

City University of New York (CUNY)

CUNY Academic Works

Dissertations, Theses, and Capstone Projects

CUNY Graduate Center

6-2021

Contracting in Direct Asset Sales

Xin Yuan

CUNY Graduate Center

[How does access to this work benefit you? Let us know!](#)

More information about this work at: https://academicworks.cuny.edu/gc_etds/4326

Discover additional works at: <https://academicworks.cuny.edu>

This work is made publicly available by the City University of New York (CUNY).

Contact: AcademicWorks@cuny.edu

CONTRACTING IN DIRECT ASSET SALES

by

XIN YUAN

A dissertation submitted to the Graduate Faculty in Business in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2021

© 2021

XIN YUAN

All Rights Reserved

CONTRACTING IN DIRECT ASSET SALES

by

XIN YUAN

This manuscript has been read and accepted for the Graduate Faculty in Business in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Date

Edward Xuejun Li

Chair of Examining Committee

Date

Karl Lang

Executive Officer

Supervisory Committee:

Masako Darrough

Xi Dong

Monica Neamtui

THE CITY UNIVERSITY OF NEW YORK

Abstract

CONTRACTING IN DIRECT ASSET SALES

by

XIN YUAN

Advisor: Professor Edward Xuejun Li

Using a unique, hand-collected dataset of direct asset sales agreements in the SEC filings, I provide the first large-sample evidence on how contracting mechanisms are used to mitigate information frictions in these important transactions. The conflict of interests is unique because the scarcity of asset-specific financial information makes target assets difficult to value and monitor, especially when such transactions are usually consummated in a short period. I first show an extensive use of representations and warranties, covenants, and special payment arrangements in these contracts when severe information asymmetry exists between buyers and sellers. Importantly, further results suggest that these contracting mechanisms tend to be used jointly rather than as substitutes for one another. A robust test based on the adoption of SFAS 141(R) provides strong evidence on such complementarity. Additional tests also suggest a significant relation between covenants and contract duration. Overall, my study provides novel evidence on direct asset sales' contracting mechanisms and their relationships.

Acknowledgements

Accomplishing this dissertation for my Ph.D. degree would have been more arduous if I had not received others' help. I am deeply grateful to my doctoral advisor, Edward Xuejun Li, for guiding me with extraordinary patience during the past six years. From evaluating research ideas to reviewing dissertation drafts, he gave me the benefit of his intelligence and experience whenever my progress stalled. When in 2019 I was disheartened by an unsuccessful job search, I recovered my courage and confidence through his help and advice. What I learned from Professor Li will have the lasting impact on my future career.

I also benefited from the advice of my dissertation committee members: Masako Darrough, Xi Dong, and Monica Neamtiu. From them, I gained valuable knowledge about developing ideas and carrying out research. Professors Darrough and Neamtiu also provided generous support in connection with my job search.

I am grateful to the comments from Philip Berger, Jeremy Bertomeu, Donal Byard, Ming-Cherng Deng, Heedong Kim, Seil Kim, Kalin Kolev, Karl Lang, Heemin Lee, K. Ramesh, Xin Wang, Joseph Weintrop, Regina Wittenberg-Moerman, Yue Zhang, and my Ph.D. colleagues. They were generous with their time and I thank them for the opportunity to discuss my dissertation with them. Insightful suggestions were also provided by workshop participants at Central University of Finance and Economics, Dongbei University of Finance and Economics, Fudan University, Xiamen University, and Xi'an Jiaotong University. Besides, I acknowledge the financial resources provided by City University of New York through Carrel Dissertation Fellowship and Doctoral Student Research Grant. Zhiyuan (Tommy) Tu generously provided his PERL programs.

Without the selfless support of my parents, Xuehai Yuan and Li Wu, I would not have been able to pursue a doctorate in the U.S. I am particularly indebted to my wife, Hemeng Sun, for

her patience during our long separation. Her humor and optimism always alleviated the pressure that I experienced in the course of my research. Special thanks to Feng Liu, my master's advisor, who offered me this great opportunity to study at Baruch College. Alma Flesch, my warmhearted English teacher, significantly improved my writing and speaking skills with sincere care and help.

I am fortunate to have acquired many genuine friends in New York City. Xintian (Tammy) Lin gave me great support in my research and life, especially during the Covid-19 pandemic. Jianyu Pan and Junhua Yang listened to my complaints and consoled me when I was facing difficulties. Other friends, such as Jing (Jodie) Dai, Ge (Melody) Dong, Daeun (Philip) Lee, Heyun (Emma) Li, Yan Li, Ying Liang, Saghar Samimy, Amanda Sanseverino, Yu Shan, Ye Yang, Saeyoung Yoon, Jiakai Zhang, Binghao (Jimmy) Zhao, Changyun Zhou, and Xiaoyun (Ross) Zhu also assisted me in overcoming many setbacks. I hope and believe that these friendships will endure.

Table of Contents

LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
CHAPTER ONE: INTRODUCTION.....	1
CHAPTER TWO: DIRECT ASSET SALES.....	7
2.1 Institutional Background.....	7
2.2 Prior Literature on Direct Asset Sales.....	9
CHAPTER THREE: HYPOTHESES DEVELOPMENT.....	11
3.1 Valuation-Related Information Frictions.....	11
3.2 Payment-Related Information Frictions.....	12
3.3 Relationship among Contracting Mechanisms.....	14
CHAPTER FOUR: SAMPLE AND DATA.....	16
4.1 Agreement Collection and Classification.....	16
4.2 Data Collection and Variable Construction.....	18
4.2.1 Dates, Transaction Roles, and Non-Filers' Characteristics.....	18
4.2.2 Target Assets.....	18
4.2.3 Purchase Price and Payment Arrangements.....	18
4.2.4 Representations and Warranties.....	19
4.2.5 Covenants.....	20
4.2.6 Other Contractual or Transaction Characteristics.....	20
4.2.7 Complementary Mechanisms.....	21
CHAPTER FIVE: DESCRIPTIVE ANALYSES.....	22
5.1 Structure of Direct Asset Sales Agreements.....	22
5.2 Distribution of Direct Asset Sales Agreements.....	23

5.3 Description of Contracting Mechanisms.....	24
5.3.1 Accounting Covenants.....	24
5.3.2 Financial Information Reps.....	24
5.3.3 Financing Covenants.....	25
5.3.4 Financial Condition Reps.....	25
5.3.5 Payment Arrangements.....	26
5.3.6 Other Provisions.....	26
CHAPTER SIX: EMPIRICAL RESULTS.....	28
6.1 Research Design.....	28
6.2 Individual Contracting Mechanisms.....	29
6.3 Complementary Contracting Mechanisms.....	29
6.4 Prevalence of Mechanism Complementarity.....	30
6.5 Relationship between Payment and Non-Payment Mechanisms.....	31
6.6 Expected Contract Duration.....	32
CHAPTER SEVEN: CONCLUSION.....	34
APPENDICES.....	60
Appendix A: Variable Definitions.....	71
A.1 Variables of Sellers' Contracting Mechanisms.....	71
A.2 Variables of Buyers' Contracting Mechanisms.....	71
A.3 Other Variables.....	72
Appendix B: Examples of Contracting Mechanisms.....	73
B.1 Accounting Covenants (Sellers).....	73
B.2 Financial Information Reps (Sellers).....	73
B.3 Financing Covenants (Buyers).....	74
B.4 Financial Condition Reps (Buyers).....	74

B.5 Payment Arrangements.....	75
B.6 Miscellaneous Mechanisms.....	76
Appendix C: Direct Asset Sales Agreement Taxonomy.....	79
BIBLIOGRAPHY.....	81

List of Tables

Table 1: Sample Selection.....	39
Table 2: Agreement Distribution.....	40
Table 3: Summary of Contracting Mechanisms.....	43
Table 4: Descriptive Statistics.....	45
Table 5: Individual Contracting Mechanisms.....	47
Table 6: Complementary Contracting Mechanisms.....	50
Table 7: Prevalence of Mechanism Complementarity.....	53
Table 8: Relationship between Payment and Non-Payment Mechanisms.....	56
Table 9: Expected Contract Duration.....	58
Table A1: Individual Contracting Mechanisms – Robustness Test after Controlling for Fixed Effects.....	65
Table A2: Prevalence of Mechanism Complementarity – Robustness Test after Controlling for Fixed Effects.....	68

List of Figures

Figure 1: Two Contracting Stages.....	38
Figure 2: Three Categories of Contracting Mechanisms.....	38
Figure A1: Agreement Distribution by Year.....	61
Figure A2: Agreement Distribution by Industry.....	62
Figure A3: Agreement Distribution by SEC Form.....	63

CHAPTER ONE: INTRODUCTION

Direct asset sales are a type of transaction that allows one company to acquire specific assets from another business.¹ Such transactions usually involve substantial value. For example, in 2019, Apple Inc. purchased the smartphone modem business of Intel Corporation, a transaction valued at \$1 billion and involving 2,200 Intel employees.² In the U.S., direct asset sales comprise nearly one-half of corporate assets traded, with the other half through mergers and acquisitions (Ravenscraft and Scherer, 1987; Maksimovic and Phillips, 2001). Globally, direct asset sales have transferred \$1.2 trillion assets between 2019 and 2020 and continue to grow in a surging trend (Maral, 2021). Despite the economic importance, the distinct information frictions within these transactions and how contracts are structured to mitigate such frictions have received limited attention from prior empirical research. This paper fills this void by analyzing these contractual relationships, using a unique sample of direct asset sales agreements in the Securities and Exchange Commission (“SEC”) filings.

An in-depth investigation on these contracts is needed because direct asset sales are distinct from other types of transactions examined in the prior contracting literature. Specifically, unlike typical M&A transactions (“M&As”), direct asset sales transfer only partial assets rather than the entire business: asset-specific financial information is generally scarce and lacks auditors’ verification (Berger and Hann, 2007; D’Souza, Ramesh, and Shen, 2010; Chen, Miao, and Shevlin, 2015); shareholders and antitrust regulators also have less authority to scrutinize or intervene such transactions (Shukairy, 2006; Hege, Lovo, Slovin, and Sushka, 2009). In addition, given that buyers and sellers continue to operate as separate entities, seller managers’

¹ In this paper, “direct asset sales,” “asset sales,” and “asset purchases” refer to the same type of transaction.

² Having been announced on July 25, 2019, the transaction was completed on December 2, 2019. See <https://www.apple.com/newsroom/2019/07/apple-to-acquire-the-majority-of-intels-smartphone-modem-business/> and <https://newsroom.intel.com/news-releases/intel-completes-sale-smartphone-modem-business-apple/#gs.yoto4n> for more information.

career concerns are less of an issue in these transactions (Cain, Denis, and Denis, 2011; Schoenfeld, 2020). Importantly, since direct asset sales tend to be consummated in a short period of time and are not expected to repeat, such transactions have limited hold-up problems with relationship-specific investment, which is critical to a supply relationship (Costello, 2013).

These distinct features, taken together, create a unique setting to test predictions about how contract design helps mitigate asset valuation-related information frictions. Specifically, in negotiating transaction price, the scarcity of verified financial information on target assets makes them difficult to value, leading to the adverse selection issue (Akerlof, 1970). Once the price is settled, the shortage of asset-specific information also makes target assets difficult to monitor, triggering the moral hazard problem in which sellers could expropriate target assets (Arrow, 1963; Pauly, 1968). I predict that transaction parties, to mitigate these frictions, could employ certain contracting mechanisms to improve financial reporting and monitoring of target assets. However, if such mechanisms are less effective due to the difficulty in preparing and verifying asset-specific financial information, special payment arrangements could serve to alleviate the conflict of interests (Lang, Poulsen, and Stulz, 1995; Campello, Graham, and Harvey, 2010; Chen, 2019).

Although prior theoretical work analyzes the use of individual contracting mechanisms to mitigate information frictions, it provides limited guidance on whether various contracting mechanisms should be used jointly or as substitutes for one another. Armstrong, Guay, and Weber (2010) also note that different contracting mechanisms could be either complements or substitutes. Recent empirical studies on other types of contracts tend to find a substitution effect. For example, Costello (2013) shows that in supply relationships, which tend to be long term, the two contracting mechanisms, contract duration and financial covenants, are substitutable. Nevertheless, given the unique scarcity of asset-specific information and short contract duration in direct assets sales, I predict that transaction parties could respond to the severe

information frictions by relying on complementary mechanisms. For example, pre-contract asset-specific reporting and post-contract accounting covenants could jointly mitigate information asymmetry and facilitate the valuation and monitoring of target assets. Although multiple mechanisms could enhance performance, they could be costly to write and enforce, especially as the transaction lasts longer (Tirole, 1999; Battigalli and Maggi, 2002). Therefore, it is an empirical question whether direct asset sales agreements employ different contracting mechanisms jointly or separately.

To test these predictions, I compile a large sample of direct asset sales agreements in the SEC filings using Python and then hand-collect detailed information from each agreement about three categories of contractual provisions: representations and warranties (“reps”), covenants, and special payment arrangements. Reps can verify financial information regarding target assets, as well as transaction parties per se, before formal agreements become effective, whereas covenants can discipline transaction parties’ accounting treatment afterward. According to my predictions, when buyers are more concerned about the valuation and condition of target assets, they would impose on sellers more reps and covenant provisions that stipulate the quantity and quality of sellers’ financial information. Special payment arrangements, like equity or cash payments, could also solve information frictions ex post. Therefore, when facing higher uncertainty about target assets value, buyers would also avoid immediate cash payments and choose a delayed payment. From the sellers’ perspective, if they are uncertain about buyers’ financial liquidity, they would prefer more financing provisions that specify how buyers secure their funding. Timely cash payments would also be required by sellers.

To construct a proxy for the severity of information frictions, I follow prior research to identify whether buyers or sellers are private firms in that privately held firms are required to provide less public disclosures and tend to have more opaque information environment (Cassar,

2011; Gustafson, Ivanov, and Meisenzahl, 2020). In my sample, either sellers or buyers can be private firms. In the first set of analyses, I examine which contracting mechanisms are used to mitigate valuation-related information frictions. I find that when sellers are private firms, contracts are more likely to include (1) reps for sellers to verify the integrity of their interim financial information, (2) covenants that require sellers to continue financial reporting and maintain consistent accounting policies, and (3) equity payment arrangements that align the interests of transaction parties. These findings are consistent with the use of sellers' reporting reps, accounting covenants, and equity payments to mitigate seller-side information frictions.

In the second set of analyses, I examine which contracting mechanisms assist in alleviating payment-related information frictions. My findings show that direct asset sales agreements involving private buyers are more likely to contain reps that verify buyers' pre-contract liquidity condition regarding their cash holdings and credit arrangements, and covenants that regulate buyers' post-contract financing activities. Furthermore, the agreements are more likely to require that private buyers make a timely cash payment and exclude delayed payments. These findings suggest that buyers' liquidity reps, financing covenants, and cash payments are employed to tackle buyer-side information frictions.

In the third set of analyses, I focus on the six types of provisions and investigate their relationship to explore whether they are used as complementary or substituting mechanisms to mitigate severe information frictions. The results suggest that the contracts with private sellers tend to jointly use more seller reporting reps, accounting covenants, and equity payment arrangements. This relation is robust to different research design specifications. The other three mechanisms related to buyers' price payment, including financing covenants, liquidity reps, and cash payments, show a similar pattern of being jointly used.

To evaluate the prevalence of complementarity, I further study the use of bundled mechanisms. For example, an agreement could simultaneously contain accounting covenants,

reporting reps, and equity payments. I find that when seller-side information asymmetry becomes more severe, to mitigate valuation-related frictions, the agreements are more likely to use the bundle of the three mechanisms or their mechanism pairs. I also document a positive association between buyer-side information asymmetry and the simultaneous use of buyers' mechanisms such as financing covenants, liquidity reps, and cash payments. These results suggest that the use of complementary mechanisms becomes more prevalent when direct asset sales are likely to be hampered by severe information frictions. Other characteristics of direct asset sales, including high purchase price, a complex structure of target assets, and transaction materiality, are also associated with the inclusion of bundled mechanisms.

The mechanism complementarity may be explained by transaction parties' incentives to use as many contractual provisions as possible, because doing so in a short-term contracting process is less costly. To examine the validity of this explanation, I exploit the adoption of Statement of Financial Accounting Standards ("SFAS") 141(R) as an exogenous shock to the contract design. Since SFAS 141(R) requires that firms disclose more information about the fair value of earnout, the increased cost discourages the use of equity or contingent payments (Cadman, Carrizosa, and Faurel, 2014; Bates, Neyland, and Wang, 2018). Instrumenting for the payment arrangement choice based on SFAS 141(R)'s adoption, a bivariate Probit model regression shows that the use of non-payment mechanisms such as reps and covenants drops when the agreements contain fewer special payment arrangements. The findings are suggestive of transaction parties' reliance on the mechanism complementarity.

While direct asset sales are usually consummated in a short period, I also look into variations in the expected length of contract duration, which is an important contractual characteristic (Costello, 2013). Given the complexity of direct asset sales, transaction parties need to be prepared for more uncertainty as the expected contract duration becomes longer. Noting that the explicit statement of expected closing date is an endogenous choice, I use the

Heckman selection model to address the potential self-selection issue before investigating the determinants of duration length. With both accounting covenants and financing covenants showing a positive relation, my findings suggest that transaction parties rely on covenants to cope with the uncertain prospect brought by the longer contract duration.

My study contributes to the contracting literature in three aspects. Presenting the novel evidence of direct asset sales agreements, this paper sheds light on the role of complementary contracting mechanisms in mitigating information asymmetry, suggesting that reps, covenants, and special payment arrangements could be used jointly. By documenting the valuation and disciplinary roles of financial reporting in direct asset sales, my analyses also expand the knowledge about accounting in the contracting process (Watts and Zimmerman, 1986, 1990). Further, my results are suggestive of the joint effects produced by the solutions to adverse selection and moral hazard (Darrough and Stoughton, 1986; Banker, Darrough, Li, and Threinen, 2019). Nonetheless, my investigation concentrates on a subset of contracting mechanisms included in direct asset sales agreements. It would be intriguing to explore the characteristics of other contractual provisions. Whether a broad spectrum of mechanisms exhibit complementarity or substitution effects is an interesting research question.

The remainder of this paper is organized as follows. Section 2 introduces the institutional characteristics of direct asset sales and relevant studies. I develop the hypotheses on the use of contracting mechanisms in Section 3. Section 4 describes the procedures of collecting agreements and constructing variables. Section 5 summarizes descriptive analyses, and Section 6 analyzes empirical results. I conclude the paper in Section 7.

CHAPTER TWO: DIRECT ASSET SALES

2.1 Institutional Background

In direct asset sales, buyers acquire a specific portion of sellers' total assets, which could be a business unit, such as a subsidiary, a division, and a segment, or specific assets, such as fixed assets, personal properties, and intellectual properties (Alexander, Benson, and Kampmeyer, 1984; Jain, 1985). Different from M&As, direct asset sales do not change the ownership structure of sellers, allowing these firms to relieve financial distress or enhance operation efficiency by disposing assets. Taking advantage of the flexibility in direct asset sales, buyers could target specific assets without committing to acquire sellers' entire business. Although only partial assets of sellers are traded, the value of these transactions can be substantial.³

The transaction procedures of direct asset sales share a lot of similarities to those of M&As. Starting from a preliminary negotiation, buyers and sellers exchange confidential information to settle down a letter of intent for further cooperation and discussion (Brown, 2007). As the negotiation unfolds, both sides conduct due diligence investigation with the assistance from counsels and advisors (McConnell and Cole, 2012). After deciding to engage in a deal, sellers and buyers enter into direct asset sales agreements on the agreement effective date, and they close the transaction on the sales closing date.⁴ During the gap period between the two dates, sellers and buyers need to prepare for the transaction closing (Lopez, 2015).

Despite these similar procedures, the contracting process of direct asset sales can be more complicated than M&As' (Egan, Balotti, Patrick, and Doliner, 2005). Since only partial assets

³ For instance, starting in early 2018, Chinese HNA Group Co. made a series of direct asset sales totally worth more than \$25 billion (Dormido, 2019); in 2019 General Electric Co. decided to sell its biopharma business for \$21.4 billion (Smith and Westin, 2019); in 2017 The Cooper Companies Inc. paid \$1.1 billion cash to purchase the global right and business associated with a medical device owned by Teva Pharmaceutical Industries Ltd.; on July 21, 2020, eBay Inc. reached a deal to sell its Classifieds business unit to Adevinta ASA for \$9.2 billion.

⁴ The two dates are illustrated in Figure 1.

and certain liabilities would be transferred, it is necessary that sellers and buyers clearly identify and specify the components of target assets and assumed liabilities. Moreover, the value of different categories of assets should be separated because transaction parties need to allocate the purchase price.⁵ However, sellers are rarely required to disclose the disaggregate financial information of partial assets. An extensive audit is also not applied to sellers' partial assets during ordinary operation.⁶ As a result, it is difficult for buyers to verify the value of target assets. The process of transferring target assets is also time-consuming. Sellers and buyers need to obtain consents from third parties before re-assigning contractual rights.⁷ Buyers may also apply for governmental authorization to retitle sellers' licenses and permits. In addition, a pre-merger notification filing must be sent for antitrust review if the purchase price or the size of transaction parties exceeds pre-specified thresholds.⁸ To prepare the notification filing, transaction parties have to determine which assets are reportable under the HSR Act.⁹ These complicated procedures increase the difficulty of monitoring target assets' condition after the agreement effective date.

Direct asset sales usually have short contract duration, which ranges from a few days to a few months.¹⁰ For example, in 2014, in a transaction closed within merely 19 days, Toro

⁵ In the United States, purchase price allocation is subject to SFAS 141(R) and SFAS 142. Buyers need to negotiate with sellers to determine the value of each component of target assets and assumed liabilities. Both sellers' sales tax and buyers' tax deduction are influenced by the allocation result (Kerchner, 2019).

⁶ According to the auditing standards of the Public Company Accounting Oversight Board ("PCAOB"), auditors should consider segment information as part of the consolidated financial statements, instead of performing the audits as extensive as if a separate opinion would be required for the segment information. See the paragraph 31 of the PCAOB's AU 9326 (https://pcaobus.org/oversight/standards/archived-standards/pre-reorganized-auditing-standards-interpretations/details/AU9326_24-41) and the appendix B2 of the PCAOB's AS 2810 (<https://pcaobus.org/oversight/standards/auditing-standards/details/AS2810>). Statement of Financial Accounting Standards No. 131 also provides much discretion to managers in terms of preparing segment financial information.

⁷ Some contracts are not assignable, requiring a novation when they are transferred from sellers to buyers (Egan et al., 2005).

⁸ The value of the thresholds is adjusted periodically in compliance with the Hart-Scott-Rodino Antitrust Improvements Act ("HSR Act").

⁹ An example is provided by Informal Interpretation No. 0805021: <https://www.ftc.gov/enforcement/premerger-notification-program/informal-interpretations/0805021>.

¹⁰ My sample contracts, randomly drawn from a comprehensive collection of asset sales agreements found in the SEC filings, are mainly short term. In my sample, among the agreements specifying the expected closing date, the median of contract duration is only 6 days and the mean is 43 days. Only four contracts are anticipated to be

Company paid \$227 million to buy BOSS Snow Management Business from Northern Star Industries, Inc.¹¹ Despite the short contract duration, sellers typically demand a higher purchase price to compensate for the ordinary income tax rate incurred by direct asset sales (De Laria and Driskell III, 2020). Moreover, the majority of direct asset sales prefer cash proceeds, catering to sellers' financing needs (Lang et al., 1995; Slovin, Sushka, and Polonchek, 2005). In contrast, acquirer and target firms are more inclined to initiate share exchange to complete M&As.

Shareholders and regulators have limited impact on direct asset sales, whereas they play a more influential role in M&As. Direct asset sales provide more discretion to the board of directors so long as their decisions can be justified by the business judgment rule (Hege et al., 2009). Delaware law does not require direct asset sales to be approved by sellers' shareholders and does not authorize appraisal or dissenters' rights to the shareholders (Shukairy, 2006). The contracting process of direct asset sales is therefore less likely to be subject to shareholders' intervention. Even when antitrust regulators review direct asset sales, transaction parties confront less scrutiny because the flexibility of direct asset sales facilitates the development of a permissible transaction structure. Thus, the course of direct asset sales is mainly determined by the private negotiation between sellers and buyers.

2.2 Prior Literature on Direct Asset Sales

Literature on direct asset sales mainly consists of three lines of work. A set of pioneer work documents the wealth effect of public announcements regarding direct asset sales (Alexander et al., 1984; Jain, 1985; Klein, 1986; Slovin, Sushka, and Ferraro, 1995). Further, a subsequent series of studies investigate two motivations of engaging in such transactions. Direct asset sales

closed one year after the agreement effective date.

¹¹ Other anecdotal examples include: Walgreens Boots Alliance Inc. entered into an agreement on June 29, 2017 to buy 2,186 stores from Rite Aid Corporation and completed the transaction on March 27, 2018; Warner Chilcott PLC agreed to sell certain product licensing rights to LEO Pharma A/S on September 23, 2009 and their transaction was consummated on the same day.

constitute a financing channel for sellers to undertake their investment projects (Bates, 2005; Lang et al., 1995). This channel reduces sellers' cost of capital if external financing has a higher cost because of agency problems, such as asset substitution, debt overhang, and managerial discretion (Jensen and Meckling, 1976; Myers, 1977; Stulz, 1990). Sellers also resort to direct asset sales when dealing with bankruptcy and financial constraints (Pulvino, 1998, 1999; Campello et al., 2010). Debt capacity and asset liquidity are therefore critical determinants (Kruse, 2002; Schlingemann, Stulz, and Walkling, 2002). In the midst of an economic downturn, sellers might dispose assets at a much cheaper price through fire sales (Shleifer and Vishny, 1992, 2011).

The second motivation is to improve operating performance through direct asset sales (Maksimovic and Phillips, 2001; Warusawitharana, 2008). Disposing unprofitable or non-essential assets enables sellers to focus on their core business units (Ofek, 1993; John and Ofek, 1995; Weisbach, 1995; Dittmar and Shivdasani, 2003). In addition, Bartov (1993) documents that managers use the proceeds of direct asset sales to smooth earnings numbers and circumvent the limitations imposed by bond covenants. Buyers can also benefit from the synergy generated by consolidating target assets into their current operations (Hite, Owers, and Rogers, 1987).

CHAPTER THREE: HYPOTHESES DEVELOPMENT

3.1 Valuation-Related Information Frictions

Buyers are concerned about the value and condition of target assets. To avoid overestimating the asset value, buyers need the financial information of target assets, which may be critical in the valuating process (McNichols and Stubben, 2015; Rabier, 2017). However, granular financial information pertaining to specific assets is scarce because managers usually choose to withhold disaggregated information (Berger and Hann, 2007; D'Souza et al., 2010; Chen et al., 2015). In addition, auditors do not audit the financial information of specific assets as extensively as they would if these assets were taken as a separate entity. Due to the asymmetric information, buyers would protect themselves by discounting the purchase price, leading to the valuation-related adverse selection.

Before target assets are transferred, their value is subject to change because sellers' operating activities could alter the asset value. Moreover, sellers are less incentivized to protect target assets' condition in the aftermath of the agreement effective date because the purchase price has already been determined. Given the fact that sellers' efforts of protecting target assets are unobservable, buyers would pay the same purchase price on the sales closing date even if the asset value has declined. The overpayment could result in a dispute and time-consuming adjustment to the purchase price (Johnson, 2011). Thus, the valuation-related moral hazard could decrease the transaction efficiency.

Judicious contracting mechanisms could help sellers and buyers alleviate these valuation-related information frictions. Since timely financial information assists buyers in appraising target assets, the reps that guarantee the integrity of sellers' interim financial information could mitigate the valuation-related adverse selection. To monitor target assets' value, buyers could use accounting covenants that require sellers to prepare periodic financial statements and

maintain consistent accounting policies. Through aligning the interests of sellers and buyers, equity payments, as a type of special payment arrangement, could incentivize sellers to disclose more information and protect target assets. Nonetheless, the accounting-based reps and covenants might not be used because it is costly to verify and prepare additional financial information (Chen, 2019). Sellers also likely prefer cash payments to satisfy their financing needs (Lang et al., 1995; Campello et al., 2010).

Since private firms are much more opaque than public firms, direct asset sales that involve private sellers face higher risks arising from sellers' asymmetric information. If each of the three mechanisms is effective, buyers have stronger incentives to use them individually when trading with private sellers. Therefore, I propose my first hypothesis below in the alternative form.

H1: The involvement of private sellers in direct asset sales is positively associated with the individual use of accounting covenants, reporting reps, or equity payments in direct asset sales agreements.

3.2 Payment-Related Information Frictions

The price payment is important for sellers, especially when they regard direct asset sales as an alternative financing channel (Almeida, Campello, and Weisbach, 2004; Faulkender and Wang, 2006; Denis and Sibilkov, 2010). To receive the entire purchase price, prior to the agreement effective date, sellers need information to evaluate buyers' payment capacity. The lack of the relevant information would discourage sellers from participating in direct asset sales because of the uncertainty about the price payment. The payment-related adverse selection could impede the transaction progress.

Upon entry into agreements, buyers would start preparing their payment that depends on either internal funds or external financing proceeds (Myers and Majluf, 1984; Bharadwaj and Shivdasani, 2003). Since direct asset sales agreements are usually expected to be closed in a

short period, it is necessary that buyers secure adequate funds in a timely manner. However, buyers' managers have incentives to overinvest in order to expand the company size to an excessive scale (Jensen and Meckling, 1976; Jensen, 1986, 1993). If the overinvestment strains buyers' liquidity, sellers' receipt of the purchase price has to be delayed, and the transactions might be eventually terminated due to buyers' payment failure. Both situations, as the possible consequences of the payment-related moral hazard problem, would impose significant opportunity costs on sellers.

The uncertainty concerning the price payment could be reduced by certain contracting mechanisms. Sellers could impose liquidity reps on buyers to ensure that buyers possess sufficient funds or have obtained credit arrangements as of the agreement effective date. In addition, financing covenants could regulate buyers' price payment by stipulating that enough funds be secured prior to the sales closing date. Furthermore, sellers could require the payment to be made in full cash, rejecting stocks, promissory notes, and contingency payments, in case sellers could not obtain cash from these special payments (Bates et al., 2018; Jansen, 2020). Notwithstanding, the three contracting mechanisms significantly raise the threshold for buyers to engage in direct asset sales. Transaction parties therefore need to trade off the related benefits and costs.

Since private firms provide less public information, it is more difficult for sellers to evaluate the payment capacity of private buyers and to observe their efforts of preparing funds. Sellers should have stronger motivations to implement each of the three mechanisms when dealing with private buyers. Based on the preceding analysis, I propose my second hypothesis below in the alternative form.

H2: The involvement of private buyers in direct asset sales is positively associated with the individual use of financing covenants, liquidity reps, or cash payments in direct asset sales agreements.

3.3 Relationship among Contracting Mechanisms

Recent economic research provides insights on how multiple mechanisms could jointly mitigate information frictions in the contracting process. Glazer and Rubinstein (2012) show that in a persuasion model, if agents do not always tell their true profiles, to alleviate adverse selection, the principal can design a contract composed of multiple contractual clauses so that the high threshold of disguising true profiles precludes agents from misrepresentation. Jakobsen (2020) examines a model in which a contract is designed to reveal truthful reporting by maximizing the number of contractual clauses, and the agent is prevented from transiting to its desired state. The two papers suggest that the complementarity among contracting mechanisms could mitigate adverse selection and moral hazard.

Given the severe information frictions caused by direct asset sales' unique features, buyers and sellers could exploit mechanism complementarity to enhance the transaction efficiency. Reporting reps, which guarantee the integrity of sellers' pre-contract financial information, and accounting covenants, which administer sellers' post-contract financial information, could jointly help buyers appraise and monitor target assets. A big discrepancy between the two periods of financial numbers could indicate that sellers has misrepresented the pre-contract financial information by exaggerating the asset value (Roychowdhury, 2006). The discrepancy could also suggest that target assets' value has significantly changed.

Equity payments could have an incremental contribution to mitigating the seller-side information frictions. Despite the valuation role of reporting reps, equity payments enable sellers to signal target assets' quality (Hege et al., 2009). The interests of sellers and buyers are also aligned by equity payments in a period longer than the coverage of accounting covenants. Thus, equity payments could be used to complement reporting reps and accounting covenants.

The complementarity between liquidity reps, financing covenants, and cash payments could assist sellers in receiving the entire purchase price. Liquidity reps, which guarantee

buyers' entry into credit arrangements, and financing covenants, which require buyers to prepare adequate funds, could jointly administer the price payment. Cash payments, which specify that the entire purchase price be paid in cash on the sales closing date, could complement liquidity reps and financing covenants by urging buyers to complete financing.

Although sellers and buyers could benefit from the complementarity among multiple mechanisms, they would likely assume higher contracting costs (Jensen and Meckling, 1976; Tirole, 1999; Battigalli and Maggi, 2002). For example, it is costly to design a contract including many clauses; the simultaneous compliance with reps, covenants, and special payment arrangements might consume many resources; the renegotiation becomes costlier if many clauses have to be modified at the same time (Williamson, 1985; Rey and Salanie, 1990). Hence, whether sellers and buyers use the mechanism complementarity needs further investigation.

When trading with private firms, the transaction parties could have a stronger tendency to employ complementary mechanisms because private sellers and private buyers could lead to severer information frictions. Therefore, I propose my third hypothesis below in the alternative form.

H3: The involvement of private sellers (buyers) in direct asset sales is positively associated with the simultaneous use of accounting (financing) covenants, reporting (liquidity) reps, and equity (cash) payments in direct asset sales agreements.

CHAPTER FOUR: SAMPLE AND DATA

4.1 Agreement Collection and Classification

I collect direct asset sales agreements (“ASAs”) from the exhibits of the SEC filings in four steps. I first download the SEC current reports, periodic reports, and registration statements from the SEC’s Electronic Data Gathering, Analysis, and Retrieval system (“EDGAR”) and keep the filer firms (“filers”) that have all required database identifications.¹² Second, I extract Exhibit 2 and Exhibit 10 by parsing the SEC filings. In the third step, an agreement is selected if its first 30 lines or its first 150 words comprise capitalized words “ASSET PURCHASE AGREEMENT.”¹³ Fourth, I eliminate the agreements whose titles include “STOCK,” “SECURITY,” or “SHARE,” because such agreements involve the trade of sellers’ shares, and by following the method of Nini, Smith, and Sufi (2009), I also delete the misidentified loan agreements that mention “ASSET PURCHASE AGREEMENT” at the beginning. After the four steps, 7,830 ASAs are collected from the SEC filings, which were posted to the EDGAR between 1994 and 2017.

I filter the collected ASAs to drop unqualified agreements in the following six steps. I first delete 1,374 agreements filed by financial institutions (SIC: 6000-6999) or by the firms from regulated industries (SIC: 4400-5000). In the second step, by searching the titles and recitals of ASAs for “amend,” “addendum,” and “restate,” I take out 942 amended agreements, addenda, and restated agreements, which either provide only modified provisions or restate the entire modified agreement. Third, I remove 169 ASAs that do not have the agreement effective date. Fourth, through sorting filers’ CIKs and the agreement effective date, I eliminate 533 duplicates that are ancillary agreements or repeatedly filed by the same firm.

¹² I follow the SEC filing taxonomy shown in the Internet Appendix IB of Li, Ramesh, Wu, and Shen (2018).

¹³ Direct asset sales agreements are titled “Asset Purchase Agreements” in practice.

In the fifth step, I differentiate the agreements that relate to direct asset sales from those that cover de facto mergers. The underlying transactions are classified as direct asset sales if they satisfy one of the following five criteria.¹⁴ Target assets are sold by filers; 8-K filings describe the agreements as “Certain Asset Purchase Agreement;” the recitals of ASAs mention “certain asset” or “specific asset,” and neither the recitals nor 8-K filings mention “all asset;” 8-K filings mention “certain asset” or “specific asset,” and neither the recitals of ASAs nor 8-K filings mention “all asset;” the manual investigation into the recitals of ASAs and related filings recognizes the underlying transactions as direct asset sales. The five criteria enable me to remove 1,595 agreements of de facto mergers.

In the sixth step, I further delete 521 agreements because they are part of mergers, joint ventures, stock purchases, or partial interest acquisitions. To find these agreements, I search the recitals of ASAs for the keywords indicative of such transactions. I also rely on the Securities Data Company (“SDC”) database that classifies such transactions into “Acquisition of Major Interest,” “Acquisition of Partial Interest,” and “Acquisition of Remaining Interest,” “Acquisition,” and “Merger.” I match ASAs to the records of the SDC database by filers’ CUSIP, the agreement effective date, and the sales closing date.¹⁵ The two methods drop 521 ASAs related to mergers and other unqualified transactions. My full sample therefore includes 2,696 qualified ASAs that relate to direct asset sales.

I randomly select 900 agreements to hand-collect direct asset sales’ characteristics and contractual provisions. I discover and delete 55 agreements, which lack required data or engage special entities such as individuals, proprietorships, and not-for-profit organizations.¹⁶ Thirty-six agreements are further removed from my sample because 24 ASAs miss certain control

¹⁴ The concrete examples that illustrate the five criteria are provided by Appendix C.

¹⁵ The SDC database names the sales closing date “deal effective date.” ASAs are taken out if their agreement effective date is within the 61 calendar days prior to the “deal effective date” of an unqualified event and the CUSIP of the filers is matched to the CUSIP of either target firms or acquirer firms in the event.

¹⁶ For example, some ASAs do not specify the purchase price; some are scanned documents unable to process.

variables and 12 ASAs are filed by both sellers and buyers. Eight hundred and nine agreements, which have all required information and control variables, constitute my random sample.

4.2 Data Collection and Variable Construction

I use Python programs and hand-collection to extract contractual provisions and transaction characteristics from ASAs and the related SEC filings. A series of indicator variables are created based on the collected data. I further construct several control variables to capture filers' characteristics.¹⁷

4.2.1 Dates, Transaction Roles, and Non-Filers' Characteristics¹⁸

From the contract preamble of ASAs and the related SEC filings, I collect the agreement effective date, filers' transaction roles, and non-filers' names and transaction roles. To figure out whether non-filers are private firms, I search the Company File of Compustat by matching the names and postal codes of non-filers. S&P Capital IQ is also used to supplement my search and collect non-filers' postal codes. The indicator variables *Private Seller* and *Private Buyer* describe non-filers' private ownership. The expected closing date is also collected from the contract article "Closing."

4.2.2 Target Assets¹⁹

I create two variables to summarize the characteristics of target assets. Based on the recitals of ASAs and the content of 8-Ks, I classify target assets into division or unit assets and create the indicator variable *Division Assets*. The information about the complexity and components of target assets is extracted from the contract sections "Purchased (Excluded) Assets" and "Assumed (Excluded) Liabilities." The variable *Asset Complexity* counts the number of words that describe target assets.

4.2.3 Purchase Price and Payment Arrangements

¹⁷ All variables are defined by Appendix A Variable Definitions.

¹⁸ The structure of ASAs is described by Section 5.1.

¹⁹ ASAs usually refer to target assets as "purchased assets."

The majority of ASAs specify the purchase price's number in the contract section "Purchase Price," whereas some agreements describe only the number of shares or the scheme of contingent payments. When no concrete purchase price is found, I estimate the expected purchase price with the information available in the contracts.²⁰ The variable *Price Ratio* is then calculated by dividing the purchase price by filers' total assets.

After extracting the contract sections "Purchase Price" and "Contingent Payments," I search for the keywords that specify the details of payment arrangements. Two variables are created to reflect the special payment arrangements: the indicator variable *Equity Payments* measures whether buyers are permitted to pay shares, and the indicator variable *Cash Payments* captures if sellers exclude other payment arrangements but demand that the entire purchase price be paid in cash on the sales closing date.

4.2.4 Representations and Warranties

To characterize the reps of ASAs, I extract the contract sections such as "Financial Statement (Information)," "Absence of Certain Change," "Undisclosed Liabilities," and "Books and Records" from the contract article "Representations and Warranties of Seller." I search them for some keywords to identify specific contractual provisions. For example, the keywords "month" and "unaudited" assist in creating the indicator variable *Reporting Reps*, which measures whether the contracts verify the interim financial information of the pre-contract period. Sellers' other accounting and financing practices are also identified from those contract sections.

In terms of buyers' contractual provisions, I focus on certain sections of the contract article "Representations and Warranties of Buyer." I search financing-related contract sections to find the provisions that describe buyers' solvency, financing commitments, or capitalization

²⁰ If buyers pay shares but do not provide the share value, the expected purchase price = the number of shares*10; if an earnout scheme specifies the conditional payment but does not mention the length of the payment period, the expected purchase price = the payment made per year*10.

condition. The indicator variable *Liquidity Reps* captures whether the contracts verify buyers' pre-contract financial condition with respect to solvency and financing commitments. Some ASAs also stipulate the accounting-related contract sections for buyers.

4.2.5 Covenants

To delineate the characteristics of the covenants, I extract the contract section "Conduct of Business" from the articles "Covenants of Seller" and "Conditions to Obligations of Seller." I search for the keywords that indicate the contractual provisions regulating sellers' accounting policies or requiring the delivery of post-contract financial information. The two accounting-related provisions are measured by the indicator variable *Accounting Covenants*. Sellers' financial covenants and capital expenditure covenants are collected as well.

With respect to buyers' covenants, I collect the provisions relevant to financing activities from the contract articles "Covenants of Buyer" and "Conditions to Obligations of Buyer." The provisions that are intended to secure the price payment are identified by the indicator variable *Financing Covenants*. I also extract other covenants that require buyers to deliver post-contract financial information or monitor buyers by restricting the range of their financial ratios or accounting numbers.

4.2.6 Other Contractual or Transaction Characteristics

I create four variables to describe other important characteristics of direct asset sales and ASAs. Since filers can use special marks to redact the proprietary information, I construct the indicator variable *Redaction* as the proxy for redacted disclosures (Verrecchia and Weber, 2006). With the postal codes collected from ASAs, I create the indicator variable *International Deal* to reflect the cross-country transactions. By using the coordinates of the postal codes, I measure the geographical proximity between sellers and buyers with the variable *Distance*, which records the logarithm value of the transaction parties' mile distance. The variable *Current Report* indicates whether ASAs are filed in the exhibits of the SEC current reports.

4.2.7 Complementary Mechanisms

To measure the extent to which direct asset sales rely on complementary mechanisms, I construct a series of discrete variables for both sellers and buyers. Based on the variables such as *Accounting Covenants* (*Financing Covenants*), *Reporting Reps* (*Liquidity Reps*), and *Equity Payments* (*Cash Payments*), the value of the variable *#Acc_Rep_Equity* (*#Fin_Liq_Cash*) indicates how many contracting mechanisms are imposed on sellers (buyers). I also create other discrete variables such as *#Acc_Rep*, *#Acc_Equity*, and *#Int_Equity* (*#Fin_Liq*, *#Fin_Cash*, and *#Liq_Cash*) to measure how the contracts employ specific mechanism pairs of sellers (buyers).

Some indicator variables are constructed to capture the use of bundled mechanisms. The variable *D.Acc_Rep_Equity* (*D.Fin_Liq_Cash*) equals 1 when ASAs simultaneously specify the reps, covenants, and special payment arrangements for sellers (buyers). In addition, to measure the inclusion of mechanism pairs, I create the variables *D.Acc_Rep*, *D.Acc_Equity*, and *D.Int_Equity* (*D.Fin_Liq*, *D.Fin_Cash*, and *D.Liq_Cash*) regarding sellers' mechanisms (buyers' mechanisms). Table 4 reports the descriptive statistics of the variables used in the regression analyses.

CHAPTER FIVE: DESCRIPTIVE ANALYSES

5.1 Structure of Direct Asset Sales Agreements

Direct asset sales agreements (“ASAs”) of my sample are filed as material contracts in the SEC filings (Li, 2013). Like other types of contracts, ASAs are mainly composed of contractual provisions such as articles, sections, and clauses. Each article consists of several sections, which are further divided into clauses (Weagree, 2019). Including a variety of provisions, ASAs are intended to specify the background, schedules, and other details of direct asset sales. In addition to provisions, ASAs can also contain some exhibits, which provide the definitions of contract terms, describe ancillary agreements, or enumerate disclosure schedules.

At the beginning of ASAs, two contract articles introduce the background of direct asset sales. The article “Preamble” describes the agreement effective date, the identity of sellers and buyers, and their parents or subsidiaries involved in the transaction. In addition, the article “Recital” introduces sellers’ operation, target assets, and the transaction’s basics. Two other contract articles detail the schedules of direct asset sales. The article “Purchase and Sale” lists the components of target assets through four contract sections: “Purchased Assets,” “Excluded Assets,” “Assumed Liabilities,” and “Excluded Liabilities.” Additionally, the article “Closing” specifies the expected closing date and the purchase price.²¹ It also sets forth the rule of adjusting the purchase price as well as the deliveries that transaction parties should make on the closing date (Johnson, 2011).

The majority of remaining contract articles verify pre-contract disclosures and discipline post-contract actions. The article “Representations and Warranties” guarantees that the pre-contract disclosures of sellers and buyers are accurate;²² the article “Covenants” include

²¹ Some ASAs use a separate article to specify the provisions related to the purchase price.

²² The contract sections of the article “Representations and Warranties” are hereby named “reps.”

affirmative or negative provisions, which regulate the post-contract actions of sellers and buyers;²³ the article “Conditions to Obligations,” similar to “Covenants,” sets forth the prerequisites that sellers and buyers must satisfy to close the transaction.²⁴ For the three contract articles, ASAs separately present sellers’ provisions from buyers’. If the transaction parties breach any provisions, penalties would be imposed in accordance with the contract articles “Termination,” “Indemnification,” and “Miscellaneous,” which specify the conditions on terminating agreements, indemnifying counterparties, and fulfilling other specified obligations (Brown, 2007).

5.2 Distribution of Direct Asset Sales Agreements

Table 2 presents the distribution of the sample ASAs over agreement effective years, industries, and SEC filing types. As Panel A shows, sample ASAs are mainly distributed between 1993 and 2017. Covering 28.18% of the random sample ASAs, the period from 1996 to 1999 manifests an active engagement in direct asset sales; companies signed 14.09% of the random sample ASAs between 2000 and 2002; the years from 2003 to 2006 present 28.56% of the random sample ASAs. The number of ASAs significantly declined in 2008.

Based on Fama-French 49 Industry Classification, Panel B reports the ASAs’ industry distribution.²⁵ Although direct asset sales can occur in a variety of industries, some industries provide a higher fraction of sample agreements. For instance, 8.53% of the random sample ASAs are from the pharmaceutical product industry; the business service industry supplies 7.42%; the computer software and electronic equipment industries contribute to the sample by 10.63% and 9.15%, respectively.

²³ The sections of the article “Covenants” are hereby named “covenants.” Affirmative covenants summarize the activities that transaction parties must complete, whereas negative covenants set forth the prohibited conducts. The article “Covenants” can also be decomposed into pre-closing covenants and post-closing covenants. In ASAs, pre-closing covenants are usually named “Conduct of Business Pending the Sale.”

²⁴ Since this article is also intended to regulate transaction parties’ behaviors, I regard its sections as covenants.

²⁵ Even though I follow Fama-French 49 Industry Classification to present the industry distribution, subsequent regression tests are based on Fama-French 12 Industry Classification to maintain a consistent sample between the Probit model and the OLS model.

The distribution over three types of the SEC filings is presented by Panel C. I find that 61.06% of the random sample ASAs are filed with the SEC current reports, which disclose the entry into such agreements through Item 1.01 and announce the completion of the transactions in Item 2.01; the SEC periodic reports provide 32.39% of the random sample ASAs, and the SEC registration statements supply 6.55%. The distribution of 2,696 full sample ASAs is similar to that of 809 random sample ASAs, suggesting that the random sample is representative of direct asset sales' characteristics.

5.3 Description of Contracting Mechanisms

To study the contracting mechanisms related to accounting, financing, and target assets, I extract different contractual provisions from ASAs. Table 3 summarizes sellers' contracting mechanisms, buyers' contracting mechanisms, and payment arrangements collected from 809 random sample ASAs. The characteristics of these mechanisms are described below.²⁶

5.3.1 Accounting Covenants

Accounting covenants discipline two types of accounting-related activities. Negative accounting covenants prevent transaction parties from arbitrarily changing accounting policies and estimates, and affirmative accounting covenants require the delivery of financial information, which can be regular, such as monthly, or be non-periodic. The delivered financial information, which is usually presented in the format of financial statements, can be used to monitor target assets' condition or prepare regulatory filings. Table 3 shows that 34.12% (1.98%) of the sample ASAs impose accounting covenants on sellers (buyers).

5.3.2 Financial Information Reps

Financial information reps verify the quality and quantity of the financial information provided prior to the agreement effective date.²⁷ Since sellers' pre-contract financial

²⁶ The examples of different mechanisms are shown by Appendix B.

²⁷ Similar to the report of unqualified auditor opinion, financial information reps usually state that "the financial information satisfies fair presentation in all material respects and conforms to effective accounting principles."

information can assist buyers in appraising target assets, financial information reps are related to either target assets or transaction parties per se. Based on a fiscal period or an interim period, the report of the financial information is usually presented in the format of the balance sheet, the income statement, and the statement of cash flows.

Table 3 shows that 71.69% of the sample ASAs require sellers to make financial information reps. Specifically, the reps related to interim financial information are found in 32.26% of the sample ASAs, and the reps about carve-out financial information, which is based on target assets, exist in 60.44% of the sample ASAs. Panel A shows that sellers verify different financial statements such as the balance sheet (46.68%), the income statement (21.88%), and the statement of cash flows (26.21%). In contrast, the financial information reps of buyers are present in 12.48% of the sample ASAs.

5.3.3 Financing Covenants

Financing covenants require buyers to secure adequate funds before the sales closing date. A common prerequisite of financing covenants is that buyers have entered into a binding commitment with creditors or other investors. The covenants could require buyers to complete financing by executing the credit arrangement that has been approved by sellers. Table 3 Panel B shows that 12.48% of the sample ASAs contain such covenants to discipline buyers' financing activities.

5.3.4 Financial Condition Reps

Financial condition reps verify the cash holdings, credit arrangements, or capitalization condition of transaction parties. They typically ensure that transaction parties have sufficient funds, either of their own or from credit facilities, to complete direct asset sales, or they describe the authorization and issuance of transaction parties' capital stock. Table 3 Panel B presents that 38.07% of the sample ASAs require buyers to make such reps. Sellers also comply with financial condition reps in 17.92% of the sample ASAs.

5.3.5 Payment Arrangements

Payment arrangements are critical mechanisms to direct asset sales. For example, Hege et al. (2009) analyze the tradeoff between cash and equity payments. Cash payments may rely on the use of third-party escrow.²⁸ In addition, promissory notes can be paid as a type of seller financing (Jansen, 2020). Buyers can also engage in contingent payments, such as earnouts and royalty. Earnouts allow buyers to make payments after the sales closing date when pre-specified goals are achieved (Cain et al., 2011).²⁹

According to Table 3 Panel C, cash payments are required by 94.31% of the sample ASAs, and 30.66% of the sample ASAs implement third-party escrow. I find that 28.68% of the sample ASAs rely on non-cash payments such as equity (20.15%) and promissory notes (10.75%).³⁰ Contingent payments are specified in 17.43% of the sample ASAs.

5.3.6 Other Provisions

ASAs can impose other provisions, which are relevant to accounting, financing, and target assets, on sellers and buyers. Table 3 Panel A shows that 14.83% of the sample ASAs contain capital expenditure covenants that limit sellers' post-contract investment; financial covenants, which restrict the range of sellers' financial ratios or accounting numbers, are found in 6.06% of the sample ASAs; undisclosed liability reps are included in 40.05% of the sample ASAs to ensure that sellers do not underreport liabilities; in 19.04% of the sample ASAs, sellers use books and records reps to guarantee that their internal accounts are accurate and are prepared with good business practice; audit, review, and internal control reps, which exist in 2.72% of the sample ASAs, state that sellers have maintained reliable accounting and internal control systems so that the previous transactions are legitimate and accurately recorded; adverse

²⁸ Third-party escrow requires buyers to prepay an amount of money to an escrow agent before the transaction is closed. The money will be held by the escrow agent, which complies with an escrow agreement, until all pre-specified conditions are satisfied.

²⁹ For example, the sales of the purchased division pass the pre-specified threshold of ASAs.

³⁰ The percent numbers inside parentheses denote the fraction of the sample ASAs.

change reps, which usually specify that no material changes are made to sellers' accounting policies, and no excessive capital expenditure is incurred by sellers during the pre-contract period, exist in 61.68% of the sample ASAs. Although buyers also comply with similar provisions, as Table 3 Panel B shows, the fraction of their accounting-related mechanisms are much smaller. Buyers' contracting mechanisms are more likely to focus on financing. Besides, the sample ASAs also include asset-specific provisions, like intellectual property reps (72.19%), working capital reps (54.76%), fixed asset reps (44.13%), and personal property reps (28.18%).

CHAPTER SIX: EMPIRICAL RESULTS

6.1 Research Design

To investigate the association between information frictions and the use of contracting mechanisms, I apply the Probit model and the OLS model shown below.

$$\begin{aligned} \Pr (\textit{Contracting Mechanism}_i = 1) \\ = \Phi(\alpha + \beta_1 \textit{Private Seller (Buyer)}_i + \beta_2 \textit{International Deal}_i \\ + \beta_3 \textit{Price Ratio}_i + \beta_4 \textit{Asset Complexity}_i + \beta_5 \textit{Division Assets}_i \\ + \beta_6 \textit{Redaction}_i + \beta_7 \textit{Current Report}_i + \beta_8 \textit{Distance}_i + \beta_9 \textit{Total Assets}_i \\ + \beta_{10} \textit{Tobin's Q}_i + \beta_{11} \textit{Altman Z - Score}_i + \beta_{12} \textit{ROA}_i \\ + \beta_{13} \textit{Operating Risk}_i + \beta_{14} \textit{Firm Age}_i + \varepsilon_i) \end{aligned} \quad (1)$$

$$\begin{aligned} \textit{Contracting Mechanism}_i \\ = \alpha + \beta_1 \textit{Private Seller (Buyer)}_i + \beta_2 \textit{International Deal}_i \\ + \beta_3 \textit{Price Ratio}_i + \beta_4 \textit{Asset Complexity}_i + \beta_5 \textit{Division Assets}_i \\ + \beta_6 \textit{Redaction}_i + \beta_7 \textit{Current Report}_i + \beta_8 \textit{Distance}_i + \beta_9 \textit{Total Assets}_i \\ + \beta_{10} \textit{Tobin's Q}_i + \beta_{11} \textit{Altman Z - Score}_i + \beta_{12} \textit{ROA}_i \\ + \beta_{13} \textit{Operating Risk}_i + \beta_{14} \textit{Firm Age}_i + \gamma_i + \varphi_i + \varepsilon_i \end{aligned} \quad (2)$$

Model (1) is a Probit model, which predicts the probability of using specific contracting mechanisms, and Model (2) is an OLS model, which controls for year fixed effects and industry fixed effects. Both models are intended to examine the use of individual contracting mechanisms and the prevalence of mechanism complementarity. I rely on Model (2) to check the use of complementary mechanisms. Following the prior research, I use the indicator variables *Private Seller* and *Private Buyer* to measure the severity of information frictions because private firms tend to have a more opaque information environment and make fewer public disclosures (Minnis, 2011; Minnis and Sutherland, 2017).

6.2 Individual Contracting Mechanisms

To examine the first and the second hypotheses, I analyze the use of individual contracting mechanisms and report regression results in Table 5. Based on both Model (1) and (2), the results of Panel A suggest that the use of accounting covenants, reporting reps, and equity payments is associated with the severity of seller-side information frictions. In terms of the probability of using any of the three mechanisms, ASAs are 11.67% more likely to impose accounting covenants on private sellers; the likelihood of using reporting reps increases by 7.69% if buyers trade with private sellers; ASAs involving private sellers are 17.50% more likely to employ equity payments. The findings support the prediction of the first hypothesis and suggest that the three mechanisms serve an important role in mitigating information frictions.

Table 5 Panel B suggests that the severity of buyer-side information frictions are significantly related to the inclusion of financing covenants, liquidity reps, and cash payments. If buyers are private firms, the likelihood of using financing covenants and liquidity reps increases by 7.02% and 5.83%, respectively. Private buyers are also 12.37% more likely to pay the entire purchase price in cash on the sales closing date and exclude other types of payment arrangements. The results are consistent with the second hypothesis. All the findings about individual contracting mechanisms are robust to controlling for year and industry fixed effects.

6.3 Complementary Contracting Mechanisms

To test the third hypothesis, I initially focus on the three sellers' mechanisms, such as accounting covenants, reporting reps, and equity payments, and analyze whether they tend to be used jointly. Table 6 Panel A presents a positive association between the severity of seller-side information frictions and the use of multiple sellers' mechanisms, suggesting that ASAs involving private sellers are inclined to use more mechanisms. Taking the three mechanisms together, Column (1) shows that trading with private sellers is associated with employing

additional 0.4075 mechanisms. Given the fact that sellers comply with 0.8653 mechanisms on average, the number of mechanisms increases by 47% when private sellers engage in direct asset sales. Panel A Columns (2) to (4) also indicate the number of mechanisms significantly increases if different mechanism pairs are imposed on private sellers.

I further investigate the three buyers' mechanisms, such as financing covenants, liquidity reps, and cash payments. Table 6 Panel B shows that ASAs with private buyers use additional 0.2419 mechanisms, which are 25% of the average 0.9679 mechanisms imposed on buyers. The results suggest that the severity of buyer-side information frictions is positively associated with the use of multiple mechanisms. According to Panel B Columns (2) to (4), different mechanism pairs are also employed jointly if private buyers participate in the transaction. In comparison to sellers' mechanisms, buyers' mechanisms manifest less pronounced complementarity. The contrast suggests that seller-side information frictions are more significantly associated with the use of complementary mechanisms.

Several characteristics of direct asset sales are also related to the joint use of different mechanisms. Table 6 indicates that the high purchase price and a complex asset structure are associated with imposing multiple mechanisms on sellers and buyers. In addition, material direct asset sales, measured by trading division assets or disclosing through the SEC current reports, are linked with the simultaneous use of sellers' mechanisms. These results suggest that complementary mechanisms are more likely to be used to enhance the transaction efficiency of complex or material transactions.

6.4 Prevalence of Mechanism Complementarity

I further conduct a battery of stricter tests to examine the prevalence of the mechanism complementarity faced by sellers and buyers. The regression results of Table 7 use a group of indicator variables, which measure the use of bundled mechanisms, as dependent variables. For example, *D.Acc_Rep_Equity* equals 1 if ASAs contain accounting covenants, reporting

reps, and equity payments simultaneously; *D.Fin_Liq* equals 1 if financing covenants and liquidity reps are imposed on buyers in the same contract.

Table 7 Panel A shows that bundled mechanisms are more likely to be used for private sellers. Specifically, ASAs involving private sellers are 5.80% more likely to implement the three sellers' mechanisms jointly, and are 7% to 12% more likely to use different mechanism pairs. These findings still hold after controlling for year and industry fixed effects. In addition, if direct asset sales are material transactions, which are disclosed by the SEC current reports, ASAs are more likely to impose bundled mechanisms on sellers.

The findings concerning buyers' bundled mechanisms are reported by Table 7 Panel B. I find a positive association between the use of the bundled mechanisms and the severity of buyer-side information frictions. Column (1) shows that private buyers are 2.51% more likely to use financing covenants, liquidity reps, and cash payments in the same contract. As Columns (2) to (4) indicate, the likelihood of using mechanism pairs increases by 3% to 7% when ASAs involve private buyers. When the purchase price is high or target assets have a complex structure, bundled mechanisms are also more likely to be employed for buyers. These results suggest that buyers' mechanisms have a stronger connection with the transaction's economic importance. Overall, the use of complementary mechanisms is prevalent in direct asset sales, particularly so when transaction parties need to mitigate severe information frictions.

6.5 Relationship between Payment and Non-Payment Mechanisms

An alternative explanation to the use of multiple mechanisms is that transaction parties try to employ as many mechanisms as possible but do not rely on their complementarity. To rule out this explanation, I investigate the relationship between payment and non-payment mechanisms by using the setting of SFAS 141(R)'s adoption. The accounting standards' revision is plausibly exogenous to the choice of payment arrangements but is unrelated to the use of reps or covenants.

SFAS 141(R) became effective on December 15, 2008 and mandates the acquirer firm to disclose the earnout's fair value on a regular basis. The increased disclosure cost incurred by the standards revision discourages firms from using equity and contingent payments, which usually involve earnout payments.³¹ Following Bates et al. (2018), I use a bivariate Probit model to include *Post SFAS 141*, an indicator variable equal to one if the agreement became effective after January 1, 2009, as an instrumental variable for the payment arrangement choice, which is represented by *Equity Payments* and *Cash Payments*. To capture the use of both reps and covenants, I construct *Seller Non-Payment Mechanisms* (*Buyer Non-Payment Mechanisms*), two indicator variables equal to one if the contract includes reps or covenants for sellers (buyers), as the dependent variable.

Table 8 reports the association between payment and non-payment mechanisms. Columns (1) and (2) focus on the seller-side mechanisms. The results suggest that the adoption of SFAS 141(R) discourages transaction parties from using equity payments. However, if the agreement includes equity payments, transaction parties are 43% more likely to use reporting reps or accounting covenants in the same contract. Columns (3) and (4) evaluate the buyer-side mechanisms. In contrast to equity payments, cash payments are more likely to be used since the adoption of the standards revision. Column (4) presents the positive coefficient of *Cash Payments*, suggesting that the likelihood of using liquidity reps or financing covenants increases by 44% when the entire purchase price is required to be paid in cash with no delays. These findings are strong evidence supporting that transaction parties rely on the complementarity between payment and non-payment mechanisms.

6.6 Expected Contract Duration

Direct asset sales agreements could specify an expected closing date, which indicates the

³¹ SFAS 141(R) could be applied to direct asset sales as long as transferred assets constitute a business according to the guidance set forth in the accounting standards. In my sample, 41% contracts explicitly describe target assets as a "Business." SFAS 141(R) has been codified into Accounting Standards Codification ("ASC") 805.

expected length of contract duration. Although direct asset sales are generally expected to close in a short period, there is still variation in duration. As the transaction lasts longer, unexpected uncertainty is more likely to impede the transaction process. Prior research suggests that financial covenants could extend the length of contract duration (Costello, 2013).

To investigate the relationship between covenants and expected contract duration, I rely on the Heckman two-stage model to resolve the selection concern because some agreements choose not to contain an expected closing date. In the first stage, *Price Ratio*, *Inventory*, and *#Buyer Reps* are used to predict the existence of the expected closing date.³² *Inventory* and *#Buyer Reps* satisfy the exclusion restriction required for identification in the second stage. According to Columns (2) and (3) in Table 9, the use of accounting or financing covenants is positively associated with the expected length of contract duration. On average, covenants could extend the expected contract duration by 0.31 standard deviation. The results suggest that transaction parties would implement covenants to deal with the uncertainty resulting from longer duration.

³² *Price Ratio* is defined as the ratio of purchase price to the filers' total assets; *Inventory* is an indicator variable equal to one if the agreement includes the reps regarding the pre-contract condition of target inventory; *#Buyer Reps* is the number of reps that buyers comply with.

CHAPTER SEVEN: CONCLUSION

This study investigates the contracting process of direct asset sales. I analyze how contracts are designed to address the trading frictions brought by information asymmetry between sellers and buyers. The research question is important because direct asset sales, a type of transaction of great economic significance, are distinct from other types of transactions that are examined by prior research. Different from M&As, direct asset sales trade partial assets, which are more difficult to value due to the lack of asset-specific financial information. Such transactions are not subject to stringent public oversight and do not need to account for seller managers' career concerns. In addition, the hold-up problem is not the major issue of direct asset sales because they are expected to close in a short period and are unlikely to repeat. Such a setting allows me to look into association between contract design and valuation-related information frictions. Thus, using a unique sample of agreements provided by the SEC filings, I study which contracting mechanisms are used to mitigate information frictions and their relationship.

I predict that the likelihood of using particular mechanisms is associated with the nature and severity of information frictions. My hypotheses focus on three categories of contractual provisions: representations and warranties, covenants, and special payment arrangements. Reps can verify transaction parties' pre-contract financial information, and covenants can discipline their post-contract accounting treatment. The descriptive analysis of sample agreements reveals that sellers' mechanisms tend to relate to financial reporting and target assets, whereas buyers' mechanisms are inclined to focus on financing activities. Special payment arrangements could involve different payment methods, such as cash, equity, promissory notes, and contingent payments. Transaction parties' private firm status is chosen as the proxy for severe information frictions. In my sample, either sellers or buyers can be private firms.

My empirical analyses begin with examining the use of individual contracting mechanisms. I first study the three contracting mechanisms that could mitigate valuation-related information frictions: (1) accounting covenants that require sellers to continue financial reporting and maintain consistent accounting policies; (2) reporting reps that verify the integrity of sellers' interim financial information; (3) equity payments that allow buyers to pay shares as consideration. The findings suggest that each of these mechanisms is positively related to the severity of seller-side information frictions.

I further investigate the three contracting mechanisms that could alleviate payment-related information frictions: (1) financing covenants that require buyers to secure adequate funds in order to close the transaction; (2) liquidity reps that guarantee that buyers' pre-contract liquidity condition is solid; (3) cash payments that ask buyers to pay the entire purchase price in cash and not to make delayed payments. My results suggest a positive association between each of the three mechanisms and the severity of buyer-side information frictions.

I then conduct a series of tests to explore the relationship among these mechanisms. My analyses show that the contracts with private firms are likely to employ more mechanisms. The positive relation between the number of mechanisms and the severity of information frictions is suggestive of complementarity between different mechanisms. To evaluate the prevalence of the complementary relationship, I examine the use of bundled mechanisms and find that they are more likely to be included in contracts when private firms are involved. The findings suggest that complementarity becomes more prevalent as information asymmetry grows. Several characteristics of direct asset sales, such as the high purchase price, a complex structure of target assets, and transaction materiality, are also positively associated with the use of complementary mechanisms.

An alternative explanation to the use of multiple mechanisms is that transaction parties attempt to employ as many mechanisms as they can. To test this explanation, I rely on the

adoption of SFAS 141(R) to observe relationship between payment and non-payment mechanisms. Since the standards revision mandates the acquirer firm to disclose earnout's fair value on a regular basis, it reduces the acquirer's intention to use equity and contingent payments, which usually involve earnouts. Therefore, the adoption of SFAS 141(R) is plausibly exogenous to the payment arrangement choice. By using a bivariate Probit model, my analysis suggests a positive association between payment and non-payment mechanisms, which cover both reps and covenants. The results provide strong evidence supporting that transaction parties rely on mechanism complementarity.

Since contract duration is an important contractual characteristic, I continue to investigate the relation between covenants and the expected length of contract duration. I use the Heckman two-stage model to solve the selection concern in that some contracts choose not to specify expected closing dates. Consistent with the prior literature, my results indicate a positive association between the use of covenants and the expected length of contract duration. In direct asset sales, covenants are important tools for transaction parties to deal with the uncertainty caused by a longer transaction horizon.

Overall, this study provides early evidence indicating that different contracting mechanisms, which are related to accounting, financing, and payment arrangements, are used to mitigate severe information frictions in direct asset sales. The likelihood of using these mechanisms increases as information asymmetry becomes more severe. Moreover, the evidence in this paper suggests that different mechanisms complement one another, and transaction parties rely on such complementarity, especially when information frictions are severe. In addition, my results indicate that accounting serve both verification and disciplinary roles in the contracting process of direct asset sales, and the solutions to moral hazard and adverse selection could produce joint effects. Future research can explore other types of provisions that are not covered

by this paper. More details about contracting mechanisms and their relationship would help us better understand the nature of contracting in direct asset sales.

Figure 1. Two Contracting Stages

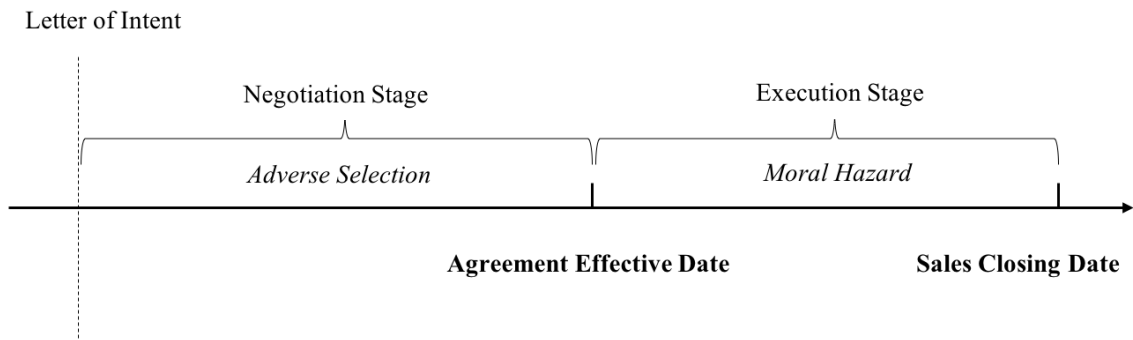
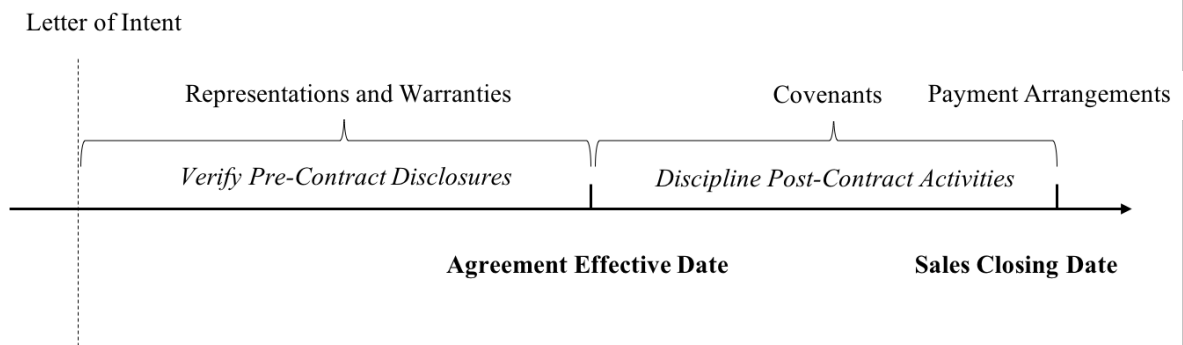


Figure 2. Three Categories of Contracting Mechanisms



Note: Figure 1 describes the two contracting stages of direct asset sales and two types of information frictions that impede the transaction process. Figure 2 shows three categories of contracting mechanisms that are found in direct asset sales agreements and the roles of the mechanisms. On the agreement effective date, sellers and buyers enter into direct asset sales agreements. On the sales closing date, they close the transactions by transferring the asset rights and making payments.

Table 1. Sample Selection

<i>Panel A. Agreement Collection</i>		
	#ASAs	#ASAs
Direct asset sales agreements found in the SEC filings (filer firms have following identifications: GVKEY, PERMNO, CUSIP, IBTIC, and CIK)		7,830
Delete Following Contracts:		
(1) Contracts filed by financial institutions (SIC: 6000 to 6999) or by firms from regulated industries (SIC: 4400 to 5000)	(1,374)	
(2) Amended agreements, addenda, or restated agreements	(942)	
(3) Contracts missing the agreement effective date	(169)	
(4) Ancillary agreements or repeated agreements	(533)	
(5) Contracts of de facto mergers	(1,595)	
(6) Contracts of direct asset sales related to mergers, joint ventures, and stock purchases	(521)	
Qualified Direct Asset Sales Agreements		2,696
<i>Panel B. Agreement Sample</i>		
	#ASAs	#ASAs
Qualified Direct Asset Sales Agreements		2,696
Randomly Selected Agreements		900
Delete Following Contracts:		
(1) Contracts engaging special entities or lacking required information	(55)	
(2) Contracts missing control variables	(24)	
(3) Duplicate contracts filed by both sides for the same transactions	(12)	
Final Agreement Sample		809

Note: Table 1 shows the procedures of sample selection, which result in a full sample of 2,696 direct asset sales agreements (“ASAs”) and a random sample of 809 ASAs. Special entities refer to individuals, proprietorships, and not-for-profit organizations.

Table 2. Agreement Distribution

<i>Panel A. Year Distribution</i>				
Agreement Effective Years	Random Sample 809 ASAs		Full Sample 2,696 ASAs	
	#ASAs	Fraction	#ASAs	Fraction
1990	0	0.00%	1	0.04%
1991	0	0.00%	0	0.00%
1992	0	0.00%	1	0.04%
1993	2	0.25%	4	0.15%
1994	9	1.11%	33	1.22%
1995	23	2.84%	66	2.45%
1996	47	5.81%	145	5.38%
1997	69	8.53%	222	8.23%
1998	54	6.67%	233	8.64%
1999	58	7.17%	185	6.86%
2000	38	4.70%	140	5.19%
2001	40	4.94%	128	4.75%
2002	36	4.45%	119	4.41%
2003	52	6.43%	127	4.71%
2004	44	5.44%	154	5.71%
2005	43	5.32%	155	5.75%
2006	52	6.43%	136	5.04%
2007	40	4.94%	121	4.49%
2008	18	2.22%	91	3.38%
2009	28	3.46%	74	2.74%
2010	22	2.72%	91	3.38%
2011	21	2.60%	79	2.93%
2012	23	2.84%	60	2.23%
2013	23	2.84%	79	2.93%
2014	22	2.72%	71	2.63%
2015	22	2.72%	76	2.82%
2016	14	1.73%	54	2.00%
2017	9	1.11%	51	1.89%
Total	809	100%	2,696	100%

(Continued on the next page)

*(Table 2 Continued)**Panel B. Industry Distribution*

Fama-French 49 Industries	Random Sample 809 ASAs		Full Sample 2,696 ASAs	
	#ASAs	Fraction	#ASAs	Fraction
1. Agriculture	3	0.37%	10	0.37%
2. Food Products	14	1.73%	44	1.63%
3. Candy & Soda	0	0.00%	2	0.07%
4. Beer & Liquor	5	0.62%	17	0.63%
5. Tobacco Products	0	0.00%	4	0.15%
6. Recreation	9	1.11%	24	0.89%
7. Entertainment	7	0.87%	34	1.26%
8. Printing and Publishing	17	2.10%	37	1.37%
9. Consumer Goods	8	0.99%	32	1.19%
10. Apparel	20	2.47%	36	1.34%
11. Healthcare	33	4.08%	128	4.75%
12. Medical Equipment	40	4.94%	126	4.67%
13. Pharmaceutical Products	69	8.53%	217	8.05%
14. Chemicals	15	1.85%	59	2.19%
15. Rubber and Plastic Products	9	1.11%	24	0.89%
16. Textiles	9	1.11%	19	0.70%
17. Construction Materials	14	1.73%	40	1.48%
18. Construction	8	0.99%	43	1.59%
19. Steel Works	9	1.11%	28	1.04%
20. Fabricated Products	5	0.62%	13	0.48%
21. Machinery	24	2.97%	79	2.93%
22. Electrical Equipment	34	4.20%	102	3.78%
23. Automobiles and Trucks	9	1.11%	33	1.22%
24. Aircraft	2	0.25%	14	0.52%
25. Shipbuilding, Railroad Equipment	1	0.12%	5	0.19%
26. Defense	2	0.25%	4	0.15%
27. Precious Metals	1	0.12%	3	0.11%
28. Non-Metallic and Industrial Metal Mining	3	0.37%	10	0.37%
29. Coal	1	0.12%	6	0.22%
30. Petroleum and Natural Gas	20	2.47%	72	2.67%

(Continued on the next page)

*(Table 2 Panel B Continued)**Panel B. Industry Distribution*

Fama-French 49 Industries	Random Sample 809 ASAs		Full Sample 2,696 ASAs	
	#ASAs	Fraction	#ASAs	Fraction
33. Personal Services	17	2.10%	39	1.45%
34. Business Services	60	7.42%	230	8.53%
35. Computers	25	3.09%	82	3.04%
36. Computer Software	86	10.63%	294	10.91%
37. Electronic Equipment	74	9.15%	207	7.68%
38. Measuring and Control Equipment	25	3.09%	76	2.82%
39. Business Supplies	10	1.24%	37	1.37%
40. Shipping Containers	1	0.12%	8	0.30%
41. Transportation	7	0.87%	17	0.63%
42. Wholesale	38	4.70%	155	5.75%
43. Retail	35	4.33%	118	4.38%
44. Restaurants, Hotels, Motels	23	2.84%	75	2.78%
Others	17	2.10%	93	3.45%
Total	809	100%	2,696	100%

Panel C. SEC Filing Distribution

SEC Filing Types	Random Sample 809 ASAs		Full Sample 2,696 ASAs	
	#ASAs	Fraction	#ASAs	Fraction
Current Reports	494	61.06%	1,667	61.83%
Periodic Reports	262	32.39%	868	32.20%
Registration Statements	53	6.55%	161	5.97%
Total	809	100%	2,696	100%

Note: Table 2 reports the distribution of 809 random sample ASAs (direct asset sales agreements) and 2,696 full sample ASAs over agreement effective years, Fama-French 49 industries, and SEC filing types. In Panel A, agreement effective years are the calendar years when sellers and buyers enter into direct asset sales agreements. Panel B excludes regulated industries (No.31 – Utilities and No.32 – Communication), financial industries (No.45 – Banking, No.46 – Insurance, No.47 – Real Estate, and No.48 – Trading), and unidentified industries (No.49). In Panel C, current reports include the SEC Filings 6-K, 8-K, and 8-KA; periodic reports comprise the SEC Filings 10-K, 10-KA, 10-Q, and 10-QA; registration statements refer to the SEC Filings S-1, S-1A, S-3, S-3A, S-4, and S-4A.

Panel A. Sellers' Contracting Mechanisms

(Continued on the next page)

*(Table 3 Continued)**Panel B. Buyers' Contracting Mechanisms*

	#ASAs	Sample Fraction		#ASAs	Sample Fraction
Financing Covenants	101	12.48%	Financial Condition Reps	308	38.07%
Accounting Covenants	16	1.98%	- Solvency	205	25.34%
Financial Covenants	4	0.49%	- Financing Commitment	76	9.39%
			- Capitalization	47	5.81%
	#ASAs	Sample Fraction			
Financial Information Reps	101	12.48%			
Undisclosed Liability Reps	14	1.73%			
Adverse Change Reps	28	3.46%			

Panel C. Payment Arrangements

	#ASAs	Sample Fraction		#ASAs	Sample Fraction
Cash	763	94.31%	Contingent Payments	141	17.43%
- Third-Party Escrow	233	28.80%	- Earnouts	75	9.27%
Non-Cash	232	28.68%	- Royalty	35	4.33%
- Equity	163	20.15%	- Others	46	5.69%
- Promissory Note	87	10.75%			

Note: Table 3 summarizes the accounting/financing/payment-related contracting mechanisms found in the 809 random sample ASAs (direct asset sales agreements). Panel A (B) presents sellers' (buyers') contracting mechanisms, and Panel C reports payment arrangements. The characteristics of these mechanisms are described in Section 5.3 Description of Contracting Mechanisms, and the concrete mechanism examples are provided in Appendix B Examples of Contracting Mechanisms.

Table 4. Descriptive Statistics

<i>Panel A. Variables of Sellers' Contracting Mechanisms</i>						
Variable Name	#ASAs	Mean	STD	25%	Median	75%
Accounting Covenants	809	0.3412	0.4744	0	0	1
Reporting Reps	809	0.3226	0.4678	0	0	1
Equity Payments	809	0.2015	0.4014	0	0	0
#Acc_Rep_Equity	809	0.8653	0.8591	0	1	1
#Acc_Rep	809	0.6638	0.7384	0	1	1
#Acc_Equity	809	0.5426	0.6418	0	0	1
#Int_Equity	809	0.5241	0.6212	0	0	1
D.Acc_Rep_Equity	809	0.0420	0.2008	0	0	0
D.Acc_Rep	809	0.1607	0.3675	0	0	0
D.Acc_Equity	809	0.0816	0.2739	0	0	0
D.Int_Equity	809	0.0680	0.2519	0	0	0
<i>Panel B. Variables of Buyers' Contracting Mechanisms</i>						
Variable Name	#ASAs	Mean	STD	25%	Median	75%
Financing Covenants	809	0.1248	0.3307	0	0	0
Liquidity Reps	809	0.2349	0.4242	0	0	0
Cash Payments	809	0.6082	0.4885	0	1	1
#Fin_Liq_Cash	809	0.9679	0.7844	0	1	1
#Fin_Liq	809	0.3597	0.5521	0	0	1
#Fin_Cash	809	0.7330	0.5869	0	1	1
#Liq_Cash	809	0.8430	0.7028	0	1	1
D.Fin_Liq_Cash	809	0.0284	0.1663	0	0	0
D.Fin_Liq	809	0.0371	0.1891	0	0	0
D.Fin_Cash	809	0.0742	0.2622	0	0	0
D.Liq_Cash	809	0.1805	0.3848	0	0	0

(Continued on the next page)

*(Table 4 Continued)**Panel C. Other Variables*

Variable Name	#ASAs	Mean	STD	25%	Median	75%
Private Seller	809	0.3770	0.4849	0	0	1
Private Buyer	809	0.3337	0.4718	0	0	1
International Deal	809	0.1211	0.3265	0	0	0
Price Ratio	809	0.1494	0.2205	0.0255	0.0751	0.1791
Asset Complexity	809	6.8387	0.7781	6.4457	6.9735	7.3827
Division Assets	809	0.4363	0.4962	0	0	1
Redaction	809	0.3449	0.4756	0	0	1
Current Report	809	0.6106	0.4879	0	1	1
Distance	809	6.1698	1.9733	5.5386	6.7459	7.5687
Total Assets	809	5.0578	1.6435	3.8856	4.9730	6.2052
Tobin's Q	809	2.0432	1.7776	1.1169	1.4703	2.2262
Altman Z-Score	809	-0.3078	4.7969	-0.8420	1.0902	1.9474
ROA	809	-0.1072	0.4035	-0.1433	0.0082	0.0708
Operating Risk	809	0.1510	0.2477	0.0439	0.0831	0.1373
Firm Age	809	15.3572	11.9473	7	12	20

Note: Table 4 reports the descriptive statistics of the variables constructed by analyzing the contractual provisions of ASAs (direct asset sales agreements). Panel A (B) presents the variables of sellers' (buyers') contracting mechanisms, and Panel C shows the other variables used in regression analyses. See Appendix A Variable Definitions for the detailed definitions of these variables.

Table 5. Individual Contracting Mechanisms

<i>Panel A. Individual Mechanisms Mitigating Sellers' Information Frictions</i>			
	(1) Accounting Covenants	(2) Reporting Reps	(3) Equity Payments
Private Seller	0.3624*** (3.18)	0.2303** (2.11)	0.6817*** (6.17)
International Deal	-0.2141 (-1.27)	-0.1674 (-1.04)	0.1403 (0.82)
Price Ratio	1.1461*** (4.19)	0.7758*** (3.18)	0.0676 (0.27)
Asset Complexity	0.3121*** (4.22)	0.3453*** (4.73)	0.0125 (0.17)
Division Assets	0.1286 (1.25)	0.2368** (2.41)	0.1359 (1.24)
Redaction	0.0013 (0.01)	0.0108 (0.10)	0.0551 (0.46)
Current Report	0.1805* (1.73)	0.2056** (2.01)	0.1094 (0.94)
Distance	-0.0050 (-0.20)	0.0260 (1.02)	0.0151 (0.52)
Total Assets	0.1947*** (5.00)	0.0136 (0.37)	-0.1305*** (-3.13)
Tobin's Q	0.0101 (0.31)	-0.0126 (-0.40)	0.0097 (0.32)
Altman Z-Score	-0.0153 (-0.99)	0.0028 (0.21)	0.0018 (0.13)
ROA	0.3148 (1.49)	0.0504 (0.30)	-0.0945 (-0.60)
Operating Risk	-0.4089* (-1.83)	-0.1542 (-0.67)	-0.2155 (-1.00)
Firm Age	-0.0022 (-0.51)	0.0016 (0.36)	-0.0133** (-2.53)
Intercept	-3.9069*** (-7.31)	-3.4749*** (-6.51)	-0.6573 (-1.20)
N	809	809	809
Pseudo R-squared	0.115	0.065	0.087
Marginal Pr(Private Seller)	+11.67%	+7.69%	+17.5%
Model Type	Probit	Probit	Probit
Industry FE	No	No	No
Year FE	No	No	No

(Continued on the next page)

(Table 5 Continued)

<i>Panel B. Individual Mechanisms Mitigating Buyers' Information Frictions</i>			
	(1)	(2)	(3)
	Financing Covenants	Liquidity Reps	Cash Payments
Private Buyer	0.3798*** (2.97)	0.2233** (1.98)	0.3513*** (3.37)
International Deal	0.1198 (0.60)	-0.0347 (-0.20)	-0.3824** (-2.52)
Price Ratio	1.2856*** (4.89)	0.4914* (1.96)	0.2369 (1.02)
Asset Complexity	0.0863 (1.06)	0.4106*** (4.75)	0.0012 (0.02)
Division Assets	0.1341 (1.05)	-0.1687 (-1.53)	-0.1437 (-1.55)
Redaction	-0.1895 (-1.41)	0.2121* (1.92)	-0.1968* (-1.90)
Current Report	0.1154 (0.88)	0.1219 (1.06)	0.1511 (1.47)
Distance	-0.0513* (-1.68)	0.0160 (0.59)	0.0311 (1.21)
Total Assets	0.1961*** (4.15)	0.1862*** (4.74)	0.2403*** (6.21)
Tobin's Q	0.0048 (0.10)	-0.0634* (-1.73)	-0.0291 (-1.02)
Altman Z-Score	-0.0002 (-0.01)	-0.0306** (-2.18)	-0.0143 (-1.09)
ROA	-0.2122 (-0.83)	0.2341 (1.15)	-0.0244 (-0.16)
Operating Risk	-0.4775* (-1.86)	0.1338 (0.54)	-0.3542* (-1.69)
Firm Age	-0.0037 (-0.73)	0.0131*** (2.82)	0.0039 (0.85)
Intercept	-2.8345*** (-4.36)	-4.9989*** (-7.99)	-1.1338** (-2.36)
N	809	809	809
Pseudo R-squared	0.104	0.145	0.079
Marginal Pr(Private Buyer)	+7.02%	+5.83%	+12.37%
Model Type	Probit	Probit	Probit
Industry FE	No	No	No
Year FE	No	No	No

Note: Table 5 reports the use of individual contracting mechanisms to mitigate the information frictions of direct asset sales. Panel A (B) shows association between the severity of seller-side (buyer-side) information frictions and the choice of different contracting mechanisms. In Panel A (B), Columns (1), (2), and (3) are based on a Probit model. The dependent variables in Panel A (B) are the indicator variables, which equal 1 if direct asset sales agreements use accounting (financing) covenants, reporting (liquidity) reps, or equity (cash) payments. In Panel A (B), the variable Private Seller (Private Buyer) equals 1 if sellers (buyers) are privately held firms. All the variables are defined in Appendix A Variable Definitions. The marginal probability row of Panel A (B) denotes the incremental likelihood of implementing accounting (financing) covenants, reporting (liquidity) reps, or equity (cash) payments if direct asset sales involve private sellers (buyers). Standard errors are clustered by filer firms. Z-statistics are presented inside the parentheses below the Probit regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

Table 6. Complementary Contracting Mechanisms

<i>Panel A. Mechanisms Mitigating Seller-Side Information Frictions</i>				
	(1)	(2)	(3)	(4)
	#Acc_Rep_Equity	#Acc_Rep	#Acc_Equity	#Rep_Equity
Private Seller	0.4075*** (5.81)	0.2077*** (3.43)	0.3293*** (6.40)	0.2780*** (5.58)
International Deal	-0.0821 (-0.79)	-0.1178 (-1.42)	-0.0236 (-0.31)	-0.0227 (-0.30)
Price Ratio	0.7370*** (4.83)	0.7079*** (5.05)	0.4441*** (3.58)	0.3220*** (3.18)
Asset Complexity	0.1914*** (4.75)	0.1867*** (5.57)	0.0917*** (2.91)	0.1042*** (3.58)
Division Assets	0.1193* (1.91)	0.0978* (1.87)	0.0503 (1.03)	0.0906* (1.94)
Redaction	0.0466 (0.68)	0.0132 (0.23)	0.0467 (0.91)	0.0332 (0.66)
Current Report	0.1495** (2.41)	0.1195** (2.24)	0.0807* (1.70)	0.0989** (2.14)
Distance	0.0061 (0.42)	0.0040 (0.31)	-0.0017 (-0.16)	0.0099 (0.90)
Total Assets	0.0530** (2.30)	0.0796*** (3.98)	0.0430** (2.49)	-0.0165 (-1.00)
Tobin's Q	0.0070 (0.37)	0.0047 (0.33)	0.0075 (0.51)	0.0018 (0.12)
Altman Z-Score	-0.0059 (-0.82)	-0.0049 (-0.86)	-0.0070 (-1.22)	-0.0000 (-0.01)
ROA	0.0488 (0.57)	0.0920 (1.40)	0.0387 (0.59)	-0.0330 (-0.45)
Operating Risk	-0.2165** (-2.08)	-0.1429* (-1.77)	-0.1574* (-1.76)	-0.1328 (-1.53)
Company Age	-0.0008 (-0.30)	0.0010 (0.41)	-0.0013 (-0.63)	-0.0013 (-0.68)
Intercept	-0.9898*** (-2.77)	-1.0104*** (-3.65)	-0.5779 (-1.46)	-0.3912 (-0.67)
N	809	809	809	809
Adj. R-squared	0.120	0.139	0.085	0.075
Model Type	OLS	OLS	OLS	OLS
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

(Continued on the next page)

*(Table 6 Continued)**Panel B. Mechanisms Mitigating Buyer-Side Information Frictions*

	(1)	(2)	(3)	(4)
	#Fin_Liq_Cash	#Fin_Liq	#Fin_Cash	#Liq_Cash
Private Buyer	0.2419*** (4.51)	0.1268*** (3.15)	0.1849*** (4.20)	0.1720*** (3.61)
International Deal	-0.0989 (-1.24)	0.0203 (0.34)	-0.0688 (-1.05)	-0.1493** (-2.04)
Price Ratio	0.5263*** (4.38)	0.4479*** (4.65)	0.3719*** (3.82)	0.2327* (1.91)
Asset Complexity	0.0893** (2.50)	0.0938*** (4.17)	0.0139 (0.47)	0.0710** (2.16)
Division Assets	-0.0690 (-1.30)	-0.0168 (-0.45)	-0.0355 (-0.88)	-0.0857* (-1.72)
Redaction	-0.0755 (-1.31)	-0.0015 (-0.04)	-0.0994** (-2.24)	-0.0502 (-0.92)
Current Report	0.1006* (1.81)	0.0408 (1.00)	0.0787* (1.86)	0.0816 (1.62)
Distance	0.0038 (0.30)	-0.0094 (-1.02)	0.0022 (0.21)	0.0148 (1.18)
Total Assets	0.1707*** (9.34)	0.0841*** (5.99)	0.1222*** (8.18)	0.1350*** (8.02)
Tobin's Q	-0.0130 (-0.85)	-0.0028 (-0.27)	-0.0058 (-0.43)	-0.0175 (-1.28)
Altman Z-Score	-0.0117 (-1.59)	-0.0035 (-0.82)	-0.0090 (-1.52)	-0.0108 (-1.55)
ROA	-0.0387 (-0.51)	-0.0397 (-0.74)	-0.0419 (-0.63)	0.0044 (0.06)
Operating Risk	-0.1861** (-2.00)	-0.0490 (-0.80)	-0.2095** (-2.44)	-0.1136 (-1.30)
Company Age	0.0027 (1.16)	0.0019 (1.05)	0.0010 (0.54)	0.0026 (1.19)
Intercept	-0.5398 (-0.52)	-0.5122 (-0.88)	0.2044 (0.22)	-0.7718 (-1.23)
N	809	809	809	809
Adj. R-squared	0.227	0.211	0.144	0.177
Model Type	OLS	OLS	OLS	OLS
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Note: Table 6 reports the use of complementary contracting mechanisms to mitigate the information frictions of direct asset sales. Panel A (B) shows association between the severity of seller-side (buyer-side) information frictions and the use of complementary mechanisms, which can include accounting (financing) covenants, reporting (liquidity) reps, or equity (cash) payments. All the regression analyses of Panel A and B are based on an OLS model in which year and industry fixed effects are controlled. The dependent variable *#Acc_Rep_Equity* (*#Fin_Liq_Cash*) of Panel A (B) equals 0, 1, 2, or 3, measuring the choice of the three contracting mechanisms that sellers (buyers) comply with. Similarly, the other dependent variables of Panel A (B) equal 0, 1, or 2, measuring the choice of the two contracting mechanisms that sellers (buyers) comply with. In Panel A (B), the variable *Private Seller* (*Private Buyer*) equals 1 if sellers (buyers) are privately held firms. All the variables are defined in Appendix A Variable Definitions. Standard errors are clustered by filer firms. T-statistics are presented inside the parentheses below the OLS regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

Table 7. Prevalence of Mechanism Complementarity

<i>Panel A. Complementary Mechanisms Mitigating Sellers' Information Frictions</i>				
	(1)	(2)	(3)	(4)
	D.Acc_Rep_Equity	D.Acc_Rep	D.Acc_Equity	D.Rep_Equity
Private Seller	0.7362*** (3.97)	0.3295** (2.39)	0.8310*** (5.72)	0.6742*** (4.39)
International Deal	0.3913* (1.65)	-0.0746 (-0.39)	0.1448 (0.68)	0.2530 (1.21)
Price Ratio	0.6462* (1.91)	1.0745*** (3.94)	0.7111** (2.42)	-0.0701 (-0.22)
Asset Complexity	0.0332 (0.29)	0.2315*** (2.60)	0.1726* (1.68)	0.0557 (0.59)
Division Assets	0.3058* (1.74)	0.2697** (2.19)	0.2744** (1.98)	0.2634* (1.82)
Redaction	0.4007** (2.31)	0.0277 (0.22)	0.2315 (1.56)	0.3399** (2.30)
Current Report	0.4326** (2.33)	0.2415** (2.04)	0.2788* (1.87)	0.5403*** (3.46)
Distance	0.0082 (0.20)	0.0014 (0.05)	0.0100 (0.29)	0.0242 (0.65)
Total Assets	0.0101 (0.16)	0.1425*** (3.10)	-0.0686 (-1.26)	-0.0544 (-1.01)
Tobin's Q	0.0679 (1.37)	0.0378 (1.03)	0.0333 (0.83)	-0.0048 (-0.11)
Altman Z-Score	0.0094 (0.36)	0.0029 (0.18)	-0.0000 (-0.00)	-0.0139 (-0.65)
ROA	0.3690 (1.24)	0.2424 (1.09)	0.4037* (1.92)	0.1084 (0.43)
Operating Risk	-0.2389 (-0.68)	-0.5553* (-1.92)	-0.1948 (-0.64)	-0.1315 (-0.54)
Firm Age	0.0023 (0.34)	-0.0005 (-0.10)	-0.0006 (-0.11)	-0.0101 (-1.36)
Intercept	-3.3338*** (-3.68)	-3.9299*** (-5.89)	-3.2528*** (-4.54)	-2.5475*** (-3.56)
N	809	809	809	809
Pseudo R-squared	0.133	0.096	0.118	0.101
Marginal Pr(Private Seller)	+5.8%	+7.26%	+11.11%	+7.99%
Model Type	Probit	Probit	Probit	Probit
Industry FE	No	No	No	No
Year FE	No	No	No	No

(Continued on the next page)

*(Table 7 Continued)**Panel B. Complementary Mechanisms Mitigating Buyers' Information Frictions*

	(1)	(2)	(3)	(4)
	D.Fin_Liq_Cash	D.Fin_Liq	D.Fin_Cash	D.Liq_Cash
Private Buyer	0.4992** (2.26)	0.4880*** (2.61)	0.5395*** (3.58)	0.1702 (1.41)
International Deal	-0.8211 (-1.51)	-0.3540 (-0.86)	-0.0958 (-0.39)	-0.4373** (-2.19)
Price Ratio	1.1427*** (2.80)	1.3167*** (3.59)	1.0519*** (3.51)	0.5421** (2.01)
Asset Complexity	0.5712** (2.28)	0.4462** (2.38)	0.0885 (0.83)	0.4610*** (4.42)
Division Assets	-0.1308 (-0.62)	-0.1099 (-0.57)	0.1058 (0.71)	-0.1641 (-1.41)
Redaction	-0.0658 (-0.30)	-0.1105 (-0.54)	-0.3214** (-2.06)	0.1122 (0.93)
Current Report	0.0514 (0.23)	0.0690 (0.34)	0.1894 (1.20)	0.2472** (1.97)
Distance	0.0579 (1.11)	0.0208 (0.44)	-0.0178 (-0.51)	0.0407 (1.35)
Total Assets	0.3489*** (4.72)	0.2943*** (4.50)	0.3082*** (5.78)	0.2192*** (5.26)
Tobin's Q	-0.2649** (-2.01)	-0.2320* (-1.87)	0.0381 (0.57)	-0.0598 (-1.40)
Altman Z-Score	0.0431 (1.28)	0.0374 (0.89)	-0.0185 (-0.68)	-0.0471*** (-2.99)
ROA	-0.7923*** (-3.02)	-0.4811 (-1.17)	0.5506 (1.25)	0.2003 (0.80)
Operating Risk	-0.1706 (-0.40)	-0.2775 (-0.54)	-0.0792 (-0.26)	-0.9178** (-2.23)
Firm Age	-0.0064 (-0.88)	-0.0003 (-0.05)	-0.0063 (-1.02)	0.0081* (1.72)
Intercept	-8.2460*** (-3.98)	-6.8000*** (-4.48)	-4.0316*** (-4.76)	-5.7085*** (-7.73)
N	809	809	809	809
Pseudo R-squared	0.265	0.234	0.150	0.175
Marginal Pr(Private Buyer)	+2.51%	+3.14%	+6.51%	+3.69%
Model Type	Probit	Probit	Probit	Probit
Industry FE	No	No	No	No
Year FE	No	No	No	No

Note: Table 7 reports the prevalence of mechanism complementarity in direct asset sales. Panel A (B) shows association between the severity of seller-side (buyer-side) information frictions and the use of complementary contracting mechanisms, which include accounting (financing) covenants, reporting (liquidity) reps, and equity (cash) payments. In Panel A (B), Columns (1), (2), (3), and (4) are based on a Probit model. The dependent variable D.Acc_Rep_Equity (D.Fin_Liq_Cash) of Panel A (B) is an indicator variable, which equals 1 if direct asset sales agreements impose the three contracting mechanisms on sellers (buyers) in the same contracts. The other dependent variables of Panel A (B) are also indicator variables equal to 1 if direct asset sales agreements use a pair of contracting mechanisms for sellers (buyers). In Panel A (B), the variable Private Seller (Private Buyer) equals 1 if sellers (buyers) are privately held firms. All the variables are defined in Appendix A Variable Definitions. Standard errors are clustered by filer firms. Z-statistics are presented inside the parentheses below the Probit regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

Table 8. Relationship between Payment and Non-Payment Mechanisms

	(1) Equity Payments	(2) Seller Non- Payment Mechanisms	(3) Cash Payments	(4) Buyer Non- Payment Mechanisms
Equity payments		1.3237*** (3.49)		
Cash payments				1.5045*** (13.77)
Post SFAS 141	-0.5880*** (-4.12)		0.3510*** (3.62)	
Private Seller	0.7234*** (6.64)	0.0213 (0.14)		
Private Buyer			0.3392*** (3.28)	0.0376 (0.37)
International Deal	0.1029 (0.60)	-0.3122** (-2.14)	-0.3754** (-2.41)	0.2886* (1.96)
Price Ratio	0.0148 (0.06)	1.0619*** (3.35)	0.2607 (1.14)	0.6445*** (2.79)
Asset Complexity	-0.0004 (-0.01)	0.3798*** (4.58)	-0.0370 (-0.56)	0.2081*** (3.16)
Division Assets	0.1182 (1.07)	0.0929 (0.95)	-0.1418 (-1.57)	0.0434 (0.50)
Redaction	0.1515 (1.25)	-0.0253 (-0.26)	-0.2733*** (-2.64)	0.1693* (1.79)
Current Report	0.1615 (1.39)	0.1428 (1.40)	0.1447 (1.43)	0.0222 (0.23)
Distance	0.0159 (0.55)	0.0116 (0.47)	0.0291 (1.15)	-0.0389 (-1.62)
Total Assets	-0.1170*** (-2.76)	0.1407*** (4.07)	0.2299*** (5.95)	0.0309 (0.77)
Tobin's Q	0.0029 (0.09)	-0.0219 (-0.78)	-0.0181 (-0.62)	0.0056 (0.18)
Altman Z-Score	-0.0066 (-0.48)	-0.0105 (-0.82)	-0.0126 (-1.03)	-0.0110 (-0.98)
ROA	-0.1032 (-0.70)	0.2031 (1.27)	0.0359 (0.22)	0.0629 (0.36)
Operating Risk	-0.2212 (-1.02)	-0.1228 (-0.60)	-0.3613* (-1.70)	0.1608 (0.72)
Firm Age	-0.0090* (-1.73)	0.0035 (0.85)	0.0009 (0.20)	0.0046 (1.16)

(Continued on the next page)

(Table 8 Continued)

Intercept	-0.6549 (-1.15)	-3.8573*** (-6.50)	-0.8387* (-1.72)	-2.9803*** (-5.61)
N	809	809	809	809
Model Type	Bivariate Probit		Bivariate Probit	

Note: Table 8 analyzes the relationship between payment and non-payment mechanisms of direct asset sales agreements. Columns (1) and (2) show the two equations of a bivariate Probit model, which take into account the endogenous selection of equity payments as part of special payment arrangements. Columns (3) and (4) present the two equations of another bivariate Probit model, which account for the endogenous inclusion of cash payments into special payment arrangements. *Equity Payments* is an indicator variable that equals 1 if the payment arrangements rely on equity. *Cash Payments* is an indicator variable equal to 1 if the payment arrangements specify cash but excludes other delayed payments, such as equity payments, promissory notes payments, and contingent payments. *Post SFAS 141* is an indicator variable equal to 1 if the agreement became effective after January 1, 2009. The indicator variable *Private Seller (Private Buyer)* equals 1 if sellers (buyers) are privately held firms. Other variables are defined in Appendix A Variable Definitions. Standard errors are clustered by filer firms. Z-statistics are presented inside the parentheses below the Probit regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

Table 9. Expected Contract Duration

	(1) Expected Closing Date	(2) Expected Contract Duration	(3) Expected Contract Duration
Intercept	0.7695*** (5.88)	2.3351** (2.36)	1.9159* (1.93)
Price Ratio	-0.5276** (-2.53)	2.4318*** (4.43)	2.5457*** (4.66)
Inventory	-0.1539 (-1.51)		
#Buyer Reps	-0.0577*** (-3.15)		
Accounting Covenants		0.5419*** (3.06)	
Financing Covenants			0.5452** (2.32)
Private Seller		-0.1148 (-0.65)	
Private Buyer			-0.2028 (-1.22)
International Deal		0.3612 (1.38)	0.3076 (1.19)
Asset Complexity		-0.1257 (-1.04)	-0.1068 (-0.88)
Division Assets		0.1768 (1.05)	0.1834 (1.09)
Redaction		0.0160 (0.09)	0.0213 (0.12)
Current Report		-0.0574 (-0.34)	-0.0287 (-0.17)
Distance		0.0001 (0.00)	-0.0004 (-0.01)
Total Assets		0.3607*** (5.96)	0.3728*** (6.32)
Tobin's Q		-0.0179 (-0.35)	-0.0269 (-0.51)
Altman Z-Score		-0.0187 (-0.74)	-0.0264 (-1.09)
ROA		-0.0228 (-0.10)	0.0465 (0.21)
Operating Risk		-0.5564* (-1.86)	-0.5943* (-1.93)

(Continued on the next page)

(Table 9 Continued)

Firm Age		0.0118 (1.56)	0.0128* (1.67)
Inverse Mills Ratio		-0.4332 (-0.41)	-0.2815 (-0.27)
N	809	481	481
Pseudo/Adj. R-squared	0.022	0.156	0.149
Model Type	Probit	OLS	OLS
Industry FE	No	Yes	Yes
Year FE	No	Yes	Yes

Note: Table 9 reports the determinants of the expected contract duration of direct asset sales agreements. Based on OLS models, Columns (2) and (3) comprise the inverse mills ratio calculated by the Heckman selection model listed in Column (1). *Expected Closing Date* is an indicator variable equal to 1 if the agreement explicitly specifies the date by which the transaction is expected to close. *Expected Contract Duration* is the logarithm value of the number of days between the agreement effective date and the expected closing date. *Price Ratio* is the ratio of the purchase price of the direct asset sales to the total assets of the filer firm. The indicator variable *Inventory* equals 1 if the agreement contains inventory-related representations and warranties. *#Buyer Reps* describes the number of representations and warranties that buyers comply with. When accounting (financing) covenants are specified by the agreement, the indicator variable *Accounting (Financing) Covenants* is equal to 1. *Private Seller (Private Buyer)* equals 1 if sellers (buyers) are privately held firms. Other variables are defined in Appendix A Variable Definitions. Standard errors are clustered by filer firms. Z-statistics (T-statistics) are presented inside the parentheses below the Probit (OLS) regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

APPENDICES

Figure A1. Agreement Distribution by Year

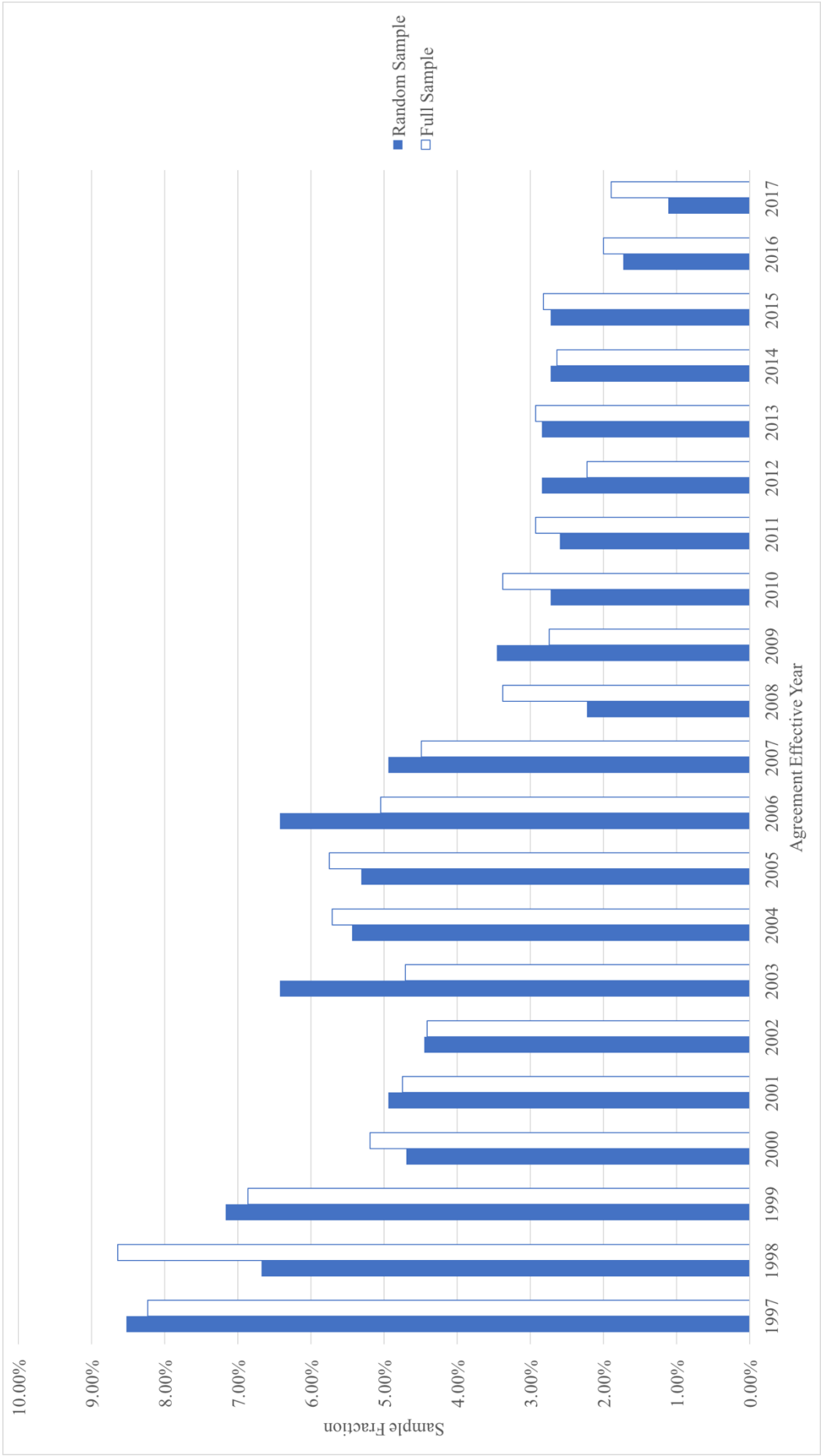


Figure A2. Agreement Distribution by Industry

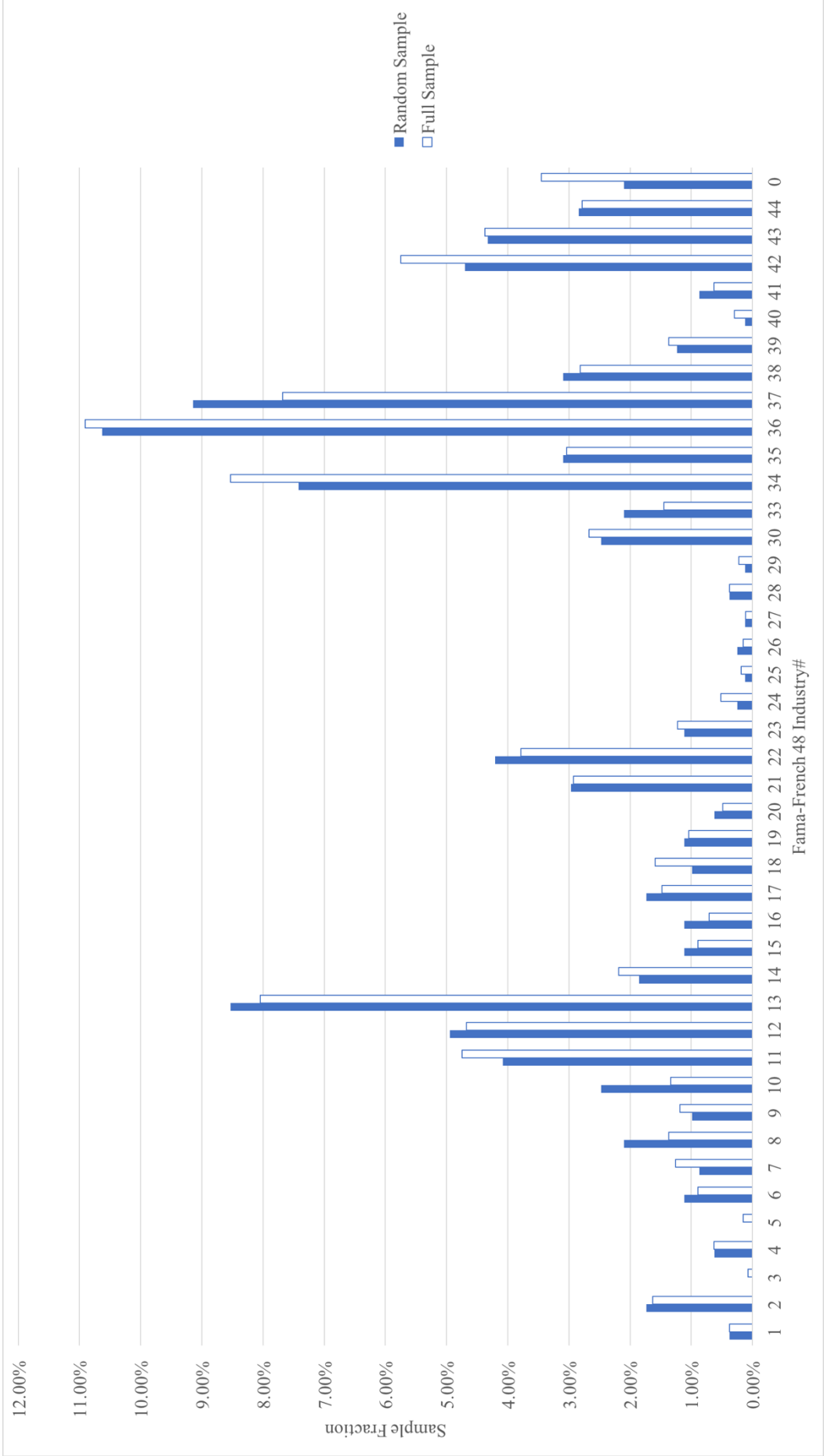
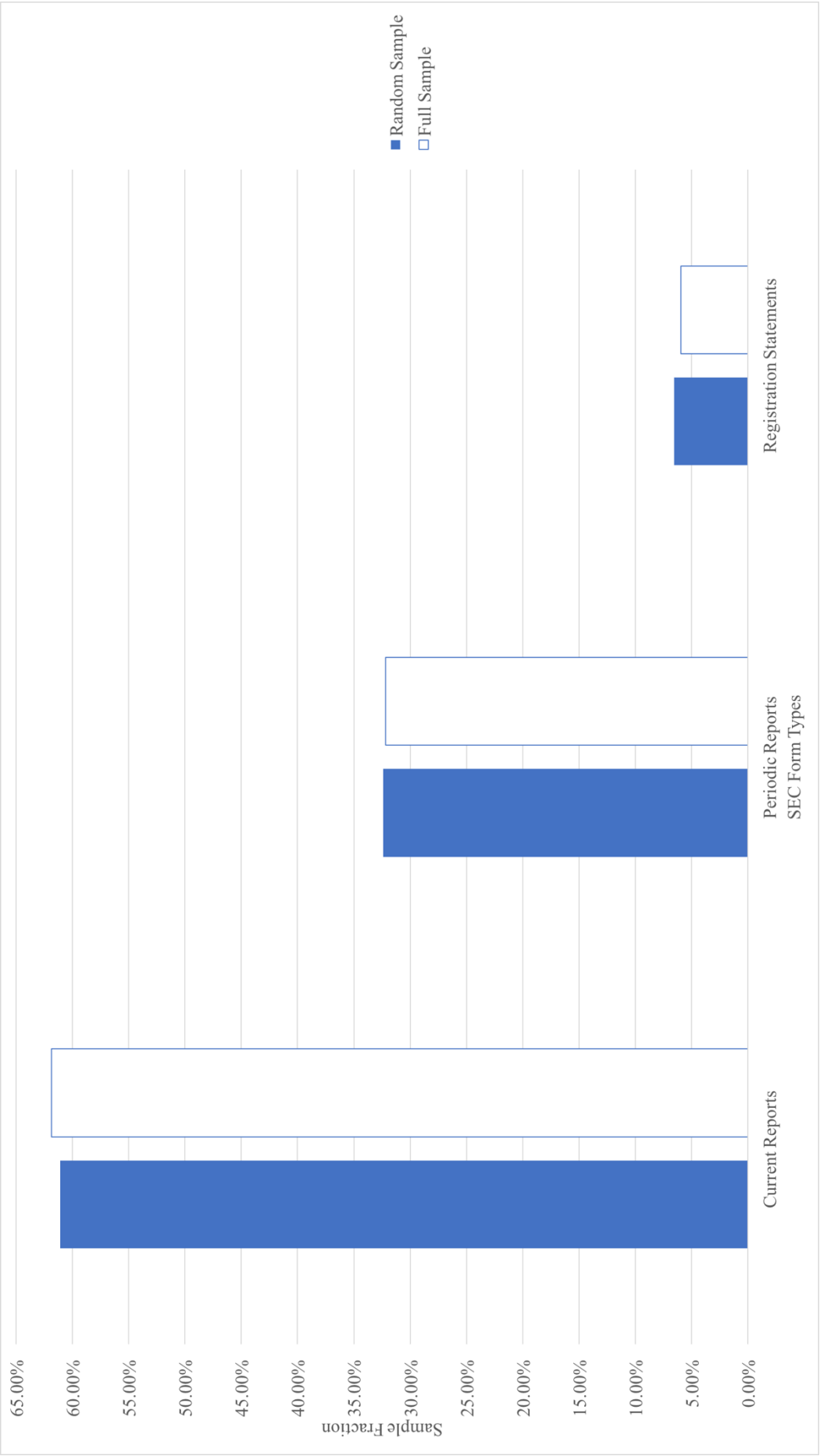


Figure A3. Agreement Distribution by SEC Form



Note: Figure A1 describes the year distribution of the collected direct asset sales agreements. The year refers to the agreement effective year. Figure A2 presents the industry distribution of the collected direct asset sales agreements. The industry classification is based on Fama-French 48 industries. Figure A3 reports the distribution by the SEC Form. In each figure, the solid bar represents the random sample, which includes 809 agreements, and the blank bar stands for the full sample, which comprises 2,696 agreements.

**Table A1. Individual Contracting Mechanisms
Robustness Test after Controlling for Fixed Effects**

<i>Panel A. Individual Mechanisms Mitigating Sellers' Information Frictions</i>			
	(1)	(2)	(3)
	Accounting Covenants	Reporting Reps	Equity Payments
Private Seller	0.1295*** (3.46)	0.0782** (2.05)	0.1998*** (6.25)
International Deal	-0.0594 (-1.11)	-0.0585 (-1.10)	0.0358 (0.79)
Price Ratio	0.4150*** (4.52)	0.2929*** (3.20)	0.0291 (0.40)
Asset Complexity	0.0871*** (4.07)	0.0996*** (4.72)	0.0046 (0.22)
Division Assets	0.0288 (0.81)	0.0691** (2.00)	0.0215 (0.68)
Redaction	0.0134 (0.37)	-0.0002 (-0.00)	0.0333 (1.04)
Current Report	0.0506 (1.44)	0.0689** (1.99)	0.0301 (0.97)
Distance	-0.0038 (-0.46)	0.0078 (0.92)	0.0021 (0.29)
Total Assets	0.0696*** (5.43)	0.0100 (0.76)	-0.0266*** (-2.61)
Tobin's Q	0.0052 (0.55)	-0.0005 (-0.05)	0.0023 (0.24)
Altman Z-Score	-0.0059 (-1.51)	0.0010 (0.25)	-0.0011 (-0.25)
ROA	0.0819* (1.87)	0.0101 (0.22)	-0.0432 (-0.84)
Operating Risk	-0.0837 (-1.64)	-0.0591 (-0.88)	-0.0736 (-1.17)
Firm Age	0.0005 (0.30)	0.0005 (0.32)	-0.0018 (-1.55)
Intercept	-0.5985 (-1.33)	-0.4119 (-0.93)	0.0207 (0.10)
N	809	809	809
Adjusted R-squared	0.117	0.063	0.072
Model Type	OLS	OLS	OLS
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

(Continued on the next page)

*(Table A1 Continued)**Panel B. Individual Mechanisms Mitigating Buyers' Information Frictions*

	(1) Financing Covenants	(2) Liquidity Reps	(3) Cash Payments
Private Buyer	0.0699*** (2.64)	0.0569* (1.86)	0.1151*** (3.18)
International Deal	0.0504 (1.31)	-0.0301 (-0.63)	-0.1192** (-2.14)
Price Ratio	0.2936*** (3.89)	0.1544** (2.02)	0.0784 (0.90)
Asset Complexity	0.0183 (1.21)	0.0755*** (4.38)	-0.0044 (-0.17)
Division Assets	0.0167 (0.68)	-0.0335 (-1.14)	-0.0522 (-1.46)
Redaction	-0.0253 (-0.98)	0.0238 (0.72)	-0.0740* (-1.90)
Current Report	0.0190 (0.77)	0.0218 (0.72)	0.0597 (1.59)
Distance	-0.0110 (-1.62)	0.0016 (0.22)	0.0132 (1.40)
Total Assets	0.0357*** (3.88)	0.0484*** (4.47)	0.0866*** (6.67)
Tobin's Q	0.0045 (0.54)	-0.0073 (-1.13)	-0.0102 (-0.90)
Altman Z-Score	-0.0008 (-0.32)	-0.0027 (-0.75)	-0.0081 (-1.54)
ROA	-0.0430 (-1.04)	0.0033 (0.10)	0.0011 (0.02)
Operating Risk	-0.0725** (-2.30)	0.0235 (0.47)	-0.1370* (-1.70)
Firm Age	0.0002 (0.14)	0.0017 (1.18)	0.0008 (0.54)
Intercept	0.2320 (0.49)	-0.7442*** (-4.05)	-0.0276 (-0.05)
N	809	809	809
Adjusted R-squared	0.092	0.187	0.075
Model Type	OLS	OLS	OLS
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Note: Table A1 reports the use of individual contracting mechanisms to mitigate the information frictions of direct asset sales. Panel A (B) shows association between the severity of seller-side (buyer-side) information frictions and the choice of different contracting mechanisms. In Panel A (B), Columns (1), (2), and (3) rely on an OLS model in which year and industry fixed effects are controlled. The dependent variables in Panel A (B) are the indicator variables, which equal 1 if direct asset sales agreements use accounting (financing) covenants, reporting (liquidity) reps, or equity (cash) payments. In Panel A (B), the variable *Private Seller (Private Buyer)* equals 1 if sellers (buyers) are privately held firms. All the variables are defined in Appendix A Variable Definitions. The marginal probability row of Panel A (B) denotes the incremental likelihood of implementing accounting (financing) covenants, reporting (liquidity) reps, or equity (cash) payments if direct asset sales involve private sellers (buyers). Standard errors are clustered by filer firms. T-statistics are presented inside the parentheses below the OLS regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

**Table A2. Prevalence of Mechanism Complementarity
Robustness Test after Controlling for Fixed Effects**

<i>Panel A. Complementary Mechanisms Mitigating Sellers' Information Frictions</i>				
	(1)	(2)	(3)	(4)
	D.Acc_Rep_Equity	D.Acc_Rep	D.Acc_Equity	D.Rep_Equity
Private Seller	0.0682*** (3.66)	0.0771** (2.40)	0.1270*** (5.32)	0.0909*** (4.04)
International Deal	0.0320 (1.21)	-0.0176 (-0.44)	0.0266 (0.86)	0.0305 (0.96)
Price Ratio	0.0630 (1.60)	0.2711*** (3.37)	0.1138* (1.89)	-0.0033 (-0.08)
Asset Complexity	0.0013 (0.14)	0.0369** (2.24)	0.0211 (1.61)	0.0073 (0.61)
Division Assets	0.0228 (1.41)	0.0488* (1.79)	0.0352 (1.61)	0.0291 (1.42)
Redaction	0.0328* (1.79)	-0.0015 (-0.05)	0.0408* (1.75)	0.0453** (2.08)
Current Report	0.0300** (2.13)	0.0438* (1.65)	0.0308 (1.52)	0.0586*** (3.33)
Distance	-0.0006 (-0.18)	-0.0005 (-0.07)	-0.0002 (-0.04)	0.0014 (0.31)
Total Assets	0.0037 (0.71)	0.0348*** (3.29)	-0.0054 (-0.72)	-0.0029 (-0.46)
Tobin's Q	0.0069 (1.37)	0.0116* (1.72)	0.0050 (0.81)	-0.0008 (-0.13)
Altman Z-Score	0.0008 (0.57)	0.0004 (0.14)	-0.0011 (-0.52)	-0.0014 (-0.53)
ROA	0.0187 (1.07)	0.0301 (1.06)	0.0416* (1.83)	0.0020 (0.06)
Operating Risk	-0.0215 (-1.06)	-0.0743** (-2.30)	-0.0283 (-0.74)	-0.0259 (-0.82)
Firm Age	0.0004 (0.60)	0.0001 (0.08)	0.0007 (0.77)	-0.0007 (-0.91)
Intercept	-0.1065 (-1.20)	-0.4883*** (-3.30)	-0.2805** (-2.50)	-0.1571 (-1.39)
N	809	809	809	809
Adjusted R-squared	0.027	0.062	0.051	0.021
Model Type	OLS	OLS	OLS	OLS
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

(Continued on the next page)

*(Table A2 Continued)**Panel B. Complementary Mechanisms Mitigating Buyers' Information Frictions*

	(1)	(2)	(3)	(4)
	D.Fin_Liq_Cash	D.Fin_Liq	D.Fin_Cash	D.Liq_Cash
Private Buyer	0.0244* (1.71)	0.0328** (2.10)	0.0635*** (2.87)	0.0380 (1.37)
International Deal	-0.0242 (-1.64)	-0.0221 (-1.17)	0.0183 (0.63)	-0.1054*** (-2.70)
Price Ratio	0.0518 (1.63)	0.0978** (2.37)	0.1052* (1.89)	0.1372** (1.98)
Asset Complexity	0.0159** (2.35)	0.0147** (1.96)	0.0131 (1.06)	0.0640*** (4.09)
Division Assets	-0.0107 (-0.97)	-0.0129 (-1.01)	0.0013 (0.07)	-0.0313 (-1.18)
Redaction	-0.0142 (-1.04)	-0.0152 (-0.99)	-0.0307 (-1.60)	0.0020 (0.07)
Current Report	-0.0027 (-0.21)	-0.0043 (-0.29)	0.0295 (1.54)	0.0412 (1.50)
Distance	0.0019 (0.80)	-0.0001 (-0.02)	-0.0024 (-0.51)	0.0072 (1.09)
Total Assets	0.0181*** (3.82)	0.0218*** (3.86)	0.0356*** (4.85)	0.0541*** (5.62)
Tobin's Q	-0.0021 (-1.01)	-0.0024 (-0.99)	0.0040 (0.65)	-0.0029 (-0.51)
Altman Z-Score	0.0004 (0.43)	0.0010 (0.86)	-0.0025 (-1.27)	-0.0064* (-1.89)
ROA	-0.0208*** (-2.60)	-0.0211** (-2.16)	0.0131 (0.65)	-0.0140 (-0.51)
Operating Risk	-0.0087 (-0.82)	-0.0107 (-0.79)	-0.0150 (-0.64)	-0.0879*** (-2.80)
Firm Age	0.0000 (0.02)	0.0006 (0.72)	-0.0005 (-0.45)	0.0005 (0.40)
Intercept	-0.1811*** (-2.96)	-0.1812*** (-2.58)	0.2710 (0.65)	-0.7236*** (-4.57)
N	809	809	809	809
Adjusted R-squared	0.059	0.072	0.094	0.178
Model Type	OLS	OLS	OLS	OLS
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Note: Table A2 reports the prevalence of mechanism complementarity in direct asset sales. Panel A (B) shows association between the severity of seller-side (buyer-side) information frictions and the use of complementary contracting mechanisms, which include accounting (financing) covenants, reporting (liquidity) reps, and equity (cash) payments. In Panel A (B), Columns (1), (2), (3), and (4) rely on an OLS model in which year and industry fixed effects are controlled. The dependent variable D.Acc_Rep_Equity (D.Fin_Liq_Cash) of Panel A (B) is an indicator variable, which equals 1 if direct asset sales agreements impose the three contracting mechanisms on sellers (buyers) in the same contracts. The other dependent variables of Panel A (B) are also indicator variables equal to 1 if direct asset sales agreements use a pair of contracting mechanisms for sellers (buyers). In Panel A (B), the variable Private Seller (Private Buyer) equals 1 if sellers (buyers) are privately held firms. All the variables are defined in Appendix A Variable Definitions. Standard errors are clustered by filer firms. T-statistics are presented inside the parentheses below the OLS regression coefficients. *, **, and *** indicate statistical significance at the level of 10%, 5%, and 1%, respectively.

Appendix A: Variable Definitions

A.1 Variables of Sellers' Contracting Mechanisms

- *Accounting Covenants*: an indicator variable equal to 1 if sellers are regulated by accounting covenants, which require sellers to deliver post-contract financial information or forbid sellers to arbitrarily modify accounting policies.
- *Reporting Reps*: an indicator variable equal to 1 if sellers make representations and warranties regarding their pre-contract interim financial information, which is defined as the unaudited financial information of an interim period prior to the agreement effective date.
- *Equity Payments*: an indicator variable equal to 1 if the payment arrangements specify equity payments.
- *#Acc_Rep_Equity*: equal to 0, 1, 2, or 3 and capturing the number of sellers' contracting mechanisms, such as accounting covenants, reporting reps, and equity payments.
- *#Acc_Rep*: equal to 0, 1, or 2 and capturing the number of sellers' contracting mechanisms, such as accounting covenants and reporting reps.
- *#Acc_Equity*: equal to 0, 1, or 2 and capturing the number of sellers' contracting mechanisms, such as accounting covenants and equity payments.
- *#Rep_Equity*: equal to 0, 1, or 2 and capturing the number of sellers' contracting mechanisms, such as reporting reps and equity payments.
- *D.Acc_Rep_Equity*: an indicator variable equal to 1 if direct asset sales agreements include sellers' contracting mechanisms, such as accounting covenants, reporting reps, and equity payments.
- *D.Acc_Rep*: an indicator variable equal to 1 if direct asset sales agreements include sellers' contracting mechanisms, such as accounting covenants and reporting reps.
- *D.Acc_Equity*: an indicator variable equal to 1 if direct asset sales agreements include sellers' contracting mechanisms, such as accounting covenants and equity payments.
- *D.Rep_Equity*: an indicator variable equal to 1 if direct asset sales agreements include sellers' contracting mechanisms, such as reporting reps and equity payments.

A.2 Variables of Buyers' Contracting Mechanisms

- *Financing Covenants*: an indicator variable equal to 1 if buyers are regulated by financing covenants, which require buyers to prepare adequate funds before closing direct asset sales.
- *Liquidity Reps*: an indicator variable equal to 1 if buyers do not make equity payments, do not make representations and warranties about their capitalization, but make representations and warranties about their pre-contract liquidity condition, which typically specifies that buyers have sufficient funds or have entered into credit arrangements.
- *Cash Payments*: an indicator variable equal to 1 if the payment arrangements require the entire purchase price to be paid in cash and exclude delayed payments, such as equity payments, promissory notes payments, and contingent payments.
- *#Fin_Liq_Cash*: equal to 0, 1, 2, or 3 and capturing the number of buyers' contracting mechanisms, such as financing covenants, liquidity reps, and cash payments.
- *#Fin_Liq*: equal to 0, 1, or 2 and capturing the number of buyers' contracting mechanisms, such as financing covenants and liquidity reps.
- *#Fin_Cash*: equal to 0, 1, or 2 and capturing the number of buyers' contracting mechanisms, such as financing covenants and cash payments.
- *#Liq_Cash*: equal to 0, 1, or 2 and capturing the number of buyers' contracting

mechanisms, such as liquidity reps and cash payments.

- *D.Fin_Liq_Cash*: an indicator variable equal to 1 if direct asset sales agreements include buyers' contracting mechanisms, such as financing covenants, liquidity reps, and cash payments.
- *D.Fin_Liq*: an indicator variable equal to 1 if direct asset sales agreements include buyers' contracting mechanisms, such as financing covenants and liquidity reps.
- *D.Fin_Cash*: an indicator variable equal to 1 if direct asset sales agreements include buyers' contracting mechanisms, such as financing covenants and cash payments.
- *D.Liq_Cash*: an indicator variable equal to 1 if direct asset sales agreements include buyers' contracting mechanisms, such as liquidity reps and cash payments.

A.3 Other Variables

- *Private Seller*: an indicator variable equal to 1 if the seller is a privately held firm.
- *Private Buyer*: an indicator variable equal to 1 if the buyer is a privately held firm.
- *International Deal*: an indicator variable equal to 1 if either the buyer or the seller is an international firm.
- *Price Ratio*: the ratio of the purchase price of the direct asset sales to the total assets of the filer firm.
- *Asset Complexity*: the logarithm value of the number of words that describe the target assets' components.
- *Division Assets*: an indicator variable equal to 1 if target assets constitute a subsidiary, a division, or a segment.
- *Redaction*: an indicator variable equal to 1 if the filer firm redacts certain information in direct asset sales agreements.
- *Current Report*: an indicator variable equal to 1 if the filer firm discloses the direct asset sales agreement through an SEC current report.
- *Distance*: the logarithm value of the number of miles between the headquarters of the seller and the buyer.
- *Total Assets*: the logarithm value of the filer firm's total assets.
- *Tobin's Q*: the filer firm's Tobin's Q ratio calculated by dividing assets' market value by assets' book value.
- *Altman Z-Score*: the filer firm's Altman Z-score calculated by following the formula of Leary and Roberts (2014).
- *ROA*: the filer firm's return on total assets, the ratio calculated as dividing net income by total assets.
- *Operating Risk*: the volatility of the filer firm's operating cash flow within the past five years prior to the agreement effective date.
- *Firm Age*: the filer firm's age calculated by subtracting the year of the firms' initial Compustat record from the agreement effective year.

Appendix B: Examples of Contracting Mechanisms

B.1 Accounting Covenants (Sellers)

(1) Financial Information Delivery

“Seller shall prepare and deliver to Buyer unaudited financial information of the Business, including income statements for the relevant period and balance sheets as of the last day of the relevant period, prepared on a basis consistent with the assumptions and basis of presentation of the special purpose financial statements for the Business for the fiscal years ended December 31, 2015 and 2016 that were audited and delivered to Buyer on September 1, 2017 (the “Audited Financials”), for (1) each of Seller’s 2017 fiscal quarters that ended prior to the Closing Date (the “Quarterly Financials”) and (2) the period beginning on the day after the last day of the immediately preceding fiscal quarter and ending on the Closing Date (the “Stub Period Financials”). Seller shall deliver the Quarterly Financials no later than January 31, 2018; provided, however, that if the Closing Date is on or after December 31, 2017, Seller shall deliver the financial information for its fiscal quarter ended December 31, 2017 no later than sixty (60) days after the Closing Date. Seller shall deliver the Stub Period Financials (y) if the Closing Date is on or before October 31, 2017, no later than December 11, 2017, or (z) if the Closing Date is after October 31, 2017, no later than sixty (60) days after the Closing Date. Subject to the other provisions of this Section 4.18, Seller shall provide such financial statements and information (audited or unaudited, as the case may be) related to the pre-Closing Business, at such times, as Buyer reasonably requires to timely comply with its obligations under Rules 3-05 and 1-02(w) of Regulation S-X and cooperate reasonably with Buyer in connection with those statements and information.”

(CIK: 711404; Filer Company: Cooper Companies Inc; Filing Type: 8-K; Filing Date: September 12, 2017; Exhibit: 2.1; Section 4.18 Financial Statements)

“Seller shall prepare, or cause the preparation of, in accordance with GAAP, and deliver to Buyer within 30 days following the Closing, such additional audited and unaudited Acquired Business Balance Sheets, Acquired Business Statements of Operations and Acquired Business Statements of Cash Flows as may be required to enable Parent to complete and file its Form 8-K under the Exchange Act relating to the transactions contemplated by this Agreement, together with, in the case of any audited Acquired Business Balance Sheet, Acquired Business Statements of Operations and Acquired Business Statements of Cash Flows, the manually signed accountants' report of Arthur Andersen L.L.P. covering such audited financial statements.”

(CIK: 852637; Filer Company: Brite Voice Systems Inc; Filing Type: 8-K; Filing Date: November 7, 1997; Exhibit: 2.1; Section 7.7 Financial Statements)

(2) Accounting Policy Change

“Maintain Sellers' books of account, records and files substantially in the same manner as they are maintained as of the date of this Agreement and make no material change in accounting principles from those followed in the preparation of the Financial Statements;”

(CIK: 5657; Filer Company: American Precision Industries Inc; Filing Type: 8-K; Filing Date: May 3, 1996; Exhibit: 2; Section 3.3 Affirmative Covenants of Sellers)

B.2 Financial Information Reps (Sellers)

(1) Interim Financial Information (Reporting Reps)

*“Attached as collective Paragraph 4(c) to the Seller's Disclosure Letter are the following financial statements (collectively the “Financial Statements”): (i)...and (ii) unaudited **balance sheet** and **statement of income** (the “Most Recent Financial Statements”) as of and for the month ended May 31, 1996 (the “Most Recent Fiscal Month End”) for the Seller.”*

(CIK: 763098; Filer Company: Response Oncology Inc; Filing Type: 8-K; Filing Date: October

21, 1996; Exhibit: 10.Y; Section 4(c) Financial Statements)

(2) Carve-out Financial Information (Fiscal Financial Information)

*“Section 3.5 of the Company Disclosure Schedules sets forth a **statement of profits and losses** with respect to each Acquired Store for the twelve-month period ended April 29, 2017 (collectively, the “Financial Statements”). The Financial Statements collectively present fairly, in all material respects, the results of operations of the applicable Acquired Store at their respective dates and for the periods covered by such statements, which are in conformity with the Transaction Accounting Principles, applied consistently, and are consistent with the historical accounting principles, practices, methodologies and policies of the Company or the Company’s applicable Affiliates, subject to normal year-end adjustments. The Financial Statements have been derived from the financial books and records of the Company and the Company’s applicable Affiliates. Neither the Company nor any of the Company’s Affiliates (with respect to the Acquired Stores or Distribution Centers) has received any written notification from its independent accountants that the Company or any of the Company’s Affiliates (with respect to the Acquired Stores or Distribution Centers) has used any improper accounting practice that would have the effect of not reflecting or incorrectly reflecting in the books and records of the Company, any Affiliate of the Company (with respect to the Acquired Stores or Distribution Centers) or any of their subsidiaries any material properties, assets, liabilities, revenues, expenses, equity accounts or other accounts with respect to the Acquired Stores, except as has not had, and would not reasonably be expected to have, a Material Adverse Effect.”*

(CIK: 1618921; Filer Company: Walgreens Boots Alliance Inc; Filing Type: 8-K; Filing Date: July 3, 2017; Exhibit: 10.1; Section 3.5 Financial Statements, Undisclosed Liabilities)

(3) Cash Flow

*“4.4. Financial Statements. 4.4.(a) Company Financial Statements. Included as Schedule 4.4.(a) are true and complete copies of the financial statements of Company consisting of (i) a balance sheet of Company as of September 30, 1994, and the related statements of income and **cash flows** for the fiscal year then ended (including the notes contained therein or annexed thereto), which financial statements have been reported on, and are accompanied by, the signed review report of McGladrey & Pullen, LLP, independent accountants for Company for such year...”*

(CIK: 788329; Filer Company: Johnson Worldwide Associates Inc; Filing Type: 10-Q; Filing Date: May 15, 1995; Exhibit: 2; Section 4.4 Financial Statements)

B.3 Financing Covenants (Buyers)

“Purchaser shall have obtained the Debt Financing Commitments and the Equity Financing Commitments and the lenders who provided the Debt Financing Commitments and the investors providing the Equity Financing Commitments shall have provided the funds contemplated thereunder in accordance with the terms thereof.”

“Purchaser shall have received the proceeds of debt and equity financing of Purchaser on terms previously approved by Seller.”

(CIK: 40934; Filer Company: Genesee Corp; Filing Type: 8-K; Filing Date: January 2, 2001; Exhibit: 10.1; Section 8.15 Financing Commitments & Section 9.11 Financing)

B.4 Financial Condition Reps (Buyers)

(1) Solvency

“Purchaser has funds of its own, or has binding commitments from responsible banks or other financial institutions to provide funds, which will be sufficient and available to pay the Purchase Price”

(CIK: 37755; Filer Company: Furon Co; Filing Type: 10-K; Filing Date: March 25, 1996;

Exhibit: 10.14; Section 5.4 Financing)

“Sufficient funds and credit arrangements are available to Buyer as of the date hereof, and will be so available at the Closing, to pay the Purchase Price and all other amounts payable by it hereunder at the Closing.”

(CIK: 91419; Filer Company: Smucker JM Co; Filing Type: 8-K; Filing Date: April 15, 1994; Exhibit: 2.1; Section 4.3 Financial Ability to Perform)

(2) Financing Commitment

“Cott has cash or has existing borrowing facilities or binding firm commitments, subject to conditions, that are sufficient to enable it to consummate the transactions contemplated by this Agreement. The copy of the letter regarding such facilities and commitments provided by Cott to Seller is true and complete except for those items that are expressly redacted therein (the “Commitment Letter”).”

(CIK: 884713; Filer Company: Cott Corp CN; Filing Type: 8-K; Filing Date: August 2, 2001; Exhibit: 2.1; Section 7.5 Financial Ability)

(3) Capitalization

“The authorized capital stock of Purchaser, consists of (i) 20,000,000 shares of common stock, par value \$0.001 per share, of which 6,294,650 shares were issued and outstanding as of the date hereof; (ii) no shares of capital stock of Purchaser in treasury; and (iii) 5,000,000 shares of Preferred Stock, \$0.001 par value per share, all of which have been designated Series A Preferred Stock and all of which were issued and outstanding as of the date hereof (each of which shares is convertible into four shares of common stock). Each share of the issued and outstanding capital stock of Purchaser is duly authorized, validly issued, fully paid and nonassessable. Purchaser will provide at Closing an updated version of this Section 4.2, updated and accurate as of the Closing (the “Updated Capitalization Representation”). The fully diluted percentage ownership of Purchaser represented by the Closing Shares will not materially change between the date hereof and the Closing. Except for outstanding options to purchase up to 1,200,000 shares of common stock, there are no outstanding options, warrants, rights (including conversion or preemptive rights) or agreements for the purchase or acquisition from Purchaser of any shares of its capital stock.”

(CIK: 1035181; Filer Company: Vista Medical Technologies Inc; Filing Type: 10-K; Filing Date: March 30, 2004; Exhibit: 10.59; Section 4.2 Capital Stock of Purchaser)

B.5 Payment Arrangements

(1) Cash Payments and Equity Payments

““PURCHASE PRICE” means \$81 million in cash plus a number of shares of Parent Common Stock that have an aggregate Market Value on the Closing Date, of \$10 million; provided, however, that in no event shall the number of such shares be greater than 1,000,000 or less than 666,667.”

(CIK: 790706; Filer Company: Golden Books Family Entertainment Inc; Filing Type: 8-K; Filing Date: August 30, 1996; Exhibit: 2.1; Definition “PURCHASE PRICE”)

(2) Promissory Notes Payments

“At the Closing, Purchaser shall deliver to Sellers...(b) two or more promissory notes “Promissory Notes” from Purchaser guaranteed by Purchaser Parent (such guarantees shall be in the form of Exhibits 1.04-1 and 1.04-2 hereto) payable to Sellers in aggregate principal amounts equal to 80% of the Purchase Price. The Promissory Notes shall be (i) a note in the principal amount of \$10,000,000 (the “Offset Note”) in the form of Exhibit 1.04-3, principal and interest otherwise payable thereunder may be offset by Seller's indemnification liabilities, if any, under Section 7.06 hereof, and (ii) one or more (but not more than five) notes for the balance of 80% of the Purchase Price (the “Other Notes”), in the form of Exhibit 1.04-4 hereto.”

(CIK: 85408; Filer Company: Rowan Companies Inc; Filing Type: 8-K; Filing Date: February

24, 1994; Exhibit: 2.1; Section 1.04 Payment of Purchase Price)

(3) Contingent Payments

• Earnouts

“With respect to the Terminal at Piney Point, Purchaser shall pay SPC an earn-out for each of the seven calendar years commencing January 1, 1996, equal to forty percent (40%) of the net revenues in such year in excess of \$10,250,000 (the "Earn-Out"), as set forth more fully in Exhibit 2.3.2.”

(CIK: 54441; Filer Company: Kaneb Services Inc; Filing Type: 8-KA; Filing Date: January 3, 1996; Exhibit: 10.1; Section 2.3 Payment of Purchase Price)

• Royalty

“Meridian shall pay CBC royalties in an amount equal to two percent (2%) of worldwide Net Sales, as hereinafter defined, for each twelve month period commencing on the Closing Date or an anniversary thereof ("Royalty Year"), in excess of Two Million Five Hundred Thousand Dollars (\$2,500,000) of Products and any improvements replacements or substitutions for the Products (collectively "Royalty Products").”

(CIK: 794172; Filer Company: Meridian Diagnostics Inc; Filing Type: 8-K; Filing Date: July 2, 1996; Exhibit: 10.1; Section A2 Consideration for Transfers, Etc.)

• Others

“If, within twelve months of the Closing, Buyer enters into an agreement with Daimler Benz Aerospace or an affiliate thereof ("DASA") pursuant to which DASA agrees to purchase at least 600 Pylon Decoder Units, then, as additional consideration, Buyer shall pay Seller \$400,000, which amount shall be payable in the amount of \$100,000 per fiscal quarter beginning three months after Buyer receives an order under such agreement.”

(CIK: 10242; Filer Company: Base Ten Systems Inc; Filing Type: 8-K; Filing Date: November 12, 1997; Exhibit: 2.1; Section 3.2 Consideration Payable After Closing)

B.6 Miscellaneous Mechanisms

(1) Capital Expenditure Covenants (Sellers)

“(Seller) not make or agree to make any capital expenditures for additions to property, plant or equipment, except for expenditures and commitments not exceeding \$1,500,000 in the aggregate,”

(CIK: 85408; Filer Company: Rowan Companies Inc; Filing Type: 8-K; Filing Date: February 24, 1994; Exhibit: 2.1; Section 3.02 Operation of Sellers)

(2) Financial Covenants (Sellers)

“Section 9.10 Minimum Inventory. The Inventory Value set forth on the Inventory Listing Report after adjustments identified on the Inventory Closing Update shall be no less than Sixty Million Dollars (\$60,000,000).”

(CIK: 95052; Filer Company: Elizabeth Arden Inc; Filing Type: 10-K; Filing Date: September 11, 2006; Exhibit: 10.22; Section 9.10 Minimum Inventory)

(3) Undisclosed Liability Reps (Sellers)

“Except as set forth on Schedule 5.4(b), Seller has no material Liabilities with respect to the Purchased Assets, except (i) those which are adequately reflected or reserved against in the Financial Statements as of the Balance Sheet Date, and (ii) those which have been incurred in the Ordinary Course of Business since the Balance Sheet Date and which are not, individually or in the aggregate, material in amount.”

(CIK: 1028215; Filer Company: KMG Chemicals Inc; Filing Type: 8-K; Filing Date: January 20, 2015; Exhibit: 10.34; Section 5.4 Financial Statements)

(4) Books and Records Reps (Sellers)

“All books, records and accounts of Seller related to the Business are accurate and complete in all material respects and are maintained in accordance with good business practice and all

applicable Laws.”

(CIK: 1028215; Filer Company: KMG Chemicals Inc; Filing Type: 8-K; Filing Date: January 20, 2015; Exhibit: 10.34; Section 5.4 Financial Statements)

(5) Audit, Review, and Internal Control Reps (Sellers)

“Seller maintains a system of accounting and internal controls sufficient in all material respects to provide reasonable assurances that (i) financial transactions of the Business are executed in accordance with the general and specific authorization of the management of Seller; (ii) all transactions of the Business are recorded as necessary to permit the preparation of financial statements in conformity with legal and accounting requirements applicable to Seller in connection with the Business and to maintain proper accountability for items, and (iii) access to the property and assets of the Business is permitted only in accordance with management’s general or specific authorization.”

(CIK: 1028215; Filer Company: KMG Chemicals Inc; Filing Type: 8-K; Filing Date: January 20, 2015; Exhibit: 10.34; Section 5.4 Financial Statements)

(6) Adverse Change Reps (Sellers)

• **Accounting Policy Change**

“Except as and to the extent set forth in Schedule 4.7, since the date of the Recent Balance Sheet there has not been: ... (l) No Accounting Change. Any change in accounting methods or practices affecting any of the properties or assets of Company that are Purchased Assets or the Business;”

(CIK: 788329; Filer Company: Johnson Worldwide Associates Inc; Filing Type: 10-Q; Filing Date: May 15, 1995; Exhibit: 2; Section 4.7 Absence of Certain Material Changes)

• **Capital Expenditure**

“Except for the execution and delivery of this Agreement and the transactions to take place pursuant hereto on or prior to the Closing Date, since July 4, 1997 there has not been any material adverse change, or any event or development which, individually or together with other such events, could reasonably be expected to result in a material adverse change, in the Condition of the Business. Without limiting the foregoing, except as disclosed in Section 2.6 of the Disclosure Schedule, there has not occurred, between July 4, 1997 and the date hereof, any of the following: ... (vii) capital expenditures or commitments for additions to property, plant or equipment used or held for use in the conduct of the Business constituting capital assets in an aggregate amount exceeding \$50,000.”

(CIK: 1036713; Filer Company: Acorn Products Inc; Filing Type: 8-K; Filing Date: August 22, 1997; Exhibit: 2.1; Section 2.6 Absence of Changes)

(7) Intellectual Property Reps (Sellers)

“Section 3.7 Intellectual Property. (a) Seller has the right to use all the Automated Systems Technology without payment of royalties, fees or services to any Person. Seller has not entered into any License, whether on an exclusive basis or otherwise, that would interfere with Seller's rights in the Automated Systems Technology. Seller's rights in and to the Automated Systems Technology are free and clear of all Encumbrances other than Permitted Encumbrances...”

(CIK: 21535; Filer Company: Cohu Inc; Filing Type: 10-Q; Filing Date: October 29, 2001; Exhibit: 10.1; Section 3.7 Intellectual Property)

(8) Working Capital Reps (Sellers)

“Section 3.11 Inventories. The inventories of Seller as of the date hereof constituting part of the Assets and set forth on the June Balance Sheet are of standard quality and are usable and salable in the Ordinary Course of Business consistent with past practice, except for items that have been written off or written down to fair market value and for which adequate reserves have been provided therein.”

(CIK: 21535; Filer Company: Cohu Inc; Filing Type: 10-Q; Filing Date: October 29, 2001; Exhibit: 10.1; Section 3.11 Inventories)

(9) Fixed Asset Reps (Sellers)

“Section 3.9 Real Property, Condition of Facilities. (a) Seller does not own any real property used in connection with the Automated Systems Business. (b) Schedule 3.9(b) contains a description of each Seller Lease, including the applicable landlord and expiration date, and the street address and approximate rentable square footage with respect to all Facilities in which Seller has a leasehold interest (each such parcel, a "LEASED PARCEL"). Seller warrants to Buyer that Seller's interest in each Leased Parcel is free and clear of all Real Property Encumbrances other than those identified on Schedule 3 as acceptable to Buyer ("PERMITTED REAL PROPERTY ENCUMBRANCES") ...”

(CIK: 21535; Filer Company: Cohu Inc; Filing Type: 10-Q; Filing Date: October 29, 2001; Exhibit: 10.1; Section 3.9 Real Property, Condition of Facilities)

(10) Personal Property Reps (Sellers)

“Section 3.10 Personal Property. (a) Seller owns good and transferable title to all of the Assets other than the Real Property free and clear of any Encumbrances ("NON-REAL PROPERTY ENCUMBRANCES"), other than those identified on Schedule 3 as acceptable to Buyer ("PERMITTED NON-REAL PROPERTY ENCUMBRANCES") or as would not be expected to have a Material Adverse Effect. (b) Each item of Tangible Personal Property is in good repair and good operating condition, ordinary wear and tear excepted, is suitable for immediate use in the Ordinary Course of Business, and to Seller's Knowledge is free from latent and patent defects. No item of Tangible Personal Property is in need of repair or replacement other than as part of routine maintenance in the Ordinary Course of Business. All Tangible Personal Property is in the possession of Seller.”

(CIK: 21535; Filer Company: Cohu Inc; Filing Type: 10-Q; Filing Date: October 29, 2001; Exhibit: 10.1; Section 3.10 Personal Property)

(11) Third-Party Escrow

“At Closing, Buyer shall pay to the Escrow Agent Twenty-Seven Million Five Hundred Thousand Dollars (\$27,500,000), to be held in accordance with the Escrow Agreement in form and substance as set forth in Exhibit 3.1(c) hereto (the "Escrow Agreement").”

(CIK: 71691; Filer Company: New York Times Co; Filing Type: 10-Q; Filing Date: August 10, 1994; Exhibit: 2.1; Section 3.1 Consideration)

Appendix C: Direct Asset Sales Agreement Taxonomy

The following five criteria are used to exclude the direct asset sales agreements of which the underlying transactions are de facto mergers. Extracts from agreement recitals and filing summaries are included in quotes. I also provide the location of reference agreements inside parentheses.

- **Criterion 1: The filer firm is the seller.**

“THIS ASSET PURCHASE AGREEMENT (this “Agreement”) is entered into as of September 3, 2002, by and between Metrowerks Corporation, a Texas corporation and a wholly-owned subsidiary of Motorola, Inc. (“Purchaser”), on the one hand, and Applied Microsystems Corporation, a Washington corporation (“Seller”), on the other hand.”

(CIK: 1000787; Filer Company: Applied Microsystems Corporation; Filing Type: 8-K; Filing Date: September 4, 2002; Exhibit: 2.1)

- **Criterion 2: The 8-K filing summary of the agreement contains “Certain Asset Purchase Agreement”.**

*“On August 31, 2009, ICU Medical Inc. (the “ICU Medical”) completed the previously announced purchase of the commercial rights and physical assets of the critical care product line of Hospira, Inc. (“Hospira”), pursuant to that **certain Asset Purchase Agreement** (the “Agreement”) dated as of July 8, 2009, between ICU Medical and Hospira.”*

(CIK: 883984; Filer Company: ICU Medical Inc.; Filing Type: 8-K; Filing Date: September 4, 2009; Exhibit: 2.1)

- **Criterion 3: The agreement’s recital mentions “certain asset” or “specific asset,” while neither the agreement’s recital nor its filing summary mentions “all asset.”**

- (1) **“Certain Asset”**

*“Seller desires to sell, and Buyer desires **to acquire, certain of the assets of Seller** and the Selling Subsidiaries on the terms and subject to the conditions set forth in this Agreement.”*

(CIK: 1002388; Filer Company: Accelrys, Inc.; Filing Type: 8-K; Filing Date: July 29, 2011; Exhibit: 2.1)

- (2) **“Specific Asset”**

*“WHEREAS, through certain of its Affiliates and **within its wireless systems segment, Seller conducts a worldwide wireless network systems business** which designs, builds, distributes, maintains and supplies wireless communications systems, including land mobile radio and broadband equipment systems and networks and equipment for the public safety, utility, federal, military and commercial markets (the “**Business**”); and WHEREAS, Buyer desires to **purchase the Business from Seller and its Affiliates**, and Seller and its Affiliates desire to sell the Business to Buyer, subject to the terms and conditions hereinafter set forth;”*

(CIK: 1385157; Filer Company: Tyco Electronics Ltd.; Filing Type: 10-Q; Filing Date: May 4, 2009; Exhibit: 10.2)

- **Criterion 4: The 8-K filing summary of the agreement mentions “certain asset” or “specific asset,” while neither the agreement’s recital nor its 8-K filing summary mentions “all asset.”**

- (1) **“Certain Asset”**

*“On July 25, 2005, the Company’s wholly owned subsidiary, Acrocrete, Inc. (“Acrocrete”) entered into an Asset Purchase Agreement (the “Asset Purchase Agreement”) with Degussa and Degussa Construction Chemicals Operations, Inc., a Delaware corporation (“DCCO”) (“Degussa and DCCO being the “Purchasers”), whereby **the Purchasers acquired certain of***

the manufacturing assets of Acrocrete.”

(CIK: 49930; Filer Company: Imperial Industries Inc.; Filing Type: 8-K; Filing Date: July 29, 2005; Exhibit: 2.1)

(2) “Specific Asset”

“On December 15, 1999, Cygnus, Inc. (“Cygnus”) completed the sale of its Drug Delivery Business to Ortho-McNeil Pharmaceutical, Inc. (“Ortho-McNeil”), for up to \$75 million in cash. The sale was completed pursuant to the terms of an Asset Purchase Agreement dated as of November 17, 1999, between Cygnus and Ortho-McNeil, a copy of which is attached hereto as Exhibit 10.49.”

(CIK: 870755; Filer Company: Cygnus Inc.; Filing Type: 8-K; Filing Date: December 30, 1999; Exhibit: 10.49)

- **Criterion 5: The agreement can be identified as a direct asset sales agreement after the manual investigation.**

“On July 31, 2002, we acquired certain assets and assumed certain liabilities of Advanced Hardware Architectures, Inc. for \$7.0 million in cash. The purchase price was financed from internal Company funds. This operation is included in our telecommunications transmission segment.”

(The 10-K Filing Summary)

“Seller is engaged in the business of design, development and marketing of high value integrated circuit solutions and semiconductors, including technology involving single-chip lossless compression and decompression integrated circuits based on the Adaptive Lossless Data Compression algorithm (the “Business”). Buyer desires to purchase substantially all of the assets, properties and rights of the Business, and Seller desires to sell such assets, properties and rights, on the terms and subject to the conditions set forth in this Agreement.”

(The Agreement Recital)

(CIK: 23197; Filer Company: Comtech Telecommunications Corporation; Filing Type: 10-K; Filing Date: October 16, 2002; Exhibit: 10.(H))

BIBLIOGRAPHY

- Akerlof, G.A., 1970. The Market for “Lemons”: Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics* 84, 488.
- Alexander, G.J., Benson, P.G., Kampmeyer, J.M., 1984. Investigating the Valuation Effects of Announcements of Voluntary Corporate Selloffs. *The Journal of Finance* 39, 503–517.
- Almeida, H., Campello, M., Weisbach, M.S., 2004. The Cash Flow Sensitivity of Cash. *The Journal of Finance* 59, 1777–1804.
- Armstrong, C.S., Guay, W.R., Weber, J.P., 2010. The Role of Information and Financial Reporting in Corporate Governance and Debt Contracting. *Journal of Accounting and Economics* 50, 179–234.
- Arrow, K.J., 1963. Uncertainty and the welfare economics of medical care. *Journal of Health Politics, Policy & Law* 53, 941–973.
- Banker, R.D., Darrough, M., Li, S., Threinen, L., 2019. The Value of Precontract Information About an Agent’s Ability in the Presence of Moral Hazard and Adverse Selection. *Journal of Accounting Research* 57, 1201–1245.
- Bartov, E., 1993. The Timing of Asset Sales and Earnings Manipulation. *The Accounting Review* 68, 840–855.
- Bates, T.W., 2005. Asset Sales, Investment Opportunities, and the Use of Proceeds. *The Journal of Finance* 60, 105–135.
- Bates, T.W., Neyland, J.B., Wang, Y.Y., 2018. Financing acquisitions with earnouts. *Journal of Accounting and Economics* 66, 374–395.
- Battigalli, P., Maggi, G., 2002. Rigidity, Discretion, and the Costs of Writing Contracts. *American Economic Review* 92, 798–817.
- Berger, P.G., Hann, R.N., 2007. Segment Profitability and the Proprietary and Agency Costs of Disclosure. *The Accounting Review* 82, 869–906.
- Bharadwaj, A., Shivdasani, A., 2003. Valuation effects of bank financing in acquisitions. *Journal of Financial Economics* 67, 113–148.
- Brown, R., 2007. *The Concise Guide to Mergers, Acquisitions and Divestitures: Business, Legal, Finance, Accounting, Tax and Process Aspects*. Springer.
- Cadman, B., Carrizosa, R., Faurel, L., 2014. Economic Determinants and Information Environment Effects of Earnouts: New Insights from SFAS 141(R). *Journal of Accounting Research* 52, 37–74.
- Cain, M.D., Denis, D.J., Denis, D.K., 2011. Earnouts: A Study of Financial Contracting in Acquisition Agreements. *Journal of Accounting and Economics* 51, 151–170.

- Campello, M., Graham, J.R., Harvey, C.R., 2010. The Real Effects of Financial Constraints: Evidence from a Financial Crisis. *Journal of Financial Economics* 97, 470–487.
- Cassar, G., 2011. Discussion of The Value of Financial Statement Verification in Debt Financing: Evidence from Private U.S. Firms. *Journal of Accounting Research* 49, 507–528.
- Chen, C.-W., 2019. The Disciplinary Role of Financial Statements: Evidence from Mergers and Acquisitions of Privately Held Targets. *Journal of Accounting Research* 57, 391–430.
- Chen, S., Miao, B., Shevlin, T., 2015. A New Measure of Disclosure Quality: The Level of Disaggregation of Accounting Data in Annual Reports. *Journal of Accounting Research* 53, 1017–1054.
- Costello, A.M., 2013. Mitigating Incentive Conflicts in Inter-Firm Relationships: Evidence from Long-Term Supply Contracts. *Journal of Accounting and Economics* 56, 19–39.
- Darrough, M.N., Stoughton, N.M., 1986. Moral Hazard and Adverse Selection: The Question of Financial Structure. *The Journal of Finance* 41, 501–513.
- De Laria, S., Driskell III, F.D., 2020. Disputes and Litigation in Merger and Acquisition Transactions. Accessed at: http://willamette.com/insights_journal/20/autumn_2020_3.pdf.
- Denis, D.J., Sibilkov, V., 2010. Financial Constraints, Investment, and the Value of Cash Holdings. *The Review of Financial Studies* 23, 247–269.
- Dittmar, A., Shivdasani, A., 2003. Divestitures and Divisional Investment Policies. *The Journal of Finance* 58, 2711–2744.
- Dormido, H., 2019. HNA's \$25 Billion Fire Sale Not Enough to Emerge from Crisis. Accessed at: <https://www.bloomberg.com/news/articles/2019-04-28/hna-s-25-billion-fire-sale-not-enough-to-bring-it-out-of-crisis>.
- D'Souza, J., Ramesh, K., Shen, M., 2010. Disclosure of GAAP line items in earnings announcements. *Review of Accounting Studies* 15, 179–219.
- Egan, B.F., Balotti, R.F., Patrick, G.W., Doliner, N.L., 2005. Busted M&A Deals Headed for Litigation: What Happens When Bad Things Surface Between Signing and Closing. 2005 Mergers and Acquisitions Institute.
- Faulkender, M., Wang, R., 2006. Corporate Financial Policy and the Value of Cash. *The Journal of Finance* 61, 1957–1990.
- Glazer, J., Rubinstein, A., 2012. A Model of Persuasion with Boundedly Rational Agents. *Journal of Political Economy* 120, 1057–1082.

- Gustafson, M.T., Ivanov, I.T., Meisenzahl, R.R., 2020. Bank Monitoring: Evidence from Syndicated Loans. *Journal of Financial Economics*. Forthcoming.
- Hege, U., Lovo, S., Slovin, M.B., Sushka, M.E., 2009. Equity and Cash in Intercorporate Asset Sales: Theory and Evidence. *Review of Financial Studies* 22, 681–714.
- Hite, G.L., Owers, J.E., Rogers, R.C., 1987. The Market for Interfirm Asset Sales: Partial Sell-Offs and Total Liquidations. *Journal of Financial Economics* 18, 229–252.
- Jain, P.C., 1985. The Effect of Voluntary Sell-off Announcements on Shareholder Wealth. *The Journal of Finance* 40, 209–224.
- Jakobsen, A.M., 2020. A Model of Complex Contracts. *American Economic Review* 110, 1243–1273.
- Jansen, M., 2020. Resolving Information Asymmetry Through Contractual Risk Sharing: The Case of Private Firm Acquisitions. *Journal of Accounting Research* 58, 1203–1248.
- Jensen, M.C., 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review* 76, 323–329.
- Jensen, M.C., 1993. The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *The Journal of Finance* 48, 831–880.
- Jensen, M.C., Meckling, W.H., 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3, 305–360.
- John, K., Ofek, E., 1995. Asset Sales and Increase in Focus. *Journal of Financial Economics* 37, 105–126.
- Johnson, D.C., 2011. Rigid or Flexible Accounting Rules? Evidence from Purchase Price Adjustments. MIT Doctoral Dissertation.
- Kerchner, T., 2019. Discuss Purchase Price Allocation Early in Negotiations. BMI Mergers & Acquisitions. Accessed at: <https://www.bmimergers.com/discuss-purchase-price-allocation-early-in-the-negotiations/>.
- Klein, A., 1986. The Timing and Substance of Divestiture Announcements: Individual, Simultaneous and Cumulative Effects. *The Journal of Finance* 41, 685–696.
- Kruse, T.A., 2002. Asset Liquidity and the Determinants of Asset Sales by Poorly Performing Firms. *Financial Management* 31, 107–129.
- Lang, L., Poulsen, A., Stulz, R., 1995. Asset Sales, Firm Performance, and the Agency Costs of Managerial Discretion. *Journal of Financial Economics* 37, 3–37.
- Leary, M.T., Roberts, M.R., 2014. Do Peer Firms Affect Corporate Financial Policy? *The Journal of Finance* 69, 139–178.

- Li, E.X., 2013. Revealing Future Prospects without Forecasts: The Case of Accelerating Material Contract Filings. *The Accounting Review* 88, 1769–1804.
- Li, E.X., Ramesh, K., Wu, J.S., Shen, M., 2018. Price Discovery in Good and Bad Times: An Analysis of the Annual Corporate Disclosure Cycle. Working Paper.
- Lopez, E., 2015. Private M&A Transaction Process. Accessed at: <https://www.themalawyer.com/private-ma-transaction-process/>.
- Maksimovic, V., Phillips, G., 2001. The Market for Corporate Assets: Who Engages in Mergers and Asset Sales and Are There Efficiency Gains? *The Journal of Finance* 56, 2019–2065.
- Maral, G., 2021. The Asset Deal Trends to Watch in 2021. Accessed at: <https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-the-asset-deal-trends-to-watch-in-2021>.
- McConnell, K.C., Cole, J.D., 2012. Preparing Your Company for Sale: Due Diligence from A Seller’s Perspective. Accessed at: <https://www.lexology.com/library/detail.aspx?g=b2c90aed-1ece-424b-9bce-7b655e83536a>.
- McNichols, M.F., Stubben, S.R., 2015. The Effect of Target-Firm Accounting Quality on Valuation in Acquisitions. *Review of Accounting Studies* 20, 110–140.
- Minnis, M., 2011. The Value of Financial Statement Verification in Debt Financing: Evidence from Private U.S. Firms. *Journal of Accounting Research* 49, 457–506.
- Minnis, M., Sutherland, A., 2017. Financial Statements as Monitoring Mechanisms: Evidence from Small Commercial Loans. *Journal of Accounting Research* 55, 197–233.
- Myers, S.C., 1977. Determinants of Corporate Borrowing. *Journal of Financial Economics* 5, 147–175.
- Myers, S.C., Majluf, N.S., 1984. Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have. *Journal of Financial Economics* 13, 187–221.
- Nini, G., Smith, D.C., Sufi, A., 2009. Creditor Control Rights and Firm Investment Policy. *Journal of Financial Economics* 92, 400–420.
- Ofek, E., 1993. Capital Structure and Firm Response to Poor Performance: An Empirical Analysis. *Journal of Financial Economics* 34, 3–30.
- Pauly, M.V., 1968. The Economics of Moral Hazard: Comment. *The American Economic Review* 58, 531–537.
- Pulvino, T.C., 1998. Do Asset Fire Sales Exist? An Empirical Investigation of Commercial Aircraft Transactions. *The Journal of Finance* 53, 939–978.

- Pulvino, T.C., 1999. Effects of Bankruptcy Court Protection on Asset Sales. *Journal of Financial Economics* 52, 151–186.
- Rabier, M.R., 2017. Value is in the Eye of the Beholder: The Relative Valuation Roles of Earnings and Book Value in Merger Pricing. *The Accounting Review* 93, 335–362.
- Ravenscraft, D.J., Scherer, F.M., 1987. The Economics of Sell-Off: Statistical Evidence, in: *Mergers, Sell-Offs, and Economic Efficiency*. Brookings Institution Press, pp. 159–191.
- Rey, P., Salanie, B., 1990. Long-Term, Short-Term and Renegotiation: On the Value of Commitment in Contracting. *Econometrica* 58, 597–619.
- Roychowdhury, S., 2006. Earnings Management through Real Activities Manipulation. *Journal of Accounting and Economics* 42, 335–370.
- Schlingemann, F.P., Stulz, R.M., Walkling, R.A., 2002. Divestitures and the Liquidity of the Market for Corporate Assets. *Journal of Financial Economics* 64, 117–144.
- Schoenfeld, J., 2020. Contracts Between Firms and Shareholders. *Journal of Accounting Research* 58, 383–427.
- Shleifer, A., Vishny, R.W., 1992. Liquidation Values and Debt Capacity: A Market Equilibrium Approach. *The Journal of Finance* 47, 1343–1366.
- Shleifer, A., Vishny, R., 2011. Fire Sales in Finance and Macroeconomics. *Journal of Economic Perspectives* 25, 29–48.
- Shukairy, Y., 2006. Mega Subsidiaries and Asset Sales under Section 271: Which Shareholders Must Approve Subsidiary Asset Sales. *Michigan Law Review* 104, 1809–1833.
- Slovin, M.B., Sushka, M.E., Ferraro, S.R., 1995. A Comparison of the Information Conveyed by Equity Carve-Outs, Spin-Offs, and Asset Sell-Offs. *Journal of Financial Economics* 37, 89–104.
- Slovin, M.B., Sushka, M.E., Polonchek, J.A., 2005. Methods of Payment in Asset Sales: Contracting with Equity versus Cash. *The Journal of Finance* 60, 2385–2407.
- Smith, M., Westin, D., 2019. GE Puts Debt Cuts in Forefront with \$21 Billion Asset Sale. Accessed at: <https://www.bloomberg.com/news/articles/2019-02-25/ge-puts-debt-reduction-in-forefront-with-21-billion-asset-sale>.
- Stulz, R., 1990. Managerial Discretion and Optimal Financing Policies. *Journal of Financial Economics* 26, 3–27.
- Tirole, J., 1999. Incomplete Contracts: Where do We Stand? *Econometrica* 67, 741–781.
- Verrecchia, R.E., Weber, J., 2006. Redacted Disclosure. *Journal of Accounting Research* 44, 791–814.

- Warusawitharana, M., 2008. Corporate Asset Purchases and Sales: Theory and Evidence. *Journal of Financial Economics* 87, 471–497.
- Watts, R.L., Zimmerman, J.L., 1986. *Positive Accounting Theory*. Prentice-Hall.
- Watts, R.L., Zimmerman, J.L., 1990. Positive Accounting Theory: A Ten-Year Perspective. *The Accounting Review* 65, 131–156.
- Weagree, 2019. Articles, Sections or Clauses in Contracts. Accessed at:
<https://weagree.com/drafting-principles/5-presentation-the-look-and-feel/5-2-layout-and-numbering/a-articles-and-sections/>.
- Weisbach, M.S., 1995. CEO Turnover and the Firm's Investment Decisions. *Journal of Financial Economics* 37, 159–188.
- Williamson, O.E., 1985. *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. Free Press.