Health Care Financing Trends

The burden of health care costs: Business, households, and governments

by Katharine R. Levit and Cathy A. Cowan

In this article, the authors recast health care costs into payer categories of business, households, and Federal and State-and-local governments which are more useful for policy analysis. The burden that these costs place upon the financial resources of each payer are examined for 1989 and for trends over time. For businesses, their share of health care costs continues to creep upward compared with other payers and relative to their own resources, despite many changes they are making in the provision of employer-sponsored health insurance to their employees.

Introduction

In 1989, spending for health care rose to $604.1 billion, up 11.1 percent from the prior year. National health expenditures (NHE) captured almost twice the proportion of national output in 1989 as it did in 1965, growing from 5.9 percent of the gross national product in 1965 to 11.6 percent in 1989.

In order to understand more about the payers of health care and the pressures they face, the traditional source-of-funds (program) scheme of presenting NHE (Lazenby and Letsch, 1990) has been recast into payer categories. This payer classification fills policy needs by recognizing the role that business pays in financing health care and establishes a framework for understanding economic incentives of health care payers. Four of the separately identifiable payer categories under the new scheme include businesses, households, and Federal and State-and-local governments. Nonpatient revenues, a fifth payer category, is exactly equivalent to the traditional payer category of nonpatient revenues presented in the National Health Accounts (NHA).[1] Since this category is identical with the NHA category, it will not be discussed in detail in this article.

One of the most important aspects of this rearrangement of the NHA is the identification of the expenditures for which businesses are responsible. Business sponsors 89 percent of privately-financed insurance policies through employer-sponsored private health insurance (Health Insurance Association of America, 1989). Health insurance is a key part of compensation packages that workers assess when choosing an employer. As such, businesses have a difficult choice when confronted with rising health care costs: Good insurance packages are expensive, but are needed to compete successfully for good employees. To finance these increases, employers can cut their profit, raise product prices, or offer smaller wage increases. Another option is to offer less rich packages or drop health insurance benefits altogether, and risk losing workers.

In recent years, some businesses have faced annual premiums increases of 20 and 30 percent. Employers have re-examined policies, attempting to reduce their cost increases by raising deductibles and shifting more of the premium cost to employees. Many companies have moved into managed care programs, hoping that gatekeeper approaches would stem excess utilization.

Companies have also been grappling with problems of the rising number of retirees who have been promised health care benefits. These benefits have been mainly funded on a pay-as-you-go basis from current resources. The enormity of the future burden this will place on business is only beginning to be realized.

Business output drives economic growth. Any restructuring of the health care system to address the needs of the uninsured and to contain the rapid growth in health care costs must be grounded in a firm understanding of the effects that these changes will have on business and on their ability to grow and compete nationally and internationally.

Data presented in this article track expenditures made by these alternative payer categories from 1965 through 1989. A special emphasis is placed on business health care spending, analyzing the changes which businesses have been attempting to employ in their provision of health care insurance benefits for their workers. In addition, the burden of health care spending, measured as a portion of payers' ability to finance this care, is assessed.

Payer structure

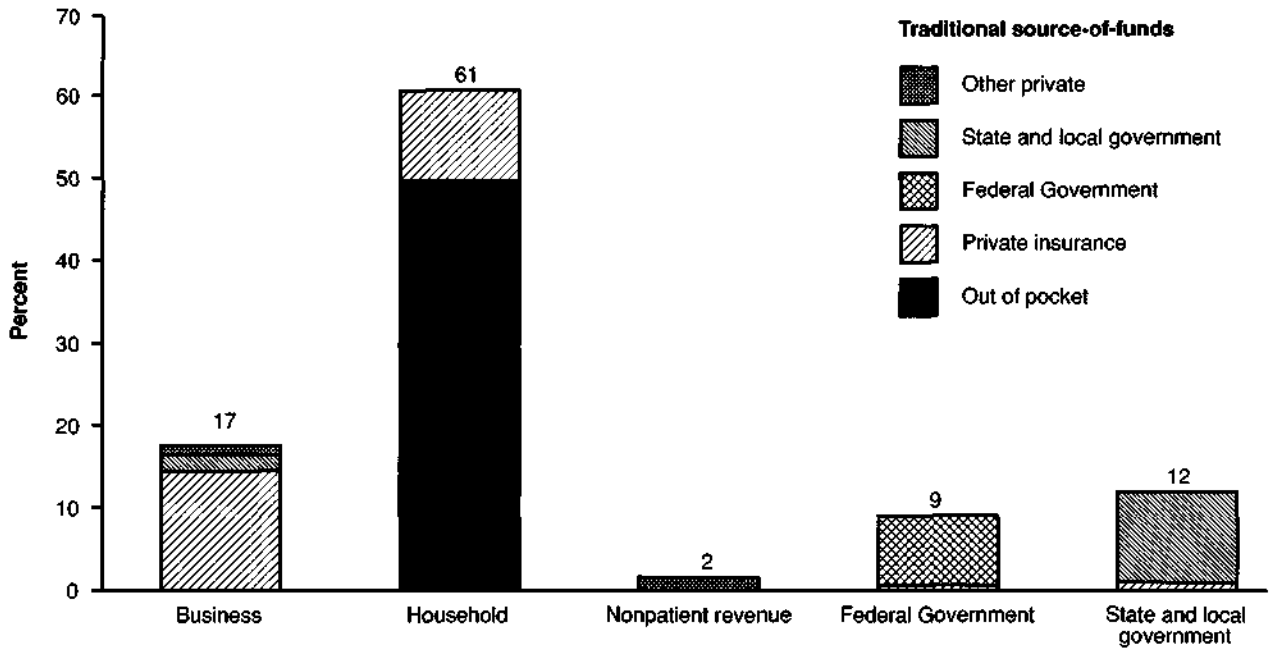
The basis of aggregation under the payer classification presented here is health services and supplies (HSS). HSS covers the delivery of all health services and the purchase of medical products, including prescription drugs and vision products, in retail outlets. It also includes government public health expenditures, the administrative costs of public programs, and the net cost of private health insurance. (Net cost includes administrative costs, net additions to reserves, rate credits and dividends, premium taxes and profits or loss.) Not included in this construct are expenditures for research and for construction.

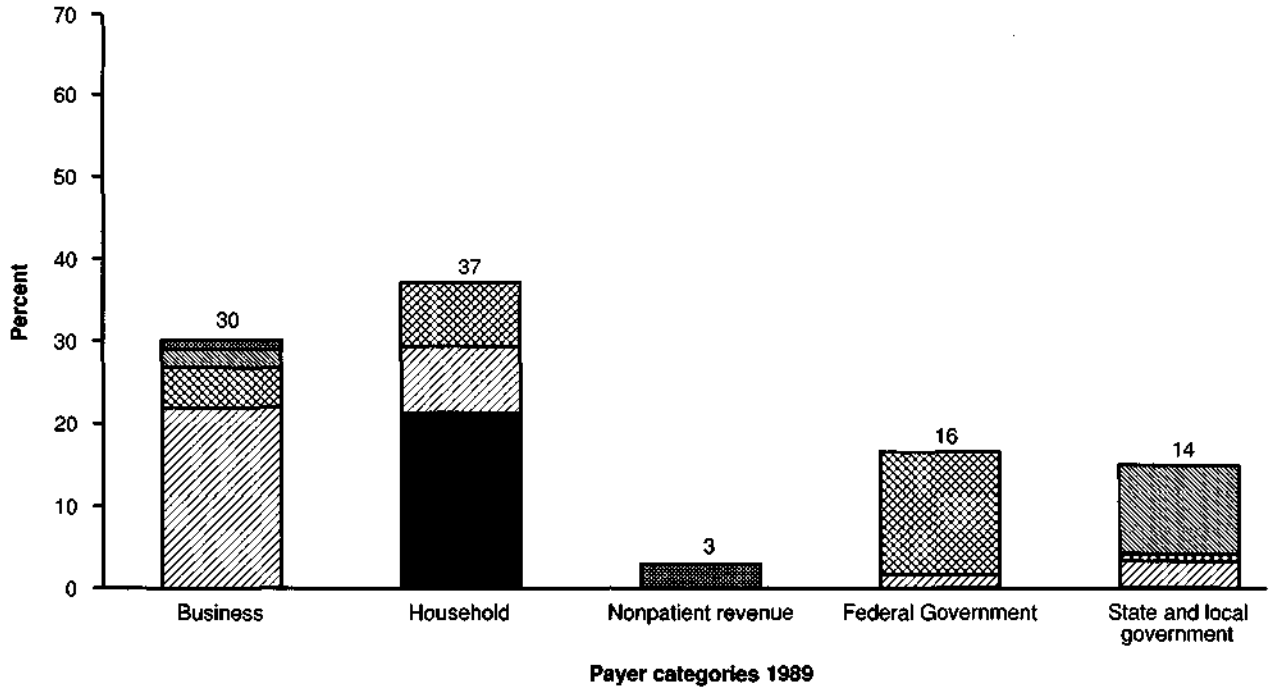
Under the traditional NHE structure, a significant proportion of business health care costs are hidden within the category of private health insurance premiums. Initially, the costs of these plans are financed entirely by employers or are shared with employees. Business absorbs additional health care costs by paying workers'

[1]This category includes philanthropic revenues received by providers of care as well as income received by hospitals, nursing homes, home health agencies, and outpatient clinics from assets such as interest, dividends, and rents.

Reprint requests: Carol Pearson, Office of National Cost Estimates, L-1, EQ05, 6325 Security Boulevard, Baltimore, Maryland 21207.

Figure 1
Health services and supplies disaggregated into payer classification: 1965 and 1989





SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of the National Cost Estimates.

compensation and temporary disability policy premiums, through the provision of direct health care services at the place of employment or at other sites, and through Medicare hospital insurance payroll tax—one-half of which is paid by the employer.

In the case of households, the traditional program NHA taxonomy lists out-of-pocket costs for health care as the only obvious expenditure responsibility of individuals. Under the accounting scheme presented in this article, the financial responsibility for health care costs assigned to individuals almost doubles: It includes, in addition to out-of-pocket expenditures, the employee portion of employer-sponsored health insurance premiums, premiums for individually purchased insurance (including medigap policies), premiums for Medicare supplementary medical insurance (SMI), and the employee portion of contributions and voluntary premiums paid to the Medicare hospital insurance (HI) trust funds (Figure 1).

Under the traditional source-of-funds (program) scheme, 42 percent of all expenditures for HSS comes from the public sector. Under the payer scheme presented here, governments' overall responsibility for health care financing is reduced to 31 percent; government expenditures are primarily limited to those funded from general revenue sources.

For the Federal Government, this means that Medicare expenditures are reduced by the amount businesses and households pay into the Medicare trust funds. (Federal Government, as an employer, pays the employer portion of the Medicare hospital insurance tax for Federal employees. These payments remain in the Federal sector.) The amount recorded as Medicare expenditures under this taxonomy is primarily the amount of general revenue contributions to Medicare, Federal employer payments to the trust fund, and trust fund interest income reduced by any change in the trust fund balances. As such, Medicare expenditures in 1989 are only one-fourth of all Medicare expenditures counted in the traditional source-of-funds construct. Only part of this Medicare reduction is offset by expenditures which the Federal Government, as an employer, pays towards private health insurance premiums for employees.

In 1989, State and local governments' share of health care spending is slightly higher under this payer scheme than it is under the source-of-funds scheme. The amount these governments, as employers, pay for a portion of private health insurance benefits and for contributions into the Medicare hospital insurance trust fund for its employees more than offset the State and local worker's compensation and temporary disability insurance premiums[2] transferred to business under this payer classification.

Levit, Freeland, and Waldo (1989) provide a complete discussion of the accounting used to transform NHE source of funds classifications into payer categories.

[2]In NHA, workers' compensation and temporary disability insurance programs are State-mandated benefits. These benefit programs are operated by some combination of government, private insurers, or businesses themselves through self-insurance. Since the benefit is required by law, it is assigned to State and local government expenditures under the traditional NHE taxonomy.

Health spending in 1989

Households

In 1989, households' spending for health care accounted for the largest segment of HSS expenditures—37 percent. Households spent $215.6 billion on health care, slightly more than one-half from out-of-pocket sources (Table 1). The $124.8 billion in out-of-pocket expenditures purchased services not covered by insurance and paid for the deductible and coinsurance amounts of insured services. An additional $45.6 billion in household monies went for health insurance premiums for both the purchase of individual policies and for the employee share of employer-sponsored premiums. Medicare contributions by households to SMI and HI trust funds through taxes and premiums amounted to $45.2 billion. In aggregate, health care expenditures by households grew 9.9 percent from the previous year, slower than the 11.3 percent growth in HSS.

Business

In 1989, business is the second largest payer of health care paying for a total of 30 percent of all HSS. Business expenditures of $173.4 billion grew 12.3 percent between 1988 and 1989. A substantial portion of business spending was for insurance: $128.8 billion for employee private health insurance policies and $28.5 billion for contributions to the Medicare HI trust fund as part of employer-paid Federal Insurance Contributions Act (FICA) taxes[3]. Businesses spent an additional $14.1 billion on workers' compensation and temporary disability insurance and $2.1 billion for employee health programs.

Federal Government

In 1989, Federal Government outlays for HSS was $95.5 billion, or 16 percent, of the HSS total, an increase of 13.4 percent from 1988. Federal spending under this payer classification method is less than 60 percent of the size it is under the traditional source of funds taxomony. This is because of the allocation of Medicare payroll taxes and premiums back to the sectors from which they originated. What remains in this sector is general revenue contributions to Medicare and other Federal health care programs, Federal employer payments for private health insurance and trust fund interest income (less any changes to the trust fund balances).

State and local government

State and local government expenditures under this payer construct are 9 percent higher than those in the traditional source of funds allocation scheme in 1989. Additions of State and local employer contributions to private health insurance and to the Medicare HI trust fund are greater than the amounts subtracted for workers'

[3]In 1989, employers and employees each contributed 1.45 percent of taxable earnings, up to a limit of $48,000. For 1990, that earning limit rose to $51,300.

Table 1

Expenditures for health services and supplies, by type of payer: United States, selected calendar years 1965-89

Type of payer	1965	1967	1970	1975	1980	1985	1986	1987	1988	1989
	Amount in billions									
Total	$38.2	$47.9	$69.1	$124.7	$237.8	$404.7	$436.3	$475.2	$524.1	$583.5
Private	30.3	35.0	50.1	86.2	161.5	280.2	304.4	329.5	365.1	405.1
Private business	6.5	8.9	15.1	30.3	67.6	117.1	128.0	137.8	154.4	173.4
Employer share of private health insurance premiums	5.4	6.2	11.2	22.4	51.1	87.5	93.0	99.7	113.2	128.8
Employer contribution to Medicare hospital insurance trust fund	0.0	1.4	2.1	5.0	10.5	20.3	23.3	24.7	26.4	28.5
Workers' compensation and temporary disability insurance	0.8	1.0	1.4	2.4	5.1	7.8	10.1	11.6	12.9	14.1
Industrial inplant health services	0.2	0.2	0.3	0.5	0.9	1.4	1.6	1.7	1.9	2.1
Household	23.1	25.3	33.6	53.4	87.0	151.2	164.0	178.3	196.1	215.6
Employee share of private health insurance premiums and individual policy premiums	4.1	4.2	4.6	7.4	13.9	30.3	33.7	37.9	40.6	45.6
Employee and self-employment contributions and voluntary premiums paid to Medicare hospital insurance trust fund[1]	0.0	1.6	2.4	5.7	12.0	24.0	27.6	29.5	31.4	33.9
Premiums paid by individuals to Medicare supplementary medical insurance trust fund	0.0	0.6	1.0	1.7	2.7	5.2	5.2	6.1	8.7	11.3
Out-of-pocket health spending	19.0	18.9	25.6	38.5	58.4	91.7	97.4	104.7	115.5	124.8
Nonpatient revenue	0.6	0.8	1.5	2.5	7.0	11.9	12.4	13.5	14.6	16.1
Public	7.9	12.8	18.9	38.5	76.3	124.5	131.9	145.7	159.0	178.4
Federal Government	3.4	7.0	10.4	21.3	42.6	69.0	70.0	76.7	84.2	95.5
Employer contributions to private health insurance	0.2	0.2	0.3	1.2	2.2	4.3	4.0	4.8	6.4	8.0
Adjusted Medicare	0.0	1.4	2.0	3.3	11.1	20.3	18.0	19.5	20.8	24.8
Medicare	0.0	5.1	7.6	16.4	37.5	72.1	76.9	82.9	90.5	102.1
Less Medicare hospital trust fund contributions and premiums	0.0	3.1	4.7	11.3	23.7	46.6	53.7	57.3	61.1	66.0
Less Medicare supplementary medical insurance premiums	0.0	0.6	1.0	1.7	2.7	5.2	5.2	6.1	8.7	11.3
Other health program expenditures (excluding Medicare)	3.3	5.4	8.2	16.8	29.2	44.4	48.1	52.4	57.0	62.7
Medicaid	0.0	1.5	2.9	7.4	14.5	23.1	25.4	27.9	31.0	35.5
Department of Veterans Affairs	1.2	1.3	1.8	3.5	5.9	8.7	9.2	9.6	10.0	10.6
Department of Defense	1.0	1.5	1.8	2.8	4.3	7.6	8.4	9.3	9.8	10.4
Other programs[2]	1.2	1.1	1.8	3.0	4.4	4.9	5.1	5.6	6.2	6.2
State and local government	4.5	5.8	8.5	17.2	33.7	55.5	61.9	69.0	74.9	82.9
Employer contributions to private health insurance	0.3	0.4	0.6	1.9	6.2	11.9	12.8	13.9	15.8	17.4
Employer contributions to Medicare hospital insurance trust fund	0.0	0.1	0.2	0.7	1.3	2.2	2.7	3.1	3.3	3.6
Health expenditures by program	4.2	5.3	7.6	14.6	26.3	41.4	46.4	52.1	55.8	61.9
Medicaid	0.0	1.6	2.5	6.1	11.6	18.6	19.8	22.9	23.9	26.9
Hospital subsidies	2.6	2.6	3.4	5.2	6.2	7.8	10.0	11.2	12.4	13.9
Other programs[3]	1.6	1.1	1.8	3.3	8.5	15.0	16.6	18.0	19.5	21.1

[1]Includes one-half of self-employment contribution to Medicare hospital insurance trust fund.
[2]Includes Maternal and Child Health, Vocational Rehabilitation, Alcohol Drug Abuse and Mental Health Administration, Indian Health Service, Office of Economic Opportunity (1965-74), and other miscellaneous general hospital and medical programs and public health activities.
[3]Includes other public and general assistance, Maternal and Child Health, Vocational Rehabilitation, and public health activities.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

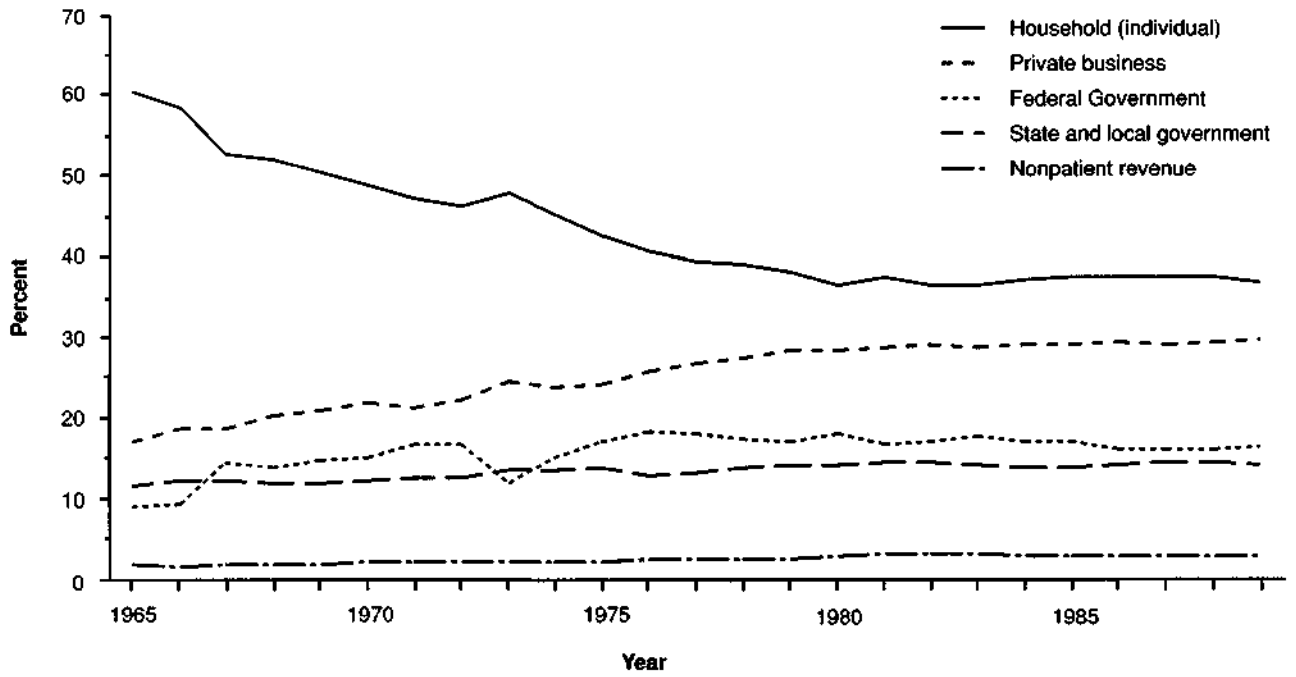
compensation and temporary disability insurance which are reassigned to the business sector. State and local government outlays grew at a rate of 10.7 percent between 1988 and 1989 to reach $82.9 billion, 14 percent of HSS.

Trends in health spending

Under the traditional source-of-fund (program) allocation of the HSS, the share of funding shifted from private sources to governmental programs from 1965 through 1980. When HSS is disaggregated under the payer method presented here, the shift from private to public shares of health care spending occurs, but less dramatically (Figure 2). Under the payer scheme, private spending accounted for 79 percent of the HSS in 1965 (Table 2). Private spending dropped to 73 percent in 1967 with the advent of Medicare and the 50 percent subsidy of Medicare's SMI program with general revenue. By 1980, the private spending share fell to a low of 68 percent. Since then, the private expenditures segment has grown only slightly to reach a level of 69 percent in 1989.

Figure 2

Percent of expenditures for health services and supplies, by payer: United States, selected calendar years 1965-89



SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

Table 2

Percent distribution of expenditures for health services and supplies, by type of payer: United States, selected calendar years 1965-89

Type of payer	1965	1967	1970	1975	1980	1985	1986	1987	1988	1989
	Percent distribution									
Total	100	100	100	100	100	100	100	100	100	100
Private	79	73	73	69	68	69	70	69	70	69
Private business	17	19	22	24	28	29	29	29	29	30
Household (individual)	61	53	49	43	37	37	38	38	37	37
Nonpatient revenue	2	2	2	2	3	3	3	3	3	3
Public	21	27	27	31	32	31	30	31	30	31
Federal Government	9	15	15	17	18	17	16	16	16	16
State and local government	12	12	12	14	14	14	14	15	14	14

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

Households

Within the private share of health care expenditures, the division between two components—households and business—has changed dramatically. In 1965, households accounted for 61 percent of HSS, with business capturing only 17 percent. Household share dropped until 1982 when it reached 36 percent. Throughout the 1980s the household share has remained fairly constant, fluctuating between 36 and 38 percent of HSS. The largest component of household expenditures—out-of-pocket spending—has fallen steadily as a percent of the total HSS expenditures since 1965. Since 1980, however, this falling out-of-pocket share has been offset by increases in households' private insurance premiums and in their tax contributions and voluntary premiums paid into the Medicare trust funds.

Business

Business spending has offset a proportion of the decline in the household share of spending from 1965

through 1981. Businesses accounted for 17 percent of HSS spending in 1965. Their share of HSS increased to 29 percent in 1981 and has maintained that share for most of the decade. A significant portion of business expenditure is for the employer share of private health insurance premiums. Private health insurance accounted for 22 percent of HHS spending in 1989, up from 14 percent of the HSS expenditures in 1965.

Because of data limitations discussed later, one of the most difficult estimates to prepare is the employer-paid share of private health insurance. For the past few years, the authors have been tracking the results of a new data source to generate estimates of the employer-paid portion of employer-sponsored health care premiums. This source, the Bureau of Labor Statistics (BLS) Employment Cost Index (ECI) Survey, measures, among other things, the change in cost to employers for the purchase of health care policies for current workers. Data from this source were reconfigured by BLS to yield the employer cost of health insurance premiums as a percentage of wages and salaries earned. This ratio, when multiplied by BLS wage and salary statistics, yielded estimates of total private employer costs for health insurance premiums.

For 1984 and 1987, ECI-based estimates are nearly identical to those used in this payer construct. In 1984 and 1987 respectively, ECI-based estimates show employer paid premiums for health insurance totalling $82.6 and $99.5 billion (Table 3) compared with $82.2 and $99.7 estimated using methods developed by the Bureau of Economic Analysis (BEA) and used in this construct (Table 1). In other years, these estimates diverge slightly.

Given existing data sources, it is unclear which method produces more accurate estimates of employer-paid insurance premiums. The ECI survey was designed to measure the change in employer costs for employee compensation per hour worked, with the cost of all insurance combined in one category; it was not designed to produce aggregate private health insurance estimates. On the other hand, many assumptions must be made by BEA to produce their estimates, including the level of NHE private health insurance premiums and the ratio of employer-paid to total employer sponsored premiums. In both cases, estimates are crafted by piecing together the best available information, information which may have been designed for other purposes.

If the ECI based estimates were used in Table 1 instead of the BEA-method estimates, businesses would bear an even greater share of health care costs in 1989, offset by a smaller share attributable to households. The ECI-based estimates show an additional $2 billion in employer paid premiums (0.4 percent of total HSS) in 1989. These estimates continue, in an even more deliberate fashion than the BEA-method estimates, the trends established in earlier years.

The conclusion that can be drawn from comparing these two alternative methods of estimating the employer share of private health insurance premiums is that the size of the employer health care bill estimated using two different methods—one using insurance industry data and the other using establishment data—is generally consistent. Both series support the conclusion that businesses have not yet been effective in transferring a greater share of the cost of health care to employees. As more data is accumulated on this subject, our ability to assess the strengths of each source and understand the best ways to use these data will be enhanced.

Federal Government

The public share of HSS grew from 21 percent in 1965 to 31 percent in 1989. Most of the growth occurred in the Federal sector, with most of that change resulting from the implementation of the Medicare program. In 1965, the Federal sector purchased 9 percent of HSS. By 1967, this share rose to 15 percent as the Medicare and Medicaid programs got under way. In 1976, Federal spending peaked at 18 percent of all HSS expenditures. By 1986, the Federal share fell to 16 percent, because of the use of more effective cost and utilization containment measures such as the prospective payment system. Medicaid plays a smaller role in the growing share of health care costs financed by the Federal sector than does Medicare, since the program replaced existing federally funded medical care programs and since State budget constraints limited Medicaid program spending growth.

State and local government

The State and local share of HSS has grown relatively little since 1965, rising from 12 percent in 1965 to

Table 3

Employer share of private health insurance premiums for current workers by industry, as calculated using data from the Employment Cost Index survey: United States, selected calendar years 1984-89

Type of industry	1984	1985	1986	1987	1988	1989
			Amount in billions			
All private industry	$82.6	$93.4	$96.7	$99.5	$115.4	$130.9
Agriculture, forestry, and fishing	0.5	0.6	0.6	0.6	0.7	0.8
Mining	1.6	1.5	1.6	1.6	1.8	1.9
Construction	4.2	4.8	5.3	5.8	6.2	6.7
Manufacturing	35.4	38.1	35.3	36.1	42.3	49.6
Transportation, communications, electric, gas, and sanitary services	7.2	8.4	8.7	9.7	11.3	11.6
Wholesale trade	7.0	8.4	9.4	8.6	9.9	11.5
Retail trade	7.4	8.8	9.8	10.4	11.2	10.6
Finance, insurance, and real estate	5.2	6.0	7.0	7.5	9.6	11.1
Services	14.1	16.9	18.9	19.2	22.4	27.2

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

14 percent in 1989. The HSS share attributable to State and local spending did reach a high of 15 percent in 1987 but has since dropped as a percentage of HSS spending. The most significant change in this sector has been the establishment of the Medicaid program in 1966. Explicit attempts to limit Medicaid expenditures have restrained the growth of the program, affecting the overall State and local government share of HSS.

Burden of health care spending

Rising health care costs do not necessarily present a problem for payers as long as increases in the income used to finance the expenditures keeps pace with or exceeds them. Even if growth in health care expenditures exceeds the growth in income, payers may be able to balance increased health care burdens with greater efficiencies in other areas. Payers may even be willing to accept larger health care burdens if increased expenditures lead to improved health status. As health care costs begin to eat away at payers ability to meet other responsibilities or needs, the burden of health care costs become an issue.

By every measure used here to quantify this health care "burden," growth in business' output and governments' revenue has not kept pace with the rising health care costs which these sectors bear. In 1989, the financial burden of health care costs has grown from as little as two times to as great as seven times the 1965 level. For households, however, the burden of health care costs as a percent of personal income was relatively stable from 1965 through the early 1980s. Only in the last half of the 1980s has the burden on individuals increased, but that increase has been insignificant when compared with the increased burdens faced by business and governments.

We later discuss several indicators which track the change in burden, or ability to pay, over time.

Business

According to most of the measures used in this article, the burden business carries for health spending at least doubled from 1965 through 1989, and, depending on the measure, rose to as much as seven times the 1965 level (Table 4).

First, a comparison was made of the trend in health spending with two measures of aggregate business income: business receipts and gross domestic product (GDP). In 1965, the ratio of health spending to business receipts was 0.4 percent. By 1982, that share had tripled to 1.2 percent, indicating that business health spending had grown much faster than output during that period. A similar trend is evidenced by the ratio of health spending and private GDP, an aggregate measure of value added by business at each stage of production, which rose from 1.0 percent in 1965 to 4.2 percent in 1989.

The trends in these two ratios are similar, but the ratios themselves are not. Use of value added rather than business receipts measures the value of health spending embedded in purchases made by individual firms as well as their direct health expenditures. For example, a manufacturer of final products pays health insurance premiums for its workers: this spending is direct. It also purchases intermediate products, and part of the cost of those products is attributable to health benefits paid to workers in the intermediate industries. That latter cost is not seen by the final product manufacturer as health spending, but, in fact, it is, and should be represented at an aggregate level. The ratio of health spending and private GDP is at least double that of health spending and business receipts.

Next, the relationship between health spending and various categories of labor expense is compared. Health spending constituted 2 percent of total labor compensation in 1965 and more than tripled to 7 percent in 1989. When

Table 4

Expenditures for health services and supplies as a percent of business income, expense, or profit: United States, selected calendar years 1965-89

Year	Business health spending as a share of						
	Total business receipts[2]	Gross private domestic product[3]	Labor compensation			Corporate profits[1]	
			Total compensation[4]	Wages and salaries[4]	Fringe benefits[4]	Before taxes	After taxes
	Percent						
1965	0.4	1.0	2.0	2.2	22.4	8.4	14.0
1967	0.5	1.3	2.4	2.6	24.4	11.1	18.8
1970	0.7	1.7	3.1	3.5	29.2	19.8	36.1
1975	0.8	2.2	4.1	4.7	30.0	22.4	36.1
1980	0.9	2.9	5.1	6.1	33.0	28.5	44.4
1985	1.3	3.3	6.2	7.3	39.6	52.2	91.6
1986	1.3	3.4	6.3	7.5	40.7	57.7	110.0
1987	1.3	3.5	6.4	7.5	42.0	50.0	92.8
1988	NA	3.9	6.6	7.8	43.6	48.7	85.5
1989	NA	4.2	7.0	8.3	46.1	56.4	100.5

[1]Based on July 1990 data from the U.S. Department of Commerce national income and product accounts.
[2]Business receipts for sole proprietorships and total receipts of partnerships and corporations based on Internal Revenue Service data.
[3]Reflects health costs embedded in the unduplicated value of intermediate and final goods; based on data from the U.S. Department of Commerce national income and product accounts.
[4]For employees in private industry.

NOTE: NA is not available.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

health spending is taken as a share of wages and salaries, the share grows to four times its original portion—to 8.3 percent in 1989, up from 2.2 percent in 1965. Health spending as a share of fringe benefits doubles during the same timeframe: from 22.4 percent in 1965 to a 1989 level of 46.1 percent. These measures illustrate the value workers place on health insurance benefits, and their willingness to tradeoff wage increases for the maintenance of health care benefits.

The last group of indicators compare business health costs with profits. The only readily available measure of profits covers corporations only, leaving out the profits of sole proprietorship and partnership businesses. To the extent that corporation profits have a constant relationship to all profits, these burden measures give accurate trends, although the levels will be inflated.

The ratio of health spending to pre-tax corporate profits rose from 8.4 percent in 1965 to a high of 57.7 percent in 1986; the ratio dipped in 1987 and 1988, but rose again to 56.4 percent in 1989. Compared with after-tax profits, the ratio is even higher. Business health care expenditures as a share of after-tax profits was 14.0 percent in 1965, but climbed fairly steadily until it reached an high of 110.0 percent in 1986, then decreasing to a level of 100.5 percent in 1989. Business health care costs may not be eroding corporate profits any more than some other factor inputs of production; however, the fact that health care spending is essentially the same size as after-tax profit helps explain the attention which business focuses on the level of health care costs.

The BLS Employee Benefit Survey of Medium and Large Size Firms (1990) offers insight into provision of health care insurance by employers. Although the omission of small firms and exclusion of part-time workers limits its scope, the survey does offer valuable insight into trends in employer-sponsored health insurance during this decade.

During the 1980s, the proportion of full-time employees in employer-sponsored medical care plans fell from 97 percent participation in 1980 to 92 percent in 1989. During the same period, employers required a greater proportion of employees to share the cost of premiums. In 1980, 72 percent of all employees with single policies and 51 percent of all employees with family policies were covered by policies completely paid by employers; by 1989, employers completely financed only 48 percent of their employees with single policies and 31 percent with family policies.

A small part of the reduction in participation rates comes from the expansion of the survey sample to include a broader spectrum of service industries and more small firms. These businesses are less likely to offer health insurance coverage to employees. Additional reduction in participation rates can be linked to employers who drop health insurance coverage as a benefit for their workers. Reduction in participation rates may also be linked to premium cost-sharing requirements. When faced with these requirements, families with two working spouses may decide to drop dual coverage previously paid completely or substantially by the employer. Other individuals may feel that the employee share of premiums is too large, and decide to bear the risk of medical liability themselves. In 1989, employees who shared the cost of premiums with their employers contributed, on average, $25 per month for employee only coverage and $72 per month for family coverage.

Virtually all full-time employees in medium and large size firms who participated in employer-sponsored private health insurance are covered for hospital care, surgery, physician visits, and prescription drugs (Table 5). Until this decade, most policies did not extend beyond these basic coverages for most employees. During the 1980s, however, there has been an explosion in the breadth of services covered by employers. The most dramatic growth is seen in alcohol and drug abuse coverage, which, by 1989, extended to almost all employees participating in health plans. There has been a surge in the percent of employees covered for home health care

Table 5

Percent of full-time workers in medium and large firms who participate in employer-sponsored health plans, by category of benefits covered: United States, selected calendar years 1980-89

Covered benefits	1980	1982	1984	1986	1988	1989
			Percent distribution			
Hospital[1]	100	100	100	99	98	98
Surgery	100	100	100	99	98	98
Physician visits						
In-hospital	100	100	100	99	98	98
In-office	94	95	96	96	98	97
Prescription drugs	97	97	98	97	94	95
Dental	56	68	77	71	66	66
Vision	21	22	30	40	35	35
Alcohol abuse	NA	50	61	70	80	97
Drug abuse	NA	37	52	66	74	96
Home health	NA	37	46	66	76	75
Hospice	NA	11	11	31	38	42
Routine physicals	NA	NA	8	18	28	28
Well-baby care	NA	NA	NA	NA	31	34
Immunizations and inoculation	NA	NA	NA	NA	29	28

[1]Includes room and board and miscellaneous services.

NOTE: NA is not available.

SOURCE: (Bureau of Labor Statistics, 1989.)

services. Additional gains have been made in coverage of hospice care, and preventive services such as routine physicals, well-baby care, and immunizations.

Part of the increased breadth of coverage is because of State mandated benefits requiring insured employers to cover specific services, procedures, or professionals. From 1980 through 1989, the cumulative number of mandated benefits States have enacted grew 80 percent (Gabel and Jensen, 1989). Employers who self-fund health care benefits, are exempt from mandates. Still, they need to provide health benefit packages which are competitive with other employer packages offered within their labor market.

During the 1980s, policy deductibles increased moderately. In 1980, 85 percent of all medical plan participants in medium and large size firms had deductibles of $100 or less. By 1989, deductibles for more than one-half of the participants had risen to greater than $100, with 15 percent of participants with deductibles greater than $200. Considering that health care costs as measured by HSS grew 145 percent during this period and that the deductible covered many additional services previously paid completely out-of-pocket, the increases in deductibles appear relatively small (Levit, Freeland, and Waldo, 1990).

Businesses are taking steps to alter the structure of employer-sponsored private health insurance, the biggest part of business health care costs. Efforts are under way to shift more of these costs to employees through increased premium cost-sharing and through larger coinsurance and deductibles. As shown in data on Table 1, these steps, so far, seem not to have been effective at reducing business' share of health care costs. Deductibles have been increased, but this rise has not kept pace with growth in medical care costs, nor has it taken into account the increased breadth of benefits offered which were previously paid out-of-pocket by employees. Business' share of costs continue to increase faster than household out-of-pocket and employee share of employer-sponsored and individually purchased private health insurance premiums, so the burden on businesses continues to rise faster than it has for households.

Households

Household health care spending as a proportion of adjusted personal income remained unchanged at about 4 percent from 1965 until 1980 (Table 6). During the 1980s, the share rose steadily, reaching 5.1 percent in 1989. This results from a combination of changes: from increases in private health insurance premiums (both individually purchased and the employee share of employer-sponsored private health insurance); from increases in Medicare HI contributions and SMI premiums; all of which have growth rates in excess of the growth in adjusted personal income.

The data from the BLS' Consumer Expenditure Survey, which covers the noninstitutionalized population, shows almost no change in household health care costs as a share of income after taxes between 1972-73 and 1988. Data from the Consumer Expenditure Survey highlight an important point: Aggregate measures can obscure distributional issues within a payer class. The share of

Table 6

Expenditures for health services and supplies as a percent of household (individual) income: United States, selected calendar years 1965-89

Year	Individual health spending as a share of adjusted personal income[1]	Health spending as a share of income after taxes[2]	
		All ages	Reference person 65 years of age or over[3]
		Percent	
1965	4.2	NA	NA
1967	4.0	NA	NA
1970	4.1	NA	NA
1972-73	NA	5.1	8.9
1975	4.1	NA	NA
1980	3.9	NA	NA
1985	4.7	4.8	11.0
1986	4.8	4.9	11.8
1987	4.9	4.6	10.7
1988	5.0	5.0	12.1
1989	5.1	NA	NA

[1]Personal income adjusted to include personal Medicare contributions and to exclude certain transfer payments (medical benefits for Medicare, Medicaid, workers' compensation, and temporary disability insurance).
[2]Calculated from the Consumer Expenditure Integrated Survey of the Bureau of Labor Statistics. In this survey, the institutionalized population, including nursing home residents were excluded, so spending for nursing home care covers only a small portion of total days of care.
[3]Consumer expenditure data are tabulated by age of reference person. These households may include some individuals under 65 years of age. Similarly, individuals 65 years or over who reside in households where the reference person is under 65 years of age are excluded.

NOTE: NA is not available.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

income consumed by health care spending for families with an elderly head of household is 12.1 percent, compared with a 5.0 percent for all families in 1988 (Table 6). The share of income after taxes devoted to health care for elderly headed households has risen over the last 15 years whereas the share for all families has not.

Government

From 1965 to 1985, the Federal Government experienced almost a quadrupling of the demands of health care on its income—general revenue (Table 7). From 1984 through 1987, favorable economic conditions spurred growth of tax revenues that kept pace with rising SMI and other health care outlays. However, there is an increase in the health spending ratio in the last 2 years. Growth in Federal Government revenues maintained a moderate pace while the growth of health care spending has increased.

The share of State and local receipts devoted to health care financing, primarily Medicaid spending and subsidies to hospitals, almost doubled from 1965 to 1989. Growth in general revenues of these governments has not kept pace with rising health care costs throughout most of this period.

Table 7

Expenditures for health services and supplies as a share of Federal and State and local government revenues: United States, selected calendar years 1965-89

Year	Federal Government health spending as a share of Federal revenues[1]	State and local government health spending as a share of State and local revenues[2]
	Percent	
1965	3.5	7.5
1967	6.1	8.2
1970	7.3	8.3
1975	11.0	10.2
1980	11.6	12.4
1985	14.4	12.6
1986	14.1	13.1
1987	13.6	13.7
1988	14.4	13.9
1989	15.1	14.4

[1]Excludes contributions to social insurance because these came directly from businesses and individuals. These funds are for dedicated purposes and are not part of the general revenue pool of funds from which health spending can be financed. Based on July 1990 data from the U.S. Department of Commerce national income and product accounts.
[2]Excludes contributions to social insurance, as explained in footnote 1, and Federal grants in aid, such as Federal Medicaid grants to States. Based on July 1990 data from the U.S. Department of Commerce national income and product accounts.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Cost Estimates.

Definitions, revisions, sources and limitations

Since the first presentation of estimates under this accounting scheme (Levit, Freeland, and Waldo, 1989), major revisions in data sources and concepts have been incorporated into the NHA (Office of National Cost Estimates, 1990).

Most of the data used to estimate payer categories comes directly from the NHA (Lazenby and Letsch, 1990). Additional information on the employer-paid portion of employer-sponsored private health insurance comes from estimates for 1965 through 1982 developed by the BEA (1986). For 1983 through 1989, the BEA method of estimating the private employer paid portion of private health insurance was used, adjusted to incorporate new levels of private health insurance premiums contained in the NHA.

Data on employer and employee contributions (represented as liabilities incurred) to the Medicare HI trust fund come from unpublished tabulations from the Social Security Administration. Additional information on premiums paid by voluntary enrollees into the Medicare HI trust fund and on premiums paid into the Medicare SMI trust fund come from reports on trust fund activity (Board of Trustees of the Federal Hospital Insurance Trust Fund, 1990, and Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund, 1990). Estimates presented within this report are subject to certain limitations. Most importantly, estimates of private employer-sponsored health insurance premiums and the split of those estimates into employer and employee shares are difficult to measure as discussed later in this article.

In producing estimates of employer-sponsored private health insurance, BEA uses estimates of aggregate premiums from the NHA. Since the mid-1970s, measuring private health insurance in NHA has become complicated by the increased proportion of businesses which self-insure and by the blossoming of managed care providers such as health maintenance organizations (HMOs). A potential for double-counting premiums exists as traditional insurance carriers, still offering indemnity insurance services, developed new services in order to recapture some of the business lost to self-insurance. These services include the handling of administrative services and utilization review, reinsurance through stop loss and minimum premium plans, and the development of managed care programs through HMOs and preferred provider organizations. In addition, new businesses, in the form of third-party administrators, emerged to compete with traditional insurers in providing administrative services and utilization review for self-insuring companies. Counting each segment of the insurance industry once and only once is difficult given existing data sources.

Besides the accurate measurement of total premiums, splitting premiums into employer and employee shares is troublesome. BEA uses ratios measuring the employer share of private health insurance premiums from the Chamber of Commerce employee benefits survey (Chamber of Commerce of the United States, 1989). In the 1989 survey, almost two-thirds of the employers surveyed came from manufacturing, public utilities, insurance and hospital industries, potentially biasing the results. Despite this limitation, the Chamber of Commerce survey remains one of the most useful surveys available for estimating the employer share of premiums.

Summary

The data on health care costs presented in this article recast the traditional NHE source-of-fund accounting scheme into a payer construct. This alternative taxonomy provides a more relevant structure for understanding effects of rising health care costs on payers. For policy purposes, this construct permits analysis of the relative burden of health care costs and how these burdens have changed over time.

During the 1980s, shares of health care costs absorbed by business, households, and governments have changed only slightly. Households and businesses paid a larger share of Medicare costs through the increased share of SMI premiums (households) and through the higher Medicare HI contribution rates (FICA taxes)[4] and higher maximum taxable earnings[5] (households and businesses). Federal Government share of health expenditures fell 1.5 percentage points during the 1980s. Most of that decline was caused by the health expenditures of the

[4]In 1980, employees and employers each contributed 1.05 percent of taxable wages to the Medicare HI trust fund; by 1989, this contribution rate rose to 1.45 percent.
[5]In 1980, maximum taxable amount of annual earnings was $25,900; by 1989, that amount had risen to $51,300.

Department of Veterans Affairs which grew at one-half the rate of HSS during the last half of the decade. The share paid by State and local governments is unchanged from its share at the beginning of the decade.

For the business and government sectors, the burden of financing health care expenditures has grown many-fold over the 1965-89 period. For households, however, the health care burden maintained a stable percent of personal income throughout the first 20 years presented in this article. Since 1985, however, the burden on households—that is, their ability to finance health care—has been increasingly slightly under pressure from both public and private insurance, as the growth in income has not kept pace with rising health care costs.

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