## **Bankruptcy & Moral Hazard**

# Money, Banking, Financial Markets at Texas A&M University

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#### Abstract:

In this paper, we look at the moral hazard implications of bankruptcy situations for both firms and individual borrowers. Previous research has suggested possible moral hazard effects exist due to the "soft budget constraint problem" for firms and "shadow debt" for individual debtors. We find that firms receive the most benefit of the "soft approach" typically given to them by lenders, while individual debtors do not receive the same benefits, as they lack the bargaining power of a firm. We conclude that neither firms nor individuals have enough incentive to create these theorized moral hazard issues on a significant level.

The purpose of this paper is to identify the effects that moral hazard and asymmetric information can have on potential losses that occur from bankruptcies in the United States.

Along with these effects, we then determine just how prevalent bankruptcy is and whether the resulting moral hazard issues have any significant influence on both borrowers' and creditors' decisions.

Bankruptcy, in general, is very costly to the lender, as it means the lender must engage in costly enforcement policies to collect or settle a portion of what was lent to a borrower. When trying to settle a potential bankruptcy, lenders have several traditional tools to mitigate potential losses. These tools can be categorized as one of two types of enforcement approaches: the "soft approach" and the "hard approach". A soft approach occurs when a bank decides that the credit contract may be renegotiated or some of the debt can be forgiven. A hard approach occurs when the lender is "committed to imposing bankruptcy upon the borrower's announcement of default" (Janda, 2004, p.1). On the surface, many would assume that a soft approach is inherently less optimal to a lender, however, research so far suggests that it is not so black and white.

In analyzing both the "soft" and "hard" approaches, this paper will attempt to measure the effects moral hazard has on the lender's decision of which approach to apply. Intuitively, the soft approach appears to have a higher effect of moral hazard, yet lenders in the United States, more often than not, adopt soft approaches of renegotiation in potential bankruptcy situations.

<sup>&</sup>lt;sup>1</sup> "Enforcement policies" for bankruptcy refer to the steps that a lender takes in taking possession of the assets that a borrower set as collateral in the original terms of the loan agreement. These include the repossession process, liquidation, and redistribution of assets to claimants. See: https://www.investopedia.com/terms/l/liquidation.asp

Although much of the literature surrounding the soft approach (often referred to as the "Soft Budget Constraint" in previous research), is based in theory, this research provides us with many insights into borrower/lender behavior and the effect moral hazard can have in the soft and hard approaches. Previous research identifies many potential moral hazard issues that could arise from soft approaches. The "soft budget constraint problem" has been previously theorized to give rise to moral hazard problems because of "the creditor's impossibility to pre-commit not to renegotiate the contract" (Kolecek, 2008, p.42). The intuition behind this problem is that because a soft approach lender is not fully committed to pursuing liquidation in cases of failed repayment, borrowers, in turn, are less committed to the original repayment agreement. So why the soft approach then?

As it turns out, a lender does not typically want the end result of a loan contract to be liquidation. Well, at least not usually in the United States. Kolecek (2008) describes how softer bankruptcy laws actually increase welfare for both borrower and lender whenever liquidation costs are high. In most U.S. cases, some form of debt restructuring or partial debt forgiveness is the more optimal option. This typically benefits both the lender and the borrower, as it improves the borrower's chances of repayment obligations, and lenders "understand that they would receive even less should the [borrower] be forced into bankruptcy or liquidation" (Kopp, 2020). Given that lenders are typically trying to avoid bankruptcy proceedings and are more willing to restructure their debt contracts, borrowers appear more likely to engage in riskier behaviors/projects since there is a safety net.

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<sup>&</sup>lt;sup>2</sup> "Soft Budget Constraint": whenever the amount of 'claims' exceeds the budget constraint originally set by the lender, the lender may commit to a subsidy for that borrower in order to avoid default. Kolecek, L. (2008). "Bankruptcy Laws and Debt Renegotiation". *Journal of Financial Stability*, Volume 4, Issue 1, April 2008, Pages 40-61. https://doi.org/10.1016/j.jfs.2007.09.001

Lenders in the United States bankruptcy proceedings follow the guidance of the U.S. Bankruptcy Code, which also happens to provide somewhat of a safety net for borrowers. The U.S. Bankruptcy Code aims to protect a "bankrupt firm's going-concern value while it is in bankruptcy" and minimize the potential losses "caused by liquidation" (Janda, 2004, p.2). The most common types of bankruptcy proceedings occur when a borrower enters liquidation under Chapter 7, Chapter 11, and Chapter 13 of the U.S. Bankruptcy Code. Chapter 7 results in the borrower's project/firm/etc. being shut down and their assets being "dispersed under the control of the bankruptcy trustee" (Janda, 2004, p.2). Although available to both individuals and corporations, a discharge of debt is only available to individual filers. Chapter 11, however, allows debtors engaged in business (corporations, partnerships, sole proprietorships, etc.) to reorganize their debt obligations as "going concerns" and are still able to operate and are protected from their creditors. Finally, Chapter 13 filings allow individual debtors who do not pass the "means test" to create new payment plans in order to catch up on overdue payments, as well as protect themselves from home foreclosure.<sup>3</sup> All this to say that there are several options for avoiding liquidation in the United States, whose Bankruptcy Code is typically characterized as "soft".

Traditional enforcement tools used by lenders do not appear very effective at preventing moral hazard either. Traditionally, banks and other financial intermediaries have relied on collateralizing loan contracts they deemed "risky" in order to incentivize borrowers to repay the full amount of the loan. The most common type of collateral put up is the physical asset of real estate, with firms being more likely than individuals to put up collateral through negotiable

<sup>&</sup>lt;sup>3</sup> For the definition of the means test, see: https://www.law.cornell.edu/wex/means\_test

securities such as certificates of deposit, corporate bonds, etc. Regardless of the type of collateral, intended use is to deter riskier borrowers from creating moral hazard problems.

However, research done by Carroll and McCann actually suggests that there is "no evidence that collateral is a successful tool for mitigating against borrower missed payments" (Caroll, McCann, 2017). So while collateral does reduce potential losses a lender would face from bankruptcy (and is still optimal for lenders to use), its effectiveness at deterring moral hazard bankruptcy situations has been called into question.

It appears as though the lack of effectiveness in this once regarded powerful default deterrent, as well as many of the borrower protections that are created in "soft approach" situations, would leave room for significant moral hazard issues in the United States. So we will now examine whether or not the "soft budget constraint problem" and its theorized moral hazard implications are actually impacting creditor/borrower decisions in the United States.

For firms, the soft approach, which allows for debt renegotiation, increases the welfare of both risky and safe borrowers while protecting lenders' utilities at the same time (Janda, 2004). The number of bankruptcy filings by businesses in the U.S. started to fall in 2010 and continued this trend till today (Jones Day Publications, 2010). The reason behind this shape in direction is largely due to the ease in the credit market situation as firms could restructure debts outside of court (Jones Day Publications, 2010). This outcome is consistent with Janda's conclusion as firms tend to seek debt renegotiation when the current economic situation allows. Surprisingly enough, businesses are able to reap the benefits of the "soft approach", but the same cannot be said for individual debtors. Individuals, due to their limited negotiation powers, typically cannot take advantage of the soft approach to the same extent as businesses.

Imagine this: a person has \$100,000 remaining in mortgage debt with \$20,000 worth of car loan outstanding. The economy is bad, at least for him, and he hasn't been able to get a raise from his boss. Not being able to catch up with those payments, he believes that declaring bankruptcy is his only way out. After doing some search on the internet, he is surprised to find out that those so-called "unsecured debt" would usually be wiped out in most bankruptcy filings. What do you think he will do under this hypothetical scenario? Maxing out his credit card before declaring bankruptcy seems to be a "sensible" thing to do since credit card debt is categorized as unsecured debt.

Indeed, according to the BAPCPA (Bankruptcy Abuse Prevention and Consumer Protection Act) report, over 730 thousand bankruptcy reports were filed in the year 2018 alone with 61 percent of them filed under Chapter 7 (United States Courts, 2019). The total amount of debt discharged from 2009 to 2018 totaled 2.03 trillion (United States Courts, 2019).

Borrowers facing bankruptcy could be incentivized to increase their indebtedness through continuous accumulations of additional unsecured and "shadow" debt (Argyle et al, 2020, p.2). A classic principal-agent problem is present in this kind of situation as lenders generally do not have swift and strong instruments that could prevent such accumulations by individual borrowers who are on the brink of default. The research conducted by Argyle et al shows that individual bankruptcy filers who are able to delay their filings tend to incur more unsecured and "shadow" debt, with the so-called "shadow debt" (debts that are usually not observable on credit reports) accounts for 16 percent of total debt reported on filings. As of the relationship between the delay of filing and the accumulation of extra debt, they conclude that, on average, a first-stage delay of one month increases \$4,000 in unsecured debt borrowing, and

an additional \$7,200 or 1.8 percentage-point increase in shadow debt could be caused by one month delay in bankruptcy filing. However, their research cannot detect precisely the motive (intentional or just passive) behind such accumulation of additional debt by borrowers amid imminent bankruptcies, which implies that such moral hazard created might not be fully man-made or due to bad intention.

Bankruptcy protection provides filers with security on their assets and relieves them from massive financial distress. Even though bankruptcy protection generates potential moral hazard in itself, research finds that it reduces moral hazard to some extent when exercised by ordinary filers with no bad intention. Research conducted by Dobbie et al concludes that Chapter 13 filings, specifically, decrease mortality risk and increase general financial wellbeing for filers, and the benefits persist past plan completion dates.

Another research by Sasha Indarte re-examines the motive behind individual bankruptcy filings. Indarte finds a positive yet small relationship between potential debt forgiveness and the intent of filing. Moreover, bankruptcy filings are 5 times more responsive to liquidity issues (borrowers do not have enough cash) compared to relief generosity (Indarte, 2020, p.1). \$1,000 increase in relief generosity increases only 0.02 percent in annual bankruptcy filings. She concludes that 83 percent of filings in response to dischargeable debt are caused by liquidity issues on the borrower's side rather than moral hazard. The moral hazard effect is insignificant compared to the stigma imposed on filers. In general, an ordinary person is reluctant to file bankruptcy since undergoing this process would create an invisible wall that blocks him/her from entering into new jobs and acquiring new lines of credit in the future. In the micro view, the moral hazard against creditors appears to be huge and impossible to anticipate; when

viewing the population as a whole, however, the effect of this particular moral hazard is negligible.

In conclusion, we find that the "soft approach" is what is most effective for increasing both borrowers' and lenders' welfare in potential bankruptcy outcomes for businesses. However, we also conclude that the potential moral hazard benefits to borrowers in the "soft approach" are mostly seen on the macro-level of lending, i.e. corporations and debtors participating in businesses. Even so, the potential moral hazard effect for firms is not large enough for it to have a significant effect on lender decisions. Individual debtors, however, do not possess the same negotiating power, and instead their potential moral hazard can arise through loopholes in the bankruptcy process itself. As aforementioned research has shown, these weaknesses in bankruptcy policies do not provide enough incentives for individuals to actively seek bankruptcy filings when other measures are available. Therefore, we believe that lenders should focus more on how frequent such moral hazard emerges instead of whether it exists in their lending strategies. As it stands, the "soft budget constraint problem" has only been discussed in research on the macro-level of lending. We believe more research needs to be done into whether the effects of the "soft approach" have any impact on the decisions of individual debtors as well.

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