

**Studienreihe der Stiftung Kreditwirtschaft
an der Universität Hohenheim**

Barbara Flaig

Corporate Bankruptcies in Germany
Recovery Rates in Insolvency Plans



Verlag Wissenschaft & Praxis



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an der Universität Hohenheim**

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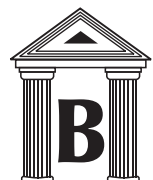
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Abbreviations

APR	Absolute Priority Rule
APRD	Absolute Priority Rule Deviation
CES	Center for Economic Studies
CRSP	Center for Research in Security Prices
EAD	Exposure at Default
ESUG	Gesetz zur weiteren Erleichterung der Sanierung von Unternehmen
GBP	Great British Pound
GDP	Gross Domestic Product
InsO	Insolvenzordnung
ISIC	International Standard Industrial Classification of all Economic Activities
NACE	Nomenclature Statistique des Activités Économiques dans la Communauté Européenne
OLS	Ordinary Least Squares
RR	Recovery Rate
UK	United Kingdom
US	United States
U.S.C.	United States Code
USD	US Dollar

I Introduction

One of the major topics in finance literature is the prediction of bank recovery rates for distressed companies. Due to requirements according to credit risk assessments as well as the calculation of loan interest rates, banks have to determine recovery rates as accurately as possible.¹ Thus, studies about recovery rates are mainly driven by banks and analyze corporate reorganizations before a formal procedure is initiated.

Since 1999, German insolvency legislation provides two different mechanisms within one formal procedure. Besides liquidation, reorganization by means of an insolvency plan (called *Insolvenzplanverfahren*) is possible. Investigations about corporate reorganizations within a formal procedure and corresponding creditor recovery rates are rare. This is due to a lack of data as well as the fact that only a few cases have been passed since 1999. Official statistics do not reveal the quantity of approved insolvency plans for corporate bankruptcies in Germany. Nevertheless, other statistics indicate that the proportion of insolvency plans in corporate bankruptcies was never higher than 2% between 1999 and 2012 respectively.² In comparison to Chapter 11, which is the corresponding reorganization chapter in US bankruptcy law, the German reorganization procedure has been relatively uncommon until now.

The main objective of the amendments to the German insolvency statute (called *Gesetz zur weiteren Erleichterung der Sanierung von Unternehmen – ESUG*), which were gradually made effective in 2012 and 2013, is to strengthen continuation within the formal procedure. This may increase ex-post efficiency, which suggests that efficient firms shall be continued and inefficient firms shall be liquidated. According to the supplements to German insolvency legislation, a convergence to Chapter 11 can be observed.

Indeed, insolvency legislation does not only affect distressed companies. Even creditors and shareholders of viable firms consider insolvency rules while calculating expected values. Consequently, different incentives are created by insolvency rules which may, for example, impact corporate finance before bankruptcy. Literature refers to these difficulties under the term “ex-ante efficiency” of insolvency legislation.

¹ See Grunert and Weber (2009), p. 505.

² See Kanzlei Schultze & Braun (2013).

As a first step, theoretical literature about efficiency of insolvency legislation is discussed in chapter II. Based on this analysis, bankruptcy procedures of the US and Germany are presented and the two insolvency laws are appraised according to ex-post and ex-ante efficiency (chapter III). Subsequently, empirical literature concerning the distribution of creditor recovery rates as well as influencing factors on the extent of recovery rates is analyzed (chapter IV). As mentioned above, studies about insolvency plans in Germany are rare.³ The few existing studies concentrate predominantly on descriptive analyses about the economic situation of insolvent companies, or use combined data sets which include reorganizations and liquidations. The repayments to creditors in reorganization procedures as well as influencing factors on the extent of the recovery rate are not investigated in detail. Against this background, the empirical study in chapter V concentrates on the economic situation of insolvent companies at the time of filing as well as specific aspects of ex-post efficiency in Germany: The extent of different creditor recovery rates as well as influencing factors on the recovery rate for all creditors (so called firm recovery rate) in formal reorganization procedures. In addition, the data set is separated into two subsamples. The first subsample includes firms which continue after the formal procedure and the second one involves firms which are liquidated after the acceptance of an insolvency plan. Again, influencing factors on firm recovery rates are presented. Chapter VI summarizes the main results of the study.

³ See for example Kranzusch and Icks (2009), Icks and Kranzusch (2010) as well as Blazy, Petey and Weill (2012).

II Efficiency of Insolvency Laws

II.1 Ex-post Efficiency

II.1.a Incentives of Stakeholders in Bankruptcy

In case of a business failure, stakeholders have to decide between liquidation and reorganization of the firm. The decision ought to be based on the expected value after liquidation compared to the expected value after reorganization. When the decision between liquidation and reorganization maximizes the expected value, the solution is considered to be ex-post efficient.⁴

Regarding investigations about bankruptcy resolutions, theory focuses on the different incentives stakeholders face. Consequently, all studies exclude a conflict of interest between old management and shareholders. The following considerations assume that managers and owners have congruent goals.

One main problem is that stakeholders want to maximize the expected value of their own returns instead of the expected value of the entire firm. This can lead to ex-post inefficiencies. Jensen and Meckling (1976) show that equity holders of leveraged firms face incentives to overinvest.⁵ The reasoning behind this is that shareholders receive all residual earnings in case of success, while their risk is limited to the amount of equity. This effect is also known as “go for broke”.⁶ Conversely, debt holders tend to underinvest.⁷ As these incentive effects increase with the leverage ratio, they apply in particular to distressed firms.

The deviation of the incentives of shareholders and creditors can impede the reorganization and liquidation proceedings. According to Jensen and Meckling (1976) and Burghof (1998), shareholders tend to reorganize firms that should be liquidated while creditors tend to liquidate firms that should be reorganized.

The renegotiation power of equity- and debt holders is highly affected by insolvency laws. But insolvency laws do not only enforce stakeholders to assert themselves. Moreover, the legal framework can also create new incentives that can affect the distribution of the firm value between the different stakeholders.

⁴ See for example Hart (2006), p. 4, Aghion, Hart and Moore (1992), pp. 532-533 or White (1989), p. 129.

⁵ See Jensen and Meckling (1976), pp. 334-337.

⁶ See Harris and Raviv (1991), p. 301.

⁷ See Burghof (1998), pp. 505 et seqq.