ONLINE APPENDIX

Court Disclosures of Firms in Chapter 11 Bankruptcy

The following Online Appendix for "Court Disclosures of Firms in Chapter 11 Bankruptcy" provides additional details about data hand-collected as part of the *Journal of Accounting Research*'s registration-based editorial process.

A1. DATA COLLECTION

A1.1 Sample Selection

The primary court document this study examines is the final disclosure statement filed during the Chapter 11 reorganization process. We first obtain a complete list of companies that filed for Chapter 11 bankruptcy from the UCLA-LoPucki Bankruptcy Research Database, which captures bankruptcies with more than $100M in pre-petition assets (1980 dollars). We supplement the sample of publicly traded firms with a sample of private firms listed in NGR that have at least $100 million in pre-petition assets or liabilities. Our sample consists of bankruptcy cases filed between 2001 and 2021. We create an initial sample by removing all observations related to Chapter 7 filings, conversions from Chapter 11 to Chapter 7, and Chapter 11 liquidating plans. We further require that each Chapter 11 case be confirmed, include at least one disclosure statement, and have a bankruptcy confirmation date before January 1, 2022. From the publicly traded sample we remove non-public entities that voluntarily filed a form 10-K with the SEC in the three years prior to the Chapter 11 filing to avoid double counting those in the private sample and firms that do not have pre-petition total assets in Compustat. This leaves us with a sample of 346 public and 196 private Chapter 11 cases.

A1.2 Disclosure Statement Identification and Completeness Verification

Court dockets containing information disclosed under the Bankruptcy Code are housed within the PACER system. We begin our data collection process for each potential observation by downloading from PACER a docket report starting one month before the bankruptcy filing date and ending one month after the bankruptcy confirmation date.[1] The docket report contains a numbered list of the filings associated with a bankruptcy case. From the report, we obtain the total number of filings contained within the docket.

To identify the final disclosure statement for each bankruptcy case, we search the filings in the court docket and obtain the bankruptcy confirmation order from the confirmation hearing. We read the first three pages of the confirmation order to determine the date and, if available, the docket number of the confirmed final disclosure statement. Using the information obtained from the confirmation order, we search the filings in the docket report for the final disclosure statement. Once we have identified the final disclosure statement in the docket report, we obtain the total number of pages associated with the final disclosure statement.

Using the information from the confirmation order, we manually collect all final disclosure statements, primarily using Bloomberg Law and secondarily using NGR, for bankruptcies where (1) the total number of filings contained within the court docket on PACER agrees with the number of filings contained in Bloomberg Law or NGR, and (2) the number of pages associated with the final disclosure statement in PACER agrees with the number of pages in the final disclosure statement listed in Bloomberg Law or NGR. Additionally, we check the date and amendment number to ensure we have the final disclosure statement.[2]

Our examination of the coverage of our sample suggests that joint reliance on Bloomberg Law and NGR is comprehensive and complete when compared to PACER. This conclusion is not surprising as the representatives of these subscription-based platforms confirm that they directly source the documents from PACER. All observations from the full sample have been reconciled

[1] The docket report contains summary information about each case, both pending and decided, that have been filed with the bankruptcy court.

[2] The amendment number captures the version of the disclosure statement. Significant changes to the disclosure statement often result in an amended disclosure statement.

across PACER and the subscription-based data platforms in the total number of filings. For a small sample of random observations (N=14), stratified based on industry-year and public versus private status, we download the final disclosure statement from PACER and Bloomberg Law to compare the number of pages between the two documents and spot-check the wording to ensure that the page numbers and corresponding content are consistent between sources. We note no discrepancies. For a single observation, we examine the totality of the two filings by spot-checking all exhibits and supplements to the disclosure statement. We note no discrepancies.

We use PACER as the starting point for our data collection process and ensure that the number of filings agrees with Bloomberg Law/NGR. Once reconciled, we use Bloomberg Law/NGR to source the data. We prefer to use this approach for two reasons. First, the PACER system requires fees, which could be rather significant. Second, the Bloomberg Law and NGR databases present materials in a more user-friendly format, making it feasible to employ research assistants to download the documents. After we ensure the completeness of the disclosure statement and corresponding amendments and appendices/exhibits, we download these disclosure statements. It is important to note that these are digital copies filed with the court system and are in PDF format.

A1.3 Collection of Disclosure Statement Variables

Our hand-collection process within the disclosure statement has been iterative. We began by having the co-author team examine disclosure statements to determine the scope and feasibility of collecting relevant data. We then employed research assistants (RAs) and selected items for the RAs to collect. We used a small training sample to help familiarize the RAs with disclosure statements and our hand-collection variables. Then, we had two RAs independently collect each item, and a co-author examined the agreement between the two data points. To the extent an item did not agree, a member of the co-author team independently collected the item and recorded the value. Frequent disagreement between the RAs on an item would trigger a review of the instructions given to the RAs, and we would determine if the process can be improved by providing more specific instructions. All disclosure index items, projected EBITDA, Projected loss, and Projected assets and liabilities (emerging) were collected twice in this fashion. Private sample pre-petition assets and liabilities were collected by one RA and compared to NGR for validation. For the variable *Revisions*, when the agreement rate between variables collected by two RAs was consistently greater than 90%, we allowed the RA's to independently perform future data collection. In addition, for any variable missing from the NGR/BRD dataset (such as *Bond_note*), we collect the data from court dockets following the same 90% consistency requirement. We relied on this process to ensure that all of our final variables could be collected reliably, even when allowing for subjectivity. We briefly outline the process to collect each variable directly obtained from the Disclosure Statement.

A1.4 Identification of Financial Projection, Valuation, and Liquidation Analyses

The financial projection section is often delineated as either a separate section within the disclosure statement or included as an appendix or exhibit to the disclosure statement. To identify the projection section, we obtain the final disclosure statement and search the disclosure statement for "projection." We then read the block of text [-50 words, +50 words] around the word "projection" to identify the location of this section. In some instances, a final disclosure statement may reference an appendix associated with an earlier disclosure statement amendment. Therefore, if the projection appendix cannot be found in the final disclosure statement, we obtain the second to last iteration of the disclosure statement from the court docket, if available. After verifying that the total number of pages associated with the second to last iteration of the disclosure statement agrees between PACER and Bloomberg Law, we repeat our projection section search process. If a projection section cannot be found, we continue our process until all disclosure statements have been fully searched. As an additional check, we search the court docket for “projection” to determine if a projection statement was filed separately. Finally, if the disclosure statement contains a placeholder for a projection statement but does not include the projection statement (e.g., Projection Statement Appendix C), we search the court docket for the referred item. If no projection statement can be identified after carrying out the above steps, we record a 0 for all projection variables.

We repeat the above process to identify the valuation and liquidation analyses, both of which are generally delineated from the rest of the disclosure statement. If no valuation or liquidation analyses are identified, we record a 0 for all valuation or liquidation variables, respectively.

A1.5 Collection of Disclosure Index Items

Balance Sheet (1/0): We manually search the financial projection section for the existence of a pro forma balance sheet, which we define as a table that contains total assets, total liabilities, and total equity. If a projected balance sheet containing at least one year of projections after the bankruptcy emergence date exists, we record a 1; otherwise, we record a 0.

Cash Flow (1/0): We manually search the financial projection section for the existence of a pro forma cash flow statement that contains a section for cash flows from (a) operating activities, (b) investing activities, and (c) financing activities. If a projected cash flow statement containing all three of these elements for at least one year after the bankruptcy emergence date exists, we record a 1; otherwise, we record a 0.

Revenue projections (1/0): We manually search the financial projection section for a projected revenue or sales amount for at least one-year post-emergence. If at least one projected revenue value is provided, we record a 1; otherwise, we record a 0.

Expense projections (1/0): We manually search the financial projection section for a projected expense amount for at least one year. If at least one expense projection value is provided, we record a 1; otherwise, we record a 0.

Liquidity projections (1/0): Within the financial projection section, we search for "liquidity." If a liquidity projection value is provided for at least one year, we record a 1; otherwise, we record a 0.

Revenue assumptions (1/0): Within the financial projection section, we search for "revenue" and "sale." We read the text surrounding the keywords to determine if it relates to a revenue assumption. If the projection statement mentions at least one assumption related to revenue, we record a 1; otherwise, we record a 0.

Cost assumptions (1/0): Within the financial projection section, we search for "expense," "cost," and "commodity." We read the text surrounding the keywords to determine if it relates to a cost assumption. If the projection statement mentions at least one assumption made in their projections for expenses, record a 1; otherwise, we record a 0.

Number of tables (1/0): We count and record the number of tables in the financial projection section. If the number of tables is equal to or above the sample median, we record a 1; otherwise, we record a 0.

Years of projection (1/0): Within the financial projection section, we identify the table containing projected revenues to determine the number of years projected. If no projected revenues are provided, we note the number of years projected for the cash flow statement. If no projected revenues or cash flow projections are available, we obtain the number of forward-looking years projected for the balance sheet. If the number of forward-looking years projected is equal to or above the sample median, we record a 1; otherwise, we record a 0. Forward-looking projections relating to a partial year of emergence are classified as a full year. For example, if a firm emerged from bankruptcy in March 2019, a projection for the fiscal year ended December 2019 would count as one year.

Sources and uses of cash (1/0): We manually search the financial projection section for a standalone table of the sources and uses of cash (defined as a table that includes sources of cash and uses of cash). If a table on the sources and uses of cash exists, we record a 1; otherwise, we record a 0.

Valuation analyses (1/0): If a valuation analyses exhibit or valuation analyses section exists as part of the disclosure statement, we record a 1; otherwise, we record a 0.

Valuation methods (1/0): We manually read the valuation analyses section and count the number of valuation methodologies used (e.g., discounted cash flow analyses, comparable companies analyses, comparable transactions analyses, among others). If more than one valuation method is disclosed, we record a 1; otherwise, we record a 0.

Liquidation analyses (1/0): If a liquidation analyses exhibit or a liquidation analyses section exists as part of the disclosure statement, we record a 1; otherwise, we record a 0.

Governance disclosure (1/0): Within the final disclosure statement, we search for "governance" and "board." We read the block of text [-50 words, +50 words] surrounding each search word to determine whether the disclosure relates to the proposed post-emergence governance structure. If a disclosure about post-emergence governance exists, we record a 1; otherwise, we record a 0.

Plan summary (1/0): We search for "summary" within the final disclosure statement. This section provides a tabular or bullet point summary of recovery rates for each class. We read the block of text [-50 words, +50 words] surrounding each of the search words to determine whether the disclosure statement summarizes the contents of the plan. If there is a plan summary section, we record a 1; otherwise, we record a 0.

Tax disclosure (1/0): We search for "tax" within the final disclosure statement. We read the block of text [-50 words, +50 words] surrounding each search result to determine the existence of disclosure related to the tax consequences of the plan. If references are made to potential tax consequences of the plan, we record a value of 1; else, we record a 0.

A1.6 Collection of characteristics sourced primarily from the Disclosure Statement

Revisions (#): We read the first page of the final disclosure statement to determine the number of *amendments* made to the disclosure statement.[3] In instances where there were no amendments made to the disclosure statement, we record a 0. We record the higher of a) the number of disclosure statement amendments, and b) the number of plan of reorganization amendments. We do not count disclosure statement modifications or supplements since these changes are relatively minor.

Projected loss (1/0): Using the last set of financial projections available, we manually search for the projected EBITDA value based on the first-year EBIDTA projections relative to the disclosure statement's expected emergence date. If the projected EBITDA for the first year after emerging from bankruptcy is negative or the projected EBITDA is missing, we record a one. If the projected EBITDA for the first year after emerging is positive, we record a 0.

Projected Assets Emerging (#): Using the last set of financial projections available, we manually search the financial projection section for the existence of a pro forma balance sheet. We record

[3] Disclosure statement modifications can occur when minor changes to the disclosure statement are made. Plan supplements are separate documents filed with the bankruptcy court that support the information contained within the disclosure statement.

the value of the projected assets at the time of actual emergence. If this amount is not presented in the disclosure statement, then we record the value of the projected assets at year t+1 from the date of emergence.

Projected Liabilities Emerging (#): Using the last set of financial projections available, we manually search the financial projection section for the existence of a pro forma balance sheet. We record the value of the projected liabilities at the time of actual emergence. If this amount is not presented in the disclosure statement, then we record the value of the projected liabilities at year t+1 from the date of emergence.

EBITDA Year t (#): Using the last set of financial projections available, we manually search and record the projected EBITDA value for years 1 through 5, if available, after emerging from bankruptcy based on the actual emergence date. Year 1 EBITDA projections are annualized.

EXAMPLE
Arch Coal Inc. Chapter 11 Bankruptcy Disclosure Statement Example

These are potentially relevant variables extracted manually from Arch Coal Inc.'s disclosure statement dated July 6, 2016

Variable	**Value**	**Reference**
Firm Name	Arch Coal Inc.	
Case Number	16-40120	
PACER – Bloomberg Law (BL) Completeness Test		
Number of filings in docket (PACER)	1,413	
Number of filings in docket (BL)	1,413	
Number of pages in *final* disclosure statement (PACER)	280	
Number of pages in *final* disclosure statement (BL)	280	
Disclosure Index Variables		
Projection		
Balance Sheet (1/0)	1	Page 275
Cash Flow (1/0)	1	Page 274
Revenue Projections (1/0)	1	Page 273
Expense Projections (1/0)	1	Page 273
Liquidity Projections (1/0)	0	
Revenue Assumptions (1/0)	1	Page 270
Cost Assumptions (1/0)	1	Page 270
Number of Tables (#)	4	Pages 270-275
Number of Tables (1/0)	0	Pages 270-275
Years of Projections (#)	3	Page 273
Years of Projections (1/0)	0	Page 273
Sources and Uses of Cash (1/0)	0	
Projection total	6	
Valuation		
Valuation Analyses (1/0)	1	Page 277
Valuation Methods (#)	3	Pages 278-279
Valuation Methods (1/0)	1	Pages 278-279
Valuation total	2	
Liquidation		
Liquidation Analyses (1/0)	1	Page 254
Liquidation total	1	

Variable	Value	Reference
Other		
Governance Disclosure (1/0)	1	Pages 224-226
Plan Summary (1/0)	1	Pages 21-25
Tax Disclosure (1/0)	1	Pages 150-160
Other total	3	
Ch11_Disc_Index	12	
Other Variables		
Case characteristics		
Revisions	3	Page 1
Debtor characteristics		
Projected_loss (#)	$108,000,000	Page 273
Projected_loss (1/0)	0	Page 273
Outcome test variables		
Projected Assets (Emerging)	$4,673,000,000	Page 275
Projected Liabilities (Emerging)	$1,206,000,000	Page 275
EBITDA Year 1	$108,000,000	Page 273
EBITDA Year 2	$141,000,000	Page 273
EBITDA Year 3	$208,000,000	Page 273