

## **CEO:WORKER PAY RATIOS—IT ALL DEPENDS**

**by Graef Crystal**

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Hardly a week goes by but that some writer or other cites a growing gap between CEOs and their workers, producing in the process an inflammatory statistic – one that is not only large but is also described as “growing out of control”.

Discussions of pay ratios have been going on for centuries. In a much earlier time, Plato told Aristotle that no one in a community should possess more than five times the wealth of any other person – not five times the average wealth, but, seemingly, five times the lowest-person’s wealth. (Plato apparently didn’t contemplate the answer to the question: “What’s five times zero?”) So far as I know, Plato never said how he came up with that ratio of five. It would presumably have to be higher today, because back then there were no income taxes to pay.

Through the middle ages, Catholic theologians debated the doctrine of just price, which itself opined on wealth gaps.

At the turn of the 20<sup>th</sup> Century, legendary financier J.P. Morgan thought the ratio should be 20 times.

Later in the century, famed management philosopher Peter Drucker agreed that 20 was a good number.

In a study I conducted in 1974 of CEO-workers pay ratios in major American companies, I found the ratio had advanced to 35 times.

And in my 1991 book “In Search of Excess: The Overcompensation of American Executives”, I found the ratio had moved up to 150 times.

All the above commentators, including me in an earlier time, posited a one-size-fits all ratio that is thought to be applicable in any situation.

But there really is no single pay ratio that works in all situations. Put another way, you can almost have whatever pay ratio you desire.

The calculation of the ratio, of course, is simplicity yourself. You simply divide a CEO’s pay by an average worker’s pay, and voila, you have a ratio.

But both the numerator and the denominator in that calculation can vary, though.

Let’s start with CEOs first.

For openers, we need to define what we mean by CEO pay. Here's my definition, which is the sum of the following elements:

- Base salary.
- Bonus for annual performance.
- The value at grant of free shares granted during the year.
- The estimated present value at grant (using the Black-Scholes model) of stock options granted during the year.
- The "target" value of prospectively-granted performance shares or units granted during the year.
- The present value of pension accruals for the particular year.
- And, as defined by the U.S. Securities and Exchange Commission, miscellaneous compensation.

In every statistical study I have conducted, I have found a strong and statistically-significant relationship between the size of the company and the pay of the CEO. It is not perfect, but knowing the company's size (usually as defined by its sales) typically accounts for some 30 percent of the variation in CEO total pay figures.

Therefore, if you accept as the numerator of your pay ratio the pay of only those CEOs running the very largest companies, you will obtain higher CEO-Worker pay ratios.

Then we have the pay of the average American worker. Ideally, that denominator would be, for each company, the average pay of non-supervisory workers in that company. But those figures are not available.

So I have used as the denominator the 2007 U.S. Bureau of Labor Statistics average American worker pay of an annualized \$36,100.

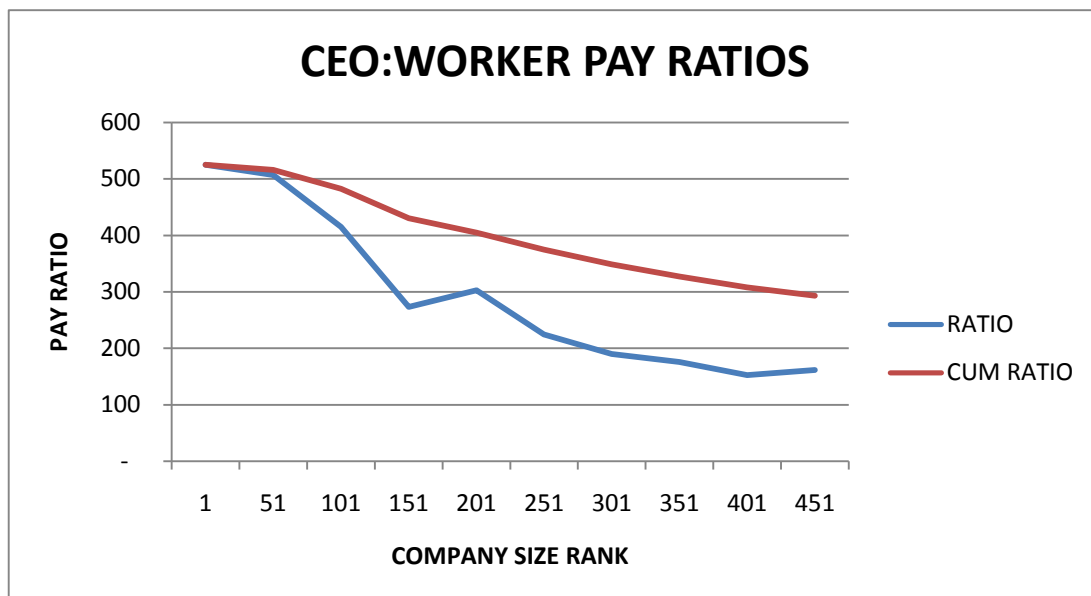
Herewith follows a table and a chart, both capturing the same data. It is based on a study of 2007 pay I performed using 500 companies, all with market capitalizations of \$3 billion or more.

One ratio series displays the ratio for each of ten tranches of 50 companies each, in declining order of 2007 sales. The second series calculates a cumulative pay ratio as you descend the size spectrum, i.e., the ratio for the 50 largest companies, then for the 100 largest companies, then for the 150 largest companies, and so forth.

Here is the table:

SALES RANK		SALES (millions)		AVERAGE		CUM
FROM	TO	FROM	TO	CEO PAY (000)	RATIO	RATIO
1	50	\$36,679	\$358,600	\$18,982	525	525
51	100	\$18,634	\$36,622	\$18,332	507	516
101	150	\$12,990	\$18,424	\$15,011	415	483
151	200	\$9,412	\$12,853	\$9,889	274	430
201	250	\$6,769	\$9,402	\$10,946	303	405
251	300	\$5,107	\$6,705	\$8,127	225	375
301	350	\$3,565	\$5,011	\$6,863	190	348
351	400	\$2,290	\$2,896	\$6,349	176	327
401	450	\$1,435	\$2,277	\$5,517	153	307
451	500	\$452	\$1,433	\$5,842	162	293

And here is the chart:



These ratios are, of course, much higher than they were decades ago. On the other hand, income tax rates for senior executives are generally lower than they were in the past.

For example, in 1962, the maximum marginal tax rate in this country was 91 percent. It was lowered to 70 percent in 1964, then 60 percent and, in 1969, 50 percent. In the mid-1980s President Ronald Reagan lowered it to 28 percent. Under President Bill Clinton, the rate rose to 39.6 percent before settling back under President George Bush to its current level of 35 percent.

So if the pre-tax ratio of CEO pay to worker pay is as high as it has ever been, and if tax rates have generally been lowered over the decades, then it follows that the after-tax ratio of CEO pay to worker pay has absolutely soared.

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