

Understanding Health-Insurance Coverage of Low-Skilled Workers in the US and in California: Trading Wages for Insurance^a

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1. Introduction

Currently 41.2 million Americans lack health insurance, a majority of whom are low-skilled individuals living in families with at least one full-time worker.¹ Approximately one in six of these uninsured Americans lives in California. Since employment-based health insurance is the primary source of coverage in California and in the United States, intense public debates on reducing the ranks of the uninsured often focus on the employer. For example, proposals have been put forth for mandated employer health benefits, tax credits for employers providing health benefits and options for employers to buy into publicly-subsidized health plans. Many cities have also enacted or proposed living wage laws that mandate a higher wage for employers not providing health insurance benefits. Implicit in any employer-based proposal is the assumption that workers – particularly those currently uninsured – would be made better off if their employers provided health insurance as part of their compensation package. Yet, we know very little about the value employees place on the availability of employer-based health insurance and the tradeoffs they are willing to make between wages and these benefits. Indeed, if low-skilled workers prefer a combination of higher wages and lower health insurance benefits, then policies forcing or persuading employers to provide health benefits could actually decrease the well-being of these workers.

This paper increases our understanding of low-skilled individuals' valuation of health insurance by characterizing their options for health insurance and estimating the rate at which they are willing to trade wages for access to employer-sponsored health insurance, which is the only viable source of coverage for most of these individuals. Since Internal Revenue Service nondiscrimination rules stipulate that employers may not individually adjust wages according to employee benefits selections, the key policy question that we ask is: How much are workers willing to trade in wages for *access to* (in contrast to *enrollment in*) employer health insurance? The basis of this question lies in the conventional theory of compensating wage differentials, which hypothesizes that differences in wages reflect not only labor productivity, but also compensation for particular job characteristics – such as working conditions and nonpecuniary

¹ Census Bureau, 2002. We classify an individual as low-skilled if his or her highest education level is no more than a high school degree or credentials.

benefits.

While the theory of compensating wage differentials is widely accepted, empirical evidence of a wage tradeoff for health insurance is limited. Since isolating individuals' willingness to pay for health insurance in forgone wages requires one to disentangle numerous competing factors, the identification of such a tradeoff is not trivial. Ideally, we would like to compare the wage an employee could earn at an employer that offers health insurance to the wage she could earn at an identical employer that does not provide health benefits; however, for any given employee, only one of these wages is observed at a point in time. Thus, our task is to not only identify the counterfactual wage, but also to isolate the component of the wages that reflects the implicit price of access to health insurance.

1.1 Overview of Report

This paper proceeds as follows. In Section 2, we begin by describing the options for health insurance, which are ultimately based on labor market opportunities. Then, we describe the two data sets we use to meet the rigorous informational demands of the research question and exploit these sources to characterize the health insurance choices made by low-skilled individuals. In doing so, we highlight the primary role of employer-sponsored health insurance in the coverage of low-skilled individuals, and in Section 3, we classify the availability and nature of health insurance across the low-skilled labor market.² We introduce the conventional concept of compensating wage differentials in Section 4 and illustrate how neither a simple examination of the data nor the existing literature confirms theoretical predictions. In Section 5, we develop a simple economic model and empirical specification that we use to identify how much low-skilled individuals are willing to trade in wages to obtain access to health insurance. We present our results in Section 6. Finally, we conclude in Section 7 with several policy implications of our findings.

² This section helps to place the later analysis in the context of the decision-making process of a low-skilled individual. The reader who is interested solely in estimations of the compensating wage differential for health insurance may wish to skip this section.

2. HEALTH INSURANCE COVERAGE FOR THE LOW-SKILLED POPULATION

What are the potential channels through which a typical low-skilled or low-wage individual can obtain health insurance? Many would answer this question by listing a variety of health insurance *sources*, such as employer-provided, publicly subsidized, or privately purchased. However, the availability of such types of coverage is contingent on the work decisions made by this same individual and thus the decision process of an individual is much more complex than one of simply choosing among the array of possible health insurance sources. Accordingly, consumer demand for health insurance cannot be analyzed in isolation, but rather it must be examined in the context of employment decisions, which determine an individual's opportunity set for obtaining health insurance and ultimately reveal his or her preferences for insurance.

2.1 Options for Health Insurance Coverage

To acknowledge the explicit link between labor supply choices and accessibility to health insurance, we make a distinction between health insurance “options” and sources, defining an option as a combined work and health insurance alternative. Table 2.1 clarifies this concept by listing the thirteen work-health insurance options available to a low-skilled individual. Clearly one's labor decision – both whether to work and at which employer to work – directly affects his set of health insurance alternatives and hence his eventual health insurance outcome.³ Most notably, individuals working at employers that do not offer health insurance have fewer accessible sources for coverage. To fully appreciate the tradeoffs individuals are willing to make between health insurance and other forms of compensation, it is necessary to analyze their choices about insurance within the context of these thirteen work-health insurance options. One of the challenges of this, however, is obtaining the data necessary to consider this question in entirety. While data sets frequently contain information on either the selections made by an individual or the provisions offered by an employer, they are rarely able to describe an individual's nonchosen alternatives - information that is crucial to the analysis. However, we have identified two data sources that can be combined to overcome this problem. In the remainder of this section, we first describe these data sets and then illustrate the joint work-health

³ The work decision in this description is binary and independent of the number of hours worked; therefore, a part-time worker who is not offered health benefits (even if her firm offers benefits to full-time workers) would be modeled as working and not offered benefits.

insurance choices that individuals make.

2.2 Description of the Data Used in Our Study

Since our goal is to understand low-skilled individuals' labor and health insurance decisions in the context of their opportunity sets, we require data on not only the option selected by a given individual, but also on the relinquished alternatives. Not surprisingly, such comprehensive data is not readily available. While there are a few data sets that include the necessary combination of individual and employer level data, none of these sources are nationally representative or generalizable. To overcome these data challenges, we integrate two rich and nationally-representative sources.

2.2.1 1996 Panel of the Survey of Income and Program Participation

The Survey of Income and Program Participation (SIPP) is a large nationally representative longitudinal survey of individuals that collects detailed information on income sources and amounts, labor force participation, social program participation, and general demographic characteristics. The SIPP collected information on families every four months for four years beginning in 1996, and it oversampled individuals from low-income households. At each interview, a family was asked to respond to questions capturing the “core data” for each of the four previous months. The SIPP also contains several topical modules that address special areas of interest. In particular, it contains a supplementary module on employer-sponsored health insurance that asks a comprehensive collection of questions, including whether an individual was offered employer-sponsored coverage (irrespective of whether it was accepted). While many data sets contain information on coverage through employer-sponsored health insurance, few surveys contain this valuable information on access to employer health benefits. Information on each person's employer health insurance options - both chosen and rejected – is available for one month between July 1997 and October 1997, while less detailed information on health insurance coverage is available for each month an individual participated in the survey.

In addition the valuable information collected by the SIPP's topical module on employer-sponsored health insurance; the health insurance information included in the core data of the SIPP provides many benefits. In particular, since the SIPP collected health insurance information four times per year, it accurately depicts the variable nature of health insurance, which for many

people – especially in the low-income population – changes across months or quarters. This survey method is more reliable than methods used by other surveys, such as the Current Population Survey, which ask individuals to report their health insurance status for the prior year. Data based on one response for the entire year is likely to suffer from measurement error stemming from recollection problems and confusion over how to respond when one’s health insurance status changed within the twelve-month reference period.⁴

2.2.2 1997 Robert Wood Johnson Foundation Employer Health Insurance Survey

The Robert Wood Johnson Foundation Employer Health Insurance Survey (RWJF) is a national survey of employers that asks questions about the health insurance options they offer, including each plan’s type (HMO, PPO, or indemnity plan), respective employer and employee premiums, cost-sharing characteristics (e.g., deductibles and coinsurance rates), and extent of coverage (e.g., doctor visits and prescription drugs). In our analyses, we consider only “basic” health insurance plans – those allowing family coverage and including coverage for doctor and inpatient visits, prescription drugs, and mental health care – to make comparisons of plans more meaningful. The RWJF also collects information on employees’ eligibility and enrollment in health plans, as well as on establishment characteristics, such as the number of employees, industry, location, and hours, age, gender, and earnings distributions of workers. The information in the survey refers to health insurance provisions between September 1996 and October 1997, and the sample includes 22,465 employers offering a total of 33,549 health plans.

2.2.3 Linking information from the SIPP and RWJF

While the SIPP and the RWJF both contain weights that make them representative of the United States population, we cannot use the RWJF to link individuals in the SIPP to their actual employers or job opportunities. However, we are able to relate the two data sets through constructions of multivariate distributions summarizing a comprehensive array of choices, opportunities, and demographic attributes. Since the SIPP contains detailed health insurance information on an individual’s range of work-health insurance options at only one point in time,

⁴ Bennefield (1996) and Nelson and Mills (2001) discuss the differences between health insurance coverage reporting in the SIPP and the CPS, noting that the CPS has historically reported higher rates of uninsured individuals than the SIPP and other reputable surveys of health insurance coverage. Beginning in March 2000, the CPS implemented verification questions – based largely on the SIPP methodology – to make the data more reliable.

we use the RWJF survey to better characterize the available alternatives.

Tables 2.2 and 2.3 illustrate the legitimacy of pairing the two surveys, showing that they depict a very similar picture of the American workforce. Similarly, Table 2.2-CA shows that the California samples of the SIPP and RWJF are also well-matched. On the whole, the distribution of workers across industries, firm sizes and regions is remarkably comparable, with only a few minor differences. For example, the SIPP represents fewer professional services employees (about five percentage points less than the RWJF) and slightly more public sector, agriculture, and transportation workers. Also, the SIPP portrays slightly higher concentrations of workers in firms with less than 100 workers and of workers living in the South.⁵ Turning to the demographic composition of the American workforce, Table 2.3 shows that the RWJF and SIPP are also similar along these dimensions. For example, both surveys show that about 47% of the American workforce was female and approximately four-fifths were less than 50 years old in 1997. The SIPP shows slightly higher percentages of part-time workers and low-wage workers.⁶

The time periods summarized by the RWJF and SIPP are also satisfactorily comparable. The RWJF sampled employers from September 1996 to October 1997, and we use data from the SIPP from two months before to one year after this period – from July 1996 to October 1998. While our SIPP sample extends later than the RWJF sample, it is fairly innocuous to assume that the general work-health insurance market did not change over the course of the year.⁷ Therefore, we assert that the SIPP and RWJF are generally analogous across time, employer and individual compositions.

⁵ Definitions of the regions used in this table and throughout the paper are based on Census definitions, which are included in the Appendix.

⁶ Given the different sampling and weighting strategies of the SIPP and RWJF, in addition to their distinct units of observation - employee versus employer - their likeness is remarkable. Since estimates from different samples are affected by a number of factors affecting survey contents - such as sampling, weighting, response, and survey goals - making comparisons across samples is challenging, in general, and we would not expect to find that estimates across the SIPP and RWJF are statistically indistinguishable. However, we conclude from our casual examination of the composition of the two samples that the SIPP and RWJF are similar enough to use simultaneously.

⁷ According to the RWJF, 80% of employees that were offered health insurance at the time of data collection were offered the same choice of plans the previous year at the same employer, 91% were offered the same contribution policy, and 85% of employees working at firms that did not offer health insurance were also not offered in the previous year.

2.3 Summary of Low-Skilled Adults' Health Insurance Choices

Faced with the thirteen labor-health insurance options described above, what choices do low-skilled adults make? Table 2.4 shows the distribution of low-skilled adults across these work-health insurance options as reported by the SIPP.⁸ While 46% of the sample had access to employer-sponsored health insurance, only 80% of these employees enrolled in their employer's health plan. Of those who chose not to enroll, 68% had coverage through either a spouse's employer or another source, 3% had public insurance, and 29% had no insurance. Table 2.4-CA shows that fewer Californians had access to employer health insurance and more lacked health insurance entirely. More than one-fifth of the U.S. sample and one-fourth of the California sample worked at an employer that did not offer them health insurance; 51% (61% in California) of these individuals were uninsured and 11% (14% in California) were public insurance beneficiaries. In total, one in four low-skilled adults in American had no insurance – about three-fifths of whom were employed. While single and married individuals were equally likely to be enrolled in employer-sponsored health insurance, single individuals were more likely to be uninsured than their married counterparts. While 33% of single adults had no insurance, only 19% of married adults lacked coverage - a distinction that is largely explained by coverage for married individuals through their spouses' employers.

Although there are alternatives to employer-sponsored health insurance – such as publicly-subsidized and privately-purchased insurance – accessibility of these alternatives is limited. Less than 15% of working-aged low-skilled individuals are eligible for Medicaid⁹ and exorbitantly high prices in the private market often make this an unrealistic option for a majority of low-skilled individuals. Thus, for many low-skilled individuals, the question of whether or not they have health insurance rests on the employer at which they choose to work and the extent to which they are willing to trade wages for access to employer-sponsored insurance.¹⁰ Accordingly, the remainder of this report focuses specifically on low-skilled individuals' opportunities for and valuations of employer-sponsored health insurance.

⁸ The data summarized in this table refer to choices made between July 1997 and October 1997.

⁹ This figure comes from the SIPP panel between July 1997 and October 1997. We use a simple Medicaid eligibility criteria that considers only income and does not adjust for assets or various earnings disregards.

¹⁰ Health insurance coverage for married persons clearly also depends on their spouses' labor supply decisions.

3. OPPORTUNITIES FOR EMPLOYER-SPONSORED HEALTH INSURANCE

The United States' health care system – and its reliance on employer-based coverage – primarily evolved during World War II, when mandated wage controls and tax-exemptions for nonwage benefits led many employers to offer fringe benefits, including health insurance, as a way to recruit and retain workers in the competitive labor market. Today, there are many institutional and market rules that suggest an individual may value access to employer-sponsored health plans for a variety of reasons in addition to basic considerations of the insurance itself. In particular, the distinctions between the group insurance market - accessible to groups (employers) with more than 50 members - and the private insurance market are stark. For example, the process of “experience rating” or medical underwriting – in which insurers tailor premiums to individual health and demographic characteristics – often leads to extremely high prices and exclusionary riders for preexisting medical conditions in the private (nongroup) market. On the other hand, this pricing method benefits the employer health insurance market because insurers, who are able to spread the financial risk of medical expenses across a number of people, offer lower premiums to groups. Since the cost of health insurance is likely to be lower for any given individual in the group market than in the private market, a dollar in forgone wages for access to employer-sponsored health insurance is more valuable in terms of health insurance than its dollar value because the same amount could not purchase equivalent health insurance coverage in the private market.

Another large distinction between health insurance obtained through employment and that purchased in the private market is the preferential tax treatment given to employer-sponsored health insurance. Employer contributions to health insurance premiums and medical expenses are exempt from taxes, making one dollar spent by an employer on these fringe benefits more valuable than a dollar spent on wages, which are subject to income and payroll taxes. Some employers also establish plans that allow employees to make contributions to health insurance and medical necessities with pretax dollars. While individuals purchasing health insurance in the private market can deduct expenditures on medical expenses – including health insurance premiums – that are in excess of 7.5% of earned income, the value of this option is less than that of the tax exemption in the employer market and it requires significantly more information and effort – such as the itemization of deductions – to redeem. Since our focus is on low-skilled

individuals who are likely to face low marginal tax rates, this preferential tax treatment of health insurance benefits is likely to weigh less heavily on their decisions than it might on a person with a higher income. Nevertheless, it is a distinction that is sure to influence the behaviors of these individuals and their employers to some degree.

Before moving on to a formal analysis of how much low-skilled individuals value access to employer health insurance, much can be learned by using simple summary statistics to characterize these individuals' opportunity sets for health insurance. Since the predominant source of coverage for low-skilled individuals is employer-sponsored health insurance, we can use individuals' labor market selections to identify their preferences for such coverage. Thus, it is instructive to examine how the available alternatives for health insurance vary across jobs, a task we undertake in the remainder of this section.

3.1 Differences in Health Insurance Options Across Low-Skilled Labor Markets

Employers offer health insurance for a number of reasons, including improving the health (and productivity) of their workforce, discouraging worker turnover, and maintaining employee satisfaction. These reasons do not, however, motivate all employers to offer health insurance and about 14% of all employees in the United States and 17% of Californian employees worked at firms that did not offer health insurance benefits to any of their employees in 1997.¹¹ Not surprisingly, employers offering health benefits are not randomly distributed across the labor market and we illustrate the systematic differences in health insurance provisions below.

Table 3.1 shows the percentage of employees working at firms that offer employer-sponsored health insurance across a variety of employer characteristics. Table 3.1-CA presents the same information for employees in California.¹² Looking first at differences across industries in the United States, employers appear to fall into one of three categories: those with a relatively high, medium, or low likelihood of offering insurance. Employers in the public sector and mining and manufacturing industry comprise the group with the highest probability of offering insurance. In fact, the employers of 99% of employees in the public sector and 93% of those in mining/manufacturing offered health benefits. The middle group consists of professional

¹¹ This figure, which comes from the RWJF, is adjusted by weights that make the survey nationally representative of employees in the United States.

¹² Since relationships in California are generally similar to those found in the United States, we focus this discussion on the entire country.

services, wholesale trade, transportation, communication and utilities, and finance, insurance, and real estate. Approximately 83%-86% of employees in these industries were employed by firms that offered health insurance benefits. The group least likely to offer benefits includes employers in retail trade, nonprofessional services, construction, and agriculture; the employers of less than three-fourths of the employees offered health benefits.

There is a similarly distinct breakdown of employers according to the number of workers employed, and Table 3.1 depicts a monotonic relationship between firm size and the likelihood of health insurance provision. Small firms, which face much higher costs to insure employees, were much less likely to offer benefits than employees in medium or large firms.¹³ Less than 60% of employees in firms with no more than 25 workers worked at firms offering benefits, while 89% of employees in medium-sized firms and nearly 100% of employees in firms with more than 100 workers had employers providing health insurance. Lastly, looking at employer provisions across regions, Table 3.1 shows that the variability across the country was less than that across industries or size. Employees in the Northeast and in the Southwest were slightly more likely to work at employers offering insurance than those in the Southeast and the Pacific.

Table 3.2 illustrates that the stark relationship between employer size and the likelihood of health insurance availability holds within industries; however, it also shows that the probability of small firms offering health insurance varies dramatically across industries. For example, only 40% of nonprofessional service employees and 46% of retail employees in firms with less than 25 workers had employers offering health insurance benefits, while the smallest wholesale trade and manufacturing/mining employers offered benefits to 74% and 67% of employees respectively. Differences at large firms across industries were less; almost all employees in large firms had employers that offered health insurance irrespective of industry, with percentages offered ranging from 95% of construction employees to slightly less than 100% of public sector workers.¹⁴

Another way to classify employers is by the types of workers they employ, such as those who are low-wage earners or full-time employees. These breakdowns are particularly appealing

¹³ Health insurance costs faced by small firms are higher because they are not able to pool the financial risk for medical expense across as many workers. Moreover, small firms have fewer individuals over which to spread administrative costs.

¹⁴ The one exception is large agriculture firms, in which only 79% of the employees had access to health insurance. Not only is this statistic based on an extremely small sample of firms, but also the agriculture industry is known for unique circumstances, including high rates of temporary employment, turnover, and great susceptibility to seasonality.

since the IRS's nondiscrimination rules ensure that health insurance offers are largely uniform across full-time workers within employers. Thus, since employers cannot offer different health insurance packages to employees earning different wages, we might expect employers with a higher percentage of low-wage workers to forgo offering health insurance benefits entirely. Table 3.3 verifies this hypothesis by classifying firms according to the percentage of low-wage workers employed, where a low-wage worker is defined as someone earning less than \$7 an hour. The table shows a decreasing relationship between the percentage of low-wage workers employed and the likelihood of a firm providing health insurance. For example, about 96% of employees working at firms with the lowest positive share of low-wage workers (20% at most) had employers that offered health insurance. Surprisingly, a slightly lower percentage (88%) of employees at firms that had no low-wage workers had potential health insurance benefits from their employer. However, as the low-wage worker share increases, the likelihood of an employer providing health insurance benefits fell rapidly. Only 54% of workers at firms that primarily employed low-wage workers (more than 80% of their workforce) were employed by employers that offered health insurance benefits to any employees.

Table 3.3 also categorizes firms according to the percentage of full-time workers – those working at least 35 hours per week – and shows that employees working at firms with a higher percentage of full-time workers were increasingly more likely to be offered health insurance benefits. Whereas only 65% of employees at firms with less than 20% full-time workers worked at firms that offered benefits, about 89% of those at firms with more than 80% full-time workers had employers providing benefits.

To place these findings in the context of the low-skilled labor market, Table 3.4 shows the distribution of low-skilled workers across industries, employer sizes, and regions.¹⁵ While the relative concentration of low-skilled workers across industries is similar to the distribution of the workforce for the most part, there is one large distinction. About 11% of low-skilled workers were employed in the public sector, in comparison to about 17% of all workers. This is noteworthy, especially because public sector employers were most likely to offer health insurance. Table 3.4-CA shows that almost 9% of low-skilled workers in California were employed in the agricultural industry - which is associated with low rates of health insurance

¹⁵ In contrast to Table 2.2 – which shows the distribution of all workers across the labor market – Table 3.4 shows the choices made by only low-skilled workers.

availability - and about 36% worked in small firms. Thus, there is some evidence that low-skilled individuals tend to work in sectors of the labor market that are less likely to offer health insurance.

3.2 Types of Health Plans Offered by Employers

Health insurance is not a homogeneous good and there are many dimensions across which plans vary. The first distinction we discuss is the type of health insurance plan. There are three common types of health plans: Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPO)/Point of Services (POS), and traditional indemnity plans. Indemnity plans – or fee-for-service plans – provide reimbursement for all medical services delivered by any provider and have become much less common than HMOs and PPO/POSSs, which have restrictions on the doctors and services covered. Table 3.5 describes the distribution of the different types of health plans offered in the U.S. work-health insurance market, showing the probability of a given employee working at firm that offers health benefits of having access to a specific option.¹⁶ Employees at firms offering health benefits were most likely offered enrollment in one or more HMOs, while the likelihood of being offered a PPO or POS was much lower (only about 25%). A similar distribution holds in the California labor market - as illustrated by Table 3.5-CA - although employees in California were slightly more likely to be offered a PPO/POS than those in the United States at large. The predominance of HMO plans was not constant across industries. For example, the probability of employee having access to an HMO plans was only 26% in retail, 28% in nonprofessional services, and 45% in professional services. Similarly, agriculture workers in California employed by firms providing health insurance had only a 22% chance of being offered an HMO plan. Employees in retail and wholesale trade were most likely to be offered a PPO/POS plan, while those in the public sector were least likely to be offered either a PPO/PPS or an indemnity plan. Employees at large firms were the most likely to be offered an HMO, facing an offer rate of about 75%. Lastly, as the percentage of low-wage workers at a firm decreased, the likelihood of being offered an HMO plan increased.

Another way to classify employer-sponsored health insurance plans is by whether or not

¹⁶ Averages are taken over all plans offered, so if an employer offered a choice of plans, then each plan is considered a single observation. All averages are weighted to make the sample nationally representative of employees..

they are self-insured by the employer. In contrast to the case of fully-insured plans, where an insurer assumes the risk for plan members, the financial risk of self-insured plans falls solely on the employer. This distinction is meaningful because the state insurance laws that regulate group insurance plans do not apply to self-insured health plans.¹⁷ Accordingly, self-insured plans may be less desirable (or simply different in nature) than fully-insured plans. Table 3.6 shows that the likelihood that an employee at an employer providing benefits was offered a self-insured plan was much higher in firms with a higher percentage of low-wage workers. Whereas employees at firms predominantly employing low-wage workers were offered a self-insured plan about half of the time, those at firms with few low-wage workers were offered such plans less than 10% of the time. As Table 3.6-CA shows, however, this relationship between self-insured plans and the percentage of low-wage workers did not hold in California, where the employees most likely to be offered such a plan worked in firms with 20% - 40% low-wage workers. Turning to other employer attributes, medium-sized firms were most likely to offer self-insured plans. Employees in the public sector were least likely to be offered self-insured plans – less than 2% of the time – while those in retail trade were most likely, where the likelihood of employees at employers providing health plans being offered one or more self-insured plans was almost 60%.

3.3 Costs of Employer-Sponsored Health Plans

Employer health insurance plans can also be categorized according to the multiple dimensions of cost. For example, we can compare health plans' total premiums, which are the comprehensive per-member costs, including administrative expenses. The total premium is equivalent to the premium that an individual would pay for coverage in the private health insurance market. While it is difficult to capture the quality of health plans, which is often perceived differently by individual members who visit different doctors and have different medical needs, many use the total premium as a proxy for quality.¹⁸ Another cost-related attribute of employer health plans is the share of the total premium that an employer pays. This dimension highlights the two benefits to an employee of enrolling in employer-provided health insurance: 1) access to an employer's plan (which is less expensive than the private market equivalent) and 2) the employer's subsidy of the premium (only a portion of which is shifted to

¹⁷ This follows from the Employment Retirement Income Security Act (ERISA) of 1974.

¹⁸ This practice is based on the (possibly inaccurate) assumption that higher prices are associated with higher quality.

wages, as we show below). Lastly, there is the employee contribution to the total premium, which is clearly a product of the total premium and the employer's share. While theoretical predictions suppose that employees consider the total premium in making work-health insurance decisions, there is some debate on whether employees actually have this foresight.¹⁹ Furthermore, the decision of many employees not to enroll in an employer-sponsored plan – even if they have no other source of coverage – suggests that employee attention is centered on the share of the premium for which they are responsible.²⁰

Tables 3.7 and 3.8 show how total monthly premiums for single and family coverage varied across employers characterized by the same attributes highlighted above.²¹ These tables reflect the distribution of premiums for all offered plans to portray the full range of options faced by employees.²² Overall, the average single and family premiums for employer-sponsored health insurance were \$169 and \$427, respectively.²³ Tables 3.7-CA and 3.8-CA show that total premiums in California were nearly identical to those in the United States as a whole.²⁴ In general, total premiums for single coverage were higher in professional services, finance/insurance, mining/manufacturing, and construction. The lowest premiums were in transportation, wholesale trade and nonprofessional services. The relative ranking of premiums across industries is fairly similar for family insurance. Average single and family premiums were remarkably similar across employers of different sizes, while median premiums were slightly higher for firms with more than 100 employees. In California, single and family premiums were

¹⁹ Chernen, Frick, and McLaughlin (1999) find that employee take-up decisions are sensitive to the employee contribution but not to the total premium. This implies that workers do not perceive a full tradeoff between health insurance and wages.

²⁰ According to the SIPP, twenty-two percent of employees that opted out of health insurance did so because it was too costly.

²¹ Family premiums denote the cost for the largest family group specified by a given plan.

²² Thus, if a firm offers multiple plans and no employees enroll in one of them, its premium is still accounted for in these calculations.

²³ Reported premiums refer to health plans offered between September 1996 and October 1997; dollars are in \$1997.

²⁴ Other studies, such as the California Employer Health Benefits Survey - a joint effort by the Kaiser Family Foundation, Health Research and Educational Trust, and the Center for Health and Public Policy Studies at UC Berkeley – suggest that premiums in California are slightly lower than those in the United States. Since these findings are based on estimates from different samples that include different survey weights to make the samples representative of the state, the differing conclusions are not surprising. Moreover, the California study noted above looks only at private firms, while the conclusions we draw from the RWJF are based on health insurance provisions offered by both public and private firms.

highest at firms with at least 100 employees.²⁵ Premiums in New England and the Southwest tended to be higher than those in the Midwest. Lastly, firms with a higher percentage of low-wage workers offered plans with slightly lower premiums.

Table 3.9 shows how the share of the total premium paid by employers varied across the labor market for both single and family coverage. Immediately obvious from the table is that employers heavily subsidized their employees' health insurance coverage, paying about 82% of single premiums and 74% of family premiums on average. Employers in California (Table 3.9-CA) paid a slightly larger share of total health plan premiums, picking up 85% of single and 77% of family premiums.²⁶ The distribution of employer shares was very narrow, with the 25th percentile, median, and 75th percentile of the shares for single plans being 81%, 82%, and 83% respectively. The distribution of employer shares for family coverage was only slightly wider. Roughly, these statistics imply that employers contributed more than twice the amount for employees receiving family coverage than those enrolled in single coverage.²⁷ Looking at employer shares across industries, Table 3.9 shows that employers in retail, finance, and nonprofessional services tended to subsidize a lower percentage of health insurance premiums for both single and family coverage. On average, small (large) firms contributed the largest (smallest) share for single plans, but contributed the smallest (largest) share of the premium for family coverage. Similarly, employers in the South Central area offered the highest employer share for single plans but the lowest share for family plans.²⁸ Lastly, there was a decreasing relationship between the employer share and the percentage of low-wage workers employed by a firm; employees working at firms with a higher concentration of low-wage workers were

²⁵ The similarity of health insurance premiums across employer size in the U.S. and the higher premiums at large firms in California underscores the sensitivity of employers' decisions about whether or not to provide health benefits to costs. If all employers offered the health insurance plans, we would expect the total premiums for small firms to exceed those of large firms since the "rules" of pricing in the health insurance market favor larger employers. Since we do not observe large price differences across employer size, we posit that only those small employers who were able to secure lower-cost health insurance options provided such benefits and that small employers offered less comprehensive coverage.

²⁶ In our analysis below, we show that employees primarily paid for these employer subsidies with reduced wages for access to health insurance.

²⁷ Since wage differentials for health insurance access do not differ across family structure, this implies that workers with dependents who enroll in employer insurance effectively pay for a lower share of health insurance than single employees making the same decisions.

²⁸ This pattern suggests that small firms (and those in the South Central region) offered a larger incentive for employees to enroll in private coverage, possibly as a way to encourage married individuals to obtain health insurance through their spouses' employers instead.

expected to pay a larger explicit share of the total health insurance premium.²⁹

Tables 3.10 and 3.11 show how monthly employee contributions for single and family coverage varied. While the mean contribution for single coverage was about \$30, Table 3.10 shows that average employee contributions for single plans ranged from about \$20 in construction, to \$31 in the public sector, to \$37 in retail trade.³⁰ In California, where employee premiums were lower on average, Table 3.10-CA shows that average premiums ranged from \$9 per month for construction workers to almost \$30 for wholesale trade workers. At least 50 percent of the construction workers who receive health insurance benefits were not required to pay any portion of the premium; at least three-fourths of the Californian construction workers faced zero contributions. Relating employee contributions to total premiums, we see that employees in retail trade were offered plans with the lowest total premium, but faced one of the highest employee contributions. In contrast, employees in the public sector and finance were offered plans with some of the highest total premiums and the largest employee contributions. Turning to employee contributions for family coverage, Table 3.11 shows that industry rankings were similar. For example, the two highest mean contributions were in retail (\$170) and finance (\$146), although, in contrast to single plan contributions, the mean family contribution in the public sector was one of the lowest (\$107). Lastly, employees in construction were the most likely to receive fully-subsidized family coverage, and at least one-fourth in the U.S. and one-half in California (Table 3.11-CA) could enroll in employer health insurance with no explicit contribution.

Employee contributions also varied across employer size, with the lowest average and median contributions for single plans being in the smallest firms and interestingly, those for family plans in the largest firms. At least 50 percent of the employees in the smallest firms who had access to health insurance received a fully-subsidized single plan; at least 25 percent of these employees were also offered a fully-subsidized family plan. The differences in employee contributions across different sized firms were much larger than the differences in total premiums across these firms. Turning to employee contributions at firms employing different percentages of low-wage workers employed, Tables 3.10 and 3.10-CA show little evidence of a systematic

²⁹ This finding could reflect employers' inability to pass health insurance costs to employees through reduced wages when employees earn close to the minimum wage.

³⁰ Median contributions were less than mean contributions in all industries, and they were similarly ranked across industries as the mean.

relationship between employee contributions for single plans and the share of low-wage workers employed. For example, employees at firms with the greatest percentage of low-wage workers in the U.S. faced the highest contributions for single plans (\$38), but those with zero low-wage workers faced the second highest contribution (\$31). Tables 3.11 and 3.11-CA show that the relationship for contributions to family plans, however, was monotonically increasing with the percentage of low-wage employees: employee premiums tended to be higher when the share of low-wage workers was higher.³¹ Lastly, Tables 3.10 and 3.11 also highlight differences in employee contributions across regions, with higher contributions for single plans on the East Coast and for family plans in the South Central and Mountain states.

The descriptions above consider all health plans together; however, since the nature of health plans varies, it is also informative to look at the ways in which premiums varied across the different types of health plans. Table 3.12 shows that total monthly premiums for indemnity plans were the highest and those for HMOs were the lowest. This relationship holds for both single and family coverage. Table 3.12-CA shows that total premiums for PPO/POS plans offered in California exceeded those of indemnity plans for both family and single coverage. Looking at employee contributions to different types of plans, Tables 3.12 and 3.12-CA show that employers paid a larger share of the premium for indemnity plans, leading to an average employee contribution for this type of plan that was lower than the required contribution to premiums for PPO/POS plans. In general, HMO plans were associated with both the lowest total premiums and the lowest employee contributions for both single and family coverage; however, in California, indemnity plans had the lowest average employee contributions.

3.4 Cost-Sharing Characteristics of Employer-Sponsored Health Plans

There are two common cost-sharing techniques used by insurers to lower total premiums and increase individuals' awareness of medical service use: annual deductibles and co-payments. Both higher deductibles and co-payments (or coinsurance rates) are associated with less coverage, since the insured are financially responsible for a larger portion of medical expenses. These plan features are of particular relevance to low-skilled individuals, who may be financially challenged by cost-sharing provisions on top of base premiums. In general, an individual's

³¹ Much like small employers, this pattern suggests that employers with a high share of low-wage workers tried to discourage employees from obtaining health insurance for their families through the offered health plan.

preferred combination of a premium, deductible, and coinsurance rate is largely dependent on his aversion to risk, perceived need for medical care, income, and health. Tables 3.13 and 3.13-CA depict the variation in cost-sharing provisions across firms for both single and family coverage plans in the United States and California, respectively. First, note that the median deductible was zero in all but three industries (construction, retail trade, and services in the U.S. and only agriculture and services in California). Similarly, the 75th percentile was \$0 for employees at large firms, while the median deductible was \$50 at small firms. Looking at employee wages, higher deductibles were associated with firms employing a higher fraction of low-wage workers. With respect to coinsurance rates, Tables 3.13 and 3.13-CA show that there was little variation across industries, size, region, and the percentage of low-wage workers employed. Median coinsurance rates were typically 20%, while 25th percentile rates were 10%.

Linking these cost-sharing attributes to total health plan premiums, Table 3.14 shows the variation in total monthly premiums, employee contributions, and employer shares by whether or not a health plan had a deductible and the size of the coinsurance rate. Both single and family plans without a deductible had lower mean premiums and employee contributions. Employer shares for plans without deductibles were 1% and 6% higher than single and family plans with deductibles, respectively. Looking at co-payments, the relationship for lower coinsurance rates was similar to that for no deductibles: lower coinsurance rates were associated with lower total premiums and employee contributions and higher employer shares. Table 3.14-CA illustrates that similar relationships held in California. In contrast to the negative relationship between premiums and cost-sharing requirements in the nongroup market for health insurance, the positive association observed in the group market underscores the nonrandom distribution of workers across firms with respect to health insurance coverage. In particular, individuals with the highest valuation of health insurance will seek the lowest costs (by choosing employers accordingly), thereby leading to the coupling of lower cost-sharing provisions with smaller costs. In contrast, we expect individuals with lower valuations of health insurance to work in jobs offering less valuable health insurance benefits, characterized by both higher premiums and cost-sharing attributes.³²

³² The coupling of higher cost-sharing provisions (and employee contributions) with higher premiums can be interpreted as less attractive insurance; Dranove, Spier and Baker (2000) present a theoretical model of employer competition showing that firms facing slightly higher premia may require substantially higher contributions.

4. VALUATING HEALTH INSURANCE WITH COMPENSATING WAGE DIFFERENTIALS

Up until this point, we have alluded to the value that low-skilled individuals place on access to employer-sponsored health insurance. Unlike conventional consumer goods, we cannot assess this value with the observed market price since access to such insurance is a job attribute, rather than a tangible good purchased in an explicit market. Thus, our goal is to identify the implicit price for access to health insurance through a careful examination of individuals' labor supply decisions. In this section, we outline the basic behavioral principles underlying individuals' selection into jobs with and without health insurance, introducing the well-known theory of compensating wage differentials. Next, we provide a broad overview of the relationship between wages and health insurance. Lastly, we review the literature that has tried to quantify the compensating wage differential for health insurance, noting its inconclusive findings and various shortcomings. The subsequent section presents our approach for accomplishing this task.

4.1 Behavioral Principles Underlying Job and Health Insurance Selections

Introduced by Adam Smith more than two centuries ago, the theory of compensating wage differentials offers a simple framework for understanding how labor compensation adjusts for the characteristics of a job. These characteristics may make a job more attractive, as would be the case if it offers health insurance and other fringe benefits, or less attractive, occurring when a job involves such attributes as dangerous work conditions or evening shifts. The theory of compensating wage differentials postulates that two distinct components make up labor compensation: a monetary and a nonmonetary component. The monetary portion constitutes the gross wages paid to a worker as take-home earnings, while the nonmonetary part represents the combined valuation that a worker places on the various characteristics of a job. Typically, workers care about multiple attributes of the job, and the nonmonetary component of compensation measures the economic value assigned to this package of attributes as determined jointly by employees and firms in the labor market. Attractive features realize a positive valuation by workers, and unattractive attributes receive a negative value. A job's total compensation equals the sum of its monetary (i.e., gross wage) and its nonmonetary (i.e., the combined implicit valuations placed on the job's attributes) elements. In a simple world with

homogeneous workers of given skill level, total compensation must be equal across jobs requiring this skill. Consequently, a job offering net positively-valued characteristics must pay a lower wage than a job offering net negatively-valued attributes. The difference in the wages paid by these two jobs represents the market's valuation of the differences in the characteristics between the jobs. This basic principle underlies the concept of compensating wage differentials, which provides the vehicle exploited in empirical work to measure valuations of job attributes.

To provide a formal framework for illustrating and solidifying these central concepts, define τ_k as the total compensation received for working on job k, let ω_k denote the monetary take-home wage component paid on this job, and let η_k designate the valuation of the characteristics associated with this job. According to the theory of compensating wage differentials, total compensation for job k equals

$$(4.1) \quad \tau_k = \omega_k + \eta_k.$$

Because workers will switch to a job with higher total compensation, equilibrium in the labor market requires

$$(4.2) \quad \tau_k = \tau_m$$

for any two jobs k and m that require workers of a particular skill level. Accordingly, in a world with homogeneous workers, the difference in the valuation of the nonwage characteristics associated with jobs k and m equals

$$(4.3) \quad \eta_k - \eta_m = \omega_m - \omega_k.$$

Equation (4.3) offers the fundamental relationship implied by compensating wage differentials.

To measure the valuation of a particular job attribute, such as an employer offering health insurance, one specifies a further breakdown of the nonmonetary component of total labor compensation given by

$$(4.4) \quad \eta_k = \delta_k + \gamma_k.$$

In this relation, δ_k corresponds to the valuation of health insurance availability, and γ_k measures the valuation of all other nonmonetary job characteristics. If one can identify two jobs, k and m, that share all attributes other than the availability of health insurance, then $\gamma_k = \gamma_m$. If job k offers insurance and job m does not – implying $\delta_m = 0$ – relationship (4.3) implies

$$(4.5) \quad \delta_k = \omega_m - \omega_k.$$

Thus, the differences in the wages paid by the jobs measures the value assigned by the labor market to providing employer health insurance, which is also the amount workers forgo in wages

by taking jobs with this attribute.

In our empirical application, we carefully distinguish between “access to” and “enrollment in” employer health insurance. Since employers do not adjust employee wages individually according to their benefit selections, workers’ health insurance take-up decisions do not translate into wage differentials. Rather, the theory of compensating wage differentials suggests that the job characteristic assigned a nonmonetary valuation is access to health insurance. While this differential should not differ for workers of a particular skill level *within* firms (or sectors of the labor market), there may be different compensating wage differentials for access to health insurance *across* labor market sectors, such as those defined by region or employee skill level. Of course we expect individuals’ preferences for health insurance to vary, but these differences are manifest in the self-selected distribution of people across labor markets and not in person-specific compensating wage differentials.

4.2 Initial Examination of Relationship Between Wages and Employer Health Insurance

In contrast to the predictions of the conventional theory of compensating wage differentials, a casual examination of wages across individuals’ employer health insurance opportunities reveals that low-skilled workers with access to health insurance received higher wages on average than those without health insurance benefits. Tables 4.1 and 4.2 show that this positive relationship between wages and access to health insurance held across demographic characteristics and job attributes. For example, the average hourly wage for full-time low-skilled workers was \$8.57 without health insurance and \$11.84 with access to health insurance in 1997, a difference of about \$3.25 per hour. The average difference in California was about one dollar higher, largely as a result of higher average wages for those with health insurance access (Tables 4.1-CA and 4.2-CA). The observed differences in wages across health insurance opportunities was slightly larger for men than women, increased with age, and was more evident for individuals with a high school degree than for those who dropped out of school. Table 4.2 shows that the size of the differential between wages associated with a health insurance offer and wages without health insurance varied substantially across different types of jobs. For example, the wage differential in the public sector was almost twice as large as that in agriculture, retail trade,

and professional services.³³ Similarly, the difference between wages with and without access to health insurance was more than \$5 for workers in protective service occupations, but only about a third of that for general service workers. The wage differential also appeared to increase with employer size.

The observed positive association between wages and health insurance not only appears to contradict theoretical predictions, but it also highlights the role of self selection into jobs according to health benefit provisions. In particular, Tables 4.1 and 4.2 suggest that individuals with a higher demand for health insurance also have attributes that make them more productive workers. Since workers who do and do not have access to health insurance are sure to have different levels of labor market productivity that will influence their monetary component of total wages, it is impossible to attribute the observed differences in wages to specific work-health insurance choices. Indeed, any tradeoff that employees are willing to make to obtain access to employer health insurance is masked in simple comparisons such as the one presented here. Moreover, as we describe in the next section, the complexity of the analysis has led to a literature on compensating wage differentials for health insurance that offers ambiguous results.

4.3 Mixed Evidence of a Tradeoff Between Wages and Health Insurance

The literature has long-acknowledged the relationship between wages and nonwage forms of labor compensation, with a number of researchers attempting to estimate the compensating differentials underlying the supply and demand parameters for health insurance in particular. The most common method attempts to estimate the tradeoff between wages and health benefits with a traditional wage equation. Consider the model

$$(4.6) \quad \omega = \alpha H + \beta \mathbf{X} + \varepsilon,$$

where ω is the wage, H is a measure of the value of employer-sponsored health insurance, \mathbf{X} is a vector of individual and job characteristics, and ε is a random error. Interpreting this equation in terms of relations (4.3)-(4.5), one presumes $\delta = \alpha H$ and $\beta \mathbf{X}$ captures both the nonmonetary components γ and skill differences in jobs. Empirically, if \mathbf{X} fully captures all factors that affect the wage other than health insurance and the errors ε are distributed randomly across

³³ The relationship between wages and health insurance for technologists is negative, meaning that those offered health insurance received lower wages on average than those not offered. This pattern differs from the sample at large and within all other industries; moreover, we expect these results may simply be driven by an insufficient sample size.

observations, then the estimate of α will accurately estimate the compensating differential for health insurance. According to equation (4.6), some interpret the theory of compensating wage differentials as implying $\alpha = -1$ – that is, that wages are reduced one-for-one with health insurance benefits.³⁴

In sharp contrast to theoretical predictions, studies have typically found that estimated wage differentials for health insurance tend to be positive.³⁵ Currie and Madrian (1999) note that “the empirical validity [of the wage-health insurance tradeoff] has been difficult to establish...[and] the literature has thus focused not on the magnitude of the wage-health insurance tradeoff, but on the reasons why economists cannot find evidence that there is one.” The most common explanation for the divergence between empirical and theoretical predictions is that the estimates are biased by the presence of unobserved individual productivity or job differences that are correlated with both wages and preferences for health insurance. Hwang, Reed, and Hubbard (1992) find that studies using wage equations severely underestimate workers’ marginal willingness to pay for job attributes.³⁶ Brown (1980) attempts to control for unobserved individual attributes by using panel data to estimate compensating differentials for a variety of job characteristics, including the nonwage share of compensation. Like the cross-sectional analyses, he obtains a positive relationship between wages and fringe benefits. While his approach improves upon traditional approaches, he introduces substantial measurement error by using the average nonwage share of compensation for a particular industry rather than the actual compensation received by workers. Buchmueller and Lettau (1997), implementing a similar method with employer-based panel data to estimate the link between wages and employer costs of providing health insurance, discover a positive and statistically significant relationship between the change in health insurance costs and the change in wages.³⁷ However, because their data lacks information on employees’ contributions to health insurance, it is not possible to identify whether changes in employer health insurance costs are due to actual variations in costs

³⁴ This abstracts from the preferential tax treatment of employer-provided health benefits and the potential behavior distortion caused by health insurance (such as limited job mobility and negative or positive productivity effects), both of which might lead to theoretical justifications for α to lie somewhere between 0 and -1.

³⁵ Many researchers have used the same approach to estimate the compensating differentials associated with other nonpecuniary job attributes, such as the degree of risk or work conditions. In general, these studies find a wide range of estimates that, for the most part, confirm theoretical predictions to a larger degree than estimates of compensating differentials for health insurance. See Viscusi (1993) for a review.

³⁶ They focus on all nonwage attributes, rather than just health insurance.

³⁷ Their approach mirrors that of Smith and Ehrenberg (1983), who find similar results.

or to shifts in the share of total health plan premiums paid by employers.

Olson (2002) represents one of the few papers to find evidence of the theoretically predicted tradeoff using a wage-equation framework. Instead of using panel data, this study instruments for wives' own health insurance with husbands' union status and firm size – which themselves are interpreted as instruments for husband health insurance benefits – and finds that wives with employer-sponsored health insurance accept wages that are 20% lower than what they would have earned from a job without health benefits. While Olson's "double instrument" approach is meant to account for the endogeneity linking wives and husbands' work and health insurance decisions, his estimates are still biased if husbands choose union status or firm size according to their wives employment alternatives. Furthermore, the generalizability of Olson's results is limited since he considers a very select group – married working women – a choice that gives rise to the question of why he did not equivalently consider the tradeoff for married working men, who presumably participate in the same labor markets as married women.

A few researchers have pursued methods other than those based on estimating forms of wage equations. Woodbury (1983), for example, uses conventional consumer theory to develop a model of the demand for benefits. While he estimates the elasticity of substitution between wages and fringe benefits to be greater than one, suggesting that workers are willing to accept reduced wages for fringes, his results are driven solely by the differential tax treatment of fringes in comparison to wages. Since the marginal tax rate – Woodbury's price of health benefits – varies with income and induces a correlation with the relative share of benefits in compensation, his estimates may simply reflect nonlinear income effects. Moreover, he assumes that employer costs of providing wages and nonwage benefits are equal, an untenable assumption given the variation across firms in the costs of providing health insurance that is sure to exceed the differences in the costs of providing wages in a variety of instances.³⁸

Royalty (2002) uses a discrete choice model to estimate employees' valuation of \$1 of benefits in comparison to \$1 in wages (as opposed to employees' valuation of the benefits themselves). She examines employer-level data and exploits information on the nonchosen alternatives at a given employer to estimate employees' valuation of benefits. She claims that

³⁸ Woodbury and Hammermesh (1992) try to account for the endogeneity between the relative prices of wages and benefits with instrumental variables and find that the demand for benefits is quite elastic with respect to taxes. However, these estimates also rely on the assumption that the cost to a firm of providing wages is the same as the cost for providing nonwage benefits.

differencing across alternatives within an employer offers a more effective control for individual fixed effects and overcomes the problem of unobservable differences in productivity or job characteristics inherent in standard wage equations. She restricts the sample to firms offering a choice of health plans and models employee choice among offered plans according to employee and employer prices for benefits. Her results indicate that employees with families value health benefits approximately one-for-one with wages, while single workers' marginal value of benefits relative to wages is about one-third as large. Since these estimates depend on workers' comparisons of different health plans offered by an employer rather than on comparisons between having and not having access to any health plans, her analysis critically relies on a select sample of workers who have higher valuations of health insurance as revealed by their decision to work at firms offering not just health insurance benefits, but a choice of health insurance plans.

A final approach to examining the tradeoff between health insurance and wages addresses the problem from the employer's perspective, and it usually suggests that employees pay for health insurance with lower wages. Gruber (1994), for example, exploits changes in state legislation that made coverage for childbirth a mandatory part of all health insurance policies. He finds evidence that the wages of women of childbearing age and their husbands – the workers expected to benefit from maternity benefits – are shifted down by 59-90%. Sheiner (1999) applies differences in health care costs across cities to measure the extent to which wages are adjusted for health insurance and finds that older workers in cities with higher health costs earn lower wages. However, since she does not control for employment characteristics that are likely correlated with age and wages – such as firm size, industry, and tenure – her estimates on the relationship between age and wages are likely to be biased. Moreover, Gruber and Sheiner's key findings that employers engage in refined wage shifting – passing health insurance costs onto those employees likely to incur the highest medical expenses – are quite surprising since federal rules forbid employers from individualizing wages according to health insurance selections. Lastly, Royalty (2000) shows that a one dollar increase in the minimum wage is associated with reductions in the probability of full-time employees with little experience or education receiving employer-sponsored health insurance, suggesting that there is a tradeoff between wages and health insurance provisions.

In summary, research to date offers conflicting evidence on the extent to which

employees are willing to make tradeoffs between wages and health insurance. Moreover, the previous literature generally attempts to estimate a wage tradeoff for *enrollment* in employer-sponsored health insurance, while the pertinent question is how much employees are willing to trade for *access* to employer health insurance.³⁹ In the next section, we describe our approach to this problem, which involves initially asking the appropriate question and then developing an estimation procedure that overcomes many of the shortcomings encountered by previous efforts.

³⁹ Gilleskie and Lutz (2002) differentiate between health insurance enrollment and health insurance access in their examination of the relationship between job turnover and employer-sponsored health insurance, and they provide some evidence that health insurance access is an important factor in models of job mobility.

5. AN EMPIRICAL APPROACH FOR ESTIMATING COMPENSATING WAGE DIFFERENTIALS

Despite the positive relationship between wages and health insurance access revealed by a simple examination of the data, we cannot conclude that the theory of compensating wage differentials is faulty. Rather, these results suggest that individuals' job selections are based on preferences for a multitude of employment attributes, including wages and health insurance. To gain a better understanding of individuals' choices, this section looks more carefully at the simple model of wage determination introduced above. In particular, we isolate the implicit price of health insurance access by decomposing the nonmonetary component of the wage. From this framework, we develop an empirical wage specification and econometric approach that permits estimation of the compensating wage differential for health insurance in the low-skilled labor market.

5.1 Generalized Description of the Behavioral Principles Underlying Job Selection

Employers participating in the low-skilled labor market compensate workers for the marginal value of their labor productivity and for job attributes. Since our focus is the implicit price of health insurance access, our empirical task involves isolating the portion of the wage reflecting the valuation of just this characteristic. The behavioral model and specifications put forth in Section 4.1 naively assume that workers are homogeneous within measurable skill levels, which would imply workers within specific job categories – those offering the same characteristics – would earn the same wages. Of course, this does not actually occur because workers differ both in terms of their productivity and valuations of job attributes.

In order to derive reliable estimates of how much workers are willing to forgo in wages to acquire a job offering health insurance, one must generalize the behavioral framework outlined in Section 4.1 to depict a more realistic setting. In place of equation (4.1), specify job k as paying individual i at time t a total compensation equal to

$$(5.1) \quad \tau_{kit} = \omega_{kit} + \eta_{kit},$$

where, analogous to the previous discussion, the terms τ , ω and η correspond to the total, wage and nonmonetary components of labor compensation. Relationship (5.1) recognizes that workers holding the same “job” may differ in their productivity and tastes for job characteristics, implying both total compensation and wages vary across workers within job classifications and over time

for the same worker. Assuming that a worker selects the job offering the highest total compensation, observing a worker in job k means that

$$(5.2) \quad \tau_{kit} \geq \tau_{mit} \quad \text{for all other jobs } m \neq k.$$

Differences across workers in conjunction with relation (5.2) significantly complicate estimation of compensating wage differentials, and like the overall literature, the following analysis devotes substantial attention to this topic.

Letting the quantity δ_k represent the market valuation of health-insurance availability and γ_{kit} measure an individual i 's combined valuation of all other nonmonetary aspects of job k , the nonmonetary component of labor compensation becomes:

$$(5.3) \quad \eta_{kit} = \delta_k + \gamma_{kit}.$$

If worker i appears in job k , which offers insurance, and in job m , which does not – implying $\delta_m = 0$, then the following relationship gives the valuation assigned to health insurance:

$$(5.4) \quad \delta_k = (\omega_{mit'} - \omega_{kit}) + (\gamma_{mit'} - \gamma_{kit}),$$

where the periods t and t' refer to the times when the individual occupied each of the jobs. If one further identifies a pair of jobs wherein worker i values all nonmonetary characteristics the same other than the availability of health insurance – implying $\gamma_{mit'} = \gamma_{kit'}$, then (5.4) reduces to

$$(5.5) \quad \delta_k = \omega_{mit'} - \omega_{kit} \quad \text{or} \quad \omega_{kit} - \omega_{mit'} = -\delta_k.$$

The challenge, of course, involves finding such a pair of jobs for a given worker, since one never really knows that the worker assigns equivalent valuations across jobs' nonmonetary attributes, or $\gamma_{mi} = \gamma_{ki}$.

Our empirical approach exploits information on $\omega_{mit} - \omega_{kit'}$ to estimate a value for δ , introducing a set of controls to account for the differences in $\gamma_{mit'} - \gamma_{kit}$ and workers' productivity at different jobs. Because we are unable to control perfectly for differences in $\gamma_{mit'} - \gamma_{kit}$ or productivity, the way in which individuals choose jobs – as represented by relationship (5.2) – induces “selection bias” in estimation. As we describe below, our approach also deals with such sources of bias.

5.2 Specifications for Estimating Valuations of Employer Health Insurance

The essential idea exploited in our empirical approach involves comparing wages earned by the same person in different jobs, one offering health insurance and the other not. Our analysis not only distinguishes access to health insurance as an attribute of a job, but it also

accounts for many other characteristics determining either its monetary or nonmonetary compensation. In doing so, our empirical approach mitigates many of the potential biases arising from missing aspects of compensation and selection biases confounding other studies. The following discussion begins by introducing a flexible formulation describing wage compensation; then, it adapts this specification to recognize issues encountered in our data. This section ends with a discussion of our sample, and the next section presents empirical findings.

5.2.1 *Characterization of Hourly Wages*

To describe the monetary component of compensation paid on jobs, suppose the following relationship determines wage rates:

$$(5.6) \quad \omega_{kit} = \delta NA_{kt} + \beta_x X_{it} + \beta_z Z_{kt} + \beta_c C_{kit} + \varepsilon_{kit}.$$

As defined above, ω_{kit} denotes the average hourly earnings paid to worker i on job k in period t ; the variable NA_{ki} represents an indicator variable taking a value of 1 if job k does not offer access to employer-sponsored health insurance (and equaling 0 if it does); the quantity X_{it} incorporates a set of worker-specific characteristics (such as education, age, and experience); Z_{kt} includes characteristics associated with job k (such as employer size, industry, occupation, and union status); and the quantities C_{kit} capture the potential impact of a variety of labor market factors reflecting the productivity of person i in job k at time t (such as levels of local unemployment or conditions leading to involuntary separations). The coefficient δ in (5.6) measures the wage tradeoff workers make to acquire access to health insurance, and the parameters β detect the impacts of other measured variables. Finally, ε_{kit} denotes an error term capturing an individual's valuations of job characteristics and productivity unmeasured by the covariates appearing in (5.6). The basic structure of equation (5.6) resembles those estimated elsewhere in the literature.

The problem encountered in estimating such wage specifications in a cross section setting arises due to “selection bias” afflicting the errors ε in (5.6). This bias occurs due to presence of the inequalities involving the τ 's given by (5.2), which simply recognize that each worker chooses the best job depending on individual assessments of total compensation. Because many of the components of assessed compensation differ across workers in ways not accounted for by the covariates in equation (5.6), the errors ε_{kit} capture much of the influence of the τ 's. Consequently, the τ inequalities (5.2) translate into a similar property for the ε 's. This in turn induces the averages of the ε_k 's to be positive within each job category k , implying violation of

conventional statistical assumptions needed to compute reliable estimates of the coefficients in (5.6).

Researchers often cite this systematic bias in the errors of wage equation (5.6) as explaining why estimates of the compensating wage differential δ attain a sign opposite to that suggested by economic principles – that is, estimates of δ show up as negative rather than positive. This phenomenon occurs in many previous studies, as highlighted in Section 4.3, and also results in our elementary cross-section empirical analysis presented in Section 4.2.⁴⁰ The basic statistical argument goes as follows. Much of a worker’s productivity shows up as unobserved attributes captured by the error in the wage equation. Jobs providing health insurance typically pay higher compensation in other forms and recruit the “best” workers within skill categories. These jobs not only offer more generous fringe benefits, but they also pay higher wages to attract the most productive workers. Consequently, workers in jobs with health insurance (with $NA_k = 0$ in (5.6)) typically have extraordinary high values of ϵ_k reflecting their more productive attributes. This in turn induces a negative correlation between NA_k and ϵ_k , which leads to a downward bias in the estimate of δ and, possibly, a negative value.

5.2.2 Differences in Wage Across Jobs

We develop an approach that avoids, or substantially mitigates, this bias. As a general formulation, suppose two distinct components comprise the errors ϵ_{kit} : a worker-job-specific element θ_{ki} that captures the unobserved systematic match of a worker to a job and an idiosyncratic element μ_{kit} that varies from period to period. More formally,

$$(5.7) \quad \epsilon_{kit} = \theta_{ki} + \mu_{kit}.$$

The selectivity bias encountered in the estimation of wage equations primarily arises due to the correlation between NA_k and θ_{ki} , and not between NA_k and μ_{ki} , since it is the stable productivity characteristics of a worker that appeal to employers. One can eliminate the primary source of bias by developing a description of wages that excludes θ_{ki} in specifications.

We do this by exploiting the longitudinal aspect of our data set, examining how wages change for the same worker who switches jobs offering differing access to health insurance. Suppose an individual switches jobs between periods t and t' . According to relationship (5.6),

⁴⁰ According to estimations of the wage equation (5.6) in a cross-section setting, δ is $-\$1.36$ before an employment change and $-\$1.90$ after an employment change. Both are significant at the 1% level and suggest a negative valuation of access to health insurance.

the difference in this person's wage becomes:

$$(5.8) \quad \omega_{kit} - \omega_{mit'} = \delta (NA_{kt} - NA_{mt'}) + \beta_x (X_{it} - X_{it'}) + \beta_z (Z_{kt} - Z_{mt'}) + \beta_c \Delta C_{it} + (\varepsilon_{kit} - \varepsilon_{mit'}),$$

where the expression ΔC_{it} captures factors describing circumstances of the job switch (such as whether job separation was involuntary).⁴¹ Equation (5.8) corresponds directly to the second equation listed in relationship (5.5), with the exception that δ from (5.8) is equivalent to $-\delta_k$ in (5.5), since the key variable in the wage specification is the lack of access to health insurance while it is health insurance availability in relationship (5.5). Assuming jobs k and m remain within the same classification, the worker-job-specific components of the errors remain constant with $\theta_{ki} = \theta_{mi}$. In this case, the error in specification (5.8) takes the form:

$$(5.9) \quad \varepsilon_{kit} - \varepsilon_{mit'} = \mu_{kit} - \mu_{mit'},$$

which does not depend on the unobserved systematic part of the regression error responsible for biased estimation of the compensating wage differential. In an empirical application, our challenge involves identifying jobs with sufficiently similar values of θ_{ki} for the same worker. For this reason, our analysis primarily focuses on the behavior of individuals who do not change occupations and industries ('stayers'), in contrast to the behavior those who change occupations or industries ('switchers').

5.2.3 Distinguishing Health Insurance Access and Enrollment

To estimate specification (5.8) using our sample drawn from the SIPP, we must introduce a simple modification to overcome one limitation of the data. The SIPP asks individuals about *access* to employer-sponsored health insurance only once during the 1996 Panel; in particular, the supplementary topical module includes questions about whether or not an individual was eligible for health insurance coverage at her employer, irrespective of whether this person was enrolled in such benefits. However, it also provides information on *enrollment* in employer-sponsored health insurance consistently for the whole time period. Thus, for individuals who change jobs, we have information on either NA_{kit} or $NA_{mit'}$, but not on both. We must account for this missing data by substituting a replacement based on a reliable predicted value.

Fortunately, we have data on whether a worker actually enrolled in employer health

⁴¹ In our empirical analysis discussed in the subsequent section, ΔC_{it} includes two variables: an indicator variable equaling 1 for individuals whose job separation was involuntary in the previous period. T_{it} is a fixed effect for the time period after a job change, and it is equal to 1 for all individuals at time t and equal to 0 for all at time t' . Thus, $(T_{it} - T_{it'}) = 1$ for all i , which leads to the inclusion of an intercept term in specifications.

insurance at all points in time, and this knowledge provides considerable information on whether the employer offered access to insurance. More specifically, letting the indicator variable I_{kit} designate whether worker i accepted employer health insurance from job k in period t , SIPP provides data on both I_{kit} and I_{mit} . If a worker had insurance, $I_{kit} = 1$, then the job must have provided access, implying $NA_{kit} = 0$. Alternatively, if a worker did not have insurance, $I_{kit} = 0$, then either the worker was offered insurance, $NA_{kit} = 0$, and did not enroll or was not given access at all, $NA_{kit} = 1$. We use data on I_{kit} and other characteristics to form projections for NA_{kit} when it is missing.

Formally, when we do not observe NA_{kit} directly, we replace it by its conditional expectation given by:

$$(5.10) \quad E(NA_{kit} | Q_{kit}, I_{kit}) = \begin{cases} NA_{kit} = 0 & \text{when } I_{kit} = 1 \\ P(NA_{kit} = 1 | Q_{kit}, I_{kit} = 0) & \text{when } I_{kit} = 0. \end{cases}$$

The quantity $P(NA_{kit} = 1 | Q_{kit}, I_{kit} = 0)$ appearing in (5.10) represents the probability that a person worked at a job that did not offer access to health insurance given this individual was not enrolled and faced circumstances described by the characteristics Q_{kit} . So,

$$(5.11) \quad P(NA_{kit} = 0 | Q_{kit}, I_{kit} = 0) = 1 - P(NA_{kit} = 1 | Q_{kit}, I_{kit} = 0)$$

measures the fraction of persons who had access to insurance on their jobs but who chose not to enroll in this insurance. We can readily estimate the probabilities in (5.11) by exploiting information in SIPP describing the period for which one observes both access and enrollment in employer insurance. Thus, when we have data on NA_{kit} we use it; when we do not have data, we replace NA_{kit} by (5.10) with probabilities predicted using data on Q_{kit} and I_{kit} . From a statistical perspective, estimation requires the set of covariates Q_{kit} to include all relevant elements of the variables X_{it} , Z_{kt} , and C_{kit} appearing in wage equation (5.6).

The appendix accompanying this study presents summary statistics and estimates for this probability. We assume a flexible functional form for the probability function $P(\bullet)$, presuming $P(\bullet)$ takes the form of a logistic distribution function. The average of the predicted P 's across those without insurance equals 0.56. As we would expect from the discussion presented in Section 3, the highest values of $P(\bullet)$ occur for workers in the agriculture, service, and construction industries, and $P(\bullet)$ falls as firm size increases.

5.3 Description of Primary Sample Used in Our Estimations

As noted above, the challenge of reliably estimating the compensating differential for health insurance lies in identifying a pair of jobs for each worker that have sufficiently similar job-specific attributes; ideally, job pairs should differ only in whether one offers access to employer health insurance. Moreover, our sample should consist of those individuals who switched jobs solely because of their preferences for attaining access to insurance and not due to factors (such as being fired) that could introduce systematic wage losses or gains unrelated to valuations of health insurance. Clearly, it is impossible to identify such individuals and job switches with complete confidence. However, by applying a number of selection criteria to our sample, we can go a long way toward achieving this objective by including those individuals whose decisions best mimic the desired job change. In doing so, we observe wage differences that are more likely attributable to the valuation of health insurance availability, since the composition of the resulting sample - in conjunction with the measurable job characteristics that we include in our specification – controls for many of the other factors that influence compensation levels.

While our sample design involves isolating particular job switchers, the resulting estimates for compensating wage differentials are applicable to the entire low-skilled labor market. These differentials are “priced” in the labor market as a whole, for they represent what workers forgo or receive in compensation to make up for the job attribute. (This does not mean that workers individually value an attribute the same, just as persons who purchase a good may value it more than what they actually paid for it). We introduce our sample selection criteria as way to avoid factors potentially contaminating measures of wage changes from one job to another. To this end, we subject our sample to the four conditions outlined below. Then, we provide summary statistics describing the resulting sample.

5.3.1 Selection Criteria for Sample

Our first criterion restricts the sample to job changers who stay within the same occupations and industries. As discussed previously, this condition contributes to ensuring that job switchers value the nonmonetary characteristics of the two jobs equivalently, abstracting from differences in the availability of health insurance. Our second condition compares wages on jobs held closely together in time, which mitigates problems arising from sources of wage

growth not related to differentials associated with job attributes. We impose this condition by using only two years of the four-year panel of the SIPP. Our third and fourth sample selection conditions - the exclusion of older workers and nonspouse dependents - require fuller explanations, which we discuss in turn below.

There are several reasons why we distinguish between older and younger individuals, who we define as aged 35-55 years and 25-35 years respectively. For example, we expect that the job mobility of older individuals is highly influenced by the interactions among many job attributes. In contrast to choices made by younger individuals, the labor supply decisions of older workers likely reflect a complex combination of retirement, age, family or other personal factors. As a result, we hypothesize that the worker-job specific factors (θ_{ki}) related to employment matches for older workers do not remain constant even when job changes within occupation or industry are considered. Thus, the extent to which we can attribute job changes - and their associated wage changes - to valuations of health insurance is much less for older individuals.

Independent forces in the labor market are also likely to have differential effects on old and young workers. In particular, employer-sponsored health insurance may induce “job lock,” a situation occurring when workers are reluctant to move to better employment matches out of the fear of losing health coverage. Estimates from the literature suggest that employer health benefits make workers 10% to 40% less likely to leave their jobs than workers without these benefits (Cooper and Monheit (1993), Madrian (1994), Buchmueller and Valletta (1996), Black (2000)).⁴² Since we are looking at individuals who change jobs, if job lock is an important factor, then our sample will disproportionately contain those individuals who do not feel locked into their job, possibly attributable to a lower valuation of access to employer health insurance. While we do not view this as a confounding factor for younger workers, who are at the beginning of their careers, experience much higher rates of job turnover, and are less likely to forgo better job matches, we posit that job lock plays a substantial role in the decisions of older workers, implying that older workers who change jobs are unrepresentative of the population and systematically hold lower valuations of access to health insurance.

Plans for retirement are also likely to influence the labor market decisions made by older

⁴² There are also some studies that suggest that health insurance benefits have little to no effect on job mobility (Holtz-Eakin (1994), Kapur (1998), Gilleskie and Lutz (2002)).

workers. In particular, some of these workers may be encouraged to retire early if an employer offers to continue health insurance following retirement (or early retirement). In fact, estimates from the literature suggest that the availability of employer-sponsored retiree health insurance increases the likelihood of retirement by 30% to 80% (Gruber and Madrian, 2002). Accordingly, the role of retirement in the decisions of older workers leads to endogeneity between their health insurance preferences and job selections, a situation that we expect will induce a downwards bias in estimation of the wage differential for health insurance.

Another distinct reason for excluding older workers is that perceived medical events and health status are likely to play much larger roles in the joint labor-health insurance decisions of these individuals, who tend to be less healthy - or require more medical care - than their younger counterparts. Table 5.1 shows that 70% of young low-skilled workers described themselves as either in excellent or very good health, while only 57% of older less educated workers made a similar claim. Likewise, older workers were almost 2.5 times more likely than younger workers to consider themselves in fair or poor health. Clearly we cannot accurately quantify either an individual's expected need for medical care or health, yet we expect that such beliefs and circumstances have direct effects on preferences for health insurance. Moreover, the nature of the correlation between health insurance enrollment and health status is ambiguous. On one hand, if sicker individuals are more likely to seek health insurance because they face higher expected medical costs, then the relationship will be negative (a phenomenon commonly referred to as adverse selection); on the other hand, if insured individuals are healthier because they have better access to medical care, then the relationship will be positive. While we do not attempt to solve this debate, we acknowledge the existence of the association and argue that health status and perceived medical necessity weigh much more heavily in the joint labor-health insurance decisions of older workers than young workers. Since the way in which these forces are manifest is not observable, such factors will induce bias into our estimates of the compensating differential for health insurance.⁴³

Much like the complex reasons underlying the job mobility decisions of older workers,

⁴³ Our strategy of focusing on young workers is based on the argument that health factors do not affect the wages or health insurance preferences for this group. A key assumption of our model is that individual characteristics are constant over short periods of time; however, if our claim is incorrect and health factors do affect the wages and health insurance preferences of this group, then our estimates will still be unbiased if health status does not change over time (particularly in negative ways). For the young group of workers, 81% described themselves as either in better or the same health over the time period of interest. Hence, we are confident that changing health status and potential adverse selection is not a problem for the sample of young workers.

the reasons why nonspouse dependents change jobs are also unlikely related to health insurance preferences. Keeping in mind that our sample is restricted to individuals who are at least 25 years old, we classify individuals described as children, grandchildren and foster children of the household head as “nonspouse dependents.” Since it is difficult to account for the selection forces affecting such workers’ decisions about employment, we exclude these individuals from primary analyses. Nonspouse dependents are systematically different from the remainder of the sample; they were more likely to receive lower wages and hold blue collar jobs and were less likely to be offered health insurance. More specifically, these individuals were 10% less likely to have access to employer health benefits than all other young low-skilled workers, had wages that were 16% lower, and were more likely employed as service, clerical and transportation workers.

5.3.2 Summary Statistics of Sample

We apply the last three selection criteria to our data to create the primary sample used in estimations. Instead of excluding occupation and industry switchers from the sample - the first criteria - we estimate results for both stayers and switchers independently to verify the legitimacy of our approach. Table 5.2 describes the characteristics of the resulting sample – low-skilled, full-time, young workers with employment changes – according to whether an individual switched occupation. As a whole, the sample is predominantly male, married, and had children. Approximately one-fourth of the workers did not complete high school, while the remaining three-fourths had either a high school degree or the equivalent credentials. The average hourly wage ranged from about \$9.00 to \$10.75. Lastly, slightly more than 60% of the workers had access to employer-sponsored health insurance, while only about two-thirds of those offered were enrolled in such benefits. Looking at distinctions by whether or not a worker’s job change occurred within his occupation, Table 5.2 shows that switchers were more likely to be male, younger, and to live in the South and Midwest. Switchers also had wages that were about \$0.90 to \$1.20 lower than the wages of stayers, and their wage growth between jobs was only 66% of the wage growth of stayers. On average, stayers were more likely to have access to health insurance after a job change than before a change, while the reverse relationship holds for switchers. However, switchers’ participation in employer health benefits appears to increase after a job change and both groups experienced higher rates of employer health insurance enrollment after a job change.

6. ESTIMATES OF LOW-SKILLED WORKERS' VALUATIONS OF HEALTH INSURANCE

This section presents our empirical findings based on the wage specifications and samples described above. It opens with a discussion of our principal estimates of how much low-skilled workers are willing to forgo in wages to obtain access to employer-sponsored health insurance. The analysis then explores the sensitivity of our findings to various modifications of our primary specification. The discussion continues with an examination of the degree to which the compensating differential for health insurance varies across different labor markets, with markets characterized by the levels of labor skills and regions of the country. The section ends with a detailed analysis of how experiences in California differ from those in other regions and the United States at large.

6.1 Compensating Wage Differential for Employer Health Insurance

Table 6.1 presents our principal findings. Before discussing these results, consider the layout of this table, which will serve as the template for other tables in this section. The first three rows of Table 6.1, labeled “Valuation of Health Insurance Access,” present estimates of the compensating wage differential, which corresponds to the coefficient δ appearing in the wage specifications (5.6) and (5.8). As described previously, δ represents the market valuation of health insurance availability or, equivalently, the amount that workers are willing to forgo in wages to obtain access to employer health benefits. The row labeled “Net Growth” reflects the net monetary gain resulting from low-skilled workers’ job changes after accounting for the influence of all covariates; it is the intercept of the wage change equation.⁴⁴ The remaining rows of Table 6.1 report coefficient estimates summarizing the effects of a wide array of job attributes on the changes in wages across jobs, including: the occupational classification of the jobs, the industry classifications, the size of the firm where a job resides, the union status of the job, and whether or not the job change was the result of an involuntary separation. The accompanying appendix presents summary statistics for all covariates used in our analysis.

6.1.1 Interpretation of Tables

To interpret the parameter estimates listed in the lower rows of Table 6.1, consider the

⁴⁴ With respect to equation (5.8), this component refers to an element of the vector C .

covariates controlling for occupational classifications. Referring to specification (5.8), these variables appear as part of the elements comprising the vector $(Z_{kt} - Z_{mt})$. Specifically, each covariate equals 1 if an individual switched *to* that occupation, equals to -1 if an individual switched *from* that occupation, and equals 0 if an individual either never worked in that occupation or stayed in that occupation for both jobs.⁴⁵ The estimates reported in each row correspond to inferences regarding the β_z coefficients in (5.6) and (5.8). Thus, the estimate for an occupational variable represents the wage differential in levels earned in that occupation. In the wage change specification, it is the difference in these occupational coefficients that count in explaining wage growth.⁴⁶ Similarly, the coefficients on industry classifications measure the wage differentials earned in industries. The inherent differences in job attributes across occupation and industry categories necessitate the inclusion of these variables, which control for the compensating differentials associated with these job characteristics and thereby allow us to isolate the wage differential associated with just health insurance access. Similarly, we control for a variety of other job characteristics known to induce wage differentials.

Looking across columns, Table 6.1 presents two sets of results, which introduce refinements to mitigate biases attributable to the selection process underlying the decisions of individuals who change occupations when they change jobs. The second set of columns distinguishes between individuals who change jobs but remain in the same occupation (“stayers”) and those who change occupations through a job change (“switchers”). As noted in our discussion of the ideal job changers to include in our samples, reliable estimation of compensating differentials depends on removing sources of wage differentials distinct from the items of direct interest. When workers switch jobs across occupations and industries, there are an unquestionably large number of factors motivating the behavior and suggest the attributes describing the two job matches differ substantially. In contrast, workers who change jobs within occupation-industry groups are more likely to face similar attributes across jobs. Expressed in terms of the statistical specifications introduced in Section 5, job switchers remaining within occupation-industry groups are more likely to have $\theta_{ki} = \theta_{mi}$ comparing jobs *k* and *m*, which prevents estimation bias. In our empirical analysis, we explored defining “stayers” as workers

⁴⁵ This construction assumes common occupation effects on the wage level before and after a job change.

⁴⁶ For example, consider an individual who switched from a job classified as a nonprivate or private service occupation to one defined as a transportation occupation. Looking at the restricted model presented in the second and third columns of Table 6.1, we conclude that holding everything else equal, this individual gained \$1.11 [-\$0.94 - (-\$2.05)] as a result of the occupation change.

who switched jobs within the same occupation and industry (in contrast to just occupation), but we discovered that restricting stayers to those keeping jobs within occupations alone yielded results virtually indistinguishable from those obtained by adding the further restriction that jobs must also stay within industries. So, to maintain as large a sample as possible for stayers, we identify this group as job switchers whose jobs stay within an occupation.⁴⁷ For this reason, we identify this group as “occupation stayers” in Table 6.1, while all other job changers in our sample are called “occupation switchers.” The second set of columns in Table 6.1 presents separate estimates for these two groups of individuals who change jobs, with those reported for occupation stayers deemed to be the more reliable estimates of the compensating wage differential for health insurance access.

6.1.2 Discussion of Key Empirical Findings

Turning to the results presented by Table 6.1, our first specification – shown in the “Restricted” set of columns – assumes a common estimated compensating wage differential for all job changers. (Use of the term “Restricted” merely indicates that our estimation approach constrains the coefficient measuring the valuation of health-insurance access to be the same for stayers and switchers). According to these findings, low-skilled workers trade off wages for access to health insurance at a rate of 23 cents per hour; in other words, workers are willing to forgo \$0.23 per hour on the margin to acquire jobs offering employer health benefits. This value is imprecisely estimated, in that its standard error is slightly larger than this value. Consequently, the estimate is statistically insignificant at conventional levels of confidence.

To obtain a more refined estimate of this compensating wage differential, the “Unrestricted” set of columns in Table 6.1 present results from estimations of a model that allows separate parameters for occupation switchers and stayers. Assuming that worker-job specific characteristics remain constant across jobs in the same occupation, we can more reliably interpret the estimate for stayers as the compensating wage differential for health insurance access. Inspection of these findings reveals that low-skilled workers forgo access to employer-sponsored health insurance for an additional 74 cents per hour, with this estimate statistically

⁴⁷ In addition to empirical tests supporting our use of occupations to define “stayer,” this approach also has an intuitive appeal according to the ways in which jobs within an occupational category differ across industries. For example, we expect the attributes of a secretarial job are similar regardless of whether it is in the wholesale trade, finance, or services industry.

significant at the 10% level significance. In sharp contrast, the estimate indicated for switchers has the wrong sign – negative – to be interpreted as a compensating wage differential for insurance. As an important qualification, one cannot assign much confidence to this estimate since its standard error is quite large.⁴⁸ Nevertheless, this standard error is not sufficiently large to accept the hypothesis that estimates of the compensating differential are the same for occupation switchers and stayers; the test statistic presented in the last row of the table reveals that this hypothesis is rejected at a 10% level of significance.

Table 6.2 summarizes the robustness of our results by excluding a variety of employment-related attributes from the main specification. Looking across the three sets of columns – which present results from estimations excluding occupation differentials, industry differentials, and occupation and industry differentials, respectively – the estimation of the compensating differential is stable and statistically significant at about 72 cents per hour. Following the discussion above, this is the estimate relating to occupation stayers, for it is the only one that we can confidently interpret as measuring the wage tradeoff for health insurance access. Much like the results presented above, parameter estimates from the restricted models suggest smaller wage tradeoffs that are not statistically different from zero. Similarly, estimates associated with occupation switchers in all three models are negative and have standard errors large enough to render them statistically insignificant.

Translating our results into monthly wage tradeoffs, we conclude that low-skilled workers were indifferent between a job without health benefits paying an additional \$124 per month and a job offering health insurance coverage.⁴⁹ Relating this to health insurance premiums, workers were willing to trade wages equivalent to almost three-fourths of the total cost of single employer health insurance and about three-tenths of the cost for a family plan. Accounting for average employee contributions, this implies that employers effectively shifted about 90% of the costs of single health insurance and about 55% of the costs for family insurance to workers through reduced wages.

⁴⁸ Formally, one can readily accept the hypothesis that the wage differential for health-insurance access is zero for workers who switch jobs and occupations. Taken literally, this implies in the 1997 labor market, these workers were indifferent between a job with health insurance access and a job without health insurance access *and* a lower wage.

⁴⁹ This calculation assumes a 40 hour work week and an average of 4.2 weeks per month.

6.2 Examining Sensitivity of the Findings for Compensating Differentials

To investigate how estimates vary across different segments of low-skilled workers, we estimate the main specification for a variety of subsamples. Since all individuals of a given skill level participate in the same labor market, there should be one compensating differential that applies to each market. Thus, workers of all demographic characteristics with the same skill level face the same compensation alternatives across jobs with and without health insurance. Of course, we expect workers to have systematically different preferences for health insurance, but these are reflected in their labor supply decisions and not in individualized wage differentials. Tables 6.3 and 6.4 show how our data and estimation strategy support this theory and highlight the subpopulations whose behavior is characterized by unique selection forces that our data is unable to explain and induce bias into the estimation.

Table 6.3 presents estimates of the compensating wage differential for health insurance according to the decisions of just household heads, household heads and spouses, and nonspouse dependents. The specifications reported replicate the one presented in Table 6.1; however, parameter estimates on employment characteristics are not reported here for simplicity. Following the discussion presented above, we concentrate on the parameter estimates associated with occupation stayers only. Looking first at household heads, the third column shows an estimated tradeoff of \$1.19 per hour; this estimate is statistically significant at the 1% level and is slightly larger than the estimate based on the entire sample. Turning to household heads and their spouses, the fifth column shows a compensating wage differential of 83 cents. This estimate is also statistically significant. Lastly, the final column shows that when the sample is restricted to nonspouse dependents, the estimated compensating differential is \$0.07 per hour, with a standard error that is almost 17 times as large as the estimate and implies that the estimate is not statistically significant from zero. According to the discussion in Section 5.3, we claim that this estimate is biased by selectivity factors specific to this subsample and exclusion of this group is one the selection criteria we impose on the sample for our primary analyses.

We also estimate the main specification for older workers, another group identified by our selection criteria for exclusion from the primary sample. As noted above, our data does not allow us to account for the selection forces underlying the job changes of these individuals, and thus we cannot interpret estimates of δ as the compensating wage differential for health insurance. Nevertheless, we present results for this group as a basis of comparison. Table 6.4

replicates the models presented in Table 6.1 for workers 35 to 55 years old. As expected, the unobserved attributes affecting the decisions of these individuals bias estimates of δ downward. If we interpret this as the compensating differential, we would spuriously conclude that workers were indifferent between a job with access to employer health insurance and a job without health insurance that paid 82 cents per hour less in wages. Table 6.4 also shows that the net monetary wage growth of these workers was only about one-third of the net monetary gains experienced by younger individuals.

6.3 Valuations of Health Insurance Vary Across Low-Skilled Labor Markets

Compensating wage differentials may differ across labor markets, defined by characteristics such as region or skill level. The various circumstances in a region or for a skill level of workers suggest that the realized wage in each labor market is likely to vary and, similarly, the valuations of health insurance access may vary across different labor markets. Since the observed differential is the result of both supply and demand forces, variations in the market valuation of health insurance could stem from a number of factors, including differences in health costs, employee preferences, and labor market cultures. In this section, we investigate how valuations of health insurance vary across labor markets in four regions of the country, in California alone, and for two skill levels.

Table 6.5 describes the characteristics of the different labor markets that we consider. We define the very low-skilled labor market as the one containing individuals who have not finished high school, while the low-skilled market is applicable to high school graduates. We also look at four different regional markets - the Northeast, Midwest, South, and West - in addition to California alone. First, comparing the compositions of the very low-skilled market and the low-skilled market, Table 6.5 shows that workers in the very low-skilled market were less likely to have access to employer health insurance and less likely to enroll in such insurance if offered. Only 62% of very low-skilled workers had access to health insurance, while 80% of those with a high school degree had such benefits. Not surprisingly, the average wage in the very low-skilled market was about 20% smaller than the equivalent wage in the low-skilled labor market. Very low-skilled workers described themselves as less healthy, a finding that some may relate to the lower rates of health insurance among these workers, although such a causation is difficult to establish. Lastly, the differences in the distribution of workers across industries

according to skill level are striking. For example, Table 6.5 shows that high school dropouts were 82% more likely than high school graduates to work in agriculture and 33% more likely to work in construction. As shown in Section 3, these two industries had the lowest incidence of health insurance provision. Similarly, high school dropouts were more heavily concentrated in small firms, which were also less likely to offer health insurance.

Turning to differences across regional low-skilled labor markets, Table 6.5 shows that rates of health insurance access were highest in the Midwest and lowest in the West. Take-up rates were also highest in the Midwest, while workers in the South were least likely to enroll in health insurance when offered. Median wages were highest in the Northeast, about 22% higher than those in the South, which experienced the lowest wages. It is likely that variations in the distributions of workers across industries in different regions largely explain these wage differences. For example, low-skilled workers in the Northeast were more likely than their counterparts across the country to work in finance and professional services. In contrast, workers in the West were two to six times more likely than other workers to be employed in the agriculture industry.

Lastly, we look at the Californian low-skilled labor market in isolation. Comparing this market to the low-skilled labor market in the United States as a whole, the last column of Table 6.5 shows that access to health insurance was lower in California than in the United States. While 76% of American employees were offered employer-sponsored coverage, only 65% of Californian workers had access to health benefits. However, the take-up rate in both markets was nearly identical – about 83%. The primary difference in the distribution of workers across industries was that California's low-skilled workers were three times more likely to work in agriculture than their American counterparts. Wages were similar; the mean wage in California was higher than in the United States (\$11.66 in comparison to \$11.06), while the median wage in California was 25 cents lower than across the country (\$9.75 versus \$10.00).

6.3.1 Compensating Differentials in the Very Low and Low-Skilled Labor Markets

Table 6.6 shows that high school dropouts were willing to trade less in wages for access to employer-sponsored health insurance than high school graduates. While high school graduates were indifferent between a job with health insurance access and one without benefits but with an additional 88 cents per hour, workers without a high school degree valued the health insurance at

only 31 cents per hour. While it is difficult to isolate demand and supply factors affecting the observed market equilibrium, the relationship in Table 6.6 suggests that the decisions of very low-skilled workers may partly be explained by stricter income constraints. Since the very low-skilled workers presumably had lower incomes, they may have been more reluctant to trade wages for health insurance benefits. Similarly, high school dropouts were less likely to participate in employer-sponsored health insurance when offered.

Despite the apparent differences in the market valuations of health insurance by low-skilled and very low-skilled workers, along with the intuitive explanations for why these differences could exist, the compensating differentials in these two markets are not statistically different from each other.⁵⁰ Thus, our findings support the view that low-skilled workers face a common wage tradeoff for health insurance benefits, falling in the range of \$0.74-\$0.88 per hour.

6.3.2 Compensating Differentials Across Regional Low-Skilled Labor Markets

Table 6.7 suggests that the rates at which low-skilled employees in different regional labor markets were willing to trade health benefits for additional wages vary substantially. The market valuation in the Northeast was the largest at \$1.06 per hour, while the tradeoff in the Western low-skilled labor market was the smallest at \$0.47. The relative ranking of the regional compensating differentials corresponds to the relative costs of health insurance across regions. In particular, Section 3 shows that total premiums for employer-sponsored health insurance were highest in the Northeast and lowest in the West. Comparing the distributions of wages and health insurance valuations across regions, the only clear relationship is that both wages and the market compensating differential were highest in the Northeast. For the other regions, however, there is not a systematic relationship. For example, while the Southern low-skilled labor market witnessed the lowest wages, the compensating differential for this region was right in the middle in comparison to other areas.

The results presented in Table 6.7 are based on the assumption that employment characteristics - such as industry, occupation, and employer size - are unique to a region.

⁵⁰ Allowing for common effects on the wage of very low-skilled and low-skilled workers' job characteristics and estimating the market valuation for low-skilled workers in addition to an adjustment factor specific to very low-skilled workers suggests that high school graduates were willing to forgo 88 cents per hour for access to health insurance, while the adjustment factor for high school dropouts (-\$.052) is not statistically significant. Thus, we conclude that the compensating differential for high school dropouts is no different than the one for high school graduates.

However, we might expect that such attributes are valued similarly in compensation across the United States. Moreover, Table 6.7 says nothing about whether the regional market valuations are statistically different from those in United States as a whole. Table 6.8 addresses these concerns by providing results from an estimation of the market valuation of health insurance in the United States, in addition to unique regional adjustments to this valuation. These results also allow for common effects of employment attributes; although, the parameter estimates are not included in the table for ease of presentation. Looking at conditions specific to the Northeast, the second column of the table shows that the compensating wage differential in the United States was 64 cents per hour and that the market valuation in the Northeast was 50 cents higher. Thus, the market differential in the Northeast was \$1.04 ($\$0.64 + \0.50). Reading across the row of regional adjustments, we see large variations in the magnitude of these region-specific effects, which range from the Northeast's 50 cents to negative 45 cents in the Midwest. However, more important than the variation across different areas is the consistent finding that none of the regional adjustments are statistically different from zero. Thus, we conclude that the market valuation of health insurance does not differ across the United States.

6.3.3 How do Wage Tradeoffs in California Compare to Those in the United States?

Examination of estimated differentials for low-skilled employees in California reveals that their rates for gaining access to health insurance are statistically indistinguishable from those of their counterparts across the country, a finding that is not surprising in light of the common regional valuations noted above. Table 6.9 shows the results of a similar exercise as the one performed for different regions; that is, we estimate both the valuation of access to health insurance for the entire U.S. market (or a more refined market, such as the very low-skilled U.S. market) and an adjustment factor for the valuation specific to the California labor market. The first column shows a Californian adjustment of $-\$0.79$, but reference to its standard error reveals that it is not statistically different from zero. This supports the position that the market valuation in California is no different from that in the rest of the United States. The second column compares the compensating differential in California to that in the West, and it reveals the similar conclusion that there is not a statistically significant difference in the valuations in these two areas. Lastly, the third and fourth columns test whether the compensating differentials in the very low and low-skilled labor markets in California differ from the tradeoffs in the respective

markets in the United States. Not surprisingly, the valuations in these more refined markets in California are no different from those in the remainder of the country.

7. CONCLUSION AND POLICY IMPLICATIONS

An overview of our empirical findings indicates that low-skilled workers valued access to employer health insurance at about 74 cents per hour in 1997, which means that in today's dollars, the implicit price of this access is approximately 83 cents per hour in forgone wages. For a full-time worker, this translates into about \$140 in salary per month. Our estimates for this compensating wage differential vary depending on the skill level of workers and regions of the country. Estimates exceed \$0.83 per hour for workers who have high-school degrees and for those who are heads of households. Estimates lie below this value for workers with less than a high-school degree and for workers residing in California. However, none of this variation in estimated values comes close to reaching statistical significance. Reference to the confidence intervals obtained in our study indicates that the compensating wage differential for employer health insurance has only a 10% chance of surpassing \$1.41 per hour. Estimates for all specifications and sample compositions fall well below this upper bound.

Before discussing the policy implications of these findings, we briefly examine how our reliance on data describing market conditions and individual behavior in 1997 might influence the relevance of our results for current circumstances. In thinking about how the market valuation for health insurance access might have changed between 1997 and 2003, we emphasize that the implicit price of health insurance access is based on its marginal value. That is, the compensating wage differential is equivalent to the valuation held by the "marginal worker" who is indifferent between a job with health benefits and a lower wage and a job without benefits and a higher wage. However, most individuals selecting jobs with health benefits are willing to pay more than this marginal value and therefore experience a consumer surplus equal to the difference between their true willingness to pay and the market valuation. Similarly, the compensating wage differential reflects the price at which the marginal firm is indifferent between providing health benefits with a lower wage and not offering benefits but paying a higher wage; employers able to provide health benefits more cheaply than the market price experience a producer surplus. Thus, in assessing how the market valuation for health insurance may have changed between 1997 and 2002, the key question is whether or not the willingness of the marginal worker to pay for health insurance access or the costs of the marginal firms to provide such benefits have changed over time.

For the most part, we believe that the current compensating wage differential for health insurance access is on the same order of magnitude as the hourly 74 cents (or \$0.83 in 2002 dollars) suggested by our analysis. However, there are two factors that may have induced slight shifts in the marginal valuation of health insurance access since 1997. First, health insurance premiums have increased substantially since 1997 – growing 3.7% in 1998, 11 % in 2001, and 12.7% in 2002 – while wages and inflation have experienced relatively constant growth (wages grew by 4.4% in 1998 and 3.4% in 2002, whereas inflation grew 1.4% in 1998 and 1.6% in 2002).⁵¹ Together, these conditions may have increased the value of health insurance access to low-skilled individuals and hence increased the willingness of the marginal worker to pay for health benefits. At the same time however, there was a small increase in the percentage of firms offering health insurance, which we would expect to result in a slightly lower compensating wage differential for health insurance. Overall, we believe the combined influence of the changes in health insurance premiums and employer provisions on the relevance of our findings for a contemporary application is minor.

The second factor that may have changed the compensating wage differential between 1997 and 2002 is the growth of public health insurance programs through the State Children’s Health Insurance Program (SCHIP). This federal program, which was initiated by the Balanced Budget Act of 1997, provides states with grants to fund health insurance coverage for children and parents who earn too much to be eligible for Medicaid, but too little to be able to afford private coverage. For example, California’s Healthy Families makes health insurance available to children and parents who have incomes between 100% and 200% of the federal poverty limit. Since SCHIP has increased the number of available health insurance options for many low-skilled individuals, we would expect a slightly diminished demand for access to employer health insurance and a correspondingly lower market valuation. However, since many low-skilled workers earn more than the SCHIP eligibility threshold or do not have children, we do not expect the enactment of this program has substantially changed the applicability of our results to the present market valuation of employer-sponsored health insurance.

⁵¹ Kaiser Family Foundation/Health Research and Educational Trust (2002). *Annual Employer Health Benefits Survey*. Available at www.kff.org.

Turning to the political relevance of our empirical analysis, our results are directly applicable to assessments of a number of policies designed to reduce the rate of uninsurance in the United States. In particular, the designs of many of these programs involve policymakers' speculations about how much low-skilled workers value health insurance as a fringe benefit of their jobs. For the most part, these speculations exceed the values suggested by our analysis.

A prominent example occurs in the establishment of living wage laws, which mandate a minimum wage for particular groups of workers. In instituting these laws, policymakers frequently differentiate the level of mandated wages by whether or not jobs provide health benefits. Most of the enacted living wage ordinances in cities across the country arbitrarily set the differential between the wage level for employers offering health benefits and the higher wage level for employers that do not. Designers of these policies assume that workers are willing to forgo health benefits for anywhere from an extra \$0.75 in hourly wages to as much as \$2.00 per hour, with the vast majority of differentials far exceeding \$1.00 per hour. Our findings strongly suggest the differentials established by most of these laws are too high, meaning that these policies induce many low-skilled workers to select jobs with the higher wages not offering health insurance.

Another oft-cited proposal to increase health insurance coverage involves a mandate forcing all employers to make health insurance accessible to their employees. Such a strategy would change the effective costs for employers to compensate employees, leading to lower wages (or other fringe benefits) as a result of the health insurance offer. Since employers currently not offering health benefits must pass on their costs for health insurance provision, we might expect such employers to be unable to provide health insurance at the rate at which low-skilled employees are willing to trade wages. Thus, if employers are forced to provide benefits and reduce hourly wages by more than \$0.83 to low-skilled workers, then these workers will be forced to consume health insurance at a price beyond their valuations of the benefits. Moreover, some argue that if employers were unable to reduce wages to cover new health insurance costs, then we could see a decrease in labor demand and employment opportunities.

Another idea endorsed by some policymakers involves employer tax incentives to encourage the provision of health benefits. For example, some legislators have suggested giving a tax credit to employers who provide health benefits and meet minimum contribution levels for each employee enrolling in insurance. The optimal tax credit, however, must not only persuade

employers not offering benefits to make them available but also prevent them from passing any remaining health insurance costs on to employees at rates higher than \$0.83 per hour. If the tax credit was set too low and employers claiming the tax credit reduced wages more than employee valuations of health benefits, then low-skilled employees would seek employers offering higher wages in lieu of any health insurance coverage.

Other policymakers have supported proposals that would allow employers with a certain percentage of either low income employees or employees without coverage to buy-in to the state employee benefit plan at a reduced premium, with the state subsidizing the remainder of the premium. Likewise, some legislators suggest allowing employers to buy health insurance for their employees through the state public health insurance program. While both types of programs would reduce the employer costs of health insurance provision, we would still expect employers to pass the majority of remaining costs to their employees through reduced wages. Accordingly, our results furnish a more informed basis for judging the optimal prices to charge employers for access to state health plans. In particular, prices must be set at levels that induce employers to offer insurance but reduce wages by no more than \$140 per month; any larger wage reduction would cause low-skilled workers to select jobs without access to health insurance.

A final application of our findings relates to the increasing use of cafeteria - or Section 125 - benefits plans, which allow employees to use “benefits credits” to purchase a desired combination of fringe benefits.⁵² Employers offering these plans provide each employee with a set amount of credits applicable for a range of benefits, typically including a choice of health insurance and dental insurance plans, various levels of life insurance, among other fringes. If the benefits credits are not sufficient to pay for the selected package, then the employee may pay for the difference with pretax dollars. Alternatively, if the benefits credits exceed the cost of the desired options, then the employee may receive (after tax) cash in lieu of additional benefits. While these plans allow employees to opt-out of health insurance for additional wages (cash payments), most plans require employees to purchase some minimum amount of life and health insurance if they are not covered by another source. In specifying minimum purchasing levels, employers must make assumptions about employees’ valuation of health benefits, and our estimates offer useful guidelines for employers establishing these policies. If minimum

⁵² According to BLS Employee Surveys, 13% of medium and large firms, 5% of state and local governments, and 4% of small firms provided health coverage through flexible benefit plans in the late 1990s.

purchasing levels are greater than \$140 per month, then employees will choose employers without such provisions and possibly without any health insurance options to avoid being forced to consume health insurance at a price above their valuation. Furthermore, if employers do not require minimum purchasing levels, but only offer health plans priced at more than \$140 per month in benefits credits, then employees will opt-out of health insurance entirely for cash. Since the cost of health insurance in the private market is typically much higher than that in the employer market, most employees choosing cash in lieu of health benefits would be unable to use this money to purchase a comprehensive health plan priced less than their valuation.

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Table 2.1
Work-Health Insurance Alternatives

Work Status		Access to employer health insurance?	Response to employer offer	Health Insurance Source
1	Work	Yes	Enroll	Employer-sponsored
2	Work	Yes	Do Not Enroll	Spouse's employer
3	Work	Yes	Do Not Enroll	Privately purchased
4	Work	Yes	Do Not Enroll	Public
5	Work	Yes	Do Not Enroll	None
6	Work	No	N/A	Spouse's employer
7	Work	No	N/A	Privately purchased
8	Work	No	N/A	Public
9	Work	No	N/A	None
10	No Work	N/A	N/A	Spouse's employer
11	No Work	N/A	N/A	Privately purchased
12	No Work	N/A	N/A	Public
13	No Work	N/A	N/A	None

Table 2.2 - U.S.
Working Populations Depicted by the SIPP and RWJF: Employer Types

Characteristic	RWJF		SIPP	
	Mean	Std Dev	Mean	Std Dev
Industry				
Public	15.2	35.9	16.7	37.3
Agriculture	0.1	2.7	2.2	14.6
Construction	4.3	20.3	4.8	21.4
Mining/Manufacturing	17.9	38.3	17.3	37.9
Transportation/Communication/Public Utilities	3.5	18.3	5.7	23.2
Wholesale Trade	2.9	16.8	3.8	19.1
Retail Trade	14.6	35.3	17.0	37.6
Finance/Insurance/Real Estate	12.2	32.8	11.4	31.8
Professional services	21.2	40.9	16.3	36.9
Other services	4.8	21.4	4.7	21.2
Size				
Less than 25	28.4	45.1	35.5	47.8
25-100	19.1	39.3	24.8	43.2
More than 100	52.6	49.9	39.6	48.9
Region				
Northeast	20.1	40.0	19.7	39.8
Midwest	25.1	43.4	25.6	43.6
South	29.2	45.5	33.8	47.3
West	24.8	43.2	20.9	40.7
Number of observations*	22465		36071	

* Each observation in the SIPP is an individual, while each in the RWJF is a firm.

Sources: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997; 1997 RWJF Employer Health Insurance Survey.

Table 2.2 - CA
Working Populations in California Depicted by the SIPP and RWJF Surveys

	RWJF		SIPP	
	Mean	Std Dev	Mean	Std Dev
Industry				
Public	11.0	31.3	16.1	36.8
Agriculture	0.1	3.6	3.6	18.6
Construction	3.1	17.3	4.4	20.5
Mining/Manufacturing	20.5	40.4	16.2	36.9
Transportation/Communication/Public Utilities	3.1	17.4	6.0	23.7
Wholesale Trade	5.4	22.5	4.1	19.9
Retail Trade	11.6	32.0	17.4	37.9
Finance/Insurance/Real Estate	14.0	34.7	13.1	33.7
Professional services	24.7	43.1	13.2	33.8
Other services	6.6	24.8	6.0	23.8
Size				
Less than 25	30.0	45.8	36.4	48.1
25-100	20.7	40.5	27.8	44.8
More than 100	49.3	50.0	35.8	47.9
Weekly hours				
% work at least 40 hours	77.5	33.0	74.0	43.9
% work 35-39 hours	11.5	25.9	4.9	21.7
% work 20-34 hours	7.6	16.7	13.8	34.5
% work less than 20 hours	3.5	12.4	7.3	26.0
Age				
% less than 30 years	29.4	24.5	29.3	45.5
% 30-39 years	29.8	20.9	28.5	45.1
% 40-49 years	24.5	19.1	23.1	42.2
% older than 50 years	16.4	18.1	19.1	39.3
Gender				
% female	46.3	27.0	44.6	49.7
Hourly Wages				
% earn less than \$5	4.4	15.2	9.9	29.9
% earn \$5-\$7	15.7	25.6	18.4	38.7
% earn \$7-\$10	21.2	24.3	19.7	39.8
% earn \$10-\$15	25.2	23.1	19.2	39.4
% earn greater than \$15	33.7	30.5	32.8	46.9
Number of observations	2016		3938	

* Each observation in the SIPP is an individual, while each in the RWJF is a firm.

Sources: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997;
1997 RWJF Employer Health Insurance Survey.

**Table 2.3 - U.S.
Working Populations Depicted by the SIPP and RWJF: Employee Types**

	RWJF		SIPP	
	Mean	Std Dev	Mean	Std Dev
Weekly hours				
% work at least 40 hours	75.5	33.3	72.7	44.6
% work 35-39 hours	12.5	25.5	6.7	25.0
% work 20-34 hours	8.2	17.1	13.5	34.2
% work less than 20 hours	3.8	12.5	7.1	25.7
Age				
% less than 30 years	29.9	24.1	28.6	45.2
% 30-39 years	28.6	19.6	27.0	44.4
% 40-49 years	25.0	19.9	24.3	42.9
% older than 50 years	16.6	18.3	20.0	40.0
Gender				
% female	47.6	27.6	47.8	50.0
Hourly Wages				
% earn less than \$5	4.7	16.2	10.3	30.4
% earn \$5-\$7	15.1	24.6	19.0	39.3
% earn \$7-\$10	21.8	24.9	22.2	41.5
% earn \$10-\$15	26.6	24.5	22.1	41.5
% earn greater than \$15	31.8	30.4	26.4	44.1
Number of observations*	22465		36071	

* Each observation in the SIPP is an individual, while each in the RJWF is a firm.

Sources: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997;
1997 RWJF Employer Health Insurance Survey.

**Table 2.4 - U.S.
Work-Health Insurance Choices of Low-Skilled Adults**

	# obs	Work Offered Insurance					Work Not Offered Insurance				Don't Work			
		Employer	Spouse Employer	Other	Public	None	Spouse Employer	Other	Public	None	Spouse Employer	Other	Public	None
All	16156	0.37 (0.48)	0.05 (0.22)	0.01 (0.11)	0.00 (0.06)	0.03 (0.16)	0.06 (0.23)	0.02 (0.16)	0.02 (0.15)	0.11 (0.31)	0.09 (0.28)	0.04 (0.19)	0.08 (0.28)	0.10 (0.30)
Gender														
Male	7664	0.44 (0.50)	0.03 (0.17)	0.02 (0.13)	0.00 (0.05)	0.03 (0.18)	0.03 (0.18)	0.02 (0.15)	0.02 (0.12)	0.13 (0.34)	0.04 (0.18)	0.04 (0.20)	0.07 (0.25)	0.10 (0.30)
Female	8492	0.29 (0.45)	0.07 (0.25)	0.01 (0.09)	0.00 (0.06)	0.02 (0.14)	0.08 (0.26)	0.03 (0.16)	0.03 (0.17)	0.08 (0.28)	0.14 (0.35)	0.04 (0.19)	0.10 (0.30)	0.10 (0.31)
Education														
No high school degree	4662	0.23 (0.42)	0.03 (0.16)	0.01 (0.09)	0.00 (0.07)	0.03 (0.18)	0.04 (0.19)	0.02 (0.13)	0.03 (0.18)	0.16 (0.37)	0.07 (0.26)	0.03 (0.17)	0.16 (0.37)	0.16 (0.37)
High school degree	11494	0.42 (0.49)	0.06 (0.23)	0.02 (0.12)	0.00 (0.05)	0.02 (0.15)	0.06 (0.24)	0.03 (0.17)	0.02 (0.13)	0.09 (0.28)	0.10 (0.29)	0.04 (0.20)	0.05 (0.22)	0.08 (0.27)
Age														
25 – 35 years	5819	0.35 (0.48)	0.04 (0.20)	0.01 (0.10)	0.01 (0.07)	0.04 (0.19)	0.05 (0.22)	0.02 (0.15)	0.03 (0.17)	0.15 (0.36)	0.06 (0.24)	0.03 (0.16)	0.08 (0.28)	0.12 (0.32)
35 – 45 years	5791	0.38 (0.49)	0.06 (0.23)	0.01 (0.11)	0.00 (0.05)	0.02 (0.15)	0.06 (0.23)	0.02 (0.15)	0.02 (0.15)	0.10 (0.30)	0.09 (0.29)	0.04 (0.19)	0.08 (0.27)	0.10 (0.30)
45 – 55 years	4546	0.38 (0.48)	0.05 (0.21)	0.02 (0.13)	0.00 (0.03)	0.02 (0.14)	0.06 (0.24)	0.03 (0.17)	0.01 (0.11)	0.06 (0.24)	0.12 (0.32)	0.06 (0.24)	0.09 (0.28)	0.09 (0.29)
Race														
White (NonHispanic)	10630	0.41 (0.49)	0.06 (0.24)	0.02 (0.12)	0.00 (0.05)	0.02 (0.14)	0.06 (0.25)	0.03 (0.16)	0.02 (0.13)	0.08 (0.27)	0.11 (0.31)	0.05 (0.21)	0.06 (0.23)	0.08 (0.27)
White (Hispanic)	2422	0.26 (0.44)	0.02 (0.15)	0.01 (0.08)	0.00 (0.06)	0.04 (0.20)	0.04 (0.20)	0.02 (0.12)	0.02 (0.16)	0.20 (0.40)	0.07 (0.26)	0.02 (0.15)	0.09 (0.29)	0.18 (0.38)
Black	2353	0.33 (0.47)	0.03 (0.17)	0.01 (0.11)	0.01 (0.07)	0.04 (0.19)	0.03 (0.17)	0.02 (0.14)	0.04 (0.19)	0.12 (0.33)	0.04 (0.19)	0.03 (0.16)	0.17 (0.38)	0.13 (0.34)
Other	751	0.27 (0.44)	0.04 (0.20)	0.01 (0.12)	0.00 (0.07)	0.04 (0.20)	0.05 (0.22)	0.03 (0.16)	0.04 (0.19)	0.15 (0.36)	0.07 (0.26)	0.04 (0.21)	0.12 (0.33)	0.12 (0.32)
Family Structure														
No Children	8999	0.34 (0.47)	0.06 (0.24)	0.01 (0.11)	0.00 (0.07)	0.03 (0.16)	0.07 (0.25)	0.02 (0.15)	0.03 (0.16)	0.11 (0.31)	0.10 (0.31)	0.03 (0.18)	0.08 (0.27)	0.10 (0.30)
With Children	7157	0.39 (0.49)	0.04 (0.19)	0.02 (0.12)	0.00 (0.04)	0.03 (0.16)	0.04 (0.20)	0.03 (0.16)	0.02 (0.13)	0.11 (0.31)	0.07 (0.26)	0.05 (0.21)	0.09 (0.28)	0.11 (0.31)
Marital Status														
Not Married	5247	0.37 (0.48)	0.00 (0.03)	0.01 (0.10)	0.00 (0.07)	0.04 (0.19)	0.00 (0.04)	0.03 (0.17)	0.04 (0.20)	0.16 (0.37)	0.00 (0.05)	0.04 (0.20)	0.15 (0.36)	0.13 (0.34)
Married	10909	0.37 (0.48)	0.07 (0.26)	0.01 (0.12)	0.00 (0.05)	0.02 (0.15)	0.08 (0.27)	0.02 (0.15)	0.01 (0.11)	0.08 (0.28)	0.13 (0.34)	0.04 (0.19)	0.05 (0.21)	0.09 (0.30)

Notes: Percentage of group in each work-health insurance choice. Standard deviations in parentheses below each group's row.

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997. Sample consists of low-skilled individuals, 25-55 years old.

Table 2.4 - CA
Work-Health Insurance Choices of Low-Skilled Adults in California

	# obs	Work Offered Insurance					Work Not Offered Insurance				Don't Work			
		Employer	Spouse Employer	Other	Public	None	Spouse Employer	Other	Public	None	Spouse Employer	Other	Public	None
All	1905	0.29 (0.45)	0.03 (0.18)	0.01 (0.11)	0.00 (0.05)	0.02 (0.15)	0.04 (0.20)	0.02 (0.15)	0.04 (0.19)	0.16 (0.37)	0.08 (0.27)	0.04 (0.19)	0.10 (0.31)	0.14 (0.40)
Gender														
Male	908	0.38 (0.50)	0.02 (0.15)	0.02 (0.13)	0.00 (0.05)	0.03 (0.18)	0.03 (0.18)	0.02 (0.14)	0.02 (0.15)	0.22 (0.41)	0.02 (0.13)	0.03 (0.18)	0.06 (0.24)	0.12 (0.33)
Female	997	0.21 (0.40)	0.05 (0.21)	0.01 (0.09)	0.00 (0.05)	0.02 (0.12)	0.05 (0.22)	0.03 (0.16)	0.05 (0.22)	0.10 (0.30)	0.14 (0.35)	0.04 (0.20)	0.15 (0.35)	0.16 (0.37)
Education														
No high school degree	881	0.21 (0.40)	0.01 (0.11)	0.00 (0.06)	0.00 (0.06)	0.02 (0.15)	0.03 (0.17)	0.01 (0.10)	0.06 (0.23)	0.22 (0.41)	0.07 (0.26)	0.02 (0.13)	0.15 (0.35)	0.19 (0.40)
High school degree	1024	0.36 (0.50)	0.05 (0.22)	0.02 (0.14)	0.00 (0.04)	0.02 (0.15)	0.05 (0.22)	0.03 (0.18)	0.02 (0.14)	0.11 (0.32)	0.09 (0.28)	0.05 (0.22)	0.07 (0.25)	0.10 (0.30)
Age														
25 – 35 years	782	0.28 (0.50)	0.02 (0.15)	0.01 (0.10)	0.00 (0.05)	0.03 (0.17)	0.04 (0.19)	0.02 (0.14)	0.03 (0.18)	0.21 (0.41)	0.06 (0.24)	0.01 (0.12)	0.12 (0.32)	0.15 (0.36)
35 – 45 years	686	0.30 (0.50)	0.04 (0.20)	0.01 (0.11)	0.00 (0.03)	0.02 (0.16)	0.05 (0.21)	0.02 (0.14)	0.05 (0.21)	0.15 (0.36)	0.07 (0.26)	0.05 (0.22)	0.08 (0.28)	0.13 (0.34)
45 – 55 years	437	0.29 (0.50)	0.04 (0.20)	0.02 (0.13)	0.00 (0.07)	0.01 (0.10)	0.04 (0.20)	0.03 (0.16)	0.03 (0.16)	0.09 (0.28)	0.13 (0.34)	0.06 (0.24)	0.11 (0.32)	0.13 (0.34)
Race														
White (Non-Hispanic)	684	0.36 (0.50)	0.05 (0.21)	0.02 (0.15)	0.00 (0.00)	0.02 (0.14)	0.05 (0.22)	0.03 (0.18)	0.02 (0.15)	0.09 (0.29)	0.10 (0.30)	0.06 (0.24)	0.09 (0.28)	0.08 (0.28)
White (Hispanic)	924	0.26 (0.40)	0.02 (0.15)	0.00 (0.07)	0.00 (0.07)	0.03 (0.17)	0.03 (0.18)	0.02 (0.13)	0.04 (0.20)	0.22 (0.41)	0.07 (0.26)	0.01 (0.12)	0.08 (0.28)	0.19 (0.39)
Black	90	0.24 (0.40)	0.03 (0.16)	0.01 (0.08)	0.00 (0.00)	0.01 (0.07)	0.03 (0.16)	0.00 (0.00)	0.06 (0.24)	0.19 (0.39)	0.02 (0.15)	0.03 (0.17)	0.25 (0.43)	0.14 (0.35)
Other	207	0.23 (0.40)	0.04 (0.19)	0.01 (0.12)	0.00 (0.06)	0.03 (0.16)	0.05 (0.21)	0.02 (0.14)	0.05 (0.22)	0.13 (0.33)	0.07 (0.25)	0.05 (0.22)	0.19 (0.39)	0.13 (0.34)
Family Structure														
No Children	1257	0.28 (0.50)	0.04 (0.19)	0.01 (0.11)	0.00 (0.06)	0.02 (0.14)	0.04 (0.21)	0.02 (0.15)	0.05 (0.22)	0.16 (0.36)	0.09 (0.29)	0.03 (0.16)	0.11 (0.31)	0.14 (0.34)
With Children	648	0.32 (0.50)	0.03 (0.16)	0.01 (0.12)	0.00 (0.04)	0.03 (0.17)	0.04 (0.19)	0.02 (0.14)	0.02 (0.13)	0.17 (0.37)	0.06 (0.23)	0.05 (0.22)	0.09 (0.29)	0.15 (0.36)
Marital Status														
Not Married	552	0.31 (0.50)	0.00 (0.00)	0.01 (0.10)	0.00 (0.05)	0.04 (0.19)	0.00 (0.03)	0.01 (0.11)	0.04 (0.20)	0.20 (0.40)	0.01 (0.10)	0.04 (0.19)	0.17 (0.37)	0.16 (0.36)
Married	1353	0.28 (0.50)	0.05 (0.22)	0.01 (0.12)	0.00 (0.05)	0.02 (0.13)	0.06 (0.24)	0.03 (0.16)	0.03 (0.18)	0.14 (0.35)	0.11 (0.31)	0.04 (0.19)	0.08 (0.27)	0.14 (0.34)

Notes: Percentage of group in each work-health insurance choice. Standard deviations in parentheses below each group's row.

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997. Sample consists of low-skilled individuals, 25-55 years old in California.

**Table 3.1 - U.S.
Percentage of All Employees Working at Firms that Offer Employer Health Insurance
by Employer Characteristics**

	# Employers	% Employees	Std Deviation
All Firms	22465	85.6	35.1
Industry			
Public	920	99.0	10.0
Agriculture	47	69.9	45.9
Construction	1701	71.6	45.1
Mining/Manufacturing	2943	93.0	25.6
Transportation/Communication/Public Utilities	1053	85.5	35.2
Wholesale Trade	1052	85.9	34.8
Retail Trade	4123	74.0	43.9
Finance/Insurance/Real Estate	3715	82.5	38.0
Professional Services	5388	85.9	34.8
Nonprofessional Services	1523	71.8	45.0
Size			
Less than 25 employees	15241	58.4	49.3
25-100 employees	4345	88.7	31.7
More than 100 employees	2879	99.2	8.7
Region			
Northeast			
New England	2476	87.1	33.5
Mid-Atlantic	2985	86.8	33.9
Midwest			
East North Central	2797	88.3	32.2
West North Central	2197	85.2	35.6
South			
South Atlantic	3982	83.7	36.9
East South Central	489	81.5	38.9
West South Central	1533	84.9	35.9
West			
North Mountain	161	84.7	36.0
South Mountain	735	90.7	29.1
Pacific	5107	82.8	37.8

Source: 1997 R WJF Employer Health Insurance Survey.

Table 3.1 - CA
Percentage of All Employees in CA Working at Firms that Offer Employer Health Insurance

	# Employers	% Employees	Std Deviation
All Firms	2016	82.5	38.0
Industry			
Public	66	99.1	9.3
Agriculture	7	79.3	40.5
Construction	116	61.8	48.6
Mining/Manufacturing	299	89.4	30.8
Transportation/Communication/Public Utilities	78	86.3	34.4
Wholesale Trade	113	87.0	33.6
Retail Trade	327	60.2	49.0
Finance/Insurance/Real Estate	365	79.4	40.5
Professional Services	510	84.2	36.5
Nonprofessional Services	135	77.5	41.8
Size			
Less than 25 employees	1381	51.3	50.0
25-100 employees	405	88.1	32.4
More than 100 employees	230	99.2	8.8
Percentage of Low-Wage Workers (earning <\$7 hour)			
0%	1061	84.4	36.3
0% - 20%	289	94.6	22.6
20% - 40%	190	81.4	38.9
40% - 60%	164	77.0	42.1
60% - 80%	118	76.4	42.4
80% - 100%	194	37.3	48.4
Percentage of Full-time Workers (working at least 35 hours per week)			
0%	90	22.9	42.0
0% - 20%	35	71.3	45.2
20% - 40%	70	58.0	49.4
40% - 60%	132	55.5	49.7
60% - 80%	179	80.9	39.3
80% - 100%	1510	86.5	34.2

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.2 - U.S.
Percentage of All Employees Working at Firms that Offer Employer Health Insurance
by Employer Size and Industry**

	# Employers	% Employees	Std Deviation
Public			
Less than 25 employees	154	59.6	49.1
25-100 employees	107	99.0	10.2
More than 100 employees	659	100.0	1.3
Agriculture			
Less than 25 employees	36	50.3	50.0
25-100 employees	7	98.6	11.7
More than 100 employees	4	79.1	40.7
Construction			
Less than 25 employees	1290	54.7	49.8
25-100 employees	347	90.1	29.9
More than 100 employees	64	95.1	21.7
Mining/Manufacturing			
Less than 25 employees	1415	67.1	47.0
25-100 employees	796	90.6	29.2
More than 100 employees	732	99.3	8.3
Transportation/Communication/Public Utilities			
Less than 25 employees	668	65.6	47.5
25-100 employees	253	93.9	23.9
More than 100 employees	132	98.0	14.1
Wholesale Trade			
Less than 25 employees	750	74.1	43.8
25-100 employees	223	95.2	21.3
More than 100 employees	79	97.9	14.3
Retail Trade			
Less than 25 employees	3059	46.4	49.9
25-100 employees	861	83.2	37.4
More than 100 employees	203	98.7	11.5
Finance/Insurance/Real Estate			
Less than 25 employees	2862	64.7	47.8
25-100 employees	587	85.3	35.4
More than 100 employees	266	98.8	11.0
Professional Services			
Less than 25 employees	3872	61.9	48.6
25-100 employees	908	91.1	28.4
More than 100 employees	608	99.4	7.8
Nonprofessional Services			
Less than 25 employees	1135	39.8	49.0
25-100 employees	256	85.8	34.9
More than 100 employees	132	97.3	16.3

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.3 - U.S.
Percentage of All Employees Working at Firms that Offer Employer Health Insurance
by Workforce Attributes**

	# Employers	% Employees	Std Deviation
Percentage of Low-Wage Workers (earning <\$7 hour)			
0%	11350	87.8	32.8
0% - 20%	3188	96.3	18.9
20% - 40%	2134	85.8	35.0
40% - 60%	1727	77.8	41.6
60% - 80%	1432	74.6	43.5
80% - 100%	2634	53.7	49.9
Percentage of Full-time Workers (working at least 35 hours per week)			
0%	954	16.0	36.6
0% - 20%	494	64.6	47.8
20% - 40%	1061	74.8	43.4
40% - 60%	1508	74.7	43.5
60% - 80%	2009	83.8	36.8
80% - 100%	16439	88.9	31.4

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.4 - U.S.
Labor Market Choices of Low-Skilled Workers**

	% Employees	Std Deviation
Industry		
Public	10.7	30.9
Agriculture	2.9	16.8
Construction	8.8	28.3
Mining/Manufacturing	27.1	44.4
Transportation/Communication/Public Utilities	7.0	25.5
Wholesale Trade	4.8	21.4
Retail Trade	15.6	36.3
Finance/Insurance/Real Estate	10.3	30.3
Professional Services	8.6	28.1
Nonprofessional Services	4.3	20.2
Size		
Less than 25 employees	34.1	47.4
25-100 employees	25.4	43.5
More than 100 employees	40.5	49.1
Region		
Northeast		
New England	4.5	20.6
Mid-Atlantic	14.0	34.7
Midwest		
East North Central	17.8	38.3
West North Central	6.8	25.1
South		
South Atlantic	19.2	39.4
East South Central	6.7	24.9
West South Central	11.3	31.7
West		
North Mountain	1.9	13.5
South Mountain	3.6	18.7
Pacific	14.4	35.1

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997.
Sample consists of low-skilled, full time workers, aged 25-55 years; sample size is 9197.

Table 3.4 - CA
Labor Market Choices of Low-Skilled Workers in California

	% Employees	Std Deviation
Industry		
Public	8.0	27.2
Agriculture	8.5	27.9
Construction	7.9	27.0
Mining/Manufacturing	24.9	43.2
Transportation/Communication/Public Utilities	7.0	25.5
Wholesale Trade	5.5	22.7
Retail Trade	15.3	36.0
Finance/Insurance/Real Estate	11.0	31.3
Professional Services	5.9	23.6
Nonprofessional Services	6.0	23.8
Size		
Less than 25 employees	36.4	48.1
25-100 employees	31.5	46.5
More than 100 employees	32.1	46.7

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997.
Sample consists of low-skilled, full-time workers, aged 25-55 years in California; sample size is 1019.

**Table 3.5 - U.S.
Employer-Sponsored Health Plan Alternatives**

	# Plans	Probability of Employee at Firm Offering HI with Particular Option			
		All	HMO	PPO/POS	Indemnity
All Plans	24774	100	70.4	24.3	5.3
Industry					
Public	7556	100	79.2	18.0	2.8
Agriculture	34	100	41.1	51.4	7.4
Construction	1066	100	34.7	50.0	15.4
Mining/Manufacturing	3130	100	34.1	47.0	19.0
Transportation/Comm./Utilities	977	100	36.0	43.6	20.5
Wholesale Trade	994	100	34.2	54.8	11.1
Retail Trade	2252	100	25.5	62.9	11.7
Finance/Insurance/Real Estate	3121	100	35.1	52.2	12.7
Professional Services	4728	100	44.5	43.0	12.5
Nonprofessional Services	916	100	28.2	52.5	19.3
Size					
Less than 25 employees	8547	100	34.2	48.3	17.5
25-100 employees	5173	100	34.9	49.2	16.0
More than 100 employees	11054	100	73.1	22.5	4.4
Region					
Northeast					
New England	2578	100	55.0	33.4	11.6
Mid-Atlantic	3525	100	57.0	33.4	9.5
Midwest					
East North Central	3088	100	46.1	40.6	13.3
West North Central	1653	100	37.3	47.2	15.4
South					
South Atlantic	4736	100	67.9	26.8	5.3
East South Central	487	100	35.2	56.9	7.9
West South Central	1513	100	52.1	35.1	12.9
West					
North Mountain	295	100	57.6	33.3	9.2
South Mountain	865	100	33.8	55.4	10.8
Pacific	5237	100	62.8	31.5	5.8
% Low-Wage Workers					
0%	14016	100	73.3	21.9	4.8
0% - 20%	5975	100	70.2	24.7	5.1
20% - 40%	1891	100	53.9	35.9	10.2
40% - 60%	1173	100	40.2	46.6	13.2
60% - 80%	907	100	42.9	47.5	9.6
80% - 100%	808	100	34.8	55.4	9.8

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.5 -CA
Employer-Sponsored Health Plan Alternatives in California**

	# Plans	Probability of Employee at Firm Offering HI with Particular Option			
		All	HMO	PPO/POS	Indemnity
All Plans	2771	100	65.4	29.0	5.6
Industry					
Public	734	100	74.1	20.4	5.4
Agriculture	8	100	22.2	77.9	-
Construction	104	100	37.4	44.8	17.9
Mining/Manufacturing	368	100	52.3	43.8	4.0
Transportation/Comm/Utilities	69	100	36.3	41.8	21.9
Wholesale Trade	119	100	39.8	57.6	2.6
Retail Trade	225	100	51.1	33.8	15.1
Finance/Insurance/Real Estate	429	100	40.2	57.5	2.3
Professional Services	571	100	49.5	44.0	6.6
Nonprofessional Services	144	100	35.4	59.8	4.8
Size					
Less than 25 employees	1033	100	53.4	37.8	8.9
25-100 employees	722	100	53.0	40.4	6.6
More than 100 employees	1016	100	67.3	27.4	5.3
% Low-Wage Workers					
0%	1546	100	68.6	27.8	3.6
0% - 20%	726	100	63.2	28.3	8.5
20% - 40%	197	100	48.6	31.3	20.2
40% - 60%	149	100	61.5	37.7	0.8
60% - 80%	107	100	54.9	39.1	6.1
80% - 100%	46	100	66.2	33.4	0.4

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.6 - U.S.
Self-Insured Employer-Sponsored Health Plans**

	# Plans	Probability of Employee at Firm Offering HI with Self-Insured Plan Option
All Plans	24774	9.4
Industry		
Public	7556	2.3
Agriculture	34	26.2
Construction	1066	20.7
Mining/Manufacturing	3130	44.1
Transportation/Comm./Utilities	977	38.5
Wholesale Trade	994	19.7
Retail Trade	2252	56.9
Finance/Insurance/Real Estate	3121	32.4
Professional Services	4728	28.3
Nonprofessional Services	916	37.6
Size		
Less than 25 employees	8547	15.3
25-100 employees	5173	18.2
More than 100 employees	11054	8.9
Region		
Northeast		
New England	2578	17.8
Mid-Atlantic	3525	12.9
Midwest		
East North Central	3088	31.0
West North Central	1653	27.1
South		
South Atlantic	4736	9.9
East South Central	487	16.6
West South Central	1513	27.9
West		
North Mountain	295	11.8
South Mountain	865	42.6
Pacific	5237	12.1
% Low-Wage Workers		
0%	14016	7.3
0% - 20%	5975	8.9
20% - 40%	1891	28.6
40% - 60%	1173	18.7
60% - 80%	907	29.1
80% - 100%	808	52.0

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.6 - CA
Self-Insured Employer-Sponsored Health Plans in California

	# Plans	Probability of Employee at Firm Offering HI with Self-Insured Plan Option
All Plans	2771	11.5
Industry		
Public	734	3.7
Agriculture	8	37.2
Construction	104	19.3
Mining/Manufacturing	368	38.5
Transportation/Comm./Utilities	69	31.1
Wholesale Trade	119	6.1
Retail Trade	225	36.5
Finance/Insurance/Real Estate	429	23.6
Professional Services	571	29.6
Nonprofessional Services	144	45.6
Size		
Less than 25 employees	1033	8.2
25-100 employees	722	12.2
More than 100 employees	1016	11.7
% Low-Wage Workers		
0%	1546	9.4
0% - 20%	726	11.7
20% - 40%	197	33.6
40% - 60%	149	19.2
60% - 80%	107	16.3
80% - 100%	46	5.0

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.7 - U.S.
Total Monthly Premiums for Employer-Sponsored Single Coverage**

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	24774	\$169	\$43	\$147	\$165	\$183
Industry						
Public	7556	\$168	\$34	\$149	\$165	\$180
Agriculture	34	\$131	\$45	\$95	\$126	\$164
Construction	1066	\$174	\$69	\$129	\$163	\$200
Mining/Manufacturing	3130	\$176	\$71	\$133	\$163	\$205
Transportation/Comm./Utilities	977	\$158	\$58	\$122	\$150	\$180
Wholesale Trade	994	\$162	\$57	\$130	\$150	\$190
Retail Trade	2252	\$169	\$79	\$119	\$148	\$191
Finance/Insurance/Real Estate	3121	\$176	\$63	\$135	\$167	\$210
Professional Services	4728	\$179	\$61	\$140	\$170	\$204
Nonprofessional Services	916	\$164	\$55	\$128	\$160	\$186
Size						
Less than 25 employees	8547	\$169	\$67	\$125	\$158	\$200
25-100 employees	5173	\$169	\$66	\$127	\$159	\$195
More than 100 employees	11054	\$169	\$41	\$148	\$165	\$182
Region						
Northeast						
New England	2578	\$200	\$79	\$160	\$184	\$208
Mid-Atlantic	3525	\$177	\$51	\$148	\$168	\$192
Midwest						
East North Central	3088	\$175	\$50	\$145	\$171	\$194
West North Central	1653	\$166	\$57	\$137	\$159	\$184
South						
South Atlantic	4736	\$167	\$39	\$147	\$162	\$180
East South Central	487	\$176	\$60	\$147	\$167	\$190
West South Central	1513	\$173	\$48	\$145	\$167	\$191
West						
North Mountain	295	\$166	\$42	\$140	\$160	\$184
South Mountain	865	\$193	\$80	\$141	\$169	\$219
Pacific	5237	\$172	\$55	\$145	\$159	\$187
% Low-Wage Workers						
0%	14016	\$169	\$39	\$148	\$165	\$182
0% - 20%	5975	\$170	\$44	\$148	\$164	\$183
20% - 40%	1891	\$172	\$66	\$144	\$163	\$186
40% - 60%	1173	\$166	\$59	\$125	\$155	\$191
60% - 80%	907	\$174	\$78	\$128	\$152	\$212
80% - 100%	808	\$157	\$64	\$119	\$148	\$174

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.7 - CA
Total Monthly Premiums for Employer-Sponsored Single Coverage in California

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	2771	\$171	\$54	\$145	\$159	\$185
Industry						
Public	734	\$173	\$45	\$149	\$160	\$180
Agriculture	8	\$149	\$50	\$110	\$164	\$182
Construction	104	\$197	\$102	\$125	\$162	\$212
Mining/Manufacturing	368	\$176	\$81	\$114	\$155	\$206
Transportation/Comm./Utilities	69	\$153	\$77	\$110	\$126	\$170
Wholesale Trade	119	\$165	\$57	\$138	\$150	\$196
Retail Trade	225	\$136	\$39	\$101	\$132	\$163
Finance/Insurance/Real Estate	429	\$165	\$67	\$119	\$154	\$209
Professional Services	571	\$163	\$61	\$125	\$148	\$187
Nonprofessional Services	144	\$181	\$55	\$155	\$170	\$192
Size						
Less than 25 employees	1033	\$157	\$63	\$121	\$146	\$177
25-100 employees	722	\$163	\$74	\$113	\$149	\$186
More than 100 employees	1016	\$173	\$51	\$147	\$160	\$185
% Low-Wage Workers						
0%	1546	\$172	\$50	\$146	\$165	\$181
0% - 20%	726	\$166	\$48	\$148	\$155	\$177
20% - 40%	197	\$180	\$76	\$131	\$156	\$206
40% - 60%	149	\$170	\$61	\$124	\$155	\$207
60% - 80%	107	\$206	\$96	\$135	\$160	\$268
80% - 100%	46	\$123	\$35	\$90	\$123	\$147

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.8 - U.S.
Total Monthly Premiums for Employer-Sponsored Family Coverage**

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	24774	\$427	\$95	\$378	\$412	\$452
Industry						
Public	7556	\$421	\$68	\$380	\$410	\$446
Agriculture	34	\$363	\$101	\$282	\$360	\$412
Construction	1066	\$466	\$154	\$365	\$449	\$563
Mining/Manufacturing	3130	\$446	\$156	\$347	\$430	\$532
Transportation/Comm./Utilities	977	\$417	\$133	\$330	\$408	\$492
Wholesale Trade	994	\$427	\$140	\$344	\$412	\$492
Retail Trade	2252	\$462	\$209	\$337	\$400	\$516
Finance/Insurance/Real Estate	3121	\$453	\$164	\$336	\$433	\$541
Professional Services	4728	\$450	\$136	\$372	\$435	\$519
Nonprofessional Services	916	\$424	\$133	\$321	\$411	\$526
Size						
Less than 25 employees	8547	\$424	\$152	\$325	\$408	\$500
25-100 employees	5173	\$430	\$150	\$333	\$408	\$506
More than 100 employees	11054	\$427	\$89	\$379	\$412	\$451
Region						
Northeast						
New England	2578	\$489	\$137	\$407	\$466	\$535
Mid-Atlantic	3525	\$437	\$107	\$375	\$415	\$481
Midwest						
East North Central	3088	\$439	\$117	\$379	\$428	\$498
West North Central	1653	\$408	\$118	\$342	\$405	\$455
South						
South Atlantic	4736	\$418	\$85	\$375	\$407	\$446
East South Central	487	\$423	\$113	\$366	\$425	\$466
West South Central	1513	\$461	\$121	\$390	\$444	\$506
West						
North Mountain	295	\$418	\$108	\$370	\$406	\$444
South Mountain	865	\$504	\$229	\$369	\$425	\$542
Pacific	5237	\$427	\$123	\$370	\$404	\$458
% Low-Wage Workers						
0%	14016	\$424	\$84	\$379	\$411	\$450
0% - 20%	5975	\$429	\$99	\$378	\$411	\$452
20% - 40%	1891	\$445	\$128	\$373	\$446	\$498
40% - 60%	1173	\$421	\$144	\$324	\$400	\$500
60% - 80%	907	\$437	\$193	\$334	\$377	\$492
80% - 100%	808	\$432	\$140	\$367	\$408	\$493

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.8 - CA
Total Monthly Premiums for Employer-Sponsored Family Coverage in California

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	2771	\$429	\$125	\$370	\$404	\$458
Industry						
Public	734	\$425	\$91	\$377	\$405	\$444
Agriculture	8	\$405	\$97	\$337	\$378	\$378
Construction	104	\$490	\$171	\$362	\$430	\$600
Mining/Manufacturing	368	\$464	\$203	\$324	\$447	\$529
Transportation/Comm./Utilities	69	\$394	\$198	\$284	\$324	\$469
Wholesale Trade	119	\$442	\$144	\$355	\$406	\$492
Retail Trade	225	\$362	\$128	\$285	\$350	\$417
Finance/Insurance/Real Estate	429	\$416	\$169	\$312	\$374	\$488
Professional Services	571	\$451	\$160	\$346	\$427	\$555
Nonprofessional Services	144	\$418	\$144	\$315	\$372	\$490
Size						
Less than 25 employees	1033	\$413	\$159	\$313	\$380	\$486
25-100 employees	722	\$400	\$154	\$312	\$374	\$477
More than 100 employees	1016	\$432	\$119	\$376	\$406	\$455
% Low-Wage Workers						
0%	1546	\$426	\$108	\$371	\$406	\$450
0% - 20%	726	\$419	\$110	\$377	\$398	\$449
20% - 40%	197	\$427	\$134	\$342	\$429	\$525
40% - 60%	149	\$472	\$165	\$350	\$451	\$555
60% - 80%	107	\$507	\$258	\$361	\$461	\$544
80% - 100%	46	\$349	\$86	\$288	\$354	\$377

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.9 - U.S.
Employer Shares of Total Premiums for Employer Health Insurance**

	# Plans	Single Coverage		Family Coverage	
		Mean	Std Dev	Mean	Std Dev
All Plans	24774	82.4%	10.8	74.2%	14.5
Industry					
Public	7556	82.3%	7.8	75.4%	10.7
Agriculture	34	87.7%	15.2	77.4%	20.0
Construction	1066	86.6%	19.7	71.5%	28.2
Mining/Manufacturing	3130	84.9%	16.3	74.2%	21.8
Transportation/Comm./Utilities	977	84.8%	17.9	74.6%	23.2
Wholesale Trade	994	83.9%	17.7	70.9%	23.6
Retail Trade	2252	76.6%	19.6	63.6%	21.0
Finance/Insurance/Real Estate	3121	81.4%	17.7	67.4%	21.3
Professional Services	4728	84.4%	18.7	69.4%	25.3
Nonprofessional Services	916	82.2%	19.6	68.3%	25.1
Size					
Less than 25 employees	8547	85.1%	20.0	68.4%	27.1
25-100 employees	5173	82.7%	19.8	65.1%	25.8
More than 100 employees	11054	82.3%	9.7	74.8%	12.9
Region					
Northeast					
New England	2578	80.1%	15.2	73.1%	18.1
Mid-Atlantic	3525	85.3%	13.0	77.4%	17.9
Midwest					
East North Central	3088	85.0%	14.0	76.6%	19.4
West North Central	1653	85.2%	15.7	70.5%	20.1
South					
South Atlantic	4736	81.0%	10.9	71.4%	15.4
East South Central	487	92.4%	11.7	57.5%	20.1
West South Central	1513	83.8%	18.6	66.5%	19.2
West					
North Mountain	295	83.2%	12.5	71.9%	18.2
South Mountain	865	85.7%	15.6	69.9%	18.0
Pacific	5237	85.4%	13.5	76.8%	18.5
% Low-Wage Workers					
0%	14016	81.8%	9.4	74.9%	12.5
0% - 20%	5975	83.3%	10.6	74.9%	14.9
20% - 40%	1891	89.1%	16.4	67.7%	20.5
40% - 60%	1173	82.3%	18.8	66.9%	25.3
60% - 80%	907	81.9%	21.0	65.0%	27.1
80% - 100%	808	76.2%	21.5	61.5%	24.5

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.9 - CA
Employer Shares of Total Premiums for Employer Health Insurance in California

	# Plans	Single Coverage		Family Coverage	
		Mean	Std Dev	Mean	Std Dev
All Plans	2771	85.1%	13.4	76.9%	18.3
Industry					
Public	734	85.5%	10.5	80.7%	13.1
Agriculture	8	87.8%	14.5	83.2%	14.4
Construction	104	93.1%	15.2	80.0%	28.8
Mining/Manufacturing	368	85.7%	16.6	75.3%	20.1
Transportation/Comm./Utilities	69	91.3%	14.3	78.9%	23.4
Wholesale Trade	119	81.4%	15.3	69.0%	21.8
Retail Trade	225	79.4%	19.4	62.0%	23.4
Finance/Insurance/Real Estate	429	85.6%	15.0	69.0%	19.1
Professional Services	571	82.1%	22.4	58.7%	29.1
Nonprofessional Services	144	87.1%	13.8	78.1%	21.0
Size					
Less than 25 employees	1033	88.4%	17.8	70.3%	27.1
25-100 employees	722	88.0%	17.0	64.8%	24.4
More than 100 employees	1016	84.7%	12.7	78.4%	16.4
% Low-Wage Workers					
0%	1546	82.9%	11.1	75.3%	14.4
0% - 20%	726	89.0%	13.2	83.3%	18.4
20% - 40%	197	85.6%	17.6	72.9%	25.5
40% - 60%	149	88.6%	12.9	74.0%	20.7
60% - 80%	107	87.9%	20.5	68.8%	30.1
80% - 100%	46	73.0%	33.0	44.8%	27.5

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.10 - U.S.
Monthly Employee Contributions for Employer-Sponsored Single Coverage**

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	24774	\$30	\$24	\$23	\$28	\$32
Industry						
Public	7556	\$31	\$21	\$25	\$28	\$32
Agriculture	34	\$17	\$20	\$0	\$5	\$36
Construction	1066	\$21	\$32	\$0	\$0	\$36
Mining/Manufacturing	3130	\$25	\$33	\$0	\$20	\$39
Transportation/Comm./Utilities	977	\$24	\$32	\$0	\$14	\$35
Wholesale Trade	994	\$26	\$31	\$0	\$18	\$41
Retail Trade	2252	\$37	\$40	\$0	\$28	\$54
Finance/Insurance/Real Estate	3121	\$34	\$38	\$0	\$26	\$53
Professional Services	4728	\$27	\$35	\$0	\$14	\$46
Nonprofessional Services	916	\$28	\$31	\$0	\$22	\$43
Size						
Less than 25 employees	8547	\$24	\$36	\$0	\$0	\$40
25-100 employees	5173	\$29	\$38	\$0	\$17	\$46
More than 100 employees	11054	\$31	\$23	\$24	\$28	\$32
Region						
Northeast						
New England	2578	\$38	\$33	\$20	\$31	\$51
Mid-Atlantic	3525	\$26	\$31	\$0	\$24	\$35
Midwest						
East North Central	3088	\$26	\$27	\$0	\$23	\$34
West North Central	1653	\$26	\$35	\$0	\$20	\$35
South						
South Atlantic	4736	\$32	\$24	\$25	\$28	\$35
East South Central	487	\$12	\$19	\$0	\$0	\$18
West South Central	1513	\$30	\$38	\$0	\$17	\$45
West						
North Mountain	295	\$29	\$28	\$16	\$27	\$32
South Mountain	865	\$24	\$30	\$0	\$20	\$37
Pacific	5237	\$25	\$28	\$0	\$26	\$31
% Low-Wage Workers						
0%	14016	\$31	\$22	\$25	\$28	\$32
0% - 20%	5975	\$29	\$24	\$20	\$28	\$32
20% - 40%	1891	\$19	\$39	\$0	\$0	\$28
40% - 60%	1173	\$27	\$30	\$0	\$23	\$46
60% - 80%	907	\$28	\$37	\$0	\$16	\$46
80% - 100%	808	\$38	\$42	\$8	\$27	\$57

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.10 - CA
Monthly Employee Contributions for Employer-Sponsored Single Coverage in California

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	2771	\$25	\$27	\$0	\$26	\$31
Industry						
Public	734	\$26	\$25	\$0	\$27	\$30
Agriculture	8	\$19	\$23	\$0	\$6	\$20
Construction	104	\$9	\$22	\$0	\$0	\$0
Mining/Manufacturing	368	\$21	\$26	\$0	\$17	\$31
Transportation/Comm./Utilities	69	\$15	\$37	\$0	\$0	\$22
Wholesale Trade	119	\$30	\$26	\$0	\$33	\$47
Retail Trade	225	\$27	\$29	\$0	\$20	\$46
Finance/Insurance/Real Estate	429	\$24	\$30	\$0	\$23	\$35
Professional Services	571	\$27	\$34	\$0	\$10	\$51
Nonprofessional Services	144	\$23	\$24	\$0	\$29	\$34
Size						
Less than 25 employees	1033	\$19	\$34	\$0	\$0	\$28
25-100 employees	722	\$19	\$29	\$0	\$0	\$33
More than 100 employees	1016	\$26	\$26	\$0	\$27	\$31
% Low-Wage Workers						
0%	1546	\$29	\$25	\$23	\$28	\$31
0% - 20%	726	\$19	\$27	\$0	\$0	\$29
20% - 40%	197	\$23	\$33	\$0	\$10	\$35
40% - 60%	149	\$19	\$22	\$0	\$8	\$46
60% - 80%	107	\$18	\$29	\$0	\$0	\$39
80% - 100%	46	\$30	\$33	\$0	\$23	\$56

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.11 - U.S.
Monthly Employee Contributions for Employer-Sponsored Family Coverage**

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	24774	\$113	\$78	\$68	\$94	\$135
Industry						
Public	7556	\$107	\$62	\$68	\$94	\$129
Agriculture	34	\$79	\$66	\$0	\$95	\$129
Construction	1066	\$126	\$140	\$0	\$94	\$221
Mining/Manufacturing	3130	\$114	\$109	\$43	\$85	\$163
Transportation/Comm./Utilities	977	\$106	\$108	\$31	\$74	\$129
Wholesale Trade	994	\$122	\$114	\$34	\$102	\$169
Retail Trade	2252	\$171	\$121	\$72	\$143	\$256
Finance/Insurance/Real Estate	3121	\$146	\$112	\$68	\$121	\$218
Professional Services	4728	\$134	\$120	\$33	\$109	\$202
Nonprofessional Services	916	\$131	\$110	\$50	\$107	\$195
Size						
Less than 25 employees	8547	\$134	\$133	\$0	\$109	\$215
25-100 employees	5173	\$148	\$125	\$50	\$128	\$227
More than 100 employees	11054	\$110	\$72	\$68	\$94	\$134
Region						
Northeast						
New England	2578	\$129	\$100	\$66	\$108	\$176
Mid-Atlantic	3525	\$100	\$91	\$49	\$75	\$129
Midwest						
East North Central	3088	\$102	\$95	\$35	\$83	\$135
West North Central	1653	\$120	\$92	\$62	\$110	\$158
South						
South Atlantic	4736	\$123	\$81	\$69	\$99	\$141
East South Central	487	\$182	\$106	\$101	\$184	\$253
West South Central	1513	\$154	\$97	\$87	\$151	\$220
West						
North Mountain	295	\$122	\$94	\$66	\$94	\$142
South Mountain	865	\$160	\$125	\$69	\$122	\$222
Pacific	5237	\$101	\$95	\$54	\$83	\$133
% Low-Wage Workers						
0%	14016	\$109	\$69	\$68	\$94	\$129
0% - 20%	5975	\$111	\$81	\$67	\$94	\$134
20% - 40%	1891	\$145	\$107	\$78	\$149	\$178
40% - 60%	1173	\$137	\$117	\$45	\$129	\$196
60% - 80%	907	\$154	\$133	\$46	\$125	\$233
80% - 100%	808	\$167	\$120	\$62	\$149	\$254

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.11 - CA
Monthly Employee Contributions for Employer-Sponsored Family Coverage in California

	# Plans	Mean	Std Dev	Percentiles		
				25%	50%	75%
All Plans	2771	\$101	\$95	\$56	\$83	\$129
Industry						
Public	734	\$86	\$77	\$59	\$74	\$117
Agriculture	8	\$70	\$56	\$0	\$95	\$106
Construction	104	\$100	\$170	\$0	\$0	\$107
Mining/Manufacturing	368	\$112	\$107	\$37	\$82	\$144
Transportation/Comm./Utilities	69	\$86	\$122	\$0	\$65	\$112
Wholesale Trade	119	\$135	\$122	\$95	\$107	\$160
Retail Trade	225	\$134	\$89	\$78	\$128	\$190
Finance/Insurance/Real Estate	429	\$135	\$117	\$68	\$94	\$161
Professional Services	571	\$175	\$127	\$74	\$163	\$268
Nonprofessional Services	144	\$90	\$95	\$20	\$63	\$107
Size						
Less than 25 employees	1033	\$126	\$139	\$0	\$91	\$210
25-100 employees	722	\$137	\$118	\$68	\$100	\$185
More than 100 employees	1016	\$96	\$88	\$60	\$79	\$123
% Low-Wage Workers						
0%	1546	\$107	\$80	\$66	\$89	\$129
0% - 20%	726	\$71	\$88	\$0	\$63	\$109
20% - 40%	197	\$113	\$114	\$0	\$88	\$175
40% - 60%	149	\$126	\$124	\$37	\$120	\$147
60% - 80%	107	\$168	\$167	\$0	\$147	\$313
80% - 100%	46	\$187	\$92	\$134	\$194	\$254

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.12 - U.S.
Monthly Premiums for Employer-Sponsored Health Insurance by Plan Type

	# Plans	Total Premium		Employee Contribution		Employer Share
		Mean	Std Dev	Mean	Std Dev	Mean
Single Coverage						
HMO	11210	\$163	\$33	\$29	\$18	83%
PPO/POS	10484	\$183	\$56	\$35	\$35	82%
Indemnity	3080	\$191	\$63	\$33	\$35	83%
Family Coverage						
HMO	11210	\$417	\$69	\$106	\$63	75%
PPO/POS	10484	\$446	\$130	\$129	\$102	72%
Indemnity	3080	\$466	\$155	\$123	\$108	73%

Source: 1997 RWJF Employer Health Insurance Survey

Table 3.12 - CA
Monthly Premiums for Employer-Sponsored Health Insurance in California by Plan Type

	# Plans	Total Premium		Employee Contribution		Employer Share
		Mean	Std Dev	Mean	Std Dev	Mean
Single Coverage						
HMO	1759	\$159	\$40	\$23	\$20	85%
PPO/POS	846	\$195	\$71	\$31	\$36	84%
Indemnity	166	\$188	\$54	\$19	\$29	89%
Family Coverage						
HMO	1759	\$406	\$87	\$91	\$82	78%
PPO/POS	846	\$472	\$172	\$126	\$113	74%
Indemnity	166	\$464	\$141	\$83	\$108	81%

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 3.13 - U.S.
Cost-Sharing Characteristics for Employer-Sponsored Health Plans**

	# Plans	Annual Deductible for Plan Use (\$)					Coinsurance Rate (%)				
		Mean	Std Dev	Percentiles			Mean	Std Dev	Percentiles		
				25%	50%	75%			25%	50%	75%
All Plans	24774	\$47	\$142	\$0	\$0	\$0	14	7	10	10	20
Industry											
Public	7556	\$18	\$78	\$0	\$0	\$0	14	6	10	10	20
Agriculture	34	\$92	\$130	\$0	\$0	\$200	18	10	10	20	20
Construction	1066	\$215	\$288	\$0	\$200	\$250	18	9	10	20	20
Mining/Manufacturing	3130	\$148	\$245	\$0	\$0	\$250	17	9	10	20	20
Transportation/Comm./Utilities	977	\$187	\$274	\$0	\$0	\$250	18	8	10	20	20
Wholesale Trade	994	\$148	\$221	\$0	\$0	\$250	19	10	10	20	20
Retail Trade	2252	\$212	\$235	\$0	\$200	\$250	19	8	20	20	20
Finance/Insurance/Real Estate	3121	\$155	\$258	\$0	\$0	\$250	18	8	15	20	20
Professional Services	4728	\$132	\$224	\$0	\$0	\$240	17	10	10	20	20
Nonprofessional Services	916	\$181	\$227	\$0	\$150	\$300	20	12	10	20	20
Size											
Less than 25 employees	8547	\$177	\$250	\$0	\$50	\$250	17	11	10	20	20
25-100 employees	5173	\$154	\$219	\$0	\$0	\$250	19	10	10	20	20
More than 100 employees	11054	\$38	\$128	\$0	\$0	\$0	14	7	10	10	20
Region											
Northeast											
New England	2578	\$54	\$127	\$0	\$0	\$0	16	8	10	20	20
Mid-Atlantic	3525	\$64	\$149	\$0	\$0	\$0	15	8	10	20	20
Midwest											
East North Central	3088	\$132	\$237	\$0	\$0	\$250	15	9	10	20	20
West North Central	1653	\$133	\$247	\$0	\$0	\$250	18	9	10	20	20
South											
South Atlantic	4736	\$45	\$128	\$0	\$0	\$0	15	7	10	10	20
East South Central	487	\$135	\$204	\$0	\$0	\$200	19	10	10	20	20
West South Central	1513	\$134	\$245	\$0	\$0	\$200	18	9	10	20	20
West											
North Mountain	295	\$81	\$171	\$0	\$0	\$100	16	7	10	20	20
South Mountain	865	\$115	\$155	\$0	\$50	\$200	18	7	10	20	20
Pacific	5237	\$63	\$174	\$0	\$0	\$0	14	7	10	10	20
% Low-Wage Workers											
0%	14016	\$37	\$130	\$0	\$0	\$0	14	7	10	10	20
0% - 20%	5975	\$43	\$129	\$0	\$0	\$0	14	7	10	10	20
20% - 40%	1891	\$105	\$208	\$0	\$0	\$200	16	9	10	20	20
40% - 60%	1173	\$139	\$214	\$0	\$0	\$250	19	11	10	20	20
60% - 80%	907	\$171	\$255	\$0	\$100	\$250	18	12	10	20	20
80% - 100%	808	\$222	\$246	\$0	\$250	\$300	17	9	10	20	20

Table 3.13 - CA
Cost-Sharing Characteristics for Employer-Sponsored Health Plans in California

	# Plans	Annual Deductible for Plan Use (\$)					Coinsurance Rate (%)				
		Mean	Std Dev	Percentiles			Mean	Std Dev	Percentiles		
				25%	50%	75%			25%	50%	75%
All Plans	2771	\$63	\$181	\$0	\$0	\$0	14	7	10	10	20
Industry											
Public	734	\$27	\$88	\$0	\$0	\$0	12	6	10	10	16
Agriculture	8	\$168	\$137	\$0	\$250	\$250	14	6	10	20	20
Construction	104	\$342	\$684	\$0	\$0	\$250	16	10	10	20	20
Mining/Manufacturing	368	\$86	\$190	\$0	\$0	\$100	16	8	10	20	20
Transportation/Comm./Utilities	69	\$109	\$153	\$0	\$0	\$200	16	6	10	20	20
Wholesale Trade	119	\$132	\$184	\$0	\$0	\$250	19	8	20	20	20
Retail Trade	225	\$87	\$142	\$0	\$0	\$200	17	10	10	20	20
Finance/Insurance/Real Estate	429	\$173	\$324	\$0	\$0	\$200	18	8	15	20	20
Professional Services	571	\$177	\$333	\$0	\$0	\$200	14	9	10	10	20
Nonprofessional Services	144	\$170	\$198	\$0	\$250	\$300	24	14	10	20	40
Size											
Less than 25 employees	1033	\$128	\$239	\$0	\$0	\$200	17	11	10	20	20
25-100 employees	722	\$95	\$171	\$0	\$0	\$200	18	9	10	20	20
More than 100 employees	1016	\$56	\$177	\$0	\$0	\$0	13	7	10	10	20
% Low-Wage Workers											
0%	1546	\$46	\$165	\$0	\$0	\$0	14	7	10	10	20
0% - 20%	726	\$66	\$159	\$0	\$0	\$0	13	7	10	10	20
20% - 40%	197	\$143	\$280	\$0	\$0	\$200	15	10	10	10	20
40% - 60%	149	\$73	\$197	\$0	\$0	\$0	17	7	10	20	20
60% - 80%	107	\$155	\$291	\$0	\$0	\$250	13	9	8	10	20
80% - 100%	46	\$195	\$235	\$0	\$0	\$500	15	11	10	20	20

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.14 - U.S.
Monthly Premiums for Employer Health Insurance by Cost-Sharing Features

	# Plans	Total Premium		Employee Contribution		Employer Share
		Mean	Std Dev	Mean	Std Dev	Mean
Single Coverage						
Deductible						
Yes	8912	\$190	\$69	\$35	\$40	82%
No	15862	\$165	\$34	\$29	\$20	83%
Coinsurance Rate						
Less than/equal to 10%	9424	\$167	\$37	\$30	\$23	83%
More than 10%	15350	\$172	\$49	\$31	\$27	82%
Family Coverage						
Deductible						
Yes	8912	\$461	\$160	\$137	\$115	70%
No	15862	\$420	\$73	\$108	\$66	75%
Coinsurance Rate						
Less than/equal to 10%	9424	\$425	\$82	\$107	\$72	76%
More than 10%	15350	\$429	\$108	\$119	\$84	73%

Source: 1997 RWJF Employer Health Insurance Survey.

Table 3.14 - CA
Monthly Premiums for Employer Health Insurance in California by Cost-Sharing Features

	# Plans	Total Premium		Employee Contribution		Employer Share
		Mean	Std Dev	Mean	Std Dev	Mean
Single Coverage						
Deductible						
Yes	618	\$196	\$77	\$31	\$38	84%
No	2153	\$165	\$45	\$24	\$23	86%
Coinsurance Rate						
Less than/equal to 10%	1355	\$168	\$46	\$23	\$25	86%
More than 10%	1416	\$176	\$65	\$29	\$29	83%
Family Coverage						
Deductible						
Yes	618	\$475	\$185	\$143	\$128	70%
No	2153	\$417	\$102	\$90	\$82	79%
Coinsurance Rate						
Less than/equal to 10%	1355	\$428	\$117	\$88	\$90	80%
More than 10%	1416	\$429	\$136	\$122	\$98	72%

Source: 1997 RWJF Employer Health Insurance Survey.

**Table 4.1 - U.S.
Wages, Employer Health Insurance, and Demographics in the Low-Skilled Labor Market**

	All	No Access to Employer Insurance			Access to Employer Insurance		
		Mean	Std Dev	Median	Mean	Std Dev	Median
All	\$11.06	\$8.57	\$6.01	\$7.50	\$11.84	\$6.21	\$10.50
Gender							
Male	\$12.01	\$9.45	\$6.67	\$8.00	\$12.81	\$6.59	\$11.80
Female	\$9.65	\$7.28	\$4.56	\$6.50	\$10.40	\$5.29	\$9.38
Education							
No high school degree	\$9.16	\$7.81	\$5.83	\$6.80	\$9.99	\$4.63	\$9.00
High school degree	\$11.63	\$9.02	\$6.06	\$8.00	\$12.27	\$6.45	\$11.00
Age							
25-35	\$10.05	\$8.14	\$4.41	\$7.03	\$10.84	\$4.99	\$9.90
35-45	\$11.62	\$9.14	\$7.31	\$7.50	\$12.35	\$7.03	\$11.00
45-55	\$11.78	\$8.62	\$6.68	\$7.40	\$12.45	\$6.30	\$11.43
Race							
White (Non-Hispanic)	\$11.77	\$9.05	\$6.31	\$8.00	\$12.43	\$6.53	\$11.23
White (Hispanic)	\$9.37	\$7.84	\$6.10	\$6.70	\$10.38	\$5.06	\$9.00
Black	\$9.64	\$7.91	\$4.33	\$7.00	\$10.23	\$4.91	\$9.10
Other	\$9.90	\$8.68	\$5.84	\$7.50	\$10.57	\$5.11	\$9.25
Self-Reported Health							
Excellent/Very good	\$11.33	\$8.62	\$5.57	\$7.50	\$12.13	\$6.51	\$10.99
Good	\$10.75	\$8.79	\$7.16	\$7.10	\$11.43	\$5.59	\$10.03
Fair/Poor	\$9.67	\$7.22	\$3.71	\$6.40	\$10.54	\$5.14	\$9.40
Marital Status							
No	\$10.23	\$8.25	\$6.69	\$7.00	\$10.98	\$5.68	\$9.78
Yes	\$11.47	\$8.77	\$5.54	\$7.50	\$12.23	\$6.40	\$11.00
Family Structure							
Have Children	\$11.15	\$8.73	\$6.00	\$7.50	\$11.85	\$5.89	\$10.67
No Children	\$10.98	\$8.45	\$6.01	\$7.20	\$11.84	\$6.50	\$10.45

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997.
Sample consists of low-skilled, fulltime workers, aged 25-55 years; sample size is 9197.

Table 4.1 - CA
Wages, Employer Health Insurance, and Demographics
in California's Low-Skilled Labor Market

	All	No Access to Employer Insurance			Access to Employer Insurance		
		Mean	Std Dev	Median	Mean	Std Dev	Median
All	\$11.66	\$8.88	\$7.12	\$7.00	\$13.15	\$9.04	\$11.50
Gender							
Male	\$12.71	\$10.06	\$8.37	\$7.50	\$14.07	\$10.48	\$12.00
Female	\$9.77	\$6.90	\$3.47	\$6.18	\$11.43	\$4.97	\$10.71
Education							
No high school degree	\$9.12	\$7.94	\$5.19	\$6.30	\$10.29	\$4.99	\$9.00
High school degree	\$13.44	\$10.21	\$9.02	\$7.76	\$14.49	\$10.13	\$12.56
Age							
25-35	\$10.55	\$8.64	\$5.83	\$7.00	\$11.86	\$5.88	\$10.30
35-45	\$12.79	\$9.67	\$9.57	\$7.00	\$14.35	\$12.27	\$12.00
45-55	\$12.04	\$7.90	\$3.48	\$7.50	\$13.48	\$6.93	\$12.00
Race							
White (Non-Hispanic)	\$14.95	\$11.98	\$10.73	\$8.56	\$15.85	\$11.68	\$13.85
White (Hispanic)	\$9.48	\$7.49	\$3.94	\$6.50	\$11.01	\$5.21	\$9.60
Black	\$11.11	\$10.35	\$7.20	\$6.29	\$11.54	\$4.68	\$9.75
Other	\$10.17	\$9.12	\$8.46	\$7.50	\$10.80	\$5.82	\$9.00
Self-Reported Health							
Excellent/Very good	\$12.06	\$9.17	\$8.00	\$7.00	\$13.52	\$9.94	\$11.75
Good	\$10.88	\$8.55	\$5.31	\$7.00	\$12.28	\$6.36	\$10.50
Fair/Poor	\$10.53	\$7.13	\$3.67	\$6.00	\$12.90	\$7.88	\$11.00
Marital Status							
No	\$11.53	\$9.14	\$9.30	\$6.30	\$12.84	\$8.17	\$10.90
Yes	\$11.73	\$8.74	\$5.62	\$7.33	\$13.32	\$9.45	\$11.89
Family Structure							
Have Children	\$10.91	\$8.19	\$5.26	\$7.00	\$12.53	\$9.40	\$10.71
No Children	\$12.87	\$10.22	\$9.65	\$7.50	\$14.08	\$8.39	\$12.30

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997.
Sample consists of low-skilled, full-time workers, aged 25-55 years in California; sample size is 1019.

Table 4.2 - U.S.
Wages, Employer Health Insurance, and Job Attributes in the Low-Skilled Labor Market

	All	No Access to Employer Insurance			Access to Employer Insurance		
		Mean	Std Dev	Med	Mean	Std Dev	Med
Industry							
Public	\$11.70	\$7.65	\$4.75	\$7.50	\$12.14	\$5.44	\$11.43
Agriculture	\$7.28	\$6.66	\$6.05	\$6.00	\$8.66	\$3.67	\$8.18
Construction	\$13.21	\$11.22	\$5.20	\$10.00	\$14.69	\$6.81	\$13.86
Mining/Manufacturing	\$11.57	\$8.29	\$4.08	\$7.40	\$12.04	\$5.24	\$11.01
Transportation*	\$13.40	\$10.17	\$10.05	\$8.00	\$14.16	\$6.52	\$13.95
Wholesale Trade	\$11.42	\$9.02	\$5.64	\$7.06	\$11.90	\$6.76	\$10.35
Retail Trade	\$9.34	\$7.67	\$7.12	\$6.50	\$10.10	\$5.10	\$8.89
Finance/Insurance*	\$10.85	\$8.69	\$5.17	\$7.55	\$11.71	\$6.72	\$10.00
Professional Services	\$9.99	\$8.31	\$4.82	\$7.10	\$10.50	\$6.60	\$9.03
Nonprof. Services	\$9.13	\$7.39	\$4.17	\$6.50	\$10.27	\$10.87	\$8.00
Occupation							
Executive/Managerial	\$13.53	\$10.16	\$7.23	\$8.46	\$14.24	\$10.78	\$12.45
Professional Specialty	\$12.94	\$9.89	\$6.33	\$8.00	\$13.74	\$7.80	\$12.00
Technologists	\$13.50	\$15.75	\$16.09	\$11.00	\$13.09	\$6.28	\$12.00
Sales	\$10.64	\$8.42	\$8.74	\$7.00	\$11.42	\$7.15	\$9.60
Administrative support	\$10.89	\$8.16	\$6.16	\$8.00	\$11.32	\$4.79	\$10.26
Service	\$8.03	\$6.99	\$3.67	\$6.23	\$8.63	\$3.90	\$7.60
Protective Service	\$11.65	\$7.16	\$1.91	\$7.00	\$12.53	\$6.01	\$12.00
Farming/Forestry/Fish	\$7.78	\$6.72	\$6.12	\$6.00	\$9.27	\$4.26	\$8.50
Mechanics	\$13.26	\$10.06	\$4.97	\$9.00	\$13.96	\$6.07	\$13.00
Construction	\$13.79	\$11.52	\$4.97	\$10.00	\$15.20	\$6.30	\$14.50
Precision Production	\$12.38	\$8.91	\$4.28	\$8.00	\$12.92	\$5.47	\$12.00
Operators/Laborers*	\$10.42	\$7.58	\$3.96	\$7.00	\$11.02	\$4.57	\$10.00
Transportation*	\$10.76	\$8.79	\$5.33	\$7.50	\$11.47	\$4.95	\$10.33
Size							
Less than 25	\$10.12	\$8.51	\$6.20	\$7.50	\$11.29	\$6.50	\$10.00
25-100	\$10.84	\$8.50	\$5.78	\$7.15	\$11.49	\$5.65	\$10.00
More than 100	\$11.99	\$8.79	\$5.47	\$7.50	\$12.33	\$6.31	\$11.20

*Full description of industries are Finance/Communications/Public Utilities and Finance/Insurance/Real Estate.
 Full description of occupations are Operators/Fabricators/Laborers and Transportation/Material Moving.
 Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997.
 Sample consists of low-skilled, fulltime workers, aged 25-55 years; sample size is 9197

Table 4.2 - CA
Wages, Employer Health Insurance, and Job Attributes
in California's Low-Skilled Labor Market

	All	No Access to Employer Insurance			Access to Employer Insurance		
		Mean	Std Dev	Med	Mean	Std Dev	Med
Industry							
Public	\$12.66	\$6.06	\$2.70	\$5.33	\$13.70	\$5.08	\$13.16
Agriculture	\$7.08	\$6.30	\$3.44	\$6.00	\$8.22	\$3.72	\$8.00
Construction	\$15.80	\$13.06	\$7.18	\$14.00	\$19.12	\$7.87	\$17.75
Mining/Manufacturing	\$11.28	\$7.78	\$3.83	\$6.50	\$12.41	\$6.27	\$11.35
Transportation*	\$17.04	\$20.27	\$20.56	\$12.00	\$16.17	\$5.66	\$16.52
Wholesale Trade	\$11.60	\$8.59	\$4.23	\$7.00	\$12.65	\$5.92	\$11.60
Retail Trade	\$9.85	\$7.81	\$3.84	\$6.50	\$11.36	\$4.88	\$9.66
Finance/Insurance*	\$12.32	\$9.39	\$7.16	\$8.00	\$14.11	\$11.98	\$10.71
Professional Services	\$10.28	\$8.15	\$4.54	\$7.60	\$11.41	\$5.92	\$9.79
Nonprof. Services	\$11.50	\$6.92	\$4.32	\$6.31	\$15.53	\$25.82	\$10.00
Occupation							
Executive/Managerial	\$17.58	\$13.59	\$11.56	\$10.00	\$18.60	\$22.16	\$13.59
Professional Specialty	\$15.17	\$11.53	\$7.93	\$8.33	\$16.23	\$11.39	\$12.50
Technologists	\$18.98	-	-	-	\$12.84	\$8.65	\$12.00
Sales	\$11.51	\$8.67	\$4.35	\$7.25	\$13.30	\$7.88	\$10.48
Administrative support	\$11.69	\$7.38	\$3.90	\$8.00	\$12.77	\$5.18	\$11.75
Service	\$8.32	\$7.11	\$2.97	\$6.50	\$9.54	\$3.82	\$9.00
Protective Service	\$14.30	\$6.83	\$0.21	\$7.00	\$16.08	\$4.12	\$16.52
Farming/Forestry/Fish	\$7.16	\$6.23	\$3.36	\$6.00	\$8.57	\$3.91	\$8.00
Mechanics	\$14.13	\$7.87	\$2.87	\$7.50	\$15.70	\$5.78	\$16.00
Construction	\$15.25	\$13.67	\$6.24	\$14.38	\$17.84	\$8.22	\$17.50
Precision Production	\$12.51	\$6.92	\$2.31	\$7.00	\$14.09	\$6.76	\$14.30
Operators/laborers*	\$9.42	\$7.06	\$2.63	\$6.00	\$10.58	\$5.01	\$9.00
Transportation*	\$11.93	\$9.60	\$7.77	\$7.00	\$13.15	\$5.51	\$12.30
Size							
Less than 25	\$10.27	\$8.34	\$5.26	\$7.00	\$12.22	\$7.08	\$10.30
25-100	\$10.99	\$9.28	\$8.67	\$7.00	\$11.92	\$5.50	\$10.48
More than 100	\$13.88	\$9.84	\$8.68	\$7.00	\$14.76	\$11.79	\$13.13

*Full description of industries are Finance/Communications/Public Utilities and Finance/Insurance/Real Estate.

Full description of occupations are Operators/Fabricators/Laborers and Transportation/Material Moving.

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997.

Sample consists of low-skilled, full-time workers, aged 25-55 years in California; sample size is 1019. Cells left blank denote sample sizes too small to be meaningful (0-2 individuals).

Table 5.1
Self-Reported Health Statuses of Young and Old Job Changers

	Young		Old	
	Mean	Std Dev	Mean	Std Dev
Excellent	0.33	0.47	0.24	0.43
Very Good	0.37	0.48	0.33	0.47
Good	0.26	0.44	0.33	0.47
Fair	0.03	0.18	0.08	0.27
Poor	0.01	0.09	0.02	0.15

Note: Means represent the fraction of individuals reporting each health status.

Source: SIPP 1996 Panel, Topical Module 6 with reference period 11/97 through 2/98. Sample consists of low-skilled, full-time workers who change jobs. Young workers are defined as 25 – 35 years old (sample size is 1083); old workers are 36-55 years old (sample size is 1513).

Table 5.2
Characteristics of Young, Low-Skilled Job Changers

Variable	Occupation Stayers		Occupation Switchers	
	Mean	Std Dev	Mean	Std Dev
Individual Attributes				
High school dropout	25.0%	43.3	25.3%	43.4
Male	64.0%	48.0	68.1%	46.6
30 or younger	49.4%	50.0	53.0%	49.9
One or more children	65.1%	47.7	66.8%	47.1
Married	61.0%	48.8	61.4%	48.7
Region				
Northeast	22.3%	41.6	13.2%	33.9
Midwest	21.4%	41.0	27.3%	44.5
South	35.5%	47.9	40.1%	49.0
West	20.9%	40.6	19.5%	39.6
Attributes of Job before Change				
HI Access*	61.3%	43.1	62.9%	41.8
HI Enrollment	45.7%	49.8	44.0%	49.6
Attributes of Job after Change				
HI Access*	65.8%	42.2	62.8%	42.3
HI Enrollment	53.7%	49.9	45.8%	49.8
Wages				
Before job change	\$9.87	4.7	\$8.98	4.4
After job change	\$10.74	5.3	\$9.56	4.7
Change	\$0.87	4.2	\$0.58	4.4
Number of observations	611		631	

*HI Access is based on predicted probabilities, as described in the text.

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998.

Table 6.1
Compensating Wage Differentials for Health Insurance in the Low-Skilled Labor Market
Dependent Variable = Wage Change Level

Independent Variables	Restricted: Switcher=Stayer		Unrestricted	
	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Valuation of Health Insurance Access	0.23	(0.28)		
Occupation Stayer			0.74*	(0.40)
Occupation Switcher			-0.22	(0.38)
Net Growth	0.78‡	(0.13)	0.80‡	(0.13)
Occupation Differentials				
Professional Specialty	0.83	(0.66)	0.88	(0.66)
Technologists	-2.25†	(0.90)	-2.18†	(0.90)
Sales	-0.80	(0.55)	-0.76	(0.55)
Administrative Support	-0.68	(0.54)	-0.69	(0.54)
Private and Nonprivate Service	-2.05‡	(0.53)	-2.02‡	(0.53)
Protective Service	-0.29	(1.22)	-0.16	(1.22)
Farming, Forestry, and Fish	-0.32	(0.95)	-0.21	(0.95)
Mechanics	-0.37	(0.63)	-0.36	(0.63)
Construction	-0.99	(0.66)	-0.92	(0.66)
Precision Production	-0.69	(0.73)	-0.67	(0.73)
Operators, Fabricators, Laborers	-0.53	(0.56)	-0.50	(0.56)
Transportation, Material Moving	-0.94*	(0.52)	-0.90*	(0.52)
Industry Differentials				
Agriculture	-1.60	(1.18)	-1.54	(1.18)
Construction	-0.34	(0.91)	-0.30	(0.91)
Mining/Manufacturing	0.00	(0.85)	0.03	(0.85)
Transportation/Comm./Utilities	-1.48	(0.92)	-1.44	(0.92)
Wholesale Trade	-0.35	(0.93)	-0.29	(0.93)
Retail Trade	-0.04	(0.86)	0.03	(0.86)
Finance/Insurance/Real Estate	0.20	(0.88)	0.24	(0.88)
Professional Services	0.07	(0.89)	0.10	(0.89)
Nonprofessional Services	0.38	(0.92)	0.41	(0.92)
Differential for Employer Size				
25-100 employees	0.19	(0.26)	0.15	(0.26)
More than 100 employees	0.64†	(0.27)	0.61†	(0.27)
Union Status Differential	1.51‡	(0.45)	1.49‡	(0.45)
Involuntary Separation	-0.91†	(0.43)	-0.95†	(0.43)
R²	0.06		0.06	
F-Stat (Test: Stayer=Switcher)			3.00*	

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Sample size is 1241. Excluded variables are the executive/manager occupation, public industry, and small (less than 25 employees) employers. Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.2
Examining Effects of Industry and Occupation Controls in Main Specification
Dependent Variable = Wage Change Level

Independent Variables	No Industry Controls		No Occupation Controls		No Industry or Occupation Controls	
	Restricted	Unrestricted	Restricted	Unrestricted	Restricted	Unrestricted
Valuation of Health Insurance Access	0.19 (0.28)		0.18 (0.28)		0.11 (0.28)	
Occupation Stayer		0.72* (0.40)		0.72* (0.41)		0.73* (0.41)
Occupation Switcher		-0.29 (0.38)		-0.33 (0.38)		-0.41 (0.38)
Occupation Differentials	Yes	Yes	No	No	No	No
Industry Differentials	No	No	Yes	Yes	No	No
R²	0.05	0.05	0.03	0.03	0.02	0.02
F-Stat (Test: Stayer=Switcher)		3.31*		3.59*		4.22†

Note: Standard errors are listed below parameter estimates in parentheses.

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Sample size is 1241. All models include an intercept and dummies to capture change in employer size, union status, and whether the job change was the result of an involuntary separation. Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.3
Compensating Wage Differential for Health Insurance in the Low-Skilled Labor Market
Different Sample Compositions According to Household Relationship
Dependent Variable = Wage Change Level

Independent Variables	HH Heads		Heads & Spouses		Nonspouse Dependents	
	Restricted	Unrestricted	Restricted	Unrestricted	Restricted	Unrestricted
Valuation of Health Insurance Access	0.53 (0.35)		0.23 (0.30)		-0.53 (0.75)	
Occupation Stayer		1.19† (0.50)		0.83* (0.43)		0.07 (1.16)
Occupation Switcher		-0.08 (0.48)		-0.35 (0.42)		-0.92 (0.94)
Occupation Differentials	Yes	Yes	Yes	Yes	Yes	Yes
Industry Differentials	Yes	Yes	Yes	Yes	Yes	Yes
R²	0.10	0.10	0.07	0.07	0.29	0.29
F-Stat (Test: Stayer=Switcher)		3.40†		3.87†		0.46
Sample Size	685		1004		173	

Note: Standard errors are listed below parameter estimates in parentheses.

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who changed jobs between July 1996 and October 1998. All models include an intercept and dummies to capture change in employer size, union status, and whether the job change was the result of an involuntary separation. Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.4
Wage Change Regression for Older Low-Skilled Workers
Dependent Variable = Wage Change Level

Independent Variables	Restricted: Switcher=Stayer		Unrestricted	
	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Valuation of Health Insurance Access	-0.72†	(0.28)		
Occupation Stayer			-0.82†	(0.40)
Occupation Switcher			-0.62	(0.39)
Net Growth	0.29†	(0.12)	0.29†	(0.10)
Occupation Differentials				
Professional Specialty	-0.80	(0.64)	-0.79	(0.65)
Technologists	-1.19	(0.78)	-1.19	(0.78)
Sales	-0.91*	(0.54)	-0.91*	(0.54)
Administrative Support	-0.79*	(0.47)	-0.78*	(0.47)
Private and Nonprivate Service	-0.32	(0.51)	-0.32	(0.51)
Protective Service	0.16	(1.13)	0.17	(0.13)
Farming, Forestry, and Fish	-2.69‡	(0.93)	-2.68‡	(0.93)
Mechanics	-0.60	(0.62)	-0.60	(0.62)
Construction	0.41	(0.60)	0.41	(0.60)
Precision Production	-1.21*	(0.62)	-1.22*	(0.62)
Operators, Fabricators, Laborers	-1.07†	(0.53)	-1.06†	(0.53)
Transportation, Material Moving	-1.37‡	(0.50)	-1.37‡	(0.50)
Industry Differentials				
Agriculture	0.37	(1.10)	0.35	(0.10)
Construction	1.15	(0.73)	1.13	(0.73)
Mining/Manufacturing	0.74	(0.67)	0.74	(0.67)
Transportation/Comm./Utilities	-0.27	(0.71)	-0.28	(0.71)
Wholesale Trade	-0.58	(0.76)	-0.59	(0.76)
Retail Trade	-0.37	(0.67)	-0.38	(0.67)
Finance/Insurance/Real Estate	0.22	(0.65)	0.22	(0.65)
Professional Services	0.18	(0.65)	0.18	(0.65)
Nonprofessional Services	0.52	(0.81)	0.51	(0.81)
Differential for Employer Size				
25-100 employees	0.34	(0.26)	0.34	(0.26)
More than 100 employees	0.58†	(0.27)	0.58†	(0.27)
Union Status Differential	1.21‡	(0.35)	1.22‡	(0.35)
Involuntary Separation	-0.22	(0.45)	-0.22	(0.45)
R²	0.05		0.05	
F-Stat (Test: Stayer=Switcher)			0.12	

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 35-55 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Sample size is 1765. Excluded variables are the executive/manager occupation, public industry, and small (less than 25 employees) employers. Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.5
Characteristics of Different Low-Skilled Labor Markets
Percent of employees in each category

	HS Dropout	HS Grad	North-east	Mid-west	South	West	CA
Employer Health Insurance							
HI Access	61.9	80.4	79.1	80.8	75.0	69.6	65.0
HI Enroll	49.4	67.0	66.0	68.4	60.8	57.6	54.0
HI Take-up	79.7	83.4	83.5	84.6	81.0	82.7	83.1
Hourly Wage (\$)							
Median	\$8.00	\$10.28	\$10.63	\$10.06	\$8.98	\$10.00	\$9.75
Mean	\$9.16	\$11.63	\$12.20	\$11.47	\$9.97	\$11.56	\$11.66
Health							
Excellent/Very Good	59.5	67.9	68.7	65.4	63.9	67.9	67.2
Good	31.7	26.6	25.3	27.8	29.0	27.7	28.5
Fair/Poor	8.8	5.6	6.0	6.8	7.1	4.4	4.4
Industry							
Public	1.8	5.6	5.0	3.9	5.3	4.3	3.2
Agriculture	8.0	1.4	0.9	1.9	2.5	6.7	8.6
Construction	12.3	8.3	8.6	8.4	9.7	9.9	7.9
Mining/Manufacturing	29.9	26.5	23.8	33.8	27.4	22.4	25.1
Transportation/Comm./Utilities	5.2	9.3	8.4	8.2	8.5	8.2	8.3
Wholesale Trade	4.4	5.0	5.6	5.3	4.4	4.6	5.5
Retail Trade	15.4	15.8	15.7	14.7	15.8	17.0	15.4
Finance/Insurance/Real Estate	8.8	11.0	12.0	10.4	9.8	10.6	11.5
Professional Services	8.6	12.9	15.1	10.4	12.3	10.2	8.5
Nonprofessional Services	5.7	4.2	4.9	3.2	4.2	6.3	6.1
Employer Size							
Less than 25 employees	39.4	32.5	35.8	30.7	34.2	36.3	36.4
25-100 employees	27.2	24.9	23.2	25.4	24.3	29.6	31.5
More than 100 employees	33.4	42.6	40.9	43.8	41.5	34.2	32.1

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997. Sample consists of low-skilled, full-time workers, aged 25-55 years.

Table 6.6
Compensating Wage Differentials in the Low and Very Low-Skilled Labor Markets
Dependent Variable = Wage Change Level

Independent Variables	Very Low Skill (no high school degree)	Low Skill (high school degree)
Valuation of Health Insurance Access		
Occupation Stayer	0.31 (0.66)	0.88* (0.50)
Occupation Switcher	0.67 (0.63)	-0.57 (0.49)
Net Growth	0.58† (0.22)	0.84‡ (0.15)
R²	0.14	0.06
Sample Size	299	941

Note: Standard errors are listed below parameter estimates in parentheses.

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Other independent variables include occupation, industry, employer size, and union change, and involuntary separation. Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.7
Compensating Wage Differentials in Regional Low-Skilled Labor Markets
Dependent Variable = Wage Change Level

Independent Variables	Northeast	Midwest	South	West
Valuation of Health Insurance Access				
Occupation Stayer	1.06 (1.03)	0.68 (0.89)	0.66 (0.65)	0.47 (0.76)
Occupation Switcher	-0.95 (1.31)	0.16 (0.78)	-0.08 (0.57)	-0.16 (0.98)
Net Growth	0.75† (0.36)	0.93‡ (0.25)	0.52† (0.20)	0.78‡ (0.28)
R²	0.14	0.22	0.09	0.21
Sample Size	206	319	466	247

Note: Standard errors are listed below parameter estimates in parentheses.

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Other independent variables include occupation, industry, employer size, and union change, and involuntary separation. Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.8
Comparing Health Insurance Valuations in Regional Labor Markets and U.S. Labor Market
Dependent Variable = Wage Change Level

Independent Variables	Northeast	Midwest	South	West
Valuation of Health Insurance Access				
Occupation Stayer				
United States	0.64 (0.45)	0.83* (0.45)	0.72 (0.50)	0.76 (0.47)
Regional adjustment	0.50 (1.02)	-0.45 (1.01)	0.04 (0.84)	-0.09 (0.93)
Occupation Switcher				
United States	-0.13 (0.41)	-0.20 (0.44)	-0.43 (0.51)	-0.19 (0.41)
Regional adjustment	-0.59 (1.04)	-0.09 (0.85)	0.48 (0.75)	-0.20 (1.07)
Net Growth	0.79‡ (0.13)	0.79‡ (0.13)	0.79‡ (0.13)	0.79‡ (0.13)
R²	0.06	0.06	0.06	0.06

Note: Standard errors are listed below parameter estimates in parentheses.

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Sample size for all regressions is 1241. Other independent variables include occupation, industry, employer size, and union change, and involuntary separation.

Statistical significance: ‡ p < .01, † p < .05, * p < .10.

Table 6.9
Comparing Health Insurance Valuations in California Labor Markets and U.S. Labor Markets
Dependent Variable = Wage Change Level

Independent Variables	U.S.	West	U.S. HS Dropout	U.S. HS Graduate
Valuation of Health Insurance Access				
Occupation Stayer				
U.S. market	0.84* (0.43)	1.08 (1.11)	0.52 (0.72)	0.95* (0.54)
California adjustment	-0.79 (1.19)	-1.14 (1.52)	-1.32 (1.80)	-0.57 (1.52)
Occupation Switcher				
U.S. market	-0.25 (0.40)	-0.44 (1.37)	0.59 (0.67)	-0.56 (0.50)
California adjustment	0.42 (1.48)	0.58 (2.00)	0.65 (1.79)	-0.28 (2.56)
Net Growth	0.79‡ (0.13)	0.79‡ (0.28)	0.56† (0.22)	0.85‡ (0.15)
R²	0.06	0.21	0.14	0.06
Sample Size	1241	247	299	941

Note: Standard errors are listed below parameter estimates in parentheses.

Source: SIPP, 1996 Panel. Sample consists of Californian low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Other independent variables include occupation, industry, employer size, and union change, and involuntary separation. Statistical significance:‡ p < .01, † p < .05, * p < .10.

Appendix

Table A.1 Regional Definitions

Northeast	Midwest	South	West
<i>New England</i>	<i>East North Central</i>	<i>South Atlantic</i>	<i>North Mountain</i>
Connecticut	Illinois	Delaware	Colorado
Maine	Indiana	Washington, D.C.	Idaho
Massachusetts	Michigan	Florida	Montana
New Hampshire	Ohio	Georgia	
Rhode Island	Wisconsin	Maryland	<i>South Mountain</i>
Vermont		North Carolina	Arizona
	<i>West North Central</i>	South Carolina	Nevada
<i>Mid-Atlantic</i>	Iowa	Virginia	New Mexico
New Jersey	Kansas	West Virginia	Utah
New York	Minnesota		
Pennsylvania	Missouri	<i>East South Central</i>	<i>Pacific</i>
	Nebraska	Alabama	Alaska
	North Dakota	Kentucky	California
	South Dakota	Mississippi	Hawaii
	Wyoming	Tennessee	Oregon
			Washington
		<i>West South Central</i>	
		Arkansas	
		Louisiana	
		Oklahoma	
		Texas	

Regional definitions are based on those used by the Census Bureau.

Table A.2
Means and Standard Deviations of Variables Used in Estimation of Health Insurance Access

Variable	Mean	Standard Deviation
Industry Dummies		
Public	0.04	0.20
Agriculture	0.04	0.19
Construction	0.09	0.28
Mining/Manufacturing	0.13	0.34
Transportation/Comm./Utilities	0.06	0.23
Wholesale Trade	0.04	0.20
Retail Trade	0.18	0.38
Finance/Insurance/Real Estate	0.14	0.35
Professional Services	0.22	0.41
Nonprofessional Services	0.06	0.23
Occupation Dummies		
Executive and Managers	0.12	0.32
Professional Specialty	0.12	0.32
Technologists	0.03	0.18
Sales	0.11	0.32
Administrative Support	0.15	0.35
Private/Nonprivate Service	0.13	0.34
Protective Service	0.01	0.11
Farming, Forestry, and Fish	0.04	0.19
Mechanics	0.04	0.19
Construction	0.06	0.23
Precision Production	0.03	0.17
Operators, Fabricators, Laborers	0.06	0.25
Transport/Material Moving	0.11	0.31
Employer Size Dummies		
Less than 25 employees	0.47	0.50
25 – 100 employees	0.25	0.43
More than 100 employees	0.28	0.45
Union Member	0.07	0.25
Education Dummies		
No High School Degree	0.16	0.36
High School Degree	0.34	0.47
Some College	0.30	0.46
College Degree	0.20	0.40

Source: SIPP, 1996 Panel, Employer Provided Health Benefits Topical Module, July 1997 – October 1997. Total number of observations is 6,673 and sample consists of all individuals with a job not offering health insurance during reference month of topical module.

Table A.3
Results from Regression Estimating Health Insurance Access

Variable	Parameter Estimate	Standard Error
Intercept	-1.41	(0.0003)
Industry Dummies		
Public	Excluded	
Agriculture	0.78	(0.0006)
Construction	0.75	(0.0003)
Mining/Manufacturing	0.42	(0.0003)
Transportation/Comm./Utilities	0.86	(0.0003)
Wholesale Trade	0.04	(0.0003)
Retail Trade	0.56	(0.0003)
Finance/Insurance/Real Estate	0.51	(0.0003)
Professional Services	0.21	(0.0003)
Nonprofessional Services	0.94	(0.0003)
Occupation Dummies		
Executive and Managers	Excluded	
Professional Specialty	0.20	(0.0002)
Technologists	0.18	(0.0003)
Sales	0.28	(0.0002)
Administrative Support	0.06	(0.0002)
Private/Nonprivate Service	0.79	(0.0002)
Protective Service	0.09	(0.0004)
Farming, Forestry, and Fish	1.50	(0.0005)
Mechanics	0.44	(0.0003)
Construction	0.99	(0.0003)
Precision Production	0.48	(0.0003)
Operators, Fabricators, Laborers	0.76	(0.0003)
Transport, Material Moving	0.74	(0.0002)
Employer Size Dummies		
Less than 25 employees	1.04	(0.0001)
25 – 100 employees	0.24	(0.0001)
More than 100 employees	Excluded	
Union Member	-0.46	(0.0002)
Education Dummies		
No High School Degree	0.72	(0.0002)
High School Degree	0.28	(0.0001)
Some College	0.16	(0.0001)
College Degree	Excluded	
Number of Observations	6673	

Dependent variable is a binary variable equal to 1 if worker was not offered employer health insurance and equal to 0 if worker was offered. Regression errors are assumed to follow a logistic distribution.

Table A.4
Means and Standard Deviations of Variables Used in Primary Wage Change Regressions

Independent Variables	Mean	Standard Deviation
Change in Health Insurance Access	-0.026	0.400
Occupation Stayer	-0.025	0.300
Occupation Switcher	-0.001	0.300
Change in Occupation		
Executive and Managers	-0.011	0.289
Professional Specialty	0.006	0.221
Technologists	-0.001	0.152
Sales	-0.009	0.306
Administrative Support	0.005	0.300
Private and Nonprivate Service	0.006	0.345
Protective Service	-0.003	0.123
Farming, Forestry, and Fish	-0.004	0.206
Mechanics	0.002	0.248
Construction	0.003	0.266
Precision Production	0.008	0.209
Operators, Fabricators, and Laborers	-0.002	0.362
Transportation and Material Moving	0.002	0.411
Change in Industry		
Public	-0.007	0.204
Agriculture	-0.008	0.326
Construction	0.018	0.434
Mining/Manufacturing	0.003	0.266
Transportation/Comm./Utilities	0.000	0.257
Wholesale Trade	-0.002	0.442
Retail Trade	-0.006	0.359
Finance/Insurance/Real Estate	-0.001	0.281
Professional Services	0.001	0.255
Nonprofessional Services	0.002	0.174
Change in Employer Size		
Less than 25 employees	0.001	0.550
25-100 employees	-0.039	0.553
More than 100 employees	0.039	0.530
Change in Union Status	0.013	0.276
Involuntary Separation	0.087	0.281

Source: SIPP, 1996 Panel. Sample consists of low-skilled, full-time workers, aged 25-35 years who are not nonspouse dependents and changed jobs between July 1996 and October 1998. Sample size is 1241.