

Chapter 11: Personal Incomes and Health Care

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Chapter 1

11.1 Rising Health Costs Hindered Growth in American Workers' Earnings¹

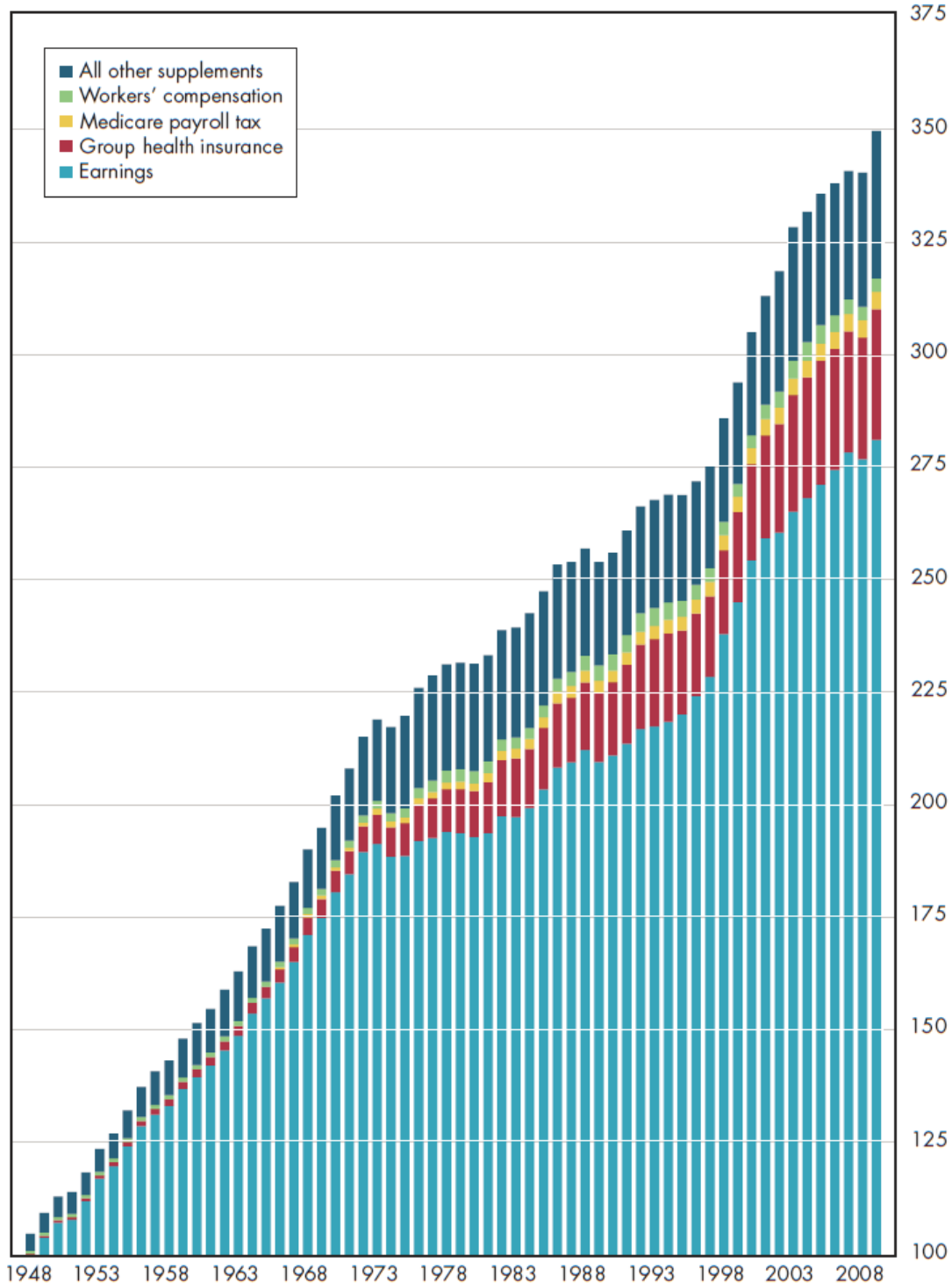
Inflation-adjusted hourly wages in 2008 were 2.8 times as high as they were 60 years earlier. This has occurred despite rapid growth in supplements to wages and salaries, including employer-provided health coverage, payroll tax deductions for health-related purposes such as Medicare and workers' compensation, and other fringe benefits.

The data in figure 11.1 include only the employer's contribution toward health insurance and social insurance. Thus, the 1.45 percent employer contribution for Medicare is included but not the parallel contribution made by the employee that appears as a deduction on most employee paychecks. Likewise, the "hidden" employer contribution to employer-sponsored health insurance is included, but not the employee share of the premium (which again shows as a paycheck deduction that reduces the monetary compensation that otherwise would go to the employee).

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10104/1.1/>>.

11.1 Rising health-related supplements are an important reason real hourly earnings have grown less quickly than average compensation

Inflation-adjusted hourly wages index using PCE deflator: 1948=100



This calculation uses the PCE price deflator to remove the effect of inflation. For several reasons, the PCE price deflator is superior to the more commonly reported CPI. It more accurately reflects changes in the purchasing power of U.S. workers. Figure 11.1 is indexed to hourly earnings rather than total compensation. Thus, it also shows how much cash earnings would have increased had there been no increase in wage and salary supplements over the past 60 years. In that case, earnings would have been 3.5 times as high.

The exact percentages are not important. As an approximation, almost half the increase in compensation for wage and salary supplements was health-related. The lion's share of these health-related add-ons was for group health coverage. Because Medicare payroll taxes support the care of today's Medicare beneficiaries, some might question whether this is an employee "benefit" at all. However, from a social contract point of view, it does not matter whether individuals are literally banking for their own future retiree health expenses or merely making their contributions into a pool in exchange for a promise to receive such benefits in the future. The purpose is unquestionably health-related.

1.1 Downloads

Download PowerPoint versions of figure.

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A. Department of Commerce. Bureau of Economic Analysis.

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*CHAPTER 1. 11.1 RISING HEALTH COSTS HINDERED GROWTH IN
AMERICAN WORKERS' EARNINGS*

Chapter 2

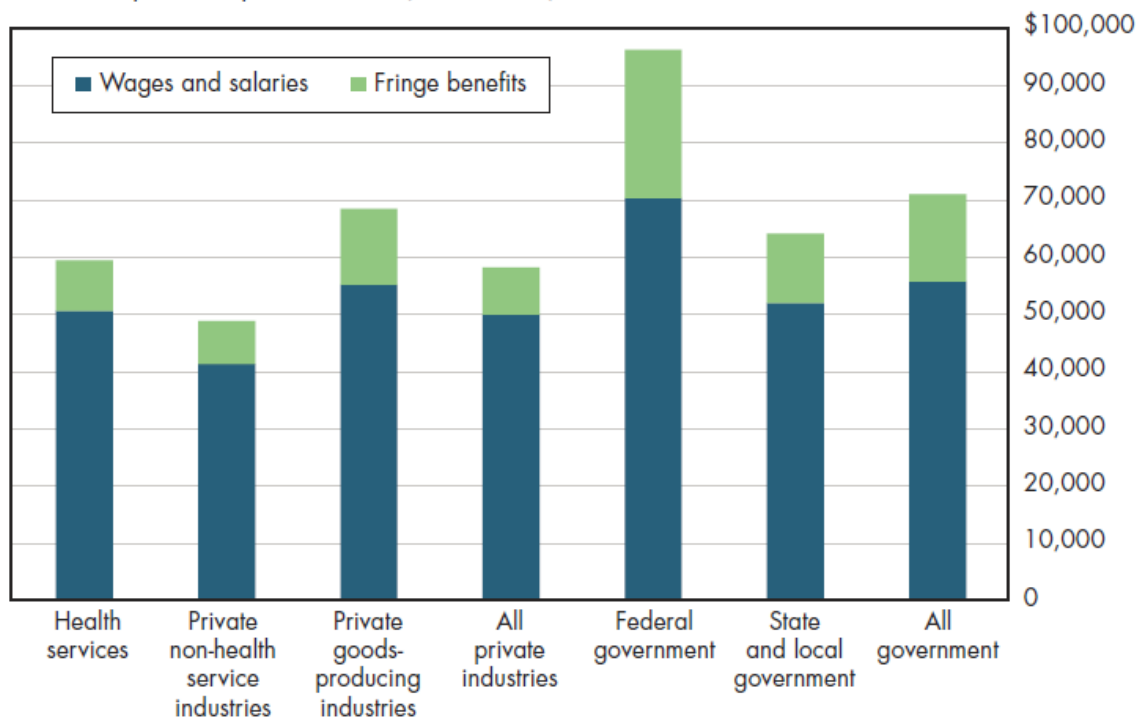
11.2 Employee Compensation in Health Services Is Slightly Higher than All Workers Average¹

In the health services industry, the average compensation per FTE worker is more than \$10,000 higher than for other workers in the service industry (figure 11.2a). It is lower than compensation in private goods-producing industries but slightly higher than the average for all private-sector workers. Both higher cash payments and fringe benefits contribute to the health care's margin of advantage.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10105/1.1/>>.

11.2a Average compensation in the health care industry is higher than in the rest of the service sector but lower than for public employees

Annual compensation per FTE worker (2008 dollars)

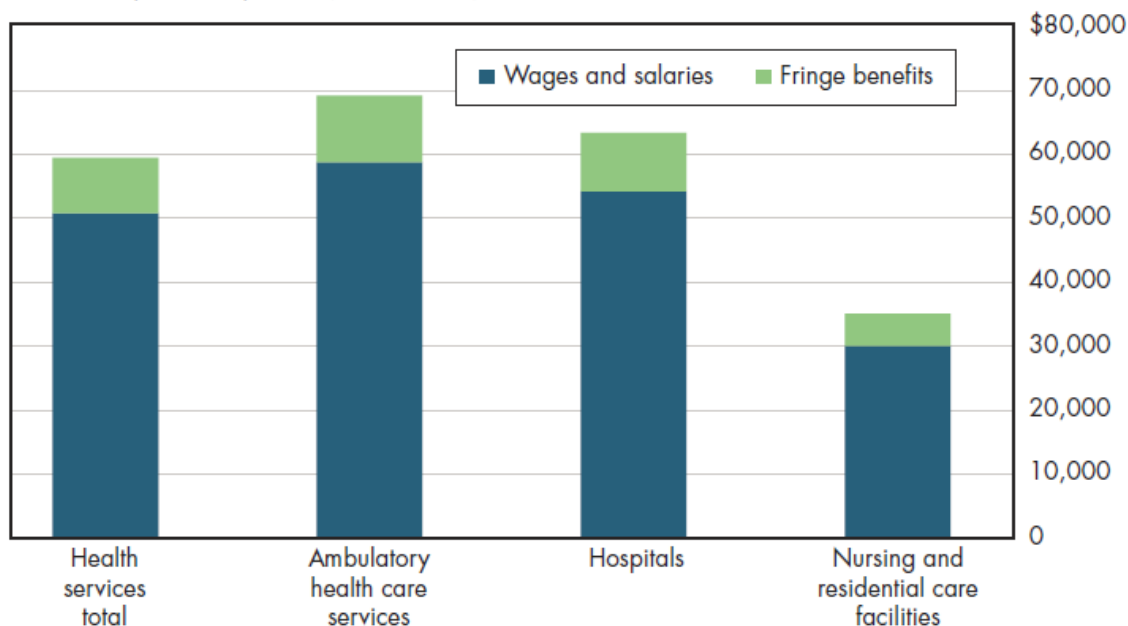


Because detailed data are not available, these numbers exclude workers in the pharmaceutical and medical device industries. They also do not count government workers who might be employed in hospitals or other government-owned facilities. However, average compensation for all types of government workers is much higher than in the private sector (figure 11.2a, right axis). Therefore, inclusion of public sector health workers might increase the health industry average overall rather than reduce it. This is not certain because some of the difference in public versus private compensation relates to differences in the skill mix used in each sector.

The average compensation for health services masks some sizable differences across different parts of the industry. Average compensation for nursing and residential facilities is only approximately half the level seen in ambulatory health care services such as physicians' offices (figure 11.2b). In the former facilities, a relatively large portion of the workforce is performing custodial care that requires less skill and training than is required for many of the highly specialized personnel used in hospitals, for example.

11.2b Average annual compensation is much lower in long-term care facilities, such as nursing homes, than elsewhere in the health sector

Annual compensation per FTE (2008 dollars)



Currently, one of every nine private employees works in the health care industry, a fraction that the BLS projects will grow over the next decade. Of the 12.2 million FTE private workers in the health sector in 2008, 40 percent work in ambulatory health care services, slightly more than 30 percent work in hospitals, and the remainder work in nursing homes and residential care facilities. It is somewhat more difficult to forecast health services employment under the health reform law. Total health spending is expected to rise. However, stringent limitations on Medicare payments, for example, have raised the prospect that some health facilities will be forced out of business altogether.

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2.2 References

- Author's calculations.
- Department of Commerce. Bureau of Economic Analysis.

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*CHAPTER 2. 11.2 EMPLOYEE COMPENSATION IN HEALTH SERVICES IS
SLIGHTLY HIGHER THAN ALL WORKERS AVERAGE*

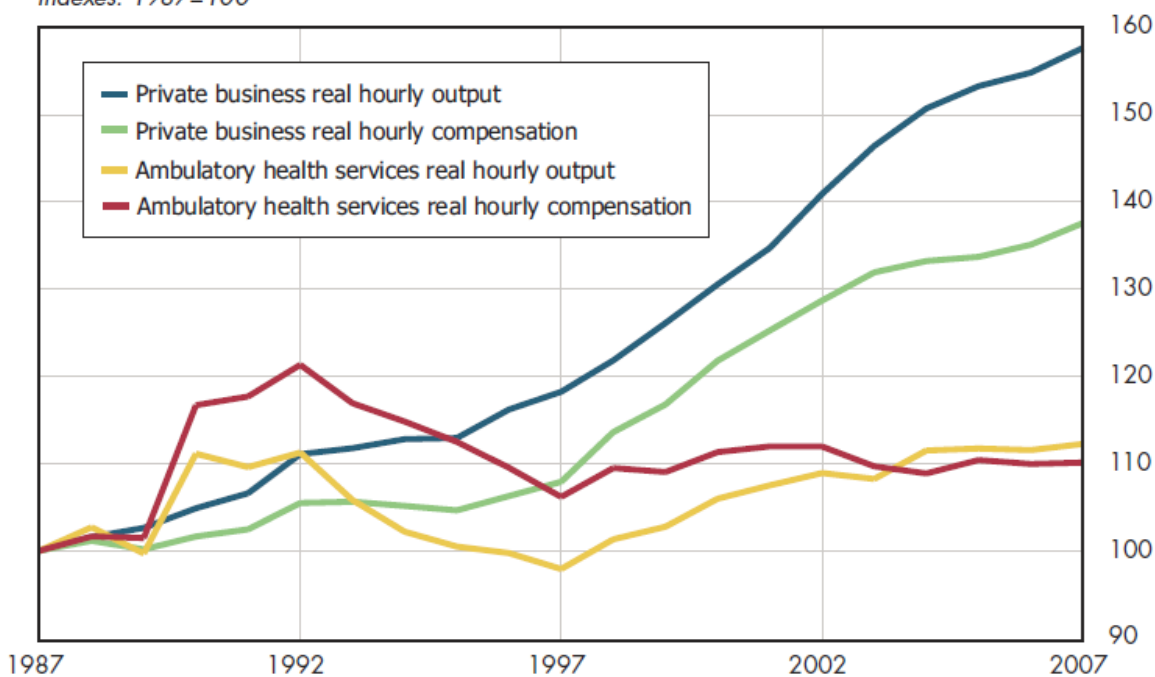
Chapter 3

11.3 Employee Compensation in Ambulatory Health Sector Grew Slowly¹

In terms of worker purchasing power, real (inflation-adjusted) hourly compensation in ambulatory health care has matched changes in hourly output over the long haul (figure 11.3a). This might seem unremarkable except that it deviates from the experience in the private sector generally. In most of the economy, inflation-adjusted hourly compensation increased in the 20 years starting in 1987. However, it did not rise as quickly as changes in real hourly output over the same period.

11.3a In terms of employee purchasing power, real hourly compensation in ambulatory health care matches changes in hourly output over the long haul

Indexes: 1987=100



In ambulatory health services, real hourly compensation rose far more rapidly than either hourly compensation in the rest of the economy or hourly output in that industry. Subsequently, however, compensation

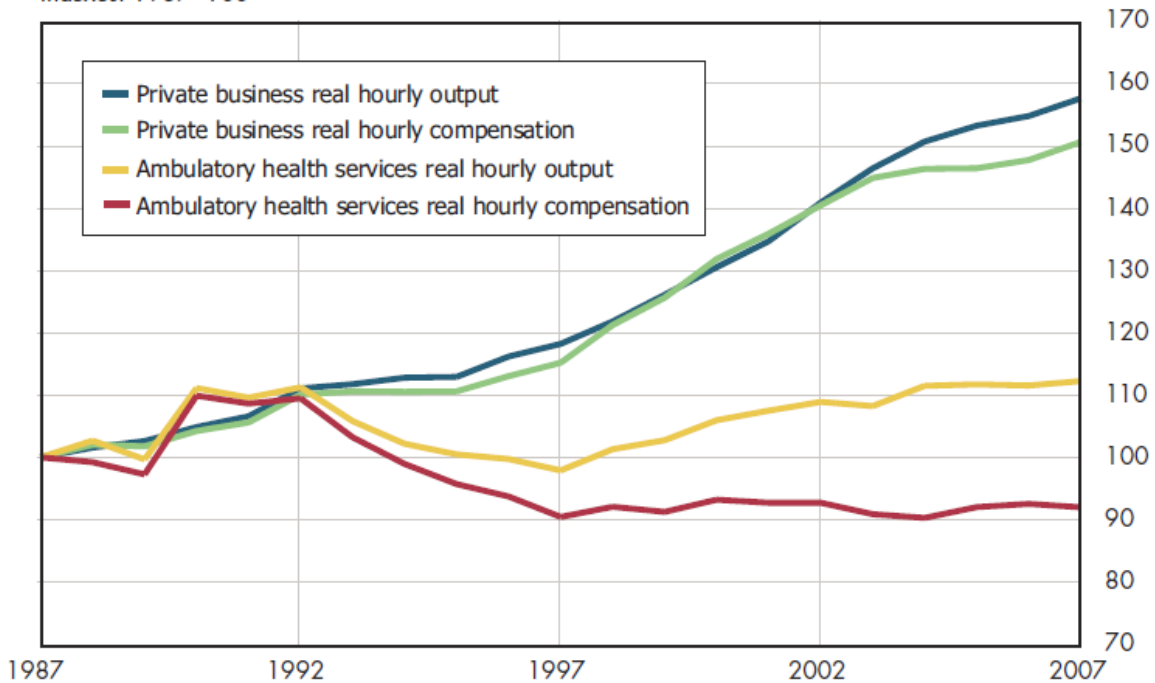
¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10106/1.1/>>.

steadily declined from its "excess" level in 1992 to a level more comparable with the change in hourly output by 2007. This is more in line with conventional economic theory that wages generally will reflect the productivity of labor. However, this compensation index measures wages in terms of worker purchasing power (as previously written, by dividing by the PCE price deflator to remove the effects of general inflation).

An alternative approach divides by the price of business output. This reflects the price of what a worker can produce in an hour. Doing this (figure 11.3b), the private sector shows a much tighter fit between changes in hourly output and what is paid to labor (although in recent years, compensation again has begun to lag behind higher productivity).

11.3b Relative to the price of hourly output, real hourly compensation in ambulatory health services has decreased since 1992; it rose in private business overall

Indexes: 1987=100



The facts in the ambulatory care sector are quite different. Although labor productivity increased by 10 percent over this period, hourly compensation declined by approximately the same amount. This reflects the fact that prices in the ambulatory health care sector have outpaced worker productivity gains. If prices rose in parallel with productivity gains—as apparently they do in the private sector generally—then real compensation for ambulatory services workers would have risen 10 percent also.

Briefly, real hourly compensation has risen less rapidly in the ambulatory health sector than in the rest of the economy. This reflects the reality that hourly productivity gains in that sector likewise have been less.

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3.2 References

- A. Author's calculations.
- B. Department of Labor. Bureau of Labor Statistics.

⁵<https://hub.mili.csom.umn.edu/content/m10106/latest/11.3bDATA.ppt>

Chapter 4

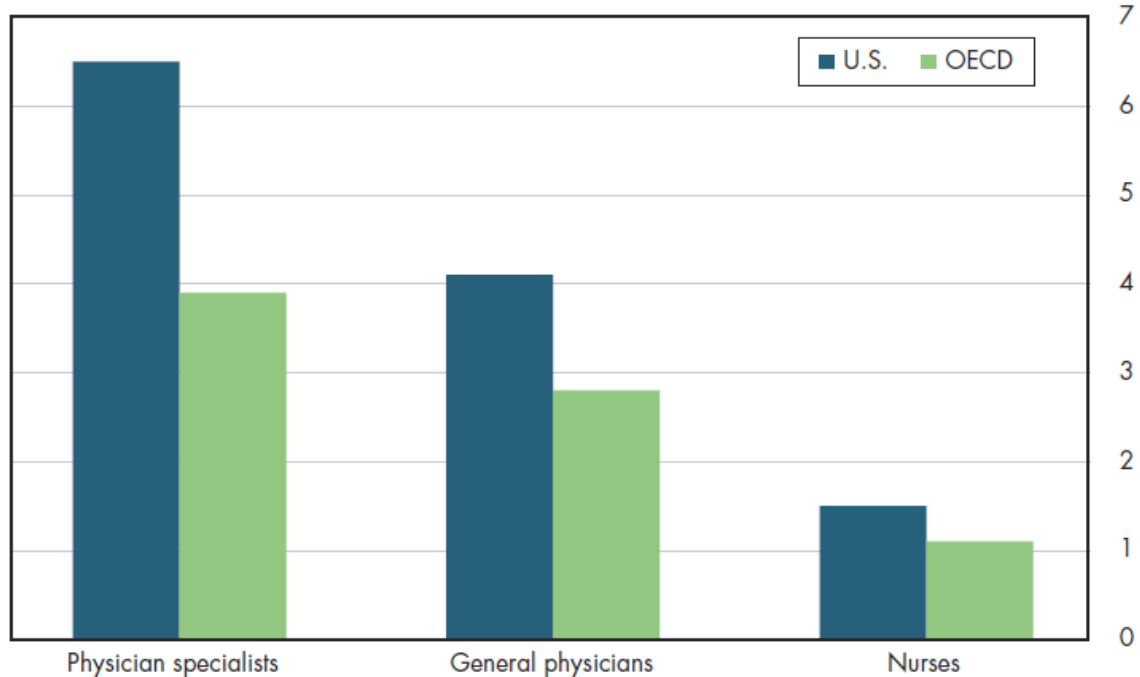
11.4 US Health Professionals Are Paid Higher than Other Industrialized Countries¹

In general, the United States pays higher prices for health labor than are paid elsewhere. The price differential varies a great deal, depending on the category of health professional examined. The average annual remuneration of physician specialists in the United States is more than six times the nation's GDP per capita (which was approximately \$46,000 in 2009). Physician specialists in OECD countries for which such data are available also are well paid, but the comparable ratio to GDP per capita is less than four to one (figure 11.4a). Alternatively, even accounting for the fact that the United States has higher wages and GDP per capita than the OECD comparators have, U.S. specialists, relatively speaking, are paid 50 percent more than their counterparts in competitor nations receive.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10107/1.1/>>.

11.4a Physicians and nurses are paid relatively more in the United States than in other OECD countries, but the largest pay differential is for specialists

Ratio of annual compensation to own country GDP per capita (2006)



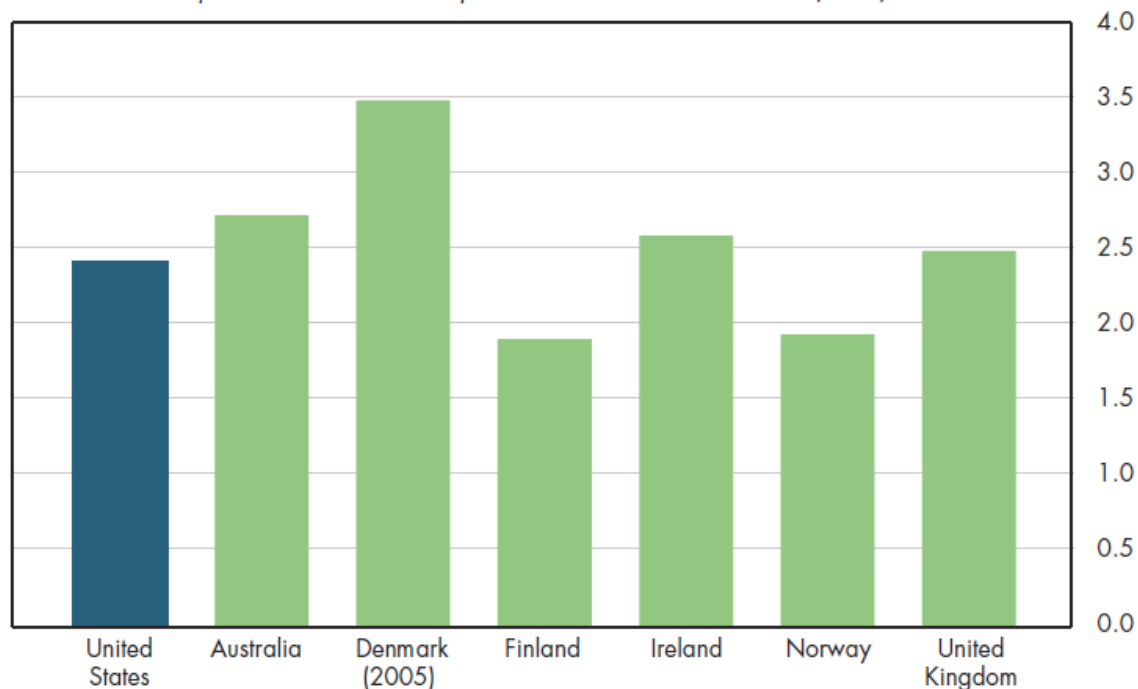
A similar result with less pronounced differences can be told for general physicians. In the United States, their relative compensation is the same as the average compensation of specialists in the OECD. Generalist physicians in the OECD earn on average less than three times per capita GDP in their own country. Thus, U.S. physician generalists are paid in relative terms almost 50 percent more than physicians in other industrialized nations receive.

The U.S. pay differential shrinks further in the case of nurses. U.S. nurses, on average, are paid approximately 50 percent more than GDP per capita, whereas in the OECD they are paid approximately 10 percent more on average. Thus, a typical U.S. nurse earns approximately 30 percent more than do counterparts in the OECD.

More detail illustrates some of the variation masked by using averages. The annual compensation for nurses employed in American hospitals is almost 2.5 times as high as that for the average U.S. worker (figure 11.4b). This is the same as the relative compensation of nurses in the UK. Although relative nurse pay is lower in some other countries (Finland and Norway), it is higher in Australia, Denmark, and Ireland. U.S. health workers generally are compensated well in absolute and relative terms. Even so, this does not imply that U.S. prices for health labor necessarily are the highest in the world when taking into account the earnings or resources available to the rest of a nation's workers or population.

11.4b Nurses in American hospitals are paid more than twice the average employee wage, but that is also true elsewhere

Ratio: annual compensation of salaried hospital nurses relative to all workers (2007)



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4.2 References

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- Organisation for Economic Co-operation and Development.

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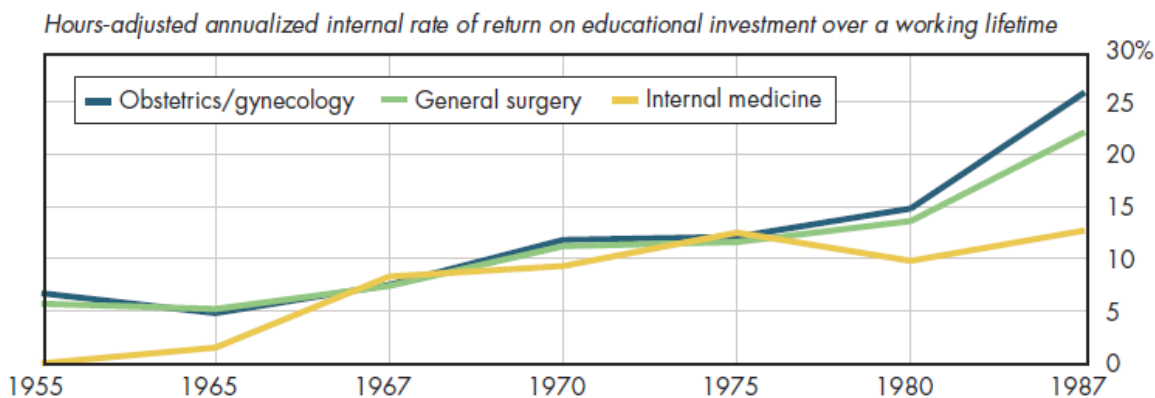
*CHAPTER 4. 11.4 US HEALTH PROFESSIONALS ARE PAID HIGHER
THAN OTHER INDUSTRIALIZED COUNTRIES*

Chapter 5

11.5 Rise in US Rates of Return for Medical Education¹

The annual rate of return to investment in physician education currently is at double-digit levels. Approximately 50 years ago, earlier studies found that such rates of return were much less than 10 percent (figure 11.5a). The numbers represent the hours-adjusted annualized rate of return on medical education over a doctor's working lifetime. The investment in medical education includes direct costs (tuition, books, and so forth) and indirect costs, that is, the income foregone by attending school/ residency rather than working.

11.5a The annual rate of return for medical education appears for some specialists to have increased over many decades



Note: The interval between years is not equal. Each year represents a different study. These studies have similar but not identical methodologies.

The return on this investment is the higher annual compensation physicians receive relative to what similar individuals receive on average during each year of their career. The hourly adjustment is important because physicians work longer hours than the average worker does. The rate of return is annualized to make it the same as other investments. For example, from 1900-2009, the total rate of return for the Dow Jones Industrial Average (DJIA) was 9.4 percent.

These data are approximations because such information for every category of physician is not available. Each of the studies that constitute the data displayed in figure 1.5b differs in its methodological details. However, they suggest that a typical physician earns a healthy rate of return compared with investing comparable resources in the stock market. These sizable rates of return appear somewhat less than for other

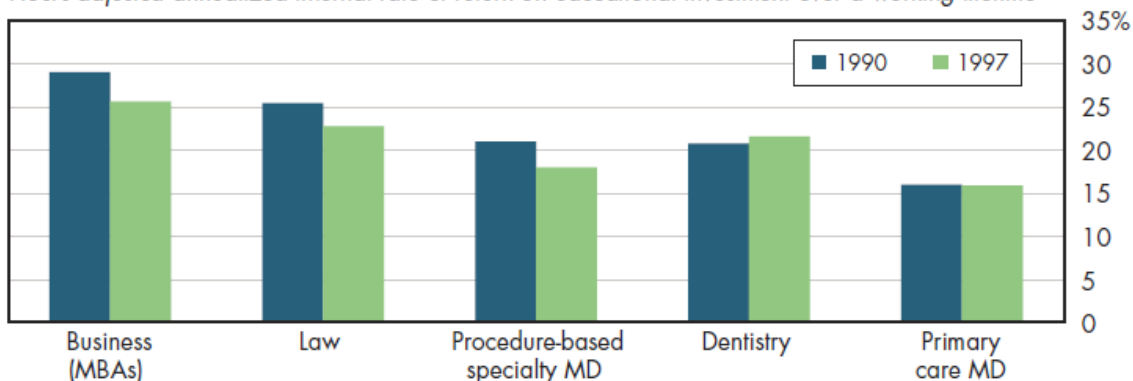
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professional degrees such as MBA or law degrees (figure 11.5b). Dentists and physician specialists have comparable rates of return, but primary care doctors have lower—albeit still impressive—rates of return. This is consistent with the general impression that primary care doctors are "underpaid" relative to specialists. The study shown defined procedure-based medicine as surgery, obstetrics, radiology, anesthesiology, and medical subspecialties. Trends for these other professions are not available, but CEO compensation has increased considerably, relative to that of average workers (figure 11.5c).

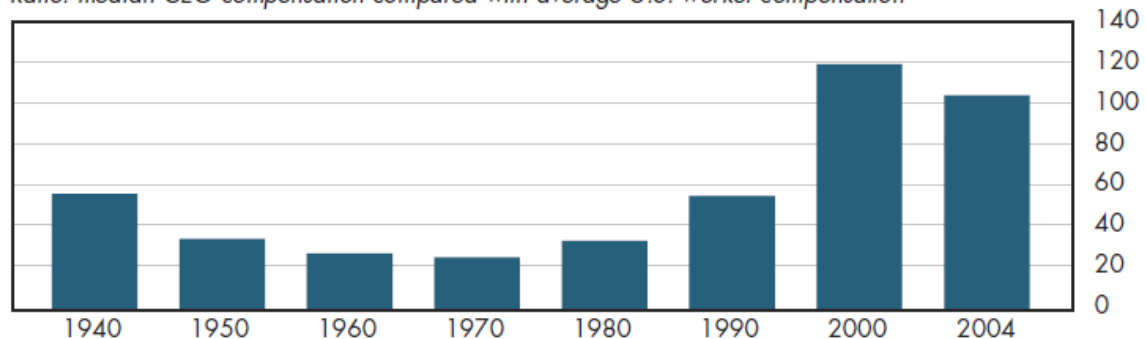
11.5b Physician specialists have higher educational rates of return than primary care doctors have, but these rates are lower than those for lawyers or for those who have MBA degrees

Hours-adjusted annualized internal rate of return on educational investment over a working lifetime



11.5c Increasing returns for physician education have occurred during a period in which CEO compensation also has been rapidly rising

Ratio: median CEO compensation compared with average U.S. worker compensation



These comparisons suggest that high prices for health labor in the United States might simply reflect higher returns to skilled labor across the board. If doctors were paid much less, more people might get MBAs or law degrees instead. This might reduce health spending, but reasonable people might disagree on whether it would improve social welfare.

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- Figure 11.5c Image Slide (as it appears above)⁶
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5.2 References

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- D. Weeks WB and AE Wallace. The More Things Change: Revisiting a Comparison of Educational Costs and Incomes of Physicians and Other Professionals. *Academic Medicine* 2002; 77(4):312-19.

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⁷<https://hub.mili.csom.umn.edu/content/m10108/latest/11.5cDATA.ppt>

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H health spending, § 1(1), § 2(5), § 3(9), § 4(13), § 5(17)

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