THE NATURE OF THE DEAL IN THE POST-CRISIS FINANCIAL MARKET

MICHAEL E. SYKUTA*

Small businesses face unique challenges and opportunities in acquiring financial capital, including the availability and terms of financing arrangements. The terms and conditions of financial deals allocate value, uncertainty (and its consequent risks), and decision rights between the parties to the deal in a manner that balances parties' interests in light of the information asymmetry, incentives and potential for opportunism within the context of the deal. However, the nature and sources of value and uncertainty, the kinds of decision rights available to parties, and the resulting information and incentive issues are directly influenced by the larger market and regulatory context. In this paper, I discuss some of the ways the recent financial crisis, federal bailouts, and new regulations have changed the contracting environment for small business finance and the implications for the availability and terms of financial arrangements for small businesses.

I. INTRODUCTION

The "Great Recession" of 2008 sent the U.S. economy into turmoil. The U.S. housing market experienced severe decline with record numbers of mortgage defaults and foreclosures. Financial markets were upended as major financial institutions experienced distress due to the collapse of the subprime mortgage market and drastically reduced values for mortgage-backed securities on banks' balance sheets. Financial distress spilled over into other sectors of the economy as companies—big and small—found it increasingly difficult to access financial capital and as consumer confidence and spending declined. Businesses cut back or closed, leading to the highest

* Michael Sykuta is Associate Professor in the Division of Applied Social Sciences and Director of the Contracting and Organizations Research Institute at the University of Missouri-Columbia. He is also an adjunct Associate Professor in the Department of Finance at the University of Missouri-Columbia's Trulaske School of Business.

unemployment rates in decades. Small businesses loan failure rates reached 12% by early 2009.[1]

Small businesses have long been touted as the primary source of job creation, so it is little wonder that attention would revolve around the question of how to help small businesses recover from the economic downturn.[2] Many critics have pointed to the financial industry and its failure to lend to small businesses as one reason for the rapid growth in small business failure rates in 2010.[3] However, a 2010 National Federation of Independent Business survey found that 52% of small businesses did not seek to borrow capital in 2010. Of those that did, 60% received all or most of the amount requested, suggesting financing might have been more available than commonly argued.[4]

My purpose in this paper is to address how the Great Recession has affected the nature of financial deals and its implication for small businesses. In order to do so, I first outline a framework for analyzing the economic fundamentals of a transaction and how those economic issues are addressed in the structure of the deal. I then examine the fundamentals of financial deals and the issues they raise for both borrowers and lenders. Given that foundation, I then consider how the events and policies stemming from the financial crisis affect the incentives and value of small business financial deals. Finally, I conclude with some suggestions on how those factors are likely to continue affecting small business financing in the post-crisis economy.

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[1] Emily Maltby, *Small Biz Loan Failure Rate Hits 12%*, CNNMONEY (Feb. 25, 2009, 11:20 AM), http://money.cnn.com/2009/02/25/smallbusiness/smallbiz_loan_defaults_soar.smb/.

[2] John C. Haltiwanger, Ron S. Jarmin & Javier Miranda, *Who Creates Jobs? Small vs. Large vs. Young* (U.S. Census Bureau Ctr. for Econ. Studies, Working Paper No. CES-WP- 10-17), *available at* http://ssrn.com/abstract=1666157. Haltiwanger et al. review Census of Business data and find that in fact it is not small firms that are primarily responsible for job creation, but young firms, which typically happen to be small. Mature small firms are no more likely to create jobs than are large firms. *Id.* This finding suggests that policies to support "small business job creation" are likely misguided as they dedicate resources on all small businesses, not necessarily the ones that are most likely to create new jobs. *Id.*

[3] DUN & BRADSTREET, THE STATE OF SMALL BUSINESSES POST GREAT RECESSION (May 2011), *available at* www.dnbgov.com/pdf/DNB_SMB_Report_May2011.pdf (reporting that the small business failure rate in the U.S. increased by 40% between 2007 and 2010).

[4] NAT'L FED'N INDEP. BUS. FINANCING SMALL BUSINESS: SMALL BUSINESS AND CREDIT ACCESS (Jan. 2011), *available at* http://www.nfib.com/Portals/0/PDF/AllUsers/research/studies/Small-Business-Credit-Access-NFIB.pdf [hereinafter FINANCING SMALL BUSINESS]. What these results do not tell us is how many of the 52% of businesses that did not seek to borrow money were discouraged from even attempting, whether informally or because of the public perception that banks had tightened small businesses' access to capital.

II. THE NATURE OF THE DEAL

There are three fundamental elements involved in every transaction. No matter how big or small the deal, the existence of these fundamentals is simply a matter of degree. Understanding these basic elements and the means by which they are addressed provides an informative lens for understanding the implications of the current market environment for the kinds of deals that are more or less likely to occur and the ways in which those deals that do occur are likely to be structured.[5]

Every transaction consists of three allocation problems that will be addressed, whether explicitly or implicitly, intentionally or unintentionally. First, voluntary economic exchange necessarily implies an allocation of the value created by the trade, i.e., the gains from trade. Second, every transaction entails some degree of uncertainty that will be allocated between the parties. The allocation of uncertainty will determine parties' exposure to risk and shape parties' incentives. Finally, every transaction requires certain decisions to be made, and those decision rights are allocated between the parties. Each of these is important individually, but they are also interdependent in the sense that how uncertainty and value are allocated may affect the incentives parties face when exercising their decision rights, and vice versa.

A. *The Allocation of Value*

The fundamental purpose of economic exchange is for trading parties to realize "gains from trade" resulting from the transfer of property rights from the incumbent holder, who values them less, to the purchaser, who values them more.[6] In a voluntary exchange economy, transactions only occur if all parties expect to be better off as a result of the transaction; that

[5] This framework is also described and applied to the analysis of a particular type of contract in Michael Sykuta & Joe Parcell, *Contract Structure and Design in Identity-Preserved Soybean Production*, 25 REV. OF AGRIC. ECON. 332 (2003). It was also used as a framework for considering the implications of product traceability requirements for the organization of agrifood value chains in Michael Sykuta, *Agricultural Organization in an Era of Traceability*, 37 J. OF AGRIC. & APPLIED ECON. 365 (2005).

[6] The concept of gains from trade dates back to ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (Edwin Cannan & George J. Stigler eds., 1904) (1776), which is the origin of modern economic theory. Smith argued that the wealth of nations was best measured by the abundance of goods available for people to consume rather than the amount of gold acquired through international trade, which implied being a net-exporter of the country's resources. *Id.* Smith argued that national wealth, whether at the individual or State level, would be maximized if producers specialized the producing based on their comparative advantage and then trading with producers of other goods. *Id.* Thus, national well-being is maximized based on specialization and trade. This makes the efficient design of contracts that govern transactions of particular interest for maximizing social welfare. *Id.*

is, if the transaction is expected to create value for all parties. Before considering how that value is allocated between parties, it is important first to understand the nature and source(s) of the value creation in order to understand the motivation for the transaction.

The value of the transaction is not necessarily determined by the intrinsic worth of the good or service being transacted. The value to the buyer is based on how the good or service contributes to the buyer's overall objectives. This may be for the buyer's immediate personal consumption, in which case the value is more directly based on the buyer's personal preferences. However, particularly in business-to-business transactions, the value of the good is determined more by how the buyer intends to use the good to create additional value downstream. As a simple example, the value of purchasing an apple for my personal consumption is likely different from the value of that same apple if I intend to resell it or turn it into applesauce and sell it. In the latter case, the value of the apple depends on other people's willingness to pay for applesauce and my costs of converting the apple and marketing the final product. Similarly, the value to the seller depends on the seller's alternative uses for the product; in this simple analogy, the availability of another buyer or the seller's ability to consume or make use of the apple herself.

B. *Allocation of Uncertainty*

In a world of imperfect information and foresight, the only certainty is the presence of uncertainty. Even in the most simple of transactions there is at least some small degree of uncertainty, though it may not be of material consequence to the trading parties.[7] However, as the duration of a transaction lengthens or as the complexity of a transaction increases, the degree of uncertainty increases along with the number of sources of uncertainty. The value of contracts as legally enforceable promises is in dealing with uncertainty about whether parties will honor their promises, i.e., to deal with behavioral uncertainty between the parties. The need for such an institution stems from uncertainty about the future and all the possible environmental and economic conditions that might give a party incentive to behave differently than she originally agreed.

It is important in this context to note that uncertainty and risk are not synonymous, at least not in the way that the term "risk" is commonly used. To see this, consider the prospect of an investment that will generate a net return of 10% or 20%, with equal probability. Although there is uncertainty about the outcome, this might be considered a win-win proposition since the investor is guaranteed a net return of no less than 10%. There is no

[7] Uncertainty that involves sufficiently low probabilities of negative outcomes or sufficiently small negative outcomes may be dismissed as negligible.

"risk" in the sense that the investor might lose value. More generally, risk is typically associated with the likelihood of negative outcomes.

How the contract terms allocate uncertainty among parties will determine which party bears what risks associated with the uncertainty. For instance, a fixed-price, long-term supply contract eliminates the nominal price uncertainty of the deal and may stabilize cash flows. However, the fixed-price terms expose both parties to the risk that the real price will move adversely to their position and create opportunity costs of lost value. Both parties also enjoy the positive possibility that the real price will move in favor of their position, creating economic rents. On the other hand, the same contract with variable-price terms ensures the economic value of the product will be accurately reflected, but exposes both sides to cash flow uncertainty. The allocation of uncertainty determines the relative payoffs of parties under different states of the world, which affects their incentives to perform under the terms of the deal and the amount of value actually created.

C. *Allocation of Decision Rights*

The ability to make a decision has value, particularly when that decision has economic or financial implications. Who gets to make what decisions related to the performance of the contract can have significant implications for the amount of value created in the transaction, the level of uncertainty affecting the transaction and the way in which the risks associated with that uncertainty are borne. Even in very routine transactions, decision rights can have significant consequences. Consider the decision right for method of payment at the local store. The store owner may implicitly give consumers the decision right for choosing the method of payment: cash, debit or credit, and if credit, which type of card. These are not all equal from the store owner's perspective. Cash imposes no transaction fee on the store owner, while debit and credit purchases do. There is also a difference in the fee between debit and credit, and between different credit cards. The consumer's exercise of her decision rights reduces the value of the transaction to the store owner. The store owner may limit the decision rights consumers have by only accepting cash, requiring a minimum purchase for the use of credit or accepting only certain credit cards. This may reduce the value of the transaction to either or both parties depending on the consumer's payment preferences. Alternatively, the store owner could allow consumers the full set of decision rights, but charge the consumer for the fees associated with the consumer's choice, thus transferring the loss in value of the transaction from the store owner to the consumer.

Now consider how many more decisions may be involved in a more complex transaction than simply checking out at the grocery store.

Decisions concerning selection of raw materials, production processes, quality determination, delivery, inspection and payment; there are a multitude of different decisions involved in typical transactions. Not all may be material to the nature of the value of the deal, but it is important to understand those that do affect value and how they can be allocated between parties to maximize the value of the deal.

It is also important to recognize the option-like nature of decision rights. As a financial instrument, a call (put) option is the right, but not the obligation, to buy (sell) an asset at a pre-specified "strike" price before a specified maturity date.[8] The value of the option depends on the value of the underlying asset relative to the strike price, the volatility of the price of the asset, the time value of money and the time to maturity. Transaction decision rights provide similar value, though they may not be as clearly structured.[9] Recognizing the option nature of decision rights and the factors that affect option value can lend new insights to incentive issues between trading parties. Contract breach is perhaps the most evident "option," whose value is determined in part by the "strike price" of the breach remedy.[10]

D. *The Structure of the Deal*

The structure of the deal affects the allocations of value, uncertainty and decision rights underlying the deal by stipulating the terms governing those allocations. From an economic perspective, the structure of the deal can be broken down usefully to three aspects of organizational architecture: the assignment of decision rights, the creation of incentive systems and the specification of performance measures.[11] These three dimensions of the structure must be aligned with the objectives of the transaction and must be designed in such a way as to complement one another to ensure effective performance.

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[8] *Call Option*, INVESTOPEDIA.COM, http://www.investopedia.com/terms/c/calloption.asp#axzz1qRICHu5m (last visited Mar. 28, 2012).

[9] *See* LEON TRIGEORGIS, REAL OPTIONS: MANAGERIAL FLEXIBILITY AND STRATEGY IN RESOURCE ALLOCATION (1996) (discussing a complete treatment of the nature of "real options" and their implications for business decision making).

[10] This real option perspective of contract breach and the economic notion of efficient breach supports the argument that liquidated damages should be more widely used in contracts, since parties would be able to value more effectively the option to breach. When the breach remedy is uncertain, there is a greater probability of both inefficient breach and inefficient performance.

[11] JAMES BRICKLEY, CLIFFORD SMITH & JEROLD ZIMMERMAN, MANAGERIAL ECONOMICS AND ORGANIZATIONAL ARCHITECTURE (McGraw-Hill, 4th ed. 2006). Brickley, Smith and Zimmerman contend that organizational architecture consists of these three dimensions and illustrate their interdependence as a three-legged stool. *Id.* If any of the three is out of line with the others, the stool will be "wobbly." *Id.* Thus, special attention has to be given to ensure the three aspects of organizational architecture are balanced in order to achieve effective performance. *Id.*

As argued above, the allocation of decision rights is a fundamental element of the transaction. So what factors determine the optimal allocation of decision rights? From an organizational economics perspective, decision rights should be allocated where they add the most value to the enterprise. Good decision-making requires both the appropriate knowledge set and access to the necessary information. Some information is more easily communicated or codified; some is more tacit and difficult to convey. Decision rights ideally should be co-located with the specialized information necessary for effective decision-making. However, access to information needs to be balanced with the ability to create appropriate incentives for the decisionmaker.

The authority to make decisions without an incentive for making decisions well is likely to yield undesirable outcomes. To create appropriate incentives, rewards should reflect the value created by good decision-making. Incentives must be related to things over which the decision maker exercises influence; otherwise, the incentive system has little power to influence behavior. For instance, compensating a regional sales manager based on total system sales would provide a weaker incentive than one tied to regional sales, since the total system sales includes results from beyond the region of the manager's control. Similarly, stock options may provide some incentive for an administrative clerk to do his job well, but not as strong an incentive as it might provide executive managers who have a more direct effect on corporate performance.

Incentives cannot be effectively implemented without performance measures that capture whether good decisions are being made. Performance measures should be closely aligned with the value objectives of the transaction. A supply agreement might evaluate quality characteristics, timeliness, or other attributes that contribute to the value of the transaction. A sales agreement might specify net versus gross sales, if product returns or discounts could be avoided through more effective sales practices. Often, the ideal measure of performance can be measured only imperfectly. In these cases it is especially important to consider how the proxy may result in suboptimal incentives. Finally, while performance measures need to reflect the decisionmaker's actions, they also need to be beyond the decisionmaker's ability to manipulate. Failure to protect against manipulation of performance measures has been the Achilles' heel of more than one major finance company in the past twenty years.[12]

[12] In 1995, Barings Bank, then the oldest investment bank in Britain, collapsed under $1 billion in losses created by a lone trader in a Singapore office who knew how to manipulate the internal accounting system to inflate his trading records and hide losses. Howard Chua-Eoan, *The Collapse of Barings Bank, 1995*, TIME, Mar. 1, 2007. UBS AG, a large Swiss bank, is currently under investigation for its failure to maintain appropriate internal controls in the case of an equities trader who made unauthorized transactions that cost the bank approximately $2.3 billion. Goran

These three aspects of organizational architecture work in concert to effect organizational performance. This is no less true in the design of contracts. Which party is best positioned to make what decisions as they relate to the value of the deal? What incentives are created by the specified allocations of value and uncertainty? How can performance be measured to ensure appropriate rewards or penalties? Would a different allocation of decision rights facilitate more effective incentives and performance measures? Which party holds the default decision rights in cases of contractual incompleteness, and what incentives would prevail in those cases?[13] These questions and their implications for the value of the deal need to be considered when evaluating the structure of the deal.

III. THE NATURE OF THE FINANCIAL DEAL

The above framework can be used to analyze any kind of transaction relationship or contract structure. It is particularly useful for considering the effects of various market and institutional factors on the value and design of transaction terms. In this section, I will go through the framework in the specific context of financial deals. While each deal has its own idiosyncrasies, the general nature of the deal is essentially the same. The specifics of the situations and terms reflect more a matter of degree than a difference in nature.

A. *Value of the Deal*

Financial deals fall in that class of transactions the value of which is based not on the good itself, but on what access to the good allows the buyer (borrower) to do. The value created in a financing deal is the difference between the expected return-on-investment (ROI) generated by the borrower's use of the funds and the lender's opportunity cost of providing the funds to the borrower. While this may be more readily apparent in the case of project financing, since we can conceptualize the project's ROI, it is equally true of working capital financing that allows a firm to conduct current business activities in anticipation of future sales.

Mijuk, *Swiss, UK Launch Enforcement Proceedings in UBS Trading Scandal*, WALL ST. J. (Feb. 3, 2012), http://online.wsj.com/article/BT-CO-20120203-706798.html. In the UBS case, the trader allegedly maintained fraudulent accounting records to hide his trading activity. *Id.*

[13] Sanford J. Grossman & Oliver D. Hart, *The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration*, 94 J. POL. ECON. 691 (1986); Oliver Hart & John Moore, *Property Rights and the Nature of the Firm*, 98 J. POL. ECON. 1119 (1990) (defining the term "residual rights of control" to describe the default decision rights under conditions of contractual incompleteness). Hart and Moore define asset ownership by the possession of residual control rights and construct a theory of firm integration based on the relative incentives of parties in cases when performance measures are observable but not verifiable. *Id.*

Any factors affecting the borrower's expected ROI or (net) cash flows from financed activities will affect the value of the deal. When the economy is slow or declining, prospects for positive net-present-value (NPV) projects may decline, making financing less valuable to the borrower. Likewise, changes in market conditions that increase costs may increase short-term demand for financing while reducing long-term demand if revenues are not expected to keep pace with increasing costs. Conversely, a growing economy typically means more positive NPV opportunities, which makes financing more valuable. Internal factors also affect the value of external financing to the borrower. Businesses that are more cash-constrained may value financing more as a means to avoid losing previous investments in the enterprise.

From the lender's perspective, the value of the deal depends on several factors as well. First, the availability of other borrowers with expected returns (on a risk-adjusted basis) equal to or greater than the present borrower determines the lender's immediate opportunity cost. By lending now, the lender also foregoes the option of lending to another borrower the amount of any outstanding principal for the life of the deal. This opportunity cost of future lending may encourage lenders to withhold financing today or to give preference to shorter maturities if they expect better borrowers in the future (perhaps due to an economic recovery) and/or a reduction in the supply of loanable funds in the future. Finally, increased reserve requirements and costs of lending will also reduce the lender's value of the deal since the opportunity cost for the loanable funds and the cost of executing the deal both increase.

How the value of the deal is allocated is, in some sense, the defining characteristic of financial deals. Whether debt or equity, the primary difference among types of financing is the nature of the supplier's claim on the borrower's cash flows and assets. Debt involves a claim based on the amount of financing itself rather than on the value the borrower creates with the financing. Equity, particularly common stock, proportionally shares in the economic value created by the financing. Thus the terms of these different financial claims differ based on the nature of the claim and the incentives those claims create for both parties with respect to the value created by the deal.

B. *Uncertainty in the Deal*

There are multiple sources of uncertainty that affect the value of financial deals. Each source of uncertainty has its own set of consequences for the value of the deal, contractual performance, incentives and monitoring and enforcement costs.

1. *Economic Uncertainty*

Simple economic uncertainty affects the value of the deal itself because it typically means more uncertain ROIs. Borrowers and lenders may have greater uncertainty about the borrower's ability to repay due to more uncertain future cash flows. Economic uncertainty also increases information asymmetry between borrowers and lenders, since borrowers have better information about their specific businesses and industries. Greater systemic uncertainty may mask the idiosyncratic uncertainties of the borrower. This creates a greater opportunity for moral hazard behavior on the part of the borrower since she can argue that weak cash flows are the result of larger economic forces and not her ineffective use (or misuse) of finances. This becomes more of a problem if the lender is unable to identify and negotiate performance measures that are more directly related to the borrower's business practices regardless the state of the general economy or the borrower's industry setting.[14]

The size and growth of the U.S. federal debt is another source of potential economic uncertainty. Douglas Elmendorf, Director of the Congressional Budget Office, argues that even a healthy economic recovery will be insufficient to support current projected debt levels and that servicing the debt will require significant changes in federal expenditures and/or revenues.[15] Either of those remedies suggests at least short-term economic consequences, as reductions in federal expenditures may result in short-term decreases in economic activity and as increases in taxes dampen economic activity long-term. This uncertainty affects the potential value of the deal for both small business borrowers and lenders.

2. *Regulatory Uncertainty Affecting Borrowers*

Uncertainty about regulations, regulatory requirements and their associated costs creates another source of uncertainty for borrowers. In the current political environment, great uncertainty persists around the implementation and effects of the Patient Protection and Affordable Care Act of 2010 (PPACA).[16] There continues to be disagreement about the

[14] Ningzhong Li, *Negotiated Measurement Rules in Debt Contracts*, 48 J. ACCT. RES. 1103 (2010) (discussing contractual definitions of net income and net worth in a large sample of private debt contracts and finding that parties tend to define net income differently from Generally Accepted Accounting Practices (GAAP) when net income plays a more important role in the contract when transitory earnings are less informative of financial performance). Li's results demonstrate how parties intentionally design efficient performance measures and structure decision rights (i.e., choice of accounting methods) to effect those measures). *Id.*

[15] Douglas W. Elmendorf, *Four Observations about the Federal Budget*, 46 BUS. ECON. 139 (2011).

[16] Patient Protection and Affordable Care Act of 2010, Pub. L. No. 111-148, 124 Stat. 119 (2010).

relative benefits to small businesses of health care tax credits and increased insurance benefit costs associated with federally mandated coverage requirements. If the cost of providing health care benefits exceeds the relief provided by tax credits, small businesses will have less need for financial capital. Moreover, increased costs for hiring additional employees will reduce the value of financing to expand businesses. While there are myriad forms of government regulation on business, health care reform is undoubtedly the most broad sweeping in its implications for small business profitability and finance.

3. *Regulatory Uncertainty Affecting Lenders*

Lenders are also subject to a range of regulatory uncertainty following the 2008 financial crisis. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank) marked the most sweeping overhaul of financial markets since the 1930s.[17] The legislation calls for over 240 rules involving eleven different federal agencies. The regulation touches every facet of financial markets, from consumer banking fees to credit cards to personal and commercial lending to securities markets. Because the legislation is so wide sweeping and so open-ended in its possible regulatory outcomes, lenders face a great unknown for the future cost of doing business in any form of financing. The regulations not only implicate pricing and costs for doing businesses, but also impose new legal standards and potential liabilities for the process as well as the product of financial deals. Uncertainty around these regulatory costs makes financing of any kind more difficult and costly for lenders to originate.

4. *Behavioral Uncertainty*

In addition to the myriad of external sources of uncertainty that may affect the value of the deal over time, there is also uncertainty stemming from the decisions and actions of the parties to the contract themselves. Moral hazard is the incentive parties have to take advantage of information asymmetry between parties to make decisions that violate the spirit, if not the letter, of the agreement. If detected, moral hazard behavior may be grounds for breach; however, incompleteness of contracts may give rise to any number of opportunities for one party to act in ways that are not explicitly prohibited under the terms of the contract.

In light of the incentive for borrowers not to repay money they borrow or to use the money for purposes other than those proposed to acquire the

[17] *Summary of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Enacted into Law on July 21, 2010,* DAVISPOLK, Jul. 21, 2010, at i, *available at* http://www.davispolk.com/files/Publication/7084f9fe-6580-413b-b870-b7c025ed2ecf/Presentation/PublicationAttachment/1d4495c7-0be0-4e9a-ba77-f786fb90464a/070910_Financial_Reform_Summary.pdf.

funding, the basic objective of the lender is to ask the question, "How do I get my money back?" Many of the terms of financial deals focus on this basic question. Here again, the nature of the claims on cash flow and deal value reveal some of those differences. Debt holders have first claims on cash flow (relative to equity holders), thereby reducing the uncertainty of repayment. They do not share proportionally in the economic value created by the financing deal, so they have little interest in the borrower's ability to achieve supernormal returns on the use of funds and are more concerned about the possible loss of their contractual claims. Seniority of debt claims and securitization through the value of the borrower's assets are additional ways debt holders may reduce the uncertainty of recuperating their funds.

Equity holders share in the uncertainty of value creation and only recoup their money if the business is able to cover all other claims on cash flow. However, because equity holders have no contractual guarantee of repayment to begin with, there is limited downside risk. Since equity holders share in the upside potential, equity holders have an incentive to support management's pursuit of higher-risk, higher-reward investments; that is, investments with a higher probability of supernormal returns and a higher probability of loss. This incentive is particularly strong if current cash flows fail to generate sufficient returns to cover all other claims and a repayment to equity.

This tension between equity and debt holders' interests in the uncertainty of cash flows and probability of repayment creates a misalignment of incentives between the borrower and lender when the borrower has well-diversified equity holdings. In a sense, equity holders (through management) hold an option to "repurchase" the cash flows of the firm by paying off its debt obligations. Option theory illustrates that the value of this option increases with the uncertainty in the value of the borrower's expected future cash flows. As a result, debt holders not only have an incentive to strengthen their claims to the cash flows or to securitize the loan through tangible assets, but also to limit the decision making authority of equity holders/management to prevent excessive risk-taking behavior.

C. *Decision Rights in the Deal*

Financial deals involve a myriad of decision rights that affect the value and uncertainty of the deal, as illustrated above. Many of those decision rights are fairly obvious, such as when payments are due and to whom and how payments should be made. But, there are many other less obvious decision rights that have consequences. Even something as seemingly innocuous as the currency for repayment may be a decision right that could, and often does, come into play. Aside from terms describing the responsibilities of the parties in the actual payment and repayment process,

decision rights are often allocated with the purpose of reducing information asymmetries and mitigating moral hazard incentives, particularly but not necessarily on the part of the borrower.

For example, a line of credit or revolving credit agreement typically allows the borrower to choose when to use the financing, creating an option value for the borrower to use (or not) the financing when it is most advantageous to her and requiring the lender to maintain sufficient liquid reserves to meet the request for cash. There is an implied opportunity cost on the part of the lender to tie up cash commitments that may never be tapped. Hence, it is not unusual for such finance agreements to maintain minimum take-or-pay provisions or charge additional fees to cover the cost of the option, whether the additional fees are flat fees or tied proportionally to the unused balance. However, such agreements also allow the lender to evaluate the borrower's position at the time the funds are requested, enabling the lender to take advantage of new or better information about the borrower's credit worthiness since the time at which the deal was first negotiated. This may reduce the ex ante costs of negotiating and originating the financing agreement.

Decision rights regarding financial reporting requirements reflect lenders' interests in measuring the borrower's overall financial performance as a proxy for the borrower's expected ability to repay during the course of the agreement. The challenge with most such performance measures is that they are generated by the borrower's accounting practices and reporting standards, hence the frequent requirement for third-party verification (i.e., audits). The choice of performance measures and how they may be calculated also needs to be tailored to the nature of the borrower's business operations to ensure they more accurately measure actual ability to repay.[18]

Debt terms regarding asset securitization, maintenance, deployment and restrictions on use of funds and course of business all limit decision rights of borrowers in attempt to mitigate moral hazard incentives. Determination of default conditions and consequences establish decision rights for the lender to protect her cash flow claims by granting the implicit option to call the debt or effect default conditions. Explicit options may grant lenders the decision right to convert their claims to equity positions, thus allowing them to benefit proportionally from effective value creation, or may grant borrowers the ability to terminate the debt early through prepayment of a loan or calling (buying back) a bond or note. These various decision rights create different incentives for either party with respect to the value of the deal and the allocation of value that is realized ex post.[19]

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[18] *See* Li, *supra* note 14.

[19] Chris Anderson, *Financial Contracting Under Extreme Uncertainty: An Analysis of Brazilian Corporate Debentures*, 51 J. FIN. ECON. 45 (1999) (discussing how various combinations of decision rights in corporate debentures can be used to

IV. THE "GREAT RECESSION" AND THE NATURE OF THE DEAL

The motivating question for this paper is how the "Great Recession" of 2008–2009 has affected the nature of financial contracting for small businesses. By this point, it should be no surprise that the conclusion is not that the nature of the deal has changed, but that the nature of the contracting environment has changed. Understanding the fundamentals of financial transactions provides a framework through which to consider why and how financial deals themselves may be affected by the financial crisis and by the policies that have been adopted since and that are still in the process of being defined and implemented.

A. *General Economic Malaise and Uncertainty*

General economic malaise reduces the potential value to be created in any financial deal since a slow economy typically means slower or negative growth in cash flows. Small businesses typically have smaller, less diversified consumer bases, leaving small businesses more susceptible to economic instability than large, particularly multi-national, businesses in part because small business are not geographically diversified across economic regions. As a result, small businesses are likely to have fewer value-creating opportunities in which to invest than large businesses, and therefore have a lower demand for financing to begin with.

On the other side of the deal, many lenders found themselves with less capital available to lend as a result of defaults on existing loans, particularly loans related to the home mortgage market. Concern over the soundness of the banking industry also led to demands for banks to increase their cash reserves, further reducing the amount of capital available to lend.[20] Given a relative scarcity of capital and regulatory pressure to bolster reserves, banks were forced to tighten credit standards. Because large firms tend to be less susceptible than small firms to the economic slowdown and have more available assets on hand for securitizing the value of the deal, large firms tend to be more attractive borrowers.

This availability of assets to securitize the loan became especially problematic during this financial crisis due to the role of the home mortgage industry as a contributing factor in the financial distress of major lending institutions. Small business owners' homes are most often the business

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effect self-enforcing incentives, particularly in the context of great uncertainty and institutional failure).

[20] Banks can choose to increase reserves either by reducing their assets (i.e. reduce lending) or by recapitalizing with additional infusions of equity. Jung-Soon Hyu & Byung-Kun Rhee, *Bank Capital Regulation and Credit Supply*, 35 J. BANKING & FIN. 323 (2011) (discussing that under capital-based regulation, banks have an incentive to reduce assets rather than recapitalize even when there is no cost to recapitalization).

owner's most valuable asset and frequently are used as security for business-related loans.[21] Record-level home mortgage default and foreclosure rates during the recession reduced home and property values around the country, and continue to suppress real estate prices due to a glut of housing stock on the market. As a result, small business owners' often primary source of security for financing is worth less, further reducing the value of financing deals to small businesses.

B. *The "Stimulus" Distortion*

While the net effectiveness of the federal "stimulus" and bailout programs remains debatable, there is no denying that some industries and businesses benefited greatly. For instance, suppliers to large bailout recipients like General Motors and Chrysler clearly benefited more than suppliers to other automobile manufacturers. Firms in or related to industries targeted for stimulus spending, such as construction or so-called "green energy," benefited more than those in non-targeted industries. To the extent lenders had money available to lend, this government intervention distorted the costs and benefits of lending to different groups of (small) businesses. Businesses that benefited more directly from these federal spending programs faced less economic uncertainty and higher expected returns than businesses that were not direct recipients of federal spending. The existence of borrowers who could demonstrate secure revenue streams, whether in the form of direct government support or contracts with government-supported businesses, decreased the uncertainty cost of lending to such entities and increased the opportunity cost of lending to small businesses that could not demonstrate such revenue stability.

C. *The (Unintended) Consequences of Financial Market Regulations*

Financial regulations at the time of the crisis and since have further implications for small businesses' access to financial capital. Capital-based regulation, which requires banks to maintain a minimum capital adequacy ratio, is one factor cited for the spiraling of the worldwide financial crisis in 2007.[22] As the value of banks' capital base declined, banks reduced lending in order to maintain their capital adequacy requirements rather than recapitalizing through issuing new securities. Among other reasons for banks' preference for reduced lending was the cost of recapitalization, which had been increased as a result of Sarbanes-Oxley.[23] This contraction in the supply of credit precipitated additional financial stress as businesses that could no longer access financing were unable to continue operating successfully, placing additional strain on banks' assets.

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[21] *See* FINANCING SMALL BUSINESS, *supra* note 4, at 29.
[22] Hyu & Rhee, *supra* note 20.
[23] Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (2002).

Financial market reforms coming out of the recession create additional costs and uncertainties that are likely to affect small businesses' access to financing. Elements of Dodd-Frank that have already been implemented have increased the cost of using credit cards, both for consumers and retailers. This cost has been particularly felt by small retail businesses that may have small per-ticket transaction values.[24] Credit cards, both personal and business, continue to be one of the primary sources of funding for small business owners. Over 75% of small business use credit card financing and roughly 25% rely exclusively on credit card financing.[25] Reforms that further increase issuers and users' costs of credit cards will restrict small business financing.

It is now almost twenty months since the passage of Dodd-Frank and more than forty rules and reports have yet to be taken up by the Securities and Exchange Commission staff.[26] Scores more have yet to be finalized. The amount of uncertainty facing the lending institutions continues to be very high. Banks continue to hold near-record levels of excess reserves.[27] This uncertainty around pending regulations and their implications for the cost of providing financial services continues to be a drag on banks' willingness to lend. Current proposals to address lingering malaise in the home mortgage market by requiring banks to pay for refinancing mortgages at reduced appraised values only add to the uncertainty and further reduce the amount and value of funds available for small business lending.[28]

V. CONCLUSION

If anything is clear at present, it is that regulatory uncertainty will continue to present challenges for small business financing, even as the economy shows signs of a slow but stable recovery. Proposals to reform financial markets have real implications for the costs of lending, and those implications are not necessarily homogeneous across potential lenders.

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[24] Robin Sidel, *Debit-Fee Cap Has Nasty Side Effect*, WALL ST. J. (Dec. 8, 2011), http://online.wsj.com/article/SB10001424052970204319004577084613307585768.html.

[25] *See FINANCING SMALL BUSINESS, supra* note 4, at 11.

[26] *Implementing Dodd-Frank Wall Street Reform and Consumer Protection Act—Upcoming Activity*, U. S. SEC. & EXCH. COMM'N, http://www.sec.gov/spotlight/dodd-frank/dfactivity-upcoming.shtml (last visited Mar. 29, 2012).

[27] *Aggregate Reserves of Depository Institutions and the Monetary Base*, U. S. FED. RES. (Feb. 16, 2012), http://www.federalreserve.gov/releases/h3/current.

[28] In his State of the Union address on January 24, 2012, President Obama announced a new initiative to assist home owners whose mortgage principals exceed the value of their home. Barack Obama, President, U.S.., State of the Union Address (Jan. 24, 2012). Banks' losses on the refinancing deals are proposed to be covered by a new fee on the largest of banks that benefitted from federal bailout money during the recession. *See* Nick Timiraos, *Obama Proposes Mortgage-Refinance Plan*, WALL ST. J. (Jan. 24, 2012), http://online.wsj.com/article/SB10001424052970203806504577181652800384514.html.

Until those reforms are better known, banks have an incentive to tighten access to credit either by restricting amounts, increasing interest rates or shortening maturities.

But, regulatory uncertainty in financial markets is not the only source of uncertainty affecting the value of small business finance deals. While the economy has recently demonstrated signs of steady, if slow, growth, financial turmoil from events around the world raise cautions about the sustainability and trajectory of growth in the U.S. economy. Small businesses face uncertainty from the costs of health care and regulatory mandates of the PPACA. Given the pressure of the federal deficit, there continues to be uncertainty about the possibility and size of potential tax rate increases that would increase costs for small businesses and reduce the value potential of small business financing.

So, how has the "Great Recession" affected small business financing? Economic cycles come and go, and the nature of the finance deal remains the same. As the economy rebounds, the value created through small business financing will also rebound and small businesses will more effectively compete with larger business for the available supply of capital. If that were the only issue, not much would have changed. However, the "Great Recession" triggered significant policy actions that compounded the effects of a weak economy. Government initiatives to subsidize, bail out and stimulate sectors of the economy distorted financial markets by arbitrarily making some businesses better candidates for financing than others, thereby reducing access to non-favored firms and industries. Financial market reforms have already increased the cost of various financial resources relied upon by small businesses, and a whole slate of financial market regulations have yet to be defined, much less understood for their likely consequences. When all is said and done, it will be these regulatory changes, their associated costs and the incentives they create that will define the effects of the "Great Recession" on small business finance.