



THE MARQUET REPORT ON EMBEZZLEMENT

A STUDY OF MAJOR EMBEZZLEMENT CASES ACTIVE IN THE U.S. IN 2009

Published by Marquet International, Ltd.
January 14, 2010

About the Report

The Marquet Report on Embezzlement is our second annual corporate fraud study on embezzlement in the United States. For the purpose of this report, embezzlement is defined as the misappropriation of assets by an employee or agent of a company or organization for his or her own purposes. While in some ways similar, we do not include other white collar crimes, such as Ponzi-type investment fraud schemes, like that perpetrated by Bernard L. Madoff.

The Marquet Report on Embezzlement studies a variety of critical factors related to the alleged perpetrator and the circumstances in each case, such as age, sex, employment position, duration of scheme, prior criminal history, geography of incident and industry classification. We also explored motivational issues, including gambling problems as well as whether the case involved a sole perpetrator or a conspiracy.

Our goal with *The Marquet Report on Embezzlement* is to identify key trends for major embezzlement cases active in 2009 and to draw some conclusions based upon an aggregation of analysis from prior years' reports. To do so we looked at 415 specific "major" embezzlement cases in 2009 – that is, cases in which more than \$100,000 was stolen from an employer. The 415 case sampling in this year's study is significantly more than the 2008 report, which had only 174 cases. This is due to the fact that we did not start collecting data until the latter half of 2008, limiting the number of cases we were able to analyze for last year's report. It should be noted the existence of 415 major embezzlement cases in 2009 means that on average, there was more than one such case reported every single day of the year in the United States.

The Marquet Report on Embezzlement includes data gathered from public sources on "active" cases in 2009 – those in which an arrest, indictment, plea, sentencing or other significant event occurred during 2009. Cases already included in our 2008 study were not included in the 2009 report. Public sources included court records, prosecutorial press releases, media accounts, vital records, government & regulatory filings and other public information.

It should be noted that many of the cases analyzed in this study are currently active and some of the accused perpetrators have not yet been convicted or plead out. The study includes those cases in which we have a high degree of confidence in the accuracy of the information.

Summary of Key Findings

Employee misconduct and internal corporate fraud will be a continuing and growing problem as the U.S. economy continues to struggle. The seeds of future major embezzlements, yet to be discovered, are being sown in the current market environment. That having been said, the revelation of so many major embezzlements in the US in recent years is in part due to the downturn in the economy beginning in 2008. As the saying goes, “when the river runs dry, the jagged rocks are revealed.” Corporate fraud schemes tend to reveal themselves when organizations pay more attention to their finances. Other white collar crimes, such as investment frauds, simply collapse on themselves in economic downturns.

Looking at the two years’ data on major embezzlements in the US, we believe we can reasonably come to the following conclusions:

- Women are more likely to embezzle than men.
- Men embezzle significantly more than women.
- Perpetrators typically begin their embezzlement schemes in their early 40s.
- By a significant margin, embezzlers are most likely to be individuals who hold financial positions within organizations.
- The two broad industry categories that have the highest risk for a major embezzlement are Financial Services and Government Agencies/Municipalities.
- The Financial Services industry suffers the greatest losses from major embezzlements.
- On average, major embezzlement schemes last about 4½ years.
- California and Florida are consistently the states that experience the greatest losses from major embezzlements.
- The vast majority of major embezzlements are caused by sole perpetrators
- Gambling is a clear motivating factor in driving some major embezzlements.
- Fewer than 10 percent of embezzlers have a criminal record – less than expected, but enough to suggest that pre-employment screening has merit.

Contrary to conventional wisdom, women are more likely to be perpetrators of major embezzlement schemes than men. However, men, who still tend to hold more senior level management positions, embezzle significantly more in their schemes than women.

Highlights of the 2009 Study

- The average loss was just over \$1 million; the median loss was \$386,500. These numbers were significantly lower than the 2008 report (\$2.2 million and \$500,000, respectively).
- Nearly 63 percent of the incidents involved female perpetrators, consistent with our 2008 findings (60%).
- Male perpetrators, on average, embezzled nearly twice as much as females, consistent with our 2008 findings.
- The average adjusted age of perpetrators at the commencement of their embezzlement was 42*, somewhat lower than our 2008 findings (44 years).
- 40 – 49 year olds caused the greatest overall percentage of losses, consistent with our 2008 findings.
- The top two industries victimized were Financial Services and Manufacturing, again consistent with our 2008 findings.
- Non-profit and religious organizations accounted for more than 11 percent of all the incidents, consistent with our 2008 findings.
- Two-thirds of the incidents were committed by employees who held finance & accounting positions, again consistent with our 2008 findings.
- The average scheme lasts nearly 4 ½ years, consistent with our 2008 findings.
- Vermont had the highest loss ratio followed by Wisconsin, Oklahoma, Montana and Iowa.**
- 87 percent of the cases involved individual perpetrators, slightly higher than our 2008 findings (80 percent).
- More than 7 percent of the cases involve perpetrators who reportedly had gambling problems, consistent with our 2008 findings.
- 5 percent of the cases involved perpetrators who had a prior criminal history, significantly higher than our 2008 findings (3 percent), but more consistent with our projection of 5 – 10 percent.

* The “average adjusted age” is the average age of the alleged perpetrators in the study minus the average duration of the schemes in the study to represent the approximate age at which the average alleged perpetrator commenced their illicit activities.

** The “loss ratio” 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.

Analysis of Critical Factors

The Marquet Embezzlement Report analyzes 415 major embezzlement cases active in 2009 in the United States. These cases by definition involved employee thefts with losses of more than \$100,000 and which had some legal action reported in 2009. However, three cases were included in the study which had losses of just under \$100,000. To the extent available, we gathered data from the public domain on each case, for the following categories:

- Amount of the loss
- Age of alleged perpetrator
- Sex of alleged perpetrator
- Industry of victim organization
- Category of job held by alleged perpetrator
- Duration of the scheme
- Geographic location of embezzlement (state)
- Was the scheme a solo action or a conspiracy?
- Did the alleged perpetrator have a gambling problem?
- Did the alleged perpetrator have a prior criminal history?

Other areas of data collection we intend to add to future reports include:

- Primary motivational factor
- Primary method of embezzlement
- Ultimate adjudication
- Company size (in gross revenues)

This last category is particularly difficult since the vast majority of cases involve privately held companies which are not required to publicly file financial reports.

Amount of Loss

In this study of 415 major cases of embezzlement, the total reported loss was \$417,632,000, up 8.3% from the \$385,572,000 loss total we reported for 2008. However, as we noted above in our introduction, we believe our 2008 data was not complete. We rounded the losses to the nearest \$1,000. The average loss per case was just over one million dollars at \$1,006,342. However, the median loss was \$386,500. The 2008 numbers were \$2.2 million average loss and \$500,000 median loss, respectively. This is apparently due to the fact that there were 9 cases in 2008 that exceeded \$10 million in losses as compared to only 4 in 2009 (see chart below). Further, the largest case in 2008 was more than double the reported loss than the largest case included in the 2009 study.

The case with the largest loss included in this report was \$31 million; the smallest was \$95,000. The \$31 million loss is the recently reported case involving publicly traded Koss Corp. in Wisconsin, wherein 46-year old Sujata "Sue" Sachdeva, vice president of finance, is alleged to have massively fleeced shareholders over a period of at least two years, spending the money on all manner of personal luxuries. This case is very recent and the details have not all come to light as of this writing.

We note that the top ten cases in the study with the greatest losses are the following:

<u>Name</u>	<u>Victim Organization</u>	<u>Amount</u>
Sujata "Sue" Sachdeva	Koss Corp.	\$31,000,000
Ricardo Figueiredo	Bank of America	\$29,592,000
Yolanda Serrano	Southeast Petro Distributors, Inc.	\$12,700,000
Jerry D. Cash	Quest Resources Corporation	\$10,000,000
Annette C. Yeomans	Quality Woodworks, Inc.	\$ 9,900,000
Rick Eddleman	Decipher, Inc.	\$ 8,900,000
James T. Hammes	G&J Pepsi-Cola Bottlers, Inc.	\$ 8,711,000
Thom W. Williams	Verso Paper Co.	\$ 8,710,000
Rev. John Skehan	St. Vincent Ferrer Catholic Church	\$ 8,600,000
Nathan John Mueller	ING Reinsurance Corp.	\$ 8,500,000

Gender of Alleged Perpetrator

The gender of 414 alleged perpetrators is known in the 415 cases in the study. Of those, 154 were male and 260 were female. That is, 37.2 percent were male and 62.8 percent were female. However, the average loss from males was \$1.4 million compared to \$770,000 for females. In other words, the average male embezzler stole nearly twice as much as the average female. As noted in the chart above, 7 of the top 10 defalcations involved male perpetrators. However, two out of the top three were female perpetrators. These findings are largely consistent with our findings in 2008.

Age of the Alleged Perpetrator

The age was definitively known in 404 of the 415 cases in the survey. It should be noted that the age was given at the time of the arrest or sentencing or other court action in 2009. Therefore the age at which the alleged perpetrator commenced his or her embezzlement would be several years younger, in some cases, many years. In the analysis below we take the age of the alleged perpetrator in 2009. We also develop an adjusted age based upon the average duration of schemes from the 2009 data. Based on the available data, the average age of the alleged perpetrator in 2009 was 46.5 years. The median age was 46 and the average adjusted age was 42 (see below). These are down slightly from our 2008 report. The age group breakdowns are as follows:

<u>Age Grouping</u>	<u>20-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60-69</u>	<u>70+</u>
Raw number	17	87	154	104	37	5
Percentage of sample	4.2%	21.5%	38.1%	25.7%	9.2%	1.2%
Gross loss by category*	9,422	61,728	166,649	131,324	30,076	11,415
Percentage of sample	2.3%	15.0%	40.6%	32.0%	7.3%	2.8%
Average loss by category	\$554,235	\$709,517	\$1,082,136	\$1,262,731	\$812,865	\$2,238,000

* in thousands of dollars

The 40-49 age group accounted for greatest percentage of the losses, consistent with our 2008 report. However, the percentage was down somewhat (41% for 2009 vs. 48% for 2008).

Industry Category of Victim Organization

As with our 2008 report, we used simple industry classifications for the victim organizations in the survey. These classifications included the following: advertising; apparel; automotive; construction; education; energy; entertainment; financial services; food & agriculture; gaming; government agencies/municipalities; healthcare; individuals; insurance; labor unions; manufacturing; media; non-profit (secular); personnel & recruiting; pharmaceutical; professional services, real estate; religious organizations; restaurant; retail; software; sports & leisure; transportation/freight; utility; and warehousing & fulfillment.

An analysis of losses incurred by industry reveals the following 12 industries which experienced the greatest gross losses:

<u>Industry</u>	<u># cases</u>	<u>% of cases</u>	<u>Gross Losses</u>	<u>% of total</u>	<u>Average</u>
Manufacturing	29	7.0%	\$ 71,968,000	17.3%	\$ 2,481,655
Financial Services	49	11.9%	\$ 69,054,000	16.6%	\$ 1,409,265
Insurance	14	3.4%	\$ 30,330,000	7.3%	\$ 2,166,429
Energy	5	1.2%	\$ 25,400,000	6.1%	\$ 5,080,000
Gov Agency/Municipality	42	10.2%	\$ 20,995,000	5.0%	\$ 499,881
Real estate	25	6.1%	\$ 20,587,000	4.9%	\$ 823,480
Professional services	28	6.8%	\$ 19,240,000	4.6%	\$ 687,143
Religious organizations	16	3.9%	\$ 18,558,000	4.5%	\$ 1,159,875
Food & Agriculture	19	4.6%	\$ 18,099,000	4.3%	\$ 952,579
Non-profit (secular)	28	6.8%	\$ 12,745,000	3.1%	\$ 455,179
Healthcare	25	6.1%	\$ 11,685,000	2.8%	\$ 467,400
Entertainment	4	1.0%	\$ 10,359,000	2.5%	\$ 2,589,750

As the chart demonstrates, the Financial Services and Manufacturing industries combined accounted for more than a third of all losses. However, the Financial Services and Government Agencies/Municipalities categories had the highest number of cases for both the 2008 and 2009 studies. In other words, these two industry classifications face the highest risk for a major embezzlement incident to occur. In any event, in the 2009 study, if we lump Insurance and Financial Services under the Finance category, the total losses approach the 25% of overall losses which is what we saw in our 2008 report. Energy had the highest average loss per incident. As in our 2008 report, Government Agencies/Municipalities accounted for the second most frequent number of incidents, but as a class has one of the lowest average losses per incident. Non profits and Religious organizations combined account for nearly 11 percent of all incidents, consistent with our 2008 report, but with 7½ percent of the total losses, up from last year. This is skewed upward by one large defalcation – the Skehen/St. Vincent Ferrer case. Again, we would argue that the control environment is relatively looser in non-profit organizations, making it easier to embezzle in general. However, there is less cash to steal in these organizations. In the Skehen case, he was taking small amounts from the collections for 42 years! (see Duration section, below).

Category of job held by alleged perpetrator

For the purposes of this study, we used 8 job classifications held by the alleged perpetrators. These categories include: Administrator; Executive; Finance & Accounting; HR; IT; Manager; Sales; and Vendor. We were able to classify 400 of the alleged perpetrators' positions in the survey in these categories. 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 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 percentages is set forth below:

Position:	<u>Admin</u>	<u>HR</u>	<u>IT</u>	<u>Exec</u>	<u>Finance</u>	<u>Manager</u>	<u>Sales</u>	<u>Vendor</u>
Total number	19	2	2	53	267	51	3	3
Percentage of sample	4.7%	0.5%	0.5%	13.2%	66.6%	12.7%	0.7%	0.7%
Gross loss by category*	12,443	1,763	3,277	64,067	266,692	58,871	1,454	4,413
Percentage of sample	3.0%	0.4%	0.8%	15.5%	64.6%	14.3%	0.4%	1.1%

* in thousands of dollars

Finance & Accounting positions accounted for two-thirds of all the embezzlement incidents and almost the same percent of the total losses in the study. In other words, those individuals with their hands on the purse strings are much more likely to be perpetrators of employee theft schemes – which is what we would expect. Executives and Managers were the only categories accounted for a significantly disproportionate

higher loss than their numbers represented. As we noted in last year's report, the greater trust and control placed in more senior level personnel allows them more opportunity to circumvent the usual financial controls and take greater amounts from their employers.

Duration of the Scheme

The approximate duration of the scheme was determined in 359 of the 415 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 from the case. Nevertheless, we tabulated the known durations, rounded to the nearest tenth of a year and determined the following:

Average duration:	53 months (or 4.4 years)
Median duration:	3.6 years
Longest duration:	42 years

These findings are consistent with our 2008 study. The embezzlement case with the longest reported duration involved 81-year old Rev. John Skehen, former pastor at the St. Vincent Ferrer Catholic Church in Delray Beach, Florida where he reportedly admitted to fleecing the collections of his flock over a 42 year period. In more recent years, Skehen allegedly conspired with another pastor of the church, the Rev. Francis Guinan. The two allegedly spent the money on "lavish trips, gambling and girlfriends," according to prosecutors. A pretty amazing case, indeed.

If we take the average duration (4.4 years) and subtract it from the average age (46.5 years), we get an "average adjusted age" of 42.1 years. Our theory is that this represents the approximate age at which the average scheme was commenced in this survey. This is roughly consistent with last years' findings, albeit slightly younger perpetrators in 2009 (42 in 2009 vs. 44 in 2008).

Geographic Location of the Embezzlement

We identified the states with the largest gross losses and determined the percentage of overall losses for these states (see chart below). We also include in this chart the number of incidents for each of these states and the respective percentage of incidents to the total in the study. We then determined the percent Gross Domestic Product (GDP) that each state contributes to the overall US GDP using 2008 US Department of Commerce numbers. This is known as the Gross State Product (GSP). We assume that the GSP percentages accurately represent the relative economic activity for each state. As such, 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.

In the table below, we compare the top twelve states with the greatest overall losses as described above, as well as included a ratio of the percent of total Losses to the percent GDP for each of these states. This ratio, which we call the state's "loss ratio," provides us with a variance factor for each state. Our theory is that those states with loss ratios greater than one (1.0) are states that have a greater loss propensity from major embezzlement cases than expected.

<u>State</u>	<u>Cases</u>	<u>% Cases</u>	<u>Losses</u>	<u>% Losses</u>	<u>% of GDP</u>	<u>Loss Ratio</u>
FL	12	2.89%	55,895,000	13.4%	5.15%	2.60
CA	61	14.70%	49,952,000	12.0%	12.79%	0.94
WI	6	1.45%	32,606,000	7.8%	1.61%	4.86
NY	16	3.86%	23,386,000	5.6%	7.92%	0.71
PA	24	5.78%	17,929,000	4.3%	3.83%	1.12
VA	18	4.34%	17,763,000	4.3%	2.65%	1.61
OK	11	2.65%	14,077,000	3.4%	0.96%	3.52
MI	21	5.06%	13,707,000	3.3%	2.65%	1.24
MN	8	1.93%	12,726,000	3.1%	1.76%	1.73
OH	11	2.65%	12,318,000	3.0%	3.27%	0.90
TX	18	4.34%	12,289,000	2.9%	8.47%	0.35
MA	18	4.34%	11,791,000	2.8%	2.43%	1.16

In these big loss states, we see that Florida, Wisconsin and Oklahoma have disproportionately high losses for their relative economic output, according to our theory.

The twelve states with the highest loss ratio are represented in the table below:

<u>State</u>	<u>Cases</u>	<u>% Cases</u>	<u>Losses</u>	<u>% Losses</u>	<u>% GDP</u>	<u>Loss Ratio</u>
VT	4	0.96%	5,982,000	1.4%	0.17%	8.44
WI	6	1.45%	32,606,000	7.8%	1.61%	4.86
OK	11	2.65%	14,077,000	3.4%	0.96%	3.52
MT	8	1.93%	3,239,000	0.8%	0.24%	3.24
IA	8	1.93%	10,696,000	2.6%	0.89%	2.88
FL	12	2.89%	55,895,000	13.4%	5.15%	2.60
SC	4	0.96%	11,072,000	2.7%	1.05%	2.53
MN	8	1.93%	12,726,000	3.1%	1.76%	1.73
SD	6	1.45%	1,627,000	0.4%	0.23%	1.70
NH	5	1.20%	2,811,000	0.7%	0.40%	1.69
VA	18	4.34%	17,763,000	4.3%	2.65%	1.61
CT	15	3.61%	9,700,000	2.3%	1.50%	1.55

This includes the previously noted Florida, Wisconsin and Oklahoma, but also some of the smaller states that had big hits, notably Vermont, Montana, Iowa, South Dakota and New Hampshire. According to our theory, these states had a higher propensity for loss from major embezzlements than their relative economic output would suggest. However, the anomalies are probably accounted for by one or two large embezzlement cases.

Was the scheme a solo action or a conspiracy?

We were able to determine with relative confidence in 413 of 415 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	54	359	413
Percentage of sample	13.1%	86.9%	100.0%
Gross loss per category	\$70,740,000	\$345,992,000	\$416,732,000
Percentage of sample	17.0%	83.0%	100.0%

According to this analysis, conspiracy cases accounted for only a marginally greater rate of loss as compared to solo embezzlement cases. Conversely, solo cases are only marginally less. The 2008 report showed more than twice the rate of losses for conspiracy cases as compared to solo cases – which showed a reduction of about 25 percent. The 2009 report has a much larger sampling and should be more statistically significant than the 2008 report. Nevertheless, we would expect that conspiracy cases would inflict greater losses for longer periods of time. On the other hand we would expect that the nature of a lone perpetrator to be such that they have a lower probability of being revealed compared to conspiracies. Perhaps these two factors weighed against each other in our 2009 data.

Motivation: Was Gambling a Factor?

Overall, we could not obtain enough reliable information on perpetrator motivation to make a scientific study statistically significant. Nevertheless, as with our 2008 report, the apparent motivation in the vast majority of cases in this years' data appears to simply be to support a lavish lifestyle for the perpetrator. However, in a number of cases, it was clearly disclosed that the alleged perpetrator had a gambling problem which may have contributed to their motivation to embezzle. Other motivating factors were identified as well, such as financial woes, compulsive buying disorders, substance abuse and divorce. Based upon the paucity of motivational data available, we believe that the number of cases where gambling and other personal problems as a key factor, are undercounted.

Nevertheless, of the 415 cases in the study, 30 definitively involve gambling as an identified factor. In other words, in more than 7 percent of the cases, the alleged perpetrator was identified as an active gambler or had a gambling problem. This is slightly higher than our 2008 result (6 percent). However, unlike last year's report, in which the 6 percent of cases involving gamblers were responsible for 20 percent of the overall losses (due in part to the massive Fry's Electronics case), the 2009 data shows equal percent loss (7 percent involved gamblers who accounted for 7 percent of the losses).

We note that 27 of the 30 cases involving a perpetrator with a gambling problem occurred in states that allow commercial or Indian gaming establishments. That is, 90 percent of the incidents occurred in states with casinos. We note that 34 of the 51 states (including DC) allow commercial or Indian gaming establishments, or 67 percent. This finding would suggest that proximity to casinos is a factor in driving embezzlement cases. We believe that 7 percent of cases, while perhaps undercounted as noted above, is still a significant number. We conclude that gambling is clearly a factor in motivating would be embezzlers.

Did the alleged perpetrator have a prior history of criminal activity?

Here we also have incomplete data, unfortunately. Nevertheless, 22 perpetrators in the sample of 415 were known to definitely have a prior criminal record. This represents 5.3 percent of the sample. While greater than last year's finding (3 percent), we still would have expected a somewhat greater percentage. We noted in last year's report that we estimate the true number to be between 5 and 10 percent. Contrary to last years' finding, the 5.3 percent of cases with known prior criminals accounted for only 2 percent of overall losses. We would have expected them to have perhaps learned from their mistakes or to be more careful in their thefts, thereby avoiding detection for longer. In any case, we note the following additional statistics:

- 68% of prior criminals held finance positions (roughly the same as overall)
- 95% of prior criminals were solo embezzlers
- 73% of prior criminal were female
- 27% of prior criminals were in California; 14% in Pennsylvania; 9% in Rhode Island; 9% in Mass; 9% in Oklahoma
- 14% of prior criminals were employed by professional services firms; 14% by non-profits

We are not sure that these findings are statistically significant, given that they are based upon only 30 cases. The aggregation of multiple year data will allow for better future analysis.

* * *

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. Our interest in embezzlement cases was piqued after the 2008 launch of our weblog entitled *White Collar Fraud Talk*, wherein we document on a regular basis 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. Please contact us at info@marquetinternational.com.