# Personal Bankruptcy and Social Insurance

Jeffrey Traczynski<sup>1</sup>

The IMF defines social insurance schemes as "collectively organized insurance schemes in which employees and/or others are obliged or encouraged to spread risk by taking out insurance against certain social risks. Such schemes require contributions, actual or imputed, to secure entitlement to social benefits." (Pitzer 2003, p. 15). Governments compel individuals to contribute to social insurance plans as a means of spreading out the risk of adverse events across society as broadly as possible; and individuals can collect payments from social insurance if an adverse event strikes them. Classic examples of social insurance schemes include unemployment insurance, government-funded health care systems, public pension plans, income assistance to the poor, and payments to disabled workers.

At first glance, the idea of personal bankruptcy, whereby debtors are allowed to eliminate bad debts without repaying their creditors and eventually re-enter credit markets, seems to have little in common with the idea of social insurance. Research conducted over the past 15 years nevertheless suggests a close connection between the two concepts. Allowing individuals to put bad debts behind them gives them a pathway to address significant adverse events like unemployment or health problems in much the same way as unemployment or health insurance. It may also impact their willingness to take on different risks, such as starting a business or leaving the workforce to obtain more education or training, which have implications for economic growth. The costs of allowing personal bankruptcy are also similar to those of a social insurance scheme, as higher interest rates on loans or increased lender screening of loan applicants affect many people in an economy, often with redistributive effects that may run counter to a policymaker's interests.

<sup>1</sup> University of Hawaii.

This paper provides an overview of the literature on the insurance effects of the personal bankruptcy systems in the US and Europe, with a focus on interactions between personal bankruptcy and alternative forms of social insurance. The paper also covers empirical work estimating the societal costs and benefits of making personal bankruptcy more generous to debtors. The paper concludes with a discussion of the potential impact of personal bankruptcy systems in need of further analysis.

### Measuring the insurance offered by personal bankruptcy

One of the first challenges in quantifying the insurance effects of personal bankruptcy is devising a measure of how much insurance the system provides to debtors. The most common measure is the local currency value of exemptions, which represents the amount of assets that a debtor can withhold from creditors throughout the bankruptcy process. This measure has the virtue of being comparable to many of the measures used to assess the generosity of social insurance programs: unemployment, pension, disability and low-income assistance programs can naturally be compared by looking at the cash benefits that each provides. This is the measure most commonly used in studies of the US, where the personal bankruptcy system uses a combination of federal and state laws, which make exemptions the most prominent aspect of bankruptcy law that varies across the country.

Cross-country studies of personal bankruptcy must quantify additional features of the law beyond exemptions that differ across countries. The number of years that an insolvent person must wait to discharge debts, whether a discharge is even possible, restrictions on the economic or civil activities of an insolvent person, or whether bankruptcy is grounds for incarceration may vary from country to country. Armour and Cumming (2008) offer ordinal indices of these features of bankruptcy law across 15 countries in Europe and North America. Their work indicates that personal bankruptcy law in the US is very generous to debtors, especially when compared to most European countries. This makes the US a good test case for the effects of laws that



loosen restrictions on debtors, which has been the general trend in Europe in the last two decades. However, large differences in the generosity of social insurance programs between the US and European countries limit the conclusions that can be drawn about interactions between the two systems.

#### Social insurance and personal bankruptcy in the US

The idea of personal bankruptcy serving as a form of insurance can be traced back to Rea (1984). Fisher (2001) was the first paper to offer a formal empirical test of the interaction between social insurance programs and personal bankruptcy. He finds that decreased weekly unemployment benefits or monthly aid to families with dependent children benefits lead to increased personal bankruptcy filings. His simplified model highlights the importance of consumers using bankruptcy as a substitute for payments from social insurance programs, mitigating negative income or asset shocks. Athreya and Simpson (2006) study the same programs in a macroeconomic framework and reach the opposite conclusion, finding that more generous unemployment insurance benefits lead to more consumer defaults. They claim greater unemployment benefits lead to higher guaranteed income streams for consumers, which encourages them to take on additional debts, as they do not fear the removal from credit markets that bankruptcy brings. They also claim that more bankruptcies result from a substitution between job search and debt, as greater unemployment benefits diminish efforts spent on job search, thereby increasing consumer debt levels and leading to a higher number of insolvent households. Athreya and Simpson reconcile these findings by pointing out that bankruptcy is a better substitute for persistent income shocks than transitory ones, as filing for bankruptcy imposes long-term credit market penalties that can prove quite costly. As such, analyses of substitutions between unemployment insurance and personal bankruptcy should account for the expected length of unemployment spells. Keys (2010) shows that an employment separation increases the probability of personal bankruptcy in the context of a dynamic model where individuals do not file for bankruptcy immediately upon losing a job, but tend to wait before invoking bankruptcy to deal with the income shock. Longer average unemployment spells, such as those seen in the US in the wake of the late 2000s financial crisis, might therefore be expected to lead to more personal bankruptcies than the shorter unemployment spells common in the US in the 1980s and 1990s.

Chatterjee et al. (2007) and Livshits, MacGee, and Tertilt (2007) find that the insurance aspects of personal bankruptcy explain part of consumer debt accumulation decisions. Their results suggest that bankruptcy law may affect the severity of financial crises through consumer debt levels, a finding supported by Li, White, and Zhu (2011) who show that a reform in the US that made personal bankruptcy less favorable to borrowers led to more mortgage defaults. Hurd and Rohwedder (2013) show that consumer debt levels depend on the possibility of future unemployment, as individuals adjust their current spending in response to the potential of earning a lower income in the future. Their work highlights the role of social insurance in personal bankruptcy, as they document consumers changing debt levels and thereby their risk of bankruptcy in response to changes in the risk of unemployment.

Research has also explored connections between health insurance and personal bankruptcy rates. Gross and Notowidigdo (2011) find that expansions of state Medicaid programs aimed at covering children caused significant decreases in the personal bankruptcy rate, suggesting that health insurance and personal bankruptcy are substitutes for individuals faced with high medical expenditures. Baicker and Finkelstein (2011), however, find no causal links between Medicaid health insurance and individual bankruptcy probabilities as part of a randomized control trial in Oregon. Mahoney (2015) shows that adults living in states with more generous personal bankruptcy laws are less likely to purchase health insurance. This finding highlights that when individuals are choosing a portfolio of risks, the insurance offered by personal bankruptcy is directly relevant to how they choose to purchase insurance for other risks. As the provision of health care is a social insurance scheme in many countries, these results indicate that some of the insurance benefits of generous terms for personal bankruptcy are already provided through the health care system. Overall, these papers show that the terms of personal bankruptcy affect consumers' ability to respond to negative income and asset shocks, which is the primary focus of social insurance policy.

## Social insurance and personal bankruptcy in Europe

There is considerably less research on personal bankruptcy outside the US, largely because of meaningful cross-country differences in the functioning of bankruptcy systems and the high prevalence of bankruptcies in the US. Reforms in Europe throughout the 1980s and 1990s, motivated by greater awareness of the potential economic benefits of making personal bankruptcy more generous to debtors (European Commission 2003), have given rise to interesting work on bankruptcy in countries with different social insurance systems. Armour and Cumming (2008) use international panel data on bankruptcy law generosity across 15 countries and show that self-employment rates increase as bankruptcy becomes more lenient for debtors. They conclude that the increase in entrepreneurship reflects an increased willingness to take on the financial risks of small business ownership when the bankruptcy system offers a reasonable way to recover from business failure. Fossen (2014) studies the German bankruptcy reform of 1999, eliminating the need for cross-country comparisons. He finds that self-employment rates increase among those with less personal wealth relative to the very wealthy. Both studies are consistent with the findings of numerous papers studying the relationship in the US between self-employment and bankruptcy system generosity.

More generally, Anderson et al. (2011) survey the reasons for personal bankruptcy across European nations and find many cross-country similarities. The most common reasons why debtors report filing for bankruptcy in their surveys are unemployment, divorce and illness. These mirror the top three reasons cited by US debtors according to Sullivan, Warren, and Westbrook (1989). Anderson and his co-authors also report on several programs spread across Europe that bundle together debt counseling services with other social welfare programs ranging from job placement assistance and income support to tax advice and mental health services. The prevalence and variety of these programs reflect the close relationship between personal bankruptcy and social insurance schemes, despite the relative lack of formal program evaluations of the substitutability or complementarity of bankruptcy law and social assistance in this policy environment.

### Who gets the insurance provided by personal bankruptcy?

When considering bankruptcy law as part of a nation's social insurance programs, it is important to determine which groups in society benefit and pay for this form of insurance to evaluate the social impact of personal bankruptcy policies. In order to take advantage of personal bankruptcy, one must generally have some assets that are worth protecting through formal legal

channels. These assets are shielded from seizure by creditors through bankruptcy exemptions as described above. While increases in bankruptcy exemptions are thought to make the bankruptcy process more generous to debtors, it is important to note that only debtors who have more assets than the current exemption limit benefit from such an increase. This implies that the poorest members of society are often not the chief beneficiaries of changes to bankruptcy law, unlike changes to state health insurance or income assistance programs that may better target the indigent. Posner (1995, p. 307) highlights this distinction when he refers to US bankruptcy law as "social insurance for the non-poor."

Entrepreneurs appear to benefit from generous bankruptcy laws, as insurance against the debts that can arise from a failed business is valuable and incentivizes greater risk-taking in the form of business startups. To the extent that these businesses are employers and offer products that consumers value, some of the gains from the marginal firm entering the marketplace are spread to the public broadly. However, neither the employees nor the customers of the firm are guaranteed to be the traditional recipients of social insurance, and the entrepreneurs themselves are likely to be wealthy. Fossen (2014) shows that many of the new entrepreneurs created when the bankruptcy system becomes more generous are wealthy, but not extremely so, as the very rich can already self-insure against the risk of business failure.

Sullivan et al. (1989) suggest that individuals who suffer adverse events benefit by using bankruptcy to smooth consumption through negative shocks. As the main adverse events they study are job loss, divorce, and health problems, individuals who suffer these events may enjoy a significant overlap with targets for social insurance schemes. There is ongoing research to determine whether these adverse events actually cause individuals to file for bankruptcy, or whether those people more likely to be affected by these shocks are also more likely to file for bankruptcy for other reasons, so that the survey findings reflect only a correlation. Regardless of the direction of causality, this survey finding across the US and Europe supports the idea that beneficiaries of social insurance schemes for these adverse events are also likely beneficiaries of generous bankruptcy law.

#### Who pays for the insurance provided by personal bankruptcy?

The main costs to consumers of having a generous bankruptcy policy are likely to be generated by the credit market. The key insight is that in cases where bankruptcy is better for debtors, consumers will want to borrow more money but lenders will not want to provide it, particularly in the form of unsecured credit. Both the supply and demand for loanable funds change when bankruptcy laws do, making it difficult to estimate the effect of bankruptcy system generosity on credit markets.

Gropp, Scholz and White (1997) show that in states with high bankruptcy exemptions, lenders redistribute loans towards individuals with more assets, resulting in higher interest rates for those with few assets. This is a critical result for understanding the insurance effects of bankruptcy law, as it suggests that the burden of paying for insurance in the form of higher interest rates and less available capital in credit markets falls heavily on those with assets below the legal exemption limit. Since having some assets is necessary to benefit from the protection offered by formal bankruptcy procedures, this finding suggests that individuals who pay for the insurance provided by personal bankruptcy are not necessarily those who benefit most from it.

Berkowitz and White (2004) show that while entrepreneurs may be more willing to take risks by starting businesses, they are also more likely to be turned down for loans if they live in a state with high exemptions. This finding is supported in the international context by Davydenko and Franks (2008), who find that across France, Germany, and the UK, bankruptcy provisions that are more generous to debtors lead to lower collateral requirements for small business loans. Traczynski (2015) addresses the credit market endogeneity problem by using variation in a form of property ownership that functions similarly to bankruptcy exemptions and finds that firm owners value asset protection, even when the cost of asset protection is limited access to credit.

#### Lessons for policymakers

The insurance effects of personal bankruptcy and the resulting interactions with social insurance schemes are an active research area. Individuals face many risks in life and the bankruptcy system is one of many ways to mitigate income and asset shocks. It is important to a policymaker to understand how bankruptcy policy af-

fects individual behavior, especially when the change in behavior may stress other parts of the social safety net. It is also important to understand that just as unemployment insurance or income assistance or health care programs must be financed with tax revenues, insurance from the bankruptcy system is financed by less access to credit and higher interest rates, especially for low income households. Like most social insurance programs, the personal bankruptcy system involves transfers of wealth beyond the obvious transfers between creditors and debtors. Policymakers need to consider these effects as part of the overall strategy for lending to and financing small businesses.

Finally, it is clear that much more research needs to be done to understand how best to design a personal bankruptcy system to account for these myriad effects. The literature on unemployment insurance or public pensions is considerably older and more developed in both its theoretical and empirical aspects than the literature on personal bankruptcy. There is not even any consensus among experts to date on seemingly basic questions like what causes individuals to file for bankruptcy. Nonetheless, current work suggests that social insurance schemes play a major role in this puzzle.

Not all types of social insurance have been tested for their interactions with personal bankruptcy, and some research indicates that insurance through bankruptcy laws may affect many areas of society. Traczynski (2011) and Burns and Stoddard (2012) find that one of the persistent, unintended consequences of changes in the generosity of personal bankruptcy is a rise in divorce rates, indicating that marriage also provides a form of insurance against negative shocks similar to that of social insurance or personal bankruptcy. At the same time, going through formal bankruptcy procedures often involves a ban on filing again over a prescribed time period, meaning that the debtor must forego future insurance in order to use it in the present. Han and Li (2007) find minimal changes in debtors' labor supply after bankruptcy, while Han and Li (2009) find that insolvents have poorer access to credit markets for ten years after filing. Their work shows that life after personal bankruptcy has significant restrictions, implying that the decision to use the insurance provided by bankruptcy law is not one that debtors should take lightly and is an important component of the social insurance system. Both the broader societal effects of the insurance value of bankruptcy and the insurance effects of filing for bankruptcy are important considerations when analyzing what drives individuals to file, but both areas are currently understudied.

New research will offer further insights into the myriad effects of social insurance and personal bankruptcy on everyday decisions by consumers.

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