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The economics and ethics of executive compensation

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Dedication

The process of writing this thesis is dedicated to Randy and Ernie (not for its circuitous route but for its relative calm). The product is dedicated to Smith College.

Thank you to Randy for supporting my academic exploration despite some skepticism and for bringing me to focus after my wanderings adrift in tangential ideas. Thank you Ernie for your sage advice neither to allow too many distractions from my thesis nor to buy into the endemic stress associated with theses. Thank you to Smith College for the Ada Comstock program and being a pioneer in adult undergraduate liberal arts education. If women are to have meaningful equality we must be able to leave and return to our educations and careers with as few barriers as possible. Thank you to Smith for providing a more flexible life path.

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Thank you to my family for their steadfast support, especially my husband. Behind some lucky women there are incredible men.

Thank you to Crystal Graef, Carola Frydman, Eric Wruck, Yaniv Grinstein and Kevin J. Murphy who all responded to questions about their research.

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Preface – Why Economics and Ethics?

Labor markets have a tremendous influence on our lives. Wages are the price of labor. The supply and demand for different skills tells us, at least monetarily, what society values. Bok points to this in his preface to The Cost of Talent; he was struggling to think of a topic to talk about in his annual commencement address at Harvard, and had a realization:

> Speakers at similar exercises would be exhorting graduating classes to devote their lives to improving society by helping the poor, defending the environment, fighting for racial justice, and pursuing other worthy ends. The more I thought about this yearly ritual, the more hollow, even hypocritical these speeches seemed… society was making it extremely difficult for graduating students to follow the advice of speakers… When I graduated from Harvard Law School in 1954, I could have taken a job with a Wall Street firm for $4,200 a year or joined a firm in a smaller city for two or three hundred dollars less. If I had decided instead to serve the government as an attorney, I could have gone to the Justice Department for almost as large a salary as private firms were offering. Or else, by giving up only a few hundred dollars in starting pay, I could have become a teacher… By 1987, the outlook for graduating law students was radically different… They could teach for $16,000 per year. They could work for the Justice Department for $25,000. Or they could join a Wall Street firm at a starting salary of $65,000 to $70,000… Moreover, financial consideration couldn't help but loom larger for today's students then they had during my law school days… most students were now leaving the university with large educational debts… Surely, it must be difficult for these young people to accept the message of graduation speakers exhorting them to stop thinking only of themselves and start devoting their lives to noble causes (vi).

Bok argues that the outcomes of markets should not be accepted as the only appropriate measures of what society needs or values. For reasons similar to those Bok outlines, I have chosen to study executive compensation. In this thesis I have tried to approach the following questions: Why do executives earn so much money? And, are their salaries fair?

To address these questions, I have used the lenses of both disciplines. People always react when I tell them I study economics and ethics. They act either surprised or incredulous and sometimes even encouraging. Many people have asked me "how and why," I am integrating these topics, certain that they are irreconcilable areas. Indeed approaching the topic from both perspectives has not been easy. But I am convinced that the disciples can and should have a symbiotic relationship.

For philosophers, what is right or wrong is often an abstract set of principles that to the lay person seem impossibly removed from the realities of daily life. How principles should actually be implemented or what they actually condone is often debatable as the answers depend on empirical realities that are not yet proven. In this sense, there are many disciplines that may have much to offer philosophers in the application of their philosophies. Economists in particular can help to answer questions about economic behavior and provide empirical evidence. Rather than being normative, economic theory has tried to be and should be a positive discipline. As economists learn more about how markets actually work in the messy and complicated world, they refine their models and their predictive power becomes more useful, but useful for what, to achieve what goals? Philosophy becomes essential to answer these questions.

We are all human. As much as one might like to be objective in their approach to furthering knowledge, one is almost always motivated by one's own perception of the world. But according to professor Buchele, "empirical data is what keeps us intellectually honest." My motivation to write this thesis is very much a result of preconceived world views but was fueled by unanswered questions more than ideology: "How can anyone *earn* 10 million dollars a year?" "If there is such a thing as *too* much, where do you draw the line in the sand?" "If I ran a successful company how much could *I* justify earning?"

I did not find a concrete answer to these questions. When I started out I was looking or hoping for an answer along the lines of the restraints imposed by firms like Costco, Whole Foods and Ben & Jerry's. They have pegged CEO pay to multiples of average worker pay or lowest pay with ratios ranging from 8 to 19 times higher for executives (Dvorak B6). Although less simple, what I found was in some ways more reassuring. Just executive compensation does not depend solely on pay and power differentials between employees, managers and stockholders; justice in this area depends upon justice in society as a whole.

Introduction

The following paper is organized in two parts: the first on the economics of executive compensation and the second on the ethics. The first section provides data showing that in real terms executive compensation has been increasing in what looks like an exponential growth pattern. This is a departure from earlier documented periods, when in real terms executive compensation grew slowly and at times declined. The next section reviews some basic economic theories about how compensation is determined and how these theories might be able to explain the observed trends. No current theories fully explain pay over the longer observed periods of time; it may be that over time the determinants of compensation have changed (Frydman and Saks 33). Looking at the 1990s, a shorter period of time which experienced rapid growth in compensation, we find many proposed explanations but little agreement.

The second part of the paper analyzes whether current levels of executive compensation are justified from the perspective of some of the most prevalent philosophical theories: utilitarianism, Rawls' Theory of Justice, and Nozick's entitlement theory. For each of these philosophical frameworks, justice depends on certain facts about the situation either leading to or resulting from high levels of compensation. The facts are largely unknown, incomplete and/or contested. In the absence of proof, the discussion focuses on what would have to be true, from each of these perspectives, for compensation to be justified within each philosophical framework. Necessarily, the discussion focuses on theory.

Part I – The Economics of Executive Compensation

Section I – The Data

I – Introduction to the Data

This section examines the evidence on executive compensation in U.S. firms. The evidence suggests compensation for executives grew at an increasing rate, in real terms, between 1970 and 2000. Compensation levels fell from 2000 – 2003, but remained relatively high.

Rapid growth in compensation during the 1980s and 1990s caused many scholars to study the levels of, and growth in, executive compensation. Together these studies provide a reasonably compelling body of evidence. The studies use the same parameters for what is included in "total compensation;" however, they differ along several dimensions, specifically in terms of the following:

- The number of top executives' compensation included
- The number and type of firms included
- The time period covered
- The use of mean or the median as the "average"

As a result, a single precise time series is not available but there is enough consistency in the trends to provide plausible boundaries around the range of growth estimates.

II – The Data Sources

In the United States, the data available on executive compensation comes only from publicly traded companies. Publicly traded companies traded on US stock exchanges are required by law to report certain financial information to the Securities and

Exchange Commission (SEC). The compensation received by the Chief Executive Officer[1] (CEO) and other top managers is part of that required disclosure[2] (Grinstein; Frydman and Saks 6). There are a few companies that process the raw data providing data bases to researchers of all kinds. A database compiled by Standard and Poor's (S&P), called ExecuComp is the most commonly used by academics. It is comprised of data from 1500 publicly traded companies, those listed on the S&P 500[3], Mid-Cap[4] 400, and Small-Cap 600 companies. The database has information dating back to 1992 (Murphy; Frydman and Saks 4). Unless otherwise noted, all the statistics presented herein are derived from this database. These 1500 firms represent 80 percent of the total market capitalization of all publicly traded firms in the U.S. (Bebchuk and Grinstein 284).

The actual compensation received by an executive is difficult to calculate because firms are not required to disclose all forms of compensation (Bebchuck and Grinstein 284). However, there is a standard working definition of "total compensation" for executives among academics using the ExecuComp database. "Total compensation" is defined as the sum of executive's salary, bonuses, long-term incentive plans, the grant-date[5] value of restricted stock awards[6], the grant-date Black-Scholes value of stock

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[1] According to an email I received from Yaniv Grinstein, "In many instances ExecuComp does not identify which of the top five executives is the CEO. To be consistent we defined the CEO as the executive who receives the highest compensation (out of the top five) in a given year."

[2] Before 1978 corporate reports usually only listed the top three highest-paid executives, after 1978 they reported the top five.

[3] The S&P 500 is Standard & Poor's index of companies with a market capitalization that is considered large. The number of firms reported by ExecuComp as part of the S&P 500 varies year to year, according to the data from ExecuComp emailed to me by Kevin J. Murphy. During the period 1992 - 2002 the number of companies reported ranged between 356 and 491.

[4] Mid-cap is short for medium market capitalization, likewise with small-cap. Market capitalization is a common way to refer to the size and value of a company. It is the price of each share multiplied by the number of shares outstanding.

[5] Grant-date means the value of the options granted or restricted stocks awarded at the time they were awarded rather than at the time they will be "cashed in".

options[7] and "other compensation"[8] (Jensen, Murphy and Wruck 25; Balsam 40; Bebchuk and Grinstein 284; Frydman and Saks 7). Until December 2006, the SEC did not require disclosure of the value of pension plans or perquisites under $50,000 (Bebchuk and Grinstein 284; Balsam 40; Calculating The Pay Figures 9). Perquisites are benefits that come with the job, like car service.

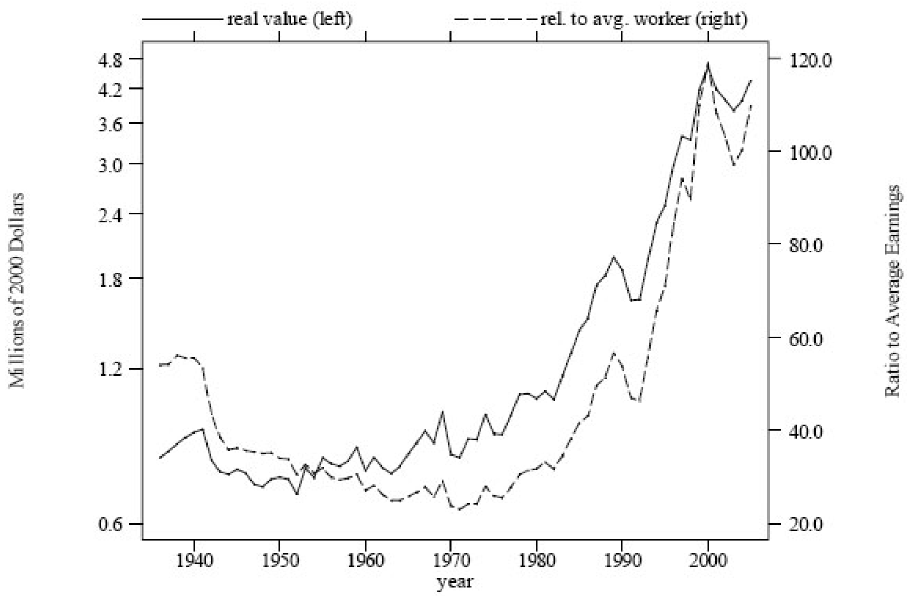
III – The Long-Term Trend

Few long-term studies exist, but Frydman and Saks of have written a paper which includes data from 1936 – 2005. They report the median value of total compensation for top executives, using ExecuComp for the time period from 1992 – 2005. They hand-collected data from 1936 – 1991 using 10-K reports from SEC records. Their sample size is of 101 firms, this relatively small sample size is due to the laborious nature of hand collecting data 1936 – 1992. They include the largest 50 publicly-traded corporations (in terms of revenues) in 1940, 1960 and 1990. For these firms they collected annual data. The sample includes 101 companies total, as some of the same companies were among the largest 50 multiple times (5). They find that for the time period of 1936 to 2005, top[9] executive compensation, in real terms, has increased from .9 million to 4.8 million in year

[6] A restricted stock award is the same as a stock grant. The firm gives employees stocks outright. The stock option or grant can be restricted with a clause prohibiting the sale of the stock for a period of time.
[7] A stock option is the right to buy stock at the "exercise price" which is usually the price of the stock on the grant-date and has an expiration date, usually around 10 years, after which the stock option can no longer be exercised. The main difference between an option and a grant is that a grant is worth something as long as the stock has any value. A stock option is only worth something if the stock increases in value (Balsam 38).
[8] This category can include items from corporate cars and apartments to life insurance and the ability to defer compensation at above market rates of interest.
[9] They look at the top three executives determined by the highest three salaries from 1936-1978 and the top five from 1978-2005 are SEC reporting standards changed (Frydman and Saks 6).

2000 dollars. This is an increase of 433 percent. The figure below is from Frydman and Sak's 2007 study (46).

Figure 1
Median Value of Total Compensation, 1936-2005



Note: Total compensation is composed of salary, bonuses, long-term bonus payments, and stock option grants. Relative compensation is defined as total compensation divided by total wage and salary accruals per full-time equivalent employee from table 6.6 of the National Income and Product Accounts. Based on the three highest-paid officers in the largest 50 firms in 1940, 1960 and 1990.

Figure 1 Median Value of Total Compensation from Frydman, Carola, and Saks, Raven E., "Executive Compensation: A New View from a Long-Term Perspective, 1936-2005." Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C. (2007): 1-48. 11 Nov. 2007 <http://www.federalreserve.gov/pubs/feds/2007/200735/200735pap.pdf>

From 1950 – 1975 compensation grew slowly, "averaging 0.8 percent per year." By the late 1990s, growth had increased to more than 10 percent per year (Frydman and Saks 7). The striking thing about their time series is the decline from 1940 – 1950 and the rapid acceleration beginning in the 1980s. There were 433 percentage points of overall growth from 1936 – 2005, most of which occurred between 1980 and 2005. Over the 69 year period, approximately 88 percent[10] of the overall growth was experienced in the last 25 years.

IV – The Recent Data

a. Bebchuk & Grinstein

Lucian Bebchuk of Harvard Law School and Yaniv Grinstein of Cornell University's Johnson School of Management, wrote a paper in 2005 examining the trends in executive compensation. They examined all 1500 S&P companies over the ten year period of 1993 – 2003. They discussed them by size as measured by their market capitalization, providing separate data for the S&P 500, MidCap 400 and SmallCap 600. They provide information on the rise of compensation for both the CEO compensation alone and the top five executives as a group. In 1993, the mean compensation (in 2002 dollars) for S&P 500 CEO compensation was $3.7 million; by 2003 it was 9.1 million. That is an increase of 146 percent (Bebchuk & Grinstein 285). The top five executives' salaries in the S&P 500 companies increased 125 percent.

During the same period the use of stock options and stock grants also increased. For S&P 500 CEOs the percentage of equity-based compensation started at 41 percent in 1993, peaked at 78 percent in 2000 and was at 59 percent in 2003. The figures were very similar for the top five executives and the trend was similar though the percentages smaller for Mid-Cap and Small-Cap firms (Bebchuk and Grinstein 290). At its height, mean CEO compensation for S&P 500 firms hit 17.4 million. This was followed by a decrease from 2000 – 2003, but "the levels stay quite high relative to the beginning of the

[10] The graph reads median executive compensation was approximately 1 million in 1980. Of the 433 percentage points approximately 380 were between 1980 and 2005 or 88 percent of the overall growth.

period under consideration" (Bebchuk and Grinstein 285). This decrease may be attributable in part to a decline in the stock market.

TABLE 1: MEAN COMPENSATION LEVELS 1993-2003

The table displays mean compensation levels for CEOs and top-five executives in firms that belong to the S&P 500, Mid-Cap 400 and Small-Cap 600 indexes. All figures are adjusted for inflation and are in 2002 dollars. Compensation in any given year is defined as the sum of salary, bonus, total value of restricted stock granted, total value of stock options granted (using Black-Scholes), long term incentive payouts and other compensation. Top-five compensation is the sum of the five largest compensation packages that the firm gives to its managers in a given year.

	CEO			*Top five executives*		
Year	*S&P500* *($M)*	*MidCap400* *($M)*	*SmallCap600* *($M)*	*S&P500* *($M)*	*MidCap400* *($M)*	*SmallCap600* *($M)*
1993	3.7	2.2	1.3	9.5	5.8	3.2
1994	4.4	2.6	1.6	10.7	6.4	3.9
1995	4.8	2.9	1.5	11.9	6.8	4.0
1996	7.0	3.3	1.9	15.8	8.1	5.0
1997	9.1	4.2	2.2	20.0	9.9	5.4
1998	10.7	4.6	2.4	23.7	10.4	5.6
1999	12.7	5.1	2.3	28.3	11.4	5.7
2000	17.4	5.1	2.5	36.6	12.1	5.9
2001	14.3	4.7	2.6	31.9	10.6	5.7
2002	10.3	4.7	2.2	23.5	10.3	5.2
2003	9.1	4.0	2.0	21.4	9.4	4.7

Table 1 Mean Compensation Levels from Bebchuk, Lucian, and Grinstein, Yaniv. "The Growth of Executive Pay." The Oxford Review of Economic Policy 21 (2005): 283-303.

For CEOs of small and mid cap companies the mean growth in compensation was 81 percent and 54 percent respectively. For the top five executives of small and mid cap companies it was 62 percent and 47 percent. The largest growth in compensation happened in the largest companies and growth in CEO pay outpaced that of other top executives. We will see when we examine data on median compensation that these trends were not the sole result of a few outliers. Historically the difference between mean and median compensation for top executives was "relatively small and stable" until the 1980s (Frydman and Saks 13). Since then it has roughly doubled, but the increase in pay for executives in lower echelons was still considerable, a similar trend to those on the top, and was also a distinct departure from earlier documented trends (Frydman and Saks 14).

b. Jensen, Murphy and Wruck

Another paper, “Remuneration: Where we’ve been, how we got to here, what are the problems, and how to fix them,” by Jensen, Murphy and Wruck also uses the S&P 500 ExecuComp database and finds a similar trend of increased growth. Their study is different in that they focus only on CEO compensation, use data from two time periods, 1970 – 2002 and 1992 – 2002 and discuss only mean compensation as their “average” (Murphy).[11] Their figures are given in 2002 real dollars.

Figure 2: Mean Cash and Total Remuneration for CEOs in S&P 500 Firms, 1970-2002

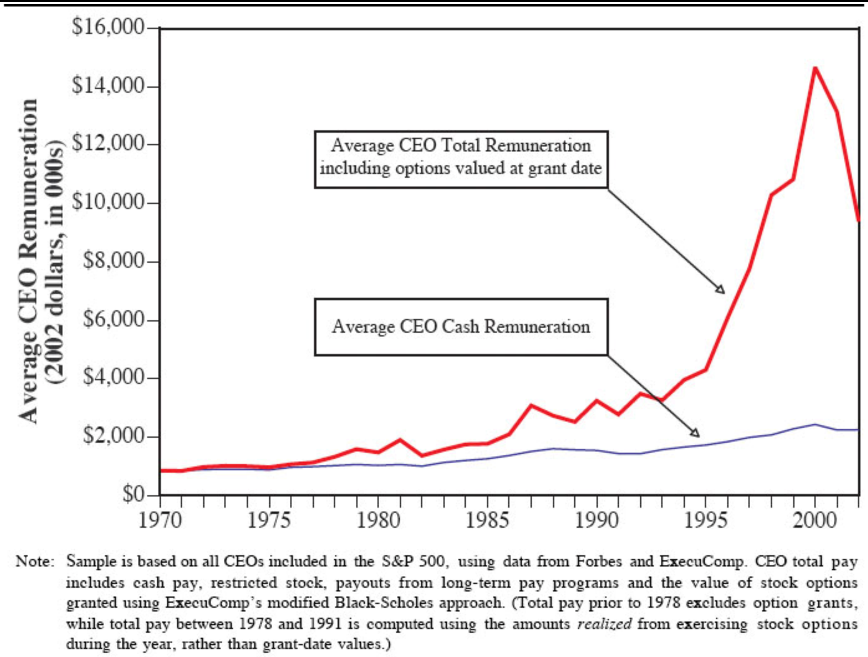


Figure 2 Mean Cash and Total Remuneration for CEOs in S&P 500 Firms, 1970 – 2002 From Jensen, Michael C., Murphy, Kevin J., and Wruck, Eric G., “Remuneration: Where we’ve been, how we got to here, what are the problems, and how to fix them”. European Corporate Governance Institute, EGCI Working Paper Series in Finance (2004): <October 12, 2007, from http://ssrn.com/abstract=561305>

[11] This is according to an email correspondence with the Kevin J. Murphy, one of the authors.

While total compensation increased by 1,006 percent from $850,000 in 1970 to $9.4 million in 2002, cash compensation grew by 159 percent increasing from $850,000 in 1970 to over $2.2 million in 2002 (Jensen, et al. 25). Although the growth of (inflation adjusted) cash remuneration is dwarfed by the growth of total compensation, it did nearly triple. The increased use of equity-based pay will be discussed in the section on explanations of the growth in executive compensation.

Unfortunately Jensen, Murphy and Wruck, used figures they accidentally labeled as inflation adjusted but which were not actually adjusted for inflation. I learned this from contacting the authors regarding discrepancies between their data and that of other economists. The authors emailed me the following data, which they got from ExecuComp. According to this data, CEO compensation for S&P 500 firms grew by 170 percent from 1992 – 2002.

Table 2: Mean CEO Compensation for S&P 500 Firms in 2002 dollars.

Fiscal Year	Firms	Real Total Pay (Avg $2002)	Total Pay (Avg)
1992	395	$3,480.8	$2,715.2
1993	408	$3,259.7	$2,617.8
1994	421	$3,952.7	$3,257.3
1995	445	$4,300.7	$3,643.8
1996	459	$6,086.9	$5,308.5
1997	464	$7,771.4	$6,934.8
1998	465	$10,289.4	$9,325.0
1999	478	$10,829.6	$10,029.7
2000	491	$14,668.0	$14,041.9
2001	491	$13,144.5	$12,939.6
2002	356	$9,388.8	$9,388.8

Source: Data from ExecuComp[12] from Murphy, Kevin J. "Re: Question For A Smith Student On CEO Compensation." Email to author. 9 Dec. 2007.

[12] Any discrepancy between this data and that of Bebchuk and Grinstein's data is likely due to the use of different versions of ExecuComp which are continually updated, according to an email from the author Kevin J. Murphy.

c. Balsam

Steven Balsam, Director of the Ph.D. Program in Business at Fox School of Business at Temple University, provided data from 1992 – 2000 in his book <u>An Introduction to Executive Compensation</u>. He also uses ExecuComp, however he presents both the mean and the median levels of compensation which gives a good cross-reference for the median figures Frydman and Saks provide from a different data set. According to Balsam, the mean total compensation package grew from 1.69 million dollars in 1992 to 8.5 million dollars in 2000. He gives figures for all 1500 companies in the ExecuComp database, not just the S&P 500.

Balsam's figures are considerably lower than in both of the previous studies mentioned. This is because he includes all three cap size companies, using the 1500 firms in ExecuComp's database rather than only those in the S&P 500, unlike the previous studies. Yet the pattern of growth is the same. According to these data, both the mean and median were experiencing rapid growth. This is consistent with Frydman and Saks growth in that the mean figures outpaced that of the median (Balsam 49). The similar trend in both mean and median figures indicates the growth was not due solely to a few outliers. The following table lists the mean and median of compensation and the graph shows the mean growth in compensation by component (49).

Table 3: Averages of CEO Compensation Package in Millions of Dollars by Year*

Year	Mean Total Compensation	Median Total Compensation
1992	1.698	.997
1993	1.798	1.076
1994	2.109	1.198
1995	2.193	1.245
1996	2.947	1.466
1997	3.464	1.679
1998	3.681	1.865
1999	5.474	2.13
2000	8.466	3.188

Source: ExecuComp Data from Balsam, Steven. An Introduction to Executive Compensation. San Diego, CA: Academic Press, 2002.
*Dollars at not inflation adjusted.

V – Conclusions

Taken together, these studies support each other, painting a relatively consistent picture of the increase in executive compensation. Each study is based on different parameters, so I will point out some similarities and discrepancies. To compare the figures I have created a table. Figures from Balsam were translated into 2002 dollars using the Consumer Price Index from the Bureau of Labor Statistics website (US Dept of Labor). I chose the start date of 1993 and an end date of 2002, because that was the first and last dates for which all the studies had values. I included 2000 because that was, by a consensus of the data, a peak point.

Table 4: Comparisons of Mean CEO Compensation in Millions of 2002 Dollars*

Authors	1993	2000	Increase '93- '00	2002	Increase '93- '02
Bebchuk & Grinstein	3.7	17.4	370%	10.3	178%
Jensen, Murphy & Wruck	3.48	14.7	322%	9.4	170%
Balsam	2.23	9.1	308%	--	--

Table 5: Comparisons of Median Compensation in Millions of 2002 Dollars*

Authors	Whose Compensation	1993	2000	Increase '93- '00
Balsam	CEO	1.34	3.33	149%
Frydman & Saks**	Top Executives	2.29	5.01	118%

*Balsam gives his figures in nominal numbers. Frydman and Saks used real 2000 dollars. All other author's work used was already given in 2002 dollars. I used the Bureau of Labor Statistic's Consumer Price Index Calculator to translate Balsam, Frydman and Sak's figures into 2002 dollars.
**Figures were not given in the text or as a table of data. I had to approximate off a graph. For 2000 the figure 4.8 million is clear to read. For 1993 I estimated that it was about 2.2 million.

The reason Balsam's figures are lower is because his data is for the S&P 1500, not the S&P 500. The figures are lower but the percentage increase is significant suggesting that the trend was not isolated to companies with large market capitalization. Though the Bebchuk and Grinstein study used the same sample as the Jensen, Murphy and Wruck study, the database is updated regularly and figures may change based on the version used according to an email exchange with Murphy. This may be an explanation of the difference between their figures. They have a 2.7 million dollar discrepancy in the magnitude of CEO compensation in S&P 500 in 2000. However, they agree that from 1993 – 2002 real CEO compensation grew at least 170 percent in S&P 500 firms.

Balsam's figures for the median are close to those of Frydman and Saks for the time period, 1992 – 2000, though Balsam looks at CEOs rather than the top five paid executives. Frydman and Saks show growth from approximately 1.6 million in 1992 to 4.8 million in 2000 (in real 2000 dollars), an increase of 200 percent. Balsam's figures for the median were 1.22[13] million in 1992 and 3.19 million dollars in 2000, an increase of 161 percent. The difference is likely explained by sample size and composition as Balsam has a larger sample that includes Mid and Small Cap companies. But these different studies using different samples agree on the general trend in their data. Frydman and Saks, comparing this period to previous periods for their sample, observed that "this acceleration represents a marked departure from the trend in compensation in the past" (1). Jensen, Murphy & Wruck agree that the data shows executive compensation has "increased dramatically" since the 1970s (24).

For top executives as a whole during the 1990s, we have figures from Frydman and Sachs as well as Bebchuk and Grinstein. Frydman and Saks said that the growth of median compensation from 1995 – 1999 was "more than 10 percent per year" (1). Based on Bebchuk and Grinstein's, work I would say the growth of mean executive pay was about 19 percent per year. The main difference between the figures is the measure of average, mean versus median.[14] The difference between these figures is not what is significant. The difference between these growth rates and historical growth rates however stand in stark contrast with each other. During WWII median executive pay grew slowly and even declined a little from 1950 to 1975; over the entire span the growth rate averaged 0.8 percent (Frydman and Saks 7). We do not have a figure on mean top executive compensation earlier then 1970 but the figures given for mean CEO pay and median top executive pay in 1970 despite different data sets are very close, both figures

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[13] After I translated his 1992 figure of $997,000 into real 2000 dollars.

[14] Some of the difference might also be explained by the difference in sample size and composition. Frydman and Saks used 101 companies rather than 500, most of which were in older industries such as manufacturing (Frydman & Saks 7). It may be that these older industry companies had slower growth in CEO compensation during the 1990s than newer areas of the economy like technology firms. In the year 2000, CEOs in the manufacturing sector were among the lowest paid relative to other industries (Balsam 51).

are just below 1 million dollars (Jensen, et al. 25; Frydman and Saks 46). The mean and the median levels of compensation have been growing farther apart. But the pace of growth for median compensation has also increased substantially. We can surmise that the same is probably true for the mean likely even more so. The median growth rate has increased from 0.8 percent to 10 percent a year and the mean growth rate rose to nearly 20 percent a year. Why?

Remuneration for the chief executive officers and top executives increased significantly during the 1990s. Despite the lack of a single time series, each of these studies shows a significant boost in executive compensation. Mean and median compensation have increased in both long and short term studies as well as across firm size. There is a reasonable degree of consistency in the data. The question is what caused this growth?

Section II – The Theory

I – Determinants of Executive Compensation

The growth in executive compensation cannot be explained without knowing what determines executive compensation. The list of proposed and debated determinants includes firm size, firm performance, industry, executive wealth, executive performance, and labor market forces but these are all debated. We do not have a clear or comprehensive explanation of what determines executive compensation.

Though the executive labor market is not a perfectly competitive market[15], increases in wages in a competitive labor market should be the result of either a decrease in the supply of workers or a shifting out of the demand curve. Some theories suggest the fundamentals of supply and demand have changed due to an increasing number of firms, technological advances or a globalized economy. However the degree to which these market forces are hampered by less then perfect competition is unknown[16] and most of the major theories have to do with other factors which we will discuss.

There may be strong, if not perfect, competition in the executive labor market. If so, the economic theory of competitive labor markets predicts workers will be paid a sum equivalent to the value of the marginal product of labor, which would be the dollar value of their contribution to the firm's revenue (Frank and Bernanke 327). Executives are not manufacturing widgets. They coordinate the efforts of others, planning firm-wide actions, making contacts and doing work that is generally team-oriented and takes the cooperation of many people. Human capital theory says that pay is determined in

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[15] There are almost no perfectly competitive markets. Perfect competition requires no product differentiation. Frank and Bernanke define perfectly competitive markets as "a market in which no individual supplier has significant influence on the market price of the product" (G-4).

[16] There are so many factors that effect executive compensation; it is hard to know how much the wages are driven up and down by the mechanisms of a competitive market.

proportion to the “stock” of human capital “an amalgam of factors such as education, training, experience, intelligence, energy, work habits, trustworthiness, and initiative that affect the value of a worker’s marginal product” (Frank and Bernanke 331). Determining exactly how much of the firm’s performance is attributable to the top executives has not been figured out. There is, however, one determinant that is largely agreed upon as at least a major determinant of pay, firm size.

In larger firms managers manage more people and more money; therefore, larger firms should have higher compensation for executives. Also a good decision resulting in a ten percent increase in value for shareholders results in a greater dollar amount for a larger firm (Balsam 292). Thus, an increase in firm size would predict an increase in executive compensation. “The cross-sectional relationship between firm size and executive pay has remained relatively stable” (Frydmans and Saks 19). In their own data Frydman and Saks found a firm’s “relative position in the distribution of firm size has consistently accounted for about 20 percent of the variation” in compensation from 1936 to 2005 (21). Bebchuk and Grinstein found that controlling for changes in firm characteristics, firm size and performance explained 20 percent of the total increase in pay for top five executives from 1993 – 2003 (288). The Bebchuk and Grinstein study was consistent with Frydman and Saks’ findings though they had a sample size roughly five times larger.

II – Explanations of the Growth in Executive Compensation

If economists cannot agree on the determinates of compensation, neither can they agree on the reasons for the rapid increase in pay during the 1990s: “It is doubtful that any single factor can explain the long-run trends in executive compensation” (Frydman and Saks 15). The only consensus among economists on this subject is that no theory yet explains the sudden rise in full (Jensen, et al. 35; Frydman and Saks 15, 33; Bebchuk and Grinstein 284). There are so many such hypotheses that I do not have room to discuss them all but I will mention a few prominent ones.

There are several theories that have to do with the fundamentals of the labor market for executives. Murphy and Zabojnik propose that the upward trend in CEO pay "reflect[s] a change in the composition of managerial skills needed to manage a modern corporation" (193). A change in the set of skills needed would be a change in the human capital required.

There are many theories that are tied to the boom market. Some theories propose that the rise of the technology industry increased demand for executive talent faster than the supply, though this would presumably be a self-correcting problem (Bebchuk and Grinstein 298). Another boom theory is that investors were less likely to be outraged by large pay packages since the booming market meant investors got rich along with executives (301). However this would leave us to wonder why pay packages have continued to increase after the market changed (Frydman and Saks 7). A similar theory is that social norms constraining top wages have fundamentally changed (Piketty and Saez 35). There are many anecdotes and theories about changes in social norms in the business world and society at large. It is proposed that unlike in the past having the highest compensation is now equated with success rather than with greed.

Another theory is that most firms are trying to be above average and, therefore, are too competitive in their pay practices: "Language is powerful… since pay below the 50th percentile is often labeled 'below market' while pay between the 50th and 75th is considered ‘competitive,’ the surveys have contributed to a ‘ratchet’ effect,” according to Jensen, Murphy and Wruck (56). This explanation could work in tandem with almost every other explanation.

Other theorists propose that compensation increased to compensate for the risk associated with increased equity-based pay; a majority of the increase in executive pay has been in the form of stock options. However, according to long-term analysis there has been significant pay-for-performance throughout the 20th century, but previous fluctuations in levels of risk have not appeared to cause an increase in overall compensation (Frydman and Saks 31).

There is no hard evidence proving any of these theories. In the absence of empirical data, the increase in executive compensation is at this point unexplained by economic theory. These claims add up to a potential explanation but do not yet qualify as full or tested explanations. What we do know, however, is that the major increases in pay came in the form of equity-based compensation. And that the equity-based pay was intended to help solve the principal-agent problem.

III – The Principal-Agent Problem

a. What is the Principal-Agent Problem?

Top executives are salaried employees of the firm but they are also in control of the firm. What is to stop them from acting in their own interest instead of in the interest of their employer – the stockholders? This situation is referred to as the principal-agent problem. If the agents (executives) take actions which are contrary to the interests of principals (shareholders) which result in decreased value, the losses are called “agency costs" (Pay Without Performance16). Offering ownership in the company to executives is intended to align the interests of managers who act as agents for the owners with the interests of shareholders.

b. The Historical Use of Stock Options

Historically executives have owned stock in the firms they managed. However they did not received stock as an annual part of their compensation. In fact, equity-based pay was not originally targeted at solving the principal-agent problem as it is today. In 1950, a change in the tax code created restricted stock options which are taxed as capital gains and therefore at a lower rate than labor income (Frydman and Saks 9). In the following five years, more than 40 percent of the firms in Frydman and Saks' study had adopted the use of restricted stock options; by the 1990s, 82 percent of executives received stock options (10). The most notable difference between the use of options in the 1960s and in the 1990s is the frequency with which they were awarded and the duration for which they were held (23). Stock option grants emerged as a significant part of pay in the 1960s because of the new tax law, but options had not become a regular component of annual pay. Prior to the 1980s, the percentage of "executives *receiving* options… was relatively modest" but the percentage of executives "*holding* options was large" (23). In the 1960s, 64 percent of top executives held options but in any given year an average of only 28 percent were granted options (23).

During the 1970s, stock options fell out of favor due to "a prolonged depression in the US stock market" (Jensen, et al. 26). Jensen, Murphy and Wruck claim that half the variation in pay was determined by firm size and therefore the incentive structure "rewarded size and growth and not value creation" (27). "Because firm size explained half of the variation in pay between firms, executives had incentives to create "unproductive diversification and investment programs… which in turn contributed to increases in excess capacity that further depressed company share prices" (26). I have not seen similar claims in the other studies I've read and there is no empirical evidence given to support the claims. I mention the reasoning because Jensen and Murphy wrote papers arguing that increasing equity-based pay such as stock options would correct executive incentives and enhance firm performance.

c. Equity-Based Compensation as a Solution

As mentioned earlier, although executives have historically held stock in the firms they managed. However as firms have increased in size, the percentage of the firm which they own has decreased. There is a debate among economists as to whether absolute sums or percentage of the firm owned is more important in aligning the interests of agents with those of the principals (Baker and Hall 768). Which executive has greater incentives, the executive who owns ten percent of the firm which is equivalent to one million dollars, or the executive who owns two percent of the firm which is equivalent to 50 million dollars? The answer to this question has many implications.

Jensen and Murphy concluded that as firms grew, executives were left with relatively trivial incentives based on the assumptions that "the marginal product of effort was constant across firm size" and therefore incentives are determined "by the dollar change in CEO wealth per dollar change in firm value" (Baker and Hall 769). They thought that increased firm size should result in more equity-based pay for two reasons. First, as mentioned earlier they hypothesized that pay being largely tied to firm size encouraged CEOs to grow the firm beyond its optimal point so instead pay should be tied to performance. Second, as firms grow incentives decrease because executives own smaller percentages of the firm. According to the hypothesis, these both led executives to act like bureaucrats. In this scenario, larger pay packages in the form of equity-based pay were not only recommended but they would be absolutely essential in resolving the principal-agent problems which Jensen and Murphy credit with at least adding to the economic malaise of the 1970s (Jensen et al. 27). They are largely credited with, and accept credit for, the subsequent increased use of equity-based compensation (Jensen, et al. 27; Cassidy 254; Bebchuk and Grinstein 299, 300; Erturk et al. 50).

d. A Resurgence in Popularity

Stock options reemerged in the 1990s. It was argued most notably by Jensen and Murphy that equity-based pay provides better incentives and therefore addresses the principle-agent problem. Historically the value of stock option grants between 1950 and the 1980s "fluctuated between 15 and 30 percent;" by 2005 35 percent of total median pay was in the form of stock options (Frydman and Saks 9). Bebchuk and Grinstein's research on a larger sample of similar size firms, shows equity-based compensation increasing from 37 percent in 1993 to 55 percent in 2003, after having peaked in 2000 at 72 percent based on an aggregation of all compensation for top executives (290). The difference between Frydman and Saks' 2005 number of 35 percent and Bebchuk and Grinstein's number of 55 percent may be due to a continued decrease after the peak in 2000 but it is also likely due to the difference between the mean and median.

For a graphic illustration of the growth of the equity-based portion of CEO pay, refer back to Figure 2. For CEOs in S&P 500 firms, Bebchuk and Grinstein's percentages are quite close to those of Jensen et al., sometimes slightly higher and others slightly lower, but generally within 5 percent of each other starting at 41 and 47 percent respectively in 1993 and ending at 67 and 64 percent in 2002. Again the discrepancy could be due to the use of different versions of the ExecuComp database. There is, however, a consensus among economists that the bulk of the recent increase in executive compensation came in the form of equity-based compensation.

e. Has Equity-Based Pay Solved the Agency Problems?

Presumably the answer to this question lies with the improved performance of firms which resulted from leadership at the top. However like the determinants of pay, the determinants of incentives are also debated. George Baker and Brian Hall say, "A confusing debate rages among academics and practitioners about what determines CEO incentives" (767). Depending on the type of incentives and performance measures they use, economists come up with divergent conclusions. However, there seems to be widespread agreement that the agency problems have not been eradicated (Jensen et al. 47; Pay Without Performance 62; Crystal 107; Erturk et al. 52). Some people point to the magnitude of the pay, others to the wave of corporate scandals exemplified by the collapse of Enron. Some point to the poor design of performance pay, others point out the executives are rewarded if the succeed but also if they fail.

Jensen et al., who are proponents of equity-based pay, propose that in the 1990s overvalued equity made the implementation of their proposals for increased equity-based pay problematic:

> "Like heroin for an addict, overvalued equity generates highly misleading signals for an organization and its board managers… in the presence of significantly overvalued equity such equity-based incentives are like throwing gasoline on a fire – they make the problem worse, not better…We believe it would be unwise to return to the old days in which managers were paid like bureaucrats and all the problems associated with

> that situation… all compensation schemes have the potential to both reduce and to increase agency problems. Many but not all of the problems with equity-based remuneration can be traced to the lack of required long-term horizons that can be resolved" (Jensen et al. 45, 47, 48).

Bebchuk and Grinstein argue that equity-based pay was linked to the market as a whole, not individual performance, because the gains made by the firms were not indexed to their industry or the performance of other firms (300). Therefore executives were not being rewarded for their own work, and thus equity-based pay was not solving the principal-agent problem (300). Bebchuk, Grinstein and Fried in their various articles also contend that equity-based pay could play a role in solving agency problems, but if it is to do so reforms are needed. A discussion of the reforms needed is outside of the scope of this paper.

f. Compensation as the Result of Agency Problems

Bebchuk, Grinstein and Fried believe that the level of compensation today reflects the ability of managers to influence their own pay process, which would allow them to earn more than they could otherwise. Economists call this rent extraction. Bebchuk, Grinstein and Fried argue that executive pay in its current form is a product of, rather than a solution to, the principal-agent problem. Bebchuk and Fried give several theoretical arguments for ways in which CEOs have influence over their own pay (Executive Compensation as an Agency Problem). In rebuttal Murphy and Zabojnik assert that "surely, CEOs were trying to extract rents even 30 years ago" (192). Frydman and Saks say the "explanation does not seem to fit well with the changes in executive pay over time" because the "level of pay and the use of options were lower from the 1950s to the 1970s than in more recent years, even though corporate governance was arguably weaker" (3). Bebchuk and Grinstein defend their argument that executives are extracting rents. They say that their theory explains how executives have taken advantage of changes in other factors not that rent seeking is new, only that corporate greed has found new success and executives have better means through which to influence their own pay.

The empirical evidence does not answer the question of whether or not agency problems have been solved, but suggests that there is reason to doubt it has been yet. However, even if high levels of pay solved all agency problems, could these levels of pay be justified? To answer this question, we will move to philosophical arguments.

Part II – The Ethics of Executive Compensation

Section I – Philosophical Arguments

I – Introduction to Ethics

Lay people are usually not as concerned as philosophers about being consistent and comprehensive in their moral theories and rationale. Often people will draw on several moral philosophies. The more kinds of justifications the better supported it feels, but this can create contradictions. Critics of executive compensation might say, "How can anyone *earn* that kind of money? This rising tide isn't lifting *all* boats. What a bunch of crooks." These criticisms appeal to a sense that pay must be earned, that it is unjust for a few to enrich themselves and that to do so is a form thievery. There is no reason why one can't criticize an argument by proving that by all measures and from any perspective it would be wrong. But one cannot as easily argue that it would be right from all perspectives. So to provide an account of what would be just one must choose between existing philosophies or pioneer a new theory.

II – The Utilitarian Argument

Utilitarians argue that just actions are those which maximize happiness or utility[17], the assumption being that happiness is the greatest good. This point is, of course, arguable. Our purpose, however, is to see what elements of utilitarian theory apply to executive compensation and how. When we consider how to theoretically

[17] Utility is sometimes used as a synonym for "happiness". However for economists they are not synonymous. They define utility as "satisfaction derived from their consumption activities" (Frank and Bernanke 120). The term consumption is used broadly; an example would be choice between consuming more work or more leisure.

maximize people's happiness, we immediately stumble across some problems: happiness for whom, at what cost and how to measure it? Utilitarians generally speak of maximizing happiness for society. Any action that increases overall happiness is an ethical action, regardless of the motivation behind it.

How does one maximize happiness for a group? This practical question raises other questions. Is the suffering of a few justifiable if the outcome is greater happiness for society? A common illustration of these concerns is the persecution of the innocent to calm a frenzied public. One could justify executing or imprisoning a few innocent people to create calm. Most utilitarians believe that in reality maximizing happiness will not result in extreme harms to individuals, but they have no theoretical argument against such sacrifices were they to maximize utility. Measuring happiness and making interpersonal comparisons is one of the stickiest points in utilitarian theory. Whether the suffering of some outweighs the happiness of others cannot be measured. Comparisons of happiness are done through self evaluation. How would I know if, on a scale of one to ten, my level five happiness is the same as your level five? This does not stop society from agreeing that the theft of a bicycle generally causes less disutility then murder and therefore has lighter penalties. But inability to measure utility empirically does stop economists from attaching any values to utility that are not ordinal.

Given the premise of utilitarianism, one would have to know that higher levels of executive compensation maximize happiness to know if current levels of executive compensation are justifiable. In theory this question could be answered empirically with aggregate measures of utility. However there is so much conflicting evidence and so many considerations that I was not able to find *the* answer in my research. If the current levels of compensation are the most efficient way to motivate managers and to produce utility for society, then they are justified. And if greater inequalities would provide greater benefit overall, then they too would be justified.

There are economists who think extreme wage inequality has serious negative effects on the economy and society from increased costs of maintaining an average lifestyle to increased crime and decreased social capital (Heckman and Krueger 19; Bok vi; Frank 43). It could be that inequality created by relatively high levels of executive pay has a negative net influence on society. Or it could be that there is a declining marginal utility of money, in which case the wealthiest would receive the least benefit from further wealth and therefore money should be distributed more equitably or be redistributed. I mention this because it is very important from a utilitarian perspective to maximize utility. In the end, whether or not current levels of executive pay are justified is going to depend on the net impact on overall utility.

We could argue that theoretically the level of pay might be an effective motivator for executives which translates into increased value for the firm and society or that the inequality created by excessive pay has a negative impact on society or that high levels of executive pay have both positive and negative impacts. But to answer the question we must know the net impact. The impact on aggregate utility would be positive if executive compensation is an effective means for maximizing utility. But even if the benefits of strong incentive structures outweigh the costs of increased inequality, utilitarians will prefer whatever method maximizes overall utility, which could be some other option altogether. There is no data that conclusively proves the incentive structures that produce such inequalities also produce a net positive gain. Virtually all economists have problems with measures of total social utility.   In the absence of empirical proof, we do not know if current levels of executive pay are justified in a utilitarian framework.

III – Nozick

Nozick recognizes no social goods beyond the protection of individual entitlements. Nozick is dedicated to preserving the rights of the individual. He rejects any claim society may have on the individual to make sacrifices other than taxation for a minimal state which provides military defenses and law enforcement. Nozick believes in a contractual concept of justice based on the logic that a series of individual just actions cannot add up to an unjust outcome.

Nozick calls his theory of economic justice "entitlement theory." If someone comes into possession of property through just means, he can then do whatever he wishes with his property so long as to do so does not violate anyone else's rights. One can come into possession of property by having been given the property by someone else that came into it through just means or by acquiring it themselves through adding value to natural resources or an exchange with others that is not coerced or fraudulent. Inequality itself is not a state of injustice as far as Nozick is concerned.

In a Nozickian framework there can be no such thing as too much compensation for the executives of the firm as long as consumers consent to buy, investors choose to invest and the board agrees to the compensation package (in the absence of fraud). It is not a matter of motivating the executive for the greatest efficiency to maximize benefits for society. Nozick does not propose that each individual person will in fact act for the benefit of society by acting out of consideration for themselves. He defines the optimal outcome as one in which individuals' rights are protected, including the right to property.

In the absence of fraud, theft or violations of the principles of fair acquisition, any level of pay is theoretically justifiable. Jared Harris argues that current levels of executive pay are unjustified to the extent to which the executive "compensation-setting process falls short of attaining true liberty, transparency, and voluntary acquiescence by stakeholders" (81). Harris says that, "Nozick argues that a thief is not entitled to his ill-gotten gains, it follows that executives who use an insider's advantage to enrich themselves at the expense of other stakeholders also do not attain just entitlement" (81). Although Harris does not use the term "rent-seeking" he argues that to some degree rents are likely being extracted (84).

In a Nozickian framework, executive pay is not justified if rent seeking is a form of thievery or constitutes a breach of contract. If not, then the extraction of rents is of no concern to Nozick. Economic rent is defined as, "the return on a productive resource, as land or labor, that is greater than the amount necessary to keep the resource producing or on a product in excess of what would have been the return except for some unique factor" (Dictionary.com). Some rents are the result of fraud others are not.

Since the Nozickian framework permits rent-seeking in the absence of outright fraud or breach of contract, we must ask if executive compensation is set in a fraudulent way. There is reason to believe this is not the case. One, compensation packages are public knowledge as the SEC requires their disclosure and are part of the contract employment and approved by the board of directors. Two, shareholders[18] can research

[18] I say shareholders instead of stakeholder, the term Harris used, as stakeholders have no entitlement to the profits of the firm as described by the principles of just acquisition.

this information, judge how well the stock is doing, and decide for themselves whether or not management deserve what they get. Therefore, in this case whether or not rents are being extracted is irrelevant.

In determining whether or not executive pay is just, the only relevant concern left is the justice in acquisition and subsequent exchanges of property and labor. To start a series of just actions there must be a just beginning. Nozick asks, “Is an injustice done to someone whose holding was itself based upon an unrectified injustice? How far back must we go in wiping clean the historical slate of injustice?” (152). To answer the question of justice, in respect to executive compensation, we must know if the initial situations that led to current levels of executive compensation were just. When was the beginning? Nozick goes on to say that he knows of no “theoretically sophisticated treatment of such issues” but that “the principles of rectification presumably will make use of its best estimate of subjective information about what would have occurred… if the injustice had not taken place” (152).

Though Nozick asserts that “justice in holdings is historical; it depends on what actually happened” he does not try to sort out what actually happened himself and neither will I (152). He does suggest that an estimation of the distribution might be justifiable. He gives an example that is similar to the situation of executive compensation. He says it *could* be that, “the operation of the system over time washes out any significant effects from the initial set of holdings” and he illustrates how that might work; “if almost anyone would have bought a car from Henry Ford, the supposition that it was an arbitrary matter who held the money then (and so bought) would not place Henry Ford’s earnings under a cloud. In any event, *his* coming to hold it is not arbitrary” (158).

Many transactions in the past may not have satisfied Nozick's principles but likely many did. In either case subsequent transactions gave rise to current levels of executive compensation and likely would have anyway. The real litmus test for justice with Nozick is the actual historical circumstances. In the absence of needed historical information the current levels of executive compensation are only as justifiable as everyone else's holdings are within a Nozikian framework – which is an open question. In the absence of fraud, there is nothing intrinsically wrong with any pay level for anyone within the Nozickian framework, therefore executive compensation levels are most likely justifiable.

IV – Rawls

Like Nozick, Rawls rejects utilitarianism because it lacks respect for the individual. Rawls' A Theory of Justice does not aim at maximizing happiness. Rather than defining ethics as the maximization of a good like happiness, Rawls proposes our pluralistic society needs a conception of justice that allows for many conceptions of the good. Justice for Rawls is not a matter of the distribution of happiness. Instead, Rawls is concerned with the distribution of primary social goods that are assumed to be the means of achieving diverse conceptions of the human good and of well-being. Primary social goods include rights, liberties, opportunities, income and wealth (Rawls 79). Rawls believes that principles of justice can be found through a hypothetical agreement or social contract. He proposes imagining ourselves behind a "veil of ignorance" famously called the "original position." Under such a circumstance he believes that we would agree to certain moral principles, principles of justice that govern the distribution of primary social goods.

The principles Rawls proposes in his book A Theory of Justice are as follows,

> "First: each person is to have an equal right to the most extensive scheme of equal basic liberties compatible with a similar scheme of liberties for others" (53).
>
> Second: "social and economic inequalities are to be arranged so that they are both (a) to the greatest expected benefit of the least advantaged and (b) attached to offices and positions open to all under conditions of fair equality of opportunity" (72).

When examining executive pay from a Rawlsian perspective we must ask if the inequality created by such large compensation packages helps the least well off. Utilitarianism aims to maximize total utility for society. Inequalities are justified so long as they generate more total utility; it provides no theoretical basis to argue against something that makes the poor worse off as long as society is better off. Rawls believes that people in the original position would not choose to maximize the net balance of social utility but to maximize their chances of being as well off as possible (160).

But Rawls' main problem with utilitarianism is that there are no individual rights in a utilitarian framework. The first part of Rawls' second principle, often referred to as, "the difference principle," says aggregate wealth itself is irrelevant; inequalities must improve the economic expectations of the least well off. In essence if relatively high levels of executive compensation can be shown to generate economic benefits for the least well off, then the resulting inequalities are justifiable. Are current levels of compensation justified in a Rawlsian framework? If not, what would have to be true to justify these economic inequalities?

Part II – The Rawlsian Perspective on Executive Compensation

I – Further Explanations of the Difference Principle

The most controversial part of Rawls' theory is the difference principle, which states that inequalities in income and wealth must benefit the least well off: "The difference principle represents, in effect, an agreement to regard the distribution of natural talents as in some respects a common asset and to share in the greater social and economic benefits made possible by the complementarities of this distribution" (87). It is not enough for inequalities to do no direct harm. The principles prohibit increasing the wealth and income of one group even if doing so has no economic effect on the position of the least well off. This is a very high standard; why should we agree to it? Rawls claims that we deserve neither our natural talents nor our starting place in society (our class or family advantages and disadvantages) (89). Rawls says that there are some entitlements based on rights to natural talents guaranteed by the first principle of liberty, which protects the "integrity of the person," and therefore individuals are entitled to whatever they can acquire within the rules of a "fair system of cooperation" (89). Whether or not one has particular natural endowments is not a matter of justice or injustice, it is a natural fact; how society deals with the natural fact of inequality is the subject of justice (87).

Objections to this principle only seem compelling after one becomes attached to one's own particular set of natural talents. Once an individual has grown attached to their talents, such as a sharp mind or good looks, then they may understandably want to take advantage of them for their own gain without considering the plight of the least well off;

but the principles of justice were not chosen after the individual found out their place in the "natural lottery" that is the "distribution of native endowments" (Rawls 89). Behind the veil of ignorance there is no guarantee that an individual will receive any natural or social advantages. Risk-averse rational people will choose the system that promises the highest minimum expectation both socially and economically. There is much at stake.

Economic theory tells us that people have different levels of risk aversion just as they have different preferences. Rawls assumes that under the conditions of the original position people will be fairly risk averse because the outcome will have profound consequences for their life prospects. This rings true on an instinctual level. If one had a choice between being a member of a society with a relatively equal income distribution or an unequal one, which is preferable? High levels of inequality are no guarantee of economic growth or prosperity; nor is an equal distribution. In a Rawlsian framework one is guaranteed an equal opportunity to participate meaningfully in society. In Nozick's framework one is guaranteed a right to their property, if they have any. If one accepts Rawls, then one must reject Nozick. If that is the case, what are the implications for executive compensation in accepting a Rawlsian framework?

II – Further Explanation of the Fair Equality of Opportunity

A fair equality of opportunity requires that offices and positions of power would be open to all those qualified without arbitrary barriers. Within a firm, a fair equality of opportunity would involve making sure that the application process for top executive positions was open and fair. But this would also have to be true for other positions of power throughout society. For executive compensation to be just, all positions of power that affect a firm would have to be filled through open and fair procedures, from the judge and legislators to board members of a firm. Fair equality of opportunity would require "roughly equal prospects of culture and achievement for everyone similarly motivated and endowed. The expectation of those with the same abilities and aspirations should not be affected by their social class[19]" (Rawls 63). To equalize the prospects of all such individuals would require a pervasive equality in educational opportunities that lead to work experience and the further acquisition of relevant skills. To do so is neither under the control of the firm, the executives, or their boards of directors. In this sense, justice in executive compensation requires fair institutions in society at large. The same is true of all positions of power and prestige from professorships to political offices.

III – Applying Rawls to Executive Compensation

Rawls does not spell out exactly how his principles should be brought to bear in the world. However the government of a given society is certain to have a role in the actualization of Rawls' principles if they are to be manifested. In this case the US government, as we have been discussing executive compensation in America. Rawls says, "The indivisibility and publicness of certain essential goods, and the externalities and temptations to which they give rise, necessitate collective agreements organized and enforced by the state" (237). Rawls specifically writes that certain kinds of capitalist and socialist systems could be compatible with his principles of justice (238, 242).

Because executive compensation in America is a function of a capitalist system and a privately owned firm, we will limit our discourse to capitalism. However our

[19] Using this quote and line of reasoning was inspired by Krouse and McPherson's inquiry into which system is more compatible with Rawls' theory or justice, a free-market capitalist system, a "property-owning democracy," or a welfare state.

capitalist society under a Rawlsian framework would be quite different from how the Unites States functions today or has functioned in the past. Necessarily the discourse will remain somewhat abstract. Rawls' work focuses on the principles of justice; likewise, this analysis will focus on the implications of Rawls theory on the theory of compensation for executives. We will look at how the difference principle might constrain wages, how the fair equality of opportunity might affect social capital as a determinate of compensation and what kind of redistribution both might require. But we must first figure out how to apply Rawls to executive compensation.

Since Rawls is concerned with justice in the community it might be tempting to try to simplify the analysis by applying his principles only to the firm, asserting that the firm is a community. However, this is problematic. Certainly the lowest paid employees in a firm may be among the least well off but Rawls' principles are to be applied to the political community as a whole. They are not to be applied to a community as small as the firm. But applying Rawls' theories to society on the national level would have direct implications for executive compensation as we shall see. In the era of globalization one might ask why not apply Rawls' principles internationally. However, Rawls says he "will be satisfied if it is possible to formulate a reasonable conception of justice for the basic structure of society conceived for the time being as a closed system isolated from other societies" (7). He insinuates that if the conception of society became global one might expand beyond the nation-state, but for the time being our conception of society is strongly tied to the nation-state.

IV – The Distribution of Income and Wealth

a. Income and the Difference Principle

In theory the difference principle puts no upper limit on the amount of inequality in society. Any inequality that results in greater expected benefit for the least well off is just. There is no limit to how small the increase could be for the least well off nor how large the increase could be for those who are better off. In theory a one million dollar increase for the best off could result in a ten dollar increase for the least well off and be completely justified. However, that inequality will result in increased expectations for the least well off is not assumed.

The default income distribution in a Rawlsian framework is equal. The distribution of income is to be equal unless inequality increases the expectations of the least well off. There must be grounds for believing that inequality will increase the expectations of the least well off. No trickle down mechanism is assumed. For inequality to be accepted there would need to be actualization not just predictions. If the inequality did not result in benefits for the least well off, likely there would cease to be grounds to believe that they would in the future. If inequalities are no longer expected to increase the expectations of the least well off, then they are no longer justifiable. There must be sound reason to expect that the least well off would actually benefit. Furthermore, if one million dollars of inequality is required to benefit the least well off, then it is justified. But if the same improvement can be made for 100,000 dollars then one million is not justified. But the difference principle is not the only constraint on inequality.

b. Income and the Fair Equality of Opportunity

The degree of inequality is constrained. As Rawls notes, “Although in theory the difference principle permits indefinitely large inequalities in return for small gains to the less favored, the spread of income and wealth should not be excessive in practice, given the requisite background institutions” (470). The background institutions Rawls refers to include branches of government to provide social minimums and maintain equal educational opportunities. Without the opportunity to participate in society fully there is no justice. Participating in society is to one’s own advantage: “In justice as fairness society is interpreted as a cooperative venture for mutual advantage” (Rawls 73, 74). Rawls believes equality in education and opportunities will result in a more equal distribution of income.

In their careful consideration of Rawls, Krouse and McPherson point out that Rawls assumes that wage differentials under his system would be due primarily to the “various disutility of work” such as unpleasantness or danger of the task or investment needed to perform the work such as large amounts of education (92). For Rawls then the distribution of income is based on contribution to society in the form of providing services that are unpopular for whatever reason. Therefore, differences in wages would reflect ambition rather than arbitrary natural endowments (Krouse and McPherson 93). They contend that, in fact, differences in natural talents would create greater wage inequality than Rawls anticipates because many forms of scarce natural talents would not be equalized by any amount of education, such as the talents of sports stars. The scarcity of their skills is precisely what makes them into stars.

This is relevant to executive compensation, becuase some economists hypothesize that rising CEO compensation is due to their becoming like rock or sports stars.

Economic theory would predict that the high wages executives receive might be an indication that the special skill set needed by top executives is in fact scarce[20]. If the skills needed to be a top executive are not in fact primarily naturally scarce talents but are largely learnable skills which many more could acquire, then Rawls' framework would presumably lead to a greater dispersal of human capital because it requires background institutions which would provide equal opportunities in education. Economic theory predicts that more people gaining greater amounts of human capital would increase the supply of skilled workers and would drive down wages at the top. A greater dispersion of human capital would also cause a decrease in the supply of unskilled workers and would drive up wages at the bottom. It would also decrease the amount of economic rents that those with learnable human capital could extract.

However the experience required to become a top executive may always be limited by the number of positions available in the firm that would provide the requisite experience for becoming an executive. If scarcity of talents and skills are due to scarcity of positions that would prepare one for top management, then the result would be just as long as at all levels positions are open to those who have the requisite skills. The amount of natural talents versus learned skill required is perhaps a knowable matter; however, it is not yet known. The answer would dictate both the amount of naturally resulting inequality and the institutions (such as progressive taxes) required to keep the principles uncorrupted.

[20] "It is interesting to make the comparison with sports stars, such as baseball players, who are often invoked by US CEOs when trying to justify and excuse their pay. As Flanagan (2003) notes, by 1990 the average baseball player earned $600,000, with only a handful of superstars claiming multi-million dollar pay (p. 28). It should also be pointed out that the sport star's career in inevitably short and always at risk of ending prematurely through injury or underperformance" (Ertuck et al. 57).

c. Wealth

Rawls writes, “The existing distribution of income and wealth… is the cumulative effect of prior distributions of natural talents… and their use favored or disfavored over time by social circumstances and chance contingencies as accident and good fortune” (63). For Rawls, not only is the existing distribution of income and wealth morally arbitrary, it has the potential to undermine liberty and the fair equality of opportunity as mentioned before. Therefore, there should be mechanisms in place to equalize existing inequalities and prevent reconcentrations of wealth. Justice requires social institutions: “Without the appropriate scheme of these background institutions the outcome of the distributive process will not be just” (Rawls 243). Rawls proposes four branches of government: an allocation branch to “prevent the formation of unreasonable market power; a stabilization branch to “strive to bring about reasonably full employment;” a transfer branch intended to provide the social minimum and finally a distribution branch (244, 245). Objections may include that governments can be corrupt or corrupted. Oversight is an issue and government power would certainly require transparency and a system of checks and balances. This is not a special problem for Rawls. Nor is it a special problem of government; corruption and oversight issues are the same in nature as the principal-agent problem.

The distributive branch of government has two missions: to use inheritance taxes to equalize intergenerational wealth and to use either a sales tax or an income tax to raise revenues for providing social services necessary for fair equality of opportunity and social needs (245, 246). Rawls goes on to say that proportional taxes might provide better incentive structures and therefore could be more efficient. If so, then they may be the better choice. If that were not the case, then justice might require that inequalities in income be tempered by something like a progressive income tax. However, Rawls is concerned with the negative incentives that it could introduce and believes it would be less preferable. However these are empirical questions and are not themselves part of a theory of justice (246). The actual make up of these institutions could affect all compensation and how they affect incentives might be an argument for which type of institution to adopt.

If the special talents of executives allow firms in the aggregate to offer more employment in the aggregate to the least well off, then presumably executives could be justified in receiving some degree of greater pay. *If* even the least well off owned some property, this might put upward pressure on their wages helping create a dynamic where inequality is more likely to be beneficial to the least well off. For executive compensation to be just any resulting inequalities in income and wealth could not be inherited by the next generation except in amounts that do not threaten liberty or the fair equality of opportunity and are compatible with the difference principle[21] (Rawls 245). How steep the resulting inheritance taxes would be, is again a matter which depends on

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[21] Rawls specifically says that "Inheritance is permissible provided that the resulting inequalities are to the advantage of the least fortunate and compatible with liberty and fair equality of opportunity." What kind of inherited inequality would be to the advantage of the least well off? On page 263 Rawls talks about Keynes' example of income inequality resulting in the ability to make large capital investment that would have been impossible with an equal distribution of income and which consequently benefited the least well off as it fueled economic growth and raised the standard of living across the board. But he goes on to say that inequality is by no means guaranteed to create benefit for the least well off. "It is only in the special circumstances, including the frugality of the capitalist class as opposed to the self-indulgence of the aristocracy, that a society should obtain investment funds by endowing the rich with more than they can decently spend on themselves. But the essential point here is that Keynes's justification, whether or not its premises are sound, can be made to turn solely on improving the situation of the working class" (Rawls 263). This situation depended on the sensibilities of a capitalist class with restrained appetites but would have been quite different if the inequalities were between workers and an aristocracy with appetites for decadence.

empirical evidence which we lack but would be affected by savings rates, growth rates and the wealth of society (255).

V – Rawlsian Conclusions

a. Could the Current Levels of Executive Pay Be Justified?

To justify current levels of executive compensation one must show that the income inequality creates a benefit for the least well off. It may be that executives, more than other highly paid individuals like sports stars, are likely to have a direct positive economic impact on the least well off for two reasons. First, when an executive in a very large firm makes a decision it can potentially affect millions of dollars thus having large and direct economic impact. Second, there is a positive correlation between firm size and wages throughout the firm (Oi and Idson 2166). Larger firms my offer better paid work to employees. An argument that larger firms can offer all workers higher wages but to do so requires paying managers significantly more, might justify executive compensation in a Rawlsian framework. The argument requires not just creating economic growth, but economic benefit for the least well off.

Though the difference principle itself does not constrain the amount of inequality in theory, the principle of a fair equality of opportunity does. For the current levels of compensation to be justified the economic, educational and political system would have to be insulated from the influence of economic inequality. Rawls doubts this is possible. But if he were wrong and it is possible to have both a fair equality of opportunity and great inequality, then inequality would be justifiable so long as it benefits the least well off. Following Rawls' principles would themselves potentially hamper the negative effects of inequality. Justice for Rawls depends on the entire system; justice in executive compensation would require justice throughout society. Equality of opportunity would have to be pervasive through out society.

Rawls' principles would potentially promote greater income equality in incomes through market forces. Fair equality of opportunity could lead to a greater dispersion of human capital. Rawls also believes under his system property would be more widely held. Increased dispersion of human capital and wealth could potentially drive up workers wages. If so, then Rawls' framework would be self-reinforcing to some degree. If Krouse and McPherson are right and Rawls does underestimate the scarcity of natural talents, then market forces would counteract the influence of equal education and opportunities. Either way, as long as the least well off benefited and the resulting inequalities did not violate the principle of fair equality of opportunity, then current levels of executive compensation could be justified.

b. Are Current Levels of Executive Pay Justified?

To be able to determine whether or not the expectations of the least well off are improved, one must establish who the least well off are. Rawls defines the least well off as those who are least favored in three categories, "persons whose family and class origins are more disadvantaged than others, whose natural endowments (as realized) permit them to fare less well, and whose fortune and luck in the course of life turn out to be less happy…" and adds that "various refinements will certainly be necessary in practice" (83). Rawls stipulates that he is assuming health and intelligence within a normal range and that the individual is a "full and active participant in society" who is "engaged in social cooperation" because "if the principle fails for this case, it would seem to fail in general" (84). He goes on to give a very specific example suggesting that a reasonable measure of the least well off might be anyone earning less than half of the median income (84). The stipulation of being a full and active participant in society would preclude either the independently wealthy or those who choose poverty by not taking paid work. Wealth in addition to income might be considered in identifying the least well off, however Rawls spends very little time talking about concrete examples.

The degree of inequality determines the degree of injustice: "How unjust an arrangement is depends on how excessive the higher expectations" are for those already advantaged (Rawls 68). Rawls is referring to economic expectations. There may be some problems comparing the average wages of workers with executive compensation, but the following statistics give a general illustration of the growth in relative terms. In 1970 median executive compensation in the largest US firms relative to that of average workers was a ratio of about 25 to 1, by the year 2000 that had increased to over 100 to 1 as can be seen in Figure 1 in the first section (Frydman and Saks 46). Other data show the same trend. According to Crystal Graef, using mean CEO compensation rather than median executive compensation, the ratio to average earners income has increased from 45 to 1 in 1973, to 140 to 1 by 1991, and 500 to 1 in 2002 (Cassidy 254).

Increased "expectations" is a somewhat vague notion. While workers wages on average have not decreased, the rate of wage growth for workers has slowed considerably during the period when manager's pay increased dramatically. In absolute terms workers continued to become better off but perhaps not as they may have expected based on historical gains to workers from increases in productivity. Though workers are earning less relative to managers, their incomes have grown in real terms and so have their benefits such as healthcare which are not included in the figures above. But it cannot be assumed that because wages are rising for the median, they are also rising for the least well off. Take the following two scenarios of income distribution: 6, 3, 2, 2, 2, and 7, 4, 4, 1, 1, the median income has risen while the least well of are worse off.

Though certainly not exhaustive, there is some empirical evidence that the least well off have not benefited. According to statistics compiled from the US Census Bureau by economist Alan Krueger, from 1973 – 2000 the bottom quintile of family annualized income grew in real terms by 0.7 percent per year while the top quintile grew by 3 percent (Heckman and Krueger 6). Alone this is not enough information. During the previous period of 1947 – 1973 the bottom quintile grew more than the top. The bottom quintile grew at 3 percent per year while the top grew at 2.4 percent (6). This may in part be due to the fact that many women joined the workforce from 1973 – 2000, doubling family incomes. Poorer families had two small incomes while wealthier families had two larger incomes, as most people tend to marry in their own economic tier, thus magnifying the increased growth at the top and the slowing growth at the bottom.

If these examples accurately reflect the position of the least well off in general then the least well off have not clearly benefited from the increased compensation for executives. If that is the case, then the current levels of compensation are not justified in a Rawlsian framework and have become increasingly unjust. Just levels of executive compensation are not dependent on the absolute sum executives receive but on the structures of society and the ability to create a system where inequalities generally produce benefits for the least well off. However enacting a set of Rawlsian institutions might create a system in which income inequalities would more likely be more be fair.

Conclusion

The first section of this paper presented data documenting the rise of executive compensation. After a long period of slow growth, which at times included a decline in the real value, executive compensation began a trend that looks like exponential growth. The trend was most striking at the top, but even median pay experienced unprecedented growth. The lowest estimate for the growth of CEO mean pay between 1993 and 2000 was 308 percent. For the top five executives, the lowest estimate for the mean are for an increase of 120 percent. There was a brief decline in executive pay from 2000 to 2002; executive compensation packages have once again continued to rise in real terms (Frydman and Saks 7). All of these figures are striking in contrast with the historical average growth rate of 0.8 percent between 1950 and 1975 (7).

The second section of the paper explained some of the ideas that economists have been debating as possible reasons for the rapid increases in executive compensation. However there are no conclusive answers to why executive compensation increased or even what the determinants are of executive compensation. What is known is that the increases came in the form of increased equity-based pay. The move to greater equity-based compensation was proposed as a means of addressing the principal-agent problem. However, it is unclear that agency problems have been remediated by these measures.

The third section of this paper looked at possible philosophical frameworks for justifying the current levels of executive compensation. These included the Utilitarian perspective and the modern responses to it by both Rawls and Nozick. Within a Nozickian framework any level of executive compensation could be justifiable assuming just acquisition and transfer. Being that it was fairly easy to make a case that any level of compensation could be justified by Nozick, we then looked at what it would take to make executive pay justifiable within a Rawlsian framework.

The fourth section of the paper looked at what the repercussions of adopting a set of Rawlsian institutions might have for executive compensation. Executive pay is a special case of wage policy, not because Rawls' standards are different for executives, but because arguably executives might be in a position to more directly affect the economic expectation of the least well off. They may therefore be more likely to satisfy Rawls' second principle. However it would be impossible to make executive compensation just without just institutions at multiple levels of society from educational and work opportunities to positions of power and influence.

Much more time was spent on Rawls' principles because they are more complicated than the other theories. But among the theories which one is "right"? It would be foolish to choose among the three philosophies based on what they say about executive compensation alone. To base a decision on a definition of justice from its application to one circumstance may have unforeseen consequences if one applies the theory more broadly.

Rawls and Nozick provide compelling reasons to reject the utilitarian perspective. Their main criticism of utilitarian theory is that it does not protect individuals sufficiently. Calculating social utility involves aggregating happiness across individuals and permits sacrificing the happiness of individuals for the sake of the community (157). Rawls and Nozick see the utilitarian framework as failing to take the distinctions between persons seriously. Nozick, Rawls and most economists reject the utilitarian framework, but for slightly different reasons. Economists reject it on the basis of the difficulty of interpersonal comparisons of happiness.   Rawls and Nozick reject utilitarianism because it provides no guaranteed rights for individuals. One could be sacrificed by society to maximize happiness. These are all sound reasons for rejecting utilitariansim.

Although Rawls rejects utilitarianism because it does not respect individuals sufficiently, for Nozick Rawls does not go far enough. Nozick criticizes Rawls' theory of distributive justice on the grounds that it too infringes on individual's rights. Though irrelevant to his core argument, Nozick says, "Most people do not accept time-slice principles" (154). He argues that looking around and seeing inequality does not necessarily mean there is injustice; justice has to be based on how the inequalities came to be. If someone justly acquired what is theirs, it cannot be just to take their property from them. However, because Nozick provides for intergenerational accumulation of wealth[22], one could as easily assert that most people would not think it fair to be born into a highly skewed income distribution, especially if there were no mechanisms to assist the individual in bettering their circumstance, such as publicly funded education. Under a Nozickian framework such mechanisms would only exist by voluntary contributions of those able (and only if individuals are willing to provide funding)[23]. Many people may just as well believe it is fair to have a guaranteed opportunity to participate in society in a meaningful way. I argue we should accept Rawls' framework, not specifically because of what it says about executive compensation, but because of what it promises all members of society.

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[22] If a prohibition on intergenerational accumulations of wealth reduces savings, growth and the standard of living of future generations, would it violate Rawls? Rawls addresses this specifically. The difference principle applies there too; one can inherit wealth just with no more injustice as inheriting a high IQ as long as the inheritance of economic inequalities satisfies the difference principle (245).

[23] Unless it was shown that historical injustices, violations of the principles of acquisition and transfer, were violated in so many ways that restitution would lead to conflicting imperatives. In such an instance something like Rawls redistributive principles may be "play a role in *this* subsidiary choice" (Nozick 153).

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