

# Does pre-packed bankruptcy create value? An empirical study of postbankruptcy employment retention in The Netherlands

Henrick Aalbers<sup>1</sup> | Jan Adriaanse<sup>2</sup> | Gert-Jan Boon<sup>3</sup> | Jean-Pierre van der Rest<sup>2</sup> | Reinout Vriesendorp<sup>2,3</sup> | Frank Van Wersch<sup>1</sup>

<sup>1</sup>Centre for Organization Restructuring, IMR, Radboud University, Nijmegen, The Netherlands

<sup>2</sup>Department of Business Studies, Leiden Law School, Leiden, The Netherlands

<sup>3</sup>Department of Company Law, Leiden Law School, Leiden, The Netherlands

#### Correspondence

Jean-Pierre van der Rest, Department of Business Studies, Leiden Law School, The Netherlands.

Email: j.i.van.der.rest@law.leidenuniv.nl

#### Abstract

In recent years, there has been growing interest in whether pre-packed bankruptcy can be a mechanism through which firms facing imminent insolvency can preserve value. Although an extensive body of literature exists on "pre-packs," whether such techniques really preserve value remains ambiguous. By analysing bankruptcy proceedings filed with Dutch courts in the period 2012-2018 through the lenses of real options and debt overhang theory, we examined employment retention postbankruptcy as a consequence of the type of bankruptcy proceeding (pre-packed bankruptcy and conventional bankruptcy) and the severity of prebankruptcy financial distress. The results show that in the Netherlands, a pre-packed bankruptcy, when compared with a conventional bankruptcy proceeding, positively impacts employment retention rates after bankruptcy. The severity of financial distress before bankruptcy does not affect employment retention rates postbankruptcy. This implies that despite the amount of resource slack, the preservation of employee value is better served under a pre-packed bankruptcy than a conventional bankruptcy proceeding. This finding is important for insolvency practice, as up to 22 June 2017, employee rights in the Netherlands (including redundancy) were not

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

<sup>© 2019</sup> The Authors. International Insolvency Review published by INSOL International and John Wiley & Sons Ltd

considered to be automatically transferred to the firm acquiring the bankrupt debtor's assets when a pre-packed bankruptcy was applied. Implications for insolvency regulation and practice are discussed.

# **1 | INTRODUCTION**

Firms that find themselves in dire circumstances can improve their situation by proactively implementing strategic change to stem survival-threatening performance decline.<sup>1</sup> Asset restructuring, as one of four common restructuring strategies,<sup>2</sup> is a way to initiate strategic change and to respond to imminent threats and opportunities in the business environment.<sup>3</sup> However, exit barriers can arise when (firm-)specific assets are difficult to trade or transfer or have environmental concerns or other attributes that hinder a fair valuation. If this is the case, firms may have difficulty implementing strategic change without experiencing value-destroying disruptions to their operations.<sup>4</sup> For these firms, strategically filing for a bankruptcy proceeding can provide a mechanism to renegotiate unfavourable relationships with stakeholders, possibly due to unforeseen and uncontrollable events in the external environment. This will reduce transaction costs in cases where contract provisions do not allow firms to renegotiate when unforeseen events occur.<sup>5</sup>

In the strategic management literature, these filings for a type of bankruptcy proceeding are referred to as "strategic bankruptcy," which refers to the use of bankruptcy as a mechanism to enable firms to implement strategic changes to relationships with customers, suppliers, or other stakeholders in a manner that positively alters the firms' likelihood of sustainable performance improvements and survival. A common element found in the literature on "strategic bankruptcies" is the perception that they are pursued to deal with a single problem, such as high-cost long-term leases. Moreover, as Moulton and Thomas report, firms that file for a bankruptcy proceeding to resolve a single strategic

<sup>6</sup>Wilbur Moulton and Howard Thomas, "Bankruptcy as a Deliberate Strategy: Theoretical Considerations and Empirical Evidence" (1993) 14 *Strategic Management Journal* 125.

<sup>&</sup>lt;sup>1</sup>See, e.g., Kathryn Harrigan and Michael Porter, "End-Game Strategies for Declining Industries" (1983) 61 *Harvard Business Review* 111; Dominic Lim et al., "Rethinking the Effectiveness of Asset and Cost Retrenchment: The Contingency Effects of a Firm's Rent Creation Mechanism" (2013) 34 *Strategic Management Journal* 42; Rick Aalbers, "Rewiring the Intrafirm Network Under Downsizing: The Role of Tie Loss on Discretionary Tie Formation" (2018) *Long Range Planning* (forthcoming); Bert Morrow Jr, Richard Johnson and Lowell Busenitz, "The Effects of Cost and Asset Retrenchment on Firm Performance: The Overlooked Role of a Firm's Competitive Environment" (2004) 30 *Journal of Management Studies* 189; Hugh O'Neill, "An Analysis of the Turnaround Strategy in Commercial Banking" (1986) 23 *Journal of Management Studies* 165.

<sup>&</sup>lt;sup>2</sup>Jim Lai and Sudi Sudarsanam, "Corporate Restructuring in Response to Performance Decline: Impact of Ownership, Governance and Lenders" (1997) 1 *European Finance Review* 197.

<sup>&</sup>lt;sup>3</sup>See, e.g., Irene Duhaime and John Grant, "Factors Influencing Divestment Decision-Making: Evidence from a Field Study" (1984) 5 *Strategic Management Journal* 301; Michael Hitt, Jeffery Harrison and Duane Ireland, *Mergers and Acquisitions: A Guide to Creating Value for Stakeholders* (Oxford University Press, 2001); Robert Hoskisson and Michael Hitt,

*Downscoping: How to Tame the Diversified Firm* (Oxford University Press, 1994); Constantinos Markides, "Consequences of Corporate Refocusing: Ex ante Evidence" (1992) 35 *Academy of Management Journal* 398.

<sup>&</sup>lt;sup>4</sup>Sharon James, "Strategic Bankruptcy: A Stakeholder Management Perspective" (2016) 69 Journal of Business Research 492.
<sup>5</sup>See Oliver Williamson, "Transaction Cost Economics: The Governance of Contractual Relations" (1979) 22 Journal of Law and Economics 233; Oliver Williamson, "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives" (1991) 36 Administrative Science Quarterly 269.

problem tend to face a similar level of difficulty when reorganizing to those suffering more general (complex) corporate distress.<sup>6</sup> Moreover, "strategic bankruptcy" is usually only pursued as a last resort after exploring all out-of-court options.<sup>7</sup> As the downward-spiral decline literature suggests, when a firm's decline is left unchecked, performance worsens over time and tends to become self-reinforcing, further depleting a firm's resource slack.<sup>8</sup> However, whereas bankruptcy may be considered a last resort, it can also prove a bridge over troubled water. This is the core thesis of strategic bankruptcy: Financially distressed firms are enabled to restructure and adapt to their changing environments through a bankruptcy proceeding, while at the same time limiting bankruptcy costs and public scrutiny. Therefore, a "strategic bankruptcy" is expected to preserve firm value and, not unimportantly from a theoretical strategic management perspective, retain the firm's employment and other key (intellectual) resources.

In recent years, there has been a growing interest in the management literature on whether "strategic bankruptcy" can be a mechanism through which firms can restructure in order to preserve and enhance value for the stakeholders. Previously, this literature perceived bankruptcy mostly as a procedure focused on liquidation and dissolution of the legal entity, an end-of-the-line approach.<sup>9</sup> Legislators and practitioners have, however, in recent years pursued new or revised approaches to legal frameworks facilitating corporate restructuring, also within bankruptcy proceedings. This includes the pre-packaging of a sale of the business before bankruptcy but also facilitating going-concern sales postbankruptcy by the liquidator.<sup>10</sup> These (legislative) developments are driven by a desire to promote efficient insolvency frameworks.<sup>11</sup> As such, the efficiency of bankruptcy proceedings has

<sup>9</sup>Harlan Platt and Marjorie Platt, "Corporate Board Attributes and Bankruptcy" (2012) 65 Journal of Business Research 1139. <sup>10</sup>See, for the Netherlands, for instance, Nico Tollenaar, "Faillissementsrechters van Nederland: Geef Ons de Prepack" *TvI* 2011/23 and the legislative proposal *Wet continuïteit ondernemingen I* (Business continuation act I) providing a legal basis for the Dutch pre-packed bankruptcy, see *Kamerstukken I* 2015/16, 34 218, A. See also the draft legislative proposal *Wet overgang van onderneming in faillissement* (Act on transfer of business in bankruptcy) (29 May 2019), available at: <www. rijksoverheid.nl/documenten/rapporten/2019/05/29/ek-bijlage-3-voorstel-van-wet-inzake-wet-overgang-van-onderneming-infaillissements. This proposal deals with matters regarding employees in a transfer of undertaking that takes place in a bankruptcy procedure.

<sup>11</sup>See, for instance, the EU legislator in its efforts since 2012 towards the Directive EU 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (EU Directive on restructuring and insolvency), recitals 16 and 29, and Article 1(c) (EU Directive on restructuring and insolvency). See also Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, A new European approach to business failure and insolvency, 12.12.2012, COM(2012) 742 final, at 2.; Commission Recommendation on a new approach to business failure and insolvency, 12 March 2014, C(2014) 1500 final, recitals 11 and 12, and at 1; Communication from the Commission to the European Parliament, the Council and the European Parliament, the Council, the European Economic and Social Committee and the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Commission to the Regions, Action Plan on Building a Capital Markets Union, 30.09.2015, COM(2015) 468 final, at 6.2. For the Netherlands, this was clearly voiced by Tollenaar, above note 10. Compare Jan van Apeldoorn, "Pre-packs" *Tvl* 2012/17 for some critical observations.

<sup>&</sup>lt;sup>7</sup>Also see David Flynn and Mamidouh Farid, "The Intentional Use of Chapter XI: Lingering Versus Immediate Filing" (1993) 12 *Strategic Management Journal* 63.

<sup>&</sup>lt;sup>8</sup>See, e.g., Donald Hambrick and Richard D'Aveni, "Large Corporate Failures as Downward Spirals" (1988) 33 Administrative Science Quarterly 1; William McKinley, Scott Latham and Michael Braun, "Organizational Decline and Innovation: Turnarounds and Downward Spirals" (2014) 39 Academy of Management Review 88; Jenny Rudolph and Nelson Repenning, "Disaster Dynamics: Understanding the Role of Quantity in Organizational Collapse" (2002) 47 Administrative Science Quarterly 1; William Weitzel and Ellen Jonsson, "Decline in Organizations: A Literature Intergration and Extension" (1989) 34 Administrative Science Quarterly 91.

become topic of debate, both in academia and practice. For example, management research on bankruptcy costs has shown that a streamlined (bankruptcy) reorganization process contributes to improving the selection of viable firms.<sup>12</sup> But whether this streamlining also preserves firm value by retaining employment for the firm has not yet been the subject of empirical investigation.

In this article, we contribute to this literature on streamlining the bankruptcy process. Using a strategic management research perspective, we focus on the retention rates of employment in two reorganization-driven scenarios, analysing whether a pre-packed bankruptcy is more efficient and effective in preserving value for employees in terms of employment retention than in a conventional going-concern sale bankruptcy proceeding. As to the specific research context, we selected cases from the Dutch insolvency practice between 2012 and 2018.

For bankruptcy proceedings, formal and collective proceedings directed at the liquidation of the debtor are administered by a liquidator (*curator*).<sup>13</sup> In practice, the liquidator in bankruptcy will pursue a (partial) going-concern sale where the company is perceived to be still (partly) viable and where this is in the best interest of the creditors.<sup>14</sup> The Dutch pre-packed bankruptcy practice emerged in 2012 but declined quickly after the Court of Justice of the European Union (CJEU) gave its judgement in the so-called Smallsteps case, mid-2017.<sup>15</sup> The rise in pre-packed bankruptcy also relates to the absence of effective informal restructuring tools in the Dutch insolvency framework.<sup>16</sup> In the preliminary phase, before filing for opening a formal bankruptcy proceeding, the debtor may request the court to appoint a provisional liquidator (in Dutch: *beoogd curator*) and a provisional supervisory judge (in Dutch: *beoogd rechter-commissaris*), while preparing a deal for an asset sale to be performed postbankruptcy.<sup>17</sup> Most of the preparations before filing for bankruptcy are conducted informally and not usually made public.

The pre-packed bankruptcy has been developed in practice; however, not all Dutch courts allow for pre-packs as it lacks a formal statutory basis. Other critiques were raised, including that the pre-packed bankruptcy lacks transparency (for all affected parties),<sup>18</sup> distorts market competition,<sup>19</sup> may limit objectivity of the liquidator,<sup>20</sup> and, at that time, possible incompatibility with the European Union (EU) Transfer of Undertakings Directive (TOU Directive).<sup>21</sup> Currently, a legislative reform is

- Chapter 11 Reorganization" (2006) 61 *The Journal of Finance* 1253; Xavier Giné and Inessa Love, "Do Reorganization Costs Matter for Efficiency? Evidence from a Bankruptcy Reform in Colombia" (2010) 53(4) *Journal of Law and Economics* 833.
- For an overview of the debate in Dutch legal literature, see Frank Verstijlen, "Reorganisatie van Ondernemingen en Pre-Pack," in Danny Busch et al. (eds), Wet Continuïteit Ondernemingen (Delen I en II) en het Bestuursverbod (Paris BV, 2014).

<sup>13</sup>Articles 20, 23, and 68, Dutch Bankruptcy Act.

<sup>15</sup>Tollenaar, above note 10; Marc van Zanten, "It Takes Smallsteps to Pre-Pack" in Ewert Verwey, Michael Broeders and Flip Schreurs (eds), *De Curator en het Personeel* (Insolad Jaarboek 2018) (Wolters Kluwer, 2018).

<sup>18</sup>Van Apeldoorn, above note 11.

<sup>&</sup>lt;sup>12</sup>See, for instance, Arturo Bris, Ivo Welch and Ning Zhu, "The Costs of Bankruptcy: Chapter 7 Liquidation Versus

<sup>&</sup>lt;sup>14</sup>David Ehmke et al., "The EU Preventive Restructuring Framework: A Hole in One?" (2019) 28(2) *International Insolvency Review* 184, Sections 3.4 and 4.

<sup>&</sup>lt;sup>16</sup>Karin Luttikhuis, "De Slagkracht van de Informele Reorganisatie" *TvI* 2008/22. Prior empirical research already showed that, for the Dutch context, informal reorganisation had benefits, such as confidentiality, flexibility and low costs of informal restructuring proceedings, see Jan Adriaanse and Hans Kuijl, "Informele Reorganisatie" *TvI* 2004/65.

<sup>&</sup>lt;sup>17</sup>See further on the legal framework of the Dutch pre-pack: Steffie van den Bosch, "De Pre-Pack in de Nederlandse Praktijk: Een Empirisch Onderzoek Vanuit Economisch Perspectief" *TvOB*, 2018/4.

<sup>&</sup>lt;sup>19</sup>Marten van Vugt, "De Nederlandse Pre-Pack: Time-Out, Please!" FIP 2014/47, 26-28.

<sup>&</sup>lt;sup>20</sup>Bruno Tideman, "Kritische Kanttekeningen bij de Pre-Pack" FIP 2013/6, 192.

<sup>&</sup>lt;sup>21</sup>Council Directive 2001/23/EC of 12 March 2001 on the approximation of the laws of the Member States relating to the safeguarding of employees' rights in the event of transfers of undertakings, businesses, or parts of undertakings or businesses. Critiques of noncompatibility of the pre-packed bankruptcy with this Directive were raised, for instance, by E. Loesberg, "Heiligt het doel de middelen? Pre-pack in het Nederlandse faillissementsrecht" *TOP* 2013/1, p. 31; Pam Hufman and Ilse

Zaal, "De toepasselijkheid van de Richtlijn overgang van onderneming bij insolvente ondernemingen" TAP 2014/98, 169.

pending to introduce legislation to formalize the pre-packed bankruptcy.<sup>22</sup> Initially, it was considered that the protection for employees as provided for in the TOU Directive was not applicable, because the Netherlands implemented the exception provided in Article 5(1) of the TOU Directive.<sup>23</sup> This is different from, for instance, the United Kingdom, where employee protection is also applicable to pre-pack sales.<sup>24</sup> However, in 2017, the Dutch approach changed when the CJEU gave its preliminary ruling in the Smallsteps case, deciding—in short—that the Dutch pre-packed bankruptcy was not considered a proceeding instituted with a view to the liquidation of the assets of the transferor.<sup>25</sup> As a consequence, the employee protection of the TOU Directive is applicable in a transfer of business in a pre-packed bankruptcy.<sup>26</sup>

The Dutch pre-packed bankruptcy is thus somewhat unique, and our study merely intends to draw attention to a relevant case setting in which employee rights were not (presumed to be) automatically transferred to the transferee upon the transfer of the business, both in the pre-packed bankruptcy and in the conventional bankruptcy proceeding.<sup>27</sup> Rescue of the business, in this specific case, was performed with a pre-packed bankruptcy due to lack of a formal or hybrid rescue proceeding. This should not directly be compared with—for example—the U.K. pre-packs that are an actual instance of the rescue processes within Administration that aims to preserve going-concern value. In the U.K. approach, the feasibility of pre-packs is also under debate, in particular about whether the protections built into the system for the less sophisticated stakeholders suffice.<sup>28</sup>

In our case study context, however, analysing the Dutch experience with a pre-packed bankruptcy, the research question is primarily of a descriptive nature: Do reorganization-driven scenarios of the Dutch pre-packed bankruptcy preserve more firm value than those in a conventional goingconcern sale bankruptcy proceeding? As such, we unpack the notion of restructuring as an instance of "strategic bankruptcy," drawing from an existing theoretical body of knowledge in the strategic management literature and backing up our descriptive analysis by a unique set of empirical data collected from the pre-pack rulings over the past years in the Netherlands. Insights from this article thereby aspire to contribute to the discussion on bankruptcy as a mechanism for strategic change and the type of bankruptcy proceeding that best serves that change. From a strategic management research literature perspective, we thus seek to contribute to the bankruptcy mechanism itself.

This article is organized as follows. First, we explain how the strategic management literature conceptualizes bankruptcy as a strategic action rather than an end-of-the-line event. Guided by debt overhang theory and real options theory, we explain why bankruptcy is used strategically as a mechanism to restructure a firm and subsequently emerge as a going concern, irrespective of the chosen

<sup>&</sup>lt;sup>22</sup>See the legislative proposal for the *Wet continuïteit ondernemingen I* (Business continuation act I), available at: <a href="https://www.eerstekamer.nl/wetsvoorstel/34218\_wet\_continuiteit">https://wet.continuiteit</a>.

<sup>&</sup>lt;sup>23</sup>Article 5(1), TOU Directive is implemented in Article 7:666, Dutch Civil Code.

<sup>&</sup>lt;sup>24</sup>See, for an elaborate comparison of the pre-pack in the United Kingdom and the Netherlands, Alexandra Kastrinou and Stef Vullings, "'No Evil is Without Good': A Comparative Analysis of Pre-Pack Sales in the UK and the Netherlands" (2018) 27(3) *International Insolvency Review* 320, Section VIII.

<sup>&</sup>lt;sup>25</sup>Court of Justice of the European Union (CJEU) 22 June 2017, ECLI:EU:C:2017:489 (FNV/Smallsteps). The CJEU followed the Opinion of AG Mengozzi, CJEU 29 March 2017, EU:C:2017:241.

<sup>&</sup>lt;sup>26</sup>This was later confirmed by the CJEU in the Plessers case on a Belgium pre-pack. See CJEU 16 May 2019, ECLI:EU: C:2019:424. That there is only limited room for the exception provided in Article 5(1) of the TOU Directive was recently concluded in the opinion of AG Drijber of 1 November 2019 in the Heijploeg case, a case that is pending with the Dutch Supreme Court (to be published).

<sup>&</sup>lt;sup>27</sup>See Kastrinou and Vullings, above note 24, Section II.

<sup>&</sup>lt;sup>28</sup>ibid., Section III. See also Teresa Graham, Graham Review into Pre-Pack Administration (Report to the Rt. Hon Vince Cable MP) (June 2014), available at:<a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</a> attachment\_data/file/317438/Graham\_review\_report\_-June2014final.docx>.

type of (i.e., pre-packed or conventional) bankruptcy proceeding. Second, we describe and justify the empirical methodology applied in this study and present the statistical results. Finally, we discuss the findings and their implications for insolvency regulation and practice.

# 2 | THEORETICAL FRAMEWORK

In our study, we define organizational decline as "a condition in which a substantial, absolute decrease in an organisation's resource base occurs over a specified period of time."<sup>29</sup> Financial distress is defined as the state in which the liquid assets of the firm are not sufficient to meet the current (contractual) obligations.<sup>30</sup> In this context, retrenchment is defined as efficiency-oriented, short-term turnaround actions such as downsizing, cost reduction, asset sell-offs, and the divestment of businesses that aim to stem survival-threatening performance decline.<sup>31</sup> Mechanisms for resolving financial distress aim to address the mismatch between the firm and its environment by restructuring the assets, restructuring the financing contracts, or both.<sup>32</sup>

Although retrenchment strategies have been approached in the strategic management literature from multiple theoretical perspectives,<sup>33</sup> real options theory and debt overhang theory stand out as the frameworks most commonly applied to the study of strategic decision making under the condition of organizational decline. Combining these two theoretical lenses emphasizes the inherent value of flexibility as well as acknowledges the associated managerial cognitive strain that commands turnaround management operations.<sup>34</sup>

In the following section, we discuss first debt overhang theory and real options theory as a theoretical framework describing mechanisms to resolve financial distress following organizational decline. Next, we discuss the strategic management context of financial distress. This focuses, particularly, on the proactive use of bankruptcy mechanisms to restructure in an attempt to resolve financial distress and regain viability. The procedure of pre-packed bankruptcy, as a strategic alternative to the conventional bankruptcy proceeding in the Netherlands, is then interpreted through the combined theoretical lenses of debt overhang theory and real options theory. We focus our discussion on

<sup>32</sup>Hotchkiss et al., above note 29.

<sup>33</sup>See, e.g., James Guthrie and Deepak Datta, "Dumb and Dumber: The Impact of Downsizing on Firm Performance as Moderated by Industry Conditions" (2008) 19 Organization Science 108; Chanchai Tangpong, Michael Abebe and Zonghui Li, "A Temporal Approach to Retrenchment and Successful Turnaround in Declining Firms" (2015) 52 Journal of Management Studies 647; Rick Aalbers and Wilfred Dolfsma, "Resilience of Information Flow During Restructuring: Characterizing Information Value Being Exchanged and the Structure of a Network Under Turmoil" (2019) 100 Journal of Business Research 299.

<sup>&</sup>lt;sup>29</sup>Kim Cameron, Myung Kim and David Whetten, "Organizational Effects of Decline and Turbulence" (1987) 32 Administrative Science Quarterly 222.

<sup>&</sup>lt;sup>30</sup>Edith Hotchkiss et al., "Bankruptcy and the Resolution of Financial Distress" in B. Espen Eckbo (ed), *Handbook of Corporate Finance: Empirical Corporate Finance* (Vol 2) (Elsevier, 2008); Matthias Kahl, "Economic Distress, Financial Distress, and Dynamic Liquidation" (2002) 57 *The Journal of Finance* 135.

<sup>&</sup>lt;sup>31</sup>Lim et al., above note 1; Morrow, Johnson and Busenitz, above note 1; O'Neill, above note 1.

<sup>&</sup>lt;sup>34</sup>See, e.g., Xavier Giroud et al., "Snow and Leverage" (2012) 25 Review of Financial Studies 680; Luigi Guiso, Paola Sapienza and Luigi Zingales, *Time Varying Risk Aversion* (Northwestern University, 2011); Jingoo Kang, Ribuga Kang and Sang-Joon Kim, "An Empirical Examination of Vacillation Theory" (2016) 38 *Strategic Management Journal* 1356; Ronald Klingebiel and Ron Adner, "Real Options Logic Revisited: The Performance Effects of Alternative Resource Allocation Regimes" (2015) 58 *Academy of Management Journal* 221; Brian Melzer, *Mortgage Debt Overhang: Reduced Investment by Homeowners with Negative Equity* (Northwestern University, 2010); Stewart Myers, "Determinants of Corporate Borrowing" (1977) 5 *Journal of Financial Economics* 147; Lenos Trigeorgis and Jeffrey Reuer, "Real Options Theory in Strategic Management" (2016) 38 *Strategic Management Journal* 42.

elements of both strategic bankruptcy and financial distress in relation to the retention of employees in bankruptcy.<sup>35</sup>

### 2.1 | Debt overhang and real options theory

Debt overhang (or being over the firm's debt capacity) is often used by banks as a rationale for credit rationing.<sup>36</sup> Tirole states that firms experience debt overhang when they are unable to raise new financing for a profitable project.<sup>37</sup> This occurs when a firm's future income and fixed assets have been forfeited and the firm is unable to restructure its debt with existing creditors in the form of a haircut or by renegotiating the debt's package of terms and conditions (e.g., interest and payment scheme). Debt overhang has serious implications for a firm's future. In financially constrained firms, an increase in leverage will increase a firm's likelihood to default.<sup>38</sup>

Debt overhang is known to affect managerial behaviour, skewing rational decision making. In a seminal article, Myers argues that managers in a firm with risky outstanding debt and a focus on maximizing equity value are incentivized to defer investing, resulting in inefficient investment behaviour.<sup>39</sup> When investigating external financing rationale, Hennessy and Whited found that debt overhang reduces the level of investment by approximately 1% to 2% for each percent increase in the leverage ratio of long-term debt to assets.<sup>40</sup> Debt overhang was also found to negatively affect employment growth and capital expenditure growth.<sup>41</sup> Moreover, Giroud et al. found that debt overhang impairs firm performance and that a decrease in leverage leads to a significant increase in Return on Assets.<sup>42</sup> The increase in Return on Assets is caused by a decrease in overhead costs and wages and an increase in sales. Moreover, when looking at the impact of firm size on this phenomenon, research suggests that larger firms tend to experience a smaller impact of leverage changes on operating performance fluctuations than smaller firms.<sup>43</sup>

In a different setting, Hackbarth focused on behavioural perspectives at managerial level and found that managerial biases can impact financing and investment decisions.<sup>44</sup> The combination of managerial optimism and overconfidence in managers that try to maximize the value of equity affects their decision making inasmuch that biased managers choose higher debt levels and invest earlier than rational managers.<sup>45</sup> Giroud et al. illustrated how debt overhang can further distort incentives. For example, owners of debt-ridden firms may intentionally forego crucial investments (e.g., maintenance of plant and equipment), exert too little effort (e.g., effort devoted to marketing,

<sup>44</sup>Dirk Hackbarth, "Determinants of Corporate Borrowing: A Behavioral Perspective" (2009) 15 *Journal of Corporate Finance* 389.

<sup>45</sup>idem.

<sup>&</sup>lt;sup>35</sup>See, e.g., Giroud et al., above note 33; Guiso, Sapienza and Zingales, above note 33; Kang, Kang and Sang-Joon, above note 33; Melzer, above note 33; Myers, above note 33; Trigeorgis and Reuer, above note 33.

<sup>&</sup>lt;sup>36</sup>Joseph Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information" (1981) 71 *The American Economic Review* 393.

<sup>&</sup>lt;sup>37</sup>Jean Tirole, The Theory of Corporate Finance (Princeton University Press, 2010).

 <sup>&</sup>lt;sup>38</sup>Jie Cai and Zhe Zhang, "Leverage Change, Debt Overhang, and Stock Prices" (2011) 17 *Journal of Corporate Finance* 391.
 <sup>39</sup>Myers, above note 33.

<sup>&</sup>lt;sup>40</sup>Christopher Hennessy and Toni Whited, "How Costly Is External Financing? Evidence From a Structural Estimation" (2007) 62 *The Journal of Finance* 1705.

 <sup>&</sup>lt;sup>41</sup>Larry Lang, Eli Ofek and Rene Stulz, "Leverage, Investment, and Firm Growth" (1996) 40 *Journal of Financial Economics* 3.

<sup>&</sup>lt;sup>42</sup>Giroud et al., above note 33.

<sup>&</sup>lt;sup>43</sup>Chaiporn Vithessonthi and Jittima Tongurai, "The Effect of Firm Size on the Leverage–Performance Relationship During the Financial Crisis of 2007–2009" (2015) 29 Journal of Multinational Financial Management 1.

sales, cost-cutting, and improving efficiency), strategically pay out cash to themselves (as wages of dividends), or sell vital assets on the secondary market and pocket the proceeds.<sup>46</sup> In extreme cases, debt overhang can distort a firm's management and lead to strategic defaulting.

At the core of the phenomenon of strategically opting for a bankruptcy proceeding lies the following reasoning. A financially distressed firm heading for failure is trapped in an unchecked downward spiral of organizational decline. In this situation, a firm's slack financial, human, and reputational resources are depleted due to incurred losses. As slack financial resources diminish along the downward spiral, so do the options and opportunities for strategic change.<sup>47</sup> As discussed, debt overhang has financial and behavioural consequences. In a state of financial distress and debt overhang, management incentives may be distorted: crucial investments may be foregone, and exerted effort can perish.<sup>48</sup> This situation can lead to managerial paralysis, as managers' priorities shift from serving the firm's interests to their own interests. At the same time, the classical notion of debt overhang affects the firm as it is unable to arrange additional funds (neither equity nor debt) to carry the necessary restructuring costs. When this state is reached, strategically filing for bankruptcy becomes a *real option* that can still be called on. Myers coined the term *real options* and envisioned bringing the theory of financial options to the realm of strategic decision making.<sup>49</sup> An option is a right, but no obligation, to take some future specified action at a predetermined cost. Originating from finance, these options are commonly used as a measure to hedge risk in the face of high stock, bond, or commodity market volatility. At the core, however, lies a fundamental decision asymmetry to take a future decision (e.g., invest, divest, or restructure) only if this is beneficial to the decision maker.<sup>50</sup> Trigeorgis and Reuer state that this asymmetry of options involving the right but not the obligation to act-also gives rise to an asymmetry in firm outcomes in the presence of uncertainty.<sup>51</sup> Applying this to a reorganization-driven scenario, firms that have an option to restructure using a bankruptcy proceeding should have a greater chance of survival than firms lacking this option. Real options reasoning, moreover, suggests for more of the defaulting firm's possible benefits to be captured and the most egregious of its costs to be contained.<sup>52</sup>

Through the real options lens, a distressed firm's strategic choice for bankruptcy may be understood as a real option. First, a "strategic bankruptcy" involves both direct and indirect costs from not choosing alternative courses of action such as selling the (unprofitable) businesses (i.e., divestment), avoiding deterioration by restructuring in a timely fashion (i.e., employee layoffs and strategic refocusing), and negotiating debt with its creditors (i.e., out-of-court settlement).<sup>53</sup> Second, if the firm can be successfully reorganized through "strategic bankruptcy," the gain from upside variance can be unlimited, whereas the costs are limited. Third, the management of the firm is free to either exercise or abandon the option depending on developments in its situation. For example, in case the variances of alternative options become more favourable for the firm, the firm's management is free to abandon the "strategic bankruptcy" without any obligations. Additionally, in the real options perspective, a firm's real assets investments in the preparation of the "strategic bankruptcy" can be

<sup>49</sup>See Trigeorgis and Reuer, above note 33.

<sup>&</sup>lt;sup>46</sup>Giroud et al., above note 33; Myers, above note 33.

<sup>&</sup>lt;sup>47</sup>Vincent Barker and Irene Duhaime, "Strategic Change in the Turnaround Process: Theory and Empirical Evidence" (1997)
18 Strategic Management Journal 13.

<sup>&</sup>lt;sup>48</sup>Giroud et al., above note 33.

<sup>&</sup>lt;sup>50</sup>idem.

<sup>51</sup> idem.

<sup>&</sup>lt;sup>52</sup>Rita McGrath, "Falling Forward: Real Options Reasoning and Entrepreneurial Failure" (1999) 24 Academy of Management Review 13.

<sup>&</sup>lt;sup>53</sup>See Rick Aalbers et al., "Relevantie van Transparantie" *M&A Community* (11 July 2014); Kang, Kang and Kim, above note 33; John Kose, Larry Lang and Jeffrey Netter, "The Voluntary Restructuring of Large Firms in Response to Performance Decline" (1992) 47 *The Journal of Finance* 891.

328 WILEY 4

regarded as parallel to option premiums as found in call options rationale, providing relative flexibility to the distressed firm.<sup>54</sup>

Bankruptcy as a strategic *real option* thus allows the firm to avert definitive failure by proactively preparing and initiating bankruptcy proceedings. The speed and discretion of the process limits bankruptcy costs and provides time to find new investors to restructure the firm as a going concern. This prearranged going-concern sale preserves more value for the business than a piecemeal liquidation that keeps the viable parts intact. Another important factor in this force field of interests and stakeholder positions is the firm's management. We argue that as the management is incentivized to maintain both control and their income, they benefit from a smooth, intact transfer of assets to a new legal entity as this increases the chances of being able to stay with the firm.

From a real options perspective, the downside variance at the firm level is limited to the bankruptcy costs.<sup>55</sup> As discussed earlier, this involves both direct and indirect costs. Direct costs refer to those associated with a firm's bankruptcy filing. These are primarily administrative and include professional fees, court costs, document preparation, and communication with potential investors and creditors.<sup>56</sup> Indirect costs are opportunity costs such as the impacts of bankruptcy on a firm's reputation and the firm's perception of sustainability.<sup>57</sup> Out-of-court settlements and prebankruptcy restructuring (e.g., renegotiating lease contracts and employee's wages) provide the fastest resolution of financial distress while diverting bankruptcy costs, making it the preferable option.<sup>58</sup> However, looking through the debt overhang lens, financial distress can also cause management to exert too little effort and to forego investments.<sup>59</sup> However, it is not only the firm's management that can be blamed for suboptimal decision making, some creditors may be unwilling to negotiate down outstanding debt before a firm's bankruptcy filing. These creditors do not recognize the cap on downside risk that these arrangements offer from an eventual bankruptcy filing.<sup>60</sup> Bankruptcy generally does not offer a sophisticated mechanism to resolve a firm's financial distress. Filing for bankruptcy is generally considered to be costly and complicated; a rough remedy in every respect, and only to be considered as a last resort. Once in bankruptcy, information is limited and primarily relates to the firm's tangible assets. Potential buyers have little time to analyse the available information in order to prepare an offer for the firm's assets. The picture painted above illustrates that an asset sale in bankruptcy is, in every respect, a fire sale. This translates into the value of the bids, which usually range between break-up value and going-concern value.

#### 2.2 | Bankruptcy as a strategic option

For many years, the organizational decline and turnaround literature viewed bankruptcy as a definitive form of failure and, therefore, considered it only as a firm's last resort.<sup>61</sup> Illustrating the strategic nature of bankruptcy, Moulton and Thomas extended this conceptualization in two ways.<sup>62</sup> First,

55idem.

<sup>59</sup>Cai and Zhang, above note 37; Giroud et al., above note 33.

<sup>61</sup>Platt and Platt, above note 9.

<sup>&</sup>lt;sup>54</sup>Kang, Kang and Kim, above note 33.

<sup>&</sup>lt;sup>56</sup>Moulton and Thomas, above note 6.

 <sup>&</sup>lt;sup>57</sup>Robert Sutton and Anita Callahan, "The Stigma of Bankruptcy. Spoiled Organizational Image and its Management" (1987)
 30 Academy of Management Review 405; Lawrence Weiss, "Bankruptcy Resolution: Direct Costs and Violation of Priority of Claims" (1990) 27 Journal of Financial Economics 285.

<sup>&</sup>lt;sup>58</sup>Julian Franks and Walter Torous, "A Comparison of Financial Recontracting in Distressed Exchanges and Chapter 11 Reorganizations" (1994) 35 *Journal of Financial Economics* 349.

<sup>&</sup>lt;sup>60</sup>See Michael Jensen and William Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure" (1976) 3 *Journal of Financial Economics* 305; Myers, above note 33.

<sup>&</sup>lt;sup>62</sup>Moulton and Thomas, above note 6.

they found that some firms deliberately use bankruptcy as a strategy within their turnaround process. Second, they extended the concept of reorganization success by introducing the notion of partial reorganizations, in which a firm divests parts of its assets and is either acquired by another firm or maintains its identity.<sup>63</sup> The Dutch pre-packed bankruptcy practice fits this extended management concept of failure as it facilitates a reorganization within bankruptcy, usually achieved by a pre-packaged going-concern asset sale, in which a firm's issues are resolved without incurring the costs associated with out-of-bankruptcy solutions such as claims from employees or penalty clauses in lease contracts.<sup>64</sup> The pre-packed bankruptcy offers the possibility for the debtor's management to proactively prepare for and implement strategic change (e.g., in financing structure, assets, and relationships with the firm's vital stakeholders) in order to preserve firm value and to improve the likelihood of business continuity. The provisional liquidator has formal powers in this phase.<sup>65</sup>

In the strategic management literature, a strategic bankruptcy is viewed as a proactive attempt by a firm's management to contend with a threat posed by a stakeholder group or other external forces.<sup>66</sup> In this context, "strategic bankruptcy" is not merely regarded as the result of organizational decline but also as a legal mechanism that can be implemented to improve an organization's effectiveness.<sup>67</sup> For example, the firm's management may initiate a "strategic bankruptcy" to deal with undesirable labour contracts, to avoid claims from a product liability lawsuit, or to avoid sanctions from governmental institutions.<sup>68</sup> From a strategy point of view, bankruptcy then is regarded as a mechanism for strategic change, reconfiguring a firm's (strategic) resources, competencies, and capabilities, to improve a firm's performance and long-term viability.<sup>69</sup> However, as Moulton and Thomas point out, the question of whether to accelerate or delay a bankruptcy filing obscures a more fundamental dilemma. Bankruptcy is no sinecure; it is generally a costly and painful experience.<sup>70</sup> Therefore, in the view of the strategic management literature, a firm will only opt for strategic bankruptcy if the firm's management is convinced that it is unable to resolve its issues in another way, without incurring severe costs or even penalties.<sup>71</sup>

A firm can use "strategic bankruptcy" to restructure (a) its liabilities and equity, (b) its assets, and (c) to reorganize relationships with key stakeholders such as employees, customers, and suppliers.<sup>72</sup> Retaining key employees and maintaining relationships with key customers and suppliers are critical for (future) value-creating activities. The preservation of value in a bankruptcy affects all

<sup>71</sup>James, above note 4.

<sup>&</sup>lt;sup>63</sup>Also see Cheryl Trahms, Hermann Ndofor and David Sirmon, "Organizational Decline and Turnaround a Review and Agenda for Future Research" (2013) 39 *Journal of Management* 1277.

<sup>&</sup>lt;sup>64</sup>See, e.g., Articles 39 and 40, Dutch Bankruptcy Act.

<sup>&</sup>lt;sup>65</sup>Wouter Jongepier and Krijn Hoogenboezem, "Wie is de stille bewindvoerder?" *FIP* 2013/6, 196. Compare Marc van Zanten, "De beoogd curator, uitgegroeid van fly on the wall tot spin in het web" *TVI* 2015/35.

<sup>&</sup>lt;sup>66</sup>See, e.g., Richard D'Aveni, "Dependability and Organizational Bankruptcy: An Application of Agency and Prospect Theory" (1989) 35 *Management Science* 1120; Catherine Daily and Dan Dalton, "Corporate Governance and the Bankrupt Firm: An Empirical Assessment" (1994) 15 *Strategic Management Journal* 643; Kevin Delaney, *Strategic Bankruptcy: How Corporations and Creditors Use Chapter 11 to Their Advantage* (University of California Press, 1992); Flynn and Farid, above note 7; Moulton and Thomas, above note 6.

 <sup>&</sup>lt;sup>67</sup>Klaus Heine and Heike Rindfleisch, "Organizational Decline: A Synthesis of Insights from Organizational Ecology, Path Dependence and the Resource-Based View" (2013) 26 *Journal of Organizational Change Management* 8.
 <sup>68</sup>Daily and Dalton, above note 65; Moulton and Thomas, above note 6.

<sup>&</sup>lt;sup>69</sup>See, e.g., Jocelyn Evans and Aberdeen Borders, "Strategically Surviving Bankruptcy During a Global Financial Crisis: The Importance of Understanding Chapter 15" (2014) 67 *Journal of Business Research* 2738; Flynn and Farid, above note 7; James, above note 4; Samina Karim and Will Mitchell, "Path-Dependent and Path-Breaking Change: Reconfiguring Business Resources Following Acquisitions in the US Medical Sector, 1978-1995" (2000) 21 *Strategic Management Journal* 1061. <sup>70</sup>Moulton and Thomas, above note 6.

<sup>&</sup>lt;sup>72</sup>Stuart Gilson, *Creating Value Through Corporate Restructuring: Case Studies in Bankruptcies, Buyouts, and Breakups* (Wiley, 2001).

stakeholders, either via the proceeds from the sale of a debtor's assets or via the value preservation inside the firm, thereby increasing the probability of a successful (partial) reorganization. As a firm's postbankruptcy value and likelihood of long-term success increases, so does the value of assets held as security for secured creditors while also maintaining key employees, customers, and suppliers who directly influence firm value.<sup>73</sup> This mechanism to ensure economic efficiency under court supervision, whether under a pre-packed or conventional bankruptcy proceeding, is very similar to informal restructuring (i.e., turnaround) as it is also aimed at overcoming financial distress, but in a different institutional (legal) context.<sup>74</sup>

It should be noted, however, that strategically, bankruptcy is not only used to increase a firm's economic efficiency as has been flagged in recent public debate by stakeholders such as labour unions, academics, and European legislators. In the Netherlands, "strategic bankruptcy," as with prepacked bankruptcy, has also been used to avoid legal sanctions from governmental institutions. This was well-illustrated by the Dutch *Heiploeg*-group case, a high-calibre case in the Dutch insolvency practice. In the case of Heiploeg, Europe's leading shrimp supplier with headquarters in the Netherlands serving a customer base all over Europe, strategically filing for bankruptcy was primarily used to reduce threats from and cut certain ties with powerful institutions (in this case, the European Commission) rather than as a mechanism to secure economic efficiency. On 27 November 2013, the European Commission announced that they would fine Heiploeg EUR 27 million for involvement in a price fixing cartel. The payment deadline was set for 28 February 2014. Following the announced European Commission fine, Heiploeg considered pursuing a pre-packed bankruptcy. On 16 January 2014, at Heiploeg's request, the court appointed a provisional liquidator and a provisional supervisory judge to oversee the (further) preparation of the pre-packaged deal. After a period of "silent (pre-pack) administration," Heiploeg filed for bankruptcy with the pre-packaged deal to sell the business postbankruptcy. On 28 January 2014, Heiploeg was declared bankrupt and restarted its business in a new legal entity, leaving the sanction with the bankrupt entity.<sup>75</sup>

In sum, in order to speak of a strategic bankruptcy, certain key elements should be present. According to Verstijlen, the aspect of court-appointed supervision in the final stage before requesting the opening of bankruptcy at the request of the distressed firm is key to this.<sup>76</sup> There must be evidence that the filing was part of a plan that the firm's managers were unable to execute prepetition and that the filing was being used as a ploy to force stakeholder support.<sup>77</sup> If this is not the case, the filing should not be considered strategic but as an end-of-the-line event. Furthermore, a strategic bankruptcy must involve an integral solution for a firm's situation, above and beyond its traditional creditors; it is not sufficient to only deal with specific issues in order to get court approval. By this, we mean that the plan must involve and consider all stakeholders, and not just a few.

<sup>&</sup>lt;sup>73</sup>James, above note 4.

<sup>&</sup>lt;sup>74</sup>See, e.g., Delaney, above note 65; Tobias Eichner, *Restructuring and Turnaround of Distressed Manufacturing Firms. An international Empirical Study* (Peter Lang GmbH, 2010).

<sup>&</sup>lt;sup>75</sup>District Court Overijssel 28 July 2015, ECLI:NL:RBOVE:2015:3589, par. 2.5-2.10. See for more details on the pre-packed bankruptcy of Heiploeg: van Zanten, above note 15, 31-32; Job van der Pijl, *Arbeidsrecht en insolventie: Over de positie van de werknemer van een insolvente werkgever* (Wolters Kluwer, 2019), paragraph 6.4.2. Proceedings are pending whether, in particular following the Smallsteps-case, the exception of Article 5(1) of the TOU Directive is applicable in the case of Heiploeg. The recent opinion of the AG Drijber (to be published) in the proceeding pending with the Dutch Supreme Court concludes that the conditions for the exception are not met in the case of Heiploeg.

<sup>&</sup>lt;sup>76</sup>Verstijlen, above note 12.

<sup>&</sup>lt;sup>77</sup>Jerry Sheppard, "Beautifully Broken Benches. A Typology of Strategic Bankruptcies and the Opportunities for Positive Shareholder Returns" (1995) 12 *Journal of Business Strategies* 99.

## 2.3 | Strategic bankruptcy and employee retention

Following real options logic, firms in severe financial distress face high uncertainty. This uncertainty inherently raises the option value of pre-packed bankruptcy and subsequent successful restructuring when the management of the distressed firm believes the distress is temporary or conducive to turnaround.<sup>78</sup> High uncertainty about a firm's future viability increases both the direct and indirect costs of bankruptcy associated with a firm's reputation and perception of sustainability. Subsequently, both expected earnings and the value of the firm's assets will decrease,<sup>79</sup> in turn lowering the real option flexibility the firm faces. Early studies indicate that executives leaving bankrupt firms do not attain similar positions for at least 3 years, providing a strong incentive for managers to avoid definitive failure.<sup>80</sup> Employees also suffer postbankruptcy; they tend to bear severe wage losses after their employer has filed for bankruptcy.<sup>81</sup> Broadening the stakeholder field beyond management and creditors towards the labour force, we note interestingly that the effect of bankruptcy type on employment retention has been little studied. Employee retention refers to the ability to retain employees in any organization.<sup>82</sup> Long-term health and success of any organization depends upon the retention of key employees, with employees directly affecting prime corporate performance mechanisms such as customer satisfaction, sales, and even effective succession planning.<sup>83</sup>

According to advocates of the pre-packed bankruptcy in the Netherlands,<sup>84</sup> strategically, bankruptcy allows a firm to restructure while limiting the ex post costs of bankruptcy that damage the firm, for example, the bankruptcy stigma proposed by Sutton and Callahan.<sup>85</sup> All involved parties including a representation of the labour force-have the opportunity to examine and gather sufficient information while under better circumstances, hidden from the public scrutiny that can delude firm value as suppliers, financers, and customers may back away from a stigmatized firm. The liquidator representing the firm and its creditors can have more opportunities to develop real alternatives, strengthening the bargaining position. The result is that a financially distressed firm can restructure via a thoroughly and discretely prepared going-concern sale. In doing so, the firm can adapt to its changing environment while at the same time limiting bankruptcy costs and disintegration damage to the firm. The loss of sales, the higher cost of credit, and less investment opportunities can thereby be limited.<sup>86</sup> This is reflected in the value of the firm and therefore in the employment retention of the bankrupt firm. A firm that preserves more value and business opportunities will very likely be better able to retain its employees, as future prospects for the firm signal continued employment opportunity to the labour force. Thus, a more seamless asset transaction, keeping the firm together as a going concern, will maximize the retained value and the retention of employees. Earlier research on the

<sup>86</sup>Edward Altman, "A Further Empirical Investigation of the Bankruptcy Cost Question" (1984) 39 *The Journal of Finance* 589; Alexander Robichek and Stewart Myers, "Conceptual Problems in the Use of Risk-Adjusted Discount Rates" (1966) 21 *The Journal of Finance* 727.

<sup>&</sup>lt;sup>78</sup>idem.

<sup>&</sup>lt;sup>79</sup>Lucian Bebchuk, "Using Options to Divide Value in Corporate Bankruptcy" (2000) 44 European Economic Review 829.

<sup>&</sup>lt;sup>80</sup>See, e.g., Stuart Gilson, "Management Turnover and Financial Distress" (1989) 25 *Journal of Financial Economics* 241; Stuart Gilson, "Transactions Costs and Capital Structure Choice: Evidence from Financially Distressed Firms" (1997) 52 *The Journal of Finance* 161.

<sup>&</sup>lt;sup>81</sup>John Graham et al., "Human Capital Loss in Corporate Bankruptcy" (1 July 2013). US Census Bureau Center for Economic Studies Paper No. CES-WP-13-37, available at SSRN: <a href="https://ssrn.com/abstract=2304298">https://ssrn.com/abstract=2304298</a>>.

<sup>&</sup>lt;sup>82</sup>Bidisha Das and Mukulesh Baruah, "Employee Retention: A Review of Literature" (2013) 14 *Journal of Business and Management* 8.

<sup>83</sup> idem.

<sup>&</sup>lt;sup>84</sup>Tollenaar, above note 10.

<sup>&</sup>lt;sup>85</sup>Sutton and Callahan, above note 56; Aalbers and Dolfsma, above note 32.

<sup>332</sup> ₩ILEY\_

Dutch pre-packed bankruptcy practice also focused on approximating employee retention. In some cases, this was limited to cases pending in a limited number of years (2012–2014) or without comparing it to the employee retention with a conventional bankruptcy.<sup>87</sup> Yet this research indicated that, compared with conventional bankruptcies, pre-packaged bankruptcy may bring about higher employee retention.<sup>88</sup> This leads to the following hypothesis:

**H1:** Distressed firms that file for pre-packed bankruptcy have higher employee retention rates than firms that file for a conventional proceeding.

#### 2.4 | Financial distress severity and employee retention

Firms in financial distress tend to have little resource slack, limiting the possibilities for a firm to invest and regain profitability and reducing the array of real options to consider. The availability of these resources, however limited, can provide comfort as they are directly related to the ability to meet financial obligations; employees' wages being one of the most important. As Arogyaswamy et al. argue, the scope of decline-stemming strategy is a function of the severity of performance decline and the availability of slack resources.<sup>89</sup> Financial approaches to organizational decline such as the bankruptcy prediction models developed by Altman, by Ohlson, and by Zmijewksi can be indicative of organizational slack and resource availability.<sup>90</sup> The lower the chance of the probability of bankruptcy predicted by these models, the greater the (financial) slack resources can be expected within a firm. This availability of resources translates into the possibility to retain employees and to keep the value-creating activities of the firm intact, making it more attractive for investors to restart the business after bankruptcy has been declared. However, once poor performance has set in, it tends to become self-reinforcing; the poor performance depletes the firm's last available resources, which in turn further negatively affects performance making definitive failure more imminent.<sup>91</sup> Indeed, research has shown that possessing a greater available resource base increases the likelihood of a firm restructuring in Chapter 11 bankruptcy proceedings and emerging as an independent firm.<sup>92</sup> Thus, reflecting on the financial stress severity of an insolvent firm as it faces bankruptcy, we formulated the following hypothesis:

**H2:** Firms with greater (financial) slack resources before bankruptcy show higher employment retention rates postbankruptcy.

<sup>&</sup>lt;sup>87</sup>Jordy Hurenkamp, *De Pre-Pack in de Praktijk* (Celsus, 2014); van Zanten, above note 15; van den Bosch, above note 17. <sup>88</sup>van den Bosch, above note 17.

<sup>&</sup>lt;sup>89</sup>Kamala Arogyaswamy, Vincent Barker and Masoud Yasai-Ardekani, "Firm Turnarounds: An Integrative Two-Stage Model" (1995) 32 *Journal of Management Studies* 493.

<sup>&</sup>lt;sup>90</sup>Edward Altman, "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy" (1968) 23 *The Journal of Finance* 589; James Ohlson, "Financial Ratios and the Probabilistic Prediction of Bankruptcy" (1980) 18 *Journal of Accounting Research* 109; Mark Zmijewski, "Methodological Issues Related to the Estimation of Financial Distress Prediction Models" (1984) 22 *Journal of Accounting Research* 59.

<sup>&</sup>lt;sup>91</sup>Hambrick and D'Aveni, above note 8.

<sup>&</sup>lt;sup>92</sup>Diane Denis and Kimberly Rodgers, "Chapter 11: Duration, Outcome, and Post-Reorganization Performance" (2007) 42 *Journal of Financial and Quantitative Analysis* 101. *Note*: their findings are primarily related to the absolute size of a distressed firm.

# **3 | RESEARCH METHODS**

# 3.1 | Data collection procedure

We gathered a sample of 225 Dutch firms over the period 2012-2018 (see Appendix A). The firms in the sample satisfy the following criteria: (a) they filed for bankruptcy between 2012 and 2018 in the Netherlands, (b) financial and employment data were available either from publicly available bankruptcy reports, the Orbis database, or from national/regional media,<sup>93</sup> and (c) the emerging (new) firm had been operational for at least 1 year postbankruptcy.<sup>94</sup> Data were collected from 2012 when the Dutch pre-packed bankruptcy practice emerged.<sup>95</sup> Up until the decision of the CJEU on 22 June 2017 in the Smallsteps case,<sup>96</sup> the absence of regular legal protection for employees, as relevant for the comparison in this study, was generally considered to be similar in both pre-packed and conventional bankruptcies. To identify which bankruptcies could be qualified as pre-packs, several sources were consulted: legal literature, media coverage in LexisNexis database. Those identified were limited to bankruptcies filed with a Dutch court that accepts the pre-packed bankruptcy practice. A bankruptcy filing was categorized as a "pre-packed bankruptcy" if the firm itself—as the debtor had requested appointment of a provisional liquidator and had concluded the pre-packed bankruptcy with a (partial) sale of the business upon being declared bankrupt. The sample of conventional bankrupt firms was compiled by analysing media coverage on business restarts in the LexisNexis database and online media coverage. Of the 225 firms, 51 were classified as a pre-packed bankruptcy<sup>97</sup> and 174 as conventional bankruptcies. However, nine firms were excluded from the analysis, six (all conventional bankrupts) had no employees before and after the bankruptcy and three were statistically identified as outliers in terms of size, making the final sample a total of 216 bankruptcies (50 prepacked and 166 conventional).

# 3.2 | Measurement

# 3.2.1 | Dependent variable

We used employment retention for the key variable of interest, the outcome variable. Employee retention refers to the ability of any organization to retain employees.<sup>98</sup> It was operationalized by measuring the number of employees before and after the bankruptcy event. To account for the long-term effects of a bankruptcy and to only measure its direct and isolated impact, the measurements took place directly before filing for bankruptcy and directly after the restart of the firm's activities in a new legal entity. This provided a ratio variable, measured as a ratio of the number of employees before and after the bankruptcy event.

<sup>&</sup>lt;sup>93</sup>Collecting these data from multiple sources without the possibility of cross-validation increased the risk of inaccuracies. We used a constant protocol regarding the reliability of the sources. Bankruptcy reports were assumed to be the most accurate as they were the last reporting documents produced and published for a firm; second came the Orbis Database, using the most recent data on the firm if available.

<sup>&</sup>lt;sup>94</sup>This third criterion was used to exclude temporary "closing down sale" businesses. These businesses purchase the bankrupt firm's stockpile at a discount in order to sell this within a short period of time after bankruptcy declaration. The bankrupt firm's business is only partially restarted for the purpose of this sale period. There is no real employment retention because the firm closes down after the stockpile has been sold.

<sup>&</sup>lt;sup>95</sup>Tollenaar, above note 10. In this article, he advocated for the Dutch courts to adopt pre-packs.

<sup>&</sup>lt;sup>96</sup>Court of Justice of the European Union 22 June 2017, ECLI:EU:C:2017:489 (FNV/Smallsteps).

<sup>&</sup>lt;sup>97</sup>Because pre-packed bankruptcy practice was established quite recently in the Netherlands, data availability was limited.

<sup>&</sup>lt;sup>98</sup>Das and Baruah, above note 81.

# 3.2.2 | Independent variables

We created two predictor variables: "Type of Bankruptcy" and "Severity of Financial Distress." The predictor "Type of Bankruptcy" was a binary (0/1) categorical variable. The values were based on information from the bankruptcy reports. If a bankruptcy was executed after the appointment of a provisional liquidator, the event was categorized as a pre-packed bankruptcy (code = 1). If there was no involvement of a provisional liquidator, but the firm managed to restart in a bankruptcy, the event was categorized as a conventional bankruptcy (code = 0). The predictor "Severity of Financial Distress" was a continuous variable constructed by calculating the accounting-based Zmijewski score<sup>99</sup>:

$$P(X_0 = 1) = \frac{1}{1 + \exp(-I)}$$

with the following discriminant coefficients:

$$I = -4,336 - 4,513 \times X_1 + 5,679 \times X_2 - 0,004 \times X_3,$$

where  $I = \text{Overall index}, X_1 = \frac{Net Income}{Total Assets}, X_2 = \frac{Total Liabilities}{Total Assets}$ , and  $X_3 = \frac{Current Assets}{Current Liabilities}$ .

The Zmijewski model generated a probability between 0 and 1. A higher value indicated a greater probability of filing for bankruptcy than a lower value, thereby providing an indicator of the severity of the financial condition. The probability of bankruptcy 2 years prior to bankruptcy was thus used as an indicator of the severity of financial distress a priori.

#### 3.2.3 | Control variables

Three covariates were included to control for firm size, industry employment trend, and industry GDP growth. First, we operationalized "firm size" as the total assets 2 years before the filing event. Moulton and Thomas explain that "firm size dominates all other factors in predicting success in completing the reorganisation process."<sup>100</sup> That is, larger firms have greater assets, greater credibility in the financial markets, and longer term contracts and, therefore, can delay the onset of liquidation bankruptcy well beyond the point to which smaller firms can. This relationship between resource availability and the likelihood of failure has also been referred to as "the liability of smallness."<sup>101</sup> Firm size is frequently a check-feature in bankruptcy studies, such as those by Daily and Dalton, Denis and Rodgers, and Hotchkiss.<sup>102</sup> It has been found to be positively related to the probability of

<sup>100</sup>Moulton and Thomas, above note 6.

<sup>&</sup>lt;sup>99</sup>As most of the firms were privately held limited companies (i.e., "Besloten Vennootschap"), no market data were available and thus an accounting-based approach was chosen. Altman (1968), Ohlson (1980), and Zmijewski (1984) are the most commonly used approaches. Wu et al. show that the respective accuracies lie close to each other; 86.1% (Altman), 88.7% (Ohlson), and 85.2% (Zmijewski). Grice and Ingram, also Grice and Dugan, found similar results. See Altman, above note 89; John Grice and Michael Dugan, "Re-estimations of the Zmijewski and Ohlson bankruptcy prediction models" (2003) 20 *Advances in Accounting* 77; John Grice and Robert Ingram, "Tests of the Generalizability of Altman's Bankruptcy Prediction Model" (2001) 54 *Journal of Business Research* 53; Ohlson, above note 89; Y. Wu, Clive Gaunt and Stephen Gray, "A Comparison of Alternative Bankruptcy Prediction Models" (2010) 6 *Journal of Contemporary Accounting & Economics* 34; Zmijewski, above note 89.

<sup>&</sup>lt;sup>101</sup>See, e.g., Joel Baum and Christine Oliver, "Institutional Linkages and Organizational Mortality" (1991) 36 Administrative Science Quarterly 187; Jacques Delacroix and Anand Swaminathan, "Cosmetic, Speculative, and Adaptive Organizational Change in the Wine Industry: A Longitudinal Study" (1991) 36 Administrative Science Quarterly 631.

<sup>&</sup>lt;sup>102</sup>Daily and Dalton, above note 65; Denis and Rodgers, above note 91; Edith Hotchkiss, "Postbankruptcy Performance and Management Turnover" (1995) 50 *The Journal of Finance* 3.

emerging as a reorganized entity.<sup>103</sup> Inclusion of the firm's asset size as a control variable served to capture variance associated with this well-reported effect, in order to improve our ability to predict postbankruptcy employment retention. Second, we looked for employment developments in the firms' respective industries. The industry employment trend was measured as the average change of employment in the industry portfolio in the year before and the year of the bankruptcy event. As Hotchkiss suggests, industry-related problems can be important to performance prior to bankruptcy and, subsequently, to employment retention.<sup>104</sup> This measure specifically controlled for macroeconomic trends for each specific industry.<sup>105</sup> Third, to specifically determine macroeconomic characteristics that could influence employment retention, the annual GDP growth rate was added to the regression model. Higher annual GDP growth rates in the Netherlands indicate better macroeconomic circumstances for firms and could have a positive influence on employment retention rates as the entrepreneurial climate is better. The GDP data were obtained from the World Bank.<sup>106</sup>

# 4 | RESULTS

# 4.1 | Descriptive statistics

During data analysis, we observed that the mean employee retention postbankruptcy of the conventional bankruptcies was 34.6% whereas that of pre-packed bankruptcies was 54.1%. Prebankruptcy employee numbers differed strongly; on average, 92.51 employees were involved in conventional bankruptcies and 260.34 in pre-packed bankruptcies. We found less differences for the severity of the financial distress, that is, the mean Zmijewski score was 0.76 for conventional and 0.79 for pre-packed bankruptcies, but the difference, -0.02, BCa 95% CI [-0.09, 0.05], was not significant t(214) = -0.640, p = .523. With regard to firm size, conventional bankruptcies on average held EUR 15,390,312 in assets (SD = 59,681,585; Min. = EUR 5,986; Max. = EUR 670,021,700), pre-packs EUR 39,113,377 (SD = 95,666,751; Min. = EUR 242,835; Max. = EUR 576,469,000). This difference, -EUR 23,723,065, BCa 95% CI [-EUR 52,319,190, EUR 4,873,059], was also not significant t(214) = -1.659, p = .102. Descriptive statistics and correlations for the total sample are presented in Table A1.

## 4.2 | Multiple regression

Table A2 presents the four different multiple regression analyses. In Model 1, we tested the baseline model containing the control variables only. None of the covariates had a significant effect on employment retention. That is, the size of the firm, the industry employee trend, and the annual GDP growth rates did not have an effect on employee retention postbankruptcy. In Models 2 and 3, we separately introduced the two predictor variables to measure their respective effect on employment retention.

 <sup>&</sup>lt;sup>103</sup>Marcel Naujoks, *Restructuring Strategies and Post-Bankruptcy Performance* (Technische Universität München, 2012).
 <sup>104</sup>Hotchkiss, above note 101.

<sup>&</sup>lt;sup>105</sup>To analyse these trends, the control variable was constructed for the following industry categories based on NACE-codes and CBS employment data: (a) manufacturing, (b) construction, (c) wholesale and retail trade, (d) transporting and storage, (e) accommodation, (f???????) information and communication, (g) financial and insurance activities, (h) professional, scientific, and technical activities, (i) administrative and support service activities, (j) human health and social work activities, and (k) other services activities. See CBS Statline, Labor and labor market, Jobs, *SBI2008 & Regions*, available at:<http:// statline.cbs.nl/Statweb/selection/?DM=SLNL&PA=83582NED&VW=T>.

<sup>&</sup>lt;sup>106</sup>The World Bank, World Development Indicators (2017). *Annual GDP Growth, Atlas Method* [Data file], available at: <<u>http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2015&locations=NL&name\_desc=false&start=2012&view=map&year=2015>.</u>

Model 2 presents the isolated effect of financial distress against the background of the baseline model. As the results indicate, there was no significant effect on employment retention (B = 0.07, p = .485). Model 3 shows that type of bankruptcy had a positive significant effect on employment retention when entered into the baseline model in isolation (B = 0.16, p = .007). This result indicates that when type of bankruptcy changes from conventional (0) to pre-packed (1), employment retention (i.e., the ratio of the number of employees before and after the bankruptcy) increased by 0.157 percentage points. Model 4 gives the effect of the two predictors, put together in one model, together with the three covariates. Type of Bankruptcy had a significant effect on employee retention (B = 0.16, p = .008). The severity of financial distress did not impact employment retention (B = 0.05, p = .611), as did firm size (B = 0.00, p = .124), industry employee trend (B = -1.94, p = .250), and annual GDP growth rate (B = -0.54, p = .488). Therefore, H1 is supported: *a pre-packed bankruptcy positively influences employment retention postbankruptcy*, but H2 is not supported: *firms with greater (financial) resource slack before bankruptcy do not show higher employment retention rates postbankruptcy*.<sup>107</sup>

## **5** | **DISCUSSION**

With this article, we set out to contribute to a discussion on bankruptcy procedures as a mechanism for strategic change, and the type of bankruptcy proceeding that best serves that change. Utilizing official court data of Dutch bankruptcies in the period 2012–2018, we analysed which proceedings were more efficient in preserving value for employees in terms of employment retention. On the one hand, the Dutch pre-packed bankruptcy proceeding provides for a preliminary phase before filing for bankruptcy, which sets it apart from the conventional bankruptcy proceedings available under Dutch law. This usually confidential preliminary phase allows the debtor's management to be in control of preparing the postbankruptcy going-concern sale. Whereas a provisional liquidator and provisional supervisory judge are involved, they have no formal powers phase. On the other hand, conventional bankruptcy proceedings do not permit such confidentiality. Moreover, the management is displaced by the liquidator who is in charge in pursuing a going-concern sale. Until the judgement of the CJEU in the Smallsteps case in June 2017, it was considered that-different from the United Kingdom-in the nonstatutory Dutch pre-packed bankruptcy, employees would not be automatically transferred to the transferee that takes over the business. This context was the basis for our study focusing on aspects of efficiency of the Dutch pre-packed bankruptcy proceeding that may assist in policymaking on efficiency of restructuring driven legal frameworks on restructuring and insolvency.

Drawing from real options theory and debt overhang theory, we argued that strategic bankruptcy limits bankruptcy costs, causes less value destruction in bankruptcy, and subsequently preserves a higher ratio of employees, postbankruptcy.<sup>108</sup> Based on a specific sample of 216 Dutch pre-packed and conventional bankruptcy cases, in which a strategic filing for bankruptcy was used as a mechanism to restructure the firm so that it subsequently emerged as a going concern, we found that pre-packed bankruptcy proceedings—compared with conventional bankruptcy proceedings—best serve employment retention rates postbankruptcy. This finding takes the amount of resource slack into account, as well as the differences in firm size, industry employment trend, and annual GDP growth rate.

Interestingly, we found that the severity of financial distress before bankruptcy did not affect employment retention. Thus, despite the amount of (financial) resource slack, the preservation of

<sup>&</sup>lt;sup>107</sup>As a robustness check to this finding, an additional Robust Covariance Matrix Estimation analysis was completed that revealed that the severity of financial distress prebankruptcy holds a marginal and insignificant effect on employment retention rate postbankruptcy. Results are available upon request.

<sup>&</sup>lt;sup>108</sup>See, e.g., Giroud et al., above note 33; Guiso, Sapienza and Zingales, above note 33; Myers, above note 33.

employee value is better served under a pre-packed bankruptcy. This finding is important for insolvency practice, as up to 22 June 2017, employee rights in the Netherlands (including redundancy) were generally considered not to be automatically transferred to the new firm in a pre-packed bankruptcy. In other words, the financial burden of employees before a bankruptcy proceeding was independent of the bankruptcy type. This suggests that strategic bankruptcy can be beneficial to employment retention regardless of the financial distress. Similarly, whereas larger firms (in terms of absolute number of employees) may face extra scrutiny from media and trade unions, this does not seem to affect employment retention postbankruptcy.

### 5.1 | Implications for insolvency regulation and practice

This empirical study centres around the specific characteristics of the Dutch pre-packed bankruptcy. This bankruptcy tool sets itself apart from, for instance, the U.K. pre-pack, by providing comparably less protection for employees by applying the exception of Article 5(1) of the TOU Directive. The liquidator plays differing roles: in pre-packed bankruptcy proceedings, the provisional liquidator has no formal powers in the preliminary phase, in contrast to those of the liquidator in conventional bankruptcy proceedings. Instead, it allows more room for the insolvent debtor and the acquirer of the debtor's assets to seek a solution for the distressed business. The Smallsteps case significantly impacted restructuring tools such as the Dutch pre-packed bankruptcy in that case was ruled to violate the employee protection provided for in the TOU Directive. In this study, we show that the Dutch pre-packaged bankruptcies provide higher employee retention rates compared with conventional bankruptcies. These results are in line with and expand on previous studies on Dutch pre-packs.

Our results suggest that the Dutch pre-packed bankruptcy better protects an employee's interest of maintaining employment, compared with going-concern sales in conventional bankruptcy. Notably, this is the case despite that the TOU Directive—explicitly promoting protection of acquired rights by employees—was considered not applicable. Furthermore, the scope of formal powers and involvement of the provisional liquidator for pre-packed bankruptcy is significantly limited compared with the liquidator in conventional bankruptcy proceedings. Whereas the debtor's management is neither tasked with maximizing value for the body of creditors nor considering employee retention in their strategic use of bankruptcy proceedings to pursue continuation of the business; still, the debtor-driven pre-packed bankruptcy results in higher employee retention than going-concern sales pursued by a liquidator in conventional bankruptcy. This is also an indication that—in the Dutch context in absence of an effective formal and hybrid restructuring proceedings—governance over a firm in insolvency by a debtor's management—instead of a liquidator—can be beneficial to the employees in case continuation of the business is pursued. This is in line with real option theory, suggesting that the firm's management aim for the strategic bankruptcy option that will result in the most beneficial alternative to successfully continue the business in a new legal entity.

The relevance of employees in insolvency has also prompted outside the context of formal bankruptcy proceedings. In recent years, both Dutch and EU legislators have been involved in legislative efforts focusing on promoting the restructuring of financially distressed but economically viable businesses. A core policy goal in these efforts is to devise legal frameworks that are conducive to "preventing their insolvency, and therefore maximising the total value to creditors, employees, owners and the economy as a whole."<sup>109</sup> The importance of this aim was reiterated recently when the

<sup>&</sup>lt;sup>109</sup>Commission Recommendation on a new approach to business failure and insolvency, 12 March 2014, C(2014) 1500 final, recital 1 and at 1.

EU Directive on restructuring and insolvency was adopted stating: "In restructuring frameworks the rights of all parties involved, including workers, should be protected in a balanced manner."<sup>110</sup> The Dutch legislator decided that in its recent bill on a Dutch Act on Court Confirmation of Extrajudicial Restructuring Plans ("WHOA"),<sup>111</sup> a proposal aligned to the aforementioned Directive, employees were to be excluded from its scope. These legislative efforts, although geared towards preventive restructuring, seem reluctant to deal with matters affecting employee rights. However, for legislative purposes, our results elevate the question whether current policy and legislation relating to employee rights in restructuring is de facto effectively protecting employee interests. Although only accounting for the impact on employee retention, contrary to current policymaking, our empirical analysis highlights that employees can benefit from flexibility and that flexibility thus can support policy goals. These insights also suggest that legislators, policymakers, and stakeholders involved in legislative processes may benefit from considering further empirical studies to better understand the effects of the network externalities of existing legal frameworks on employees.

#### 5.2 | Limitations

Although our study was carefully designed with regard to methodology and theoretical considerations, limitations are inevitable. The first limitation is dogmatic: for the purpose of this study, should a filing for a bankruptcy proceeding always be considered "strategic" in case a debtor's business continues following a (partial) sale of assets for at least 1 year postbankruptcy? Although we considered such bankruptcy proceedings to be strategic, there may be exceptions. On the one hand, a pre-packed bankruptcy may not always be well planned by the debtor, and on the other hand, a restart in a conventional bankruptcy may also have resulted from actions of the liquidator that were unforeseen when the debtor filed for bankruptcy. Second, the analysis focused on the period of 1 year after bankruptcy. Future studies should analyse the effects over a longer period, to confirm if the results hold in the longer term postbankruptcy. Third, following the CJEU judgement in Smallsteps, the employee protection provided in the TOU Directive is, in principle, considered applicable to the Dutch prepacked bankruptcy. This new state of play and its impact on employee retention fall outside the scope of this study. A new study may provide empirical insights into whether application of the TOU Directive contributes (or not) to employee retention, in comparison with the approach pursued in the Netherlands before June 2017. Fourth, this study has been limited to the Dutch setting and on the specific impact of two restructuring-driven bankruptcy scenarios on employee retention. Further research may extend the impact on the interests of employees, for example, by expanding this study to comparing strategic bankruptcy in different jurisdictions and by measuring additional features of employees' interest such as salary, fixed/nonfixed contracts, and other working conditions.

<sup>&</sup>lt;sup>109</sup>Commission Recommendation on a new approach to business failure and insolvency, 12 March 2014, C(2014) 1500 final, recital 1 and at 1.

<sup>&</sup>lt;sup>110</sup>Directive EU 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132, recital 3.

<sup>&</sup>lt;sup>111</sup>Kamerstukken II 2018/19, 35249, nr. 2 (Wetsvoorstel Wet homologatie onderhands akkoord), available at: <https://zoek. officielebekendmakingen.nl/kst-35249-2.html>.

**How to cite this article:** Aalbers H, Adriaanse J, Boon G, van der Rest J, Vriesendorp R, Van Wersch F. Does pre-packed bankruptcy create value? An empirical study of postbankruptcy employment retention in The Netherlands. *Int Insolv Rev.* 2019;28:320–339. https://doi.org/10.1002/iir.1353

#### APPENDIX

Variable	М	SD	1	2	3	4	5
1. Employee retention	0.39	0.35					
2. Type of bankruptcy	—	—	0.26***				
3. Severity of financial distress	0.77	0.26	0.01	-0.04			
4. Size	20,881,762	70,142,441	0.15*	0.24***	-0.21**		
5. Industry employment trend	-0.001	0.018	-0.19**	-0.16*	0.08	-0.20**	
6. Annual GDP growth	0.02	0.04	-0.19**	-0.34***	0.04	-0.16*	0.63***

<b>TABLE A1</b> Descriptive statistics and correlation	ations
--	--------

*Note.* Bootstrapping (BCa) = 5,000. N = 216. Spearman's rho for bivariate correlations with type of bankruptcy.

 $p^* < .05.$  $p^* < .01.$ 

p < .01.

#### TABLE A2 Multiple regression results for postbankruptcy employee retention

Dependent variable				
(employee retention)	Model 1	Model 2	Model 3	Model 4
Intercept	.397*** (0.030)	.345*** (0.081)	.196* (0.079)	.162 (0.105)
Independent variables				
Type of bankruptcy			.157** (0.058)	.155*** (0.058)
Severity of financial distress		.066 (0.095)		.048 (0.094)
Control variables				
Size	.000 (0.000)	$.000^{\dagger} (0.000)$	.000 (0.000)	.000 (0.000)
Industry employment trend	-1.866 (1.706)	-1.909 (1.710)	-1.914 (1.681)	-1.944 (1.685)
Annual GDP growth	970 (0.775)	963 (0.776)	541 (0.779)	542 (0.781)
$R^2$	.054	.056	.086	.087
Adjusted $R^2$	.040	.038	.069	.066
F	4.018**	3.128*	4.973**	4.016**
Sig.	.008	.016	.001	.002

*Note.* Bootstrapping (BCa) = 5,000. Standard error in parentheses. N = 216.

 ${}^{*}p < .05.; \, {}^{**}p < .01.; \, {}^{***}p < .001.; \, {}^{\dagger}p < .10.$ 

🗶 \_WILEY\_