

GAO

Report to the Chairman, Committee on  
Government Operations, House of  
Representatives

September 1992

EMPLOYER-BASED  
HEALTH INSURANCE

High Costs,  
Wide Variation  
Threaten System



147871

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**Human Resources Division**

B-249345

September 22, 1992

The Honorable John Conyers, Jr.  
Chairman, Committee on Government Operations  
House of Representatives

Dear Mr. Chairman:

With costs of health insurance continuously outstripping the growth in prices in the U.S. economy, the business community is finding it increasingly difficult to maintain the same level of commitment to employer-provided health insurance. The average firm has seen employer health insurance costs more than double as a share of their total wage bill in the last two decades. While these sharp increases in average costs are disturbing to most employers, the averages conceal the even more devastating increases in health care costs faced by some firms. Firms with older or less healthy work forces, firms located in high-cost areas, smaller firms, and firms with large numbers of retirees covered by company health plans have experienced even larger increases in health care costs.

Business leaders are increasingly concerned that escalating health insurance costs for their employees are hurting their firms in domestic and international markets. As a result, business is taking a more active role in cost containment and the health care reform debate. Employees are also concerned about rapid increases in health care costs. As employers redesign health benefits, workers are absorbing more of the costs. During the 1980s, most labor disputes centered on health benefits.

You asked us to assess the burden of health insurance costs for business and to identify the types of employers that have been particularly vulnerable to escalating health insurance costs. In this report, we examine the cost for various employers of providing health benefits and identify factors that contribute to the cost differences among employers.

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**Results in Brief**

Many employers are facing rapidly increasing health insurance premiums and are frustrated by their unsuccessful attempts to contain health care costs. Employers vary in their ability to absorb these costs, depending on their financial condition, competitive environment, and wage structure. As a result, some businesses face increasing difficulty meeting their commitments to employee and retiree health benefits.

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While health costs across the board have risen at twice the rate of inflation, in a highly segmented health insurance market, costs vary greatly between firms. For example, a 1991 survey of medium and large firms showed that 8 percent of firms paid less than \$2,000 per employee, while 13 percent of firms paid \$5,000 or more.

Firms most vulnerable to rising health costs are those whose plans offer extensive benefits and cover a large number of retirees or dependents; those with workers that are older, less healthy, or earning higher incomes; those with relatively few workers; and those located in high health-cost areas. For example, a painting business in Los Angeles with employees in their early sixties could pay more than \$6,000 a person annually, compared with about \$600 a person for an accounting firm in Vermont with employees in their twenties.

Individual businesses can do little to lower their costs because they cannot readily change their size, location, or employee demographics. Therefore, employers try to control health care costs by reducing benefits, shifting health costs to their workers, or limiting choice of provider through managed care programs.<sup>1</sup> Despite efforts to shift or contain costs, businesses continue to pay about the same share of national health expenditures as they did throughout the 1980s. In addition, their health expenses continue to increase about 10 percent a year.

As pressures on businesses mount, firms are adopting more severe cost containment measures. For example, a recent federal court ruling upheld the right of a self-insured employer to change its policies and to all but eliminate coverage for employees who develop AIDS.<sup>2</sup> In addition, a growing number of firms have completely eliminated health care coverage. These business responses are indicators of how growing segmentation of the market and uncontrolled costs for health care continue to weaken the link between employment and health insurance coverage.

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<sup>1</sup>Managed care plans restrict the providers from whom patients can receive care in an effort to control use and costs through negotiated discounts, physician incentives, and other means.

<sup>2</sup>Under the Employee Retirement Income Security Act of 1974, self-insured plans are exempt from state regulations requiring coverage of specific services. Thus, self-insured employers are not prohibited from modifying benefit plans to reduce or eliminate coverage for particular illnesses.

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## Background

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### Developments in Employer-Based Insurance

Over 150 million Americans obtain health insurance through employers. To provide health benefits to their employees and retirees, businesses spent about \$186 billion, or 30 percent of U.S. personal health care expenditures in 1990.<sup>3</sup> This system of employer-sponsored health insurance became widespread during World War II. At that time, firms competed for workers by offering health coverage as a fringe benefit to attract and retain workers. Further growth in employer-based insurance occurred when (1) the federal government made employer expenditures for health insurance premiums tax deductible, (2) health insurance became part of collective bargaining negotiations, and (3) insurance companies found that it reduced their marketing, enrollment, and premium collection costs below those encountered when selling to individuals.

Employees favor employer-sponsored insurance because employer premium contributions are exempt from their gross taxable income, raising their effective wage rate. They view health insurance benefits as a major factor in their decision to change or remain in a job. In a nationwide household survey, 3 in 10 respondents, mostly middle-income workers, reported that they are staying in jobs they want to leave mainly to keep their health benefits.<sup>4</sup> While the employer is still the source of health insurance coverage for most American workers and their families, nearly three-fourths of the 34 million uninsured Americans are workers or their dependents.

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### Scope and Methodology

You asked us to examine the role of employers and employees in financing health care in the United States. In this report, we (1) show how much of the burden of health spending falls to businesses, (2) examine the differences in health costs across businesses, and (3) identify factors that may contribute to this variation in costs.

To describe the distribution of aggregate expenditures for health, we used data developed by the Health Care Financing Administration that disaggregate national spending on health services and supplies into three major categories of payers: business, households, and government. We

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<sup>3</sup>Private households financed \$225 billion, or 36 percent, and federal and state governments financed \$213 billion, or 34 percent.

<sup>4</sup>The results of an August 1991 New York Times/CBS News poll of 1,430 adults were reported in: Erik Eckholm, "Health Benefits Found to Deter Job Switching," New York Times, September 26, 1991.

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also divided employer costs into several categories: health insurance, workers' compensation, health-related taxes, and direct health services.

To show how each of these elements varies across businesses, we developed estimates using the most current information from published sources. For example, we used data on employers' share of health insurance premiums collected by the U.S. Chamber Research Center using surveys of small, medium, and large-size firms. We also analyzed data from surveys conducted by A. Foster Higgins & Co., Inc., Milliman and Robertson, Inc., the Wyatt Company, and other private consulting organizations that linked firm and worker characteristics to health insurance costs. (See app. VII for details on the surveys.)

We conducted our review from September 1991 through June 1992, in accordance with generally accepted government auditing standards.

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## Business Health Care Costs Increasing Rapidly but Not Uniformly

Health spending by businesses escalated at more than twice the general inflation rate during the late 1980s. From 1987 to 1990, employer expenditures for health care services and supplies increased at an average rate of 12 percent compared to 5 percent for general inflation.<sup>5</sup> Most health expenditures are to cover the cost of health insurance plans. (See app. I.) Health insurance premiums have been increasing at an even greater rate. In a survey of medium and large firms, employer and employee health benefit costs grew at an average annual rate of 16 percent over the past 4 years.<sup>6</sup> Health care costs per covered employee among these firms rose from about \$2,000 in 1987 to about \$3,600 in 1991.

In addition, business expenditures for health care have been the most rapidly growing component of employee compensation. As a percentage of total employee wages and salaries, employer health care costs increased from 5.8 percent in 1980 to 8.5 percent in 1990. Over the same period, wages, adjusted for inflation, have declined slightly. The growth in health care costs represents a substitution of employee health benefits for cash wages.

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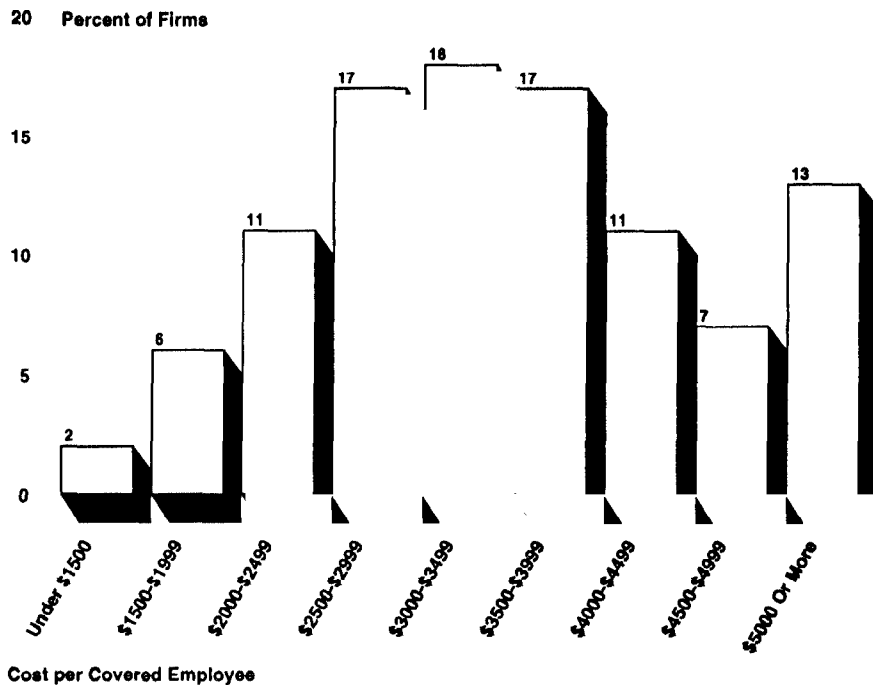
<sup>5</sup>Over the same period, federal and state governments' spending and households' spending on health care have experienced increases of 12 and 8 percent, respectively.

<sup>6</sup>A. Foster Higgins & Co., Inc., Health Care Benefits Survey: Indemnity Plans: Cost, Design and Funding, 1992.

## Health Care Costs Vary Widely Across Businesses

The differences in the cost burden of health insurance are evident across businesses and for firms within an industry. (See app. II.) As shown in figure 1, the range of costs for health insurance paid by different firms is wide and growing. Because individual firms' health costs vary widely, average cost data conceal the severity of the problem for some businesses. In 1991, employers and employees in 8 percent of firms surveyed paid less than \$2,000 per covered employee for health benefits, while 13 percent paid \$5,000 or more. By comparison, among firms surveyed in 1987, 11 percent paid less than \$1,000 per covered worker while 12 percent paid \$3,000 or more. (See fig. 2.)

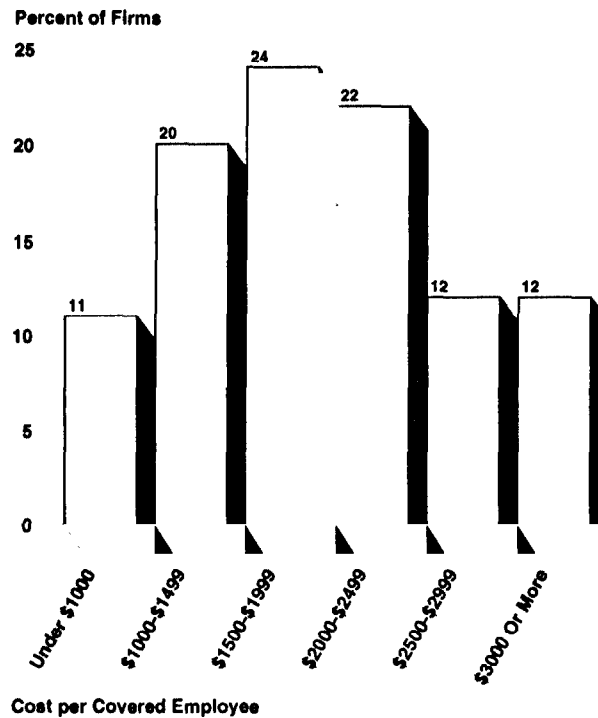
**Figure 1: Variation in Average Health Plan Costs, 1991**



Note: Represents combined employer and employee cost for medical, dental, prescription drug, vision/hearing benefits, and administration (excluding workers' compensation) for active employees, retirees, and dependents.

Source: A. Foster Higgins & Co., Inc.

**Figure 2: Variation in Average Health Plan Costs, 1987**



Note: Represents combined employer and employee cost for medical, dental, prescription drug, vision/hearing benefits, and administration (excluding workers' compensation) for active employees, retirees, and dependents.

Source: A. Foster Higgins & Co., Inc.

Even for firms within the same line of business, health costs can differ substantially. The 1991 survey showed that 21 percent of wholesale/retail trade firms had costs of less than \$2,000 per employee while 3 percent had costs of \$5,000 or more. This dispersion exists for manufacturing as well but reflects the higher costs paid by these firms. For these businesses, 5 percent of firms had health benefit costs less than \$2,000 per employee while 16 percent had costs of \$5,000 or more.

This variation is also evident when measuring plan costs against other forms of compensation. As a share of payroll, health benefit costs for all medium and large firms surveyed averaged 10.8 percent in 1989. However, health plan costs were at least 20 percent of payroll in over one-quarter of



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consumer products firms where wages tend to be low and less than 5 percent of payroll for one-quarter of firms in higher paid technical/professional services.

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## Fragmentation of Insurance Market Contributes to Variation in Firm Costs

Fundamental changes in the way health insurance premiums are determined are central to the problems facing businesses. Until the 1970s, community rating was common; this is a practice whereby all employers in a particular geographic area or broad class of business were charged the same premium for health plans. Since then, wherever possible, insurance companies have divided firms into groups and set premiums based on the actual or perceived health care costs of each group. In general, large firms became experience-rated and small firms (with fewer than 25 employees) medically underwritten.<sup>7</sup>

The insurance market was further segmented when many medium and large firms found that they could reduce their health expenditures by self-insuring. Instead of purchasing coverage from a commercial carrier, employers with sufficient resources to assume the risk for their employees' health costs finance benefits internally rather than pay an insurance company. In 1990, over half of all U.S. workers were covered by self-insured plans.

As insurers shifted away from communal sharing of risk toward concentration of risk, some businesses have become more vulnerable to escalating insurance rates. Through medical underwriting for small firms and experience rating for larger firms insurers now offer coverage to the healthiest groups at low rates and charge higher premiums to cover higher-risk groups. Small firms with higher-risk employees are particularly disadvantaged by this fragmentation. Their high administrative costs and risk premiums result in rates much higher than a community-based premium would have charged. Small firms with one or more high-risk employees may find policies that cover these individuals difficult to afford. Those that avoid these costs by not purchasing insurance contribute to the high rate of uninsured workers (see app. I).

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<sup>7</sup>For large employers, insurers examine the experience of the group as a whole and charge premiums based on the actual amount of claims payments made by the group in the previous year as well as projected health care cost increases. For smaller employers, individual members of the group are required to provide a statement of health and evidence of insurability and various interdependent risk factors are used to determine rates.

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## Work Force, Plan Design, and Firm Characteristics Determine Business Health Costs

Several characteristics of business establishments help explain why certain businesses experience especially high health costs. The characteristics include the health-risk attributes of the work force, the scope and financing of the benefit plan, and the size and geographic location of the firm. Although it is difficult to isolate the influence of specific characteristics on a firm's health costs, in general a firm's line of business can reflect the cumulative effects of size, location, beneficiary characteristics, and benefit plan structure. For example, the relatively high health costs for manufacturing firms reflect the fact that manufacturers tend to have older workers, cover more retirees, offer more generous benefit packages, and be located more often in areas with high medical costs.

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## Firms With Older, High-Risk, or High-Income Workers Have Higher Costs

Worker and retirees' demographic characteristics—age, sex, health status and history, financial status, and occupation—have a substantial effect on health insurance costs. In firms with older workers, the premiums reflect the higher costs of more frequent and more intensive use of health care services associated with these individuals. Costs are generally lowest for firms with predominantly young, low-income, healthy men in low-risk occupations. For example, the expected health care costs of a 62-year-old, high-income, healthy man may be five times higher than costs for a 22-year-old, low-income, healthy man.

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## Firms That Offer Benefit Plans With Low Cost-Sharing Provisions or Broad Coverage Have Higher Costs

The design of health benefit plans contributes significantly to the differences in business health expenditures. The share of premiums paid by the employer, the scope of health benefits and health delivery systems included in the plan, and the degree of dependent and retiree participation are major factors in defining an employer's insurance burden. For example, health care costs experienced by employers differ sharply for a firm that offers a single "bare bones" plan with no employer premium contribution as compared to a firm that completely finances a wide range of benefits and plan choices.

- The degree of employee cost sharing can contribute to the variation in employer costs. As might be expected, firms that require lower employee contributions generally have higher costs.
- Although nearly all employers providing health benefits offer basic medical coverage, they differ in the degree of supplemental coverage they offer, i.e., mental health, dental, or vision care coverage. Firms that offer a number of supplemental benefits generally have higher costs.

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- **Firms that have a large share of married or older employees and offer generous benefit packages (in terms of financing and scope) are more likely to have a high percentage of dependent coverage. Employer costs for family coverage are about 140 percent higher than for individual coverage. Similarly, employers that offer health coverage to workers who retire before age 65 with little change in the benefit plan structure are likely to incur higher total costs per employee, since early retirees typically use more health care services than the average worker.**

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## **Small Firms Face Higher Costs**

Small firms generally pay higher insurance rates than large firms. Higher administrative costs associated with the inability to spread risk over a large number of insured, claims administration, and sales commissions are major contributors to these higher health expenditures. The decline in community-rated health insurance products has also contributed to substantially higher premiums for some small firms whose workers have risk factors that could generate high health care costs.

Other cost contributors include factors that are inherent to the size of the firm:

- **Since small firms' inability to accept risk makes self-insuring more difficult than for large firms, they are subject to costs associated with regulatory requirements and premium taxes.<sup>8</sup>**
- **Small, unincorporated firms face higher tax rates for health benefits than incorporated firms since they are allowed only a 25-percent deduction for health insurance expenditures.<sup>9</sup> Incorporated businesses are permitted a 100-percent deduction.**
- **Small firms have higher health costs because they lack the bargaining power, time, or skilled personnel to seek and negotiate suitable, affordable coverage.**

In addition to experiencing higher health costs, small employers generally experience higher (and more unpredictable) rates of increase in premiums than large self-insuring firms. Health costs in the second and subsequent years can be considerably higher than costs for the first year. This occurs because some preexisting condition exclusions expire and covered

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<sup>8</sup>For example, the costs of state-mandated benefits add a modest amount to health insurance premiums. See: U.S. General Accounting Office, *Access to Health Insurance: State Efforts to Assist Small Businesses* (GAO/HRD-92-90, May 14, 1992).

<sup>9</sup>This 25-percent deduction is not available for taxable years beginning after June 30, 1992, unless that termination date is extended. Pending legislation would extend the provision to December 31, 1992.

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employees begin to develop health conditions leading to higher costs and higher premiums.<sup>10</sup> Small employers therefore may find it difficult to provide and maintain health care coverage.

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### Businesses in High-Cost Markets Have More Expensive Plans

An employer's geographic location also has a significant impact on its health benefit costs. Survey data for 1989 show that average group expected claims costs vary widely by city.<sup>11</sup> For example, average claims costs for group health insurance benefits in Los Angeles are on par with those in Miami but are 25 percent more than those in New York City, and twice as high as Seattle.

Cost variations across health care markets are strongly influenced by differences in personal income, the amount of health care resources available (hospital bed capacity and the number of physicians per capita), and the health status of the population. In addition, local variations in provider practice patterns and operating expenses can influence health costs.

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### Employers Use Various Strategies to Control Rising Costs

Differences among firms in financial condition and competitive environment generate a variety of employer strategies to control health cost growth or to reduce overall health spending. The benefit plan design, over which an employer has the most control, is generally the first factor a firm will alter to control rising costs. Such plan changes can include some combination of eliminating or limiting family coverage, retiree coverage, or covered services. Other benefit plan changes that attempt to reduce costs include the following:

- **Cost shifting.** Employers shift more of the costs of health care to employees by raising deductibles, copayments, and employee contributions to premiums. Greater cost sharing by employees also reduces total spending on covered services as patients face higher out-of-pocket costs.<sup>12</sup> The effort by employers to shift costs to the

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<sup>10</sup>Preexisting condition exclusions are restrictions on payments for charges directly related to an illness for which the insured received care or treatment before enrolling in the health plan.

<sup>11</sup>Milliman and Robertson, Inc., Group Comprehensive Major Medical Net Claim Cost Relationships by Area, 1991.

<sup>12</sup>W.G. Manning and others, "Health Insurance and the Demand for Medical Care: Evidence From a Randomized Experiment," The American Economic Review, Vol. 77, No. 3 (June 1987), pp. 251-277.

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employee is becoming an increasingly contentious issue in labor-management disputes.<sup>13</sup>

- **Cost-sharing incentives.** Many firms use differential rates of cost sharing to encourage employees to choose plans that the firm believes will have lower costs. Some employers, for example, promote the use of managed care plans in which there are incentives to use a preselected group of providers that charge discounted prices. Some managed care plans, such as those that reimburse providers on a capitation basis, shift more of the risk of health care costs onto the provider.
- **Self-insuring.** Larger firms can lower their health expenditures by assuming the risks for health care expenses of their employees instead of purchasing health insurance through insurance companies. Such self-insured plans need not comply with state laws that require health insurance contracts to include specified benefits, comply with certain anti-discrimination standards applicable to insured plans, pay state insurance premium taxes, or participate in insurance pools for high-risk individuals.
- **Cutting back retiree benefits.** In a growing trend, firms are reducing or terminating health benefits for current and future retirees. Retirees who lose their company health coverage often face poor prospects for acquiring health coverage through another employer, and individual insurance may be available only at very high rates.<sup>14</sup>
- **Eliminating coverage.** In a recent national survey of small employers, 13 percent of the respondents indicated that they had dropped coverage within the last 3 years due to the cost. In addition, 30 percent of small firms were considering dropping health insurance benefits.<sup>15</sup>

Alternatively, some firms may limit coverage for specific conditions. A federal appeals court ruling upheld the right of a self-insured employer to change its policies and sharply reduce coverage for employees who develop AIDS. Under the new benefit coverage, the lifetime maximum payment for AIDS-related claims was reduced from \$1 million to \$5,000.

Firms unwilling or unable to alter the scope and financing of the benefit plan may consider other options for containing health expenditures, including hiring lower health-risk workers. For example, firms could

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<sup>13</sup>Health benefits were the leading strike issue in 1989, involving 60 percent of work stoppages and 78 percent of striking workers. See: Service Employees International Union, AFL-CIO, CLC, Labor and Management: On a Collision Course Over Health Care, February 1990.

<sup>14</sup>Medicare benefits are not available until age 65, and Medicaid benefits cover only the very poor.

<sup>15</sup>J. Edwards and others, "Small Business and the National Health Care Reform Debate," Health Affairs, Vol. 11 (Spring 1992).

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replace older workers with younger workers, replace young female workers with young male workers, and replace full-time employees with part-time or contingent workers who often are not eligible for coverage.

A result of such cost reduction strategies is cost shifting among firms. For example, firms claim that many of the dependents they cover work for other employers that provide either minimal or no health coverage. In addition, firms with relatively generous benefits claim that they are partly financing the health care for employees of other firms who are uninsured or underinsured.<sup>16</sup> This is most often the case in health care markets with a large proportion of uncompensated or undercompensated care where physicians and hospitals may pass these costs on to employers through higher charges which are reflected in higher insurance premiums. Only those self-insured firms that have enough negotiating power in the geographic health care market can minimize this subsidy by obtaining discounted fees with providers.

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## Conclusions and Implications

Rapidly increasing business outlays for group health insurance are a serious problem for all firms, but some firms have experienced severe hardships as their costs have escalated to levels that threaten the competitiveness of the firm. Firms in declining industries with aging work forces are faced with health insurance premiums that exacerbate their competitive problems. Such firms not only have to deal with the general rise in health care costs, but also are hit by further increases which reflect the poor health experience of their aging work force. Small firms are even more vulnerable since poor health experiences of one or two workers can threaten their capacity to obtain affordable health insurance coverage.

The demise of community rating and segmentation of insurance risk groups is evident in the significantly different health care costs experienced by firms, much of which is due to factors largely beyond their control in the short-term. Firms that have high-risk worker health profiles, more generous benefit plans, smaller work forces, or high-cost locations have higher health care costs than their competitors.

The large variation in firm costs, as well as the difficulty for some firms in obtaining or retaining health coverage, contributes to the continuing erosion of employer-provided health insurance. Competition among

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<sup>16</sup>Because some small firms have responded to their high health expenditures by offering plans with limited benefits or dropping coverage altogether, the health costs of small firm employees are financed out of pocket or are absorbed by health care providers and other insuring employers. In general, health costs associated with uninsured or underinsured small firm employees are passed on to larger firms.

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insurers in the small business market has encouraged the use of practices that exclude some employees with potentially expensive health care conditions. Competition among businesses has caused some to eliminate or reduce health benefits for employees, dependents, or retirees. Rising health costs have also caused employers to attempt to shift more of the costs of care to employees through higher premiums, deductibles, and copayments. Furthermore, there is concern that the desire to lower health costs may cause some employers to avoid hiring or retaining workers who have potentially high health costs.

As the Congress considers several types of health care reform proposals, the substantial variation in health care costs becomes a major area of contention. Reducing health insurance costs for higher cost firms requires that higher costs be borne by those firms that have benefited from the competitive market with lower premiums. In a system where there is not universal access, it raises the issue that some of these firms may cancel or cut back coverage in response to higher premiums. Unless universal access is a component of health care reform, it is not clear that reforms designed to help those firms with particularly high health care costs will generate any real improvement in access to care.

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As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time we will send copies to interested congressional committees and will make copies available to others upon request. Please contact me on 512-7119 if you or your staff have any questions. Other major contributors are listed in appendix VIII.

Sincerely yours,



Mark V. Nadel  
Associate Director, Health Financing  
and Policy Issues

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**Abbreviations**

|      |                                      |
|------|--------------------------------------|
| AIDS | acquired immunodeficiency syndrome   |
| CPI  | Consumer Price Index                 |
| HCFA | Health Care Financing Administration |
| HMO  | health maintenance organization      |

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# Role of Business in Providing Health Insurance

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Most Americans obtain health insurance through an employer-sponsored plan. In 1990, 70 percent of the population under 65 years of age had employment-based health coverage. As health care costs continued to rise, business health spending grew from 3.5 percent of workers' wages and salaries in 1970 to 8.5 percent in 1990. Health insurance, which has traditionally been considered a fringe benefit, now represents a sizable and rapidly growing component of business labor costs.

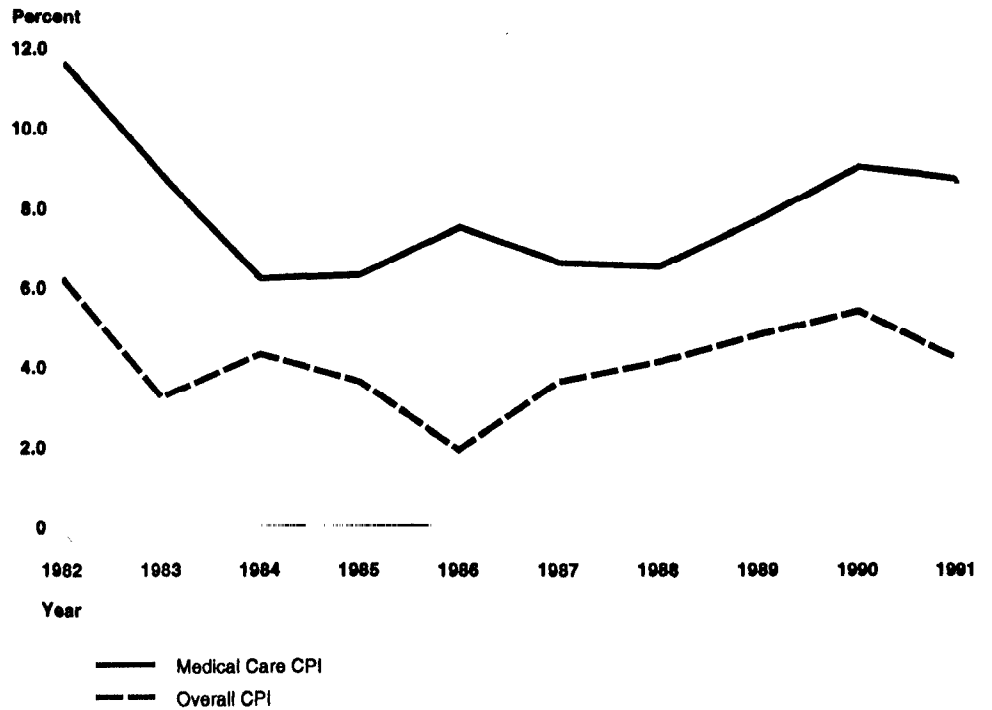
Despite the concerns within the business community about the escalation of health care costs, employers pay less than a third of all personal health expenditures in the United States, about the same share they paid in 1970. This underscores the real problem: the rapid growth in health care costs is having an equally devastating effect on business, households, and government.

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## Growth in U.S. Health Care Costs Unabated

The rising cost of health care is a major concern for business. Health expenditures in the United States are the highest in the world, both per person and as a share of gross domestic product. Since the early 1980s, the rate of medical care inflation has averaged 7.5 percent per year, nearly twice the general inflation rate (see fig. I.1).

Figure I.1: Change in Consumer Price Index (CPI) for Medical Care and Overall Consumer Price Index (1982-91)



Source: Bureau of Labor Statistics.

Characteristics of the market for health services are important determinants of the rising cost of care.<sup>1</sup> These include:

- Wages have increased more rapidly in the health sector than in the rest of the economy. For example, physicians' net incomes grew at an average annual rate of 7 percent between 1981 and 1989, far faster than the average growth in wages. Also, productivity has increased more slowly in the health care sector than elsewhere.
- Rapid advances in medical technology, which often provide better care for patients, can be very costly. New procedures and health services proliferate across hospitals and outside of hospitals. Where excess capacity is created, the unnecessary use of these technologies can result.
- Public and private health insurance insulates consumers from the full cost of services. The expansion of third-party insurance over the past decade

<sup>1</sup>U.S. General Accounting Office, *U.S. Health Care Spending: Trends, Contributing Factors, and Proposals for Reform* (GAO/HRD-91-102, June 10, 1991).

has made it possible for consumers to buy more and better services while paying a smaller share of the costs.

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## Employers Finance Less Than One-Third of All Personal Health Care

The financing of personal health care in the United States is shared relatively equally by the major payer groups. The Health Care Financing Administration (HCFA) estimates that, in 1990, employers financed about 30 percent of all personal health care expenditures,<sup>2</sup> 36 percent was paid by households,<sup>3</sup> and government programs financed 34 percent.<sup>4,5</sup> During the 1980s, the share of health spending accounted for by each group has remained nearly constant. As health care expenditures have grown over the last 10 years, each of the payer groups has experienced similar increases. As shown in figure I.2, except for a small shift of expenditures from households to businesses and government, payers' shares have remained relatively unchanged during this period.

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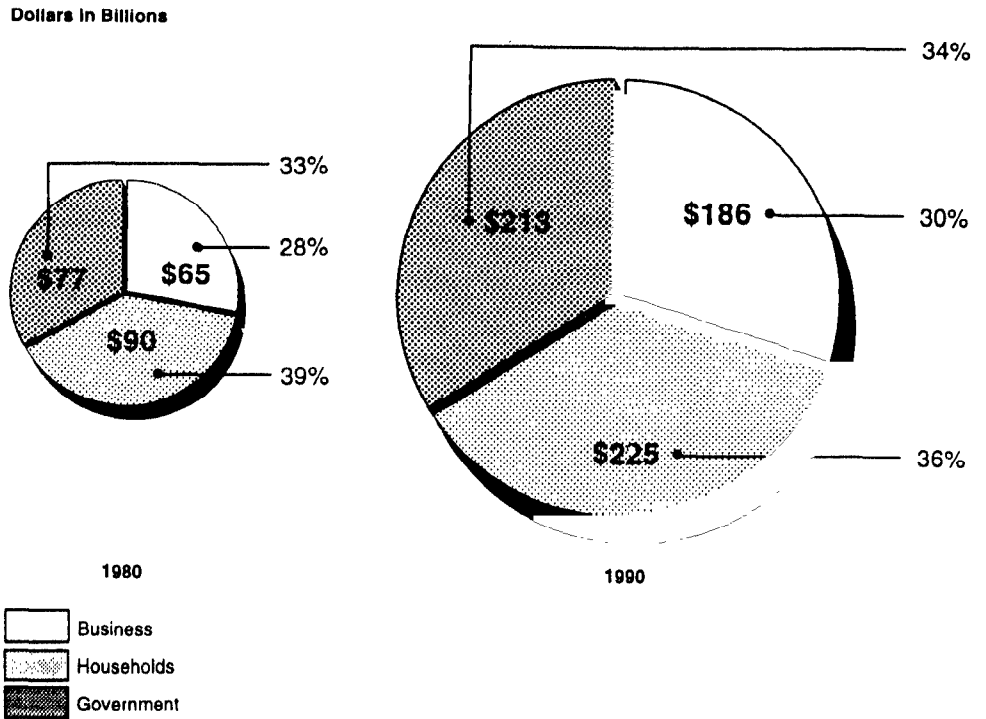
<sup>2</sup>Since employers' payments are passed through in the form of lower wages, lower return on investment, or higher prices, individuals are the ultimate payers.

<sup>3</sup>Individual expenditures include premiums, coinsurance and deductibles, out-of-pocket payments for uncovered services, and Medicare taxes.

<sup>4</sup>However, since businesses and individuals pay earmarked funds into government-sponsored health programs, the HCFA data understate the role of public payers in health financing.

<sup>5</sup>A portion of these expenditures are to some extent tax deductible for employers and for individuals. Current tax law allows employers to deduct their contributions to health insurance for employees as a cost of doing business (100 percent deduction for incorporated businesses and 25 percent for unincorporated businesses and self-employed individuals), and employees are not required to declare this benefit as taxable income. In 1991, this exclusion saved individuals and businesses an estimated \$66 to \$68 billion in federal, state, and local taxes, or about 8 percent of total personal health spending.

**Figure I.2: Distribution of Personal Health Expenditures by Payer (1980, 1990)**



Source: Health Care Financing Administration.

## Employer-Provided Health Plan Costs Rising Rapidly

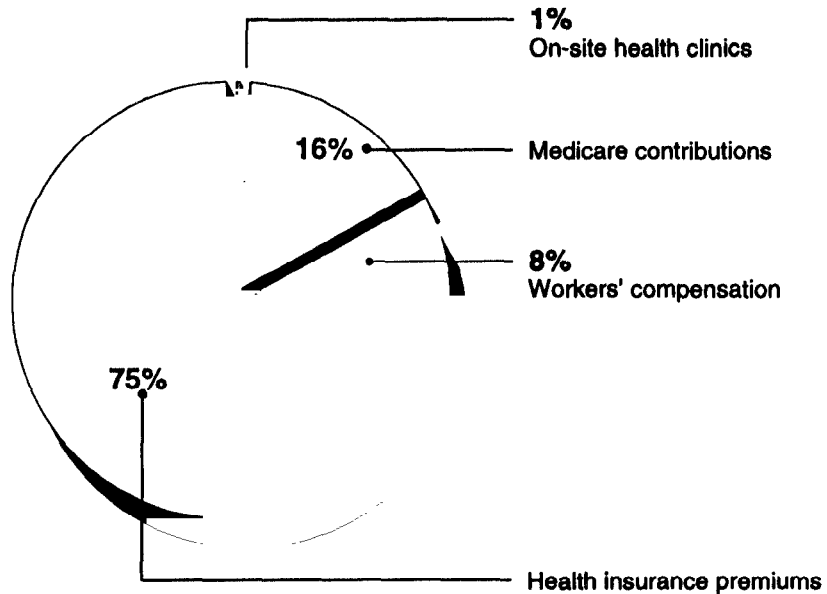
Health spending by business escalated at more than twice the general inflation rate during the late 1980s. From 1987 to 1990, total employer expenditures for health care have been increasing at an average rate of 12 percent compared to 5 percent for general inflation.

Business expenditures for health care have been the most rapidly growing component of employee compensation. As a percentage of total employee wages and salaries, employer health care costs have increased from 5.8 percent in 1980 to 8.5 percent in 1990. Over the same period, real wages have declined slightly. The growth in health care costs represents a substitution of employee health benefits for cash wages.

The largest category of health expenditures for business is spending for employee health insurance. In 1990, this component comprised three-fourths of employer health spending, or \$139 billion. (The bulk of employee health insurance premium costs was borne by the employer.)

The remaining business health expenditures are contributions to employee Medicare hospital insurance trust fund premiums, payments for the medical portion of workers' compensation and temporary disability insurance, and expenditures for company on-site health clinics. (See fig. I.3.)

**Figure I.3: Components of Business Health Expenditures (1990)**



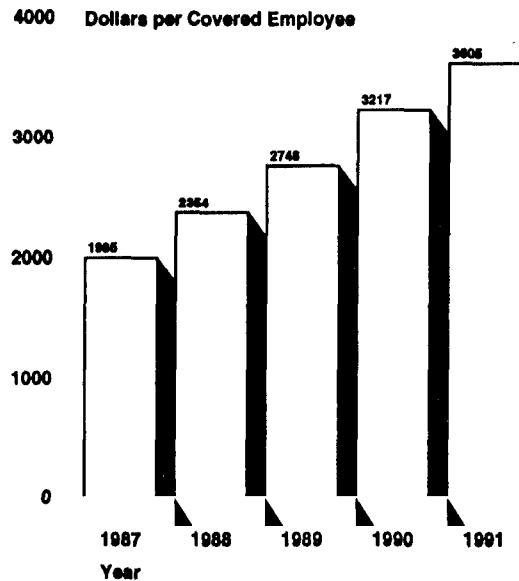
Source: Health Care Financing Administration.

Health plan costs borne by employers and employees have been rising significantly over the past 4 years. A survey of medium and large firms found an average annual increase of 16 percent in the cost of health benefits.<sup>6</sup> As shown in figure I.4, average business health care costs rose from about \$2,000 per covered employee in 1987 to about \$3,600 in 1991.

<sup>6</sup>A. Foster Higgins & Co., Inc., Health Care Benefits Survey: Indemnity Plans: Cost, Design, and Funding, 1992. (Medium and large firms have 100 employees or more.)



Figure I.4: Average Health Care Costs  
(1987-91)



Note: Represents combined employer and employee cost for medical, dental, prescription drug, vision/hearing benefits, and administration (excluding workers' compensation) for active employees, retirees, and dependents.

Source: A. Foster Higgins & Co., Inc.

## Working Uninsured Generate Higher Costs for Those With Coverage

Businesses that provide health insurance are concerned about the transfer of costs from one employer to another.<sup>7</sup> They claim that many of the dependents they cover work for other employers that provide either less generous or no health coverage. In addition, they claim that they are partly financing the cost of care provided to workers of other employers that provide minimal coverage or no coverage at all.

Almost half of the uninsured in 1990 worked either full- or part-time, and almost another third of the uninsured were nonworking dependents of full- or part-time employees. The working uninsured include employees in firms that do not offer insurance coverage and contingent (temporary, part-time, self-employed, and contract) workers in firms that restrict coverage to permanent, full-time employees. Furthermore, some workers, particularly lower income employees in firms that do not pay the full costs of health coverage, elect not to participate in the plan because of cost. In

<sup>7</sup>National Association of Manufacturers, Employer Cost-Shifting Expenditures (prepared by Lewin/ICF), December 1991.

addition, some workers are ineligible for coverage due to their perceived health risk.

Employers also claim that they often subsidize health care financed through public programs. A recent study estimated that the average total loss per hospital from Medicaid, Medicare, and other government programs was \$1.8 million in 1989. It found that half of all hospitals were able to completely subsidize their losses and half were not. Hospitals that covered all of their losses did so by setting prices that generated higher profits on private patients than other hospitals; they did not cover their losses by having a larger share of private patients.<sup>8</sup>

In health care markets with a large proportion of uncompensated or undercompensated care, some providers pass these costs on to employers through third-party payment systems. Only those self-insured firms that have enough negotiating power in geographic health care markets can minimize this subsidy by obtaining discounted fees with providers.

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<sup>8</sup>Prospective Payment Assessment Commission, "Cost Shifting," September 12, 1991. Alternatively, it could be argued that government programs are reimbursing hospitals an appropriate amount, and that large employers and private insurers are overpaying hospitals.

# Health Plan Costs and Coverage Vary by Industry

Although average firm health costs have been experiencing double digit increases, the costs faced by individual firms vary widely. In 1991, annual contributions made by employers and employees ranged from less than \$1,500 per employee for some firms to above \$5,000 for others. This variation reflects the growing trend toward premiums based on the actual or expected claims experience of the firm. The major underlying factors that influence the cost of health insurance for firms include

- the demographic characteristics of the work force, such as age, occupation, and income,
- the design of the health plan, in terms of the financing and scope of benefits, and
- the characteristics of the firm, in terms of size and location.

The interaction of all of these variables determines total health care costs for firms in particular industries. This appendix focuses on the extent of variation in insurance cost and coverage by type of business. Appendixes III through VI examine each of the factors that contribute to this difference.

In this report, we primarily compare the manufacturing industry to the wholesale/retail trade industry to illustrate how employee, plan, and firm characteristics affect health care costs. We selected these two industries because they accounted for about 40 percent of U.S. nonfarm employment in 1990, include firms of various sizes, and are widely distributed throughout the country. These industries also reflect differences in employee status, with 95 percent of manufacturing workers employed full-time compared to 70 percent of wholesale/retail trade employees. In addition, these industries illustrate disparities in health insurance coverage: 76 percent of manufacturing employees have health coverage, while only 44 percent of wholesale/retail trade employees are covered.<sup>1</sup>

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## Health Plan Costs Vary by Industry

The cost burden of health insurance differs widely across industries. For example, in a 1991 survey of medium and large firms, the average combined health care costs per covered worker for employers and employees in wholesale/retail trade were about three-fourths of those in manufacturing and about two-thirds of those experienced by utilities (see

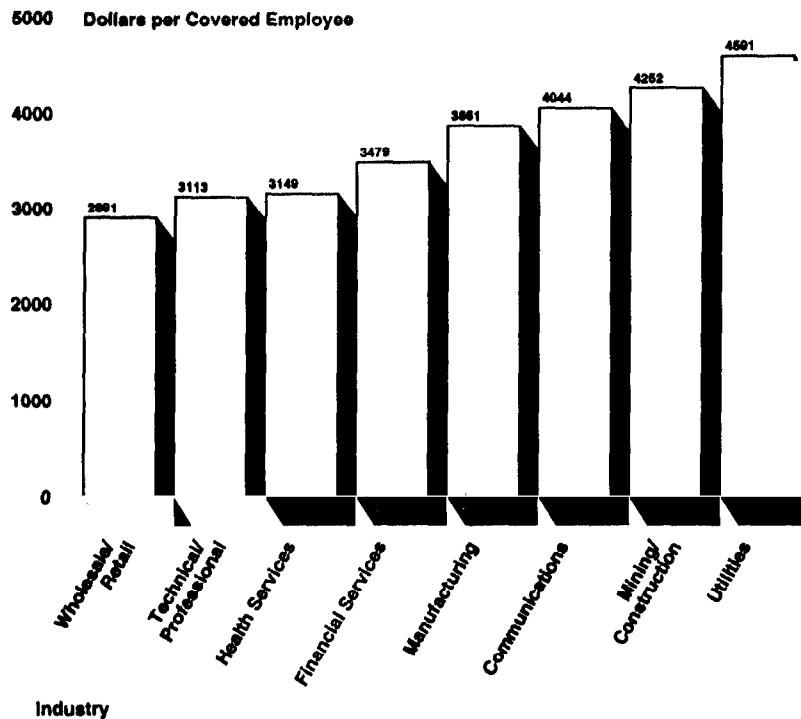
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<sup>1</sup>Sheila R. Zedlewski, *Expanding the Employer-Provided Health Insurance System: Effects on Workers and Their Employers*, Urban Institute Report 91-3, 1991.

**Appendix II  
Health Plan Costs and Coverage Vary by  
Industry**

fig. II.1).<sup>2</sup> Another survey, which also included smaller firms, evidenced even more variation across industries.<sup>3</sup> Considering employer contributions only, it found that spending for health care in wholesale/retail trade was only about two-fifths as much as in manufacturing and utilities in 1990 (see fig. II.2).

**Figure II.1: Average Health Care Costs for Selected Industries (1991)**



Notes: Represents combined employer and employee cost for medical, dental, prescription drug, vision/hearing benefits, and administration (excluding workers' compensation) for active employees, retirees, and dependents.

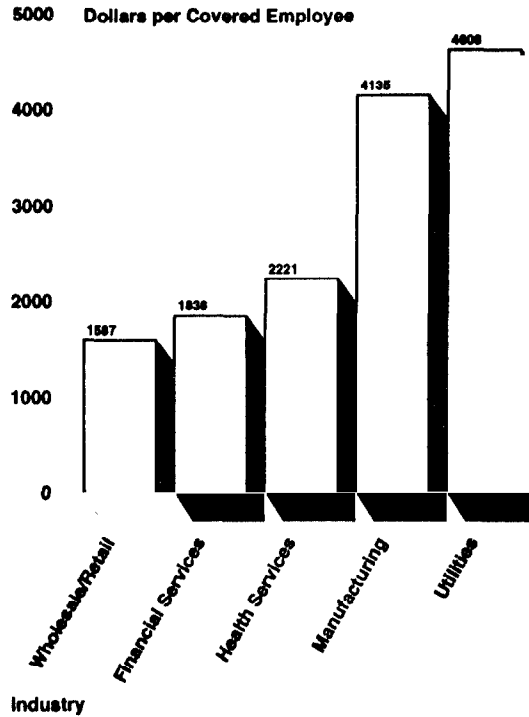
Source: A. Foster Higgins & Co., Inc.

<sup>2</sup>A. Foster Higgins & Co., Inc., Health Care Benefits Survey: Indemnity Plans: Cost, Design, and Funding, 1992.

<sup>3</sup>U.S. Chamber Research Center, Employee Benefits: Survey Data from Benefit Year 1990, 1991.

Appendix II  
Health Plan Costs and Coverage Vary by  
Industry

Figure II.2: Employer Share of Average  
Health Care Costs for Selected  
Industries (1990)



Note: Medical and medically related benefit payments, including active and retiree health insurance, short-term and long-term disability insurance, dental, vision, and other benefits.

Source: U.S. Chamber Research Center.

In addition to manufacturing, other high-cost industries include utilities, communications, mining/construction, and energy/petroleum. In addition to wholesale/retail trade, other low-cost businesses include health services, financial services, and technical/professional firms.

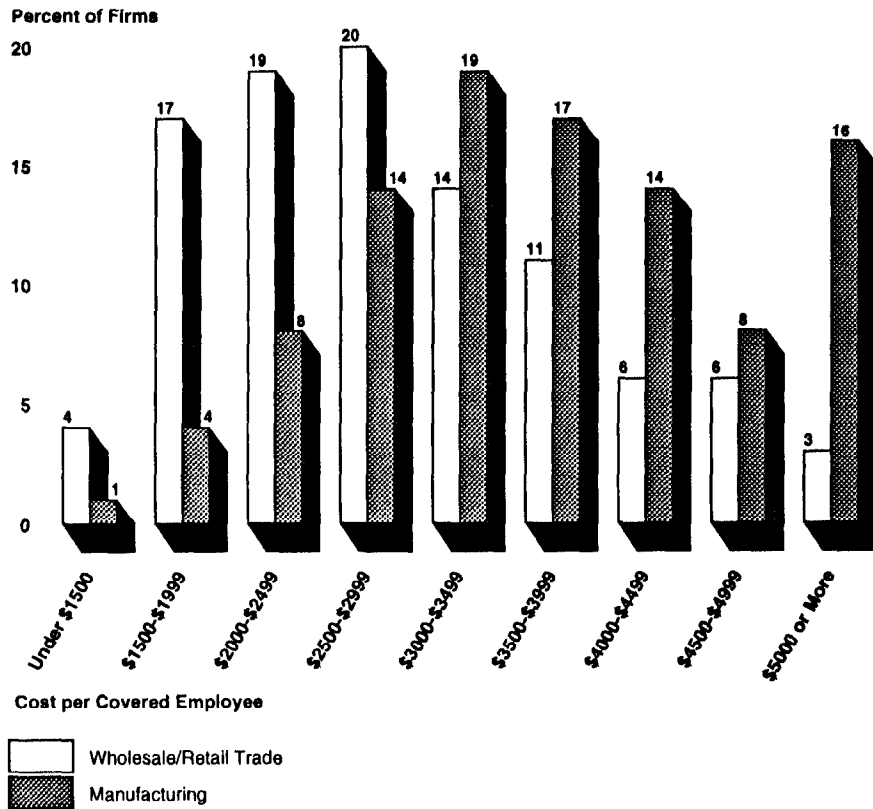
This cost variation is also evident when measuring plan costs against other forms of compensation. As a share of payroll, health benefit costs for medium and large firms averaged 10.8 percent in 1989.<sup>4</sup> However, health plan costs were at least 20 percent of payroll in over one-quarter of consumer products firms surveyed and less than 5 percent of payroll for one-quarter of firms in technical/professional services.

<sup>4</sup>A. Foster Higgins & Co., Inc., Health Care Benefits Survey, 1991.

Costs Can Vary Within an Industry

In addition to variation across industries, health care costs also vary significantly for firms within an industry. (See fig. II.3.) In 1991, health plan costs in wholesale/retail trade averaged \$2,891 per employee. However, 21 percent of trade firms had costs of less than \$2,000 per employee, while 3 percent had costs of \$5,000 or more. This disparity exists for manufacturing firms as well but reflects the higher costs paid by these firms. For these businesses, 5 percent of firms had health benefit costs of less than \$2,000 per employee, while 16 percent had costs of \$5,000 or more.

Figure II.3: Variation in Average Health Care Costs in Manufacturing and Wholesale/Retail Trade (1991)



Note: Represents combined employer and employee cost for medical, dental, prescription drug, vision/hearing benefits, and administration (excluding workers' compensation) for active employees, retirees, and dependents.

Source: A. Foster Higgins & Co., Inc.

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## **Employers' Decision to Offer Health Insurance**

A firm's decision to offer health insurance to its employees is strongly influenced by its financial condition and the competitive environment in which it operates. Firms in industries or regions where employer-provided health insurance is the norm will generally find it necessary to offer similar coverage in order to attract and retain a high-quality, stable work force.

Survey data indicate the general characteristics of firms that provide employee health coverage.<sup>5</sup> Those with the greatest likelihood of offering health plans to their workers have 25 employees or more, are in goods-producing industries, or are located in the Northeast. In addition, firms that offer benefits often employ a higher proportion of full-time employees or high-wage workers, have less employee turnover, or, if they have fewer than 10 employees, are incorporated.<sup>6</sup> For example, employers in the manufacturing industry tend to have a high percentage of workers covered, whereas employers in the wholesale/retail trade sector have a low rate of coverage.<sup>7</sup> Figure II.4 compares the percentage of workers covered by their employer's health plan for six industry groups.

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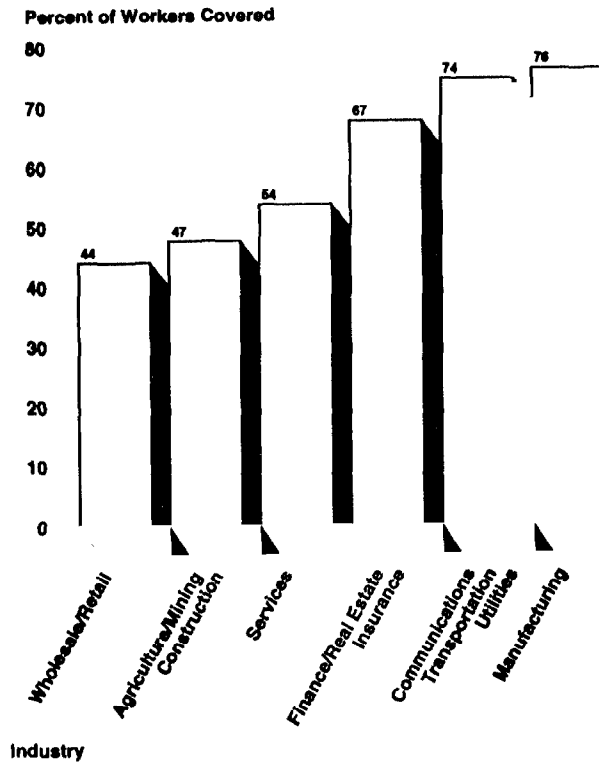
<sup>5</sup>Health Insurance Association of America, Critical Distinctions: How Firms That Offer Health Benefits Differ From Those That Do Not, 1991.

<sup>6</sup>Corporate structure may be a factor in an employer's decision due to the tax deductibility of health benefits—25 percent for small unincorporated firms compared to 100 percent for incorporated firms.

<sup>7</sup>Sheila R. Zedlewski, Urban Institute Report 91-3.

**Appendix II  
Health Plan Costs and Coverage Vary by  
Industry**

**Figure II.4: Rate of Health Insurance  
Coverage in Selected Industries (1988)**



Source: Urban Institute.



# Differences in the Cost of Health Plans by Characteristics of the Work Force

The demographic characteristics of an employer's work force strongly influence the cost of health insurance. For large firms insurers generally base premium rates on the employee groups' claims experience, as well as projected increases in overall health care costs and utilization. Increasingly, for most small firms, insurance companies are placing the groups they cover in different categories and charging each group a different rate based on such risk factors as age, sex, income, health status, and occupation of the employees. For example, in firms with larger numbers of older workers, the premiums reflect the higher costs associated with more frequent and more intensive use of health care services. Costs are generally lowest for firms with predominantly young, low-income, healthy men in low-risk occupations.

## Underwriting Practices Disadvantage Some Firms and Workers

Many insurers have moved away from community rating (basing the premium on the average cost of the anticipated health care used by all subscribers in a particular geographic area, industry, or other broad grouping) to retain the business of groups that want premiums that reflect their lower medical costs. To remain competitive, insurers are selling policies at lower rates to groups that are predominantly healthy and at high rates to those that are likely to experience high claims. Predominantly healthy groups can look for the lowest rates, causing insurers to compete to attract and retain their business. Less healthy groups, however, have difficulty shopping around because most insurers, if they do not exclude them from coverage, will charge higher premiums that reflect their potentially high claims costs. As employees move from one employer or one insurance company to another, prior illnesses are considered preexisting conditions. Many insurance companies decline to cover preexisting conditions, leaving some new employees without coverage for their most serious health problems.

Current indemnity insurance practices may create incentives for employers to hire workers who are least likely to incur large medical expenses, such as younger people. Some insurers may also be inclined to exclude high-risk members of the group or limit or exclude coverage for certain medical conditions. Under the Employee Retirement Income Security Act, self-insured employers are not prohibited from modifying benefit plans to reduce or eliminate coverage for particular illnesses. A recent federal court ruling upheld the right of a self-insured employer to change its policies and reduce coverage for employees who develop AIDS.

## Older Workers and Younger Women Have Higher Costs

Health insurance costs for firms with older people tend to be higher than for those firms with younger persons. Since both the frequency of claims and the severity of illness increase with age, younger individuals are less of a health risk than older individuals. This is particularly true among men. Men over age 60 have risk factors five times that of men under 25 years of age.

Sex also makes a difference in expected claims costs early in working life. The potential for pregnancy and maternity care and higher utilization increase claims costs for women as much as 50 percent above costs for men of a comparable age. Men and women are not considered the same health risk until they reach their late fifties. Table III.1 presents an example of age and sex adjustment factors used by insurance underwriters to calculate premiums for specific groups.

Table III.1: Age and Sex Adjustment Factors Used by Commercial Insurers

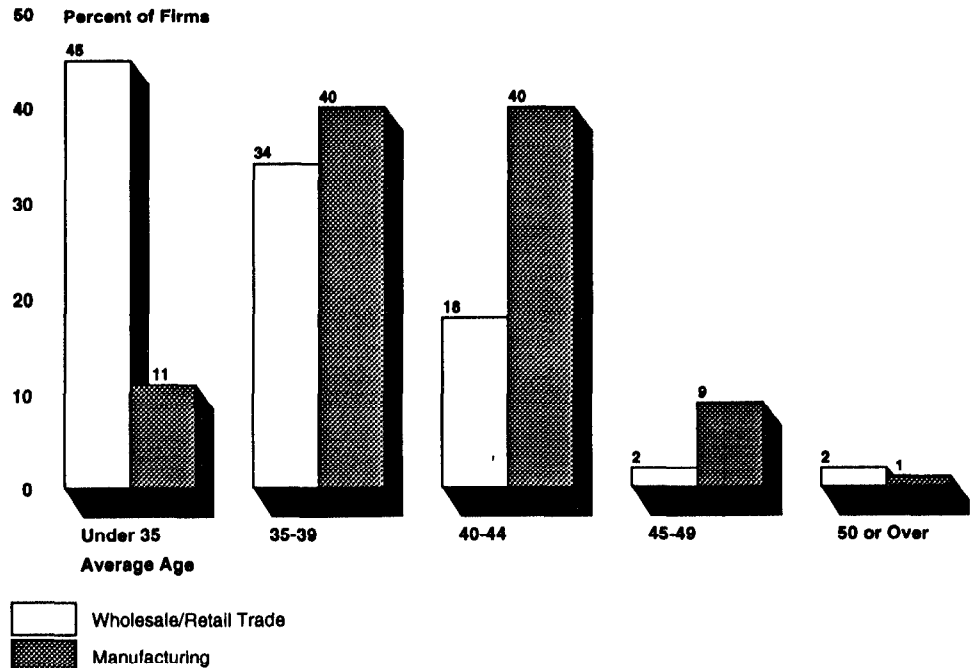
| Age   | Male | Female |
|-------|------|--------|
| <24   | 0.50 | 0.75   |
| 24-30 | 0.55 | 0.80   |
| 30-34 | 0.55 | 0.90   |
| 35-39 | 0.65 | 1.05   |
| 40-44 | 0.80 | 1.10   |
| 45-49 | 1.05 | 1.15   |
| 50-54 | 1.30 | 1.40   |
| 55-59 | 1.55 | 1.55   |
| 60-64 | 2.00 | 2.00   |
| > 64  | 2.50 | 2.50   |

Source: Congressional Research Service and Hay/Huggins, Inc., 1988.

The effect that employee age distribution can have on firm health costs can also be seen by comparing different industries. Figure III.1 shows the age distribution of active workers in manufacturing, a high health-cost sector, and wholesale/retail trade, a relatively low health-cost sector. In 50 percent of manufacturing firms, workers are age 40 or older, while in only 22 percent of trade firms, workers are age 40 or older.

**Appendix III  
Differences in the Cost of Health Plans by  
Characteristics of the Work Force**

**Figure III.1: Age Distributions of Active Employees In Manufacturing and Wholesale/Retail Trade (1991)**



Note: Percents do not add to 100 due to rounding.

Source: A. Foster Higgins & Co., Inc.

Since insurers perceive individuals over 50 years of age to be high health risks, firms that cover a large number of retirees younger than age 65 are also likely to face high health plan costs. (See app. IV.) In addition, the age distribution among the firm's retirees influences employer costs. The cost of fee-for-service coverage for retirees younger than age 65 is more than twice that of Medicare-eligible retirees who are 65 and over.

**Variation by Type of Business Reflects Perceived Risks**

In determining health plan costs, commercial insurers consider the environmental working conditions in different types of industries. Insurers have developed occupational adjustment factors that reflect the anticipated risk of a group of workers in a particular line of business. For example, industries that are perceived to have less healthy work environments, such as mining, railroads, and manufacturing, have high adjustment factors.

In addition, some employee groups are assigned high adjustment factors because they represent a higher perceived risk to the insurer for reasons other than environmental conditions. Such groups include health services or legal services professions, where utilization of health care is above average or individuals are more prone to pursue litigation. Other professions that generally have highly educated individuals, such as engineering and accounting, have larger adjustment factors because underwriters believe these individuals are more frequent users of health care.

Table III.2 illustrates the adjustment factors for various types of firms. These actuarial estimates of the differences in health costs are due to type of business alone, and do not account for other factors that affect business health plan expenses.

**Table III.2: Type of Business  
Adjustment Factors Used by  
Commercial Insurers**

| Type of business           | Factor    |
|----------------------------|-----------|
| Legal services             | 1.20      |
| Health services            | 1.15      |
| Educational services       | 1.15      |
| Engineering & accounting   | 1.15      |
| Transportation & utilities | 0.95-1.15 |
| Mining                     | 1.10      |
| Social services            | 1.10      |
| Government                 | 1.10      |
| Construction               | 1.05      |
| Manufacturing              | 1.00-1.05 |
| Financial services         | 0.95      |
| Wholesale & retail trade   | 0.95      |
| Agriculture                | 0.95      |
| All others                 | 0.95      |

Source: Congressional Research Service and Hay/Huggins Company, Inc., 1988.

## Higher Income Workers Are More Expensive to Insure

Underwriters also consider family income to be an indicator of the expected frequency and cost of health services. In general, insurance companies believe that lower income workers are less healthy than higher income workers. However, lower income people still spend less on health care than higher income workers because (1) generally, lower income people are less knowledgeable about the availability of health services,

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**Appendix III  
Differences in the Cost of Health Plans by  
Characteristics of the Work Force**

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(2) deductibles and coinsurance are stronger deterrents to the use of services by lower income people, and (3) lower income people tend to use lower cost providers. Thus, insurers charge less for lower income workers and charge more for higher income workers. Table III.3 illustrates the health plan cost adjustments made for family income.

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**Table III.3: Income Adjustment Factors  
Used by Commercial Insurers.**

| <b>Income</b>   | <b>Factor</b> |
|-----------------|---------------|
| Under \$17,500  | 0.90          |
| \$17,500-22,999 | 0.95          |
| \$23,000-34,999 | 1.00          |
| \$35,000-45,999 | 1.05          |
| \$46,000-58,000 | 1.10          |
| Over \$58,000   | 1.15          |

Source: Congressional Research Service and Hay/Huggins Company, Inc., 1991.

# Differences in the Cost of Health Plans by the Benefit Plan Design

The design of health benefit plans contributes significantly to the differences in business health expenditures. The share of premiums paid by the employer, the range of health services and providers included in the plan, and the degree of dependent and retiree participation are major factors in defining an employer's insurance burden. For example, health care costs experienced by employers differ sharply for a firm that offers a single "bare bones" plan with no employer contribution to the premium and one that completely finances a wide range of benefits and plan choices.

The financing arrangement, scope of benefits, and extent of coverage offered by firms are factors over which employers have the most control. (However, employers differ in their ability to change their benefit plans.) As the costs of health plans rise, some employers have undertaken benefits management activities to reduce their burden. These include shifting more of the cost to the employee, enrolling workers in managed care plans, and limiting family and retiree coverage.

## Plans With Little Cost Sharing Cost Firms More

One of the key sources of difference in firm health expenditures is the amount of variation in employee cost sharing required by employers. There are firms that, for a number of reasons, require little or no employee contribution to premiums, deductibles, or copayments, and therefore experience higher health care costs. Such employers may choose to minimize the proportion of cost sharing because they have contractual agreements, substitute health benefit expenditures for wages, have a history of providing cost-free benefits, or want to encourage employees to participate in the health plan to increase the size of the group.

Many other firms, however, require some contributions from employees to help cover premium costs. In addition, most employer-sponsored plans require deductibles and copayments, which are designed to moderate utilization. On average, for medium and large firms, employee contributions to premiums range between 10 to 25 percent of total premium cost. The average deductible is about \$200 for individual coverage and over \$400 for family coverage. Copayment rates of 80 percent insurer-financed and 20 percent employee-financed are most prevalent. Recent trends indicate that more employers are requiring their employees to contribute to the cost of their health insurance premiums, and these contribution amounts are increasing. In addition, employee

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**Appendix IV  
Differences in the Cost of Health Plans by  
the Benefit Plan Design**

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deductible levels have been steadily increasing, as have the number of employers requiring employee copayments.<sup>1</sup>

Differences in cost-sharing provisions are apparent by industry. In a recent survey of medium and large firms,<sup>2</sup> a greater proportion of manufacturing firms required no contributions from their employees for single and family coverage than firms in wholesale/retail trade (fig. IV.1).<sup>3</sup> In addition, of firms requiring employee contributions, manufacturing firms, on average, required employees to pay 17 percent of the premium for single fee-for-service coverage and 20 percent for family coverage. In contrast, wholesale/retail firms required employees to pay 24 percent of the premium for single coverage and 30 percent for family coverage. Furthermore, manufacturing firms have lower employee deductibles and lower employee coinsurance requirements than wholesale/retail trade firms.

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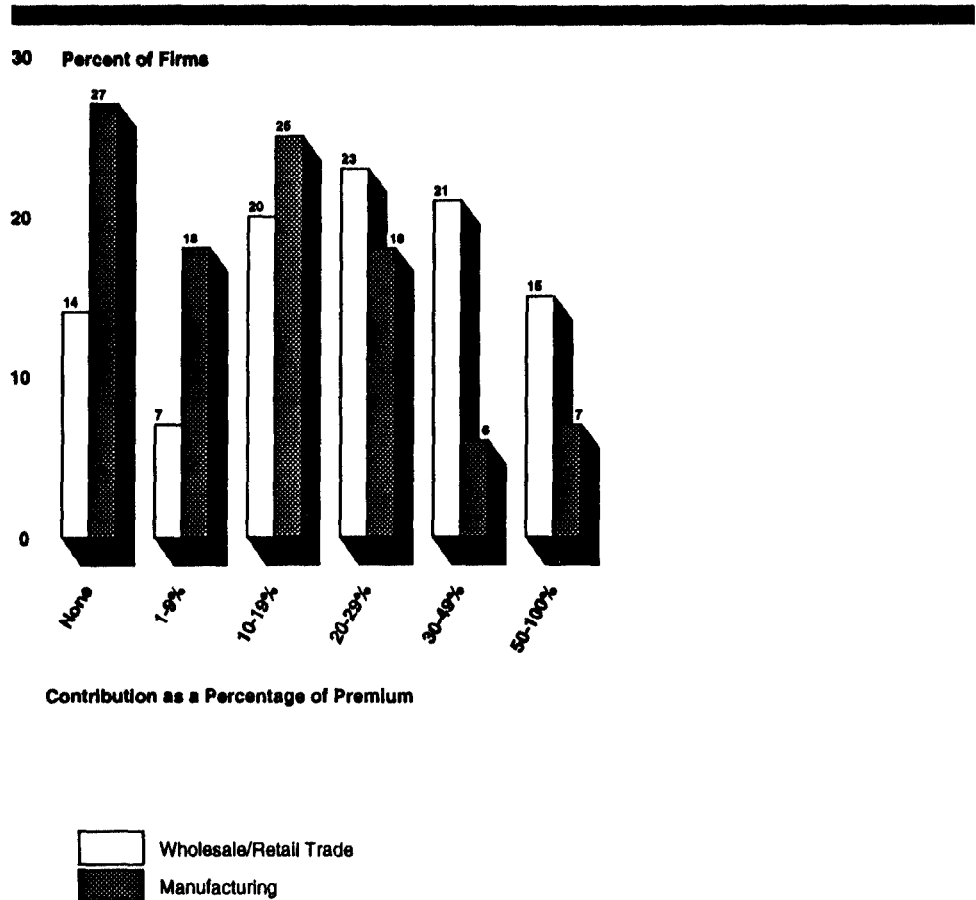
<sup>1</sup>However, increases in employee deductibles have not been keeping pace with the growth in health care costs.

<sup>2</sup>A. Foster Higgins & Co., Inc., Health Care Benefits Survey: Indemnity Plans: Cost, Design, and Funding, 1992.

<sup>3</sup>Our analysis of 1990 A. Foster Higgins data found that, on average, manufacturing employers finance 89 percent of their employees' indemnity plan coverage (both individual and family), compared to 75 percent for wholesale/retail trade employers.

**Appendix IV  
Differences in the Cost of Health Plans by  
the Benefit Plan Design**

**Figure IV.1: Employee Contribution for Family Indemnity Coverage in Manufacturing and Wholesale/Retail Trade (1991)**



Source: A. Foster Higgins & Co., Inc.

**Plans Offering Wide Range of Health Services and Providers Have Higher Costs**

Firms with plans that offer a wider range of health benefits and choice of providers will have higher costs than firms with more limited plans. An example of a plan with scaled-down policies is one that was marketed to small Virginia businesses by Blue Cross and Blue Shield. The plan placed limits on the number of doctor visits and hospital days, disallowed mental health benefits, and set a ceiling of \$50,000 annual per person claims coverage. Some of these plans were priced as low as \$800 for individual and \$1,800 for family coverage annually.

On the other hand, firms that offer additional benefits will experience higher costs. Extended benefits may include physical exams, well-baby care, general dental care, vision care, mental health treatment, substance abuse treatment, home health care, prescription drugs, and orthodontia.



The costs of these services can add substantially to a firm's total health bill. For example, in a survey of medium and large firms, the annual cost for providing dental coverage was \$359 per employee.<sup>4</sup>

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### **Employers That Offer Multiple Benefit Plans May Have Higher Costs**

Firms that offer multiple benefit plans through separate insurance carriers or provider networks may actually increase their health costs. This increase can occur through three separate mechanisms. First, by dividing a large employee pool into several smaller pools, firms may face higher administrative costs because there is a smaller number over which to spread an insurance carrier's administrative expense. Second, by decreasing the size of the employee group, firms reduce their capacity to spread risk. Finally, by offering employees a choice in coverage, the total employee pool may become stratified as the less healthy opt for plans that do not restrict choice extensively while the more healthy opt for plans that are cheaper and that offer services that are more tailored to their needs (like physical exams, vision care, dental care, etc.).

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### **Offering Coverage to Dependents and Retirees May Increase Employer Costs**

The number of dependents and retirees covered by an employer-sponsored plan contributes to the large variation in business health care costs. Firms with a high proportion of retired employees covered and a large share of workers with family coverage face higher health care costs than other firms.

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### **Firms With More Dependent Coverage May Experience Higher Costs**

The proportion of employees that select dependent coverage is important because employer costs for family coverage are about 140 percent higher than for individual coverage.<sup>5</sup> Both the decision to offer and the decision to elect dependent coverage vary across firms. Firms that have a large share of married or older employees and offer generous benefit packages (in terms of scope and financing) are more likely to have a high percentage of dependent coverage.

The importance of this factor is evident in comparing manufacturing, a relatively high health-cost industry, to wholesale/retail trade, a relatively low health-cost sector. As shown in figure IV.2, manufacturers have a much larger share of employees that elect dependent coverage than do wholesale/retail trade employers. In a survey of medium and large firms, 87 percent of manufacturing firms but only 46 percent of wholesale/retail

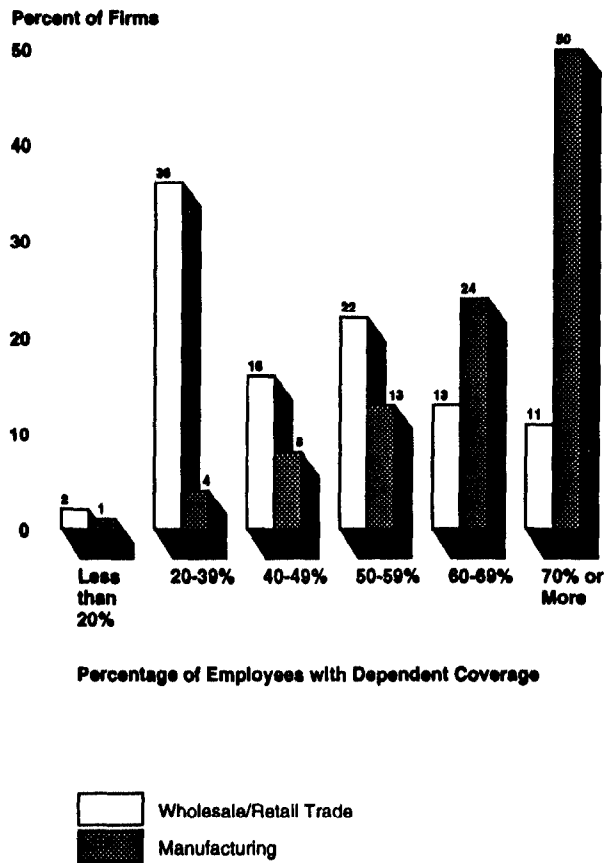
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<sup>4</sup>A. Foster Higgins & Co., Inc., *Health Care Benefits Survey*, 1992.

<sup>5</sup>The Wyatt Company, *Wyatt Comparisons*, Number One, September 1991.

trade firms had more than half of their employees electing dependent coverage.<sup>6</sup>

Figure IV.2: Proportion of Employees Electing Dependent Coverage in Manufacturing and Wholesale/Retail Trade (1990)



Source: A. Foster Higgins & Co., Inc.

Some employers assert that they are subsidizing the health costs of other firms whose health coverage is either minimal or nonexistent. They claim that many of the dependents that they cover work for other employers or in industries other than their own. For example, a recent study found that the manufacturing sector had 4.1 million workers covered as dependents under health plans sponsored by manufacturers.<sup>7</sup> Of these working

<sup>6</sup>A. Foster Higgins & Co., Inc., Health Care Benefits Survey, 1991.

<sup>7</sup>National Association of Manufacturers, Employer Cost-Shifting Expenditures (prepared by Lewin/ICF), December 1991.

dependents, 85 percent were employed in industries other than manufacturing, and about one-quarter were employed in the trade industry.

Some manufacturing firms have recently developed policies explicitly designed to discourage coverage of dependents who can obtain coverage from another employer. For example, a major manufacturing firm has recently denied primary coverage to employee spouses who have available, employer-sponsored insurance. Another manufacturing firm is attempting to discourage spousal coverage by levying charges beyond the family premium on employees that elect spousal coverage when their spouse is working and earning more than \$15,000 per year.

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### **Firms That Cover Retirees May Face Higher Costs**

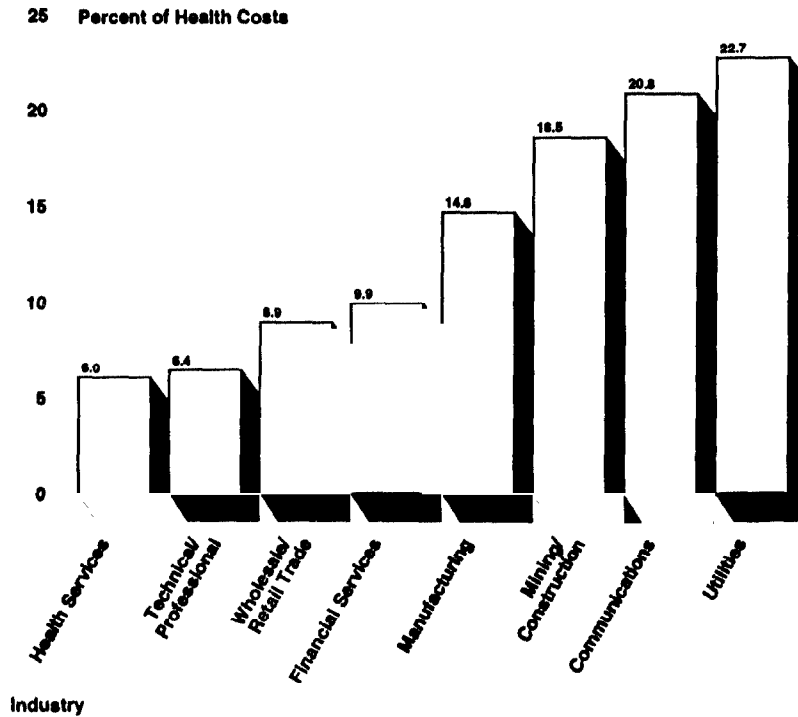
In general, firms that offer coverage to their retirees have higher total health costs. A survey of medium to large employers found that, on average, the provision of health benefits to retirees represented almost 14 percent of total firm health costs.<sup>8</sup> In the communications and utilities industries, firm retiree health expenditures represent over 20 percent of annual health costs. By contrast, in health services or technical/professional service firms, retirees account for about 6 percent of total health costs (fig. IV.3).

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<sup>8</sup>A. Foster Higgins & Co., Inc., 1991.

Appendix IV  
Differences in the Cost of Health Plans by  
the Benefit Plan Design

Figure IV.3: Share of Total Health  
Costs Accounted for by Retirees in  
Selected Industries (1990)



Note: Based on survey respondents that offer retiree health benefits. Represents both employer and employee costs.

Source: A. Foster Higgins & Co., Inc.

Industry differences in health costs per employee reflect the fact that more firms provide health coverage to their retirees in some industries than in others. For example, firms in manufacturing are almost twice as likely to offer retiree benefits than firms in the health services industry. In addition, certain industries have a higher ratio of retirees to active employees in the health plan. For instance, manufacturing firms have twice as many plan participants that are retired than wholesale/retail trade firms.

Furthermore, there can be significant variation in the ratio of retirees to total plan participants within an industry. Although more than 45 percent of manufacturing firms surveyed have retirees accounting for less than 10 percent of the covered population, 8 percent of manufacturing firms have more than 50 percent of plan participants that are retired.

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**Appendix IV  
Differences in the Cost of Health Plans by  
the Benefit Plan Design**

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Many firms are concerned about the recent Federal Accounting Standards Board ruling requiring businesses to currently account on their balance sheets for the potential liability of future health benefit costs already promised to current and future retirees.<sup>9</sup> This ruling will have disparate effects on individual firms. It has serious implications for the short-run financial condition as portrayed in a firm's financial statements for businesses with an older work force or a large number of retirees.

In response to high and growing retiree health costs and the potential ramifications of compliance with this new accounting standard, firms have begun to alter or cut back retiree benefits. Retirees who lose their company health coverage often face reduced prospects for acquiring health coverage through another employer, and individual insurance may be very expensive. In addition, Medicare benefits are not available until age 65, and Medicaid benefits cover only the very poor.

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<sup>9</sup>Companies can write off their liabilities against earnings all at once or spread it over 20 years. The impact of the new law on a company depends on the scope of benefits, workers' ages, number of retirees and active workers, employers' past and projected average costs of providing retiree health benefits, future mortality rates, and assumptions about medical and general inflation. See: U.S. General Accounting Office, Employee Benefits: Companies' Retiree Health Liabilities Large, Advance Funding Costly (GAO/HRD-89-51, June 14, 1989).

# Differences in the Cost of Health Plans by the Size of Firm

The cost disadvantages for small firms have intensified in the last two decades as insurers have based insurance premiums on groups with fewer beneficiaries.<sup>1</sup> The broad-based rate determination mechanism called community rating has been replaced by rates based on narrow pools of people, which, in many cases, are the employees of an individual firm. Furthermore, larger firms have begun to self-insure, removing their population from the overall risk pool. When community-rated health insurance was widely available, a small firm could obtain insurance with a premium that was not adjusted for its own claims experience or the health status and demographic characteristics of its workers. Now, however, small firms are confronted with rates that are initially underwritten to reflect potential claims costs based on age, industry, and health status. For small firms that experience high claims costs because a covered person incurs high health care costs, rates often rise rapidly to reflect the actual costs.

## Small Firms Often Face High Costs That Influence Coverage

In general, providing employee health insurance is more expensive for smaller firms. For comparable plans and benefits, health plan costs are 10 to 40 percent higher for small employers.<sup>2</sup>

Higher administrative costs associated with the inability to spread risk over a large number of insured, claims administration, and sales commissions are major contributors to higher health costs for small firms. Other cost contributors include factors that are inherent to the size of the firm—state health benefit regulation, unfavorable tax status, and lack of benefit management expertise. In addition, small firms lack market power in negotiating discounts with providers and have less access to managed care plans compared to large, self-insured firms.

The effect of high health insurance premiums on small employers is varied.<sup>3</sup> Many small firms that would like to offer health insurance are excluded from coverage by insurance carriers.<sup>4</sup> In contrast, many small

<sup>1</sup>For this analysis, small firms are defined as employers with 25 or fewer employees.

<sup>2</sup>ICF Incorporated, *Health Care Coverage and Costs in Small and Large Businesses*, prepared for the Small Business Administration, Office of Advocacy (Washington, D.C.: Apr. 15, 1987).

<sup>3</sup>In 1990, more than half of the uninsured were employed by small firms.

<sup>4</sup>Approximately 15 percent of small businesses fall into categories that are considered ineligible or restricted because of perceived high risk. Among the many types of businesses that various insurers exclude are logging, trucking, or roofing companies, taverns, hair stylists, and restaurants. See: U.S. General Accounting Office, *Health Insurance: Cost Increases Lead to Coverage Limitations and Cost Shifting* (GAO/HRD-90-68, May 22, 1990).

employers that could obtain health insurance do not offer it.<sup>5</sup> Furthermore, for firms not now covering their employees, it would take a large reduction (at least 50 percent or more) in the current cost of health insurance to induce them to offer coverage.<sup>6</sup> However, as with large firms, there are extremes in the extent of benefits offered and requirements for cost sharing among the small firms providing health coverage.

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**Small Firms' Premiums**  
**Reflect Higher**  
**Administrative Costs**

An important component of the high insurance premiums faced by small businesses is that insurers incur higher administrative costs for small firms than for larger firms. A Congressional Research Service study found, as shown in figure V.1, that smaller businesses pay a much larger portion of their premium for administrative costs than do larger businesses.<sup>7</sup> For example, in a small group plan with one to four employees, insurers' overhead accounts for 40 percent of claims. By contrast, the administrative expenses for a large group plan with 10,000 or more employees are 5.5 percent of claims.

The higher administrative costs experienced by small businesses are partly the result of firm characteristics, such as high employee turnover rates and a larger proportion of part-time or seasonal workers. In addition, administrative costs are higher in the small-group market because of such factors as (1) fixed costs and risk spread among fewer enrollees, (2) the expense of individual medical underwriting,<sup>8</sup> (3) commissions paid to insurance agents, (4) premium taxes, and (5) higher marketing costs.<sup>9</sup> Marketing costs reflect the greater effort required to reach small employers and persuade them to offer insurance.

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<sup>5</sup>Small businesses contend that the most important reason why they do not offer health coverage is the high cost of health insurance premiums. See: U.S. General Accounting Office, Access to Health Insurance: State Efforts to Assist Small Businesses (GAO/HRD-92-90, May 14, 1992).

<sup>6</sup>J. Edwards and others, "Small Business and the National Health Care Reform Debate," Health Affairs, Vol. 11 (Spring 1992).

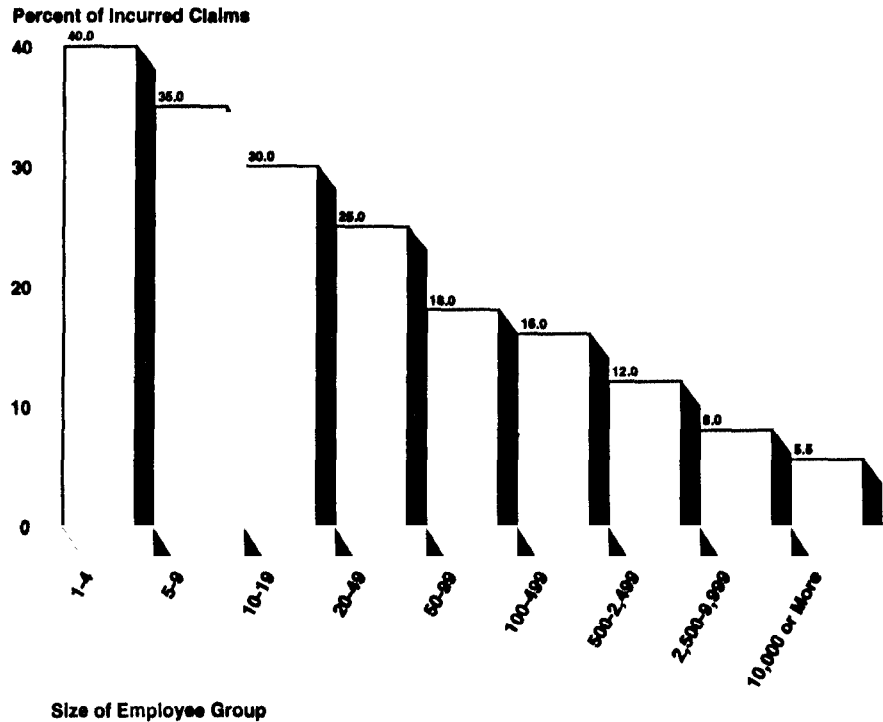
<sup>7</sup>Congressional Research Service, Cost and Effects of Extending Health Insurance Coverage, October 1988, p. 46.

<sup>8</sup>Underwriting is the process by which an insurer determines whether and on what basis it will accept an application for insurance. Small group underwriting requires that individual members provide a statement of health and evidence of insurability.

<sup>9</sup>Medium and large firms that self-insure are able to reduce administrative expenses by about 2 percent through the reduction in premium taxes. See: Congressional Research Service, Cost and Effects of Extending Health Insurance Coverage, p. 46.

**Appendix V  
Differences in the Cost of Health Plans by  
the Size of Firm**

**Figure V.1: Insurance Company  
Administrative Expenses by Size of  
Firm**



Source: Congressional Research Service.

**The Inability to Spread  
Risk Contributes to Higher  
Costs for Smaller Firms**

Small firms experience higher health care costs because they have fewer individuals over which to spread risk. The premise of health insurance is to distribute the costs of a few over many. Since large firms have a population that more closely resembles the entire community population, it is probable that relatively few workers will incur substantial health care costs. Those costs that are incurred can be spread over the entire employee population. In contrast, when insurance premiums are based on the experience of a small company, a single employee with high health expenses can cause the firm to be adversely affected. According to the Congressional Research Service, carriers require a risk premium to reflect the fact there is greater risk involved in insuring small firms. The Congressional Research Service study shows that firms with one to four employees have a risk and profit charge of 8.5 percent of incurred claims compared to 1.1 percent for firms with 10,000 or more employees.



Furthermore, the inability to spread risk contributes to the small employer's difficulty in predicting health costs from year to year. Health costs for small firms in the second and subsequent years can be considerably higher than costs for the first year. This occurs because some preexisting condition exclusions expire and the covered population begins to develop new conditions leading to higher costs and higher premiums. Some small employers cite having experienced a doubling of premiums after 1 or 2 years of enrollment.

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**Economies of Scale**  
**Disadvantage Small Firms**

Small firms have several additional cost disadvantages that larger firms do not experience. Because their small size makes it difficult to accept risk, small employers are less prone to self-insure and thus are subject to costs associated with state insurance regulations and taxes. In addition, since most small firms are not incorporated, they do not receive as favorable a tax status. Furthermore, due to their size, small employers usually have less expertise than large firms in locating and negotiating suitable, affordable coverage. Also, small firms' lack of market power hinders negotiating provider discounts or contracts with provider networks.

Small firms that provide health insurance have higher health expenditures because they are subject to the costs associated with state laws that require health insurance contracts to include specified benefits, compliance with certain anti-discrimination standards applicable to insured plans, state insurance premium taxes (ranging from 2 to 3 percent of premiums), or participation in insurance pools for high-risk individuals. Although these restrictions are actually placed on the insurance carrier, insurers shift them to small employers through higher premiums.<sup>10</sup> Small firms can avoid these insurer adjustments by self-insuring, but they are presumably less likely to do so because they often cannot accept the risk of large out-of-pocket claims.<sup>11</sup> Furthermore, other costs associated with the inability to self-insure include the loss of flexibility to use premium payments as working capital.

Small firms that are unincorporated face additional health insurance costs because of the differing tax treatment of benefits offered by incorporated and unincorporated businesses. In 1989, there were about 14 million

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<sup>10</sup>The costs of state-mandated health benefits add a modest amount to health insurance premiums. See: U.S. General Accounting Office, Access to Health Insurance.

<sup>11</sup>The Employee Retirement Income Security Act of 1974 has been interpreted by federal courts as preempting the application of state insurance laws and regulations to self-insured health plans. Consequently, state-mandated benefits are not applicable to employers that self-insure.

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**Appendix V  
Differences in the Cost of Health Plans by  
the Size of Firm**

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self-employed, sole proprietorship, partnership, and S-corporation firms. Such firms are allowed a 25-percent deduction for health insurance premiums paid for themselves and their employees. Incorporated businesses, on the other hand, are allowed a 100-percent deduction for these expenses. The higher tax rate imposed on health benefits provided by unincorporated businesses contributes to the higher costs this type of small firm faces when purchasing health insurance.

The complex insurer underwriting practices now in place can also contribute to high health costs faced by small firms.<sup>12</sup> The underwriting process may discourage small employers from shopping for a better insurance value. In addition, small businesses lack the capacity for exploring the health insurance choices that large businesses enjoy. Possessing smaller staffs with less-specialized roles, small businesses do not spend much time investigating their insurance options (most spend less than 10 hours a year).<sup>13</sup> Furthermore, they are less knowledgeable about health insurance and rely on the agent as the primary source of information about their options.<sup>14</sup>

Small employers also experience higher health costs due to their inability to use their size as market clout in negotiating discounts with providers if they self-insure. Discounts offered to large firms, as well as the ability of Medicare and Medicaid to set provider reimbursement rates, may drive up the costs to those still purchasing health insurance, as providers attempt to make up the cost differential of the discounts. In addition, small businesses often have less access to network-based health care. However, this lack of access is often dependent on geographic location. A survey found that health maintenance organizations in California, where such providers have a significant share of the market, marketed directly to small businesses.<sup>15</sup>

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<sup>12</sup>Because insurers have little knowledge about the health status of employees in small firms and are concerned about "adverse selection" among small employers (that is, the greater tendency of those who are more likely than average to use insurance to buy it), they often underwrite firms with 25 or fewer employees. Under this process, each employee seeking coverage fills out a health status questionnaire or submits to a physical exam.

<sup>13</sup>J. Edwards and others, "Small Business and the National Health Care Reform Debate."

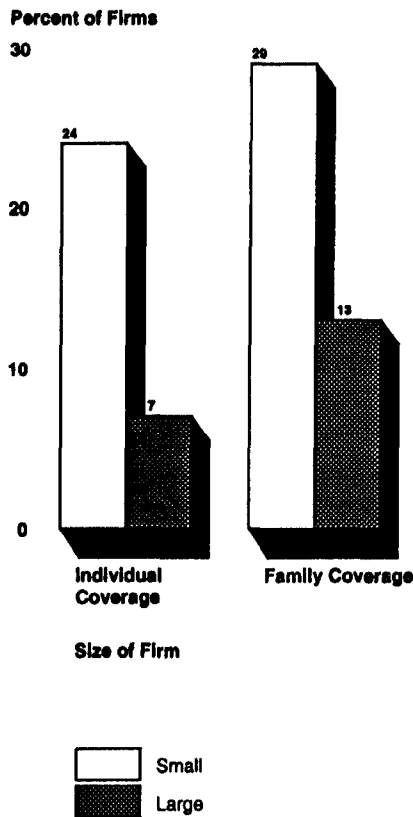
<sup>14</sup>However, although the more sophisticated benefit staffs that larger firms employ help reduce overall firm health expenditures, the costs associated with managing these health expenditures do not appear in premium costs.

<sup>15</sup>Catherine McLaughlin, "The Dilemma of Affordability: Private Health Insurance for Small Businesses," in *American Health Policy: Critical Issues for Reform*, ed. R. Helms (Washington, D.C.: American Enterprise Institute, 1992).

## Scope of Benefits and Extent of Financing Vary Widely by Small Firms

Although small employers experience higher costs for health insurance, there is variation in the structure of the benefits offered among those small employers that provide coverage. Many small firms have difficulty affording benefit coverage for their employees due to their low profitability, the lower wages of their employees, or the high cost of their coverage. Therefore, many small employers are more apt to provide insurance with minimum benefits and/or impose high cost-sharing requirements on their employees than large firms. As illustrated in figure V.2, a greater proportion of small firms than large firms require higher cost sharing from their employees.

Figure V.2: Percent of Firms Where  
Workers Pay More Than 40 Percent of  
Health Insurance Premiums (1988)



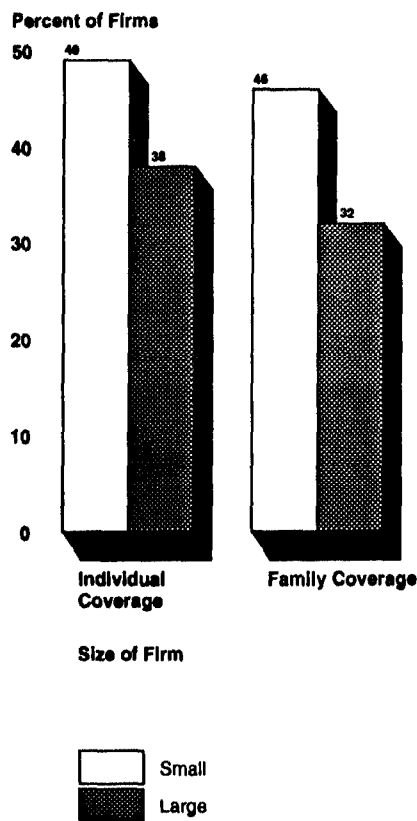
Note: Small firms have fewer than 25 employees; large firms, 500 or more.

Source: Urban Institute.

**Appendix V  
Differences in the Cost of Health Plans by  
the Size of Firm**

In contrast, some small firms are able to more easily finance health coverage for their employees. Some employers offer plans with extensive benefits or total employer financing. This may be due in part to higher profitability, higher wage workers, or full tax deductibility of health expenditures from incorporation. Or these small firms may desire to provide extensive health coverage for the firm owners and their family members. As shown in figure V.3, a higher percentage of small firms than large firms completely pay for their employees' health coverage.

**Figure V.3: Percent of Firms Where  
Workers Pay No Share of Health  
Insurance Premiums (1988)**



Note: Small firms have fewer than 25 employees; large firms, 500 or more.

Source: Urban Institute.

Another reason some small firms may finance the entire cost of employee health insurance is to achieve high plan participation. Small employers

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**Appendix V**  
**Differences in the Cost of Health Plans by**  
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require high plan participation to ensure health coverage or favorable insurance rates. This necessity makes it difficult for a small employer to impose cost-sharing requirements on employees without causing the size of the risk pool to decline.

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# Differences in the Cost of Group Health Plans by Location

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The geographic location of the firm has a substantial influence on a firm's health care costs, but it is also one of the most difficult factors to alter in the short term. Health costs can vary significantly by city or health care market area, due largely to the availability of health resources, health status of the population, personal income, provider practices, and the operating expenses of providers.

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## Businesses in High-Cost Markets Adversely Affected

The geographic location of the firm has a significant impact on health benefits costs for an employer. However, few generalizations can be made about differences in health costs between regions or even between cities within a region. As shown in table VI.1, average group expected claims costs across the country vary widely from the national average.

For example, average expected claims costs for group health insurance benefits in Los Angeles are on par with those in Miami, but are almost 50 percent higher than those in Philadelphia or Detroit. In addition, expected claims costs in Los Angeles are about twice those of Seattle, which are similar to costs in El Paso.

**Appendix VI  
Differences in the Cost of Group Health  
Plans by Location**

**Table VI.1: Index of Average Group  
Expected Claims Costs in Selected  
Cities, by Region (1989)**

| U.S. average = 1.00 |                     |                  |        |
|---------------------|---------------------|------------------|--------|
| Region/city         | Factor <sup>a</sup> | Region/city      | Factor |
| <b>West</b>         |                     | <b>Northeast</b> |        |
| Los Angeles, CA     | 1.73                | New York, NY     | 1.39   |
| San Francisco, CA   | 1.34                | Philadelphia, PA | 1.16   |
| Phoenix, AZ         | 1.10                | Newark, NJ       | 1.07   |
| Denver, CO          | 0.95                | Pittsburgh, PA   | 1.02   |
| Seattle, WA         | 0.85                | Buffalo, NY      | .75    |
| <b>Midwest</b>      |                     | <b>South</b>     |        |
| Detroit, MI         | 1.18                | Miami, FL        | 1.70   |
| Cleveland, OH       | 1.08                | New Orleans, LA  | 1.23   |
| St. Louis, MO       | 0.99                | Atlanta, GA      | 1.06   |
| Minneapolis, MN     | 0.88                | Nashville, TN    | .95    |
| Columbus, OH        | 0.84                | El Paso, TX      | .89    |

<sup>a</sup>Average area factor that would be used by an underwriter to determine the estimated claims cost for group health insurance. A factor of 1.73 means that expected claims costs are 1.73 times the national average. The factors were weighted using under-age-65 populations. Although obtained from insurance underwriters, these factors are an estimate because insurance companies may be licensed to write business in a city, but may actually write little or no business in that city. In this instance, it cannot be expected that an underwriter's factor would be as accurate as the factor for a city in which the insurer writes a substantial amount of business. In addition, a factor may be in error because the insurance company, for marketing or some other reason, set the factor either artificially high or artificially low.

Source: Milliman and Robertson, Inc.

## Many Factors Contribute to Geographic Variations in Health Costs

Cost variations across geographic health care markets are strongly influenced by a number of factors.<sup>1</sup> These include differences in personal income, the amount of health care resources available (hospital bed capacity and the number of physicians per capita), and the health status of the population. Generally, area health care costs rise with increases in average personal income and the amount of accessible health care resources. Similarly, areas with less healthy residents require more health services and have higher health spending than states with more healthy residents.

Geographic differences in health costs also may be affected by variations in provider practice patterns. Differences in practice patterns can influence patient utilization rates as well as the services provided. For example, researchers concluded in a recent study of cesarean section

<sup>1</sup>U.S. General Accounting Office, Health Care Spending: Nonpolicy Factors Account for Most State Differences (GAO/HRD-92-36, Feb. 13, 1992).

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**Appendix VI  
Differences in the Cost of Group Health  
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rates that physician practice style might be an important determinant of the wide variation in services provided. In the study, over 1,500 affluent women at low risk of obstetrical complications who were cared for in a single community hospital were observed. On average, 17.2 percent of the births for women without previous cesarean deliveries were performed through a cesarean section. However, the rate of cesarean delivery varied from 9.6 to 31.8 percent, by physician. The researchers determined that the identity of the physician was the second most important variable in its influence on the rate of cesarean section (whether the mother had given birth before was the primary variable).<sup>2</sup>

Variations in provider operating expenses can also influence differences in geographic health costs. The cost of providing health care is dependent on rent or property values, labor costs, cost of medical supplies, hospital occupancy rates, medical malpractice premiums, and bad debt percentages. Other factors that have an influence on provider charges are the proportion of Medicare and Medicaid patients and Medicare and Medicaid reimbursement rates. For example, in areas with a high concentration of elderly or indigent patients, providers may increase charges to private insurers to offset lower Medicare or Medicaid payments.

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<sup>2</sup>G.L. Goyert and others, "The Physician Factor in Cesarean Birth Rates," The New England Journal of Medicine, March 16, 1989, pp. 706-709.



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# Surveys Used to Identify Business Health Costs

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## A. Foster Higgins & Co., Inc.

A. Foster Higgins is a research and consulting firm that provides information on employee benefits. Its annual Health Care Benefits Survey was established in 1986. The firm's 1991 Indemnity Plans report is its most recently published survey on employer and employee indemnity plan health costs. This information was collected from 2,409 employers, whose plans cover 13.8 million employees. Survey participants include organizations of all sizes and industries, as well as state and local governments.

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## The Wyatt Company

The Wyatt Company is a benefits and compensation consulting firm that provides information on employee benefits. The data on group benefits dates back to the late 1970s. The September 1991 issue of Wyatt Comparison is the firm's most recently published survey on employer and employee indemnity plan health costs. This information was collected from 718 employers whose plans cover more than 7 million employees. Survey participants include a cross-section of employers in the United States.

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## U.S. Chamber Research Center

The Chamber of Commerce Survey, Employee Benefits: Survey Data from Benefit Year 1990, is the 29th survey of employee benefits. The survey was formerly published every 2 years but has been published annually since 1979. The survey includes responses from 1,000 firms employing more than 3.7 million persons. Of the firms surveyed, 222 had fewer than 100 employees and 125 had more than 5,000.

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## Milliman & Robertson, Inc.

Milliman & Robertson is an actuarial and consulting firm that provides information to the health insurance industry. The survey, Group Comprehensive Major Medical Net Claim Cost Relationships by Area, examined costs from data supplied by 16 of the nation's largest group health insurance underwriters. The report examined medical costs in 400 cities for the most common type of major medical plan covering a 45-employee group.

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# Major Contributors to This Report

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**Human Resources  
Division,  
Washington, D.C.**

**Janet L. Shikles, Director, Health Financing and Policy Issues,  
(202) 512-7119  
Michael Gutowski, Assistant Director  
Rosamond Katz, Assignment Manager  
Rafe Forland, Evaluator-in-Charge**







# Related GAO Reports

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Access to Health Care: States Respond to Growing Crisis (GAO/HRD-92-70, June 16, 1992).

Access to Health Insurance: State Efforts to Assist Small Businesses (GAO/HRD-92-80, May 14, 1992).

Small Group Market Reforms: Assessment of Proposals to Make Health Insurance More Readily Available to Small Businesses (GAO/HRD-92-27R, Mar. 12, 1992).

Health Care Spending: Nonpolicy Factors Account for Most State Differences (GAO/HRD-92-36, Feb. 13, 1992).

Employee Benefits: Effect of Bankruptcy on Retiree Health Benefits (GAO/HRD-91-115, Aug. 30, 1991).

Private Health Insurance: Problems Caused by a Segmented Market (GAO/HRD-91-114, July 2, 1991).

Workers at Risk: Increased Numbers in Contingent Employment Lack Insurance, Other Benefits (GAO/HRD-91-56, Mar. 8, 1991).

Employee Benefits: Improvements Needed in Enforcing Health Insurance Continuation Requirements (GAO/HRD-91-37, Dec. 18, 1990).

Employee Benefits: Extent of Multiemployer Plan Retiree Health Coverage (GAO/HRD-90-132, July 17, 1990).

Health Insurance: Cost Increases Lead to Coverage Limitations and Cost Shifting (GAO/HRD-90-68, May 22, 1990).

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