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Crime: The amount and disparity of sentencing – a comparison of  
corporate and occupational white collar criminals

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### Abstract

Research carried out previously, aimed at examining differences in the length of the sentencing and type of offence, have typically compared white collar and street criminality. The main aim of the current study is to examine the differences in sentence length for white collar occupational and corporate offenders from street crime offenses and to identify which factors eventually could explain such differences. The sample consisted of 305 people convicted of white collar crime in Norway. A total of 263 of the convicted were occupational and 42 were corporate criminals. To identify the sample, the same procedure reported by Schnatterly was used. Newspaper articles were examined in three Norwegian periodicals to identify all articles that focused on white collar individuals convicted in court because of economic crime. The newspapers were studied daily from 2009 to 2013, and the results show that the length of prison sentence increased with crime amount. The crime amount was smaller in occupational convictions despite the fact that the average crime amount was significantly less in this group compared to the crime amount among corporate criminals. Socioeconomic status and company size were not found to be associated with the length of the sentence. We discuss whether the difference in length of the sentence could be explained by the fact that occupational crime is committed for the criminals' own purposes or enrichment, while this is often not the case among corporate criminals.

**KEYWORDS:** White collar crime, occupational crime, corporate crime, sentence length

## Crime: The amount and disparity of sentencing – a comparison of corporate and occupational white collar criminals

Sutherland (1940) first introduced the term white collar crime and defined it as “a crime committed by a person of respectability and high social status in the course of his occupation” (Sutherland, 1983: 7). However, the definition of white collar crime has been controversial (Maddan, Hartley, Walker & Miller, 2012) and there lacks a unanimously agreed on definition (Benson & Simpson, 2009). It could be questioned whether the definition should be offender- or offense-related. When the focus is offender-related, the focus is restricted to offenders in the upper class whereas an offence-related definition focuses on the nature of the crime. The current study applied an offence-related approach. A person is defined as a white collar criminal if the person is sentenced in court to imprisonment due to a financial crime. A sentence is defined as a guilty verdict that results in a jail sentence (Arnulf and Gottschalk, 2013).

Included in the term white collar crime are both the possibility that the offender acted self-servingly to further private interests or the interests of a group of persons in a corporation that are typically labeled occupational white collar crime, and the possibility that the person may have acted on behalf of the corporation with the intention to protect or enhance its interests (Blickle, Schlegel, Fassbender & Klein, 2006). The last type is defined as corporate white collar crime.

Individuals or groups commit occupational white collar crime for their own purposes or enrichment, rather than for the enrichment of the organization as a whole, in spite of supposed corporate loyalty (Hansen, 2009). Corporate crime, on the other hand, is enacted by

executives for the benefit of the business. According to Fleet and Fleet (2006), corporate crime refers to those crimes committed by members of an organization to benefit the organization. If a corporate official violates the law in acting for the corporation, then this is also considered a corporate crime. But if he or she gains personal benefit in the commission of a crime against the corporation, it is classed as an occupational crime. Corporate crime occurs when, for example, fraud is being committed on behalf of an organization; that is, the crime is being committed to benefit the business. Perri and Brody (2011) argued that corporate crime is rationalized as acceptable behavior if it overcomes financial difficulties or makes a profit for the business.

The focus of research on criminality has primarily been on the identification of offender characteristics, especially ethnicity and class across offense types (Maddan et al., 2012). A large body of empirical studies has also focused on personality variables. In general, white collar criminals have been found to be different from other criminals. A larger percentage are male, older, graduates of high school and college and they are less likely to be unemployed (Poortinga, Lemmen & Jibson, 2006; Walters & Geyer, 2004; Wheeler, Weiburd, Waring & Bode, 1988). It is less likely that these of criminals have an arrest history or meet diagnostic criteria for substance abuse (Benson & Moore, 1992; Ragatz, Fremouw & Baker, 2012).

Behavioral self-control theory can be especially relevant for explaining occupational crime. In the general theory of crime, it is hypothesized that the lower the individual's self-control, the greater is the likelihood of his or her involvement in criminal behavior when the opportunity arises (Gottfredson & Hirschi, 1990). Low self-control is defined in terms of personal characteristics such as impulsive, risk-taking, and self-centered. Gender and high hedonism have also been shown to be predictors of white collar crime (Brickle et al., 2006; Collins &

Schmidt, 1993). Lack of self-control is a feature in narcissism and psychopathy. Accordingly, Ragatz et al., (2012) found that the white collar criminals scored high on psychopathology and psychopathic traits. Some characteristics of the psychopath may also be favorable in the business domain, e.g., self-centeredness (Babiak, 2007). Babiak, Neumann and Hare (2010) showed that psychopathy scores were positively correlated with being a successful communicator. However, there exists no decisive empirical evidence linking psychopathy to white collar criminality (Williams & Paulhus, 2004).

The great majority of theories and approaches to understand occupational white collar crime are person focused and the individual-level explanations are centered on personal characteristics and personality malfunctions. When it comes to corporate crime, the approaches aimed at understanding causal factors are primarily at the system level. Institutional theory of morale collapse might explain the extent of corporate crime. Executives, in a deteriorating business, will tend to expand into both occupational crime and corporate crime to make profits both personally and for the business. This is caused by moral collapse as a consequence of business collapse. The largest business corporations can also more easily absorb the negative impact of legal sanctions that some government or regulatory agencies might impose on them. The largest business enterprises might have better lawyers and other resources, so that they can face legal pursuits in more effective and efficient ways. Therefore, laws and regulations tend to have a much less deterrent effect in the case of large business organizations (Dion, 2009). Gross (1978) suggested that the internal structure and setting of organizations are of such a nature as to raise the probability that the attainment of the goals of the organization will subject the organization to the risk of violating societal laws of organizational behavior.

Compared to the focus on offender characteristics, research on the disparity of sentencing are sparse. However, according to Maddan et al. (2012), the research focusing on the latter has grown from sparse during the last two decades. Compared to street or common offenders, the most frequent notion is that white collar criminals are treated more leniently. Such characteristics, and perhaps especially socioeconomic status, are strongly associated with offence type (Maddan et al., 2012). Accordingly, white collar crime is interesting to study in the light of institutionalized system bias. Madden et al. (2012) applied data on the relationship between sentencing practice and type of offence (white collar *versus* street level offenders) from the United States Sentencing Commission for the year 1993 and found a significant difference in judicial imprisonment decisions between white collar and other criminals. There was also a significant correspondence between offence seriousness and criminal history of the convicts and the number of months sentenced. This is in line with Hagan, Nagel and Albonetti (1982) who found that people with higher incomes more often received more lenient sentences. Similarly, Wheeler, Weisburd & Bode (1982) showed that there was a significant relationship between severity of sentence and socioeconomic status. It may, however, be that fines for white collar criminals mediate sentences, i.e., the larger the fines the shorter the sentences received (Shanzenbach & Yaeger, 2006).

Several studies have also investigated perceived seriousness of white collar crime among lay people and among criminal justice system personnel. Wheeler, Mann and Sarat (1988) found that lay people did not view white collar crimes as being serious in comparison to crimes committed against other persons or the public. A study carried out by Cullen, Link and Polanzi (1982) also showed that white collar crime was rated to be less serious. However, lay people's perception of the seriousness of white collar crime was found to have increased over time. In a study of lay people perceptions carried out among a student sample, white collar

crimes were also found to be rated less serious than violent crime, but more serious than property crime (Rosenmerkel, 2001). In a recent study carried out among a national sample by Piquero, Carmichael and Piquero (2008), the majority of the respondents perceived white collar crimes to be either equally or more serious than street crime. Almost two thirds of the sample believed that the resources to mitigate white collar crime should be at least or more than that which is spent on street crime. These results question the assertion that lay people perceive street crime to be more serious compared to white collar crime. Studies comparing perception of seriousness of white collar crime among lay people and criminal justice system personnel have shown that the perception is similar across the groups (Pontell, Granite, Keenan & Geis, 1983, 1985; McCleary, O'Neil, Epperlein, Jones & Gray, 1981).

The studies presented above compare the length of sentencing of white collar and street criminality and public perception of crime seriousness for these types of crimes. However, to our knowledge, research carried out previously has not focused on comparing occupational and corporate white collar crime with regard to the disparity of sentencing. Due to the fact that causal factors have been attributed very differently to these two types of white collar offences, it is interesting to examine if the judicial system judges these types of crime differently when sentencing the offenders. In the current study, the seriousness of the crime was reflected by the crime amount. It is hypothesized that the seriousness of the crime will be positively associated with the crime amount, i.e., seriousness. The study also aims to examine the relative weight of seriousness and type of white collar criminality (occupational *versus* corporate) for the sentences' length. In accordance with research carried out previously, gender differences are also hypothesized. Socioeconomic status of the convicts as well as the size of their enterprises (business revenues and number of employees) may also influence the sentences' length. Consequently, the current study also aims at examining differences in the



length of the sentences due to the age of the convicted when the crime was committed, number of involved persons, the convicteds' personal income, tax and personal wealth as well as business revenue and number of business employees.

## Methods

### Sample

The sample consisted of 305 people convicted of white collar crime in Norway. A total of 263 of those convicted were for occupational crimes and 42 were for corporate crime. The average length of sentence was 2.1 years in general (median = 1.7). Among occupational criminals, the average length was 2.2 years, varying from one month to eight years. Very similar results were obtained for corporate criminals; i.e., 1.9 years on average (median = 1.2), varying from one month to nine years. A total of 92 per cent of the sample were males. The gender distribution was approximately the same between the occupational and corporate criminal sectors. The average age when convicted was 48 years of age. The values for age of conviction were 47 in the occupational category and 52 years of age among corporate criminals. The age of the convicted varied from 18 to 77 and 28 to 75 years of age in the occupational and corporate criminals, respectively.

### Procedure

To identify a substantial sample of white collar criminals, a procedure introduced by Schnatterly (2003) was used. Newspaper articles were examined to identify all articles that focused on white collar individuals convicted in court because of financial crime. There are two main financial newspapers in Norway, "Dagens Næringsliv" and "Finansavisen". In addition, the newspaper "Aftenposten" regularly includes news on white collar criminals. These three newspapers were studied on a daily basis from 2009 to 2013 to identify white collar criminals. A person was defined as a white collar criminal if the person was sentenced in court to imprisonment due to a financial crime. A sentence was defined as a jail sentence.

Therefore, cases that resulted in a sentence of a fine were not included in the sample. Criminal characteristics collected for each convicted person included gender, age when convicted, number of years in prison, amount of money involved in crime, number of persons involved in crime, personal income, paid personal income tax, personal wealth according to income statement, as well as business revenue and business number of employees.

### Statistical analysis

First, a Pearson's  $r$  correlation coefficient was applied to determine the association between the crime amount and length of the prison sentence; a  $\chi^2$ -test was used to further examine whether or not the crime amount differed significantly between occupational and corporate criminals. In this analysis those who had committed a crime, where the crime amount was less than NOK 2 million (NOK = Norwegian crowns), were compared to those where the amount was between NOK 2 – 10 million and more than NOK 20 million (NOK 6 = 1 USD). The same statistical test was applied to examine whether or not corporate and occupational criminals differed on individual and business characteristics. A Cox proportional hazard model was used to examine the time intervals and factors associated with discharge from prison. Cox regression is suitable to investigate the effect of several variables upon the time a specified event takes to happen. Time to discharge or the length of the time period of the sentence was entered as the dependent variable and the discharge/non-discharge variable was applied as the independent variable. In the current study, the enter method was used. It forces all covariates into the model in a single block. The Cox proportional hazard is a survival analysis which analyses, for instance, how several factors (covariates) effects on time to discharge or any other event of interest. The covariates can be continuous, dichotomous or categorical. The covariates added in this study were categorical [gender of the convict, age when crime was committed (age groups), crime type (occupational *versus* corporate), and crime amount]. Strata were also added, consisting of occupational and corporate crime in

analysis 1, crime amount in analysis 2 and cluster group characteristics of the convicts in analysis 3. The effects of covariates are interpreted through hazard ratios (HR), which is equivalent to the odds ratio in logistic regression analysis. A hazard ratio of 1 show there is no difference between a reference category group and the reference category. In the current study, category 1 of both the covariates was the reference category. For the interpretation of the hazard ratios,  $\beta$ -values can be helpful. A positive  $\beta$ -value shows that by increasing the covariate factor by one unit, the probability of discharge at time  $x$  increases whereas a negative  $\beta$ -value shows that by increasing the covariate by one unit the probability of discharge decreases relative to the category of reference. The time variable is usually continuous and operates as a counter of time units until discharge from prison. Hierarchical cluster analysis was carried out to identify the ideal number of clusters of characteristics of the convicted. The distance between the coefficients was examined to find a marked jump and the optimal number of clusters was set to the stage before the sudden change (see Aldenderfer & Blashfield, 1984). However, hierarchical cluster analysis cannot produce the most optimal cluster solution when it comes to between-cluster heterogeneity. Therefore, when the number of clusters was identified by hierarchical cluster analysis, a  $k$  – means iterative partitioning method was used to identify the best cluster solution. The  $k$ -means cluster analysis allocates each case to the cluster that has the nearest center point. Finally, a univariate analysis of variance was used for examining differences in the length of prison sentence due to crime amount, cluster ‘belongingness’, and whether the crime was corporate or occupational. In this analysis, interaction effects were also examined.

## Results

Table 1 summarizes the results of our analyses. Significant positive associations were observed between crime amount and the length of the prison sentence among corporate criminals ( $r = .36, p < .05$ ) as well as among occupational criminals ( $r = .42, p < .001$ ). A  $\chi^2$ -

test showed that the number of occupational criminals were more frequently represented than expected by statistical inference when the crime amounts were less than NOK 2 million and between NOK 2 – 10 million and *vice versa* for crime amounts more than NOK 20 million ( $\chi^2 = 19.53, p < .001$ ).

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Insert Table 1 about here

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As shown in Table 1, the length of the sentence significantly differed when corporate criminals were compared to occupational or private criminals ( $HR=1.77, p < .001$ ). The convicts were categorized into four groups based on the crime amount. The first group was sentenced for a crime amount of less than 1 million NOK, the second consisted of convicts where the crime amount was between NOK 2 – 10 million NOK and the third group was sentenced for a crime amount between NOK 11 – 20 million NOK. The last group was those who were convicted for a crime amount involving more than 20 million NOK. As expected, the risk of a long time period sentence increased according to the size of the crime amount. As shown in Table 1, the Hazard Ratio was significant relative to the reference category for all the groups of convicts ( $p < .001$ ). No significant gender difference was observed in sentence length ( $HR=0.75, NS$ ) and there were only minor differences due to the convicts' age when the crime was committed.

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Insert Figure 1 about here

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Figure 1 shows the probability of being convicted and sentenced to a longer prison term than a given  $x$ -value [ $P(X > x)$ ]. Age group, gender, crime type and crime amount were covariates in the analysis. Both the covariates were categorical variables. The proportional hazard model

had a satisfactory fit to the data ( $-2 \text{ Log} = 2791.90$ ,  $\chi^2 = 141.11$ ,  $p < .001$ ). The time intervals vary from 0 to  $n$  years and the  $x$ -axis shows the time intervals from the start of serving a sentence to discharge from prison. The probability of still being in prison at time  $x$  is shown by the  $y$ -axis. The probability decreases from 1 to 0 due to length of the sentence. The probability for a sentence duration longer than a given time period decreases with the size of the time period in prison. The more frequently the criminals receive sentences of short duration, the faster the curve line falls and *vice versa* when long time period sentences are frequent. The distribution shows that the probability of a long time sentence is less than for a short time sentence. Consequently, the curve levels out the longer the time period of the sentences is. The median time to discharge was 1.6 years. The analysis was not based on any premises concerning the distribution (non-parametric).

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Insert Figure 2 about here

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Figure 2 illustrates the significant association between whether the convicts were occupational or corporate criminals and years from imprisonment to discharge. As can be seen, a short time period sentence is more probable among corporate criminals and *vice versa* for occupational criminals. The probability of still being in prison at time  $x$  [ $P(X > x)$ ] was lower among corporate than among occupational criminals.

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Insert Figure 3 about here

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The length of sentence was found to depend on the crime amount (see Figure 3). With an increase in the crime amount, the probability of a long sentence increases and *vice versa*. As shown in Table 1, the Hazard Ratios were significant, indicating that whether convicts were

corporate or occupational criminals and the crime amount were important factors in the analyses ( $p < .001$ ).

From the results presented above, it is interesting to note that the length of the prison sentence increased with the average crime amount and that the crime amount was smaller in occupational convicts despite the fact that the average crime amount was significantly less in this group compared to the crime amount among corporate criminals. It is interesting to know whether this difference in length of the sentence is associated solely with the fact that occupational crime is committed for the criminals' own purposes or enrichment, while this is generally not the case among corporate criminals, or whether personal characteristics and enterprise characteristics associated with the convicts also are associated with the length of the sentence. Consequently, the next step was to examine such characteristics, including sex of the convict, age when crime committed, personal income, tax and wealth, as well as business revenue and number of business employees. First, a hierarchical cluster analysis was carried out to identify the number of cluster groups of criminals and, thereafter a k-means cluster analysis to identify the cluster group characteristics.

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Insert Figure 4 about here

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The hierarchical cluster analysis showed that the optimal cluster solution consisted of three groups of convicts. Figure 4 presents the results of the k-means cluster analysis and shows the characteristics of members of the three cluster groups. The figure presents z-scores. No significant gender differences were noted between the cluster group members. The more positive the score is for the other variables, the higher was the age when convicted, the larger were the number of involved individuals, the higher was the convicted person's income, tax,

wealth, business revenue and number of business employees, and *vice versa* for low scores. It is interesting to note that members of cluster groups 1 and 3 mainly differed when it came to business revenue and business employees while the personal characteristics of the group members were fairly similar (see Figure 4). The members of cluster group 2 are characterized by higher personal income, personal tax and personal wealth compared to the other two groups. Compared to cluster group 1 members, the members of this group also have larger business revenue and a larger number of business employees.

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Insert Figure 5 about here

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In accordance with the results presented above, Figure 5 shows that the probability of the convicts still to be imprisoned at time  $x$  are somewhat larger among members of cluster group 1 compared to the members of the other two cluster groups. A  $\chi^2$ -test was applied to examine whether cluster membership was different among corporate and occupational convicts. The results showed that occupational criminals were significantly more frequently represented than expected by statistical inference in cluster group 1 ( $n=249$ ) while the opposite was the case for cluster group 3 ( $n=39$ ) ( $\chi^2 = 22.99$ ,  $d.f. = 2$ ,  $p < .001$ ). In cluster group 2 ( $n=17$ ), the number of observed corporate and occupational individuals were nearly equal to the expected number by statistical inference in each of the three cluster groups. Therefore, this group was considered to be of less importance for the current study.

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Insert Table 2 about here

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Table 2 shows that there were significant differences in the length of the prison sentence when corporate and occupational criminals were compared ( $F = 10.19$ ,  $p < .01$ ) as well as due to the

crime amount ( $F = 20.55, p < .001$ ). However, there was no significant difference in the length of the sentence due to cluster group belongingness. The interaction effects were also examined. As can be seen, there were a no interactions related to group belongingness.

### Discussion

The results of the current study showed that the crime amount was larger among corporate than occupational criminals and that the larger the crime amount the more probable it was to serve a prison sentence larger than time  $\bar{x}$ . This was found to be the case for corporate as well as occupational criminals. However, it is interesting to note that despite the fact that the crime amount was larger among corporate criminals, they still received shorter length sentences compared to occupational criminals, indicating that factors other than crime amount also must be important in determining the length of the sentence.

Therefore, it was considered interesting to examine whether differences in socioeconomic status of the convicts (personal income, tax and wealth) as well as enterprise characteristics (business revenue and number of employees) could be associated with the length of the sentences. The results showed that the corporate criminals differed from occupational criminals due to the size of the business while socioeconomic status was of minor importance for membership in cluster groups 1 and 3. The members of cluster group 2 differed from the other two groups' members due to high socioeconomic status, but this seemed not to be related to whether the crime was committed for corporate or occupational purposes. Thus, crime characteristics (whether the crime was occupational or corporate) and seriousness of the crime (crime amount) were the two factors that seemed to determine the length of the sentences. However, cluster group belongingness did not interact with these two factors. Due to the small number of females convicted and the small age range, these factors did not



differentiate the cluster groups. However, this does not imply they are factors without importance for disparity of sentencing.

White collar criminals often have higher education and higher socioeconomic status compared to street criminals. The range of persons characterized by these factors in the sample is small. It may be that socioeconomic status is of greater importance for explaining street crimes. This is because street criminals may more often commit the crimes due to a bad personal economic situation while this is not the case to the same extent for white collar criminals. Fear of falling has been found to be supported as an explanation for white collar crime (Piquero, 2012). However, the results of the current study indicated that the convicts' socioeconomic status and the size of their businesses were not related to seriousness of the crime. Consequently, it is not likely that problems related to personal economy should be an important factor in explaining white collar crime. The obstacles to prevent white collar crimes may be less in a large enterprise compared to a small one because the large enterprises possess more resources, making them able to face legal pursuits more effectively and also absorb negative impacts of legal sanctions. The results showed that the number of corporate criminals in cluster group 3 was larger than expected by statistical inference, i.e., those employed by the largest enterprises, and *vice versa* among cluster group 1 members. To summarize, the current study did not find any support to the assumption that socioeconomic status and size of the enterprise were associated with the length of the sentence. This may also indicate good qualities in the Norwegian legal systems because it places the weight on the seriousness of the crime. This may of course vary due to the quality of a country's legal system. Also among Western countries, Norway is a very egalitarian country. Despite the fact that socioeconomic differences have increased also in Norway during the last two decades, the egalitarian

structure may be an explanation as to why socioeconomic status and enterprise resources seem not to be associated with the length of white collar crime sentences.

The results showed that the length of the sentences increased according to the crime amount, but in the larger enterprises the crime amounts were large compared to what was the case in the smaller enterprises. It is also interesting to note that the crime amount was larger among corporate compared to occupational criminals. For society, the harm of white collar crime primarily relates to the crime amount. The harm does not correspond first and foremost to the white collar criminal's motivation and causal factors for the offense. However, based on the results, it may be questioned to which extent the seriousness of the crime as judged by the legal system primarily depends on the crime amount.

The research on causal factors for occupational white collar crime has primarily focused on personal characteristics and personality malfunctions, e.g., low self-control and narcissism, while causal theories for corporate crime primarily have been addressed by institutional dysfunctions and system factors. It may be that differences in causal attribution can be of importance for the perceived seriousness of the crime and be part of the explanation as to why occupational white collar criminals are given longer sentences compared to corporate criminals. Malfunctions of the system, e.g., moral collapse caused by business collapse, may be judged as extenuating circumstances while personality factors may not be given the same weight, or they even could have the opposite effect. Another difference between occupational and corporate crime is the fact that the first is assumed to be motivated by personal enrichment, while the latter is perceived to be more unselfish and altruistic. Future research should more thoroughly examine the role of causal attribution of white collar crimes among actors of the legal systems and also how this relates to the disparity of sentencing.

Since the current research was 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 the reported cases. It must be noted that journalists in Norway enjoy respectability because of their integrity and seriousness. There are very few newspapers that carry doubtful sensational stories. No such Norwegian newspaper was found in our area of research into financial crime by white collar criminals.

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Table 1  
Covariates related to sentence time probability

	N	B-value	Hazard ratio (HR)	Confidence intervals (95,0% CI)	
				Lower	Upper
Gender:					
Male	279	-.28	.75	0.49	1.13
Female	26		Reference cat.		
Age when crime was committed					
< 40 yrs of age	76	.21	1.23	0.85	1.77
40-49 yrs of age	95	.36	1.44*	1.02	2.04
50-59 yrs of age	82	-.17	0.83	0.58	1.19
> 59 years of age	52		Reference cat.		
Crime type:					
Corporate	42	.57	1.77***	1.24	2.51
Occupational	263		Reference cat.		
Crime amount:					
< NOK 1 mill.	81	2.09	8.06***	5.51	11.81
NOK 1-10 mill	120	.98	2.66***	1.92	3.70
NOK 11-20 mill.	32	.89	2.55***	1.57	3.78
> NOK 20 mill.	72		Reference cat.		

NOK = Norwegian Crowns (1 NOK = 5.7 US dollars)

Table 2  
Differences in length of sentence due to crime amount and cluster group belongingness among corporate and occupational criminals

Independent variables	Df	F-value	p-value
1. Corporate/ occupational criminals	1	10.19	<.01
2. Cluster group belongingness	2	2.05	NS
3. Crime amount	2	20.55	<.001
1 * 2	2	1.20	NS
1 * 3	2	3.40	<.05
2 * 3	4	.80	NS
1 * 2 * 3	2	.32	NS

R<sup>2</sup> = .43 (Adj. R<sup>2</sup> = .401), NS = non-significant



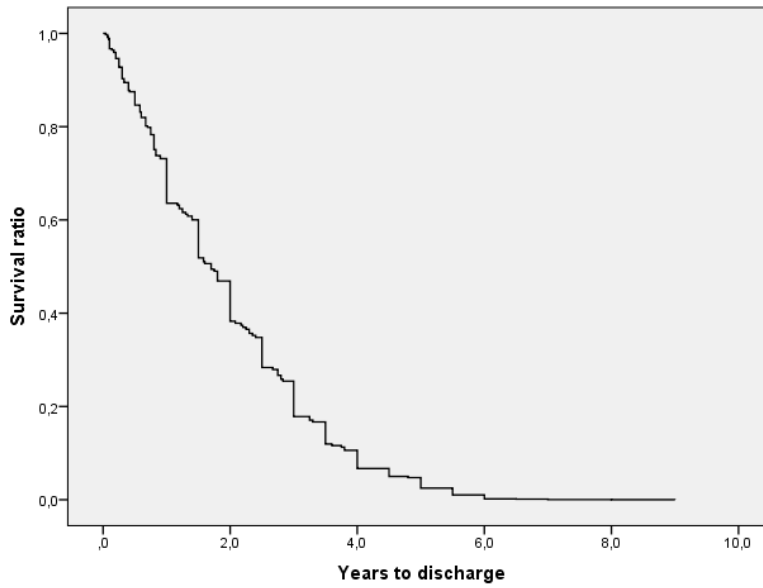


Figure 1. Survival function for convicted criminals ( $n = 268$ ) with covariates set to their respective means

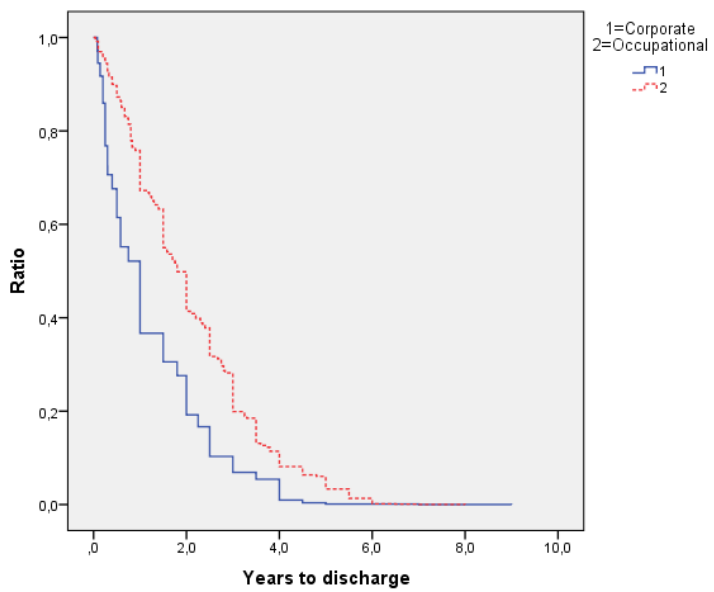


Figure 2. Hazard function - corporate *versus* occupation criminals

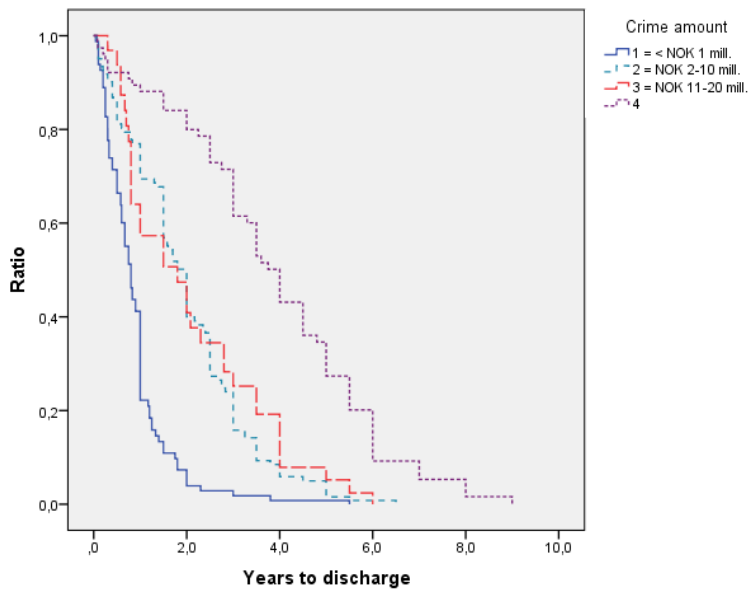


Figure 3. Hazard function due to crime amount

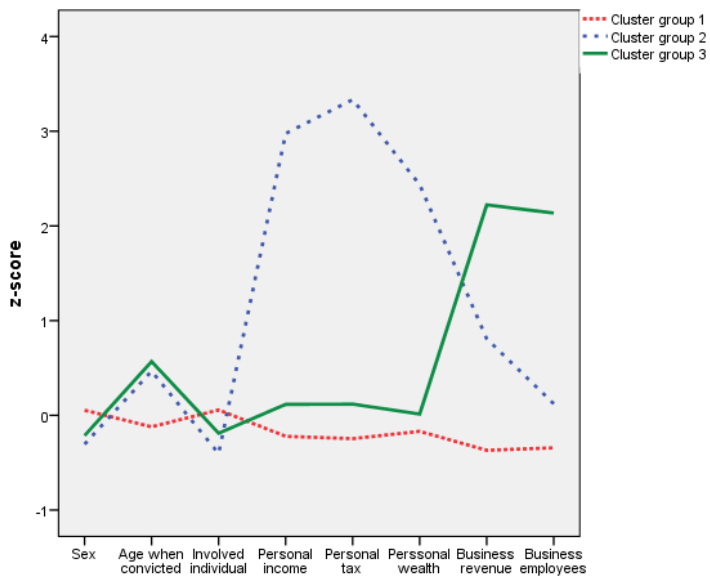


Figure 4. Cluster group characteristics

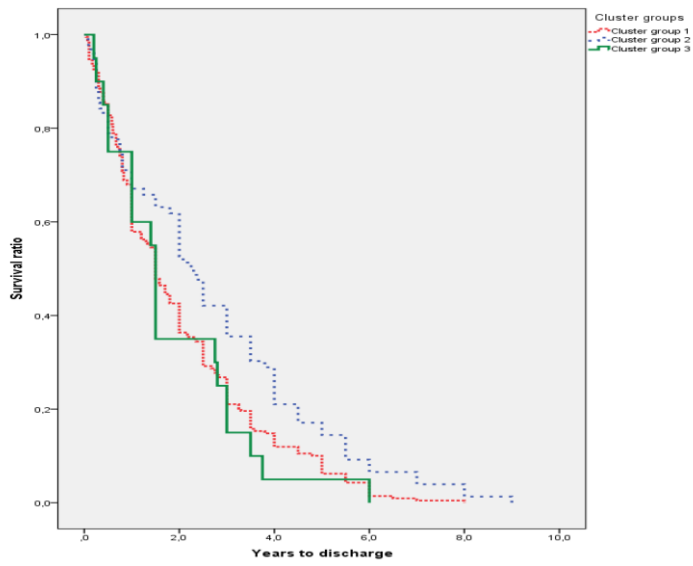


Figure 5. Hazard function due to cluster group belongingness