

# The Implications of the Rapidly Rising Cost of Employer-Provided Health Insurance for Earnings Inequality

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, health care 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 Direct empirical evidence supports this hypothesis, based on unique, unpublished survey data about employer compensation costs collected by the Bureau of Labor Statistics.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 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. In the 2010 budget presented in February 2009 by the incoming Obama administration, Piketty and Saez's finding was shown prominently as a graph. 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."

Many analysts have noted the rapid growth in the cost of health care in the U.S. 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 health care benefits is the same dollar amount per full-time worker regardless of the worker's level of compensation and that they are evenly and widely provided to workers because of nondiscrimination rules in the Tax Code. But let's also say that the cost of health care 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 across the labor force, as long as the distribution has not changed much and the cost of health insurance as a share

of compensation is generally larger for the lower paid, the fact that health care 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 expressed above would say that measured earnings inequality would increase with health care 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 article uses unpublished data provided by the Bureau of Labor Statistics (BLS) 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.

### **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 U.S.

(Warshawsky, 2012). I obtained unpublished compensation data by earnings percentiles for this seven-year period from the BLS *National Compensation Survey* and, for this period, health care cost increases fully accounted for changes in the distribution of earnings. In other words, without rising health care 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. The share of total compensation for benefits 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% of total compensation; today, benefits make up 20% 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 that 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 work-

ers. In the case of health benefits, Section 105(h) of the Internal Revenue Code added nondiscrimination rules to self-funded health plans in 1978, while the recent health reform law extended them to insured plans in 2014. Also, in order to avoid adverse selection of risks for health insurance, plan sponsors want to encourage younger and healthier workers—who also generally are lower paid—to participate so therefore include design features such as subsidized premiums in the plan.

Both economic theory and empirical findings indicate a trade-off 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 health care costs ate away at wages and nonhealth benefits.

But not every employee is affected in the same proportion by rising health care 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%. The unpublished data 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% 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 be-

cause workers earning less than \$12,244 (the annual earnings threshold for this percentile in 2006, according to Social Security data) presumably include 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% 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% of earners, health coverage made up just 4.0% of compensation.

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

The BLS data in Table I show that, from 1999 through 2006, the employer cost of health insurance coverage rose from 6.2% to 12.2% 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% during

1999–2006, wages grew by only 28%. For a middle-income worker, the employer cost of health coverage grew from 7.2% to 10.4% of compensation. And while compensation for a middle-income worker grew by 34% during 1999–2006, wages grew by only 27%. For the top 1% of earners, health care costs grew from 4.0% to 4.3% 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% for earnings and 36% for total compensation—and faster than earnings grew in the lower earnings percentiles.

Total compensation—the total of 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%. But rising health care costs suppressed earnings growth much more for lower income and middle-income workers than for high earners, with the result that reported earnings inequality increased significantly. These data show that, in the absence of rapidly rising health care costs, earnings inequality wouldn't have budged from 1999 through 2006.<sup>1</sup>

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 U.S. health care system is often of marginal benefit to

TABLE I

## Growth of Earnings and Total Compensation, 1999–2006

| Earnings percentile | Employer cost of health coverage<br>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%                |

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

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

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.

### Other Studies

Another study, done by Brookings scholars Burtless and Milusheva (2013), largely confirms the above insight and empirical results over a longer time period (1996–2008) and using a different data set. (The data set 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 contributions 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% larger.

During the 1996–2008 time period, the percentage of earnings taxed by Social Security fell from 85.7% to 83.6%. Multiplying the 2008 share of 83.6% by 1.017 gives 85.0%; this implies that about two-thirds of the decline in the covered earnings share was due to rising employer health care costs, and (at most) one-third was due to the standard “rich getting richer” explanation.<sup>2</sup>

Economists from 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 with 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, the cost of which 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 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 tenth, 50th and 90th percentiles. The tenth 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%.

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 cycle 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).

### New Empirical Evidence

Following up on the interest generated by my earlier research, I requested a longer time series of the unpublished BLS data described above—in particular, data by earnings deciles and upper percentiles—and ultimately was given data 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 longstanding 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 Office of Compensation Levels and Trends conducts the *National Compensation Survey*, which provides quarterly changes in employer costs (Employment Cost Index), quarterly employer cost 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 followup research, I received unpublished BLS data from the March ECEC. The ECEC shows the average hourly cost for employers for total compensation and its components. It uses current weights to reflect the composition of the labor force today, 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,

TABLE II

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

|                           | 1991         |               | 2014         |               |
|---------------------------|--------------|---------------|--------------|---------------|
|                           | \$           | %             | \$           | %             |
| <b>Earnings</b>           | <b>13.30</b> | <b>80.8</b>   | <b>24.99</b> | <b>78.2</b>   |
| 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           |
| <b>Benefits</b>           | <b>3.16</b>  | <b>19.2</b>   | <b>6.94</b>  | <b>21.8</b>   |
| 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           |
| <b>Total compensation</b> | <b>16.46</b> | <b>100.00</b> | <b>31.93</b> | <b>100.00</b> |

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

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

economywide 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.

As seen in Table II, 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%. But hourly compensation, which also includes the cost of benefits, increased more quickly, from \$16.46 in 1991 to \$31.93 in 2014, a 94% 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%! As a share of compensation, the employer cost for health insurance rose from 6.1% to 8.6%, 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 le-

gally 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 health care plans, whose cost is measured in the ECEC.) In 1990, 83% of full-time workers at medium- and large-sized private establishments participated in a medical plan. In 1992, 71% of full-time workers at small-sized private establishments participated. For state and local governments, 90% of full-time workers participated in a medical plan at that time. By 2014, only 63% of full-time workers in all private industry participated in medical care plans, while for state and local governments, the participation rate was 83%. 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

**TABLE III****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 |
|---------------------|-----------------------|---------------------------|--|------------------------------|
| <b>1996</b>         |                       |                           |  |                              |
| 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%                        |
| <b>2008</b>         |                       |                           |  |                              |
| 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 growth | Total compensation growth |
|---------------------|-----------------|---------------------------|
| 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%                    |

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

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

**TABLE IV****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 |
|---------------------|-----------------------|---------------------------|--|------------------------------|
| <b>1992</b>         |                       |                           |  |                              |
| 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%                        |
| <b>2010</b>         |                       |                           |  |                              |
| 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 | Total 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%                    |

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

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

**TABLE V****Regression Explaining the Differential in the Distribution of Growth in Earnings, Linear Least Squares**

Independent variables

|  |             |
|--|-------------|
|  | −0.2250666* |
| (1) Health care share in compensation (HealthofComp) | (0.0847463) |
|  | −0.3196953* |
| Lagged unemployment rate (UELag1)                    | (0.0972404) |
|  | 6.572718*   |
| Constant   | (0.7042755) |
| Observations   | 216         |
| R2   | 0.1136      |
| Adjusted R2  | 0.1053      |

*Note:* Standard errors are in parentheses. \*Significant at the 1% level.

*Source:* Author's analysis of unpublished data from the Bureau of Labor Statistics.

horizon—that is, from 1997 to 2007—participation in health care benefits remained at 79%.

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 III).

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%, but growth in earnings—which is what is typically measured in surveys and government statistics—is more uneven, increasing around 52% in the upper percentiles but around 45% 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 in-

crease in earnings inequality because of rapid increases in health care 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 IV).

We see that health care costs grew as a share of compensation for all deciles and upper percentiles between 1992 and 2010, but particularly for the lower deciles: by four percentage points for the 30th decile versus one percentage point for the top 1% 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% versus about 60%. This pattern also is found for compensation growth but to a much smaller extent, about 82% versus about 70%. 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.

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 also is 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 V.

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 V; the estimation itself has a decent degree of explanatory power ( $R^2$ ), given that it is panel data and there is some small sample noise. For every one percentage point increase in the share of compensation for health care costs, the annual rate of growth in earnings for that de-

cile or upper percentile declines by 0.23 percentage points. So, over the entire period 1990 to 2014 (averaging the health shares over the first and last five years), for the 30th percentile worker annual earnings growth is 0.66 percentage points lower because of the rapid growth in health care costs but only 0.29 percentage points lower for the top 1%. 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.

### 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 U.S., many analysts and policy makers 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 article, 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 U.S., 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 at 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.

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 long as compensation inequality has not increased much. Would we care about the implied inequality if the price (as well as quality) of watching movies went up rapidly and low-paid workers had to devote more of their compensation to it? And yet earnings are noticed and appreciated

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 health care costs have not brought 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 health care costs by, for example, reducing the highly favorable tax treatment given health care spending and insurance, 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 health care costs. However, after a brief pause—likely caused by the recession—the rate of increase in health care spending has recently picked up again, 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. 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. 

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## Endnotes

1. A Congressional Budget Office study (2011, Appendix C) also incorporated health care costs into an analysis of income inequality. It found a smaller role for health care 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 health care data sets 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.

2. Burtless and Milusheva present a chart that is close in concept to Table I in this article, 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.

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