



THE 2011 MARQUET REPORT ON EMBEZZLEMENT

A WHITE COLLAR FRAUD
STUDY OF MAJOR EMBEZZLEMENT
CASES ACTIVE IN THE U.S. IN 2011

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ABOUT THE REPORT

The 2011 Marquet Report on Embezzlement is our fourth annual fraud study on major embezzlement cases in the United States. Our goal with the annual *Marquet Reports on Embezzlement* has been to identify key trends of major embezzlement cases active during each year and to draw some conclusions based upon an aggregation of analysis from prior years' reports. Cases included in *The 2011 Marquet Report on Embezzlement* are by definition those that involve employee theft schemes that succeeded in misappropriating \$100,000 or more from organizations in the US and which came to light or were active in the judiciary process during the 2011 calendar year. That is, those cases in which an arrest, charge, indictment, criminal information, civil complaint, plea, sentencing or other significant event occurred which revealed the existence of the scheme to the public. However, we did not include cases in the 2011 study that have already been included in our prior studies.

The 2011 Marquet Report on Embezzlement is an analysis of 473 specific cases, a slight decrease of about 2% over the prior years' study, which analyzed 485 cases. The sample accounts for nearly \$355 million in employee theft. It should be noted that we included eight cases in the 2011 study which were thefts of just under \$100,000, since we felt they were statistically significant. As always, to the extent available, we compiled and reviewed objective data originating from the public domain on each case included in the study. We note also that some of the cases analyzed are currently active in legal proceedings wherein the accused perpetrators have not yet been the subject of a final adjudication. *The 2011 Marquet Report on Embezzlement* includes data from those cases in which we have a high degree of confidence in the accuracy of the information. Additional, specific research efforts have been made to update and augment our prior years' data, improving the accuracy of our cumulative analysis covering the years 2008 – 2011.

The 2011 Marquet Report on Embezzlement includes detailed analysis on several broad categories related to the white collar fraud phenomenon of employee theft:

- Characteristics of the Schemes
- Characteristics of the Perpetrators
- Characteristics of the Victim Organizations
- Judicial Consequences

Under the category of *Characteristics of the Schemes*, we analyzed the magnitude of the theft, the duration of the scheme, the primary methodology of the scheme and whether a given scheme was accomplished by a sole perpetrator or by a conspiracy of individuals. In *Characteristics of the Perpetrators*, we analyzed their age, gender, position held within the victim organization, apparent motivating factors, and whether they had prior criminal histories. We also analyzed *Characteristics of the Victim Organization*, including industry classification and geographic locale. Finally, we looked at the sentencing of perpetrators in an effort to develop any statistically relevant conclusions under the heading, *Judicial Consequences*.

SUMMARY OF FINDINGS

Highlights & Conclusions of the 2011 Study

2011 was another banner year for employee theft in the United States, continuing the frenetic pace set in 2010. In this report, we identified, researched and analyzed the details of 473 major embezzlement cases in the US active in 2011, a slight 2% decrease in the number of cases from 2010.

As noted in last years' report, employee misconduct and internal corporate fraud will continue to be a problem as the U.S. economy struggles. However, a poor economy is not the only driver for employee theft. The Marquet data and studies suggest that there is always an ambient level of corporate fraud – often driven by individuals seeking to maintain a lifestyle grander than what they could otherwise enjoy who have rationalized their actions. Indeed, in poor economic times, these kinds of frauds surface more frequently since business stakeholders tend to be more attentive to finances and the bottom line. It is noteworthy that since most of these cases span a period of several years, the frauds were actually commenced during stronger economic times. During the boom years, embezzlement often goes unnoticed since the victim organization is typically making healthy profits and the perpetrator begins by taking smaller, regular amounts. We have found that many embezzlers accelerate their thefts over time, leading to a higher probability of getting caught.

The following statistics are highlights based upon our analysis in *The 2011 Marquet Report on Embezzlement*:

- Vermont had the highest Embezzlement Propensity Factor* followed by Connecticut Pennsylvania, Montana, Virginia, Iowa and Idaho – identifying these states as having the highest risk for loss to embezzlement in 2011;
- The financial services industry suffered the greatest losses due to major embezzlements;
- Non-profits and religious organizations combined accounted for about one-sixth of all the major embezzlement incidents in the 2011 study;
- The average loss for 2011 was about \$750,000; the median loss was \$340,000;
- Nearly three-quarters of the incidents (72.3%) were committed by employees who held finance/ bookkeeping & accounting positions;
- The average scheme lasted nearly 5 years;
- The most common embezzlement scheme involved the issuance of forged or unauthorized company checks;
- Nearly 22% of the cases in which a motivating factor was known involve perpetrators who reportedly had gambling issues;
- 5% of the cases involved perpetrators who had a prior criminal history; The average embezzler in this study stole \$15,189 per month from their employer;
- Nearly two-thirds (64%) of the incidents involved female perpetrators;
- Male perpetrators, on average, embezzled about 25 percent more than females;

- Nearly 90 percent of the cases involved individual perpetrators;
- The average adjusted age** of perpetrators at the commencement of their embezzlement was just under 43 years;
- 40 – 49 year olds caused the greatest overall losses;
- Most major embezzlers appear to have been motivated by a desire to live a relatively more lavish lifestyle, rather than driven by financial woes; and,
- The average prison sentence was 4 1/3 years (52 months) for convicted major embezzlers.

* The Embezzlement Propensity Factor (EPF) is defined as the ratio of the percent of total losses for a given state to the percent of Gross Domestic Product that state contributes to overall GDP.

** The “average adjusted age” is the average age of the perpetrators in the study minus the average duration of the schemes in the study to represent the approximate age at which the average embezzler commenced his or her illicit activities.

Aggregated 4 Year Conclusions

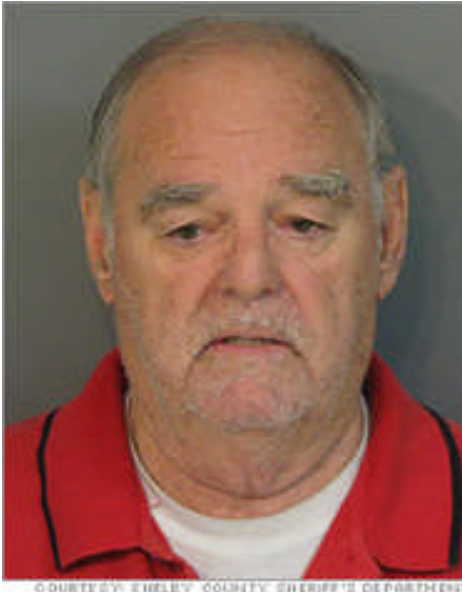
Looking at the four years’ data we have compiled on major embezzlements in the US between 2008 and 2011, which includes 1,583 cases, we believe we can reasonably come to the following conclusions, consistent with our prior year-by-year analysis:

- Major embezzlers begin their schemes in their early 40s (42.7, on average);
- The average major embezzlement spans a 4.7 year period;
- By a significant margin, embezzlers are most likely to be individuals who hold bookkeeping or finance positions (66.7% of all cases);
- The financial services industry suffers the greatest losses from embezzlement (more than 20% of all losses in the data);
- Non-profits, including religious organizations, account for nearly one-eighth of all the incidents (12.1% of all cases);
- Women are more likely to embezzle than men (63.8% vs. 36.2% overall in the data);
- Men embezzle significantly more than women (\$1.7 mill vs. \$800,000, on average);
- The vast majority of embezzlements are caused by sole perpetrators (87% of all cases);
- Gambling is a clear motivating factor in driving some perpetrators to embezzle;
- About 5 percent of major embezzlers have prior criminal histories;
- The most common embezzlement scheme involves forgery or unauthorized use of company checks (37.0% of all cases in which the method was known). The next most common scheme involves the theft and/or conversion of cash receipts (19.6%);
- California has experienced the greatest number of major embezzlements over the past four years (191 cases or 12% overall), followed by Michigan (83/5.2%), Pennsylvania (82/5.2%), New York (70/4.4%) and Texas (69/4.4%); and,
- The states with the highest risk for loss from embezzlement include Vermont, Virginia and Florida. Other high risk states include Oklahoma, Connecticut, Pennsylvania, Montana, Iowa, Missouri, West Virginia, South Dakota, Louisiana, and New York.

CHARACTERISTICS OF THE SCHEMES

Magnitude of the Misappropriation

The 2011 Marquet Report on Embezzlement includes 473 major cases of embezzlement, with total reported losses of \$354,769,000, down about 25% from the \$472,619,000 loss total we reported for 2010. The average loss per case was just under one million dollars at \$750,040, a 23% decline from the 2010 average of \$974,472. Nevertheless, the median loss was \$340,000, consistent with our 2010 report. There were 80 cases in the 473 in this years' study that were thefts of \$1 million or more (compared to 108 and 93 in 2010 and 2009 studies, respectively).



Clayton Smart – Shelby County Sheriff's Department

The largest embezzlement case in the news in 2011 was for a whopping \$70 million. This is the case involving 71-year-old **Clayton Smart**, recently of Okmulgee, Oklahoma, who fleeced as many as 13,000 trust accounts he controlled for customers at several cemeteries he owned in Michigan and Tennessee in the mid-2000s, with the help of at least two accomplices. In September 2011, Smart was sentenced to 20 years in prison – the maximum allowed – and ordered to pay \$48,670,000 in restitution. About three-quarters of the restitution was to be directed toward Michigan victims and one-quarter to Tennessee victims. It should be noted that this case originated in 2007 when Smart was indicted, and has not been included in this or our prior reports. Nevertheless, it was a noteworthy embezzlement case in the news in 2011 and is not part of our overall body of data.

The top ten cases that were revealed in 2011 with the greatest alleged thefts include the following:

<u>Alleged Perpetrator</u>	<u>Victim Organization</u>	<u>\$Embezzled</u>
Gary Foster	Citigroup	\$22,000,000
Judy Del Galdo	Hi-Fashion Fabrics Inc., et al.	\$16,000,000
Linda Speaks Tribby	Wachovia Bank	\$14,170,000
Patricia K. Smith	Baierl Acura	\$10,200,000
Susan A. Curtis	Webster Bank & Bank of America	\$6,200,000
George Todd Powers	Iowa State Bank	\$5,987,000
Stephen Marich	First National Bank of Ely	\$5,900,000
Kinde L. Durkee	Various political campaigns	\$5,844,000
Stephen C. Greb	La Salle University	\$5,600,000
Georgia A. Engelhart	Tanklages Construction	\$4,800,000

The average of the largest 10 thefts in 2011 is \$9.7 million as compared with \$15.2 million, \$13.7 million and \$25.8 million in 2010, 2009, and 2008, respectively.

Duration of the Scheme

An approximate duration was determined for the schemes of 456 of the 473 cases in the study. It should be noted that in a number of instances, prosecutors only prosecuted perpetrators going back in time to the statute of limitations, thereby omitting some of the actual losses as well as understating the actual duration of many of these cases. Nevertheless, we tabulated the known durations, rounded to the nearest tenth of a year and determined the following for 2011:

Average duration:	4.9 years (or 58.8 months)
Median duration:	4.1 years
Longest duration:	30 years

Although the average duration is slightly longer in 2011, these findings are consistent with both our 2008, 2009 and 2010 studies. We note also that the average embezzler in *The 2011 Marquet Report on Embezzlement* stole \$15,189 per month (the average theft divided by the average duration, in months), compared to the \$17,565 average monthly theft from our 2010 report.

The embezzlement case with the longest reported duration involved 67-year old **Georgia Ann Engelhart**, aka **Ann Ray**, of Antioch, California, who had served as the long-time bookkeeper for Tanklages Construction and related entities. Over a period of some 30 years, Engelhart is reported to have forged signatures, altered checks, made phony transfers and engaged in other schemes to embezzle funds from various Tanklages-related partnerships and companies. She reportedly spent some of the money on lavish trips and gambling junkets. In October 2011, Engelhart, who plead guilty to six counts of tax evasion, was sentenced to 48 months in prison and ordered to pay a total of \$6.1 million in restitution, back taxes, fines and fees. She had been an employee of the company for 34 years before coming to the attention of the company owners and the authorities. It is no surprise that Engelhart made our Top 10 list for this year.

Methodology of the Schemes

We attempted to determine the primary methodology for each scheme in the study and broke them down into a number of general categories. While many cases in the study involved more than one method of theft we nonetheless selected what we believed to be the principal embezzlement method for the purpose of this report. The embezzlement method categories include:

- Bogus loan schemes
- Credit card/account fraud
- Forged/unauthorized checks
- Fraudulent reimbursement schemes

- Inventory/equipment theft
- Payroll shenanigans
- Theft from tax or benefit accounts
- Theft/conversion of cash receipts
- Unauthorized electronic funds transfers
- Vendor fraud schemes

Definitions

Bogus loan schemes include cases in which fraudulent loans are created or authorized by the perpetrator from which funds are taken for their own benefit. **Credit card/account fraud** cases involve the fraudulent or unauthorized creation and/or use of company credit card or credit accounts. **Forged/unauthorized check** cases are those in which company checks are forged or issued without authorization for the benefit of the perpetrator. **Fraudulent reimbursement schemes** include expense report fraud and other cases in which a bogus submission for reimbursement is made by the perpetrator. **Payroll shenanigan** cases include all forms of manipulation of the payroll systems in order for the perpetrator to draw additional income. **Theft from tax or benefit accounts** include cases in which the perpetrator manipulates company accounts meant to pay corporate taxes or employee benefits to siphon these funds off for themselves. **Theft/conversion of cash receipt** cases involve the simple taking of cash or checks meant for company receipts and pocketing or converting them for one's own benefit. **Vendor fraud** cases include those where either a bogus vendor is created by the perpetrator to misappropriate monies or a real vendor colludes with the perpetrator to siphon funds from the company.

Our analysis revealed the following breakdown among the schemes:

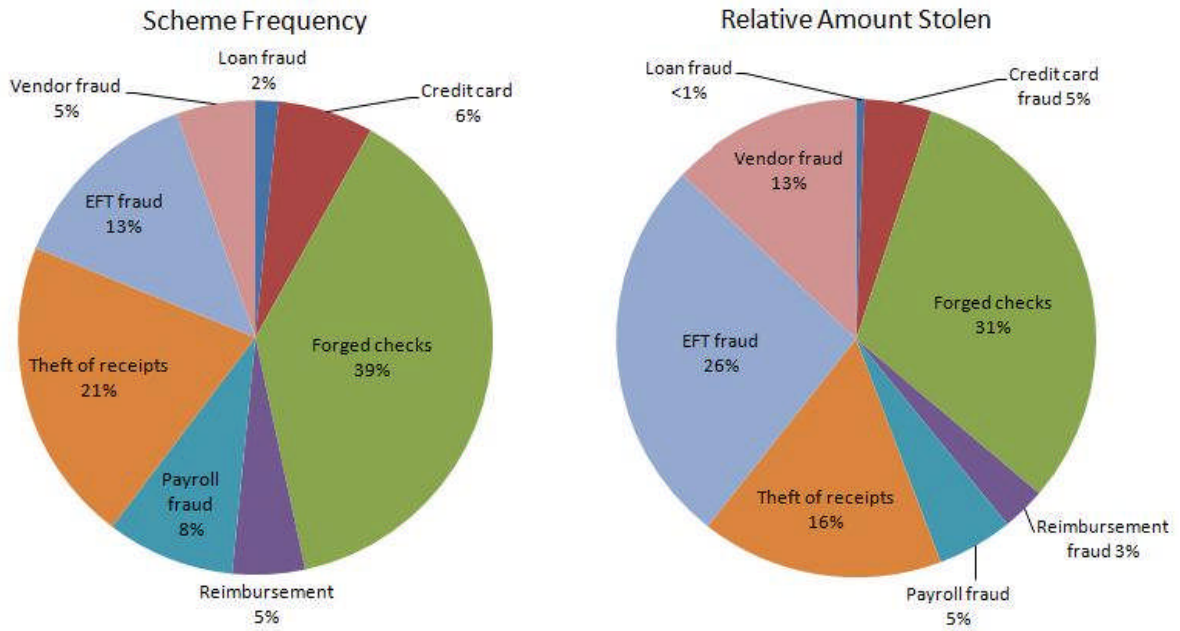
<u>Embezzlement Scheme</u>	<u>Number</u>	<u>% of total</u>	<u>Amount</u>	<u>% of total</u>
Bogus loan scheme	7	1.6%	\$1,969,000	0.6%
Credit card/account abuse	29	6.5%	\$15,488,000	4.5%
Forged/unauthorized checks	172	38.4%	\$106,408,000	30.9%
Fraudulent reimbursement scheme	22	4.9%	\$10,112,000	2.9%
Inventory/equipment theft/conversion	1	0.2%	\$414,000	0.1%
Payroll shenanigans	39	8.7%	\$17,578,000	5.1%
Theft from tax or benefit accounts	2	0.4%	\$973,000	0.3%
Theft/conversion of cash receipts	92	20.5%	\$56,296,000	16.4%
Unauthorized electronic transfers	60	13.4%	\$90,442,000	26.3%
Vendor fraud scheme	24	5.4%	\$44,306,000	12.9%

Clearly the most common form of embezzlement, by nearly a two-to-one margin, is the forgery or unauthorized use of company checks for one's own benefit. Almost 40 percent of all major embezzlement cases in this study were principally the result of this type of scheme. The next three most common forms of embezzlement were theft/conversion of cash receipts (20.5%), unauthorized electronic transfers of funds (13.4%) and payroll shenanigans (8.7%). This is

almost exactly the same result as last year’s analysis with the exception of the fourth place most common scheme which was vendor fraud instead of payroll schemes.

In terms of the most “effective” methods of embezzlement, vendor fraud, which accounts for more than twice its percentage in losses as compared to occurrences, tops the list as it did in last year’s report. This year, unauthorized electronic funds transfers, which has about 50 percent more in losses than occurrences, was the second most “effective” method of embezzlement.

Below are side by side pie charts illustrating the breakdown in frequency and the relative amount stolen for the various schemes (omitted are theft of inventory/equipment and tax/benefit account pilfering):



Was the scheme the act of a sole perpetrator or a conspiracy?

We were able to determine with relative confidence in 473 of 473 cases in the study whether the embezzlement was the work of a lone perpetrator or a conspiracy of individuals. The table below illustrates the relative breakdown between solo and conspiracy cases and compares the relative losses for each category:

<u>Solo vs. Conspiracy:</u>	<u>Conspiracy</u>	<u>Solo</u>	<u>Totals</u>
Raw number	48	424	472
Percentage of sample	10.2%	89.8%	100.0%
Gross loss per category	\$57,303,000	\$296,996,000	\$354,299,000
Percentage of sample	16.2%	83.8%	100.0%

These results are consistent with our 2009 and 2010 reports on the percentage split between solo and conspiracy cases. We note again that conspiracy cases accounted for a disproportionately higher loss than solo cases – nearly three times as much as their occurrence – which is what we would expect.

On the other hand, as we noted in our prior reports, we would expect that schemes perpetrated by a single individual would have a lower probability of being revealed compared to conspiracies. In fact, conspiracy cases lasted an average of 4.3 years whereas solo perpetrator embezzlements spanned an average of 5.0 years, consistent with our theory.

CHARACTERISTICS OF THE PERPETRATORS

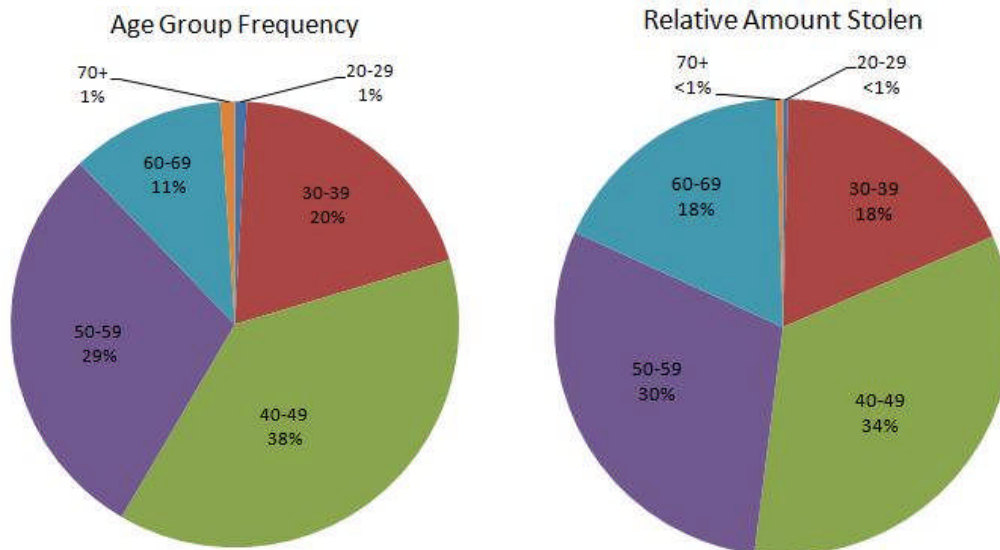
Age of the Perpetrator

The age of the perpetrator at time of discovery was known with reasonable accuracy in 466 of the 473 cases in our 2011 survey. Based on the available data, the average age of the perpetrator in 2011 was 47.9 years – consistent with our 2010 analysis. Likewise, the median age was 47, the same as it was in last years’ study. **The average adjusted age**, which is the average age, minus the average duration, was 42.9 – again consistent with our prior years’ analysis.

The age group breakdowns for 2011 are as follows:

Age Group:	20-29	30-39	40-49	50-59	60-69	70+	Totals
Raw number:	4	91	178	137	52	4	466
% of sample:	0.9%	19.5%	38.2%	29.4%	11.2%	0.9%	100%
Gross loss:*	\$1,245	\$64,027	\$118,339	\$105,265	\$62,425	\$1,707	\$353,067
% of sample:	0.4%	18.1%	33.5%	29.8%	17.7%	0.5%	100%
Avg. loss:	\$311,250	\$703,593	\$665,163	\$768,350	\$1,200,481	\$426,750	\$757,655

* in thousands of dollars



Once again, consistent with our earlier reports, the 40 – 49 age group accounted for the greatest number of cases. This year, this age group also accounted for the greatest total losses.

Some other noteworthy facts include the following:

- Oldest in the sample: 78
- Youngest in the sample: 26
- Average male age: 50
- Average female age: 46
- Average adjusted age: 43

These figures are consistent with our prior years' reports.

Gender of the Perpetrator

The gender of 469 perpetrators was known in the 473 cases in our 2011 study. Of those, 167 were male and 302 were female. That is, nearly 36 percent were male and more than 64 percent were female, almost precisely what our data showed in our 2010 report. Interestingly, the average loss from males was \$863,713 compared to \$693,970 for females. In other words, males stole about 25 percent more than females, on average. Males accounted for about 41 percent of the total losses and females accounted for about 59 percent of the total losses. These findings are not as dramatic as our prior years' findings. However, it is still consistent with our overall conclusions that males on average embezzle more than females in a given case while females are more likely the perpetrators of embezzlement, by a significant margin.

Another noteworthy finding from the 2011 data is that males are nearly twice as likely to engage in embezzlement schemes that involve a conspiracy of individuals (16.7% of the time), as females (8.6% of the time). This year we also found that males are more than 3 times as likely to engage in vendor fraud (9.9% of the time) as females (2.8% of the time). Males are also nearly twice as likely to utilize an unauthorized electronic transfer of funds scheme (19.1% of the time) as females (10.2% of the time). Finally, women are nearly twice as likely to employ a payroll fraud scheme (10.9% of the time), as men (3.7% of the time).

Position Held by the Perpetrator

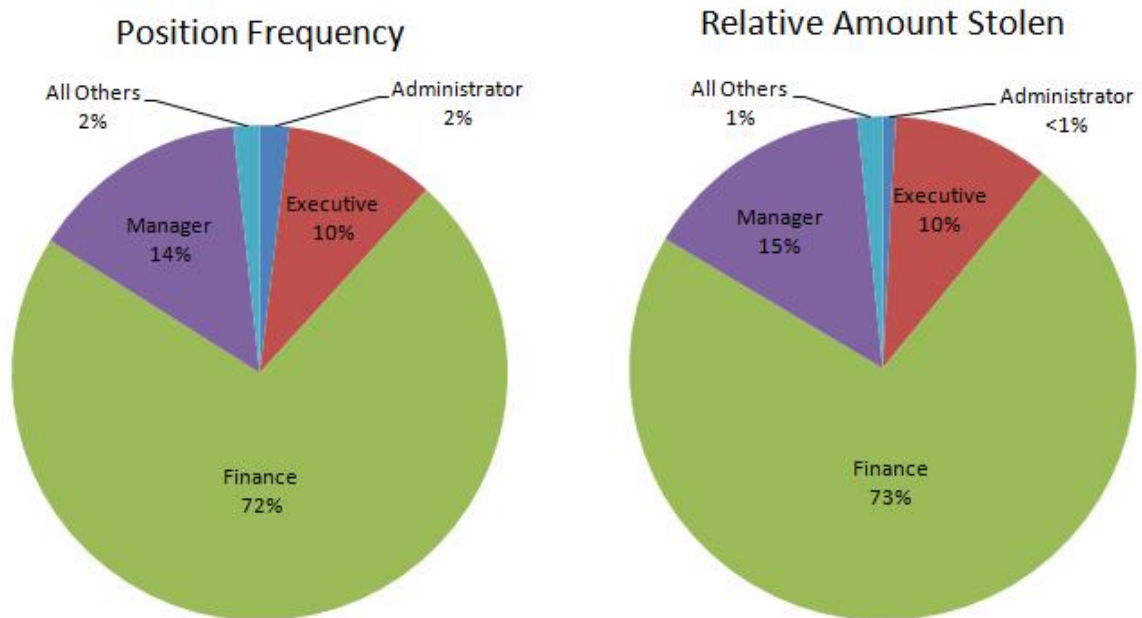
As we have done in past studies, we assigned 8 broad job classifications held by the perpetrators. These categories include: Administrator; Executive; Finance & Accounting; Human Resources; Information Technology; Manager; Sales; and Vendor. We were able to classify 466 of the perpetrators' positions for the 2011 survey. Note that the Finance & Accounting position includes everything from CFOs to "bookkeepers" and bank tellers or similar fiduciary positions. The Executive category includes very senior level executives, including owners, CEOs and Presidents. Managers are mid-level personnel, not principally involved in finance or sales –

usually operational positions. The others are self explanatory. A breakdown of the jobs and the corresponding losses as well as respective percentages of the whole, is set forth below:

Position:	Admin	HR	IT	Exec	Finance	Manage	Sales	Vendor	Totals
Raw number:	9	4	1	45	337	67	2	1	466
% of sample:	1.9%	0.9%	0.2%	9.7%	72.3%	14.4%	0.4%	0.2%	100%
Gross loss*:	2,881	3,023	1,029	35,258	255,439	52,036	1,074	542	351,282
% of sample:	0.8%	0.9%	0.3%	10.0%	72.7%	14.8%	0.3%	0.2%	100%
Avg. loss*:	320	756	1,029	784	758	777	537	542	

* in thousands of dollars

Below are side-by-side pie charts illustrating the frequency and relative amount stolen by each employee position:



Finance & Accounting positions clearly account for the vast majority of all the embezzlement incidents. This is consistent with our findings in our previous reports which have concluded that those individuals with their hands on the purse strings are much more likely to be perpetrators of employee theft schemes. This year, nearly 73 percent of the finance personnel in the study were women, perhaps explaining in part why they represent a disproportionately higher number of embezzlers.

Executives and Managers were the only other categories of significance in terms of frequency of occurrence. The 2011 Marquet data shows a near equal percent frequency of occurrence as percent overall loss for each of these three major categories. We note that the average Executive embezzled about \$784,000 whereas the average Finance personnel embezzled \$758,000 and the average Manager embezzled \$777,000. In prior years' analysis, the data indicated that Executives accounted for a disproportionately higher average loss.

Motivating Factors

Following last year's report, we conducted an analysis of the apparent motivation of the perpetrators in their respective embezzlement cases. This characteristic was the most subjective element analyzed in this report. Nevertheless, based upon media and law enforcement descriptions of the circumstances, we were able to hazard well educated guesses in 136 of the 473 cases in the 2011 study. This represents less than 30 percent of the overall sampling.

We placed the apparent motivating factors into the following expanded eight categories, including:

- Entitlement belief
- Financial need
- Lavish lifestyle
- Gambling issue
- Shopping addiction
- Substance abuse
- Support a personal business
- Support significant other

As in all of our prior studies, we identified those cases where gambling appeared to be a prime motivating factor. Note that we have added several new categories: entitlement belief; shopping addiction; and support a significant other. The breakdown in the study was as follows:

Motivation:	Entitled	Need	Shop	Gamble	Lifestyle	Drugs	Business	SigOther	Total
Raw #:	2	0	4	30	80	8	10	3	137
% Group:	1.5%	0%	2.9%	21.9%	58.4%	5.8%	7.3%	2.2%	100.0%
% Overall:	0.4%	0%	0.8%	6.3%	16.9%	1.7%	2.1%	0.6%	28.9%

In the overwhelming number of cases, excessive greed or the desire to live a relatively more lavish lifestyle appears to be the key motivating factor for major embezzlers – not to alleviate personal financial problems, as some might expect. Gambling continues to be a factor for many embezzlers. In some cases, the gambling problem was also part of an overall extravagant lifestyle. Nevertheless, we identified 30 cases this year that clearly involved gambling as the principal motivating factor. Most of the gambling cases occurred in states where casinos and/or Indian gaming facilities are permitted.

As alluded to above, one of the factors included in last years' report which we did not find this year, were embezzlers motivated out of a genuine financial desperation. However, the vast majority, if not all of the perpetrators in our study used the ill-gotten gains to pay for personal expenses and debts – certainly alleviating financial stresses.

The underlying question remains, however, why do these embezzlers steal so much over such a long period of time from employers who trusted them so implicitly? The classic fraud triangle

theory holds that there generally must be three basic elements to exist for fraud to occur: opportunity, incentive/pressure and attitude/rationalization. For embezzlement, the opportunity factor is present in organizations in which business controls are weak and specific individuals, principally those with fiduciary duties as the Marquet data has shown, can exploit those weaknesses. For fraud in general, the incentive/pressure factor is often suggested to be financial woes. However, for embezzlers, other factors exist, such as a substance abuse problem, a gambling problem, a perceived need to support a loved one and, as the Marquet data reveals, a desire to live an extravagant lifestyle or a desire to support a personal or family-owned business.

Rationalization is the most elusive segment of the fraud triangle. Researchers have suggested that one or more of the following attitudes or beliefs exist for embezzlers to engage in illicit activities:

- They believe they are entitled to the money;
- They believe they must save a family member or loved one who is perceived to be in dire circumstances;
- They believe they are in a desperate financial situation and all could be lost;
- They believe that no external or other help exists;
- They believe they are only “borrowing” the money;
- They do not understand the consequences of their actions; and,
- They do not believe or understand that what they are doing is wrong.

There is a paucity of data on this subject and we believe the psychology behind the embezzlement phenomenon must be studied further to understand what motivates certain individuals to commit these kinds of frauds.

Did the perpetrator have a prior history of criminal activity?

While we do not believe we have complete data, we were able to determine that 23 perpetrators in the sample of 473 were known to have engaged in prior criminal/fraudulent activity. This represents 4.9 percent of the sample, which is roughly consistent with our prior years’ analyses. We have noted in our prior reports that we believe this number to be undercounted and estimate the true figure to be between 5 and 10 percent. This is due to the fact that information on prior criminal activity is not always available, as well as the fact that not all criminal matters are prosecuted. While these numbers have remained consistently low, we still recommend conducting background investigations in order to root out the known bad actors.

In any case, we note the following additional statistics:

- 78% of prior criminals held finance positions
- 91% of prior criminals were solo embezzlers
- 70% of prior criminals were female
- 57% of prior criminals employed a forged/unauthorized check scheme

- 30% of prior criminals targeted non-profits, including religious organizations

As noted in our prior reports, we are not sure that these findings are statistically significant, given that they are based upon only 23 cases. The aggregation of multiple year data will allow for better future analysis which we plan for next years' report.

CHARACTERISTICS OF THE VICTIM ORGANIZATIONS

Industry Category of Victim Organizations

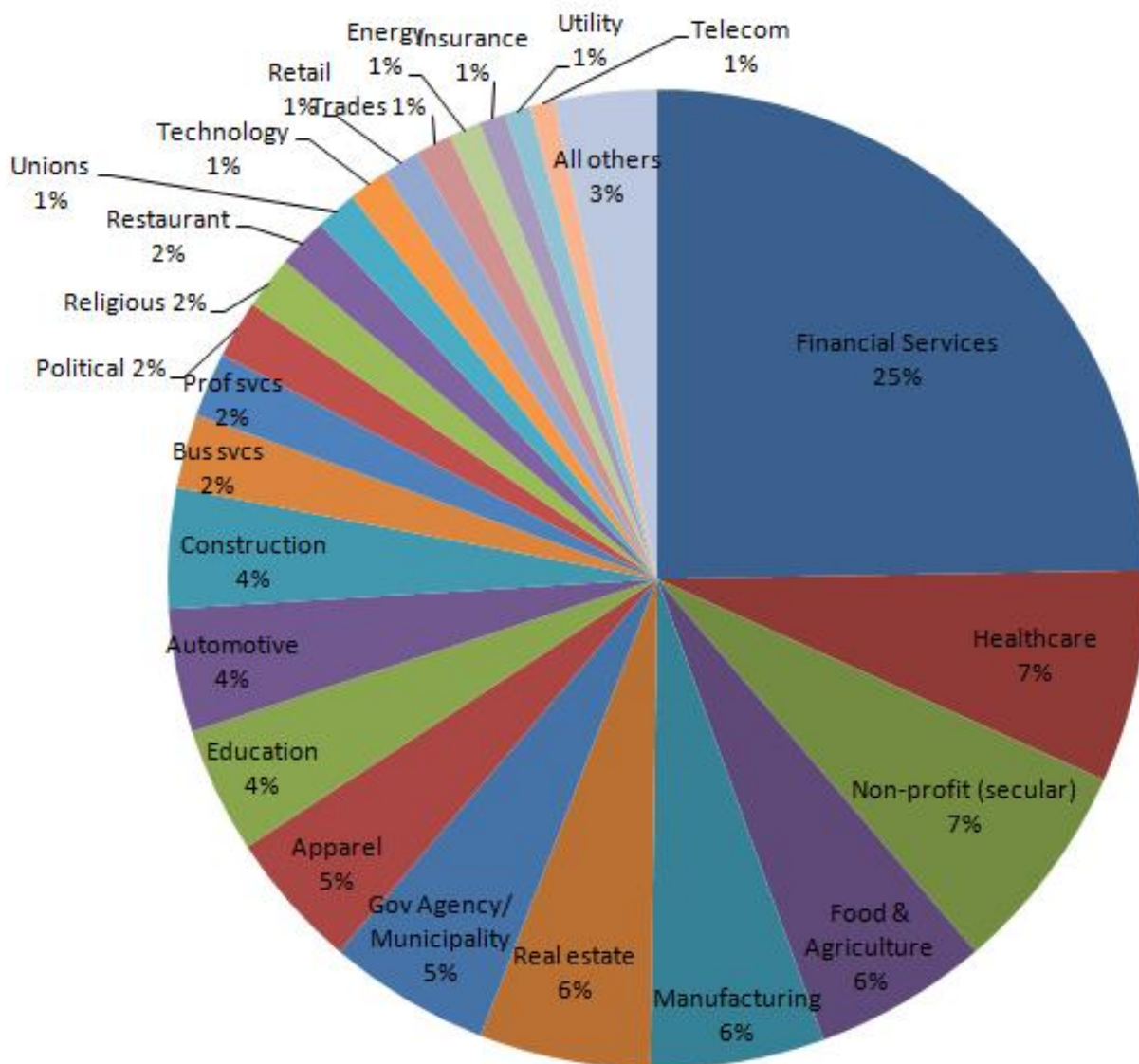
As with our prior reports, we used simple industry classifications for the victim organizations identified in the survey. The classifications used in our 2011 survey included the following: apparel; arts & entertainment; automotive; business services; cemetery/funeral services; construction; education; energy; financial services; food & agriculture; gaming; government agencies/municipalities; healthcare; hospitality; insurance; labor unions; manufacturing; natural resources; non-profit (secular); pharmaceutical; political groups; professional services; publishing/media; real estate; religious organizations; restaurant; retail; sports & leisure; technology; telecom; trade services; transportation/freight; travel; and utilities.

An analysis of losses incurred by industry reveals the following 12 industries which experienced the greatest gross losses, along with their respective average theft:

<u>Industry</u>	<u># Cases</u>	<u>% Cases</u>	<u>\$ Gross Loss</u>	<u>% Total</u>	<u>Avg. Loss</u>
Financial services	58	12.4%	86,792,000	24.7%	1,496,414
Healthcare	49	10.5%	24,679,000	7.0%	503,653
Non-profit (secular)	58	12.4%	24,650,000	7.0%	425,000
Food & agriculture	10	2.1%	20,228,000	5.8%	2,022,800
Manufacturing	30	6.4%	20,119,000	5.7%	670,633
Real estate	24	5.2%	19,887,000	5.7%	828,625
Government	44	9.4%	18,832,000	5.4%	428,000
Apparel	1	0.2%	16,000,000	4.6%	16,000,000
Education	18	3.9%	14,607,000	4.2%	811,500
Automotive	10	2.1%	14,305,000	4.1%	1,430,500
Construction	16	3.4%	13,943,000	4.0%	871,438
Business services	12	2.6%	8,599,000	2.4%	716,583

Below is a chart of the industry breakdown for percentage of overall gross losses in 2011:

Industry Gross Loss



The financial services industry, even excluding insurance-related entities, experienced the greatest losses in 2011 from major embezzlement schemes. This industry has topped our list each year of our survey, beginning in 2008. Healthcare was particularly hard hit in 2011, climbing into 2nd place, followed closely behind by non-profit secular organizations. Non-profits and religious organizations combined account for nearly one-eighth or 16.5 percent of all incidents – an increase compared to our prior reports, but with only 7.5 percent of the total losses – up from last year. As we have written about extensively, these types of organizations will always be vulnerable to employee theft as long as they continue to have weak business and cash controls. We plan on a five year aggregated analysis after next years' report comes out which should provide some very statistically relevant numbers on this front.

Geographic Location of the Embezzlement

We identified the states with the highest number of major embezzlement cases – as well as the largest gross losses and the largest average loss – and determined the percentage of overall losses for these states (see charts below).

We also include a chart that identifies those states with the highest loss ratio. To do this, we determined the percent Gross Domestic Product (GDP) that each state contributes to the overall US GDP using recent US Department of Commerce numbers. This is known as the Gross State Product (GSP). We assume that the GSP percentages represent the relative economic activity for each state. Our theory is that for each state, we would expect both its percent of overall incidents as well as its percent of overall losses to be close to its relative GSP as a percent of overall GDP. The loss ratio of the percent of gross losses for a given state to its percent GDP contribution, is what we are now calling the Embezzlement Propensity Factor, or EPF. Any state with an EPF of greater than 1 has a disproportionately higher embezzlement loss propensity.

The 12 states with the most major embezzlement cases from our 2011 study are as follows:

<u>State</u>	<u># cases</u>	<u>% of all cases</u>
CA	63	13.3%
MI	28	5.9%
PA	28	5.9%
MO	20	4.2%
NY	20	4.2%
CT	18	3.8%
TX	18	3.8%
MA	16	3.4%
IL	15	3.2%
VA	14	3.0%
NC	14	3.0%
FL	14	3.0%



The 12 states with the greatest overall losses from major embezzlement cases from our 2011 study are as follows:

<u>State</u>	<u>Gross loss</u>	<u>% of all losses</u>
NY	\$48,997,000	13.8%
CA	\$43,592,000	12.3%
PA	\$35,508,000	10.0%
VA	\$23,197,000	6.5%
FL	\$20,263,000	5.7%
CT	\$16,662,000	4.7%
IL	\$13,497,000	3.8%
MO	\$11,937,000	3.4%

TX	\$11,544,000	3.3%
MI	\$ 9,821,000	2.8%
IA	\$ 7,714,000	2.2%
OH	\$ 7,317,000	2.1%

The states with the highest average loss from major embezzlement cases from our 2011 study are as follows:

<u>State</u>	<u>Average Loss</u>
NY	\$2,449,850
NV	\$1,815,000
VA	\$1,656,929
FL	\$1,447,357
PA	\$1,268,143
IA	\$1,102,000
CT	\$ 925,667
IL	\$ 899,800
UT	\$ 841,750
OK	\$ 830,250
SC	\$ 785,500
KY	\$ 762,667



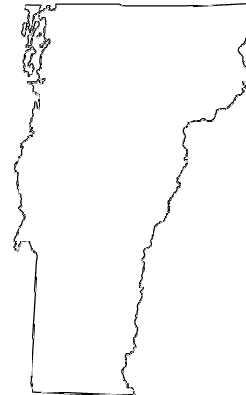
We should note that each of the above averages is higher than the overall national average embezzlement in this study.

In the table below, we compare the 12 states with the highest overall ratio of the percent of total losses to the percent GDP for each of these states. This ratio, which we call the state's "Embezzlement Propensity Factor," provides us with a variance factor for each state. Those states with loss ratios greater than one (1.0) are states that have a higher propensity to experience losses from major embezzlement cases than we would expect. The 12 states with the highest **Embezzlement Propensity Factor** (EPF) from our 2011 study are as follows:

<u>State</u>	<u>Cases</u>	<u>% Cases</u>	<u>\$Losses</u>	<u>% Losses</u>	<u>Ave Loss</u>	<u>% GDP</u>	<u>EPF</u>
VT	10	2.1%	2,914,000	0.8%	291,400	0.17%	4.8
CT	18	3.8%	16,662,000	4.7%	925,667	1.50%	3.1
PA	28	5.9%	35,508,000	10.0%	1,268,143	3.83%	2.6
MT	7	1.5%	2,127,000	0.6%	303,157	0.24%	2.5
VA	14	3.0%	23,197,000	6.5%	1,656,929	2.65%	2.5
IA	7	1.5%	7,714,000	2.2%	1,102,000	0.89%	2.4
ID	6	1.3%	2,985,000	0.8%	497,500	0.35%	2.4
NV	4	0.8%	7,260,000	2.0%	1,815,000	0.88%	2.3

MO	20	4.2%	11,937,000	3.4%	596,850	1.59%	2.1
ME	5	1.1%	2,404,000	0.7%	480,800	0.33%	2.1
WV	9	1.9%	2,862,000	0.8%	318,000	0.40%	2.0
NY	20	4.2%	48,997,000	13.8%	2,449,850	7.92%	1.7

This year, Vermont tops the list of all states in the US with the highest risk for loss from embezzlement, followed by Connecticut, Pennsylvania and Montana. We note that Vermont, Oklahoma and New York have each been on this list three out of the past four years, with one of the highest Embezzlement Propensity Factors (EPF). In 2011 several states, including Nevada, New York, Virginia, Pennsylvania, Florida and Iowa, all had average losses exceeding \$1 million.



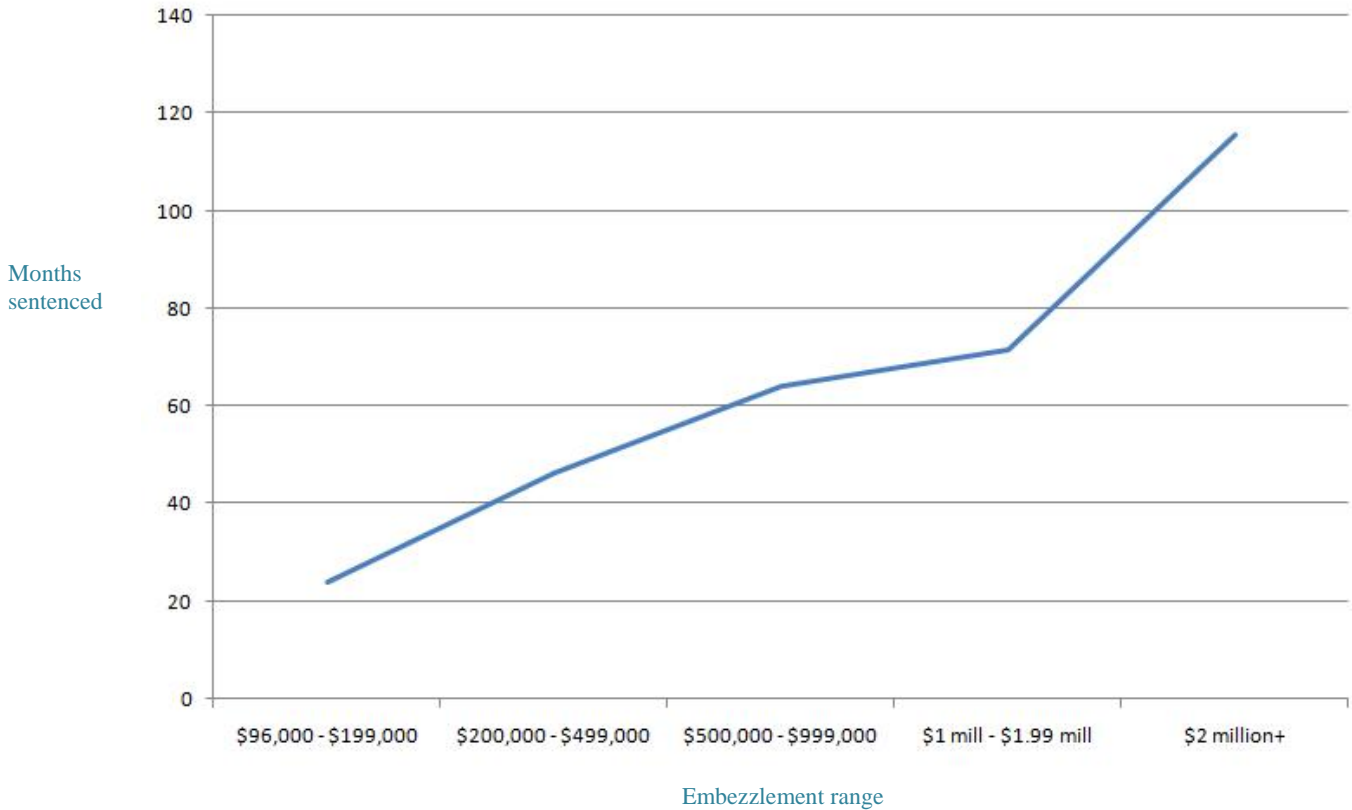
JUDICIAL CONSEQUENCES

Sentencing Analysis

As we did in last years' report, for 2011, we researched the prison terms for perpetrators who had been sentenced, if they were given any, in an effort to determine whether some conclusions could be drawn. We were able to determine the prison sentences in 155 of the 473 cases analyzed in *The 2011 Marquet Report on Embezzlement*. The prison terms ranged from probation or home confinement to 25 years in jail (300 months). The average prison sentence was 52 months or 4 years and 4 months, for an average embezzlement of nearly \$1.2 million.

For those cases that we had scheme duration data, the average length of prison time was about 4.4 years (53 months) for an average embezzlement period of about 5.3 years (63 ½ months). One office manager/bookkeeper in Michigan, 45-year-old Christine M. Desonia, was given no prison time after having siphoned about \$250,000 from her employer over a period of at least 2 years after she was reportedly passed up for a promotion. On the other hand, an administrative assistant in South Dakota, 42-year-old Sarah Schmidt, was given up to 20 years in prison for embezzling \$220,000 from her employer. As we showed in last years' report, the disparity that exists in the sentencing arena is wide across the country and varies from jurisdiction to jurisdiction and judge to judge.

We broke down the average sentences for various theft levels, as outlined in the graph and chart below:



<u>Embezzlement Range</u>	<u>Avg. Sentence in Months (years)</u>
\$ 96,000 - \$199,000	24 (2.0)
\$200,000 - \$499,000	46 (3.8)
\$500,000 - \$999,000	64 (5.3)
\$1 mill. - \$1.99 mill.	72 (6.0)
\$2 million +	116 (9.7)

Both the graph and chart demonstrate nicely that the average prison sentence increases with the magnitude of the theft – just as we would hope and expect. In last years’ report, the data showed that the sentences leveled out at the top embezzlement ranges. This may, in part have been due to maximum sentencing guidelines. As we noted last year, the good news is that these white collar criminals are generally getting prison terms – only 4.5 percent got no prison time – and every sentence received restitution orders and probationary periods.

Those states [with a sampling of at least 3 cases] with the highest average sentence given in the study are Alabama (8.3 years), Colorado (8.0 years), Montana (7.9 years), Pennsylvania (7.6 years) and South Dakota (7.1 years). Those with the lowest average sentence include Virginia (2.7 years), Tennessee (2.7 years), Oklahoma (3.4 years), New York (3.5 years) and Washington state (3.7 years).

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About Marquet International, Ltd.

Marquet International, Ltd. is a boutique investigative, litigation support and due diligence firm based in Boston, Massachusetts. Led by longtime industry expert Christopher T. Marquet, the firm is routinely engaged by corporations and their counsel to assist with internal investigations, corporate fraud and allegations of employee misconduct. Marquet International is also regularly retained to conduct thorough due diligence inquiries on key individuals in business entities and corporate transactions. Our interest in embezzlement cases was piqued after the launch of our *Fraud Talk* blog, wherein we regularly document active cases of employee misconduct and white collar fraud cases, including major embezzlements of more than \$100,000. We hope this series of reports provides insight into this type of corporate fraud. If you have questions or comments, we welcome feedback at info@marquetinternational.com.

About the Author

Christopher T. Marquet started his career in the investigative, security consulting and litigation support industry in the summer of 1983 when he joined Kroll Associates after graduating from Dartmouth College. He spent nearly 19 years at Kroll in a variety of staff, consulting and executive positions, culminating as the head of Kroll's Boston office. In 2002, he co-founded Citigate Global Intelligence with a group of other former Kroll executives and ultimately founded Marquet International, Ltd., at the beginning of 2006.

During his lengthy career, Mr. Marquet has been involved in thousands of business intelligence, investigative, litigation support, and security consulting projects around the world. These matters have been diverse and include, but are not limited to, the following: due diligence; general litigation support; investigations into intellectual property theft; environmental disputes; fraud investigations; workplace violence; and employee misconduct; hostile takeovers and proxy battles; competitive intelligence; corporate security; executive protection; crisis management; and insurance disputes.

Mr. Marquet has authored numerous articles and white papers, including *The Marquet Report on Embezzlement*; *The Marquet Report on Ponzi Schemes*; *Avoiding the Pitfalls of the Foreign Corrupt Practices Act*; *Investigating Employee Misconduct*; *Resume Fraud: The Top 10 Lies*; *Small Businesses Face Greatest Risk for Fraud & Embezzlement*; *Green Energy Investment Scams: Do Your Due Diligence*; *Ethics in Investigations*; *Ponzi Schemers, Embezzlers and Fraudsters, Oh My!*; *Integrity Hotlines: Getting the Inside Word on Fraud, Waste & Abuse*; *Managing Global Security Concerns: Practical Considerations*; *Anticipating Workplace Violence Can Reduce the Threat*; *Do You Know Who You Are Hiring?*; *Post 9/11 & Enron Due Diligence Must Dig Deeper*; *Executive Air Travel Security Guidelines* and many others. Mr. Marquet also lectures regularly on many of these and other topics as well.

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