SHADOW BANKING, FINANCIAL MARKETS, AND THE REAL ESTATE SECTOR*

STEVEN L. SCHWARCZ**

I. Overview of Shadow Banking

A. Introduction

The world's financial system has been rapidly changing. A central feature of this change is disintermediation, which entails the removal of banks as financial intermediaries. The term "shadow banking" is often used as shorthand to refer to the disintermediated financial system. The "shadow banking system" consists of effectively all forms of financing that are not bank intermediated.

1. Examples

Shadow banking encompasses structured finance and securitization, in which financing is indirectly raised by special-purpose entities ("SPEs"). It also includes financing and financial services provided by other non-bank financial intermediaries—such as finance companies, hedge funds, money-market mutual funds, real estate investment trusts ("REITs"),[1] securities lenders engaging in repo lending, and investment banks.

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** Stanley A. Star Professor of Law & Business, Duke University School of Law, and Founding Director, Duke Global Capital Markets Center; schwarcz@law.duke.edu. I thank the following professionals for helpful comments: Jason Kravitt and Stuart Litwin of Mayer Brown LLP; Eric Marcus and Warren Bernstein of Kaye Scholer LLP; and Eugene Pinover of Willkie Farr & Gallagher LLP.

[1] Although REITs have long preceded what is generally referred to as shadow banking, I include them because they are, technically, SPEs that issue securities and use the proceeds to invest in real estate properties.

2. Impact

The amount of non-bank intermediated (i.e., disintermediated) credit already "rivals" the amount of bank-intermediated credit provided to households and businesses.[2] The trajectory of disintermediation suggests that disintermediated credit will soon, if it does not already, exceed bank-intermediated credit. The gross amount of disintermediated credit was estimated to be nearly $20 trillion in March 2008,[3] but is thought to have grown to at least three times that level—between $60 and $67 trillion—in 2011.[4]

3. Risks and Regulation

The paramount concern posed by the disintermediated financial system is that it can, if left unregulated, pose systemic risks to the entire financial system.[5] Disintermediation makes it much more likely, for example, that market participants will engage in profitable but risky transactions even though doing so could externalize harm—including systemic harm—onto other market participants and even ordinary citizens.[6] Notwithstanding such risks,

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[2] Zoltan Pozsar et al., *Shadow Banking* (Fed. Reserve Bank of N.Y., Staff Report No. 458, 2010), *available at* http://newyorkfed.org/research/staff_reports/sr458.html ("The shadow banking system rivals the traditional banking system in the intermediation of credit to households and businesses.").

[3] *Id*. at 4.

[4] *Compare* Philip Halstrick, *Tighter Bank Rules Give Fillip to Shadow Banks*, REUTERS (Dec. 20, 2011, 4:17 AM), http://www.reuters.com/article/2011/12/20/uk-regulation-shadow-banking-idUSLNE7BJ00T20111220 (indicating that the shadow banking sector was, at that time, a $60 trillion industry), *with* FIN. STABILITY BD., GLOBAL SHADOW BANKING MONITORING REPORT (2012), *available at* www.financialstabilityboard.org/publications/r_121118c.pdf (estimating shadow banking's worldwide assets in 2011 at $67 trillion).

[5] *See, e.g.*, Klára Bakk-Simon et al., *Shadow Banking in the Euro Area: An Overview* 4 (European Cent. Bank, Occasional Paper No. 133, 2012), *available at* http://www.ecb.europa.eu/pub/pdf/scpops/ecbocp133.pdf (observing that disintermediation is "one of the main sources of financial stability concerns").

[6] *See infra* Part IV.C (discussing responsibility failure). *See generally* Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193, 206 (2008).

however, disintermediation can increase financial efficiency.[7] The challenge will be to determine how shadow banking should be regulated to try to maximize its efficiencies while minimizing its risks.[8]

B. How will Shadow Banking Impact the Real Estate Sector?

Securitization, hedge funds, and REITs are especially relevant to the real estate sector.

1. Because securitization is a critical means of enabling mortgage-loan originators to regain liquidity to make new loans (which I will discuss as a means of "funding regeneration"[9]), it is important both to the housing recovery and to commercial real estate generally. A common political response to the recent financial crisis, however, has been to restrict securitization.[10]

2. Hedge funds are becoming increasingly important originators of mortgage loans, as I will discuss.[11]

3. REITs might also be regarded as part of the shadow banking system.[12] Although their use has long been concentrated in U.S. markets, they are becoming increasingly important in global

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[7] Steven L. Schwarcz, *Inaugural Address: Regulating Shadow Banking*, 31 REV. BANKING & FIN. L. 619, 624–25 (2012) (explaining why shadow banking "may well constitute a public good by helping to achieve efficiencies").
[8] *Id.* at 641.("Due to regulatory arbitrage and the increasing technological ability of non-banks to compete with traditional banks in providing financial products and services, shadow banking seems here to stay. I therefore have focused on how shadow banking should be regulated to try to maximize its efficiencies while minimizing its risks.").
[9] *See infra* Part III.
[10] Steven L. Schwarcz, The 2011 Diane Sanger Memorial Lecture, *Protecting Investors in Securitization Transactions: Does Dodd-Frank Help, or Hurt?*, 72 LA. L. REV. 591, 593 & 596 (2012).
[11] *See infra* Part II.A.2.
[12] *See supra* note 1.

real estate finance.[13] However, REITs are not significant real estate loan originators or funding regenerators.[14]

II. Funding Origination

A. Mortgage-Loan Origination

1. Bank Origination

Banks are currently observing very conservative real estate lending standards.[15] Regulation such as Basel III may well motivate banks to continue observing conservative real estate lending standards.[16]

2. Non-Bank Origination

When banks observe conservative lending standards—either voluntarily or pursuant to regulation that applies only to banks—non-banks have an opportunity to begin competing in real estate loan origination. For example, I have been informed that hedge funds, both directly and through vehicles (such as SPEs) that issue securities to raise financing, are now originating a significant amount of commercial real estate lending in the United States. I also understand that hedge funds are actively engaged in acquiring residential mortgage-origination and servicing businesses, which they expect to be increasingly profitable.[17]

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[13] Julius L. Sokol, *The Proliferation of Global REITS and the Cross-Borderization of the Asian Market*, 9 SAN DIEGO INT'L L.J. 481, 487–88 (2008).

[14] Robert H. Bergdolt & Robert J. Le Duc, *Public Nontraded Mortgage REITs—Issues and Opportunities*, 7 J. TAX'N & FIN. PRODUCTS 47, 48 (2008).

[15] The Monitor, *Bank Regulation*, 30 NO. 8 BANKING & FIN. SERVICES POL'Y REP. 22, 25 (2011) (discussing the ease with which banks will comply with Basel III because of their current risk-averse practices).

[16] *See id*.

[17] E-mail from Stuart Litwin, Partner, Mayer Brown LLP, to the author (Sept. 6, 2012) (on file with author).

3. Government Roles in Mortgage-Loan Origination

(i) Governments worldwide are increasingly considering restricting residential mortgage-loan origination standards.[18] Overly restrictive origination standards could, of course, impede the housing recovery.

(ii) In the United States, for example, mortgage lending will be strongly driven by what is known as the Qualified Mortgage ("QM") definition for making mortgage loans. This definitional limitation is mandated by § 1411 of the Dodd-Frank Act, which amends the Truth in Lending Act to prohibit a lender from making a residential mortgage loan unless the lender "makes a reasonable and good faith determination . . . that the consumer has a reasonable *ability to repay* the loan . . . ."[19]

Until the definition is finalized, parties cannot estimate credit cost or availability. This contributes to the conundrum that, although today's low interest rates and home prices should make housing very

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[18] *See, e.g.*, CRAIG ALEXANDER, DEREK BURLETON, & DIANA PETRAMALA, TIGHTER MORTGAGE RULES TO COOL DEBT GROWTH, BUT HIGHER RATES ULTIMATELY REQUIRED (2012), *available at* http://www.td.com/document/PDF/economics/special/dp0912_mortgage_rules.pdf (discussing the tightening mortgage lending standards in Canada).

[19] Dodd-Frank Wall Street Reform and Consumer Protection Act § 1411(a)(2), 15 U.S.C. 1639c(a)(1) (Supp. V 2011) (emphasis added) ("In accordance with regulations prescribed by the Bureau, no creditor may make a residential mortgage loan unless the creditor makes a reasonable and good faith determination based on verified and documented information that, at the time the loan is consummated, the consumer has a reasonable ability to repay the loan, according to its terms, and all applicable taxes, insurance (including mortgage guarantee insurance), and assessments."). In April 2011, the Federal Reserve Board delegated its issuance authority to its Consumer Financial Protection Bureau (CFPB), which issued a proposed rule amending Regulation Z. Under that proposal, a QM loan would require that several specific underwriting factors be considered and verified. *See* Press Release, Fed. Reserve Bd., 2011 Banking and Consumer Regulatory Policy (Apr. 19, 2011), *available at* http://www.federalreserve.gov/newsevents/press/bcreg/20110419a.htm ("The Federal Reserve Board on Tuesday requested public comment on a proposed rule under Regulation Z that would require creditors to determine a consumer's ability to repay a mortgage before making the loan and would establish minimum mortgage underwriting standards.").

affordable, many ordinary families cannot qualify for mortgage loans.[20] Furthermore, the final QM definition will strongly impact the availability and cost of credit because borrowers will have strong incentives to litigate mortgage loans that, in retrospect, arguably fall outside that definition. Under proposed law, for example, an ability-to-repay violation would be a defense against foreclosure; also, a lender losing an ability-to-repay lawsuit would become subject to "enhanced damages," which include liability for actual damages, double finance charges, and all costs.[21] Attempts to finalize the QM definition thus face an inherent tension between protecting borrowers and ensuring reasonable credit availability.

One way to help resolve this tension would be to allow a definitional alternative option for a QM loan, based on the loan-to-value ratio. For example, there could be a *non-exclusive* regulatory safe harbor if the collateral value is at least 1.*X* times the loan principal (where *X* equals an integer). This would be somewhat analogous to Regulation U of the Federal Reserve, which requires margin loans secured by margin stock to be collateralized at least 2:1.[22] I am not suggesting, however, that real estate loans need as much overcollateralization as margin loans. I understand that residential mortgage loans in Canada, for example, are keyed to only an 80% maximum loan-to-value ratio.[23]

(iii) The Financial Stability Oversight Council ("FSOC") may be considering taking further action to proactively regulate

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[20] Robert Hardaway, *The Great American Housing Bubble: Re-examining Cause and Effect*, 35 U. DAYTON L. REV. 33, 50 (2009) (noting that one-third of Americans cannot afford to purchase a home).

[21] Regulation Z; Truth in Lending, 76 Fed. Reg. 91, 27391, 91, 27396 (proposed May 11, 2011) (to be codified at 12 C.F.R. 226).

[22] *See* 12 C.F.R. § 221.7(a) (2012) ("The maximum loan value of any margin stock is fifty per cent of its current market value. ") It is only somewhat analogous because, unlike Regulation U, the definitional alternative option for a QM loan would be non-exclusive.

[23] Canadian Bank Act, S.C. 1991, c. 46, s. 418(1) (Can.) ("A bank shall not make a loan in Canada on the security of residential property in Canada for the purpose of purchasing, renovating or improving that property, or refinance such a loan, if the amount of the loan, together with the amount then outstanding of any mortgage having an equal or prior claim against the property, would exceed 80 per cent of the value of the property at the time of the loan.").

mortgage origination in the United States.[24] Also, I understand that there are worldwide regulatory efforts to impose restrictions and safety nets for mortgage loans.

(iv) Government may play other roles in mortgage origination—subject to the caveat that any government action would, of course, affect private market incentives. Should governments consider, for example, providing mortgage-loan guarantees, perhaps for the early years of a mortgage, much as they do for project financing during the risky construction phase? Should governments consider making credit available to mortgage-loan originators to enhance the liquidity of key real estate markets?[25]

(v) Also, given the very long-term nature of typical mortgage loans, what will be the impact of Basel III's aversion to short-term "wholesale" funding to finance loan/asset books?[26] Will mortgage loans be made for shorter periods? I understand that shorter term mortgage lending is already becoming common in some countries. Although shorter terms could help to mitigate lending risk, it could increase the burden on borrowers.

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[24] *See* Helen Mason, *No One Saw It Coming —Again Systemic Risk and State Foreclosure Proceedings: Why a National Uniform Foreclosure Law is Necessary*, 67 U. MIAMI L. REV. 41, 73–74 (2012) (noting that the FDIC has asked the Financial Stability Oversight Council to examine the risks posed by mortgage servicing and foreclosure).

[25] In that regard, compare the role of Federal Home Loan Banks in the United States. *See* Adam B. Ashcraft et al., *The Federal Home Loan Bank System: The Lender of Next-to-Last Resort?* 2-3 (Fed. Reserve Bank of N.Y., Staff Report No. 357, 2008), *available at* http://newyorkfed.org/research/staff_reports/sr357.html.

[26] *See* Francisco Vazquez & Pablo Federico, *Bank Funding Structures and Risk: Evidence from the Global Financial Crisis* 5, 16 (Int'l Monetary Fund, Working Paper No. 12/29, 2012), *available at* http://www.imf.org/external/pubs/ft/wp/2012/wp1229.pdf (concluding that Basel III addressed their findings, which included bank overreliance on wholesale funding before the economic crisis).

B. Alternatives to Mortgage Loans

1. Alternative Forms of Access

To what extent will restricted loan origination motivate alternative forms of "access"—such as leasing and other non-ownership rights—to use real property? Leasing is important in some non-U.S. markets.[27] Since the financial crisis, the leasing of residential real estate has become increasingly important in the U.S.[28]

2. Rental Payments as Financial Assets

As alternative forms of access grow, one can envision regenerating funding through securitization.[29] Lease rental payments, for example, are "financial assets," and at least theoretically all types of financial assets can be securitized.

III. Funding Regeneration

A. Securitization

Recall that, because securitization is a critical means of enabling mortgage-loan originators to regain liquidity to make new loans, it is important to both the housing recovery and commercial real estate generally. For example, a mortgage-loan originator that makes mortgage loans totaling $*X* can securitize the loans and regain close to $*X* of liquidity to make additional loans. These additional loans can likewise be securitized, enabling the mortgage-loan originator to make further additional loans. This cycle can continue, perhaps enabling a mortgage-loan originator starting with $*X* to make, for example, loans aggregating close to three or four times that amount per year.

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27 Thomas J. Sugrue, *The New American Dream: Renting*, WALL ST. J., Aug. 15, 2009, at W1, *available at* http://online.wsj.com/article/SB10001424052970204409904574350432677038184.html (noting that in Germany, France, and Switzerland, renting is more common than buying).
28 *Id.*
29 *See infra* Part III.A.

1. GSE Securitization

Government-sponsored enterprise ("GSE") securitization is, through the monetization of mortgage loans, currently the primary domestic source of funding regeneration.[30] This is partially driven by regulation. The Dodd-Frank Act, for example, imposes a 5% minimum unhedged risk-retention ("skin in the game") requirement for *non-GSE* mortgage-loan securitizations.[31] In this way, GSE securitization is inconsistent with the goal of the Obama administration's white paper on housing finance, which contemplates phasing out the GSEs and enticing more "private capital" into the system.[32]

To some extent, however, GSE securitization reflects a post-financial crisis move to safety.[33] As discussed below, however, there may be a trend in today's financial markets toward increasing tolerance for risk.[34]

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[30] Sec. & Fin. Mkts. Ass'n, Comments on "FHA-Rural Regulatory Improvement Act of 2011" (May 24, 2011), *available at* http://financialservices.house.gov/uploadedfiles/052511sifma.pdf (indicating that GSEs are the largest issuers of mortgage-backed securities).

[31] Dodd-Frank Wall Street Reform and Consumer Protection Act §941(b), 15 U.S.C. 78o-11(c)(1)(i)(B) (Supp. V 2011). Risk Retention ties into the Qualified Residential Mortgage ("QRM") rule because the risk-retention requirement does not apply to securitizing QRMs. Six federal agencies are jointly responsible for issuing this rule. QRMs are to be a higher quality subset of Qualified Mortgage (QM) loans. On March 11, 2011, the six agencies proposed a very tight QRM definition. There has been no subsequent release as to when a final rule will be issued.

[32] *See generally* U.S. DEP'T OF THE TREASURY & U.S. DEP'T OF HOUS. & URBAN DEVELOPMENT, REFORMING AMERICA'S HOUSING MARKET: A REPORT TO CONGRESS 1–2 (2011) (outlining the Obama administration's positions on housing finance).

[33] Thus, Ginnie Mae, which is wholly-owned by the U.S. government, has grown even more important as compared to Fannie Mae and Freddie Mac. Foreign investors often prefer Ginnie Mae securities because they are backed by a full U.S. government guarantee. Even though the yields on Ginnie Mae securities are lower than on Fannie and Freddie securities, investors are concerned about Fannie and Freddie because they are private entities (albeit "federally chartered" or "government sponsored"), having only a line of credit to the U.S. Treasury.

[34] *See infra* Part IV.A.2.

2. Non-GSE Securitization

It is hard to predict the future of the residential mortgage-backed securities ("RMBS") market. However, until that market is weaned from the GSEs, the level of residential real estate financing may be limited.

B. Covered Bonds

1. The use of covered bonds, like securitization, can also serve as a way to monetize mortgage loans.[35] Some covered bond regimes are statutory and some are contractual. Statutory regimes are generally safer for investors because they provide legislative safe harbors. The United States does not yet have a statutory covered bond law.

2. The relationships and differences between securitization and covered bond transactions are complex. Although investors sometimes view covered bonds as preferable to securitization, covered bond transactions are more likely than securitization transactions to harm unsecured creditors of mortgage-loan originators.[36]

IV. Controlling Future Real Estate Financing Risk

No matter how funding origination and funding regeneration are regulated, there are likely to be future financial failures. This is because shadow banking can trigger three types of market failures: information failure, agency failure, and responsibility failure (the last of which is often addressed as "externalities"). Regulation cannot completely address these three types of market failure.

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[35] *See generally* Steven L. Schwarcz, *The Conundrum of Covered Bonds*, 66 BUS. LAW. 561 (2011) (discussing covered bonds in connection with mortgage securitization).
[36] *See id.* at 586.

A. Information Failure

1. Asymmetric Information

By increasing complexity, shadow banking can cause information failure by making financial transactions and products more difficult to disclose and understand. In the recent financial crisis, for example, it appears that neither investors nor underwriters always fully understood and appreciated the potential consequences of complex, highly-leveraged ABS CDO securities, which were largely payable from securities that themselves were payable from underlying mortgage loans.[37]

2. Bounded Rationality

Although sometimes categorized separately, this can be viewed as a subset of information failure.

(i) We have difficulty, for example, appreciating unlikely events that, if they occur, could have devastating consequences.[38] In this context, note the parallel between subprime margin loans as a causal factor in the Great Depression (when the rising stock market collapsed, many of these loans became undercollateralized),[39] and subprime mortgage loans as a causal factor in the recent financial crisis (when the rising housing market collapsed, many of these loans likewise became undercollateralized).[40] In both cases, observers critically under-appreciated the systemic consequences of a precipitous drop—unprecedented in then-recent history—in collateral value.[41]

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[37] Steven L. Schwarcz, *Regulating Complexity*, 87 WASH. U. L. REV. 211, 241–42 (2009).
[38] Iman Anabtawi & Steven L. Schwarcz, *Regulating Systemic Risk: Towards an Analytical Framework*, 86 NOTRE DAME L. REV. 1349, 1366-68 (2011) ("Optimism bias and availability bias play a role in explaining why individuals systematically underestimate the likelihood of very rare but potentially devastating risks—a phenomenon known as 'disaster myopia.' People are unrealistically optimistic when thinking about extreme events with which they have no recent experience, and they may undervalue the importance of those events.").
[39] *Id*. at 1356–57.
[40] *Id*. at 1360.
[41] *Id*. at 1357 & 1360.

(ii) We also have short memories. Although in late 2008 and early 2009 no investor would buy anything that did not have a government guarantee, there is a trend in today's financial markets toward increasing tolerance for risk. To obtain higher returns, investors—especially hedge funds—are now buying AAA/Aaa subprime auto and A-rated prime auto paper and are looking at other asset classes. We now appear to have a vibrant collateralized loan obligation market for non-mortgage asset classes (which looks in all respects like the old collateralized debt obligation ("CDO") market, albeit with a different name).[42] Even the market for commercial mortgage-backed securities is improving, although the market for RMBS is still uncertain.[43]

Short memories, however, may not fully explain risk cycles and today's market's increasing tolerance for risk. This trend may also be explained as evidence of a swing back to normalcy from the earlier overreaction or as a result of competitive investors fighting to get high returns.[44]

B. Agency Failure

1. By increasing complexity, shadow banking can increase the potential for agency failure (meaning principal-agent failure, as opposed to GSE "agency" failure).

2. The biggest problem may not be the traditional agency conflict between a firm's owners and senior managers but, instead, the conflict between a firm's senior managers and its secondary managers (such as vice presidents and analysts).[45] Because secondary managers are typically paid on a short-term basis, including through yearly bonuses, and often move from firm to firm, their interests do

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[42] E-mail from Litwin, *supra* note 17.
[43] *Id.*
[44] Litwin also observes that governments worldwide have made it an economic policy to keep interest rates low to stimulate their economies and economic troubles have dramatically increased the demand for low-risk government securities. Short-term, AAA/Aaa-rated, asset-backed securities have a somewhat greater return than—and have become a reasonable substitute for—other low risk investments. *Id.*
[45] *See generally* Steven L. Schwarcz, *Conflicts and Financial Collapse: The Problem of Secondary-Management Agency Costs*, 26 YALE J. ON REG. 457 (2009) (detailing conflicts of interest between firms and secondary managers).

not necessarily align with the long-term interests of their firms. Even more apropos to shadow banking, secondary managers may well have a better technical understanding of complex investments and transactions, so they can—and in the recent financial crisis, often likely did—recommend investments and transactions that generate high returns, and thus high bonuses to them, even though the investments and transactions pose real long-term risks to their firms.[46]

3. Agency failure is, theoretically, one of the easiest types of failure to try to manage by regulation.[47] But to the extent managers can move to jobs in different countries, effective regulation will require international governmental cooperation.

C. Responsibility Failure

1. Shadow banking also makes it much more likely that market participants will engage in profitable but risky transactions, although doing so could externalize harm—including systemic harm—onto other market participants and even ordinary citizens. Economists would see this as fitting into the traditional market-failure category of "externalities."

2. "Externalities," however, is a counterintuitive and confusing term for a market-failure category because it conflates cause and effect. Externalities are consequences, not causes, of market failure. We need to focus more on the *cause* of those externalities, which I will call responsibility failure.[48]

3. For example, limited liability is an important source of responsibility failure that can lead to externalities. Because investors in firms are not personally liable for the liabilities of their firms, the interests of investors may conflict with the interests of their firms

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[46] *Id*. at 460 (discussing how secondary managers used value-at-risk to accomplish this).
[47] *Id*. at 465–69 (discussing possible solutions, including aligning compensation incentives).
[48] *See generally* Steven L. Schwarcz, Regulating Shadows: Financial Disintermediation and the Need for a Common Language (Oct. 9, 2012) (unpublished working paper), *available at* http://ssrn.com/abstract=2159455 (explaining and developing the concept of responsibility failure).

and, more importantly for externalities, with the interests of third parties harmed by those firms.[49]

4. By facilitating decentralization, shadow banking makes this form of responsibility failure much more likely. The relatively small firms that operate in the disintermediated financial system are often managed directly by their primary investors. Because they typically divide up a significant share of the firm's profits, those managers have strong incentives to take risks that could generate large profits. However, if a risky action exposes their firm to significant liability for externalized harm, those managers would not be liable if the firm cannot pay that liability. Such primary investor-managers therefore have an incentive to take outsized risks with their firms, for the chance of outsized gains to themselves, notwithstanding the potential systemic impact that could result from their firm's failure.[50]

5. This is radically unlike the management incentives in large firms, such as traditional banks, in which the senior managers tend to share only indirectly in profits, such as through stock options. These managers may also be more invested in maintaining their jobs and therefore are less motivated to take actions that increase risk to the firm as a whole.

V. Conclusion

In conclusion, the future of the real estate sector is integrally tied to the growth of shadow banking. Governments worldwide are struggling with innovative regulatory challenges, such as how to control possible excesses while preserving the benefits of mortgage-loan origination and regeneration. No regulatory approach is likely to be perfect.

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[49] This is not an overlap with agency failure because agency failure goes to the principal-agent relationship whereas conflicts resulting from limited liability go to the conflict between managers of firms and society.

[50] To some extent this would be balanced, however, by the failure of a relatively small firm being less likely to trigger systemic consequences than the failure of a larger firm.