Earnings Inequality

The Implications of the Rapidly Rising Cost of Employer-Provided Health Insurance

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Abstract

Health insurance for a high-paid employee costs an employer the same amount as health insurance for a low-paid employee. At the same time, healthcare costs, and therefore health insurance premiums, are growing much more rapidly than earnings. Therefore, it is reasonable to expect that—while earnings will indeed become more unequal over time—total compensation will not become more unequal, or, when considered over the entire labor force, at least will not become as unequal. Direct empirical evidence supports this hypothesis, based on unique, unpublished survey data about employers' compensation costs collected by the Bureau of Labor Statistics. The supporting results hold both for the period 1996–2008 and for the period 1992–2010. A regression estimated over the period 1990–2014 also bolsters the understanding that the rising cost of health care is a major cause of increasing earnings inequality. This finding suggests that the best policy to reduce inequality would be to effectively control the rate of growth in the cost of health care.

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Research results from the academic literature on inequality in the distribution of earnings are currently playing an important role in political discussions, policy formulation, and public attitudes. For example, Piketty and Saez (2003, subsequently updated) and Kopczuk, Saez, and Song (2010, subsequently updated) show an increasing earnings share of the top percentile of earners from the 1970s through 2011. The authors attribute this increase to the rising pay of corporate executives rather than to the rising income of professionals and athletic and acting stars. In the 2010 budget presented in February 2009 by the incoming Obama administration, Piketty and Saez's finding was shown prominently as a graph. While the budget document ascribed the cause of increasing inequality to "technological advances and growing global competition," its policy interpretation was decidedly redistributive: "Instead of using the tax code to lessen these increasing wage disparities, changes in the tax code over the past eight years exacerbated them" (2010 Budget of the United States Government, 9). Indeed, major parts of the president's domestic policy agenda then and later have been tied to the Piketty and Saez research finding. In a December 4, 2013, speech at the Center for American Progress, President Obama stated that income inequality is the single most important policy issue in the United States, "the defining challenge of our time." This theme has been repeated many times more recently in the presidential campaigns of several leading candidates.

Many analysts have noted the rapid growth in the cost of health care in the United States over long time periods; this trend has recently resumed after the slight pause in growth

caused by the Great Recession. This growth is correctly said to cause burgeoning government spending and deficits, slower overall growth in worker earnings, and later retirements. Less noted and less understood is a possible tie between the growth in both health care and insurance costs and the increase in earnings inequality. The logic of this concept is based on simple arithmetic. Let's say that compensation (which is made up of earnings and the cost of benefits) grows at a certain common rate across workers over time at all compensation levels owing to, perhaps, overall labor productivity improvements and competitive labor markets. Let's also posit that the cost of healthcare benefits are the same dollar amount per worker regardless of the worker's level of compensation and that they are evenly and widely provided to workers. But let's also say that the cost of healthcare benefits is growing at a faster rate than compensation. Then earnings (which equal compensation less the cost of health care and other benefits) will grow more slowly for those at the lowest levels of compensation than for those at the highest levels of compensation. Even if there is some modest, positive association between compensation levels and the prevalence and costs of health insurance, as long as the distribution has not changed much and that the cost of health insurance as a share of compensation is generally larger for the lower-paid, the fact that healthcare costs are rising rapidly will mean this outcome still largely holds true.

It is rare to observe the total compensation of individual workers directly in surveys or in administrative records, but it is now common to measure household and individual income and earnings from administrative sources, such as tax and Social Security records. The logic just expressed above would say that measured earnings inequality would increase with healthcare costs even while the overall distribution of compensation and actual compensation inequality remain essentially unchanged—or at least do not increase as much as earnings inequality.

This paper uses unpublished data provided by the Bureau of Labor Statistics to test the hypothesis that there has been more consistent growth across the distribution in total compensation than in earnings. This study builds on my past research in this area, giving an alternative explanation and emphasis for the observed increases in earnings inequality: the rapidly rising cost of health insurance provided by employers, which is included in compensation but not in more common measures of earnings, and which affects the earnings of low-paid workers more than those of high-paid workers. The appropriate policy response to this evidence would involve attempts to reduce the rapid increase in healthcare costs, but not necessarily intensive and broad redistributive policies. Indeed, Gale, Kearney, and Orszag (2015) have found that even substantial increases in the top tax rate on incomes will have an "exceedingly modest" impact on overall income inequality.

A Fundamental Critique

My empirical research for a recent time period, 1999–2006, found that the rapidly increasing cost of health care can largely explain the increase in reported earnings inequality in the United States (Warshawsky 2012). Over the seven-year period for which I obtained unpublished compensation data by earnings percentiles from the National Compensation Survey of the Bureau of Labor Statistics (BLS), healthcare cost increases fully accounted for changes in the distribution of earnings. In other words, without rising healthcare costs, there would have been virtually zero change in earnings inequality over that period.

As background, most employers pay workers a combination of both earnings (mainly wages) and benefits, which include retirement plans, health insurance coverage, and other perquisites. Benefits' share of total compensation has grown significantly over time: According to National Income and Product Accounts tables from the Bureau of Economic Analysis, benefits

in 1950 made up only 7 percent of total compensation; today, benefits make up 20 percent of compensation. Most of these benefits are not included in taxable income. Also note that these benefits became more widely distributed across income groups over the last few decades, owing, in part, to the tightening of nondiscrimination rules in the tax code that apply to employers who provide benefits to their full-time workers. For example, when pension plans were first widely established in order to get around the effect of wage controls and higher tax rates during World War II, they were primarily provided to higher-paid workers, what we now measure as the top income deciles. The subsequent tightening of the tax rules has extended the provision of benefit plans to lower earnings categories of full-time workers.

Both economic theory and empirical findings indicate a tradeoff between wages and benefits: if benefits become more expensive, wage growth will suffer. Indeed, according to exhibit 6.4 of a Kaiser Family Foundation survey (2015), employer costs for family health coverage exploded from around $4,200 in 1999 to nearly $12,600 in 2015. Such numbers give a reasonable explanation for why average wages have stagnated in recent years. Total compensation continued to increase, but rapidly growing healthcare costs ate away at wages and nonhealth benefits.

But not every employee is affected in the same proportion by rising healthcare costs. The dollar cost of the same health insurance coverage is similar for high- and low-paid workers, which means that health care makes up a far larger share of total compensation for low earners than for the top 1 percent. The unpublished data I obtained from the BLS National Compensation Survey show that for the lowest-paid full-time workers in 1999, health coverage made up around 6.2 percent of total compensation. These workers are at the 30th percentile of the overall wage distribution. I use the 30th percentile as the start of the earnings distribution because workers earning less than $12,244 (the annual earnings threshold for this percentile in 2006, according to

Social Security data) presumably include jobs filled by many young workers still attached to their parents' homes or in college; older workers already largely, but not entirely, retired from the labor force; part-time workers whose spouses may work full-time; seasonal workers; and workers (including the disabled) somewhat dependent on government welfare programs, in particular Medicaid. In this regard, it should be recalled that eligibility for Medicaid and Medicare benefits has expanded greatly since 1990, thereby freeing employers from having to provide health insurance to many lower-paid workers (a crowding-out effect).

For middle-income workers, employer health contributions made up 7.2 percent of compensation—not because their health coverage was more generous in dollar terms, but because health coverage is more widespread in middle-class jobs. But for the top 1 percent of earners, health coverage made up just 4.0 percent of compensation.

Now consider what happens when healthcare costs increase rapidly. Though rising healthcare costs eat away at wage growth for everyone, the effects will be largest for the working and middle classes because their healthcare costs are so large relative to the rest of their compensation package.

The BLS data in table 1 show that, from 1999 through 2006, the employer cost of health insurance coverage rose from 6.2 percent to 12.2 percent of compensation for a lower-wage worker, a massive increase for a seven-year period. As a result, while total compensation for this group rose by 41 percent during 1999–2006, wages grew by only 28 percent. For a middle-income worker, the employer cost of health coverage grew from 7.2 percent to 10.4 percent of compensation. And while compensation for a middle-income worker grew by 34 percent during 1999–2006, wages grew by only 27 percent. For the top 1 percent of earners, healthcare costs grew from 4.0 percent to 4.3 percent of total compensation. Because health care is a smaller

share of total compensation for top earners, their earnings grew nearly as quickly as their compensation—35 percent for earnings and 36 percent for total compensation—and faster than earnings grew in the lower earnings percentiles.

Table 1. Growth of Earnings and Total Compensation, 1999–2006

Earnings percentile	Employer's cost of health coverage as percentage of compensation		Growth, 1999–2006	
	1999	2006	Earnings	Total compensation
30th	6.2%	12.2%	28%	41%
40th	8.0%	9.9%	26%	28%
50th	7.2%	10.4%	27%	34%
60th	6.8%	11.1%	27%	36%
70th	7.3%	9.6%	28%	34%
80th	6.8%	8.5%	30%	36%
90th	6.5%	7.3%	31%	33%
95th	5.5%	7.1%	34%	38%
99th	4.0%	4.3%	35%	36%

Sources: Mark Warshawsky, *BNA Pensions and Benefits Daily*, February 3, 2012. Based on unpublished BLS National Compensation Survey data.

Note: Bottom 30 percent of jobs omitted in order to exclude college students, part-time employees, and partially retired older workers.

Total compensation—the total wages and benefits paid to employees—did not become more unequal from 1999 through 2006. In fact, total compensation grew more quickly for the lowest-paid workers than for the top 1 percent. But rising healthcare costs suppressed earnings growth much more for lower- and middle-class workers than for high earners, with the result that reported earnings inequality increased significantly. These data show that, in the absence of rapidly rising healthcare costs, earnings inequality wouldn't have budged from 1999 through 2006.[1]

[1] A Congressional Budget Office study (2011, appendix C) also incorporated healthcare costs into an analysis of income inequality. It found a smaller role for healthcare costs in driving income inequality than what I summarized above. But that study indirectly estimates health benefits for employees using household survey data, which are therefore subject to considerable error, and it uses healthcare datasets from the 1970s. By contrast, the BLS National Compensation Survey is much more current and is collected directly from employers, thus providing more reliable data.

If health care were producing additional value commensurate with its rising costs, these changes in the makeup of workers' compensation wouldn't matter, just as we wouldn't care much if employers paid workers somewhat lower wages but contributed more to their retirement plans. But many studies—Fisher, Bynum, and Skinner (2009) and Skinner et al. (2009) most prominent among them—suggest strongly that the extra spending in the US healthcare system is often of marginal benefit to patients. We pay more, but we often don't get more. Workers would have been better off paying less for health care and seeing higher wages on their pay stubs. And policy to reduce inequality would be better directed to reducing the rapid growth in the cost of health care than to increasing tax rates in the higher brackets.

Other Studies

Another study, done by Brookings scholars Burtless and Milusheva (2013), largely confirms the insight and empirical results of Warshawsky (2012) over a longer time period (1996–2008) and using a different dataset. (The dataset used by Burtless and Milusheva is, however, somewhat inferior to the BLS data I used because it relies on imputations and smoothing with other data sources, whereas the BLS data are used "straight," with no need for manipulations.) These authors also explain the simple mathematics of how the distribution of earnings is directly affected by the distribution of employer health insurance contribution across earnings levels. They explain, as I did, that most employer health plans cost as much for lower-paid employees as they do for highly compensated employees. They note that when employer health insurance contributions per employee increase faster than earnings or total compensation, as has occurred consistently in the last four decades, the effect in proportional terms will be greater for low-wage workers than for high-wage workers, and thus will

contribute to the growing earnings inequality that has been observed, even while compensation inequality does not change.

In their study, Burtless and Milusheva focus their analysis on the share of earnings subject to the Social Security payroll tax, that is, below and above the taxable maximum. They use data from the Medical Expenditure Panel Survey (MEPS) in combination with other data to smooth, and imputations to match, changes in health insurance costs with earnings percentiles. They also use the data to analyze trends in employer health insurance contributions and the distribution of those costs across the earnings distribution. The authors find that employer health insurance contributions increased faster than overall compensation from 1996 to 2008. They also find that such contributions grew slightly faster among workers earning less than the Social Security taxable maximum (currently $118,500) than they did among those earning more. Across all workers, if the employer costs of providing health insurance had increased at the same rate as overall compensation, the 2008 Social Security tax base would have been 1.7 percent larger. During the 1996–2008 time period, the percentage of earnings taxed by Social Security fell from 85.7 percent to 83.6 percent. Multiplying the 2008 share of 83.6 percent by 1.017 gives 85.0 percent; this implies that about two-thirds of the decline in the covered earnings share was due to rising employer healthcare costs and (at most) one-third was due to the standard "rich-getting-richer" explanation.[2]

[2] Burtless and Milusheva present a chart that is close in concept to table 1 in this paper, showing the annual rates of growth in real wages, real employer-sponsored health insurance costs, and the sum of wages plus insurance premiums across the earnings distribution. Before employing any data smoothing but after imputations, they show a U-shaped pattern of gains in earnings, whereby wages have grown faster at the bottom (through the 15th or so percentile) and at the very top (at about the 98th and 99th percentiles) than in the middle. They say that the varying growth in employer costs of providing health insurance for workers across the earnings distribution explains a small part of the pattern of earnings gains. Yet Burtless and Milusheva do acknowledge that the earnings data in the MEPS are somewhat inaccurate and incomplete, with top-coding hiding the earnings of very high earners, and biased reporting by earnings percentiles making the ratio of health insurance to earnings too high for high earners and too low for low earners. These data problems therefore reduce—likely significantly—the accurate portrayal of the impact of increasing health insurance costs on earnings inequality.

Economists from the BLS have conducted research using data from the National Compensation Survey (Monaco and Pierce 2015) that is broadly similar to my work, that is, they look at trends in compensation inequality and compare them to earnings inequality. They use data from the third quarter of 2007 and the second quarter of 2014, that is, from the peak of an expansion to the middle of a fairly weak recovery. They include paid leave in benefits rather than in wages and salaries, so their measure of earnings will be quite different from what is reported in the literature for earnings based on tax and Social Security records and what I did . Usually, legally required benefits, whose cost tends to be somewhat regressive owing to program design, are excluded from the measure of benefits. This exclusion is more appropriate here because I am mainly interested in the effect of market conditions, and not legislative decisions, on relative contributions to to inequality. Monaco and Pierce calculate the percent change in real wages and total compensation at different percentiles of the wage and compensation distributions, respectively. They focus on the 10th, 50th, and 90th percentiles. The 10th percentile is likely filled mainly with part-time jobs, which do not have many benefits—not even paid leave—while the emphasis on the 90th percentile ignores the political focus on the top 1 percent.

The BLS researchers find that inequality measures that are based on total compensation are higher than measures that are based solely on wages. They also find an increase in inequality over the study period, an increase that is driven largely by a growing compensation gap between high- and low-earning occupations and by considerable intraoccupational inequality. It is difficult to know how much of their results key off the odd selection of the study period in business cycle terms (a peak to trough to recovery likely shows larger relative losses for the lower-paid than a peak to peak or trough to trough comparison), the inclusion of the lower

percentiles (which amounts to a comparison of part-time to full-time jobs), and the inclusion of paid leave in benefits (which is not how earnings are usually defined).

Using Social Security records for workers ages 25 to 60 who are in commerce and industry and who earn at least a quarter of the annual minimum wage, Kopczuk, Saez, and Song (2010) find that wage inequality has increased over time. In particular, they calculate that the wage share of the top percentile (earnings above $236,000 in 2004) increased from 6.45 percent in 1978 to 7.53 percent in 1983, 12.42 percent in 1999, and 12.99 percent in 2000, before falling back to 12.38 percent in 2004, the last year of their analysis. (The April 1991 to March 2001 period was the longest economic expansion in American history and a time of rapidly increasing stock prices, which produced higher, but volatile, wages to well-paid workers in the form of stock grants and option exercises.) Using a somewhat different definition of relevant working population, Piketty and Saez (2003, using updated tables and figures from 2015, table B5) report that the top wage share was 13.23 percent in 2000, 12.35 percent in 2004, 13.55 percent in 2007 (the business cycle peak), 11.96 percent in 2009 (the trough), and 12.92 percent in 2011. In other words, according to Social Security earnings data, earnings inequality has not changed much in the last decade or so.

Using IRS tax data and based on tax-paying units, Piketty and Saez (2003, using updated tables and figures from 2015) find that the share of total wages going to the top decile increased from 25.67 percent in 1970 to 29.09 percent in 1983, 35.18 percent in 1999, 35.46 percent in 2000, 35.63 percent in 2007, and 34.87 percent in 2011. Again, there is no increase in wage inequality in the last decade or so. The increase in wage share over the longer time period, according to Piketty and Saez' data, is largely concentrated at the top of the decile. The 90th to the 95th percentiles had almost no increase, the 95th to 99th percentiles only a relatively small

increase, but there were large increases at the top percentile and upper fractiles from 1970 onwards and in particular in the late 1990s.

New Empirical Evidence

Following up on the interest generated by my earlier research (Warshawsky 2012), I requested a longer time series of the unpublished BLS data described above, in particular, data by earnings deciles and upper percentiles for the time period from March 1990 to March 2014. It is worth emphasizing the advantages of this data set: Information comes from employer responses to a long-standing government survey conducted by a respected nonpartisan agency, with no need for imputations, data matching, or dependency on sometimes inaccurate household responses. Although the data for a particular year and percentile can be thin because of small sample sizes, analysis over longer time periods should dissipate the impact of this thinness.

The BLS's Office of Compensation Levels and Trends conducts the National Compensation Survey, which provides quarterly changes in employer costs (Employment Cost Index), quarterly employer costs levels (Employer Costs for Employee Compensation, or ECEC), and the incidence and provisions of employee benefits. (See William Wiatrowski [2000] for a full explanation of the survey.) For my follow-up research, I received unpublished BLS data from the March ECEC. The ECEC shows the employers' average hourly cost for total compensation and its components. It uses current weights to reflect the composition of today's labor force, and it provides cost data both in dollar amounts and as percentages of compensation. The survey covers private industry and state and local government workers from establishments of all sizes; it excludes federal government, military, agricultural and private household workers. Jobs within an establishment are sampled through a probability selection, proportional to

employment in that job. Both part-time and full-time jobs are covered. Compensation is broken out by wages and salaries, paid leave, supplemental pay (including overtime and premium pay, shift differentials, and nonproduction bonuses but excluding stock grants and exercises of stock options), insurance (mainly health), retirement and savings, and legally required benefits (such as Social Security).

Before we examine these data to identify trends in compensation inequality, however, we should first review the available data on broad, economy-wide trends in labor compensation and, in particular, the employer cost of health insurance benefits. For these data, I looked at the published ECEC data and BLS data on participation in medical care plans.

Table 2. Employer Costs per Hour for Employee Compensation and Costs as a Percentage of Total Compensation, March 1991 and March 2014

	1991		2014	
	$	%	$	%
Earnings	**13.30**	**80.8**	**24.99**	**78.2**
Wages	11.81	71.8	21.96	68.8
Paid leave	1.16	7.0	2.25	7.0
Supplemental	0.33	2.0	0.78	2.4
Benefits	**3.16**	**19.2**	**6.94**	**21.8**
Health insurance	1.01	6.1	2.75	8.6
Retirement	0.65	4.0	1.60	5.0
DB (pension)	0.57	3.5	0.98	3.1
DC (savings)	0.08	0.5	0.62	1.9
Legally required	1.39	8.4	2.46	7.8
Other	0.10	0.7	0.13	0.4
Total compensation	**16.45**	**100.00**	**31.93**	**100.00**

Note: DB = defined benefit, DC = defined contribution.

Source: Bureau of Labor Statistics, Employer Costs for Employee Compensation.

As seen in table 2, hourly earnings reported by the BLS—composed of wages, paid leave, and supplemental pay—increased, on average, across the civilian population from $13.30 in 1991 to $24.99 in 2014, an increase of 88 percent. But hourly compensation, which also includes

the cost of benefits, increased more quickly, from $16.45 in 1991 to $31.93 in 2014, a 94 percent increase. This growth differential is explained mainly by the fact that the cost of benefits increased at a faster pace than total compensation; the employer cost for health insurance in particular increased from $1.01 an hour to $2.75 an hour, or 172 percent! As a share of compensation, the employer cost for health insurance rose from 6.1 percent to 8.6 percent, a noticeable increase. Retirement costs also increased more rapidly than wages, but this category is somewhat volatile in that the defined benefit portion for the private industry sector is related to plan funding, regardless of benefit accruals, that is, it depends mainly on fund asset values and interest rates (inverse to the plan liability). The share devoted to legally required benefits, which we will ignore below in our inequality analysis, declined due to contained workers' compensation costs.

According to data gleaned from various BLS publications on employee benefits, there was some decline in participation by full-time employees in employer-provided medical care plans over this period. (Note: medical care is a somewhat narrower concept than health care, so the following statistics somewhat understate participation in healthcare plans, whose cost is measured in the ECEC.) In 1990, 83 percent of full-time workers at medium-and large-size private establishments participated in a medical plan. In 1992, 71 percent of full-time workers at small-size private establishments participated. For state and local governments, 90 percent of full-time workers participated in a medical plan at that time. By 2014, only 63 percent of full-time workers in all private industry participated in medical care plans, while for state and local governments, the participation rate was 83 percent. This trend toward lower participation may have some impact on compensation inequality to the extent that the lower participation rate is experienced more, either by choice or policy, by lower-paid full-time workers. However, using

BLS ECEC data, Brooks Pierce (2010) finds that over a shorter horizon—that is, from 1997 to 2007—participation in healthcare benefits remained at 79 percent.

I start my new empirical analysis by reporting on the same time period as that of the Brookings study described above, that is, 1996 to 2008 (table 3).

Table 3. Earnings, Compensation, and Employer Cost of Health Insurance, 1996 and 2008

A. Employer Costs per Hour Worked for Employee Compensation, Selected Components: Civilian Workers by Selected Earnings Percentiles, March 1996 and March 2008

Earnings percentile	Total hourly earnings	Total hourly compensation	Cost of health insurance per hour worked	Health share of compensation
1996				
30th	$8.28	$9.14	$0.67	7.33%
40th	$9.87	$11.16	$0.93	8.33%
50th	$11.92	$13.83	$1.32	9.54%
60th	$14.01	$15.92	$1.30	8.17%
70th	$17.06	$19.55	$1.53	7.83%
80th	$21.15	$24.19	$1.76	7.28%
90th	$27.36	$31.40	$2.26	7.20%
95th	$34.51	$39.34	$2.35	5.97%
99th	$49.88	$55.83	$2.38	4.26%
2008				
30th	$12.05	$13.90	$1.47	10.58%
40th	$14.46	$17.21	$2.03	11.80%
50th	$17.03	$20.23	$2.28	11.27%
60th	$20.41	$23.93	$2.53	10.57%
70th	$25.05	$29.95	$3.15	10.52%
80th	$31.66	$37.42	$3.43	9.17%
90th	$41.82	$49.22	$3.96	8.05%
95th	$52.34	$61.36	$4.70	7.66%
99th	$76.03	$85.79	$4.44	5.18%

B. Growth of Earnings and Compensation, 1996–2008

Earnings percentile	Earnings	Total compensation
30th	45.53%	52.08%
40th	46.50%	54.21%
50th	42.87%	46.28%
60th	45.68%	50.31%
70th	46.83%	53.20%
80th	49.69%	54.69%
90th	52.85%	56.75%
95th	51.67%	55.97%
99th	52.43%	53.66%

Source: Author's calculations based on unpublished data from the Bureau of Labor Statistics.

Note: Bottom 30 percent of jobs omitted in order to exclude college students, part-time employees and partially retired older workers.

Here we see what the Brookings scholars saw. The health share of compensation has increased dramatically over the period for all groups, but particularly for the lower-earnings percentiles. Growth in compensation is fairly evenly spread across all percentiles, at around 53 percent, but growth in earnings—which is what is typically measured in surveys and government statistics—is more uneven, increasing around 52 percent in the upper percentiles, but around 45 percent in the lower percentiles. This is a strong, clear, and clean finding—across a period that included overall strong economic growth, a recession, and then moderate economic growth—of no increase in compensation inequality but an increase in earnings inequality because of rapid increases in healthcare costs.

Next, let's expand the period of analysis to start at 1992 and to end at 2010, both occurring one year after recession troughs (table 4).

We see that healthcare costs grew as a share of compensation for all deciles and upper percentiles between 1992 and 2010, but particularly for the lower deciles: by 4 percentage points for the 30th decile versus 1 percentage point for the top 1 percent of earners. In terms of rates of growth for earnings, we see the familiar pattern of a higher rate of growth for the higher earners

than the lower earners—about 80 percent versus about 60 percent. This pattern is also found for compensation growth but to a much smaller extent, about 82 percent versus about 70 percent. So our hypothesis is still confirmed over a longer time period, if a bit more modestly: inequality in compensation has increased less than in earnings because the rate of growth in the cost of employer-provided health insurance has grown so much more rapidly than overall earnings and compensation.

Table 4. Earnings, Compensation, and Employer Cost of Health Insurance, 1992 and 2010

A. Employer Costs per Hour Worked for Employee Compensation, Selected Components: Civilian Workers by Selected Earnings Percentiles, March 1992 and March 2010

Earnings percentile	Total hourly earnings	Total hourly compensation	Cost of health insurance per hour worked	Health share of compensation
1992				
30th	$7.82	$8.69	$0.66	7.59%
40th	$9.51	$10.83	$0.97	8.96%
50th	$11.08	$12.63	$1.11	8.79%
60th	$13.12	$14.96	$1.22	8.16%
70th	$15.80	$17.79	$1.34	7.53%
80th	$19.39	$22.37	$1.75	7.82%
90th	$24.75	$28.57	$2.03	7.11%
95th	$30.42	$35.25	$2.35	6.67%
99th	$43.51	$48.62	$2.17	4.46%
2010				
30th	$12.55	$14.71	$1.71	11.62%
40th	$15.02	$17.67	$1.99	11.26%
50th	$17.69	$20.90	$2.38	11.39%
60th	$21.38	$25.52	$2.95	11.56%
70th	$26.19	$31.14	$3.32	10.66%
80th	$33.24	$39.93	$4.02	10.07%
90th	$43.57	$52.03	$4.50	8.65%
95th	$55.21	$65.01	$5.14	7.91%
99th	$77.62	$88.46	$5.07	5.73%

B. Growth of Earnings and Compensation, 1992–2010

Earnings percentile	Earnings growth	Compensation growth
30th	60.49%	69.28%
40th	57.94%	63.16%
50th	59.66%	65.48%
60th	62.96%	70.59%
70th	65.76%	75.04%
80th	71.43%	78.50%
90th	76.04%	82.11%
95th	81.49%	84.43%
99th	78.40%	81.94%

Source: Author's calculations based on unpublished data from the Bureau of Labor Statistics.

Note: Bottom 30 percent of jobs omitted in order to exclude college students, part-time employees and partially retired older workers.

To further analyze the influence of the cost share of health care and of business cycles on earnings growth by decile and upper percentiles, I estimated a simple regression equation over the period 1990 to 2014, based on all the BLS data made available to me. The independent variables are the share of health care in compensation, by decile and upper percentile and by year, and the national unemployment rate by year, lagged one year, both in percentage terms. (The state of the labor market should affect earnings equally across deciles, with a short lag.) A constant term is also added. The dependent variable is the annual rate of growth of earnings for each decile and upper percentiles and each year. The results are shown in table 5.

The expectation going into the exercise is that the coefficient on the health share variable should be negative and statistically significant, in line with the theory and results explained above, and the coefficient on the unemployment rate should be negative and statistically significant, because a weak labor market reduces all wages. These expectations are met exactly in the actual regression results shown in table 5; the estimation itself has a decent degree of explanatory power (R^2), given that it is panel data. For every one percentage point increase in the

healthcare cost's share of compensation, the annual rate of growth in earnings for that decile or upper percentile declines by 0.23 percentage points. So for the 30th percentile worker, annual earnings growth is almost one percentage point lower because of the rapid growth in healthcare costs, but only a quarter percentage point lower for the top 1 percent. For every percentage point increase in the unemployment rate, the annual rate of growth in earnings across all deciles declines by 0.32 percentage points.

Table 5. Regression Explaining the Distribution of Earnings, Linear Least Squares

Independent variables	(1)
Health care share in compensation (HealthofComp)	−0.2250666***
	(0.0847463)
Lagged unemployment rate (UELag1)	−0.3196953***
	(0.0972404)
Constant	6.572718***
	(0.7042755)
Observations	216
R^2	0.1136
Adjusted R^2	0.1053

* = significant at the 10% level, ** = significant at the 5% level, *** = significant at the 1% level.

Note: Standard errors are in parentheses.

Policy Considerations and Conclusions

It is hard to overstate the influence of the research and policy agenda of Professor Piketty and his colleagues. Based on their seemingly global research findings, but with emphasis on the United States, many analysts and policymakers have taken as givens that income inequality has increased dramatically and that further redistributive policies (such as higher taxes, larger transfers, more regulations, and so on) must be undertaken to right the wrong. Yet, as shown in this paper, these researchers have focused only on income and earnings rather than on compensation; in particular, they have ignored the significant impact of the rapidly rising cost of

health care in the United States, which is paid for, in large part, by employers. Because the cost of health insurance to an employer is, to a first approximation, the same whether the employee is low-paid or high-paid, and because the cost of health care has increased far in excess of the rate of growth of incomes, it is reasonable to expect that earnings will indeed become more unequal but compensation will not—or least compensation will not become as unequal as earnings. Direct evidence supports this view over the period 1996 to 2008 and the period 1992 to 2010, as does a regression estimated over the period 1990 to 2014.

Moreover, the most important book summarizing academic findings on income and wealth inequality, Piketty's *Capital in the Twenty-First Century*, is subject to several lines of severe criticism. These criticisms are serious enough to make one regard the study's results, and certainly their interpretation and Piketty's farfetched projections, as not warranting an entire policy and political agenda.[3]

What are the political and policy implications of this new-old insight in the face of observed increases in earnings inequality but much less in compensation inequality? In purely economic terms, because health insurance is a totally legitimate use of compensation and may be appreciated as such by workers, we should not care about increasing earnings inequality, as along as compensation inequality has not increased much. Would we care about the implied inequality if the price (as well as quality) of movies went up rapidly and low-paid workers had to devote more of their compensation to it? And yet, earnings are noticed much more by workers (and hence politicians) than compensation. Moreover, there is a credible viewpoint expressed by Fisher, Bynum, and Skinner (2009) that the rapid increases in healthcare costs have not brought

[3] For a critical review of Piketty (2014), see Warshawsky (forthcoming 2016).

commensurate value to workers because of considerable waste and that increased spending has not led to improved health outcomes.

Hence, the appropriate political and policy response should be instead to focus on reducing the rate of increase in healthcare costs, by, for example, reducing the highly favorable tax treatment given healthcare spending and insurance, or strictly enforcing antitrust law in that sector, or encouraging employers (and the federal government) to give insurance coverage with more scope for consumer sensitivity to costs. Indeed, one of the initially stated objectives of the Affordable Care Act was to reduce the rate of growth in healthcare costs. However, after a brief pause—likely caused by the recession—the rate of increase in healthcare spending has picked up again recently, and so the Affordable Care Act does not seem to be the solution to this problem. Broader redistribution policies, moreover, are not warranted in addressing the root causes of the apparent increasing inequality, and they may even be counterproductive because of their negative implications for economic growth overall and because they create particularly strong disincentives for lower-income people to put effort into working.

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