts suggest that more women did get credit after the passage of the ECOA (Hyman 2011b). In particular, this came from the financial institutions, credit cards, and department stores that comprised the fastest-growing categories of creditors. Recent work applying modern matching methods to household balance sheet data from the nationally representative Surveys of Consumer Finance finds that the ECOA increased women's access to credit cards. Miller (2019) finds that women's probability of cardholding went up seven percent more than men's on account of the ECOA. Moreover, the ECOA <u>de</u>creased the average amount that women cardholders owed by $33 (again, relative to men). In other words, the dominant effect of the ECOA was to increase the supply of credit at the extensive margin. After the ECOA, more women took the first step on the path that can lead to bankruptcy.

New Data on Petitioners for Bankruptcy, 1940-2003

To measure the extent to which the ECOA affected women's representation in bankruptcy, we use new data that we collected from the archives of bankruptcy court case records. We systematically sampled about 3,000 bankruptcy cases (both consumer and business) filed between

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[14] For a review of theoretical and empirical work related to the ECOA, see Gregory Elliehausen and Thomas A. Durkin (1989).

1940 and 2003 in the Federal District Court for Maryland. (See the Data Appendix for details.) For each case, we collected basic information, such as the name of the debtor and the date the petition was filed. We also collected detailed data on the balance sheets of the bankrupt.

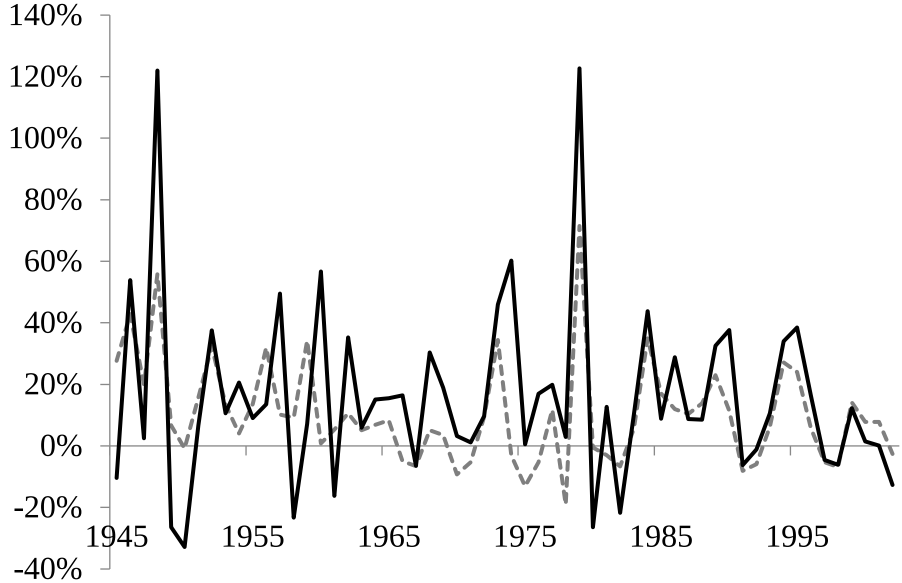
In this article we limit our attention to consumer bankruptcy cases, in which the debts of the bankrupt were primarily incurred for household purposes rather than for the operation of a business. We exclude cases in which a business name was listed as either the name of the bankrupt (that is, if the bankrupt was an incorporated business) or listed as an alias for the bankrupt (likely indicating that the business was a sole proprietorship or partnership). About 89 percent of the petitioners in the sample were consumer bankrupts.

Maryland Compared to the US

As noted above, once in default, state laws influence the decision to file for bankruptcy. Therefore, studying a single state is helpful for understanding changes in bankruptcy over time. Maryland is a good choice for this case study because, in broad terms, it is representative of the post-World War Two US economy. It has urban areas (Baltimore), suburban areas (near Baltimore and the District of Columbia) and rural areas (to the west). Changes in the labor force participation rate of women, the ratio of female-to-male unemployment, the divorce rate, and other demographic trends are similar for Maryland and the US (Hansen and Miller 2016). As a result, over the period we study, the year-to-year changes in consumer bankruptcy filings in Maryland (shown by the black solid line in Figure 1) are similar to changes in the average federal district court (dashed line).

Determining Gender

Although demographic information is not systematically recorded on the bankruptcy documents, the gender of the debtor can almost always be determined from the use of pronouns on the court documents. For the five percent of cases in which no pronouns appeared on the petition, we determined the likely gender of the petitioner using www.genderchecker.com. There were no unisex names that could not be categorized. In this way, we construct the first consistent, annual time series data set of bankruptcy among women.



Sources: Hansen, Davis, and Fasules (2015) and Michael R. Haines et al. (2010).
Notes: The pattern of change in the consumer bankruptcy rate in Maryland (solid line) is similar to the change in the national bankruptcy rate (dashed line).

Figure 1
Annual Change in Consumer Bankruptcy Rate in Maryland and the US

Women Filing Alone versus Women Filing Jointly

A single or married woman may petition for bankruptcy alone if her debts are contracted in her own name. Alternatively, a married woman may petition with her husband if they have debts in common. Again, each spouse in a bankrupt couple filed his or her own petition for bankruptcy until the 1978 rewrite of the bankruptcy law allowed spouses to file on the same petition. To make a series that is comparable across 1940-2003, we take as our unit of analysis the individual petition*er* for bankruptcy.[15]

[15] See the Data Appendix for details on the treatment of cases filed by spouses. For a comparison of the methods of counting in bankruptcy studies see

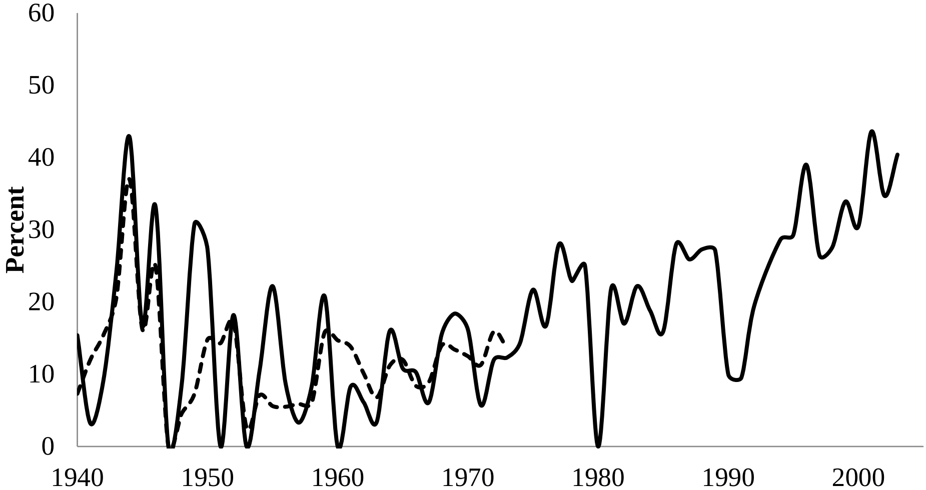
Women filing alone comprise 18 percent of all petitioners in the sample from 1940 through 2003. Women – filing alone *or* with a spouse – are 38 percent of petitioners in the sample. The solid lines in Figure 2 show women's representation in each year. About 30 percent of all petitioners from the 1940s through the 1960s were women. During the 1970s, the share of women jumped to about 40 percent, and it rose steadily thereafter. Women filing *alone* were rarest in the 1950s and 1960s (about 10 percent of petitioners), but in the 1970s the representation of women filing alone was twice as high (almost 20 percent). Our data confirm the growing representation of women in bankruptcy after 1980 that has been suggested by less comprehensive studies (for a summary, see Teresa Sullivan and Elizabeth Warren 1999). By 2000, women and men were equally represented among all petitioners, and women filing alone were almost 40 percent of all one-person petitions.

The share of women in the sample who filed prior to 1960 is more volatile than it is after 1960. This volatility exists in part because the total number of petitioners in Maryland was small prior to 1960. Total petitions averaged 44 annually in the 1940s, about 500 annually in the 1970s, and more than 2,500 annually in 2000 (Hansen, Davis, and Fasules 2015).

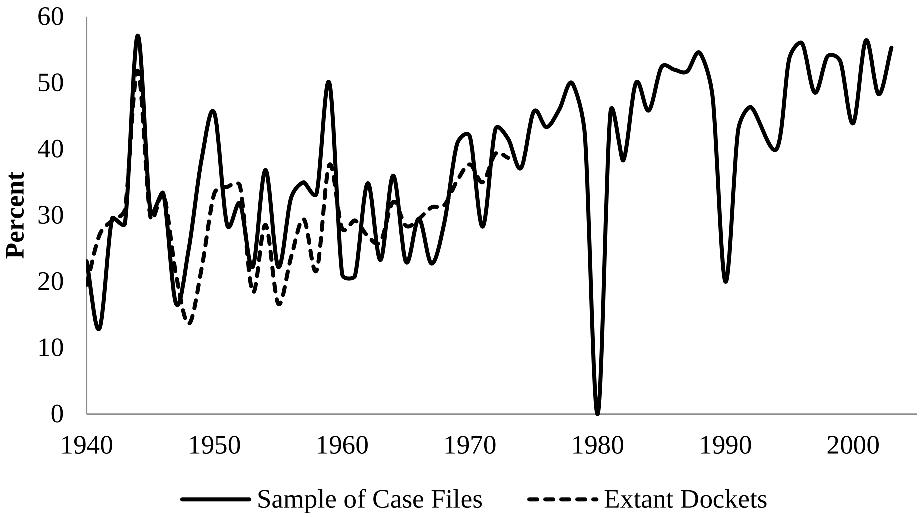
To check the representativeness of the sample, we collected the date of filing and names of petitioners for each bankruptcy case (approximately 5,000) from the court's dockets covering 1940 to 1973. Newer dockets were not available. (See the Data Appendix for additional information.) The dashed lines in Figure 2 shows the share of women on the dockets. The representation of women in the sample of case files is generally consistent with their representation on the dockets for the years in which the two data sources can be compared. Of course, the share of women in the sample is more variable than the share on the dockets, and in two years (1980 and 1990) the sample contains an unusually small number of women.

Ian Domowitz and Thomas L. Eovaldi (1993); for a discussion of the importance of method see Robert B. Chapman (2002).

A: Women Filing Alone



B: All Women



Source: Maryland sample of bankruptcy case files and dockets. See Data Appendix.

Figure 2
Percent of Petitioners Who Were Women

Descriptive Statistics

Table 1 shows descriptive statistics of the petitioner-level data. All dollar amounts are inflation-adjusted to 2000 values using the CPI-U. As we would expect, men and women who filed jointly as a couple were in better financial condition than either men or women who filed alone. Joint petitioners have a lower leverage ratio (debt-to-asset ratio) (mean 14.98) than either men filing alone (mean 26.03) or women filing alone (mean 18.21). Joint petitioners have more debt (mean $59,966) than either men or women filing alone (mean $51,149 and $41,213 respectively). This difference is primarily due to differences in secured debt; joint petitioners have more secured debt (mean $33,520) than either men (mean $17,429) or women (mean $19,330) filing alone. Finally, joint petitioners have more secured and unsecured creditors than either men or women filing alone.

The last column of Table 1 compares the means of the variables for men and women filing alone. Most of the differences are not statistically significant. While women have lower leverage ratios than men ($p<0.10$), the amount of debt and the number of creditors are not statistically different across the two groups.

Effect of the ECOA on Probability that a Petitioner is a Woman

In this section, we measure the influence of the ECOA on the probability that a petitioner for bankruptcy on a particular date is a woman. Although our data set creates the first opportunity for such a study because it is the first consistent series that covers a sufficiently long time horizon, the nature of our data set creates some challenges. We cannot use the same methods as existing micro-level studies of bankruptcy, which compare petitioners to non-petitioners, because we have only petitioners. Instead, our method is to examine the factors that have the potential to influence the share of women at each step on the path to bankruptcy. The probability that a petitioner is a woman depends on (a) changes in the relative frequency with which women obtain credit and the relative size of their debts, (b) changes in women's relative likelihood of default, and (c) changes in any gender-specific differences in the benefit-cost analysis of using the bankruptcy law.

Table 1
Descriptive Statistics from the Sample of Case Files

	Men and Women Petitioning Jointly	Men Petitioning Alone	Women Petitioning Alone	Difference Between Men and Women Petitioning Alone
Leverage	14.98	26.03	18.21	7.82*
-	[44.46]	[61.35]	[61.18]	
Total Debts	59,965.84	51,148.74	41,213.09	9,935.66
	[74,622.12]	[116,869.60]	[84,537.64]	
Total Unsecured Debt	24,481.21	31,595.16	21,247.70	10,347.46*
	[42,274.45]	[103,637.20]	[78,349.47]	
Total Secured Debt	33,519.67	17,429.12	19,330.20	-1,901.07
	[50,936.84]	[37,210.13]	[32,224.22]	
Number of Creditors	22.44	20.69	19.58	1.10
	[11.15]	[13.26]	[12.14]	
Number of Unsecured Creditors	19.84	18.42	17.79	0.63
	[10.86]	[12.66]	[12.10]	
Number of Secured Creditors	2.29	1.81	1.64	0.10
	[1.74]	[1.82]	[1.14]	
Liquidation (Chapter 7)	0.87	0.91	0.86	0.05**
	[0.33]	[0.29]	[0.35]	
Observations	658	604	373	

Source: Maryland sample of bankruptcy case files. See Data Appendix. *Notes*: All values adjusted using CPI-U to $2000. Standard deviations in brackets. * p<0.10, ** p<0.05, *** p<0.01.

We therefore estimate the following linear probability regression:[16]

$$Woman_{it} = \beta_0 + \beta_1 ECOA_t + \beta_2 Leverage_{it} + \beta_3 ECOA_t \times Leverage_{it} + \gamma X_{it} + \beta_4 Year_t + \beta_5 County_i + \varepsilon_{it},$$

where $Woman_{it}$ equals 1 if petitioner *i* who filed for bankruptcy in year *t* is a woman. To capture point (a) in the list above, we include $ECOA_t$, which equals 1 if the case was filed after the ECOA went into effect on October 28, 1975.[17] To capture point (b) in the list, we include $Leverage_{it}$, which is the debt-to-asset ratio for petitioner *i* filing in year *t*. The interaction between ECOA and leverage captures the gender-specific effect of the ECOA on the probability that a filer is a woman; we discuss this more below. To capture (c), we include a vector of controls, X_{it}. $Year_t$ is a vector of year fixed effects, $County_i$ is a vector of county fixed effects.

Table 2 shows the regression results with robust standard errors in parentheses. The first set of results includes all petitioners (columns 1-4), while the second set includes only petitioners filing alone without a spouse (columns 5-8). As seen in the first row, the probability that a petitioner is a woman is higher after the ECOA of 1974. The effect of the ECOA is statistically significant in seven of the eight specifications. The probability that the petitioner is a woman is at least 30 percentage points higher after the ECOA goes into effect.

Now consider the various specifications. In column 1, in addition to $ECOA_t$, we include only year and county fixed effects. The inclusion of year fixed effects ($Year_t$) is especially important because it captures the impact of many other time-varying factors, such as increasing labor force participation, divorce rates, and other demographic and economic changes

[16] In models with interaction terms, a linear probability model is preferred to a logit or probit model (Chunrong Ai and Edward C. Norton 2003).

[17] As discussed above, the rules under the ECOA went into effect from October 28, 1975 to June 30, 1976. The results are not affected by letting $ECOA_t$ equal one for cases filed after June 30, 1976. If we instead let $ECOA_t$ equal one if the case was filed after the ECOA was passed (October 28, 1974), results are similar in magnitude but weaker in statistical significance.

Table 2

Effect of ECOA on the Probability that Petitioner is a Woman

	All Petitioners				Petitioners Filing Alone			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ECOA of 1974	0.320**	0.334**	0.516**	0.343**	0.276	0.300*	0.524***	0.306*
	(0.149)	(0.144)	(0.138)	(0.145)	(0.177)	(0.168)	(0.168)	(0.170)
Leverage		0.0004	0.0005	0.0004		0.0005	0.0006	0.0005
		(0.0003)	(0.0004)	(0.0003)		(0.0004)	(0.0003)	(0.0004)
ECOA * Leverage		-0.0008*	-0.0013***	-0.0008*		-0.0011**	-0.0016***	-0.0011**
		(0.0004)	(0.0004)	(0.0004)		(0.0005)	(0.0005)	(0.0005)
BRA of 1978				-0.0076				-0.0146
				(0.0535)				(0.0699)
Liquidation Case				0.0230				0.0192
				(0.0488)				(0.0655)
Percent of Debt That Is Unsecured				-0.0282				0.00155
				(0.0419)				(0.0542)
Observations	1,635	1,635	1,635	1,635	977	977	977	977
R-squared	0.087	0.089	0.089	0.089	0.175	0.179	0.179	0.180

	All Petitioners				Petitioners Filing Alone			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year Fixed Effects	Yes	Yes	No	Yes	Yes	Yes	No	Yes
County Fixed Effects	Yes	Yes	No	Yes	Yes	Yes	No	Yes
Year * County Fixed Effects	No	No	Yes	No	No	No	Yes	No
Adjusted R-Squared	0.0368	0.0368	-0.0382	0.0353	0.0984	0.0984	0.0975	0.0956

Source: Maryland sample of bankruptcy case files. See Data Appendix. *Notes*: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

could also influence the likelihood that a petitioner is a woman.[18] County fixed effects control for county-specific factors, such as rural-urban differences and industry mix, that may influence the likelihood that a petitioner is female. We find that the ECOA increased the probability a petitioner is a woman by 0.32.

In column 2, we include the leverage ratio and an interaction between leverage and the ECOA. Leverage is one of the most common measures of economic vulnerability used in the bankruptcy literature.[19] Before the ECOA, the leverage ratio did not impact the probability that the petitioner is a woman; that is, before the ECOA, men and women petitioners had similar leverage ratios. If a woman got credit before the ECOA and she defaulted, then she was able to run up as much debt relative to her assets as a man before declaring bankruptcy. While not definitive, this suggests that pre-ECOA discrimination in the terms of credit was not as important as discrimination in access to credit.[20] If women were granted credit on worse terms, they would be likely to have larger leverage ratios at filing, all other things equal. Unfortunately, consumer bankrupts do not disclose

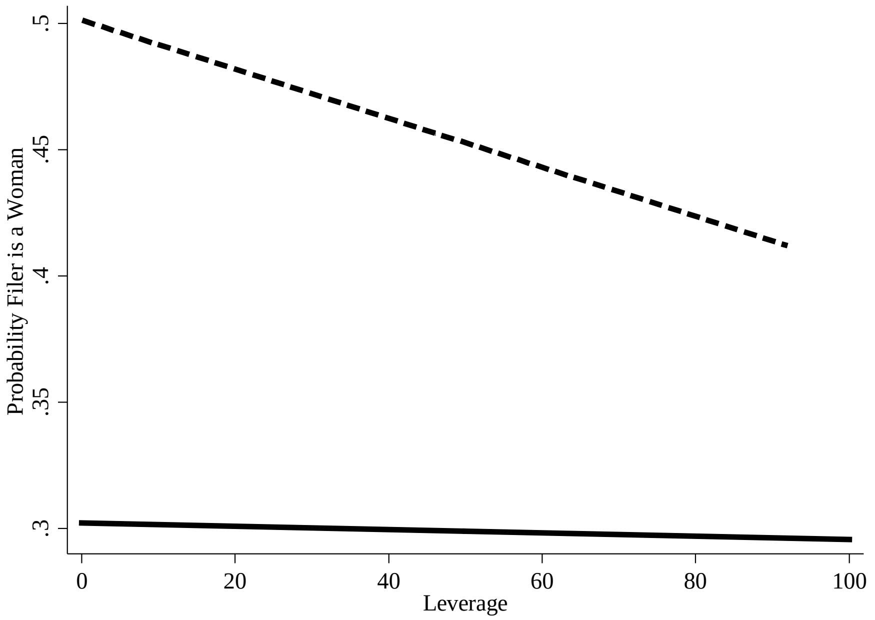
[18] We also considered a time trend. It did not alter the signs or significance of the key coefficients. For conciseness, we show only specifications with year fixed effects because they allow for more flexibility while time trends assume monotonicity.

[19] Other measures of vulnerability in the bankruptcy literature are income, marital status, and number of dependents. These are regularly recorded on the Maryland court documents only after 1990, after the ECOA, so we cannot include them and still estimate the impact of the law. Consistent with studies cited by Warren (2002), women in our sample have lower income, are less likely to be married, and have more dependents. In unreported results we estimate the probability that a filer is a woman for the sub-period 1990-2003; leverage, liquidation, and unsecured debt remain statically insignificant, though the coefficients have the same signs and are of similar size. This exercise alleviates concerns about omitted variable bias.

[20] Suppose that, before the ECOA, women who did get credit were only granted it on worse terms than men. Worse terms increase the probability of default for women, increasing women's probability of petitioning for bankruptcy. We would be less likely to find that the ECOA increased women in bankruptcy. Now suppose that discrimination in the terms of credit existed and the ECOA reduced it. Default rates among women would fall, as would bankruptcy rates among women. Again, we would be less likely to find that the ECOA increased women in bankruptcy.

terms of individual loans (such as loan lengths, interested rates, or collateral requirements), so we cannot directly examine discrimination in the terms of credit or how the ECOA affected the terms of individual loans offered to women.

To examine the mechanism through which the ECOA increased women in bankruptcy, we interact its passage with leverage. If the ECOA increased the supply of credit to women on the intensive margin, with many women who already had access to credit receiving larger amounts, we expect leverage to have a positive impact on the probability that a filer is a woman after the law was passed, all else equal. In other words, if the ECOA increased the supply of credit at the intensive margin, a filer with a high leverage would have a higher probability of being a woman (relative to a filer with low leverage). If the ECOA mainly increased the supply of credit to women on the extensive margin, with many women getting a small amount of credit for the first time, then leverage would have a negative effect on the probability a filer is a woman after the ECOA. In other words, if the ECOA increased the supply of credit at the extensive margin, a filer with a low leverage would have a higher probability of being a woman (relative to a filer with high leverage). The negative coefficient on the interaction term is consistent with the ECOA increasing credit to women at the extensive margin. Whereas leverage did not predict the gender of the filer before the law, after the ECOA, a higher leverage ratio decreases the probability that a petitioner is a woman. To visualize these relationships, the results from this column are used to construct Figure 3. Figure 3 shows the predicted probability that a petitioner is a woman before (solid line) and after (dashed line) the ECOA. The dashed line clearly shows that the probability that a filer is a women increased after the passage of the ECOA. Moreover, the negative slope of this line indicates that this effect was concentrated on low leverage filers, meaning that, relative to filers with high leverage, filers with lower leverage were more likely to be women after the passage of the ECOA.



Source: Maryland sample of bankruptcy case files. See Data Appendix.

Figure 3
Probability Filer is a Woman Before the ECOA (solid) Compared to After (dashed)

In column 3, we include Year*County fixed effects rather than common year and county fixed effects. The additional fixed effects capture time-varying but county-specific factors, such as the growth of suburbs around Washington, DC, that might influence the probability the petitioner is a woman. The ECOA's main and interaction effects remain statistically significant and the coefficients on both are larger, indicating that the estimate of about 30 percentage points from columns 1 and 2 may be conservative. Moreover, the adjusted R-Squared in this specification is lower than the others, which suggests that the results are not driven by unobserved county-year covariates.

Finally, in column 4, we include covariates X_{it}. We capture the relative benefits and costs of bankruptcy for men and women in several ways.[21] First, we control for whether the case was filed after the BRA of 1978, which lowered the cost of bankruptcy for a women who filed jointly with a spouse through the provision allowing spouses to file on one petition instead of two. Second, we control for whether the petitioner asked for liquidation rather than repayment in bankruptcy. Recall that in liquidation, petitioners are generally freed of their unsecured debts. It is believed that women feel more burdened by their debts (Lucia F. Dunn and Ida A. Mirzaie 2016), so liquidation may be of greater value to women. Alternatively, women, particularly women with children who are seeking stability, may place high value on the stream of services that their assets provide (particularly housing), making repayment more valuable to them. Finally, X_{it} includes the percent of the petitioner's debt that is unsecured. None of our case level covariates are statistically significant.[22] Moreover, our coefficients of interest remain similar in magnitude and significance when these variables are included. The robustness of the main results to their inclusion alleviates concerns about omitted variable bias.

In columns 5–8, we present the same specifications but restrict the regressions to petitioners filing alone. The sample restriction does not affect either the size or statistical significance of the estimate of the impact of the ECOA. Again, the probability that a sole petitioner is a woman is about 30 percentage points higher after the ECOA. Furthermore, the insignificant main effect of the leverage ratio once again indicates that

[21] More generally, the costs and benefits of filing and requesting liquidation depend on the ease with which creditors may pursue garnishment and how much income a creditor can seize in that procedure (Hansen and Hansen 2012; Lefgren and McIntrye 2009). In 1970, Maryland increased its garnishment exemption from a fixed $100 per week to 75 percent of wages to comply with the 1969 Supreme Court decision in *Sniadach v. Family Finance Corp.* and the passage of the CCPA. The costs and benefits of filing and requesting debt restructuring depend similarly on foreclosure procedures and exemptions. The BRA made several changes to exemptions. However, in no case do exemptions or debt collection procedures vary by gender of the petitioner, so changes in collection laws are not likely to affect the representation of women in bankruptcy.

[22] We also considered petitioners' assets (both total and itemized assets) and debts (both total and itemized). None was statistically significant. We exclude them for conciseness.

before the ECOA, the leverage ratio did not impact the probability that the petitioner is a woman. Finally, the negative coefficients on the interaction term indicate that after the ECOA, a lower leverage ratio filer has an increased probability of being a women. That the results are so robust suggests that the results in columns 1-4 are not driven by creditors under the ECOA merely making the same loans to wives as they would have made to their husbands without the law. Instead, the results suggest that the growth in bankruptcy among women is related to growth in their access to credit.

Of course, this regression analysis is descriptive, not causal. Identifying the causal effect of any specific determinant of bankruptcy in household data is quite problematic even when the data set contains observations of petitioners and non-petitioners.[23] The problem is that the path from taking on debt to petitioning for bankruptcy is not straight. It can meander; there can be long and unpredictable lags. Many years may pass between taking on debt, defaulting, and declaring bankruptcy. The lag between taking on debt and bankruptcy can vary substantially from person to person, from decade to decade, and from place to place. Recent analyses of bankruptcies after the occurrence of natural disasters and after an increase in medical expenses use data at the state and federal district court level and suggest that the average lag is two to three years (Davis 2016; Fasules 2015).

Effect of the ECOA on Number of Creditors and the Amount of Debt

Recall from the Background section that the ECOA increased the likelihood that a woman in the US would hold a credit card, but it decreased women's card balances relative to men (Miller 2019). Consistent with this increase in credit at the extensive margin, the previous section shows that bankrupts with lower leverage were more likely to be women only after the ECOA came into effect. In this section, we consider the effect of the ECOA on the amount of debt owed by the petitioners at

[23] The effect of changes in exemptions and other aspects of law that influence the cost or benefit of filing once a person is in default can be identified more precisely (for example, Richard M. Hynes, Anup Malani, and Eric A. Posner 2004).

the time that they filed for bankruptcy protection (Table 3) and on the number of creditors that petitioners listed on their paperwork (Table 4).

Table 3 shows the results of an OLS regression in which the dependent variable is equal to the inflation-adjusted debt of petitioner *i* filing in year *t*. The regression equation is:

$$Debt_{it} = \beta_0 + \beta_1 ECOA_t + \beta_2 Woman_{it} + \beta_3 ECOA_t \times Woman_{it} + \beta_4 Year_t + \beta_5 County_i + \varepsilon_{it},$$

where $Debt_{it}$ is petitioner *i*'s debt, $ECOA_t$ equals 1 if the case was filed after the ECOA went into effect on October 28, 1975,[24] $Woman_{it}$ equals 1 if petitioner *i* who filed for bankruptcy in year *t* is a woman, $Year_t$ is a vector of year fixed effects, and $County_i$ is a vector of county fixed effects.

As in Table 2, the specifications in the first four columns of Table 3 include the observations of all petitioners, while columns 5-8 report results of specifications that include petitioners who filed alone and exclude petitioners who filed jointly. For each group, we separately consider the total amount of debt, unsecured debt, secured debt, and the ratio of secured to unsecured debt.

Men and women who petitioned for bankruptcy owed a similar amount of debt; the coefficient on the gender dummy variables is not statistically different from zero. The amount of debt (either total, unsecured, or secured) of the bankrupt did not change after the ECOA went into effect. Crucially, the passage of the ECOA did not alter the debts of women relative to the debts of men. In all specifications, the coefficient on ECOA*Woman is statistically insignificant.[25] The pattern is the same for petitioners filing alone (columns 5-8). This suggests that the ECOA did not increase women in bankruptcy by increasing debt-holding among women.

[24] The alternative specifications discussed in footnotes 16 and 17 returned similar results here, too.

[25] As above, inclusion of a trend instead of year fixed effects and inclusion of county*year fixed effects in Tables 3 and 4 do not change the results. Addition of the case-level controls do not change the coefficients reported in the table.

Table 3

Effect of ECOA on the Debts of Petitioners

	All Petitioners				Petitioners Filing Alone			
	Total Debt	Unsecured Debt	Secured Debt	Ratio Secured to Unsecured	Total Debt	Unsecured Debt	Secured Debt	Ratio Secured to Unsecured
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ECOA of 1974	13,645	-727	17,472	-3.561	-8,273	-11,696	8,338	6.314
	(22,028)	(11,177)	(13,046)	(7.169)	(22,482)	(12,619)	(13,360)	(3.861)
Woman	-8,441	-2,841	-3,491	0.483	-9,856	268.4	-6,735**	-0.0317
	(11,665)	(10,993)	(2,429)	(0.437)	(20,423)	(19,494)	(2,854)	(0.243)
ECOA * Woman	-2,411	-5,997	2,442	-0.819	-7,401	-13,731	4,406	-0.944
	(12,731)	(11,703)	(3,568)	(0.846)	(21,677)	(20,432)	(4,147)	(1.107)
Observations	1,635	1,635	1,635	1,635	977	977	977	977
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.0489	0.0300	0.148	0.0635	0.0293	0.0321	0.0754	0.0475

Source: Maryland sample of bankruptcy case files. See Data Appendix. *Notes*: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 4 shows the results of a negative binomial regression in which the dependent variable is equal to the number of creditors listed by petitioner *i* filing in year t.[26] We estimate:

$$Creditors_{it} = \beta_0 + \beta_1 ECOA_t + \beta_2 Woman_{it} + \beta_3 ECOA_t \times Woman_{it} + \beta_4 Year_t + \beta_5 County_i + \varepsilon_{it},$$

where $Creditors_{it}$ are the number of creditors listed on petitioner *i*'s bankruptcy forms in year *t*, and again, $ECOA_t$ equals 1 if the case was filed after the ECOA went into effect, $Woman_{it}$ equals 1 if petitioner *i* who filed for bankruptcy in year *t* is a woman, $Year_t$ is a vector of year fixed effects, and $County_i$ is a vector of county fixed effects.

The overall format of Table 4 is the same as Tables 2 and 3. In the specifications, we separately consider the total number of creditors, the number of secured creditors, and the number of unsecured creditors. The negative coefficients on $Woman_{it}$ indicate that women have fewer creditors listed on their bankruptcy documents. The insignificant coefficients on the ECOA, together with the positive coefficients on the interaction of ECOA*Woman in five of the six columns, indicate that the ECOA increased the relative number of creditors listed by women petitioners. In other words, the ECOA increased parity in the number of creditors listed by men and women. Again, this suggests that the ECOA increased women's access to credit on the extensive margin.

Conclusions

This article documents and explains the rising bankruptcy rate among women using the first long series of consistent data. We confirm the increase in both the proportion of petitioners who were women and in the proportion of petitioners who were women filing alone that is described in various cross-sectional studies for 1980-2000. We further show that the steady upward growth of women in bankruptcy began earlier.

Evidence gathered from the archival records of bankruptcy cases filed in Maryland suggests that the emergence of gender parity in the use of bankruptcy law was largely a consequence of the emergence of gender

[26] Results are similar with a Poisson regression.

Table 4
Effect of ECOA on the Number of Creditors

	All Petitioners			Petitioners Filing Alone		
	Total Number	Secured Creditors	Unsecured Creditors	Total Number	Secured Creditors	Unsecured Creditors
	(1)	(2)	(3)	(4)	(5)	(6)
ECOA of 1974	0.0170	-0.0821	0.0873	-0.299	-0.357	-0.238
	(0.218)	(0.239)	(0.238)	(0.228)	(0.249)	(0.248)
Woman	-0.134**	-0.0995	-0.148**	-0.139	-0.190	-0.147
	(0.0550)	(0.0746)	(0.0612)	(0.0922)	(0.121)	(0.0993)
ECOA * Woman	0.185***	0.117	0.203***	0.260***	0.224*	0.276**
	(0.0621)	(0.0852)	(0.0689)	(0.1000)	(0.131)	(0.108)
Observations	1,635	1,635	1,635	977	977	977
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
County Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-Squared	0.0324	0.0405	0.029	0.0439	0.0549	0.0401

Source: Maryland sample of bankruptcy case files. See Data Appendix.
Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

parity in access to credit. Access to credit for women was accelerated by the ECOA of 1974, which made gender discrimination in the granting credit illegal in the credit market.

We present evidence that the ECOA increased the supply of credit to women on the extensive margin; while the number of creditors that women listed on their court records increased after the ECOA the amount of debt listed did not. Moreover, the probability of being a woman increased more for low leverage filers than for high leverage filers. Together, these findings confirm work by (Miller 2019) and indicate that the supply of credit was extended on the extensive margin. By extending the supply of credit at the extensive margin, the ECOA boosted women's participation in credit markets and allowed them to build credit histories. But the growing equality for women in access to credit put more women on the path to bankruptcy.

Our methods using the bankruptcy case files are descriptive. Because bankruptcy can be influenced by many economic, social, and legal factors that interact, it can be difficult to identify precisely where along the path changes in filing rates originate. Further, because the path to filing a petition for bankruptcy is a process that plays out heterogeneously—and often slowly—in the lives of individuals and families, it is difficult to quantify with precision the effect of any historical change. Nonetheless, using a straightforward regression framework and several new types of evidence, we capture a key influence behind the historical increase of women in bankruptcy. We conclude that, in the main, the economic history of women in bankruptcy is about the progress of equal access to credit being pushed along by anti-discrimination law. Women who encounter adverse events cannot find themselves in default and in bankruptcy unless a creditor has previously extended them a loan.

One avenue for future work is to explore the extent of the extent of discrimination in the terms of credit before the ECOA. If discrimination in terms existed, did the ECOA reduce it? This line of work could aid in understanding why the sub-prime crises associated with Great Recession appears to have had a disproportionate effect on women.

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The sample for Maryland used is a pilot study for our ongoing effort to create a nationally representative data set of bankruptcies filed from 1898 through the implementation of the electronic court records system, which was rolled out in the 1990s but not completed until the mid-2000s. Funding from American University, Loyola Marymount University, the National Science Foundation, the Alfred P. Sloan Foundation, the National Conference of Bankruptcy Judges, and Rutgers University is appreciated. Information, a progress report, and a list of all of the research assistants who made this project possible are at https://sites.google.com/view/mary-eschelbach-hansen/a-sample-of-historical-bankruptcy-cases?authuser=0. Thanks also to the administration and staff at the National Archives and the Federal Records Centers in Philadelphia, without whose support and patience our work could not be completed.

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Data Appendix

The sample for Maryland is a pilot study for our ongoing effort to create a nationally representative data set of bankruptcies filed from 1898 through the implementation of the electronic court records system, which was rolled out in the 1990s but not completed until the mid-2000s.

Availability

Federal law requires the preservation of "historically significant" and some other categories of cases, but not of all run-of-the-mill cases (https://www.uscourts.gov/sites/default/files/vol10_ch6_appx_6b.pdf and https://www.law.cornell.edu/uscode/text/44/chapter-21). When very large collections of records do not have to be preserved, the National Archives and Records Administration (NARA) culls them as they are transferred from the Federal Records Centers (where they are owned by the courts) to the Archives (where they are preserved for researchers). By 2010, the bankruptcy records from after World War Two alone filled over two million cubic feet at the Federal Records Centers.

Previous attempts by NARA staff led administrators to conclude that retention of a systematic sample of cases (e.g., every 100th case) would be too costly. We partnered with the NARA to develop a cost-effective strategy for selecting a random sample of boxes for preservation. We tested our procedures on the Maryland cases, and the NARA allowed us to digitize the records in the sampled boxes at the Federal Records Center in Philadelphia prior to their transfer to the NARA's archives.

The Maryland dockets for 1940 through 1973 are available in the National Archives at Philadelphia. Some newer dockets are stored in the Courthouse in Baltimore, but we were not granted permission by the judge to collect these. Some dockets covering 1973 to 1978 appear to have been lost.

Sampling

The sample consists of all cases contained in every 33rd box among the thousands of cubic feet of boxes in storage for the Maryland court. If the boxes sampled initially contained fewer than 30 cases filed in the relevant year, an additional box containing cases filed that year was sampled. The average number of cases per year is 36, the standard deviation is 19. In a few years, both sampled boxes contained some business cases, so the minimum is 7. The maximum is 132.

Documents available for case files

The name of the debtor, pronouns identifying gender of the debtor, the date the petition was filed with the court, and the chapter of the law the petition was filed under come from the petition itself. Financial data on the balance sheet of the bankrupt was taken from the bankruptcy schedules, which are forms on which different types of debts and assets are recorded, and the form summarizing these schedules. After 1990, Schedule I and/or Statement of Financial Affairs contains information on average monthly income, the number of dependents, and marital status.

Identification of cases filed jointly

For filings under the Act, we identified spouses filing "together" as persons of different genders with the same surname who filed within one week of each other and whose filing addresses were the same. In theory, this procedure could capture parents, siblings, or others with the same surname filing together. In the sample, however, the debts listed on the schedules largely overlapped, making incorrect matches unlikely. For filings under the Code, we identified a petition as being the joint petition by spouses if the "joint debtor" space contains a name, or if debtors on the docket sheet or petition were of opposite genders and had the same surname, or if a spouse was listed on the Statement of Financial Affairs.

The sample contained a small number of cases filed in or before 1978 that could be identified as being spouses filing together only through comparison with the dockets because the spouse's case was not in a sampled box.

Table A1 shows the share of all petitioners and petitioners filing alone who are women in the sample and on the dockets.

Table A1
Percentage of Women Petitioners in the Sample of Case Files and on the Dockets in Maryland

	Sample of Case Files Percent of Filers Who Are:		Extant Dockets Percent of Filers Who Are:	
Year	Women Filing Alone	Women	Women Filing Alone	Women
1940	15.40	23.08	7.30	19.51
1941	3.20	12.90	12.00	27.00
1942	9.10	29.55	15.40	29.23
1943	24.20	28.79	20.60	30.95
1944	42.90	57.14	37.00	51.85
1945	16.70	30.56	16.20	29.73
1946	33.30	33.33	25.00	33.33
1947	0.00	16.67	0.00	21.05
1948	8.30	25.00	4.50	13.64
1949	30.80	38.46	7.30	21.95
1950	27.30	45.45	14.80	33.33
1951	0.00	28.57	14.30	34.29
1952	18.20	31.82	17.20	34.48
1953	0.00	22.22	2.60	18.42
1954	10.50	36.84	7.10	28.57
1955	22.20	22.22	5.60	16.67
1956	8.70	32.61	5.50	23.64
1957	3.30	35.00	5.90	29.41
1958	8.30	33.33	6.00	21.69
1959	20.80	50.00	15.80	37.62
1960	0.00	21.15	14.70	28.00
1961	8.30	20.83	13.80	29.23
1962	6.10	34.85	10.10	26.89
1963	3.40	23.28	6.80	25.99
1964	16.00	36.00	11.20	32.04
1965	10.80	22.97	12.00	28.42
1966	10.30	29.49	8.40	29.47
1967	6.10	22.73	8.90	31.21
1968	15.60	28.89	14.00	31.56

1969	18.40	40.79	13.40	35.21
1970	16.20	41.89	12.50	37.69
1971	5.70	28.30	11.30	35.00
1972	12.00	43.00	15.90	39.31
1973	12.30	41.54	13.60	38.69
1974	14.30	37.14		
1975	21.70	45.65		
1976	16.70	43.33		
1977	28.00	46.00		
1978	22.90	50.00		
1979	25.00	42.19		
1980	0.00	0.00		
1981	21.80	45.45		
1982	17.00	38.30		
1983	22.20	50.00		
1984	18.80	45.83		
1985	15.90	52.38		
1986	28.00	52.00		
1987	25.90	51.72		
1988	27.30	54.55		
1989	27.10	47.92		
1990	10.00	20.00		
1991	9.50	42.86		
1992	19.50	46.34		
1994	28.60	40.00		
1995	29.30	53.66		
1996	39.00	56.00		
1997	26.50	48.53		
1998	27.60	54.02		
1999	33.90	53.23		
2000	30.50	43.90		
2001	43.60	56.41		
2002	34.70	48.30		
2003	40.40	55.32		

Source: Maryland sample of bankruptcy case files and dockets. See Data Appendix.