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in a National Sample**

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Principals, Agents and Entrepreneurs in White-Collar Crime: An Empirical Typology of White-Collar Criminals in a National Sample

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Abstract. This study explores a nationally representative sample of 222 Norwegian white-collar criminals in terms of the roles they and their victims had in their crimes. Establishing a typology framework based on agency models, we point out the most frequent types of white-collar criminals and their most profitable types of actions. Victims of white-collar crimes are mostly participants in business transactions. As expected, top executives are a predominant group of white-collar criminals and their most frequent victims are owners. However, another type of white-collar criminal coined “entrepreneur criminal” turns out to be more frequent and making bigger profits in absolute and relative terms. These work within smaller, less established companies with less transparent governance and target a broad range of victims. Our data support the view that white-collar crime is based on competence, not deviant dispositions, and poses real but to some extent foreseeable risks to business strategies. Theoretical and practical implications are discussed.

Keywords: white-collar crime, top executives, agency theory, entrepreneurship.

1. Introduction

“Standard economic models treat individuals as playing a game with fixed rules which they obey. They do not buy more than they can pay for, they do not embezzle funds, and they do not rob banks.” In his seminal paper on agency theory and transaction costs, Williamson (1981, p. 31) called for the need to take “human nature as we know it” into account, addressing the fact that human agents are subject to bounded rationality and opportunism. But when it came to take the real human propensity for crime into account, even Williamson seemed to restrict his analysis to “moral hazard”, which is hardly criminal but only legally opportunistic.

Assessing and understanding risk is of special relevance in strategy, but even people who address this fact rarely if at all pay special attention to white-collar crime as a risk factor (Eisenhardt, 1989; Helmer, 2003; Taleb, 2004). We believe this represents a knowledge gap in strategy learning, given the following facts: The 2011 PricewaterhouseCoopers global economic crime survey (PriceWaterhouseCoopers, 2011) documents that white-collar crime is a

persistent and intractable problem, affecting more than 50% of US companies in the past two years. The crimes suffered span asset misappropriation, accounting fraud, intellectual property infringement, corruption and bribery and money laundering. Schnatterly (2003) claimed that the cost of white-collar crime may be as high as 6 percent of annual sales, and Rosoff, Pontell, & Tillman (2004) found that the cost of white-collar crime is about 14 times that of "traditional" crimes targeting private persons and households. Clearly, strategic decision makers are well advised to be aware of crime as a risk to business and not count on the opportunism of contract partners to be restricted by rules. Organizations may suffer from white-collar crime in at least three ways: Through fraudulent behavior by external contract partners, by internal individuals securing profits for themselves at the cost of the shareholders and, less obviously, by engaging in business transactions that may turn out as illegal, risking legal reactions and loss of reputation. As an example of the latter type, Laffey & Laffey (2010) show how participants in the US gambling business used gaps in regulations to target new markets, but the risk of prosecution shaped the strategic behaviors not only of service providers but also third parties such as underwriters, consultants and banks.

Despite the fact that opportunism in business transactions provides very real incentives and rationales to commit crime, the management literature has had a tendency to draw artificial lines between "agency theory", "white collar crime" and "business ethics". Legal knowledge itself is not a sufficient basis to assess the risk of business partners engaging in white-collar crime. As shown by recent contributions of neurobiology (Hirstein & Sifferd, 2011) and the role of fines in explaining criminal intentions (Rousseau & Telle, 2010), people don't label their own actions as "committing crimes", but seek to employ their understanding of business where the risk of being fined is just one of many imperfect regulations of business conduct. Literature on business development has seldom addressed white-collar crime and the noteworthy exceptions that do exist have shown that traditional, theoretically founded governance mechanisms are imperfect (Schnatterly, 2003) or may actually sometimes increase the likelihood that managers engage in crime (Bilimoria, 1995; Donoher, Reed, & Storrud-Barnes, 2007; Klima, 2012). Most of the existing research examines whether particular governance practices have effect on particular hazards and crimes. Not even the recent encyclopedia on white-collar crime contains a description of the connection between roles in governance and their respective risks of engaging in criminal behavior towards their contractual partners (Salinger, 2005). To our knowledge, no-one has made a unified approach to white-collar crime as a business area defined by the behavioral roles of perpetrators and victims, which is strange given the vast amount of research on how different types of governance lend themselves to informational asymmetry and secrecy. Moreover, business organizations and networks lend themselves easily as the kind of contexts that give rise to organized crime (Edwards & Levi, 2008). Closer scrutiny also shows

that business transactions are time-sensitive in their vulnerability towards crime (Klima, 2012). In fact, a classical debate in the theory of white-collar crime is whether this concept is anti-business biased or reflecting a true issue of hidden risk in business – the Sutherland-Tappan debate (Holtfreter, 2005).

Our aim is to look at the total known population of white-collar criminals within one legal environment (i.e., one nation) in terms of business organization and governance and ask the research question: Under which type of agency model is white-collar crime most frequent and most profitable: as principals, as agents, as entrepreneurs, as single professionals or as non-organized perpetrators of white collar crime, and who are their most likely victims?

2. Theory

Sutherland coined the term “white-collar crime” in a lecture in 1939 (Sutherland, 1940) to draw attention to the fact that members of the privileged socioeconomic classes also commit crime. Since then, researchers have discussed what might be included in and what might be excluded from this concept and the discussion is summarized by scholars such as Benson and Simpson (2009), Blicke et al. (2006), Bookman (2008), Brightman (2009), Bucy et al. (2008), Eicher (2009), Garoupa (2007), Hansen (2009), Heath (2008), Kempa (2010), McKay et al. (2010), Pickett and Pickett (2002), Podgor (2007), Robson (2010), Schnatterly (2003) and even in encyclopedic form (Gerber & Jensen, 2006; Salinger, 2005). Even though stories of contemporary famous examples – recently, such people as Bernard Madoff, Raj Rajaratnam or Jeffrey K. Skilling – may be relevant and interesting case studies, the extent of generalization from such case studies is questionable and the study of white-collar crime has not been treated systematically in a strategic risk perspective. A larger sample of white-collar criminals is needed to study average values as well as variation in white-collar characteristics.

A crime is an act determined by law as criminal, and normally grouped according to the legal paragraphs describing them. One of the challenges of prosecutors and lawyers is to argue for the case that any given instance of an act may qualify as a crime or not. Because of this, categories of crimes have an abstract quality that seldom describes the causes and dynamics involved in the actual behaviour.

Different theories of white-collar crime focus on different mechanisms driving criminal behaviour. Central to these theories are concepts such as opportunity, trust and (core) competence. These are central concepts of doing business in organizations. White-collar crime is, to rephrase Clausewitz (1968, orig. 1832), “the continuation of business with other means.” How have previous theories conceptualized white-collar crime, and do these have implications for business?

Naylor (2003) formulated a general theory of profit-driven crime and proposed a typology that shifts the focus from actors to actions by distinguishing between market crime, predatory crime, and commercial crime. The theory of profit-driven crime suggests that financial crimes are opportunity driven, where executives and managers identify opportunities for illegal gain. Opportunity is a flexible characteristic of financial crime and varies depending on the type of criminals involved (Michel, 2008). Viewing organized crime as organized business, a framework relevant to risk in strategy may be used to analyze the criminals and their acts: What is the role of the criminal when engaging in the crime, and who is the victim?

2.1. Characteristics of White-Collar Criminals

According to Brightman (2009), Sutherland's theory of white-collar crime from 1939 was controversial since many of the academicians in the audience perceived themselves to be members of the upper echelon of American society. Sutherland defined white-collar criminal as a person of respectability and high social status who commits crime in the course of his occupation, excluding cases of murder, adultery, and intoxication, since these are not customarily a part of these people's occupations (Benson & Simpson, 2009). But it also excludes lower class criminals committing financial crime, as pointed out by Brightman (2009). In today's business world, business managers and executives are the individuals with power and influence associated with respectability and high social status.

The concept of the "white-collar criminal" has come under some attack in recent years and we will only briefly refer some main points to delineate our focus group. Brightman (2009) argues that the term white-collar crime should be broader in scope and include virtually any non-violent act committed for financial gain, regardless of one's social status. Bookman (2008) regards Sutherland's definition as too restrictive and suggest that white-collar crime is an illegal act committed by nonphysical means and by concealment or guile, to obtain money or property, to avoid payment or loss of money or property, or to obtain business or personal advantage. Pickett and Pickett (2002) use the terms financial crime, white-collar crime, and fraud interchangeably. They define white-collar crime as the use of deception for illegal gain, normally involving breach of trust, and some concealment of the true nature of the activities.

It is likely that fewer white-collar criminals are put on trial than "ordinary" street criminals, and even fewer upper class criminals are sentenced to imprisonment, even though the sentences are increasingly draconic for those who actually are prosecuted (Dhimi, 2007; Holtfreter, 2008).

Even though the distinctions between "ordinary" crime, financial crime and the core of Sutherland's original concept of "white-collar criminals" have been blurred in recent years, closer examination of this population shows that there is

still a subset of high status offenders without previous criminal records who were valued and trusted by surrounding stakeholders (Weisburd & Waring, 2001). Podgor (2007) pointed out that the most interesting aspect of Sutherland's work is that a scholar needed to proclaim that crimes of the "upper socioeconomic class" were in fact crimes that should be prosecuted. Tappan, one of the strongest opponents of Sutherland, claimed that the whole approach was "anti-business biased" (Holtfreter, 2005). It is apparent that prior to the coining of the term "white collar crime," wealth and power allowed some persons to escape not only criminal liability, but also suspicion, which is a major element in the abuse of trust. In our view, the best reason to keep the term "white collar crime" is that it calls attention to the criminal potential of a group of people otherwise above suspicion for reasons of status, power or trust, even though they may have even stronger opportunities and incentives to act opportunistically than others.

We choose in our definition to follow Hansen (2009), who claims that white-collar crime can be defined in terms of the offense, the offender or both. Defined in terms of the offense, it means a crime against property committed by non-physical means and by concealment or deception for personal or organizational gain. Defined in terms of the offender, it means crime committed for personal or organizational gain by individuals who are wealthy, highly educated, and socially connected, and who are typically employed by and in legitimate organizations.

2.2. Typology of white-collar criminals and principal-agent theory

As long as criminal behavior on the part of contractual partners is treated as unfortunate exceptions to the rule, white-collar crime is in the realm of "uncertainty" rather than "risk" in the sense of strategy (Helmer, 2003). Both from a scientific and a business perspective, "risk" implies some level of knowledge that allows more precise measurement and assessment of the vulnerability of organizations to white-collar crime. Our purpose here is to develop and test another way of classifying white-collar criminals, building on principal-agent theory and assigning roles to perpetrators depending on their roles in business transactions and the organization of the work implied by the criminal act.

Principal-agent theory holds that owners (principals) have different interests from administrators (agents), such that principals must always suspect agents of making decisions that benefit themselves, to the cost of the principals. In short, CEOs may always be suspected of cheating the owners, and appropriate measures of checks and governance need to be in place (Chrisman, Chua, Kellermanns, & Chang, 2007; Eisenhardt, 1989; Williamson, 1981). Since controls invoke costs, principal-agent theory is also related to transaction-cost theory and the value of trust (Teece, 2010; Williamson, 1985). This theoretical framework has been influential in economics, management and strategy for decades (Baiman, 1990).

Even more recent alternatives such as knowledge creation theory (Nahapiet & Ghoshal, 1998) acknowledge the need for governance to provide the necessary trust and transparency to create knowledge that has competitive advantage (Arnulf, Dreyer, & Grenness, 2005; Lane & Lubatkin, 1998). In this way, we also believe the governance issues involved in principal-agent theory apply to risks of crime involved in entrepreneurship. Using the definition of Shane & Venkataraman (2000, p. 218), the study of entrepreneurship involves “the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them”. The sources of opportunities and their exploitation as well as the individuals must be assumed also to include criminally opportunistic behaviors, and we include the concept “entrepreneurship” as a category of exploiting business opportunities in ways that reduces transparency, thus facilitating white-collar crime in business transactions (Gottschalk, 2009).

On this basis, we built a framework identifying six roles of white-collar criminals, engaging in five types of interactions with their victims:

1. “Principal criminals”: Principal-agent theory may be applied in several different settings. Technically, owners are principals but merely owning a share does not imply criminal behaviors. Activity will have to be on the part of board members (owners or representing the owners). We have restricted the model such that “principals” are chairmen or members of the board and “agents” are CEOs or similar top executives of organizations.
2. “Agent criminals”: In our case, white-collar criminals are coded “principals” if they committed a crime in the role of chairmen or board members and “agents” if committing crime as top executives (the same people may have other roles that were not affected by the crime in question).
3. “Entrepreneur criminal”: The third category stems from the fact that the principal-agent distinction is not always applicable in practice. Many of the white-collar criminals in our database are founders, owners, chairmen and/or CEOs in a mix of roles and often their companies are all but paper constructions. This solitary role may also be similar to a tight family ownership constellation with different challenges in governance and agency (Chrisman, et al., 2007; O’Boyle Jr, Pollack, & Rutherford, 2012) White collar criminals who are themselves sole owners/chairmen/CEOs of a company that partly or entirely engage in unlawful activities to make revenues are labeled “entrepreneur criminals”. “Entrepreneurship” may also be seen as an alternative choice in organizing business, using creative methods in novel ways to create bigger returns than more established ways of

organizing similar work (Minniti & Lévesque, 2010; Scott Shane & Venkataraman, 2000), and research shows that the answer to the question of “why, when and how different modes of action are used to exploit entrepreneurial opportunities” (Scott Shane & Venkataraman, 2000, p. 218) is sometimes based on criminal intent (Gottschalk, 2009).

4. “Servant criminal”: This role is assigned to a person who does not hold a formal leadership position in the business transaction, but who is central in a crime because of special professional knowledge that may be exploited, either in isolation or as part of a bigger crime. Examples are computer programmers who help writing code that help evading taxes, accountants with special access to books and registers or auditing consultants that help inflate assets by forged certificates. Servant criminals may be on the inside or outside of the main organization in the crime (raising again the question of the boundaries of an organization), but act as hired consultants and in that way act as parts of an organization.
5. “Public official”: These are people who are usually performing the role of impartial third party regulators such as police, politicians or municipal authorities. Only officials in these roles are assigned to this category, as executives and professionals in publically held companies are grouped in previous categories.
6. “Robber criminal”: The final category of white-collar criminals is a residual, consisting of individuals acting as private persons without a defined business relation to the victim(s). This may be a private person hacking bank accounts or receiving social security support through fraud.

These types of white-collar criminals may be found to relate to the following five types of victims:

- A. “Cheating investors”: When viewing white-collar crimes as organized activities, the victims may be grouped in terms of the relationship they have to the organization. Starting with principal-agent theory, the unfaithful agent will be cheating the principals, i.e., owners or investors. Any criminal who has tried to steal profits from investors has been labeled “cheating investors”.
- B. “Cheating customers”: Conversely, profits may be increased for principals and agents alike by cheating the customers external to the

organization. All criminals are labeled such if their unlawful behavior involved cheating customers.

- C. “Tax fraud”: Unlawful attempts at taking money from public finances are labeled “tax fraud”. The category spans from tax evasion to illegally obtaining public funding.
- D. “Bribes”: This category is reserved for criminal acts where any kind of rule by bribing third party regulators.
- E. “Cheating innocents”: Taking money from people who are not aware of having entered a business relationship with the perpetrator in question.

We will now attempt to use this classification to explore its value in understanding and measuring the criminal behaviors displayed in the present sample.

3. Research Method

In a small country like Norway with a population of only five million people, there are limits to available sample size. One available option would be to study court cases involving white-collar criminals. A challenge here would be to identify relevant laws and sentences that cover our definition not only of white-collar crime, but also required characteristics of white-collar criminals. Another available option is to study newspaper articles, where the journalists already have conducted some kind of selection of upper class, white-collar individuals convicted in court because of financial crime. Another advantage of this approach is that the cases are publicly known, which makes it more acceptable to identify cases by individual white-collar names. Therefore, the latter option was chosen in this research.

Our sample has the following characteristics as applied by newspapers when presenting news: famous individuals, famous companies, surprising stories, important events, substantial consequences, matters of principles and significant public interest. This is in line with research by Schnatterly (2003) who searched the Wall Street Journal for several years in her study of white-collar crime published in the Strategic Management Journal. It also avoids the Sutherland-Tappan debate since the criminals have been “carefully selected by sieving of the due process of law” as we include only criminals convicted of legal crimes, no misdemeanors (Holtfreter, 2005, p. 777).

There are two main financial newspapers in Norway, “Dagens Næringsliv” and “Finansavisen”. In addition, the newspaper “Aftenposten” regularly brings news on white-collar criminals. These three newspapers were studied on a daily

basis from late 2009 to late 2011 to identify white-collar criminals. A total of 222 white-collar criminals were identified during those two years. A person was defined as a white-collar criminal if the person seemed to satisfy general criteria mentioned above, and if the person was sentenced in court to imprisonment.

For this study it was considered sufficient that the person was sentenced in one court, even if the person represented a recent case that still had appeals pending for higher courts. A sentence was defined as jail sentence. Therefore, cases which resulted in a fine rather than a custodial sentence were not included in the sample. As our research is based on newspaper articles written by journalists, the reliability and completeness of such a source might be questioned. However, most cases were presented in several newspapers over several days, weeks or even months, enabling this research to correct for initial errors by journalists. Furthermore, court documents were obtained whenever there was doubt about the reliability of newspaper reports. This happened in one-third of reported cases.

It must be noted that there are, of course, disadvantages of applying newspapers as data source. According to Burns and Orrick (2002), research suggests that the media present a distorted image of crime by focusing on violent, sensational events that are atypical of crime in society. They argue that the media is neglecting coverage of corporate offenses, and that the media disproportionately focus on conventional crime while neglecting the impact of corporate misbehavior. This line of reasoning, however, can be seen as an argument for our research design, where the white-collar crime cases stand out in the media.

3.1. Sample Characteristics

As suggested in the research literature, most white-collar criminals are men. This is confirmed in our sample of 222 persons, which includes only 18 (8%) female criminals and 204 (92%) male criminals. The youngest was 21 years and the oldest 75 years old. A distinction is made between age when convicted and age when committing crime. On average, a person was convicted 5 years after the crime, thus the average age when committing crime is 43 years old since the average age when convicted was 48 years old.

Anecdotal cases such as Madoff, Rajaratnam and Skilling portray men in their fifties or older. This fits our sample as the average age is 48 years at the time of conviction, in agreement with a study by Blickle et al. (2006) of 76 convicted German white-collar criminals where 8% were female and the mean age was 47 years. This is also similar to the findings of the consulting firm KPMG (2011), stating that the typical fraudster is a 36 to 45 years old male committing fraud against his own employer, works in the finance function or in a finance-related role, holds a senior management position, employed by the company for more

than 10 years, and works in collusion with another perpetrator. These characteristics are based on 348 actual fraud investigations conducted by KPMG member firms in 69 countries.

All persons in our sample received a jail sentence for white-collar crime. The average jail sentence was 2.2 years, with a maximum of 10 years and a minimum of 15 days. The longest jail sentence of 10 years was given to a person involved in bank fraud convicted of organized crime. In a Norwegian context these jail sentences are quite substantial, only passed by organized crime and murder (the sample of Blickle et al. (2006) received 3.9 years imprisonment in Germany).

In the Norwegian court system, there are three levels: district courts, courts of appeal and Supreme Court. Out of 222 cases, 122 were decided final in district courts, 89 were decided final in courts of appeal, while 11 cases were decided final in Supreme Court.

The average amount involved in each financial crime case by white-collar criminals was 64 million Norwegian kroner or on average 10 million US dollars. The smallest crime amount was 1 million, and the largest was 1200 million kroner (about 198 million USD).

Only 36 white-collar criminals operated single-handed, the rest involved others in their crimes. On average, 8 persons were involved in the white-collar crime cases studied here. The maximum number involved in a case was 200 persons, where an accounting firm had been fixing 200 taxi owners' accounts so that they paid less tax. Only four persons from this taxi fraud scandal were included in our sample as white-collar criminals: the accounting responsible, the computer programmer, and two head taxi owners.

In terms of the type of crimes, there were four main financial crime categories by white-collar offenders: fraud, theft, manipulation, and corruption. Fraud can be defined as intentional perversion of truth for the purpose of inducing another in reliance upon it to part with some valuable thing belonging to him or to surrender a legal right (Henning, 2009). Theft can be defined as the illegal taking of another person's, group's or organization's property without victim's consent (Hill, 2008). Manipulation can be defined as a means of gaining illegal control or influence over others' activities, means and results such as tax evasion (Malkawi & Haloush, 2008). Corruption can be defined as the giving, requesting, receiving or accepting of an improper advantage related to a position, office or assignment (Kayrak, 2008). Our sample spans 120 cases of fraud, 11 cases of theft, 51 cases of manipulation, and 40 cases of corruption.

Income figures for all taxable incomes are published annually by Norwegian tax authorities. Almost all 222 white-collar criminals were found on the list for 2009. The average personal income was 327 000 kroner (approximately 54 000 US dollars), tax was 532 000 kroner (approximately 88 000 US dollars), and personal fortune was 37 million kroner (about 6 million US dollars).

The average white-collar offender worked in an organization with revenues of 223 million kroner and 138 employees. 200 criminals worked in private sector organizations, while 22 criminals worked in public sector organizations.

The financial damage of 64 million Norwegian kroner (10.6 million US dollars) was in most cases occurring outside the organization where the criminal worked. The victim of crime was typically another organization: 180 criminals caused damage to another organization or outside individual, while only 42 caused financial damage to his or her own organization.

Journalists in the media investigated and revealed a total of 59 out of 222 white-collar criminals. This represents 26 percent, which means more than one fourth. However, there is a bias in our sample towards media, since only cases presented in the media are included. Nevertheless, it may seem surprising that journalists make such a significant contribution. After journalists we find victims of crime who revealed 42 criminals (19%), followed by bankruptcy lawyers (8%), tax authorities (8%), banks (7%), internal controls (6%), auditors (4%), the police (4%), stock exchange (2%), and others (16%). While it may seem surprising that journalists detect as many as 26 %, it may seem surprising as well that victims were detecting as few as 19% and the police only 4%.

A distinction can be made between leader and follower in crime (Bucy, et al., 2008). In our sample of 222 criminals we find 120 leaders and 102 followers.

While corporate crime is mainly for the benefit of the organization, occupational crime is mainly for the benefit of the individual (Hansen, 2009) . In our 222 cases we find 75 corporate criminals and 147 occupational criminals.

4. Research Results

According to the official Norwegian statistics on employment, the share of all kinds of managers in the total population is about 5.9%, and the share of CEOs within this population is about 8%, or 0.5% of the population. In contrast, an overwhelming majority of people convicted of white-collar crime cite their current position to be CEOs or other top managers (43%) when appearing in court, see figure 1. In fact, when all individuals in a top management position are grouped (board, CEO, owner/founders), they amount to 45%, 28% being middle managers, and only 16% are professionals with no management duties.

Table 1: Main role in crime by types of offenders

Formal position at trial	Number	%
Chairman/Board member	16	7,2
CEO	36	16,2
Owner/Founder	48	21,6
Middle manager	24	10,8
Accounting/finance professional	15	6,8
Other internal professional	23	10,4
External consultant (e.g. investment advisor)	30	13,5
Lawyer	5	2,3
Public official	8	3,6
Unemployed	17	7,7
Total	222	100

We then ran our analyses by using our own typology of criminals as described above, see table 2. We tested our typology of criminal individuals by running logistic regressions, using types of crimes and victims as dependent variables. Our categorization of perpetrators turned out to allow significant predictions of types of crimes (p for all regression equations $< .05$) except for tax evasion, which is common to all as “the common cold of white collar crime”. Table 2 shows that the CEOs are twice as likely to engage in crimes as their principals. As predicted by principal-agent theory, they are more likely to cheat their principals (investors) than customers or innocents. However, the most typical role of a white-collar criminal by far is the entrepreneur criminal. These are also engaged in all types of crimes, seen from the position of the victims.

The “servant criminals” are more likely to appear as accomplices to entrepreneurs or CEOs than on their own. It is thus obvious that most white-collar crimes are committed in organized ways, organizing also the criminals, often spanning company boundaries in the same way that other businesses are networked.

Who are the victims of white-collar crime? All white-collar criminals are about equally likely to engage in tax frauds, but apart from this, investors are the most likely victims. Every third white-collar criminal is convicted of cheating investors in some way, and this is by far the most common crime for CEOs and board members.

Entrepreneur criminals are also cheating investors but more inclined to cheat customers. It is obvious that entrepreneur criminals operate their companies in ways that maximize their returns by reducing the value created for their

customers. Hired CEOs do not seem to be as likely to cheat their customers in this way.

Table 2: Main role in crime by types of victims

Role in crime	Count	% of all	Cheating investors	Cheating customers	Tax fraud	Cheating innocents	Bribes
Principal criminal	14	6,3 %	4,1 %	0,9 %	2,7 %	0,0 %	0,5 %
Agent criminal	26	11,8 %	6,3 %	2,3 %	4,5 %	0,5 %	0,5 %
Entrepreneur criminal	84	38,0 %	9,5 %	14,0 %	19,9 %	1,4 %	5,9 %
Servant criminal	55	24,9 %	9,0 %	6,3 %	6,3 %	0,9 %	4,5 %
Public official criminal	9	4,1 %	0,5 %	0,0 %	1,4 %	0,0 %	0,0 %
Robber criminal	33	14,9 %	1,4 %	0,0 %	2,7 %	10,0 %	0,0 %
	221	100,0 %	30,8 %	23,5 %	37,5 %	12,8 %	11,4 %

Note: Percentages are relative to the whole sample.

Almost only the rest category “robber criminals” cheat innocent bystanders. All other white-collar criminals prey on parties with whom they are engaged in business. The “0” in the field of public officials on bribes implies even though they have received bribes is that these are seen to cheat their principals, and bribing is an offence committed by the briber.

Table 3: Leaders and followers in crime by the role in the crime

Crime role	Leader/follower			
	Leader		Follower	
	Count	%	Count	%
Principal criminal	8	57,1 %	6	42,9 %
Agent criminal	21	80,8 %	5	19,2 %
Entrepreneur criminal	48	57,1 %	36	42,9 %
Servant criminal	24	43,6 %	31	56,4 %
Public official criminal	4	44,4 %	5	55,6 %
Robber criminal	12	36,4 %	21	63,6 %

Table 3 shows that CEOs to an overwhelming degree take their roles into the crime, being the main perpetrator and enlisting others as accomplices. Board members are actually almost as likely to be followers as leaders. A small majority of entrepreneur criminals are also leaders, but in fact a large share of the “entrepreneurial criminals” in the sample have established or used their companies to cover up crimes of others.

Table 4 shows the revenues of white-collar crime as a function of the perpetrators' roles and employing companies. It seems again as if the entrepreneur criminals are cashing in the biggest amounts. When CEOs commit crimes, they will more often do this in bigger companies than is the case for principals. Servant criminals will more often be engaged in crimes involving huge sums of money, but most often in the role of accomplices (followers), not as leaders in crime. Public officials and the occasional robbers are only receiving small money in this context.

99.5 % of all Norwegian companies have less than 100 employees. It is worth noting that pure CEOs among the criminals typically work for the biggest companies in the country. Board members and particularly entrepreneur criminals, however, seem to commit their crime in small to middle-sized companies. The interesting fact is that this is where the really profitable crime seems to take place. The white-collar criminal as a leader makes most money as entrepreneur, controlling most transactions in small companies, whereas followers/accomplices seem to be moving in the bigger companies.

Table 4: Crime roles by company size and leader/follower position in crime

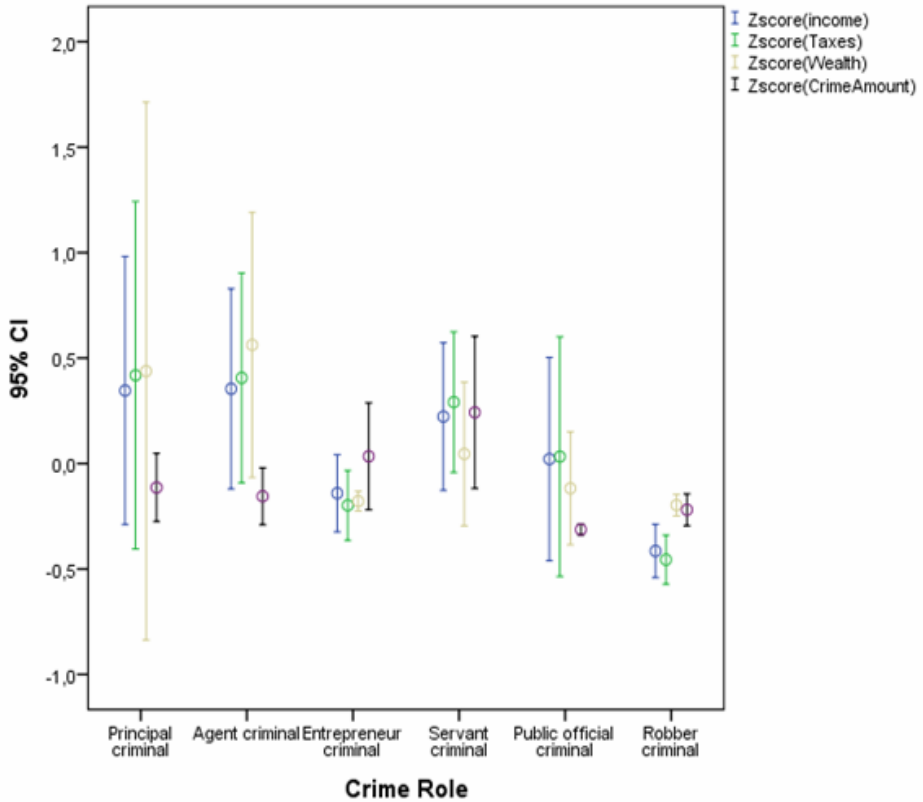
	Leader or follower in crime					
	Leader			Follower		
	Company revenue (millions of NOK)	Company staff (headcount)	Crime amount (1000 NOK)	Company revenue (millions of NOK)	Company staff (headcount)	Crime amount (1000 NOK)
Principal criminal	102	42	42	370	179	36
Agent criminal	445	206	40	483	403	10
Entrepreneur criminal	170	60	114	110	39	14
Servant criminal	205	121	46	433	375	163
Public official criminal	825	775	6	162	201	2
Robber criminal	5	3	58	3	3	1

Figure 1 shows the personal income, wealth and taxes paid for each type of white-collar criminal. Entrepreneurial criminals are making the biggest profits from crime, while having the lowest income and wealth and paying virtually no taxes.

Finally, figure 2 shows the relationship between official personal income and crime profits. It can be seen that the entrepreneurial criminals make the best profits, compared to their official income. The only group that comes close to these is the robber criminals. In fact, these two groups are the only white-collar

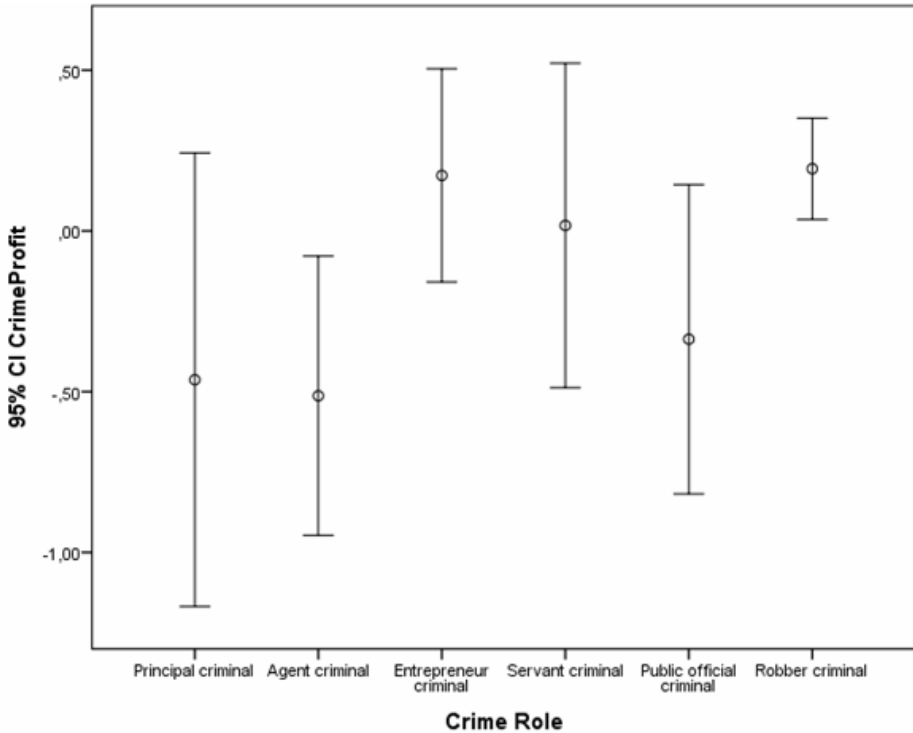
criminals that make profits that exceed their recorded assets. Measured in terms of registered assets, board members and top managers are making themselves criminal for profits that are only fractions of their wealth. The entrepreneur criminals are significantly boosting their capital basis.

Figure 1: Income, taxes, wealth and amount involved in crime by the individuals' role in the crime.



Note: All amounts in normalized figures to allow comparisons

Figure 2: Net criminal profit after subtracting income. Normalized figures used to allow comparisons.



5. Discussion

The purpose of this study was to explore a role typology of white-collar criminals based on agency models and explore which roles will commit white-collar crime most frequent and most profitable as business venture, thus posing the biggest risk to their victims: As principals, as agents, as entrepreneurs, as single professionals or as non-organized perpetrators of white collar crime?

To achieve this, we went beyond legal labels of criminal acts and created an analytical matrix based on the role of perpetrators in executing the crime along one axis and the types of victims along the other axis. Our dataset consisted of all known cases of white-collar crime in Norway reported during 2009-2011, a total of 222 individuals. The sample spanned most types of crimes and professions ranging from unemployed hackers of innocent people's bank accounts to high-profiled executives setting up Ponzi schemes.

A central finding was that most white-collar crime is committed within business transactions by executives or professionals, targeting other parts of business contracts as victims. There are also examples of "innocent bystanders"

getting hurt, but these are exceptions. White-collar crime is obviously an imminent possibility in all usual business transactions, regardless of role.

As predicted by classical agency theory (Eisenhardt, 1989; Williamson, 1981), one of the most frequent titles of a white-collar criminal in our sample is a chief executive engaged in fraudulent behavior towards his or her principals. However, when using our analytical framework of categorizing white-collar criminals, a more differentiated picture emerges. The executives fitting the classical role of the opportunistic agent are predominantly from big companies and the amounts they unrightfully channel into their own pockets are relatively small compared to their own wealth and incomes.

Much higher profits – particularly if compared to the individual's official income – are made by a group of white-collar criminals that we label "entrepreneur criminals". These are people who use companies and legal subjects as instrumental means to unlawfully maximize their profits by not behaving as foreseen by contracts.

While the term "entrepreneur" remains controversial and difficult to define precisely (Carland, Hoy, Boulton, & Carland, 1984; S. Shane, Nicolaoum, Cherkas, & Spector, 2010; Scott Shane & Venkataraman, 2000; Sorenson & Stuart, 2008), central features are quick business growth, scarcity of resources, agile management and an innovative business model. The innovation does not need to be radical (Minniti & Lévesque, 2010), as long as it creates a competitive advantage against other actors in the same market. From our data it is fairly clear that this "innovative" aspect may be exploited in criminal ways by two mechanisms: 1) the competitive advantage may partly or even wholly imply illegal conduct, securing gains that would not be possible for law-abiding competitors, and 2) the relative lack of transparency typical of small companies and tight family-like networks is more difficult to target by formal or informal governance attempts and other crime prevention measures (Donoher, et al., 2007; Holtfreter, 2008; Levi & Maguire, 2004; Schnatterly, 2003). As a strategic choice, some entrepreneurs may take advantage of different types of legislation or avoid going public to avoid transparency as in the case of the US gambling industry (Laffey & Laffey 2010), but less transparency seems associated with higher risk of exposure to white-collar crime (Klima, 2012).

Neither free professionals nor top executives in big companies seem to be able to make the same kinds of profits that these "entrepreneur criminals" make, and even board members when convicted of crimes are likely to be involved in some kind of relationship to an "entrepreneur criminal" by some kind of network. It is also worth noticing that the "entrepreneur criminal" does not seem to have victims of a preferred type. Instead, these kinds of criminals seem to use the kind of opportunity recognizing capabilities characteristic of entrepreneurs (Baron & Ensley, 2006; Krueger, Reilly, & Carsrud, 2000; S. Shane, et al., 2010; Scott Shane & Venkataraman, 2000; Short, Ketchen, Shook, & Ireland, 2010) to tap

any emerging field of business transactions, probably being in front of regulators, law enforcing agencies and even alert business partners.

As any other entrepreneur, our “entrepreneur criminals” display a skewed distribution in profits, where most of them are small actors in a larger context. However, they make sizeable profits within their own business, and there are also extremely profitable cases here, replicating patterns of risky investments as described by e.g. Taleb (2004). It testifies to the skills of these people that their listed income and wealth is far below that of the “regular” CEOs and individual professionals. A sizeable proportion of these people drives luxury cars and yachts and inhabits several houses but their official income is at the level of the unemployed ‘robber’ criminals in our residual category. In this way, they hardly pay any taxes and their assets are difficult to reach even after court verdicts. Shane & Venkatamaran (2000, p. 219) claim that “the absence of entrepreneurship” from management theory would make “our understanding of the business landscape incomplete,” and we would add that the entrepreneur as white-collar criminal completes the picture. It seems obvious that their crimes are not primarily due to sociopathic traits as portrayed by some criminologists (Alalehto, 2003; DeLisi, 2009; Knecht, 2006) or a fear of losing (Listwan, Piquero, & Van Voorhis, 2010; Piquero, 2012), but rather by “the cognitive properties necessary to value” opportunity (S. Shane, et al., 2010, p. 222) where their victims are handicapped not only by asymmetric information, but also by incompatible mental models (Helmer, 2003).

This leads to our main reasons for proposing this model of roles in white-collar crime as a mental model for considering crime as a risk in strategy. Mere knowledge about law itself renders little practical advice for the assessment of who, in what contexts, are liable to engage in criminal acts. Basing our framework instead on agency theory and research on entrepreneurship, we believe that the model satisfies most of the five requirements Helmer (2003, p. 109) posits that an effective mental model in strategy must possess: 1) *Relevance*, in so far as it concerns the central roles in business – that of principals, agents, entrepreneurs, professionals and customers, 2) *Valid*, since our data analysis shows that the sample of white-collar criminals is correctly grouped according to chi-square testing, 3) *Complete* in the sense that there is no rest category of unexplained cases, 4) *Simple*, as this is a table with only six categories of criminal roles and five roles of victims, and 5) *Practical*, since the model opens for more accurate measurements and judgments of criminal behavior, allowing uncertainty to be turned into risk and thereby possibly assessed.

There should be at least two practical implications from our findings: First, anyone entering uncertainties of business transactions needs to be aware that highly competent and organized activities are at large, not only in the zones of “incomplete contracting” or moral hazard, but even where clear contracts exist. Entrepreneur criminals can make any transaction a target of white collar crime and agents do seem to find ways of avoiding governance and transparency.

Second, we believe that global analyses of whole samples of white-collar criminals should be studied more often to provide society, lawmakers and business executives with clear trends and typologies to keep the public updated on white-collar crime.

6. Limitations

Although we propose a classification of the roles of white-collar criminals in business transactions, we have only tried to fit the model on our sample. We have no evidence of the predictive value of our framework. Further, this study is based entirely on publically available sources (newspaper and official tax registers) on white-collar crime in one single country, i.e., Norway. We have collected this information and classified roles and behaviors based on our own reading of the reports published in the media. Distributions and dynamics may of course vary across different legal and financial business contexts. Another limitation stems from the eternal challenge in criminology, i.e., we are only able to describe discovered and convicted cases, but this could also be interpreted as being restrictive with regards to the including criteria as argued by Tappan in his criticism of Sutherland (Holtfreter, 2005). All available research suggests that this is only a fraction of the real numbers. There is however no reason to assume that the undiscovered white-collar criminals are less skilled and high-profiled in business.

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