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Shadowing Lenders and Consumers: The Rise, Regulation, and Risks of Non-Banks

By Shelby D. Green

I. The Rise of the Non-Bank

Since the financial crisis of 2008, “shadow banking”1 or financial transactions by “non-banks,” has skyrocketed. Non-banks are not depositary institutions and as such, they roam free, largely outside the purview of the bank regulators. They occupy all parts of the credit markets, from mortgage loan origination to payday lenders.2 Untethered, they operate without government guarantees, such as deposit insurance and have no access to emergency government lending facilities, such as the Federal Reserve’s discount window.

There are both positives and negatives in the rise of non-banks. On the positive side is market liquidity and greater diversity of funding sources for consumer borrowing, which is often claimed to be a more efficient allocation of risk to investors.3 Also, by using alternative risk metrics in loan origination, non-bank lenders are increasingly making financing available to a particular demographic—the financially marginal. On the negative side, the heavy reliance on government guarantees and purchase of its loans may pose worrying systemic risks.

A. The Presence of Non-Banks in Mortgage Markets

Since the financial crisis of 2008 abated, non-banks nearly tripled their mortgage market share, rising from 14% in 2007 to more than 50% in 2016.4 They originate more than 50% of all mortgages and nearly 80% of loans insured by the Federal Housing Administration (FHA),5 which supports lower-income borrowers. Shadow banks almost never retain originations on their balance sheets,6 but are increasingly reliant on the Government Sponsored Enterprises (GSEs)(Fannie Mae and Freddie Mac), as well as the Government National Mortgage Association (Ginnie Mae) to purchase their mortgages.7

In the first quarter of 2018, bank and non-bank mortgage lenders originated 1.81 million loans for residential properties (1 to 4 units); a third of these mortgages were purchase mortgages, nearly one-half were refinance mortgages and the balance, home equity loans.8 In that total, non-banks, Quicken Loans,9 Loan Depot,10 United Wholesale Mortgage,11 Caliber Home Loans,12 Fairway Independent Mortgage,13 and Guaranteed Rate14 were first, fourth, fifth, seventh, eighth, and ninth of the top ten lenders, respectively. Banks, Wells Fargo,15 JP Morgan Chase,16 Bank of America,17 and U.S. Bank18 were second, third, sixth, and tenth, respectively.

Other lending dynamics are also changing. Down payments are getting smaller—an average of 11.4%, down from the traditional 20%.19 The median FICO20 score of borrowers is getting lower.21

B. Impetus for the Rise

The rise in non-bank mortgage lending seems a consequence of both a retreat by banks and market movements by non-banks.22 Banks are abandoning the primary market because the new regime of banking regulations made mortgage origination too costly.23 New regulations on balance-sheet holdings, along with risk retention and liquidity requirements, meant higher costs associated with originating and selling mortgages to private label securities.24 Capital requirements that are higher than what a firm would choose on its own, represent lost opportunities because they reduce the amount of funds otherwise available for lending or investment. Banks also determined that the best way to avoid liability from missteps in loan origination is to stay out of the business altogether.25 Surprisingly, this retreat was more prominent in the case of larger banks than smaller ones; smaller banks and non-banks stepping in to fill the void.26

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On the other side of this dynamic are the business models used by non-banks, particularly online technology in loan origination that have lowered the logistical barriers to entry in markets where lenders once needed networks of physical branches to build their businesses. These new operating models have given rise to the term “fintech” to describe platforms that use digital tools that eliminate intermediate parties and operate automatically. Heightened integration, greater efficiencies, lower costs, and improved ease of use for customers have proven to be ingredients for exponential growth in market share.

II. The Regulation of Non-Banks

There are reasons to be concerned about the tsunami of non-banks in the mortgage loan origination market. They relate to the reasons for regulating banks in the first place and for strengthening those regulations after the 2008 financial crisis. Recently, the former Fed Vice Chairman, Stanley Fischer, in an assessment of the crisis, identified the non-banking sector as an important source of vulnerability. The crisis was monumental and animated by regulatory myopia, sharp practices, and naiveté by both borrowers and lenders. The regulators saw only growing financial and housing markets, but did not consider that these levels were unsustainable. Lenders originated loans almost at a frenzied pace for immediate profits, not taking the long view of the market’s path. Investment banks operated on only veneers of capital. Borrowers amassed gargantuan debt. Firms depended on tens of billions of dollars of borrowing that had to be renewed every night, secured by subprime mortgage securities. Major firms and investors blindly relied on the AAA credit rating given to virtually all securities they were asked to rate, under pressure from the financial firms that paid for the ratings. The rate of borrowers who defaulted on their mortgages within months after closing nearly doubled from the summer of 2006 to late 2007, which meant that they likely took out loans that they neither could, nor intended to repay. Mortgage brokers were paid “yield spread premiums” by creditors as rewards for putting borrowers into higher-cost loans; creditors passing off the risks to purchasers of securities based on these loans. Nearly one-quarter of all mortgages made in the first half of 2005 were interest-only loans. During the same year, 68% of “option ARM” loans originated by the two biggest players in this story, Countrywide and Washington Mutual, had low- or no-documentation requirements. In 2007, mortgage loan originations reached over $2 trillion; in 2008, it declined to less than $.4 trillion, only to peak at almost $2.2 trillion in 2012 before declining again.

A. Banking Reform under Dodd-Frank

Although Congress acted to adopt prophylactic measures for the future, the country fell into a deep recession that did not abate until June 2009. In July 2010, Congress enacted the Wall Street Reform and Consumer Protection Act (Dodd-Frank). The act had many aims, including to “create a sound economic foundation to grow jobs, protect consumers, rein in Wall Street …end bailouts … and to prevent another financial crisis.” To achieve these aims, the legislation required prudent practices by creditors by limits on market activities posing significant systemic risks and by capital requirements. It also prohibited unfair lending practices and required plain language disclosures by creditors that would enable borrowers to make wise selections among financial products and services that best meet their needs.

I. Consolidation and Prudence

Dodd-Frank established the Financial Stability Oversight Council (FSOC) to monitor systemic risk and consolidated bank regulators from five agencies to four, the Office of the Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (FDIC), National Credit Union Association (NCUA), and the Federal Reserve Board. New regulations include enhanced safety and soundness limits, liquidity and capital requirements, and consumer safeguards. Together and separately, regulators have effective control over the life of banks, through the power to withdraw deposit insurance, revoke a charter, or take over one that is at risk of failing.

B. Control of Government-Sponsored Enterprises by the Federal Housing Finance Agency

The crisis could not have caught on without the support from the GSEs. Fannie Mae and Freddie Mac were profit-seeking, shareholder-owned corporations that had the advantage of their government-sponsored status to amass an undiversified investment portfolio of home mortgages and derivatives of more than $1.5 trillion. When the crisis was at its worst, more than 20% of these mortgages were in default. To head off the GSEs’ collapse, Congress passed the Housing and Economic Recovery Act of 2008 (“HERA”) to
consolidate and strengthen their regulation. HERA created the Federal Housing and Finance Agency (FHFA) giving it enhanced safety and soundness powers over the GSEs, resembling those of the federal bank regulators. FHFA’s powers are draconian—it can set capital standards, order the GSEs to cease any activity or divest any asset that poses a threat to financial soundness, even replace management and take over control of the firms if they became seriously undercapitalized. One of the FHFA’s first actions was to place both Fannie Mae and Freddie Mac in “voluntary” conservatorship. The two GSEs continued to operate under an agreement with the Treasury, which had provided capital to the them, by means of preferred stock purchases, to ensure that each remained solvent.46

IV. The New Regulatory Regime for Non-Banks: CFPB

Although not subject to the capital requirements of Dodd-Frank, non-banks are yet subject to consumer protection and transparency laws promulgated by the Consumer Financial Protection Bureau (CFPB). The CFPB was directed to bring the consumer protection regulation of depository and non-depository financial institutions into closer alignment and to provide federal oversight of both non-bank companies and banks in the mortgage market.47 It does this by conferring upon the CFPB jurisdiction over “covered persons,”48 as opposed to the particular activities in which they engage.49 This means that if an entity is subject to the CFPB’s supervisory authority, the entire entity must comply with all federal consumer financial laws, and the CFPB has the power to assess the entire enterprise’s compliance systems and procedures to control risks to consumers or to markets.

A. CFPB Regulations on Safety and Soundness

Dodd-Frank notably granted the CFPB the power to write new mortgage loan origination and servicing standards. All of these rules apply to depository institutions and non-banks alike. In its initial series of rulemakings, the CFPB aimed to ensure creditors and borrowers make intelligent loan decisions and that the borrower understands the risks of the undertaking.

Specifically, the regulations require lenders to determine the borrower’s ability to repay the loan (ATR).50 This determination must be made only after the examination of objective evidence, such as bank statements, pay stubs, tax returns, credit reports, rental payment history, and utility payments, among other things.51 There would no longer be “no doc” and “low-doc” loans. The CFPB also introduced the concept of “Qualified Mortgage” that gives rise to a presumption that the ATR requirements are satisfied.52 With certain specific exceptions, for a loan to be a qualified mortgage it must satisfy certain product limitations and requirements.53 These include having a term that does not exceed 30 years; does not charge points and fees that exceed a specific threshold;54 does not contain interest-only, negative amortization, or balloon-payment terms; and does not exceed a 43 percent maximum debt-to-income ratio.55 Appraisals are required for higher priced loans,56 and the appraiser must inspect the interior of the property.57 New rules also require homeownership counseling.58

IV. The Risks of Alternative Lending

Do the ATR and disclosure requirements portend higher quality and safer lending in the growing world of alternative banking? The same and different market dynamics may be pushing us toward the same and perhaps more intense crisis than in 2008. In general, mortgage loans originated by non-banks are of a lower credit quality than those originated by banks.59 Non-banks are capturing (and aggressively pursuing) a larger percentage of financially vulnerable borrowers—those with less income and wealth, those that are less likely to have college degrees and those that are more likely to be from a minority group.60 Over half of the loans originated by some non-banks are to borrowers with FICO scores below 660—a benchmark often used to denote subprime.62 Given these characteristics, shadow bank loans are more likely to default than traditional bank loans.63 High-delinquency rates portend dislocations in the market.64

Just as before the crisis, but perhaps more so, non-bank lenders rely on the support that the GSEs (as well as Ginnie Mae) provide to the conforming mortgage market through the purchase of these loans, despite FHFA constraints.65

The borrowers are the same as those who suffered most in the financial crisis. In 2017, the Federal Reserve reported that in 2016, among home-purchase mortgages, 69 percent of blacks and 60 percent of Hispanic whites took out a nonconventional loan, that is, loans with mortgage insurance or other guarantees, including
the FHA and the VA, whereas 35 percent of non-Hispanic whites and only 16 percent of Asians did so. Nonconventional loans usually have a higher loan-to-value ratio. Non-banks originated a higher share of their home-purchase loans to minority borrowers and in low- to moderate-income neighborhoods (LMI) while large banks originated a significantly lower share of home-purchase mortgages to LMI borrowers.

What may be even more concerning is that the assessment of credit risk may be camouflaged by the non-banks’ use of alternative metrics, instead of FICO scores, in loan origination. Algorithms that evaluate nontraditional, alternative information sources (such as insurance claims, utility bills, social networks, and data from Amazon and eBay) may produce high “loan grades” for some borrowers who would be classified as subprime by traditional criteria. The CFPB regulations do not require the use of FICO, only that lenders make the ATR determination based upon objective evidence. Surprisingly, despite the ready market that the GSEs and Ginnie Mae provide, non-bank loans carry interest rates that appear to be on average about 3.7 basis points higher than similar loans issued by traditional bank lenders.

V. Necessary Reforms for Safety and Soundness

Did the regulations overcorrect? Did they portend a crisis of another sort? The immediate reaction to the crisis caused a dramatic repricing of risk through tighter lending terms that reduced the supply of credit to all but those who didn’t need it. The market stalled. Ensuring access to credit in underserved communities surely is an important social policy, but it also calls for scrutiny against the kind of overreaching that put so many hapless borrowers in severe financial trouble leading to the crisis. Non-banks must not be allowed to operate in the shadows, but must be held up against safety and soundness measures that are calibrated to the risk inherent in lending on the edges. On the borrowing side of the transactions, the use of untested and unconventional criteria for assessing creditworthiness should be allowed only as a comparative measure. The ATR requirement should include an assessment of whether the borrower will have residual income, that is, income for food, clothing, transportation, medical expenses, and other day-to-day living expenses after paying for the expenses related to the home. For vulnerable borrowers, those with just enough qualifying income, but little available for contingencies, a new type of mortgage might be prescribed, one that automatically indexes payments (and not necessarily interest rates) to local economic conditions, causing them to adjust as local economic conditions, and perhaps even personal circumstances (such as a job change or unexpected medical expense) change. On the lending side, non-banks should be required to “maintain buffers of liquid assets that are sized according to the risk that their liability will run off quickly in a stress situation.” Most importantly, the government should heed the lessons from the crisis and step back to assess the larger market and demographic changes to see if the trends are positive or threatening.

Notes

1. “The term shadow banking is sometimes used to refer to the funding of loans through securities markets instead of banks—or to the funding of banks through securities markets instead of deposits. Other times, shadow banking is used to refer to financial activity that is ineligible for a government backstop,” that is, deposit insurance and access to the Federal Reserve’s discount window. E.V. Murphy, Who regulates whom and how? An overview


5. Michael Maiello, What’s Driving the Growth in Shadow Banking, http://review.chicagobooth.edu/finance/2017/article/what-s-driving-growth-shadow-banking (Jun 26, 2017); see also Greg Buchak, Gregor Matvos, Tomasz Psikorski and Amit Seru, Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks, http://www.nber.org/papers/w23288 (Buchak) at 14 (reporting that in 2007, the majority of shadow bank funding came from a bank, insurance company, and other capital, with only roughly 30% of funding coming from GSes. By 2015, nearly 50% of shadow bank loans were sold to GSes after origination.)

6. Bhutta, supra n.4, at 23.

7. Fannie Mae and Freddie Mac are the purchasers of conforming loans, while Ginnie Mae, which is government-owned, is the primary purchaser of FHA loans. Morris-Levenson, supra n.3, at 2. “In 2016, the dollar volume of mortgages in Ginnie Mae pools issued and serviced by nonbanks exceeded the corresponding volume for banks, and by the end of 2017 the nonbank share was close to 60%, making nonbanks the main counterparties for Ginnie Mae.” You Suk Kim, Steven M. Laufer, Karen Pence, Richard Stanton, and Nancy Wallace (2018), “Liquidity Crises in the Mortgage Market,” Finance and Economics Discussion Series 2018-016. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2018.016 (Kim) at 3.


9. Total mortgage origination was 73,896, with a dollar volume of $17.0 billion. Id.

10. Total mortgage originations soar 27% to $24,691 mortgages, with dollar volume up 29% to $6.4 billion. Id.

11. Total mortgage originations skyrocketed 55% to 20,387 mortgages, with dollar volume up 67% to $6.0 billion. Id.

12. Total mortgage originations rose 4% to 18,629 mortgages, with dollar volume rising 14% to $5.4 billion. Id.

13. Total mortgage originations climbing 28% to 14,655 mortgages, with dollar volume moving up 37% to $3.8 billion. Id.

14. Total mortgage originations rose 4% to 11,525 mortgages, with dollar volume rising 7% to $3.6 billion. Id.

15. In Q1 of 2018, the number of purchase mortgages and refis originated, 44,320 in total, plunged 37% from a year ago and the dollar volume of mortgages originated plunged 30% to $14.5 billion. Id.

16. For Chase, mortgage originations dropped 21% to 27,329 mortgages, with dollar volume dropping by 21% to $8.6 billion. Id.

17. For Bank of America, mortgage originations plunged 43% to 14,325 mortgages, with dollar volume plunging 37% to $5.9 billion. Id.

18. For U.S. Bank, mortgage loan originations headed downward 24% to 10,817 mortgages, with dollar volume dropping 19% to $3.6 billion. Id.

19. This is largely on account of the FHA loan guarantees that allow a 3.5% downpayment.


21. In 2015, the Federal Reserve Bank of Cleveland reported that 26 percent of FHA loans originated in 2014 were subprime and another 40 percent were near-prime, having FICO scores between 661 and 700. (Marshall Lux and Robert Greene, What’s Behind the Non-Bank Mortgage, Boom? June 2015, Mossavar-Rahmani Center for Business & Government Weil Hall, Harvard Kennedy School, https://wolfstreet.com/finance/credit/what-is-good-fico-score.aspx. (documenting recent quarterly and annual losses in mortgage profitability for JPMorgan, Wells Fargo, Citigroup, and Bank of America).
as the Fair Debt Collection Practices Act, neither of which proved effective in avoiding unfair and unsafe lending. See Eric S. Bilsky & Nela Richardson, Understanding the Boom and Bust in Nonprime Mortgage Lending, Joint Center for Housing Studies Working Paper, Harvard University (Sep. 2010).


One hoary scenario described by the Financial Crisis Inquiry Report concerns Bear Stearns. “[A]t the end of 2007, Bear Stearns borrowed as much as $70 billion in the overnight market, with only $11.8 billion in equity and $383.6 billion in liabilities. This was the same as a small firm with only $50,000 in equity borrowing $1.6 million, with $296,750 of that due coming due each day.” The report also recounted that between 2001 to 2007, the national mortgage debt nearly doubled; the amount per household rising in tandem by more than 63% from $91,000 to $149,500, with no accompanying rise in wages. http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf (Financial Inquiry) at xix.

Id at xxiii; see generally Shelby D. Green, Disquiet on the Home Front: Disturbing Crises in the Nation’s Markets and Institutions, 30 Pace L. Rev. 7, 9 (n.9), 10 (n.14) (2009).

30. Financial Inquiry, supra n.29, at xxiii-iv.


32. Id., supra n.5, at 11.


36. The OCC regulates depository banks and thrifts that have a federal charter and subsidiaries if in a holding company structure.

37. The FDIC regulates depository banks and thrifts that have a state charter.

38. The NCUA regulates credit unions that have a federal charter.

39. The Fed regulates state-chartered member banks (and subsidiaries if in a holding company structure).

40. Among other things, safety and soundness relates to risk management (by considering default risk and prepayment risk), the diversification of a bank’s portfolio, as well as ensuring adequate training and expertise of management and staff, and adequate procedures for internal controls. Id. at 16–17.

41. Dodd-Frank required specified minimum levels of capital—defined in various ways—to increase the resilience of firms to shocks and to minimize losses to investors, customers, and taxpayers when failures occur. Morris-Levenson, supra n.3, at 6–7. For larger, more complex banks, higher standards apply to those that are globally and systemically important. Id. at 5–6. New regulations require that certain banks hold sufficient liquid assets to withstand a temporary inability to refinance on the markets. Id. at 7.

42. All lenders must comply with a variety of statutes and regulations when offering financial products to consumers. Before the 2008 financial crisis, consumer financial protection was largely performed by the Department of Housing and Urban Development and the Federal Trade Commission. The Dodd-Frank Act invested much of this authority into a new Consumer Financial Protection Bureau (“CFPB”), but bank regulators still supervise many consumer activities of their chartered firms.

43. Murphy, supra n. 1, at 27


46. Green, supra n.44, at 495–497.


48. Under Section 1024(a)(1)(C), (12 U.S.C. 5514(a)(1)(C)) of Dodd-Frank, the CFPB has the authority to supervise any nonbank covered person that the Bureau “has reasonable cause to determine, . . . is engaging, or has engaged, in conduct that poses risks to consumers with regard to the offering or provision of consumer financial products or services.” This authority extends to “(1) nonbank covered persons of any size that offer or provide: (a) origination, brokerage, or servicing of loans secured by real estate for use by consumers primarily for personal, family or household purposes, or loan modification or foreclosure relief services in connection with such loans, (b) private education loans, and (c) payday loans; and (2) larger participants of a market for other consumer financial products or services, as [the Bureau defines] by rule.”


50. 12 CFR § 1026.43(c).

51. 12 C.F.R. § 1026.43(c)(3). 

52. 12 C.F.R. § 1026.43(c)(2) and § 1026.43(e)(4).

53. 12 C.F.R. § 1026.43(c)(2)(B)(2).

54. 12 C.F.R. § 1026.43(c)(3).


56. 12 C.F.R. § 1026.35(a)(1).

57. 12 C.F.R. § 1026.35(c)(3).

58. Creditors must provide a list of homeownership counseling organizations, with prescribed text on the efficacy and value of counseling to most mortgage loan applicants within three days of application and the creditor must confirm compliance, upon written certification from the counselor. Counseling upon RESPA disclosures must occur within three business days before closing. 12 C.F.R. §§ 1026.31, 1026.32, and 1026.34; 12 C.F.R. 1026.36(a)(5). New loan originator compensation rule prohibits compensation to loan originators by persons other than the borrower. 12 C.F.R. § 1026.36(d)(2). The CFPB also prohibited the “yield spread premium,” 12 C.F.R. § 1026.36(d)(1), steering, 12 C.F.R. § 1026.36(e), mandatory arbitration and waivers of consumer rights, 12 C.F.R. § 1026.36(h), financing credit insurance premiums, 12 C.F.R. § 1026.36(i), and negative
amortization loans to first-time borrowers without counseling. 12 C.F.R. § 1026.36(k).

59. Kim, supra n.7, at 38.
60. Ads for the Quicken Loan “rocket mortgage” are ubiquitous. The Lending Tree puppet invites loan applications from home in one’s pajamas.

61. Kim, supra n.7, at 38. The rate of home purchase loans for blacks in 2016 was 6 percent, up from 5.5 percent in 2015 and for Hispanic whites 8.8 percent, up from 8.3 percent. Bhutta, supra n.4, at 8. Both rates are well-below their pre-crisis peak (2006) of 8.7 percent and 11.7 percent, respectively. Id. From 2015 to 2016, there was a small increase in loans to low- and moderate-income areas. Id. Slightly more than half of the home-purchase loans in these areas were nonconventional loans. Id. at 13.

62. Lux and Greene, supra n.21, at 22.
63. Buchak, supra n.5, at 22–23 (reporting that non-fintech shadow bank borrowers are about 10% more likely to default on their loans compared to traditional bank borrowers).

64. Kim, supra n.7, at 38. In the third quarter of 2017, the serious delinquency rate on FHA and VA mortgages for single-family homes was 4% and 2%, respectively, and from GSE pools, just under 1%. Id; see also Lux and Greene, supra n.21, at 22 (reporting that “although after the crisis, the mix of deep subprime and subprime FHA originations shifted substantially, i.e., lenders all but stopped making deep subprime loans, with a concomitant increase in subprime and prime lending, the overall performance of the FHA mortgage market has not improved—the default rate of all FHA loans combined remains higher than it was before the onset of the subprime boom in 2003.”); see generally Urban Institute Housing Financing at a Glance (Dec. 2017).


66. Bhutta, supra n.5, at 1, 3.
67. Id at 23–24; see also Kim, supra note at 3, 4. In 2016, 64% of the mortgages originated by non-banks were for black and Hispanic borrowers and 58% were living in low- or moderate-income tracts. Id. at 4. They are less likely to have college degrees and have less income and wealth. Id. at 38. The debt-to-income ratio is higher, id. at 38, and the FICO credit score is lower by 5 points for GSE pools and 25 points for Ginnie Mae. Consequently, the delinquency rate is significantly higher. Id. at 38.

68. Jagtiani, supra n.25, at 31. The same FICO scores, those who borrow from the Lending Club have a higher risk of becoming delinquent (measuring credit card holders). Id. at 31.

69. Id. at 7–8.
70. Id. at 2, 26, 28.
71. Buchak, supra n.5, at 21–22. The Federal Reserve reported that black and Hispanic borrowers had the highest incidences of higher-priced loans within both the conventional and nonconventional loan types, 15.7 percent and 17.9 percent, compared to 6.2 for non-Hispanic whites. Bhutta, supra n.5, at 17–18. See also Jagtiani supra n.25, at 29–30.

72. Lux and Greene, supra n.21, at 3.
73. Id. at 32.
74. Id.
75. Id. at 8. After a borrower is approved by the non-bank originator, it funds the loan through a line of credit from a warehouse lender, which typically funds 95% of the mortgage balance. The total volume of warehouse lending at the end of 2016 was $40 billion; $1 trillion in loans funded over the course of a year as compared to total mortgage origination of $2 trillion, half of the mortgage originations. Kim, supra n. 7, at 12. See generally Peter Ruudegair, Rachel Louise Ensign and Coulter Jones, Big Banks Find a Back Door to Finance Subprime Loans, Lending to nonbank Financial Firms surges to record as banks avoid direct exposure, https://www.wsj.com/articles/big-banks-find-a-back-door-to-finance-subprime-loans-1523352601.

76. Id. at 15–18.
77. Id. at 26.
78. Green, supra n.44, at 523 (“African-American and Latino borrowers had a much higher likelihood than white borrowers with the same risk profile (e.g., credit score, income level) to be approved for and steered toward a subprime mortgage rather than a more affordable and predictable fixed rate mortgage.”)
79. The FHA already includes “residual income” as a compensating factor in calculating the allowable DTI ratio. HUD Handbook 4000.1, Single-Family Housing Policy Handbook.
80. Fischer, supra n.2, at 7.