

# BOARD COMPENSATION COMMITTEES: CEO PAY AND MARKET CAP PERFORMANCE WITH IMPLICATIONS FOR INVESTORS

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## Abstract

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Board of Directors' compensation committees currently have no pay provisions requiring CEO or top executives' compensation claw-backs for market capitalization destruction which could have huge impacts on such top executive pay. For example, CEO pay was correlated with market capitalization performance for 24 companies in the metal mining, primary metal, and coal mining industries. Simple correlation tests of 2013 total CEO pay with market capitalization destruction over the five-year period, January 2011 through December 2015, yielded a 74% weighted average strong correlation. The total annual pay for these 24 CEOs was \$198 million or an estimated \$1 billion over the five-year period from 2011-2015. During this same five-year period, the market capitalization for these 24 companies decreased 73% or \$180 billion. During this same five-year time period, the S&P 500 Index increased 63%. Some corporate governance researchers (Kostyuk, 2014 and Hilb, 2008) have advocated: "Pay for Performance, not Presence" which could include such correlations with claw-back provisions as part of executive compensation packages from Board of Directors' compensation committees.

**Keywords:** CEO Pay, Corporate Governance, Market Capitalization

## 1. INTRODUCTION

Is the vast income inequality in the U.S. necessary? Nobel Laureate Paul Krugman (2016) asked this question and offered three possible economic explanations of where extreme inequality might come from. First, individuals do vary significantly in their productivity. Second, large inequality could be based on luck. Third, huge inequality could be based on power, such as large corporation executives who often get to set their own compensation. If productivity was the major reason for such income inequality, then the wealthy in the U.S. would be mainly entrepreneurs. However, the top 0.1 % of U.S. income earners consists mainly of business executives. Some made their money from risky start-ups as entrepreneurs but most just went up well-established corporate ladders. Thus, the rise in top-level incomes mainly reflects the soaring pay of top executives, not the rewards of innovation (Krugman 2016).

The 2014 pay packages for Chief Executive Officers (CEOs) in the five best performing European Union (EU) economies, Germany, United Kingdom, Netherlands, France, and Belgium averaged approximately \$3 million. In contrast, the 2013 pay packages for U.S. CEOs of public companies averaged \$10.5 million or 3.5 times larger than these EU CEO pay packages (AP 2014). Also, many U.S.

CEOs make \$100,000 per day versus \$10,000 per day for EU CEOs (Lowenstein 2015).

A 2016 U.S. report, The 100 Most Overpaid CEOs, found that 2014 year pay for S&P 500 CEOs had risen by approximately 15.6% while the market value of these companies' shares actually declined slightly, despite massive expenditures of companies' cash on their own common stock buybacks, designed to increase the value of their remaining shares in the market. The report concluded: "CEO compensation as currently structured does not work; rather than incentivize sustainable growth it increases disproportionately by every measure, and receives no consequences. Too often it rewards deals above development and risk rather than return on invested capital" (As You Sow 2016).

In determining the 100 most overpaid CEOs, this report used statistical analysis to compare five-year stock returns with CEO compensation and other indicators, such as CEOs who had low average return on assets but still had big pay raises, perks over \$500,000, large retirement packages, and base salaries over \$1.5 million. A regression analysis showed 17 CEOs with compensation at least \$20 million more in 2014 than they should have had if their pay had been aligned with stock market and financial performance metrics.

The report further observed: "Paying one individual with excessive wealth unrelated to

incentives or results creates a false narrative that such compensation is justified or earned. Confusing disclosures coupled with inappropriate comparisons are then used to justify similar packages elsewhere. These systems perpetuate and exaggerate the destabilizing effects of income inequality and may contribute to the stagnating pay of frontline employees” (As You Sow 2016). This confusing or opaque disclosure strategy has been enhanced by the recent increase in the use of financial performance metrics that do not follow generally accepted accounting principles (GAAP).

## 2. APPLICATION TO MINING AND METALS INDUSTRIES

In a prior study, empirical correlation tests for CEO pay in the three industries of metal mining, primary metal, and coal mining were analyzed (Grove and Clouse, 2015). These three industries were chosen because most of their companies have recently experienced very dramatic market capitalization changes. In our new study, these correlations were extended from a three-year to a five-year period. Total CEO pay in 2013, which was right in the middle of the five-year market capitalization change period from January 2011 through December 2015, was correlated with such market capitalization changes for these three industries. The total CEO pay data by industry was provided by an American union group (AFL/CIO, 2014). The empirical tests in our study used the reported total CEO pay data for

2013 for the eight highest paid CEOs in each of the three industries of metal mining, primary metal and coal mining. The average pay for the 24 CEOs was \$8.3 million (with median pay of \$4.6 million) which implied a significant amount of incentive compensation.

By using this five-year period, our study looked both back and forward for changes in market cap versus total CEO pay. The market cap changes were estimated from January 1, 2011 as these dates seemed to reflect stock price peaks for many companies in these industries. For these 24 companies, the three negative numbers in the second following table reflected market cap improvements versus the 21 positive numbers in the following three tables which reflected market cap destructions over this five-year period.

In Table 1, CEO pay for the eight metal mining companies was correlated with market capitalization change from January 2011 through December 2015. The total CEO pay was \$90.9 million. All eight market cap changes were reductions for a total of \$96.3 billion in market cap destruction. The correlation of CEO pay with market cap destruction was 77% which indicated a strong positive correlation. If the total 2013 CEO pay of \$90.9 million is multiplied by 5 to match the five-year market cap destruction period, the five-year CEO pay is \$454.7 million. The total market cap destruction of \$96.3 billion was approximately 200 times greater than this total CEO pay.

**Table 1.** CEO Pay and Market Cap Destruction (Metal Mining Industry)

<i>Company</i>	<i>CEO Pay</i>	<i>Market Cap Destruction</i>
Freeport-McMoRan Copper & Gold	\$ 55,260,539	\$ 33,315,000,000
Cliffs Natural Resources Inc.	\$ 10,744,662	\$ 12,234,000,000
Newmont Mining Corp.	\$ 8,763,222	\$ 22,984,000,000
Stillwater Mining Co.	\$ 4,783,367	\$ 1,546,000,000
Hecla Mining Co.	\$ 3,854,679	\$ 3,542,000,000
Coeur Mining	\$ 3,602,873	\$ 3,403,000,000
Gold Resource Corp.	\$ 2,334,252	\$ 1,503,000,000
Southern Copper Corp.	\$ 1,603,307	\$ 17,766,000,000
<i>Totals</i>	\$ 90,946,901	\$ 96,293,000,000
Pearson Correlation Coefficient (strong positive correlation)	0.77	

In Table 2, CEO pay for the eight primary metal companies was correlated with market capitalization change from January 2011 through December 2015. The total CEO pay was \$60.0 million. Although three of the eight market cap changes were increases, the net change was \$19.8 billion in market cap destruction. The correlation of CEO pay with market cap destruction was 80% which indicated a strong positive correlation. This net destruction was caused significantly by the first two companies, Alcoa and

United States Steel, with the highest 2013 CEO pay, \$14.8 million and \$12.5 million, respectively. They also had the largest market cap destructions of \$7.2 billion and \$7.4 billion, respectively. If the total 2013 CEO pay of \$60.0 million is multiplied by 5 to match the five-year market cap destruction period, the five-year CEO pay is \$300 million. The total market cap destruction of \$19.8 billion was approximately 66 times greater than this total CEO pay.

**Table 2.** CEO Pay and Market Cap Destruction (Primary Metal Industries)

<i>Company</i>	<i>CEO Pay</i>	<i>Market Cap Destruction</i>
Alcoa Inc.	\$ 14,825,806	\$ 7,231,000,000
United States Steel Corp.	\$ 12,477,409	\$ 7,379,000,000
Nucor Corp.	\$ 8,139,044	\$ 1,125,000,000
Belden Inc.	\$ 5,803,483	\$ (456,000,000)
General Cable Corp.	\$ 4,966,123	\$ 1,059,000,000
Allegheny Technologies Inc.	\$ 4,663,181	\$ 4,797,000,000
Worthington Industries	\$ 4,586,568	\$ (754,000,000)
Kaiser Aluminum Corp.	\$ 4,561,710	\$ (594,000,000)
<i>Totals</i>	\$ 60,023,324	\$ 19,787,000,000
Pearson Correlation Coefficient (strong positive correlation)	0.80	

In Table 3, CEO pay for eight coal mining companies was correlated with market capitalization change from January 2011 through December 2015. The total CEO pay was \$47.3 million. All eight market cap changes were reductions for a total of \$62.7 billion in market cap destruction. The correlation of CEO pay with market cap destruction

was 63% which indicated a moderate positive correlation. If the total 2013 CEO pay of \$47.3 million is multiplied by 5 to match the five-year market cap destruction period, the five-year CEO pay is \$236.5 million. The total market cap destruction of \$62.7 billion was approximately 265 times greater than this total CEO pay.

**Table 3. CEO Pay and Market Cap Destruction (Coal Mining Industry)**

<i>Company</i>	<i>CEO Pay</i>	<i>Market Cap Destruction</i>
CONSOL Energy Inc.	\$ 15,170,492	\$ 9,352,000,000
Peabody Energy Corp.	\$ 10,789,389	\$ 17,612,000,000
Alpha Natural Resources Inc.	\$ 7,955,008	\$ 14,705,000,000
Arch Coal Inc.	\$ 4,348,086	\$ 7,447,000,000
Cloud Peak Energy Inc.	\$ 4,098,089	\$ 1,294,000,000
Walter Energy	\$ 2,941,211	\$ 12,016,000,000
Westmoreland Coal Co.	\$ 1,670,898	\$ 110,000,000
Hallador Energy Co.	\$ 343,777	\$ 172,000,000
<i>Totals</i>	\$ 47,316,950	\$ 62,708,000,000
Pearson Correlation Coefficient (moderate positive correlation)	0.63	

Summarizing the results of CEO pay and market cap destruction from Tables 1, 2, and 3, the total annual pay for these 24 CEOs was \$198.3 million in 2013 or an average of \$8.3 million per CEO, 2.8 times higher than the average EU CEO pay and just 20% below the average U.S. CEO pay in 2013. This approximate \$200 million of CEO compensation is an estimated \$1 billion over the five-year period from 2011-2015. During this same five-year period, the market capitalization for these 24 companies decreased \$178.8 billion or almost 200 times greater than CEO pay. During this five year period, the U.S. S&P 500 Index increased 62%. Why didn't the Boards of Directors' compensation committees of these 24 companies have claw-back compensation features in their CEO pay packages to help protect shareholders, similar to the claw-back requirements of both the U.S. Dodd-Frank and

Sarbanes Oxley (SOX) laws when earnings are restated during such compensation periods?

There were no such claw-back features in CEO pay packages in the metal mining and primary metals industries. In Tables 4 and 5, there were no significant correlations between CEO pay changes and stock price changes. However, in Table 6, there was a moderate positive correlation of 54% between CEO pay decreases and stock price decreases, showing a moderate claw-back compensation feature in the coal mining industry. In Table 7, these coal mining companies attempted to use confusing non-GAAP metrics, primarily Adjusted EBITDA, to offset the negative news of stock price decreases. However, this distractive disclosure strategy did not work as increases in non-GAAP performance metrics correlated 73% with stock price declines.

**Table 4. CEO Pay Change vs. Stock Price Change (Metal Mining Industry)**

<i>Company</i>	2013	2014	<i>CEO Pay Annual Change</i>		2014	2014 & 2015
	<i>CEO Pay</i>	<i>CEO Pay</i>	<i>Dollars</i>	<i>Percent</i>	<i>St. Price Change Percent</i>	<i>Market Destruction (millions)</i>
Freeport-McMoran	55,260,539	10,123,035	(45,137,504)	-0.82	-0.37	36,700
Cliffs Natural Resources	10,744,662	22,627,680	11,883,018	1.11	-0.73	3,800
Newmont Mining Corp.	8,763,222	9,547,404	784,182	0.09	-0.16	2,700
Stillwater Mining Co.	4,783,367	3,546,263	(1,237,104)	-0.26	0.19	662
Hecla Mining Co.	3,854,679	4,526,525	671,846	0.17	-0.08	337
Coeur Mining	3,602,873	3,727,881	125,008	0.03	-0.53	1,100
Gold Resource Corp.	2,334,252	971,886	(1,362,366)	-0.58	-0.24	156
Southern Copper Corp.	1,603,307	1,535,285.0	(68,022)	-0.04	-0.01	2,000
<i>Totals</i>	90,946,901	56,605,959	(34,340,942)			47,455
Pearson Correlation Coefficient (weak negative correlation)	-0.45					

**Table 5. CEO Pay Change vs. Stock Price Change (Primary Metal Industry)**

<i>Company</i>	2013	2014	<i>CEO Pay Annual Change</i>		2014	2014 & 2015
	<i>CEO Pay</i>	<i>CEO Pay</i>	<i>Dollars</i>	<i>Percent</i>	<i>St. Price Change Percent</i>	<i>Market Destruction (millions)</i>
Alcoa Inc.	14,825,806	18,158,522	3,332,716	0.22	0.50	917
United States Steel	12,477,409	13,211,513	734,104	0.06	-0.11	3,200
Nucor Corp.	8,139,044	8,941,639	802,595	0.10	-0.08	4,200
Belden Inc.	5,803,483	6,388,081	584,598	0.10	0.12	956
General Cable Corp.	4,966,123	5,407,435	441,312	0.09	-0.50	781
Allegheny Technologies	4,663,181	7,958,504	3,295,323	0.71	-0.02	2,600
Worthington Industries	4,586,568	4,700,984	114,416	0.02	-0.30	794
Kaiser Aluminum Corp	4,561,710	4,692,501	130,791	0.03	0.02	(238)
<i>Totals</i>	60,023,324	69,459,179	9,435,855			13,210
Pearson Correlation Coefficient (weak positive correlation)	0.22					

**Table 6.** CEO Pay Change vs. Stock Price Change (Coal Mining Industry)

Company	2013	2014	CEO Pay Annual Change		2014	2014 & 2015
	CEO Pay	CEO Pay	Dollars	Percent	St. Price Change Percent	Market Destruction (millions)
CONSOL Energy Inc.	15,170,492	8,326,097	(6,844,395)	-0.45	-0.11	6,800
Peabody Energy Corp.	10,789,389	10,994,083	204,694	0.02	-0.60	5,300
Alpha Natural Resources	7,955,008	7,775,349	(179,659)	-0.02	-0.77	1,300
Arch Coal Inc.	4,348,086	7,345,397	2,997,311	0.69	-0.62	927
Cloud Peak Energy Inc.	4,098,089	4,078,258	(19,831)	0.00	-0.49	974
Walter Energy	2,941,211	6,292,406	3,351,195	1.14	-0.92	1,300
Westmoreland Coal Co.	1,670,898	4,650,943	2,980,045	1.78	0.72	243
Hallador Energy Co.	343,777	3,938,938	3,595,161	10.46	0.38	102
Totals	47,316,950	53,401,471	6,084,521			16,946
Pearson Correlation Coefficient (moderate positive correlation)	0.54					

**Table 7.** Use of Non-GAAP Metrics vs. 2015 Stock Price Change (Coal Mining Industry)

Company	Non-GAAP Metric	Increase to: GAAP Metric	St. Price Change Percent
CONSOL Energy Inc.	Adjusted EBITDA	1.08	-0.77
Peabody Energy Corp.	Adjusted EBITDA	1.29	-0.93
Alpha Natural Resources Inc.	Adjusted EBITDA	1.84	-0.99
Arch Coal Inc.	Adjusted EBITDA	1.11	-0.94
Cloud Peak Energy Inc.	Adjusted EBITDA	1.83	-0.77
Walter Energy	Adjusted EBITDA	1.94	-0.99
Westmoreland Coal Co.	Adjusted EBITDA	1.60	-0.82
Hallador Energy Co.	None	0	-0.59
Pearson Correlation Coefficient (moderate negative correlation)	0.73		

### 3. CEO COMPENSATION AND BOARD OF DIRECTORS' RESPONSIBILITIES TO SHAREHOLDERS

One of the major responsibilities of a company's Board of Directors is to determine the compensation of the company's CEO. The recommendation usually comes from the Board's compensation committee. The compensation package for a CEO can consist of a base salary, incentive pay frequently in the form of shares of stock and stock options, and a severance package that may include a golden parachute. There are many recent examples of CEO compensation levels that have been called into question as to why the Board chose to give these amounts. During the financial crisis of 2008-2009, many U.S. financial services companies lost billions of dollars and had to be bailed out by the U.S. government. However, there were many examples of these companies' CEOs still receiving high levels of compensation, including bonuses. Such examples have resulted in many stockholders, regulators, and legislators questioning whether Boards of Directors are acting in the best interest of shareholders when they are making the CEO compensation decision.

A 2013 research study (Cooper, Gulen, and Rau 2013) found similar results to the 2016 report on the 100 most overpaid U.S. CEOs. The authors summarized their research findings:

"We find evidence that CEO pay is negatively related to future stock returns for periods up to three years after sorting on pay. For example, firms that pay their CEOs in the top ten percent of excess pay earn negative abnormal returns over the next three years of approximately 8%. The effect is stronger for CEOs who receive higher incentive pay relative to their peers. Our results appear to be driven by high-pay induced CEO overconfidence that leads to shareholder wealth losses from activities such as overinvestment and value-destroying mergers and acquisitions".

They defined excess pay as incentive compensation which includes restricted stock grants, option grants, long-term incentive payouts, and other annual noncash compensation. They defined an overconfident CEO "as one who maintains a large proportion of unexercised exercisable in-the-money options relative to their total compensation, measured in the year after firms are allocated into pay deciles...Thus, according to this measure, the highest paid CEOs do in fact appear to be more overconfident than their lower paid peers" (Adams 2014).

The companies studied were the S&P 1550 firms or all NYSE, AMEX, and NASDAQ firms jointly listed on the Compustat Execucomp Database from 1994 to 2010 and on the CRSP files of stock returns from 1994 to 2011. Total median CEO pay consisted of 48% cash compensation (salary and bonus) and 52% incentive compensation for these companies. Firms were sorted annually into industry and size benchmark adjusted CEO compensation, deemed to be excess pay, deciles.

This study found that CEO pay in the top ten percent of excess pay earned negative abnormal returns over the next five years of approximately 13% with a strong negative relation between annual excess pay and future abnormal returns. Also, when high paid CEOs engaged in greater investment activities (capital expenditures and mergers) than low paid CEOs, the stock market reacted more negatively to the merger announcements of these high paid CEOs. The results "suggested that firms with highly paid CEOs earn significantly lower stock returns when the CEO is also overconfident" (Cooper, Gulen, and Rau 2013).

The authors also found "that the level of the industry and size adjusted incentive compensation is significantly negatively related to the forward one-year return of assets. Our results imply that managerial compensation components such as restricted stock, options and long-term incentives

payouts, that are meant to align managerial interest with shareholder value, do not necessarily translate into higher future returns for shareholders” (Morgan 2014). Such poor company performance would be impounded in the negative stock returns by an efficient stock market which could give CEOs an incentive to manage accounting earnings, possibly using non-GAAP metrics, such as adjusted net income and adjusted EBITDA. These new non-GAAP metrics have led to the creation of new performance ratios, such as Adjusted EBITDA divided by Sales, and new leverage ratios, such as Debt divided by Adjusted EBITDA, which reflect confusing, opaque disclosure strategies. Recent examples of such distractive disclosure strategies by the well-known international companies, Apple, JPMorgan Chase, Exxon Mobil, and Volkswagen, are provided in the Appendix.

#### 4. SAY ON PAY RULES

Since 2011, investors have had the right to “say on pay”, per the U.S. Dodd-Frank financial reform law (McGregor 2016). However, various entities, such as mutual funds and pension funds, casting votes on behalf of shareholders, frequently do not represent the shareholders’ interests. In the 2016 report, The 100 Most Overpaid CEOs, mutual funds voted against the top 100 overpaid CEOs only a median 25% of the time although the mutual funds, Schwab and American, voted no about one-third of the time. However, the Vanguard, BlackRock, and TIAA-CREF funds voted in favor of these 100 overpaid CEOs 97%, 97%, and 96% of the time, respectively. Often, there may be a conflict of interest as these funds are also administering the retirement plans of these CEOs’ companies, as opposed to state public pension funds which voted a median 33% against such CEO pay packages.

Also, confusing, opaque disclosures with inappropriate comparisons are often used to justify similar pay packages elsewhere. Nell Minow, a financial press reporter, commented: “While the new rule to give investors a voice in the process had been effective in some ways, it could also have unintended consequences if companies use say on pay yes rates to defend high pay. When they get high votes of approval, it acts as a cover for Boards and their compensation committees. Like other past efforts to rein in high executive pay, no matter what we do, we seem to continue to pour gas on the fire” (McGregor 2016). Thus, such systems may contribute to income inequality for CEOs and top managers and to stagnating pay for company employees.

#### 5. CONCLUSIONS

The tests in this research paper were just simple correlations with no causality implied from any of these correlation tests. However, some corporate governance researchers (Kostyuk 2014 and Hilb 2008) have advocated: “Pay for Performance, not Presence” which could include such correlations as part of top executive compensation packages from Board of Directors’ compensation committees. Claw-back provisions, similar to the requirements of the U.S. Dodd-Frank Act and the U.S. Sarbanes-Oxley Act for accounting restatements, could be expanded to include market capitalization destruction in evolving compensation packages. Claw-backs could also be used when a firm does poorly in relation to its peers.

Board compensation committees could also reconsider the conventional wisdom that CEOs make their best decisions when they have the most incentive-based compensation which is contrary to the results of the 2013 research study cited here. All these conclusions have implications for corporate governance by Boards of Directors. Board compensation committees should revise their compensation packages with claw-backs for market capitalization destruction and poor performance versus competitors.

Unfortunately, to avoid the Dodd-Frank and SOX claw-back requirements for accounting restatements to prior-year financial statements, many firms, with the acquiescence of their auditors, are instead using earnings revisions to current-year financial statements. This strategy relies upon the use of the nebulous, accounting materiality concept which has no numerical guidelines: information is said to be material if omitting it or misstating it could influence decisions that users make on the basis of an entity’s financial statements (IFRS Foundation 2015). Thus, using this revision strategy, such potential restatements are deemed not to be material so they instead become revisions which do not require claw-backs. For example, in 2011, revisions accounted for 57% of the 727 earnings fixes, up from 33% of the 1,384 earnings fixes in 2005 per an Audit Analytics report (McKenna 2012). A further benefit is that the company is not required to file a special 8-K report with the U.S. Securities and Exchange Commission (SEC) and, thus, does not call attention to its earnings corrections for possible market cap reductions and for possible shareholder lawsuits. One securities class action lawyer said his firm has seen revisions, as opposed to restatements, for material write-downs to financial reserves, goodwill, and deferred tax assets (McKenna 2012).

Board compensation committees could also follow the executive compensation policy of Berkshire Hathaway (2009). Concerning executive pay, Berkshire Hathaway dramatically departs from convention. Both the CEO, Warren Buffett, and his vice-chairman, Charlie Munger, have annual fixed salaries of \$100,000 with no bonuses. The majority of their compensation is variable from price appreciation or depreciation of their own Berkshire Hathaway common share holdings which aligns their compensation with their shareholders’ interests of market cap creation (Williams 2015). Thus, they had a real claw-back impact on their 2015 compensation as the Berkshire Hathaway Class A stock decreased from \$226,000 on January 1, 2015 to \$194,000 on January 31, 2016. This decrease in market cap of \$31,643 was a 14% claw-back on their recent compensation consistent with the total 14% market cap destruction of \$25.7 billion for this period. However, from January 1, 1991 to January 31, 2016, the Berkshire Hathaway stock price went up by a factor of 28.6 from \$6,575 to \$194,360, a dramatic increase in market cap.

The use of more innovative types of executive compensation was also supported by the findings of the previously cited 2013 research study where the more the CEO was paid, the worse his/her company did with the effect largest on the 150 firms with the highest paid CEOs (Adams 2014). The companies run by the highest 10%-paid CEOs returned 10% less to their shareholders than their peers did and the companies with the top 5%-paid CEOs returned 15% less to their shareholders. Such research findings,

including the 2016 report, The 100 Most Overpaid CEOs, have reinforced the argument by various economists, lawmakers, and activists that the U.S. corporate compensation systems which attempt to link CEO pay to company performance are badly broken. They have noted that U.S. CEOs make almost 300 times more than their workers. These critics have observed that often CEOs get performance-based bonuses even when their performance failed to meet targets, like many financial industry CEOs who walked away with millions of dollars during the recent financial crisis. Also, over one-third of the highest paid CEOs over the past 20 years have been bailed out by taxpayers, fired from their jobs by their boards, or busted for fraud (Pyke 2014).

To reduce excessive CEO pay and help reverse this U.S. concentration of wealth, the following change to the U.S. income tax code has been recommended: Cap the tax deductibility of excessive executive compensation. Since 1993, the U.S. income tax code has prohibited corporations from deducting executive salaries exceeding \$1 million. Thus, senior executive compensation is now based largely on short-term and noneconomic performance measures that may be detrimental to a company. Use of unaudited, self-determined performance goals for bonuses, instead of financial results reported to shareholders, can ensure payment of bonuses to executives, regardless of whether the outcome is favorable for shareholders or whether the executive contributed to achieving the outcome (Verschoor 2016).

Finally, concerning implications for investors, the increasing use of confusing, opaque non-GAAP measures, which Lynn Turner, the former Chief Accountant of the SEC, calls EBBS or Earnings Before Bad Stuff, may be a red flag or warning for the cover-up of poor financial performance and corresponding poor stock market performance, such as the recent examples of Apple, JPMorgan Chase, Exxon Mobil and Volkswagen in the Appendix. Since Board compensation committees currently do not require CEO or CFO compensation claw-backs for market cap destruction, top executives may not feel any pressure to discuss such poor performance. Also, the increasing use of accounting revisions, which avoid the claw-back requirements of various U.S. laws, as opposed to accounting restatements which do require claw-backs, indicates the reluctance of top executives to have any claw-back features in their compensation packages. However, against much political opposition, the SEC has finally adapted a reporting rule requiring companies to disclose the gap between the CEO pay and the average pay of other employees in the company. Also, the SEC is considering rules that will help expose the gap between the CEO pay and the performance of the companies' shares in the stock market, just as this paper has done with the analyses of 24 mining companies.

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## APPENDICES

### Appendix 1. Recent Confusing, Opaque Disclosure Strategies

A blatant example of using confusing, opaque disclosure strategies with non-GAAP measures came from Apple's quarterly earnings announcement on January 27, 2016. Apple only sold 16.1 million iPads during the Christmas 2015 quarter, compared to a peak of 26 million two years ago. Also, iPhone sales reached a plateau in 2015 with the Apple CEO, Tim Cook, predicting a decline in sales in the upcoming 2016 quarter. There were no official sale disclosures for the new Apple Watch. However, Cook boasted during a 2016 earnings conference call that Apple has "the mother of all balance sheets, with almost \$216 billion in cash, which translates to nearly \$39 per diluted share." However, this non-GAAP metric was distorted by the omission of \$165 billion in liabilities on the balance sheet, another \$40 billion in off-balance-sheet commitments, and a \$30 billion tax liability if Apple brought its overseas trapped cash (about 75% of its total cash) back to the U.S. Netting out all these liabilities against this \$216 billion of "mother" cash, Apple appears to have no free-and-clear cash for its investors. A financial analyst summarized this opaque, confusing, non-GAAP information: "Counting assets and ignoring liabilities is called single-entry bookkeeping. Not a good thing" (Arends 2016). Coincidentally, Apple's stock price had decreased \$13.86 per share from \$110.38 on January 1, 2015 to \$96.52 by this January 28, 2016 earnings conference call. With 5.54 billion shares outstanding, the market cap destruction was \$76.8 billion or 12.6%. There were no claw-back features in this CEO's pay package since his 2015 compensation was \$10.3 million, up 12% from 2014, and up more than 100% from 2013 to \$9.2 million in 2014. The stock had hit a record high of \$134.54 on May 22, 2015.

Another high-visibility, confusing disclosure strategy with non-claw-backs concerned the CEO of JPMorgan Chase, Jamie Dimon. He had his pay raised 35% from \$20 million to \$27 million by the Board of Directors (while cutting staff by 3% or almost 7,000 jobs in 2015 with more cutbacks to come in 2016), as disclosed in a January 22, 2016 press release (MSN.com 2016). The 2016 report, *The 100 Most Overpaid CEOs*, ranked Jamie Dimon as the sixteenth most overpaid CEO. On May 20, 2015, JPMorgan Chase was one of five of the largest worldwide banks, including Citigroup, Barclays, UBS, and Royal Bank of Scotland, who pleaded guilty to criminal charges that they rigged the London interbank offered rate (LIBOR) which impacted the prices of billions of foreign currencies for more than five years. These five banks had to pay a total of nearly \$6 billion with JPMorgan's share being a \$550 million fine plus an additional payment of \$342 million to the U.S. Federal Reserve. For the first time since 1989 with Drexel Burnham Lambert, this U.S. Department of Justice settlement included guilty pleas to criminal charges. However, the SEC granted waivers to these banks, allowing them to continue their securities business as usual (Freifeld et. al. 2015). Per U.S. senator Elizabeth Warren: "JPMorgan

Chase was so chastened by pleading guilty to a crime that it awarded Jamie Dimon, its CEO, a 35% raise" (Warren 2016).

Coincidentally, the JP Morgan Chase stock price had decreased \$5.60 per share from January 1, 2015 through the January 22, 2016 press release on Dimon's pay increase. With 3.68 billion shares outstanding, the market cap destruction was \$20.6 billion or 8.9% so obviously there were no claw-back features in this CEO's pay package. Neither were there any CEO bonuses based upon stock price increases from the beginning prices for 2013, 2014, and 2015, of \$43.93, \$58.48, and \$62.58, respectively.

However, Dimon's 2013 compensation had been cut by one-half or \$11.5 million, primarily for the monstrous derivatives bet, the "London Whale," which cost the company \$6.2 billion. Then, in 2014, his pay was raised 74% to \$20 million, due to the company's "sustained long-term performance and gains in market share and customer satisfaction" (ABC News 2015). The Board also commended Dimon for holding the fines paid in 2014 to federal authorities to \$20 billion! In 2015, institutional investors had tried to split his two jobs of CEO and Chairman of the Board, i.e., the duality factor which is a typical research red flag for poor corporate governance, but were unsuccessful due to the CEO and Board's lobbying against such a split.

These institutional investors had also complained that this CEO's pay was too arbitrary and not tied to objective measures of performance. In contrast, JPMorgan Chase continues to use opaque non-GAAP measures of performance. A January 14, 2016 8-K report to the Securities and Exchange Commission (SEC) discussed opaque non-GAAP metrics for both the fourth quarter and the annual numbers for 2015. 2015 income before income tax expense of \$30.7 billion was adjusted to "income before income tax expense, fixed charges and interest on deposits" of \$39.1 billion, an increase of 27.4%, which, in turn, increased the "ratio of earnings to adjusted fixed charges" from 4.55 to 4.89, an increase of 7.5%. Similarly, the 2015 GAAP overhead ratio of 61% was reduced 4.9% to an adjusted overhead ratio of 58% by excluding firm wide legal expenses of \$3 billion. "Management believes this information helps investors understand the effect of these items on reported results and provides an alternative presentation of the company's performance" (JPMorgan Chase 8-K Report 2016).

Another high profile, confusing disclosure example concerned Exxon Mobil, the largest U.S. oil producer, as the New York Attorney General began an investigation in 2015 to determine whether the company lied about the risks of climate change to the public and to investors about how such risks might hurt the oil business, especially in recent statements to investors. From the 1990s to the mid-2000s, Exxon Mobil funded outside groups that sought to undermine climate science, even as its own in-house scientists were outlining the potential consequences and uncertainties to company executives. Any potential fraud prosecutions may depend on how big a role company executives played in directing campaigns of climate denial. Similarly, Peabody Energy, the largest U.S. coal

producer, has already been under investigation by this same Attorney General for two years about whether it properly disclosed financial risks associated with climate change (Gillis and Krauss 2015).

In addition to the decline in commodity prices, this investigation may be contributing to the decline in Exxon Mobil's stock price. For example, from January 1, 2014 to January 31, 2016, Exxon Mobil's stock price declined from \$101.20 to \$78.48 which reduced market cap by \$94.5 billion, a decline of 22.5%. Meanwhile, the Exxon Mobil CEO, Rex Tillerson, had his compensation increased 18% from \$28 million in 2013 to \$33 million in 2014. The 2016 report, *The 100 Most Overpaid CEOs*, ranked Rex Tillerson as the eighth most overpaid CEO. Concerning opaque non-GAAP metrics, Exxon Mobil uses cash flow from operations plus asset sales. In its February 2016 8-K Report to the SEC, it stated: "We believe it is useful for investors to consider proceeds associated with the sales of subsidiaries, property, plant, and equipment, and sales and returns of investments together with cash provided by operating activities when evaluating cash available for investment in the business and financing activities" (Exxon Mobil 8-K Report 2016).

This non-GAAP metric increased cash flow from operations by \$2.4 billion (\$30.3 to \$32.7 or 7.9%) for the full year of 2015 and 18.6% for the fourth quarter of 2015. The 2014 year increase was 8.8% and 2.7% for the fourth quarter of 2014.

A dramatic non-disclosure example occurring from at least 2008 concerned Volkswagen. If Volkswagen executives had a portion of their pay linked to market cap changes, they might have received an increase in compensation, say based upon the Volkswagen market cap creation of \$43.7 billion during the May 2012-May 2015, non-disclosure, three-year period. However, they would have had to claw-back some of their compensation when the Volkswagen market cap decreased one-third in one week after the diesel emissions software cheating was uncovered and disclosed in September, 2015 or three months later by the end of 2015 when the Volkswagen market cap was still down 15% or \$8.3 billion. For examples of extreme claw-backs, the Volkswagen CEO resigned the same month the cheating was disclosed and, subsequently, eight top Volkswagen managers were either suspended or have resigned by late 2015 with no mention of any golden parachute buyouts (Ewing, Bowley, and Eddy 2015).