Making Sense of White-Collar Crime: Theory and Research

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The field of white-collar/corporate crime has been studied by scholars from many disciplinary fields. Yet, the ambiguity and complexity of the subject, dearth of program and policy evaluation, poor or inaccessible data and lack of systematic empirical research has precluded any consensus about its causes or what can be done to prevent and control it. Concern about the global financial crisis of 2008 and its association with fraudulent activities in the mortgage and securities markets has brought white-collar crime back to the forefront of criminological inquiry. New research—particularly evidence-based criminology and criminal justice and vignette studies of corporate crime—has provided insight into some of the longstanding debates in the field while also revealing new and interesting puzzles for scholars to explore. These new developments are summarized along with suggestions for new research on mortgage fraud, including the revitalization of a “criminogenic tier” approach to organizational actors, firms, and markets, and the use of network analysis as a means to map and measure key ties among fraudsters, network centrality, and reach.

I. INTRODUCTION

Criminologists and legal scholars have defined and classified white-collar crime in a variety of different ways.1 Two general types of white-collar crimes are discussed in this paper—those committed by companies and their managers to “achieve the goals of the business” (corporate crimes) and offenses committed by individuals that may or may not involve organizational or business resources, but tend to be tied more to self-interest (e.g., embezzlement or income tax fraud). Most remarks in this paper center around corporate crime, but the intersection of the two types, especially in the area of mortgage fraud, is of particular interest.

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Thinking about corporate crime requires recognition that both organizations and individuals may be illegal actors and potential targets for crime prevention and control (sanctions). It also necessitates familiarity with Edwin Sutherland’s argument that the traditional conception of crime and justice, with its exclusive focus on criminal law and criminal justice, is too narrow to capture the behaviors of interest. In this paper, I follow Sutherland’s lead by adopting a broad definition of corporate crime that includes organizational behavior proscribed by criminal, civil, and regulatory law and administered by the appropriate system of justice.

Several years ago, in an essay published in the Newsletter of the American Society of Criminology, I noted that the content and treatment of white-collar crime in most sociology/criminology textbooks had changed very little over the past decades. I linked this stagnation to three interrelated problems: (1) white-collar crime research is rarely sponsored and funded; (2) the historical dominance of radical/critical epistemological approaches that are often at odds with positivistic criminology; and (3) the subject matter is complex and difficult to study.

After the 2008 global financial crisis—brought about in large part by mortgage, insurance, and securities frauds—white-collar crime scholars were hopeful that the government would declare one of its infamous “crime wars” and white-collar/corporate crime would finally get the attention and funding it deserves. With a few exceptions, however, we have been disappointed. Even if the political will to prioritize white-collar crime was in place, unresolved data and methods problems limit both the direction and degree of progress that can be achieved.

In the next section, some of the major problems confronting white-collar crime researchers (especially those related to data and measurement) are highlighted. This is followed by a review of what has been learned from evidence-based approaches and recent vignette studies about corporate crime prevention/control, along with current knowledge gaps. The section concludes with several promising directions for further conceptual and empirical white-collar crime work, including: (1) fraud, foreclosures, and neighborhood crime; (2) criminogenic tiers; and (3) network analysis of mortgage fraud participants.

II. MAKING SENSE OF THE LITERATURE

A. Data Limitations

Calculating estimates of crime incidence and prevalence generally is a difficult task. But, unlike traditional street crime, the task here is even more troublesome. It is difficult to measure white-collar crime because all of the typical

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2 Edwin H. Sutherland, White Collar Crime 6 (1949).
sources of crime data (including official data, offender self-reports, and victimization reports) are limited in scope, not collected in a systematic manner, or have unique problems that discourage operationalization and generalization.

Some of the better known studies of white-collar and corporate crime have used some kind of “official” data to assess crime incidence and prevalence. Sometimes, cases are collected at the far end of the justice process (e.g., “convicted” offenders). Other researchers rely on “arrest/case” data or a combination of sources. For instance, in their study of frauds in the savings and loan industry, Calavita, Tillman, and Pontell used criminal referral data. In my work, I have supplemented case data (criminal, civil, and administrative “arrests” and “resolved” case decisions) with information gleaned from interviews, company self-reports (Environmental Protection Agency (EPA) Discharge Monitoring Reports), and survey data (in particular, factorial surveys that include hypothetical scenarios that measure managers’ offending “intentions”). Still other researchers extrapolate crime estimates from known incidents and case studies. All of these data sources have severe limitations which are likely to produce highly biased crime incidence and prevalence estimates.

The Uniform Crime Reports (UCR) contain arrest data on white-collar crime, including fraud, forgery/counterfeiting, embezzlement, and all other offenses. Data elements within these categories can be broken down by the sex, age, and race of the arrestee. The UCR are not very helpful in studying corporate crime.


10 Id.
because: most cases are not investigated and recorded by the police per se; the data elements are limited and thus lack utility for purposes of theory development or testing; and little is known about how representative arrested offenders are of the more general offending population. The National Incident-Based Reporting System (NIBRS) may yield more promise than the UCR data, as it captures more offense types and has the ability to drill down to incident characteristics (including location type, property description, and type of victim). However, NIBRS data also are limited to known criminal incidents. In the case of white-collar crime, discovery by the police is problematic for a number of reasons—not the least of which is that the victim is often unaware that a crime has occurred. Critics also speculate that the data are likely to be biased downward (from executives to less powerful employees, away from companies to individuals as criminal actors).

In addition to the UCR and NIBRS, other “official” data are available from state and federal court records. The U.S. Sentencing Commission, for instance, collects information about “organizational” offenders sentenced under Chapter 8 of the Sentencing Guidelines. These data have been reported yearly since 1991 when the Sentencing Guidelines were promulgated. Data elements describe: (1) the organizational offender (including structure, size, and economic viability); (2) the type of offense for which the firm was convicted; (3) the mode of case adjudication; (4) the type of sanctions imposed (including probation and court-ordered compliance programs); and (5) how the sentencing guidelines were applied. Despite an uneven start, the sentencing data provide a useful window to the types of cases brought in and the sentencing practices of the federal courts. But, given the biases associated with how cases are moved into and through criminal court, the portrait that emerges from the data about organizational offenders is far from representative of the unknown corporate offender (i.e., the dark figure of corporate crime).

Corporate offending statistics also are collected by regulatory agencies, such as the EPA, the Federal Trade Commission (FTC), and the Securities and Exchange Commission (SEC). Although more of these data are readily available today than in the past, agency data are not “systematic” across sources. Agencies

11 Id. at 2–6.
12 Id. at 6.
15 Id.
have different discovery mechanisms, case processing decision structures, and case outcomes which negatively affect data comparisons across regulatory bodies. Like police statistics, regulatory data also require “official” discovery. Agencies may learn about violations in a variety of proactive and reactive ways, including: inspections and audits; victim, competitor, and citizen complaints; referrals from police; and self-reports. Again, systematic biases are suspected but the degree of bias and its direction is virtually unknown. In general, there has been little assessment of data reliability.

There are also several national surveys that track victimization, reporting practices, and public opinion about white-collar crime (e.g., The National Public Survey of White-Collar Crime18). Questions tend to focus on more traditional white-collar and not corporate offenses, on victimization and not offending. Coupled with sampling difficulties and low response rates, the generalizability of survey findings is questionable. Consequently, nearly seventy-two years after Sutherland’s seminal work,19 the “hidden” figure of white-collar and corporate crime remains cloaked in mystery.

B. Conclusions, Puzzles, and Unresolved Issues

Although most scholarship in the field tends to be more conceptual and qualitative in nature, the few systematic quantitative studies that have been conducted have produced some uniform findings: (1) the amount of white-collar and corporate crime is extensive; (2) a large percent of offenders are recidivists; (3) similar to street offenders, a small number of offenders account for the bulk of offending; and (4) in some regulatory arenas (such as the environment), most regulated companies generally are law-abiding.20 Many even over-comply.21 This led some scholars to suggest that earlier command and control regimes have achieved a high level of success among the large, industrial point-source polluters


21 Simpson, Garner & Gibbs, supra note 7, at 127.
and that it is time to focus attention on non-industrial sources of environmental pollution and other risk creators (including small businesses and individuals).22

Although there are a number of studies that examine individual, firm, and organizational characteristics, research results in these areas are still equivocal.23 Findings regarding the relationship between offending and characteristics such as firm size, diversity, profitability, the age of facilities, and so forth often report contradictory relationships.24 We know little about the spatial distribution of white-collar crimes and even less about the psychology of white-collar offenders, although more is known about the individual white-collar offender who gets caught than the “corporate criminal.”25

More detailed studies of chronic offenders and how they are similar and different from low-level or non-offenders would be helpful from both a theoretical and policy perspective. A criminal career approach has already been utilized with some success looking at individual white-collar offenders.26 A life course approach applied to corporations, with data that tracks within-company change, would provide a better understanding of criminogenic processes over time.

The question of over-compliance is an interesting one, but little is known about this phenomenon, also known as “extreme volunteerism.”27 Do managers in these firms consistently share pro-social norms and values? Are these norms and values organizational, individual, or does a confluence of the two produce extreme volunteers? Do extreme volunteer firms have stronger internal compliance systems that socialize, discover, and sanction ethical lapses? Or, do companies/managers over-comply for instrumental reasons (i.e., out of economic self-interest)?


It is also unknown whether firms behave similarly across regulatory environments. It is speculated that “bad” corporate citizens are generally bad everywhere (e.g., securities, occupational health and safety, anti-competitive behavior, environment) and, conversely, “good” citizens are good across the board. But, because of data difficulties, the question generally remains empirically unexamined. In a similar vein, we have little knowledge about case processing within and across justice systems: which cases are dropped, remanded, diverted somewhere along the way and how do these cases compare with those that remain in the system?

An additional lingering question is whether the field would benefit from creating a corporate crime offending rate. Although some regulatory agencies are interested in developing a rate-based measure, there are numerous complexities associated with doing so. If one agrees that the rate should be calculated from official data, from which reports and sources should data be used? What would comprise the numerator and denominator of the rate measure? For what period of time? The merits of calculating a rate-based measure can be debated, but the practicalities of creating the measure may be overwhelming.

III. MOVING FORWARD: EVIDENCE-BASED APPROACHES AND VIGNETTE STUDIES

Coupled with all the measurement difficulties in the field is an equally troubling lack of program and policy evaluation. Consequently, we know relatively little about the successes or failures of white-collar/corporate crime interventions. Interventions tend to be driven by crime “debacles” such as the savings and loan frauds in the 1980s, the securities and accounting frauds of the 1990s and early 2000s, the ongoing financial meltdown in the mortgage/financial markets, and environmental disasters (Three Mile Island, Love Canal, Bhopal, Exxon Valdez, and the BP oil spill in the Gulf). Critics claim that crime policies in this area are reactive and primarily symbolic, especially when companies use the letter of the law to create devices that effectively undermine the intent of the law (e.g., “creative compliance”).

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There is little question that regulation and control of corporate crime, in particular, occurs in a highly politicized environment, but whether the “reactive” policies adopted during these periods are merely symbolic is an empirical question.

A well-known study conducted in the 1990s, known as the Maryland Report, used an evidence-based approach to assess “what works, what doesn’t, and what’s promising” in the area of traditional crime prevention and control. Of all the important areas in which reviews were conducted (e.g., policing, families, communities, labor markets, corrections, schools), evaluations of white-collar and corporate crime interventions were notably absent. To make up for this deficiency, an ongoing systematic review of corporate crime prevention and control strategies is in progress. This assessment, however, has revealed few systematic studies that can inform evidence-based policy and practice. For instance, an extensive search of ten databases using fifty-four white-collar and corporate crime search terms produced over 58,923 unique published source hits. Of these, only 2,730 publications contained quantitative data and were deemed potentially relevant to the subject of interest. After detailed review of the remaining studies it was clear that, because of data limitations, few would be eligible for a meta-analytic approach. More and better studies are needed to assess, evaluate, and recommend policies and practices that prevent and control white-collar/corporate crime.

In spite of the overall paucity of systematic evaluation research, there has been a great deal of discussion and debate about the role formal sanctions play in white-collar/corporate crime prevention and control. Much of the debate is centered on the success (or lack thereof) of criminal justice sanctions, as criminalization and getting tough on crime are both popular reactions to the debacles mentioned earlier. Yet, this is a fairly narrow way to think about the issue. There are multiple crime prevention strategies to consider in this discussion,

31 For a discussion of mine safety regulation in the United States, see Sally S. Simpson, Corporate Crime and Regulation, in MANAGING AND MAINTAINING COMPLIANCE 63 (Henk Elffers et al. eds., 2006).
33 See id. at v–vi.
34 Not surprisingly, low levels of research support also affect program evaluation. We have learned a great deal about the effectiveness of drug courts, boot camps, and gun seizures but relatively little about whether internal compliance systems prevent crime, the role of informal controls, or which (if any) sanctions are apt to deter individuals, companies, and offer general deterrence. See Sally S. Simpson et al., Why Did This Protocol Take Five Years? Lessons Learned from the Campbell Corporate Crime Deterring Project (unpublished paper presented at the 60th Annual Meeting of the American Society of Criminology, Nov. 12-15, 2008) (on file with author).
35 Some databases were searched for more than a century (e.g., PsychInfo, 1840-2003), while others had a significantly shorter span (e.g., Business Source Premier, 1990-2003). All searches concluded at the end of 2003.
36 See generally SIMPSON, CORPORATE CRIME, supra note 7.
including: Punitive (Deterrence) Models; Informal/Cooperative (Persuasion) Models; and a Pyramid of Enforcement. The former is more explicitly tied to criminal justice with its emphasis on penalties (including imprisonment) and deterrence. Cooperative interventions focus more on shaping compliance through a collaborative relationship between the state and regulated entity. The enforcement pyramid emphasizes both, along with responsive regulation strategies.

On a more positive note, however, the deterrent role of sanctions may be the one area of white-collar crime prevention and control where there are enough studies, using a variety of different data sources, to draw some reasonable conclusions. Findings from this literature, however, are inconsistent. Based on their interviews with nursing home executives, Braithwaite and Makkai declare deterrence (measured using subjective utility models) to be a stark failure. They also note that sanction threats operate differently depending on individual-level traits such as emotionality. Klepper and Nagin, on the other hand, are more optimistic about deterrence-based policies. In their study of tax-noncompliance (survey-based methodology), they find sanction tipping points that shift potential offenders toward compliance.

My research in this area (using factorial surveys which combine hypothetical offending scenarios with traditional survey techniques) has found the relationship between legal sanctions and behavior to be mediated and moderated by individual and firm-level factors. Managers appear to take both their own risks and those of the company into account when contemplating illegal actions. For instance, respondents generally believe that the company is the most likely recipient of punishment but individual-level sanctions are seen as more consequential. Both appear to deter offending likelihood, but formal sanction effects can pale in the context of informal sanctions. Scholars also suggest that elements of procedural

43 Paternoster & Simpson, supra note 42, at 579.
44 Id.
45 Simpson, Corporate Crime, supra note 7, at 106–07.
justice and organizational legitimacy (authorities and rules) may affect whether sanctions inhibit,\textsuperscript{46} or increase offending risk (e.g., defiance).\textsuperscript{47} Tom Tyler, for instance, has argued that compliance will be greatest when “people believe that the rules of their organization are legitimate, and hence ought to be obeyed, and/or that the values defining the organization are more congruent with their own moral values, leading people to feel that they ought to support the organization.”\textsuperscript{48}

At the company (or aggregate) level, there is some evidence that sanction certainty and severity produce both general and specific deterrence.\textsuperscript{49} Yet, other studies challenge the deterrence framework.\textsuperscript{50} It is likely that disparate results are a function of the origins and consequences of the type of legal sanctions levied and how deterrence is measured (e.g., behavior of individuals/firms, pricing of products, counts of occupational accidents, oil spills, and so on). Simpson and Koper, following a group of antitrust offenders over time, found marginal support for a specific deterrence effect related to changes in antitrust penalties (i.e., shifts in the severity of sanction from misdemeanor to felony).\textsuperscript{51} More generally, however, Simpson and Koper found no specific deterrent effect for criminal or civil sanctions.\textsuperscript{52} Both had counterintuitive positive and significant effects on re-offending.\textsuperscript{53} Only regulatory interventions had a negative (but insignificant) relationship with recidivism.\textsuperscript{54} This is in contrast to other studies where civil sanctions (especially class action suits) seem to be a more important source of crime inhibition than other types.\textsuperscript{55}

Crime inhibition through formal sanctions may vary by offense or findings may be associated with a particular kind of research design. A recent longitudinal

\textsuperscript{46} Margaret Levi & Audrey Sacks, \textit{Legitimating Beliefs: Sources and Indicators}, \textit{3 REG. & GOVERNANCE} 311, 314, 317 (2009).


\textsuperscript{50} Simpson, Garner & Gibbs, \textit{supra} note 7.


\textsuperscript{52} Id.

\textsuperscript{53} Id.

\textsuperscript{54} Id.

(but cross-sectional) study of EPA violations and sanctions found “little evidence of a deterrent effect” for any kind of sanction on recidivism (formal/informal, criminal/civil/regulatory).\textsuperscript{56} However, a panel analysis of Occupational Safety and Health Administration data showed a negative relationship between past crime and future offending when the relationship was modeled dynamically (within company change).\textsuperscript{57} When cross-sectional analysis techniques were utilized, there was a positive relationship between past and current offending (controlling for differences in inspections over time).\textsuperscript{58} Thus, cross-sectional studies may be less likely to find deterrent effects than longitudinal analyses that can model within individual or organizational change over time.

Although the results are far from conclusive, the deterrence literature has raised a number of important issues that require more scientific investigation. First, do formal legal sanctions affect corporate offending and, if so, are some types of sanctions more effective and for whom? Is there a tipping point? Second, what is the relationship between individual and company characteristics, the kinds of sanctions delivered, and recidivism? Third, how do deterrence and compliance fit together in a prevention and enforcement regulatory scheme? Does legitimacy of the sanctioning authority (state and/or company) matter? Fourth, are results sensitive to unit of analysis, sample type, research design, and type of data analysis?

IV. NEW AND PROMISING RESEARCH DIRECTIONS

One area that should add to our knowledge of white-collar crime is the new research focus on “foreclosures and crime.” The National Institute of Justice recently solicited research proposals that link mortgage fraud to neighborhood foreclosures and traditional crime. Of particular interest is the relationship between mortgage fraud, high levels of foreclosures (especially within certain communities), and property and violent crime within those communities.

Linking white-collar crime to neighborhood disorder and street crime is, to my mind, an interesting and intriguing nexus. Therefore, I conclude my remarks with a discussion of how an old way of thinking about white-collar crime (“criminogenic tiers”) and a revitalized way of looking at social connections (network analysis) may yield interesting insights with important policy implications.

\textsuperscript{56} Simpson, Garner & Gibbs, supra note 7, at 2.


\textsuperscript{58} Id.
A. Criminogenic Tiers

Beginning with Sutherland, research consistently has shown that some industries are more criminogenic than others and that structural characteristics—especially those related to the political and economic environment of the market—are critical factors associated with white-collar offending. This view is in contrast to the idea (more common in finance or economics) that markets will be self-correcting without intervention.

In the 1970s, sociologists used qualitative “case study” methods to examine how the structure of markets/industries increased the risk of crime. Leonard and Weber, for example, used the term criminogenic market to refer to occupational crime that emerged as a direct consequence of a legally established market structure. Denzin studied the liquor industry, and Farberman the automobile industry, to uncover the structural relationships that affected and constrained actors (both individuals and companies) within the market hierarchy.

This approach assumes that industry actors are both interdependent and autonomous at the same time. Structural power rests primarily at the top of the distribution chain. Consequently, pressures and constraints mainly are pushed downward, but not exclusively so. This process, whereby pressures at one structural level affect others, is known as a “criminogenic tier.”

For Farberman, the key structural relationships in the auto industry included the manufacturers, wholesalers, new and used car dealers, and car buyers/purchasers. Denzin identified five tiers in the liquor industry (suppliers, distributors, retailers, customers, and regulators). Each tier is situated in a

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59 See generally Sutherland, supra note 2; see also Simpson, Decomposition of Antitrust, supra note 7. A more recent example can be found in Robert Tillman, Making the Rules and Breaking the Rules: The Political Origins of Corporate Corruption in the New Economy, 51 CRIME L. & SOC. CHANGE 73 (2009).


64 Denzin, supra note 62, at 916, notes that liquor retailers have a fair amount of power and autonomy in the distribution network, even though they are further down the market structure than distributors.

65 Id. at 913.


67 Denzin, supra note 62, at 906.
competitive environment with its own distinct characteristics and pressures. For instance, in the liquor industry, suppliers are a hostile and highly competitive bunch, geographically clustered in family owned companies. Their main goal is to increase sales and market expansion using advertising and target marketing. The top of the chain in the automobile industry is much less competitive. At the time Farberman was writing, four companies controlled 92% of the new car market. This near monopoly gave the auto makers a tremendous amount of power vis-à-vis wholesalers, new car dealers, and used car retailers. Not coincidently, it also granted political influence over economic policy and rules that, according to Tillman, give rise to “the creation of motivations and opportunities for corporate corruption.”

A central theme in this literature is that pressures and constraints that affect one level will affect other levels in a manner similar to squeezing a balloon. Different kinds of occupational crime emerge at different levels in response to the motivations and opportunities for crime. Manufacturers, for instance, need to move unpopular products. They might restrict access to more successful product lines until the franchise dealers or retailers agree to take more of the unpopular one. Keeping the unpopular product is costly to the retailer, especially when it sits in inventory and takes up space in showrooms or display shelves. To move the product, retailers will often attempt to sell the item at bargain prices. But, that is costly to the bottom line. In an effort to keep profits up, retailers might squeeze their customers through the illegal tying of products, fraudulent repairs in their service department (in the case of automobiles), or selling liquor to illicit customers (underage drinkers).

The approach described above adopts the notion that normal market processes produce pressures or strains that are linked to crime. Markets, however, may be rigidly structured or loosely coupled. Criminogenic processes may be crime-coercive (illegal behavior is directly linked to corporate profits and desired by top managers) or crime-facilitative (structural conditions that favor crime are allowed to exist).

With these ideas in mind, how does a criminogenic tier analysis help us think about mortgage fraud, foreclosures and traditional crime? The home mortgage industry can be understood as a vertically structured market that deals in financial instead of physical products (such as automobiles). Most Americans either have a

68 Id. at 909–17.
69 Id. at 909.
70 See id. at 909, 914–15.
71 Farberman, supra note 63, at 439 n.2.
72 Id.
73 Tillman, supra note 59, at 74.
74 See Farberman, supra note 63, at 456.
mortgage or live in a home or apartment that is mortgaged; thus, it follows that mortgages are an essential product in the United States and most western societies.\footnote{Thanks to Harold Barnett for this observation.}

B. Structure of the Tiers

Home buyers are at the bottom of the market structure with lenders above them, investment banks atop them, and a number of other players within each level. For instance, credit raters and credit insurers evaluate the securities that investment banks are selling and investors purchase those securities. Developers work with commercial banks or mortgage brokers to get funds to purchase and refurbish properties. Real estate agents work directly with the buyer or developer as does the appraiser (who may be affiliated with agents or lenders).\footnote{See generally L. Randall Wray, Lessons from the Subprime Meltdown (The Levy Econ. Inst. of Bard Coll., Working Paper No. 522, 2007), available at http://www.levyinstitute.org/pubs/wp_522.pdf (last visited Mar. 18, 2011); Harold C. Barnett, And Some With a Fountain Pen: The Securitization of Mortgage Fraud (Nov. 4, 2009) (unpublished paper presented to the American Society of Criminology in Philadelphia, Pa.), available at http://mortgagemarketconsultant.com/mortgage_fraud_asc.pdf (last visited Mar. 18, 2011).}

The mortgage industry is not as tightly integrated as some of the oligopoly industries (like automobile manufacturing). But, historically the mortgage market tended to have more layers of regulation than the physical product market—brokers were regulated by the states, banks by state and federal governments, credit raters by the federal government, and so forth.\footnote{For a general history of banking in the United States and bank regulation, see generally William G. Shepherd, The Banking Industry, in THE STRUCTURE OF AMERICAN INDUSTRY 334 (Walter Adams ed., 5th ed. 1977) and Steven Pilloff, The Banking Industry, in THE STRUCTURE OF AMERICAN INDUSTRY 265 (James W. Brock ed., 12th ed. 2009). See also Wray, supra note 77.} Under regular or typical market conditions, a variety of occupational frauds occurred in this market (e.g., buyers misstating assets or the property flipping schemes depicted in Figure 1 below), but criminogenesis appears tied to one’s membership in or contact with the mortgage market.\footnote{See Needleman & Needleman, supra note 75, at 520–22.}

In the context of a new loan vehicle—the subprime mortgage—the level of regulatory oversight shifted and the market gave rise to extraordinary profit opportunities.\footnote{See Donald Palmer & Michael Maher, A Normal Accident Analysis of the Mortgage Meltdown, in MARKETS ON TRIAL: THE ECONOMIC SOCIOLOGY OF THE U.S. FINANCIAL CRISIS: PART A 219, 247 (Michael Loundsbury & Paul M. Hirsch eds., 2010).}

The subprime mortgage market emerged out of a lax and/or ineffective regulatory market. Housing appreciation (in some places as high as 20% per year) coupled with low interest rates created an attractive investment market along with opportunities for new mortgage products with a different, riskier population
targeted (those with no or less than optimal credit history). The loans, which carried with them high origination fees, higher than conventional mortgage rates, pre-payment penalties, and other (often hidden) costs, allowed many people who would not normally meet the criteria for a conventional mortgage to qualify for a subprime loan. In addition, if borrowers already owned a home, they were encouraged to refinance for cash (also for high fees) and use their equity for other purchases or to reduce financial obligations (such as reducing credit card debt)—in essence to treat their homes like their own personal ATM machine.

From 1993-99, there was a ten-fold increase in the number of subprime loans reported under the Home Mortgage Disclosure Act. Although subprime mortgages constituted a relatively small percent of all mortgages, they were associated with high risks of fraud. Data collected by the FBI reveals that the “subprime share of outstanding loans . . . more than doubled since 2003 putting a greater share of loans at higher risk of failure. Additionally, during 2007 there were more than 2.2 million foreclosure filings reported on approximately 1.29 million properties nationally, up 75 percent from 2006.” Between 1997 and 2005, there was a 1,411% increase in the number of suspicious activity reports (SARs) that identified potential mortgage fraud.

The mortgage boom, and in particular the subprime market, brought many opportunities for predatory lending, inviting agents, appraisers, developers, and lenders to participate in multiple fraud schemes “for profit.” Fraud for profit includes appraisal fraud, fraudulent flipping, straw buyers, and identity theft. The


82 Palmer & Maher, supra note 80, at 236–37.


85 Barnett, supra note 77, at 2.


87 Id.


89 Id. at 3.

90 Id.
low “teaser” rates associated with the subprime market were attractive instruments for fraud, especially in the context of rapidly appreciating housing values (see Figure 1).

**Figure 1: Illegal Property Flipping Scheme**

![Figure 1: Illegal Property Flipping Scheme](image)

As market conditions changed, the political environment shifted as well. Freddie Mac and Fannie Mae were allowed to treat high risk subprime mortgages as meeting their mission of making housing affordable to nontraditional buyers (low income). In fact, the U.S. Department of Housing and Urban Development (HUD) required that Freddie and Fannie purchase even more of these loans by allowing the government chartered (but privately owned) mortgage finance firms to “count billions of dollars they invested in subprime loans as a public good that would foster affordable housing.” Almost half of all U.S. mortgages are financed by Fannie Mae and Freddie Mac and, as of 2008, the two government subsidized firms held almost $5.3 trillion in outstanding debt.

On the purchaser side, as the new products no longer required verification of income, buyers were encouraged to lie about their assets and misstate income. This and other kinds of frauds for property (including occupancy fraud, debt elimination, straw buyers, and identity theft) involved both legitimate and illicit buyers. This kind of fraud is referred to as fraud for property.

Telephones and the Internet (on-line applications), coupled with the development of automated risk assessment instruments, contributed to fraud opportunities. These instruments (e.g., no document loans) were used to

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93 Id.
94 Id.
95 Mortgage Fraud Report 2006, supra note 91.
96 Id.
97 Mortgage Loan Fraud: An Industry Assessment Based upon Suspicious Activity Report Analysis, supra note 88, at 5.
determine if the consumer could meet the initial loan conditions (without taking into account such factors as this population’s increased risk of illness, unemployment, or loss of income). Because income was no longer verified, and many consumers misstated their income, the old adage “garbage in, garbage out” meant that people who really should not have qualified for the mortgages did, but were then unable to make payments, especially when the new Adjusted Rate Mortgage kicked in and the housing bubble burst. Home values tumbled, equity disappeared, and people lost their jobs, increasing the risk of foreclosure—which brought about a whole new kind of fraudulent activity: foreclosure rescue frauds.

Because subprime lending was concentrated in low-income and minority neighborhoods, foreclosures hit these communities the hardest. Communities least able to absorb the foreclosures and abandoned properties have been the most affected by the housing collapse. Foreclosed homes are more apt to remain empty in these neighborhoods as the number of eligible buyers shrink. Properties are abandoned, vandalized, and are attractive for illicit activities (e.g., safe houses for drugs and human trafficking).

In Phoenix, for instance, the housing boom attracted investors who bought and rented houses while waiting for a chance to flip them. When the mortgage market started to decline in mid-2007, the number of rental homes in the Phoenix area increased approximately seventy-five percent from the number of rentals in 2000. In addition to a new, riskier type of renter, the declining market and subsequent foreclosures gave rise to community “dead zones”—concentrated areas

98 See id.
99 See Barnett, supra note 77, at 17–18.
101 A study of Chicago lending practices found “that a dual mortgage market existed, . . . Mainstream lenders active in White and upper income neighborhoods were much less active in low-income and minority neighborhoods—effectively leaving these neighborhoods to unregulated subprime lenders.” Fishbein & Bunce, supra note 84, at 274 (discussing DANIEL IMMERGLUCK & MARTI WILES, WOODSTOCK INST., TWO STEPS BACK: THE DUAL MORTGAGE MARKET, PREDA TORY LENDING, AND THE UNDOING OF COMMUNITY DEVELOPMENT (1999)).
103 Id.
105 Id.
of foreclosed and abandoned properties.\textsuperscript{106} Under these conditions, criminologists expect neighborhood crime to increase—even in suburban neighborhoods.\textsuperscript{107}

Although the mechanisms through which neighborhood crime is linked to mortgage fraud are not well-conceptualized or empirically linked, a number of different explanations seem reasonable (e.g., broken windows, self-control, general strain, disorganization/social control).\textsuperscript{108} The effects of fraud on crime likely will depend on both the type of neighborhood in which fraud and foreclosures are concentrated and who is living in that community (i.e., the social and personal costs of loan default and foreclosures).\textsuperscript{109} Such characteristics are also apt to influence the type of crime that occurs (property versus violent crime; street violence versus domestic violence). Finally, it is important to recognize that fraud and its consequences are dynamic processes. Foreclosures that occur as a consequence of fraud and other questionable activities, such as predatory lending, occur in a time and space continuum. Specifying the causal relationships between foreclosures and crime must disentangle complex neighborhood processes (e.g., physical and social disorder).

Subprime products were very popular on Wall Street. Investment banks were highly competitive with one another to package and bundle high risk mortgages with other investments and sell them to investors. The trick was to pass on to investors the risk of delinquency and default carried by the toxic assets in a form that was not perceived to be risky while often at the same time, hedging or betting against the products’ appreciation and value (e.g., Goldman Sachs). The investment banks, in a sense, played both sides against the middle. They channeled money to wholesalers and direct sources of funds (the lenders) in order to reap the financial benefits from the loans and then packaged and enhanced the mortgages for sale to investors.\textsuperscript{110}

Subsequent problems in the housing industry and credit markets cannot be laid at the feet of a few bad apples. Insiders argue that criminogenic activities were systemic and extensive, up and down the market structure.\textsuperscript{111} As Mark Zandi, senior economist at Moody’s Economy.com, suggests, “the causes of the credit problems are very broad-based . . . . [E]veryone was involved to some

\textsuperscript{106} Id.


\textsuperscript{108} See, e.g., id.

\textsuperscript{109} Immergluck & Smith, supra note 102, at 860.

\textsuperscript{110} See Barnett, supra note 77; Geis, supra note 81; Palmer & Maher, supra note 80.

\textsuperscript{111} See John W. Schoen, Mortgage Fraud Sweep Marks a Turning Point: Widespread FBI Probe Highlights Breadth and Scope of Lending Crime, MSNBC (June 19, 2008, 8:10 PM), http://www.msnbc.msn.com/id/25269190/ns/business-personal_finance.
degree or another—borrower, lender, investment banker—all the way top to bottom.”

The short story is this: Wall Street, in its thirst to increase profits, discovered the subprime residential business and embarked on a liquidity spree by providing warehouse lines of credit to too many undercapitalized subprime lenders. The Street—Bear Stearns, Lehman Brothers, Merrill Lynch, take your pick—funded these companies and then turned around and securitized their loans. The reason for the fall: loan quality. Wall Street and the wholesalers feeding them product threw residential mortgage standards out the window. This may sound like a gross over exaggeration, but during the ‘boom’ years just about any loan applicant with a pulse could obtain a mortgage, be it stated-income, alt-A, payment options ARMs, and various other nontraditional loan types. (Note: Bear and Lehman are now dead. See what happens when you play with fire?)

The overall structure of the mortgage market and its relationship to neighborhood foreclosures, with links to traditional property and violent crime, is summarized below in Figure 2. The key market relationships discussed above are depicted (buyers, mortgage brokers, investment banks, credit raters, and investors), as well as other less central players (appraisers and real estate agents).

![Figure 2]

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112 Id.


C. Network Analysis

A criminogenic tier analysis can identify the key structural relationships among players in the mortgage market, up and down the hierarchy and within levels. It can assess the economic, political, and cultural environments in which the actors operated and isolate the particular pressures, constraints, and opportunities that both coerced and facilitated fraudulent activity at all levels of the industry. However, the criminogenic tier approach is a conceptual analytic framework. It does not statistically link actors to one another or allow researchers to assess the density of networks or the centrality of certain actors to others. This is where network analysis is useful.

Network analysis, focused on the actors within a criminogenic market, can visually represent the structural roles of the market participants, their actions, the transaction flows and transfer of resources between points, and physical distances between actors. It can focus on a particular actor, node, point, or agent and pinpoint the type of tie among actors. Actors can be analyzed in a dyad, triad, subgroup, or group. In this way, network analysis provides insight into the relations between elements (the structure) instead of focusing on the specific attributes of the individual elements.

Network analysis can be used to test a variety of different theories that may provide insight into mortgage fraud, such as the strength of weak ties, transaction costs, opportunity theory, social exchange theory, contagion theories, and so on. Research has shown, for instance, that mortgage fraud risk moved in waves across the country from east to west. States identified with the highest levels of foreclosures “correspond closely” with states with the highest overall levels of mortgage fraud risk. Thus, there are fraud hotspots that might be particularly amenable to network analysis. The extent to which analyses could identify weak ties that appear to control information might prove useful for policy interventions, as would a focus on the density and extent of control networks (e.g., regulation). Tracking networks over time may show how new opportunities (such as the emergence of subprime mortgages or changes in regulation) influence the composition of network actors and their relationships. Tillman and Indergaard

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120 Id.
remind us that transformations in the corporate landscape can alter the structure of criminogenic tiers, broadening the network of fraudsters to include players from outside the primary market.\footnote{Robert Tillman & Michael Indergaard, Corporate Corruption in the New Economy, in INTERNATIONAL HANDBOOK OF WHITE-COLLAR CRIME AND CORPORATE CRIME 474, 482–85 (Henry N. Pontell & Gilbert Geis eds., 2007). They coin the term “criminogenic institutional frameworks” to capture the broader spectrum of participants in the construction of a crime-facilitative environment. Id. at 482.}

Baker and Faulkner’s analysis of the great electrical price-fixing conspiracies demonstrates the utility of network analysis to test theory and analyze white-collar offending, with a focus on both individual and organizational actors.\footnote{Wayne E. Baker & Robert R. Faulkner, The Social Organization of Conspiracy: Illegal Networks in the Heavy Electrical Equipment Industry, 58 AM. SOC. REV. 837 (1993).} Their study reveals “that the structure of illegal networks is driven primarily by the need to maximize concealment, rather than the need to maximize efficiency.”\footnote{Id. at 837 (emphasis omitted).} Illegal networks are different from legal ones in that the former rely on secrecy. Information must be transferred quickly, discretely, and accurately. Legal network theory suggests that in order to do this, the network should be sparse and decentralized as this would offer better protection from investigation and sanctioning.\footnote{Id. at 853.} Organizations in this type of network should have low rates of conspirators who will be found guilty, and if found guilty will have shorter sentences and lower fines.\footnote{Id. at 845.}

Most of Baker and Faulkner’s results were inconsistent with their original hypotheses.\footnote{Id. at 850–51, 855.} For instance, decentralization did not protect against successful prosecution and people who were centralized were less likely (rather than more likely) to be found guilty.\footnote{Id. at 851.} The study is, however, an excellent description of criminogenic networks within three electrical markets, the structure of those networks, and linking structural characteristics to outcomes. This approach, assuming the availability of relevant information to construct the network,\footnote{See generally MATTHEW H. FLEMING, FIN. SERVS. AUTHORITY, FSA’S SCALE & IMPACT OF FINANCIAL CRIME PROJECT (PHASE ONE): CRITICAL ANALYSIS (2009), available at http://www.fsa.gov.uk/pubs/occpapers/op37.pdf.} offers great utility for exploring the mortgage fraud industry, key actors and relationships, ties among them, and how the network is linked to foreclosures and neighborhood crime.

This paper began with a discussion of the various deficiencies in our understanding of white-collar crime. As we move toward collecting and utilizing better data to study the phenomenon, there will be better systematic research in this area—focused on both the causes of crime and its prevention and control. A
criminogenic tier approach has the utility to link individual and organization actors in a network of interdependent relationships. Network analysis can then depict those relationships in a variety of useful ways—for theory development and policy interventions.