

GRADUATION TO HEALTH INSURANCE
COVERAGE: 1981-1996

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ABSTRACT

The health insurance experience of young men, who are new labor market entrants, provides an early indicator of the strengths and weaknesses of the employer-sponsored health insurance system. Insurance coverage for these men has fallen sharply over the past 15 years. We examine patterns of health insurance coverage for cohorts of young men using successive cross-sectional surveys and longitudinal data.

We find that coverage declines persist and are exacerbated as young men age. Not only did cohorts of men born during the 1950s fail to age into employer-sponsored coverage as they reached their 30s and 40s, they actually lost such coverage as they grew older. Furthermore, young men who lacked coverage when they were in their mid-20s were unlikely to gain such coverage later. Declines in coverage are sharpest among the least educated cohorts of young men. We show that most of this decline was due to the substantial increase in health insurance costs during the 1980s. By contrasting young men's pension receipt experience with their health insurance experience, we show that structural changes in the labor market cannot explain any of the decline in coverage within cohorts.

Our results suggest that the existing system of employer-sponsored health insurance subsidies did not compensate for the declines in earnings and increases in health insurance costs faced by young men between 1981 and 1996.

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Among all Americans, young men have the lowest rate of health insurance coverage. Rates of health insurance coverage for young men have historically been lower than the corresponding rates among older men, but over the past 15 years the gaps in coverage have grown wider. In 1981, rates of employer-sponsored coverage for those 25-29 were 2.7% lower than for those 40-44¹. In 1996, the gap in coverage had expanded to 8.8%. While rates of insurance coverage for some groups of older men stabilized in the early 1990s, coverage rates for younger men continued to fall.

Understanding the changing patterns of insurance coverage among young men—and the reasons for these changing patterns—is important in formulating policy to address the needs of this population. In addition, the vast majority of young men who have health insurance coverage obtain it through their employers. Changes in the insurance coverage of this group, who are recent entrants to the American labor force, are a bellwether of change in the employer-sponsored insurance system overall.

The policy importance of the low rates of coverage among young men depends, in part, on whether these men continue to lack insurance as they grow older, or whether they eventually “graduate” to long-term, private insurance coverage. The growing gap in coverage rates between young and older men may indicate that the pattern of graduation to employer-sponsored coverage has become more important over time. The pattern of change is also, however, consistent with a steady decline in insurance coverage across cohorts of young Americans.

The reasons for these low rates also matter in formulating policy for this group. If declining rates of coverage are entirely a consequence of rising health care costs, policy can respond by offering greater subsidies for the purchase of employer-sponsored insurance by young workers. If declining coverage rates reflect fundamental changes in the labor market, however, they raise questions about the U.S. reliance on employment as a principal source of health insurance coverage.

This article follows the experience of cohorts of young Americans to see how and why their employer-sponsored health insurance coverage has changed over time. The second section describes

¹ . Rates of coverage are slightly lower for young men 20-25, but the high rates of school attendance in

several hypotheses about patterns of health insurance coverage. The third section describes the data. The fourth section describes patterns of coverage over the past 15 years. The fifth and sixth sections investigate the role of the changing labor market in generating these outcomes. The final section discusses the policy implications of our results.

II. Reasons for low rates of health insurance coverage among young men

Declining rates of insurance coverage among young men may be accompanied by rising health insurance graduation rates. Wages typically increase with age so that young men have always had lower incomes than older men. Young men's low income, combined with their good health status, has always lead them to prefer cash to insurance at this stage in their lives. As these workers grow older, their income increases and their health status declines, making health insurance more attractive. Economy-wide declines in earnings, particularly for less-educated workers, may have affected younger workers more than older workers. Under this explanation, declines in insurance coverage among young adults could occur as a consequence of declines in the incomes of this group (since their relative health status has remained fairly constant over the past 20 years). Whether this group obtained health insurance later would depend on the path of their incomes. As young men's incomes increase with age, the impact of lower labor market productivity on health insurance coverage should decline with age.

This pattern of rising incomes and graduation rates might occur because of changes in the labor market. One possible change is a shift in the process of finding permanent employment. As economic research has shown, new entrants to the labor market engage in a very productive period of moving between jobs before moving to more permanent employment (Topel 1991; Topel and Ward 1992). This job-shopping phenomenon may be reflected in insurance coverage patterns. Healthy young workers who expect to remain with a particular employer for a short time may not value health insurance as much as comparable workers who expect to remain with that employer longer. Similarly, firms may not provide benefits such as health insurance that increase job

this group make it more difficult to study their experience in the labor force.

attachment unless they expect workers to remain with their firms. Young adults, moving from job to job, may not obtain health insurance at the jobs they hold in their 20s, but may graduate to better jobs, with coverage, when they enter their 30s. Declines in insurance coverage among young adults over time may reflect an intensification of this job-shopping phenomenon, with young adults (and their employers) trying out many jobs for short periods before they find the best match. If so, theory suggests that this increased shopping should lead to better jobs—with more health insurance and other workplace benefits—later in life. Lower initial rates of insurance coverage among young men should lead to higher rates of coverage as they age.

Alternatively, declines in insurance coverage among young men may not be accompanied by rising graduation rates. Instead, they may presage more general declines in insurance coverage. Such declines may occur for two reasons. First, they may reflect changes in the nature of the American labor market. Prior research in this area has examined the role of changes in the industrial composition of employment and in part-time work status. These analyses suggest that changing industrial composition may be a small part of the explanation for the decline in coverage rates, accounting for up to 15% of the decline during the 1980s (Chollet, 1994; Long and Rodgers, 1995; and Kronick, 1991). Changes in the labor market may, however, go well beyond shifts in industrial composition. Many commentators believe that long-term employment has been declining. Such declines in long-term employment would reduce the value of employer-sponsored health insurance coverage from the perspective both of employers and of employees. Empirical evidence suggests that the claim of declining job attachment is true, to some extent, particularly for less-educated male workers (Farber, 1996). If labor market attachment has declined, job-shopping might well continue throughout workers' lives, eliminating the process of graduation to health insurance coverage.

Finally, declines in insurance coverage may simply be a response to the rising cost of health coverage relative to other goods and services. In principle, increases in the cost of health care should lead workers to maintain, or even increase, insurance coverage (Phelps, 1976). In the presence of a government and hospital safety net, however, workers may choose to drop coverage in the face of growing costs. If substitution of cash for insurance is important, health insurance

coverage would decline among workers of all income levels. Increases in the cost of health insurance may, however, have more of an effect on the choices of younger adults with limited incomes and fewer recurrent health expenses than on the choices of older adults. Prior research has estimated a price elasticity of demand for health insurance in cross-sections of -0.5 to -0.2 (Marquis and Long, 1995). This estimate is likely to overestimate the responsiveness of purchasers to changes in health insurance costs over time because changes in health care quality over time confound the measurement of health insurance prices.

The analysis that follows focuses exclusively on the experience of young men. The pattern of coverage and of changes in coverage for young men is quite different from that of young women. Young women obtain health insurance coverage through three principal sources: their own jobs, their husband's jobs, and public insurance through Medicaid. Women's labor market experiences have changed substantially over the past 15 years; the timing, rate, and pattern of marital matches have changed; and Medicaid coverage has expanded. These diverse influences make it appropriate to consider the experience of women separately from that of men. Our decision to exclude women from the analysis, however, means that our results may overstate (or understate) the implications of changing ESI coverage on family health insurance. To the extent that declines in men's insurance coverage reflect increases in women's coverage, families are doing better than these results would suggest. Conversely, to the extent that dependent coverage has declined faster than individual coverage, families are doing worse. Prior research suggests that the compensatory effect of spousal coverage has not been large enough to offset the decline in coverage among men (Olson, 1995). We contrast the experience of married men to that of single men to measure the extent of such offset coverage.

III. Data

We use two sources of data for this analysis. For analyses across successive cohorts, we use four years of data from the Current Population Surveys (CPS): 1981, 1986, 1991, and 1996. These years are roughly similar in terms of economic conditions. 1991 was a business cycle trough, but 1981, 1986, and 1996 were at business cycle midpoints. Economy-wide unemployment rates

declined between each pair of years, which should bias downward our estimates of the effect of economic changes on employer-sponsored health insurance coverage rates.

In order to get a better sense of the factors that affect graduation to health insurance coverage, we also examine the 1985 through 1992 National Longitudinal Surveys of Youth (NLSY). Using these data, we construct a panel of men 25-29 and follow them through their experience in the work force. The NLSY data complement the CPS data. While the CPS allows us to examine the experience of successive cohorts, the NLSY enables us to examine rates of graduation to employer-sponsored coverage, and their correlates, within a single cohort, at the level of the individual. Furthermore, the NLSY allows us to examine patterns of graduation to continuous coverage that lasts several years and to examine the effects of particular job-related characteristics on graduation. In our analyses of the NLSY data, we examine the extent to which young men 25-29 graduate to 3 years of continuous health insurance coverage by the time they are 30-34.

The CPS is a national survey of approximately fifty thousand households each month examining labor force participation of each member of the survey households. We use the March CPS, which includes further demographic information on each individual as well as information on health insurance coverage. In each survey year the CPS asks whether or not the individual is covered by Medicare, Medicaid or private health insurance. Those who are covered by a private package are asked whether this package was made available through a current or former employer. Changes in the CPS health insurance questions make it difficult to make cross-year comparisons of many aspects of insurance coverage. The questions that relate to the receipt of employer-sponsored coverage from a current or former employer, however, are quite consistent over time². In each year we examine individuals between 20 and 44 years of age. We exclude those who report that they are

². In 1987, the CPS questionnaire changed. Prior to 1987, respondents were asked about their source of insurance coverage for all policies. In 1987, respondents were asked about a single source of coverage, which could have led to a decline in estimated coverage rates among people who also had coverage through a spouse. To investigate the importance of this wording change, we compared the experience of single and married men from 1986 to 1991 (the comparison in our sample that spans this change). We found no substantial differences in the experience of single and married men in any of the age/education groups we consider.

currently enrolled in school. The resulting data set consists of approximately twenty thousand men in each survey year.

We compute wages in the CPS by dividing annual income by hours and weeks worked. We inflation-adjust all figures to 1996 dollars using the all item consumer price index. The CPS top-code for wages increased substantially over this period. In consequence, wage estimates for high income members computed in the 1981 and 1986 are biased downward. In the analysis that follows, this downward bias may lead to a slight underestimate of the contribution of changes in compensation to health insurance.

We construct cohorts in the CPS data by following successive age-groups over time. For example, the cohort born between 1952-1956 was aged 25-29 in 1981. In 1986, the members of that cohort were 5 years older. The experience of the group is then captured by the experience of 30-34 year olds in 1986. In general, the sample of 30-34 year olds in 1986 is representative of the same population as the sample of 25-29 year olds in 1981. To the extent that men die or emigrate between 25-29 and 40-44, the populations represented by the samples will change over time. Similarly, the populations represented will change because of immigration by people 25-44. The population represented will also change as members of each cohort enter and complete schooling, since we exclude men currently in school from the figures below.

The NLSY is a longitudinal survey of young men and women who were 14 to 22 in 1979. It provides information on the employment status, earnings, and demographic characteristics, of each individual and on the benefits, including health insurance, that were offered through that person's place of work. Unfortunately the NLSY does not provide information on whether the individual is covered by any health insurance package - only if one is offered. The NLSY consists of three sample groups: a random sample, an oversampling of low income individuals, and a military sample. We use only men in the random sample who were 25-29 in 1985 in this study, in order to make the data as similar to the CPS as possible. We also eliminate from the sample all those individuals who were enrolled in school in 1985, or who return to school between 1985 and 1992. The resulting data set consists of approximately 1900 individuals tracked over seven years.

The NLSY is a representative sample, but the characteristics of the sample over time are not identical to those of the CPS sample. In particular, annual earnings levels in the NLSY are somewhat higher than those in the CPS. The difference is small (about 10%) for college graduates, but quite large for those with less than a high school education (about 30%). The differences between the samples may be attributable to sampling variability, attrition, or the differential effect of immigration in the CPS sample.

IV. Defining the Problem

Table 1 uses the CPS data to summarize information on employer-sponsored health insurance for young men over a 15 year span. Looking down the columns, the table describes the pattern of coverage at each time: in each year, rates of insurance are systematically higher for older men than they are for young adult men. Looking across columns, the pattern of insurance coverage over time reflects the ongoing decline in employer-sponsored insurance. Every age group of men had lower rates of employer-sponsored insurance coverage in 1996 than the corresponding group had in 1981. In every age group, rates of insurance coverage declined monotonically over time.

Table 1: Percentage of Men With Employer-Sponsored Health Insurance, by Age

Age	1981	1986	1991	1996
25-29	67.9	62.0	55.0	53.0
30-34	72.4	66.9	59.8	58.1
35-39	73.4	70.0	63.4	61.1
40-44	70.6	68.8	64.2	61.9

Source: Current Population Survey. March 1981, 1986, 1991, 1996.

The diagonals of Table 1 describe the health insurance experience of a particular cohort over time. These results are striking. Throughout the 1980s and continuing through 1996, graduation to ESI never happened. The increases in insurance coverage that occurred with age and

labor market experience did not keep up with the overall declines in insurance coverage. Although the protective effect of age on insurance coverage has increased over the past 15 years, employer-sponsored insurance coverage rates for successive cohorts of young men have actually declined as they grew older.

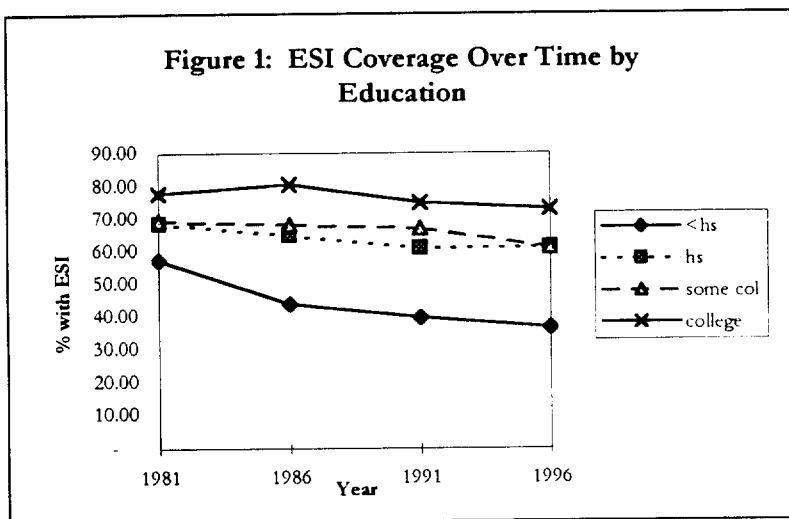
The results in Table 1 are inconsistent with the hypothesis that lower coverage rates among young adults are a consequence of a longer, more productive period of job matching. Members of the cohort born between 1952-1956 had lower rates of employer-sponsored insurance coverage than did those 5 years older at every stage in their early working careers, not just at the beginning of their careers. Furthermore, for both these cohorts, as well as for younger cohorts, insurance coverage rates declined with age, rather than increasing with age.

We next examine the pattern of declines in more detail by breaking down the data according to education category. All groups of young men experienced declines in employer-sponsored insurance coverage over the 15- year period, but the decline did not affect each group equally. Insurance coverage rates fell further for younger and less-educated men than they did for older and more educated men. Men 25-29 with less than a high school education had employer-sponsored insurance coverage rates in 1996 that were only 51% as high as this age group had in 1981. Men ten years older with the same level of education had coverage rates 58% as high in 1996 as 35-39 year olds had in 1981. By contrast, 93% as many men 35-39 who were college graduates had employer-sponsored insurance coverage in 1996 as had held such coverage in 1981.

This time-series pattern of decline reappears in the analysis across cohorts. Figure 1 illustrates the pattern of ESI coverage for cohorts of men over the 1981 –1996 period. The decline in ESI coverage has been most severe for the least educated men. In the cohort of men born between 1952 and 1956 who did not complete high school, 57% held employer-sponsored insurance coverage in 1981, when they were 25-29 years old. By 1996, when they were 40-44, fewer than 2/3 as many--36.6% of the cohort – held employer-sponsored coverage. The cohort of less-than-high-school educated men born 5 years later began with a 43% ESI coverage rate in 1986, but their coverage rate dropped to 34.9% by 1996. Even the college-educated cohorts of men born in 1952-

1956 and 1957-1961 (who were 25-29 in 1981 and 1986 respectively) have not yet regained the rates of ESI coverage that they held as young adults. The decline in ESI mainly occurred during the 1980s, but insurance coverage for most cohorts of young men continued to fall between 1991 and 1996.

These results bring home the significance of the declines in ESI that have occurred over the past 15 years. Young men, 25-29, who entered the labor market in the early and mid 1980s, saw their employer-sponsored health insurance coverage decline over the succeeding decade. Not only did they not age into ESI coverage, they actually lost it.



The cohort analyses allow us to examine the experience of a population. The results, however, may reflect a pattern in which people often switch between health insurance coverage and no coverage or a pattern in which some people never gain coverage at all. Prior research, using a much shorter panel of data, has shown that health insurance coverage is quite stable over time. Monheit and Schur (1988) find that about ¾ of those who hold coverage at the beginning of a 32 month period retain it throughout this period. We assess the extent of stability in our cohorts of young men 25-29 using the NLSY data.

Table 2 presents the results of our analysis of insurance stability. We focus on a five year interval to keep our results consistent with the CPS analysis. Although sample and survey differences between the NLSY and the CPS make it difficult to compare the results directly, the

pattern of health insurance availability in the two data sets is quite similar. In each education group, we find that fewer young men graduated to “permanent” health insurance (coverage in each year between 1990 and 1992) than had held such coverage in 1985. The decline was greatest for the least educated group. The fourth and fifth columns of Table 2 describe the pattern of stability in the transition to “permanent” coverage. The results in column 4 suggest that among all but the least educated group, about ¾ of those who held coverage in 1985 maintained coverage through 1990-1992. Among those who did not hold coverage in 1985, only 30-40% obtained coverage five years later. The strong pattern of stability in these data suggest that the problem of low insurance coverage among young men has serious long-term repercussions. Insurance coverage rates for cohorts have been falling, but within a cohort, holding health insurance coverage when 25-29 is a very strong predictor of holding coverage five years later (these results are robust to multivariate analyses that control for a range of covariates).

Table 2: Transitions in Health Insurance Coverage

	Employer-sponsored insurance in 1985 (%)	Employer-sponsored insurance from 1990-2 (%)	Percentage of those with insurance in 1985 who also had 1990-92	Percentage of those without insurance in 1985 who had insurance 1990-92
<HS	46.1	42.9	57.6	30.4
HS	63.9	61.8	78.5	32.2
Some College	64.3	60.5	71.1	41.3
College	71.8	71.1	83.3	40.0

Source: National Longitudinal Survey of Youth, Men 25-29 in 1985.

V. Has the labor market changed? A first look

Numerous studies have documented the substantial changes in the U.S. labor market over the 1980s. These changes may be a cause of the decline in employer-sponsored insurance coverage

within and across cohorts. To assess this hypothesis, we first present evidence on the changing labor supply and productivity of young men.

One important change that may have affected male labor supply and insurance coverage over this period has been the growing role of married women in the labor force. Working wives may obtain health insurance coverage for their spouses and they may also work in the formal labor market while their husbands work in the home. We compare the experience of cohorts of married and not currently married men to assess the importance of spousal employment in reducing employer-sponsored coverage among men. Not currently married men (particularly those with low educational attainment) have much lower initial rates of health insurance coverage in 1981 than do married men. Following the cohorts over time, we find that declines in coverage were greater for married men than for single men among the least educated and most educated cohorts. This pattern does not hold, however, for high school graduates or those with some college education. For these groups, who constitute the majority of the male population, declines in coverage were steeper for single men than for married men.

We also examine the role of marital status on graduation using the NLSY. Among those who held health insurance in 1985, married men were substantially and significantly more likely to hold coverage in 1990-1992 than were single men (controlling for the presence of children). Among those who did not hold health insurance in 1985, married men were slightly, but not significantly, more likely to obtain such coverage than were single men. In general, our results suggest that the changing labor market role of married women is not an important explanation of the decline in employer-sponsored coverage among younger men.

A second component of labor supply is worker skills. As the analysis above suggests, educational attainment is an important correlate of health insurance receipt. Changes in the skill composition of young men may be a factor in changes in their health insurance coverage at a point in time. We examined the skill distribution of young men across successive cohorts and within cohorts. In general, the skill composition has changed very little over the 15-year period. There has been a small increase in the proportion of men who have completed college. Within cohorts,

educational attainment has been increasing over time, consistent with the re-entry into the sample of men who went back to school. In sum, the changing skill distribution of American men cannot explain the decline in coverage across successive cohorts and exacerbates the finding of declining coverage within cohorts.

The final element in labor supply change we consider is changes in employment propensities and in hours worked. Employer-sponsored health insurance is much more common among people with full-time jobs than among those who work part-time or who are not currently employed. Reduced rates of full-time employment may also contribute to reduced health insurance coverage rates. Table 3 provides data for 25-44 year olds on the percentage of men who worked full-time at the time of the CPS survey.

Age Category	1981	1986	1991	1996
25-29	77.1	76.8	74.4	76.5
30-34	84.3	81.4	79.1	81.1
35-39	84.9	83.0	80.7	82.1
40-44	85.1	83.2	82.7	82.4

Source: Current Population Survey. March 1981, 1986, 1991, 1996.

The percentage of young adult men working full time has declined somewhat over the 1981-1996 period. The decline has been greatest among the older portion of this group. In 1981, 85% of men 40-44 worked full-time. By 1996, only 82% of this group worked full-time. Within cohorts, rates of full-time employment have generally increased through age 35-39 and declined slightly subsequently.

In comparisons across educational groups, the largest declines in full-time employment have been among 40-44 year old poorly educated men. Full-time participation rates in this group have fallen nearly 10 percentage points since 1981. These declines in full-time labor force participation

have contributed to the decline in health insurance coverage among middle-aged men. If full-time participation rates had remained at 1981 levels for each education/age group through 1996, we would observe a slightly smaller decline in insurance coverage for the cohort who were 25-29 years old in 1981.

In sum, we find that these labor supply changes are likely to have had relatively small effects on health insurance coverage for most workers. Next, we examine changes in the demand for labor, focusing on the hourly wages earned by full-time workers (Table 4). As previous research has documented, the hourly earnings of young, less-educated workers declined during the 1980s. Among less-educated groups, younger cohorts earned less at each point in their early adulthood than had cohorts born 15 years earlier (columns 2 and 3). Furthermore, wage growth for less educated cohorts was also slow--or non-existent--over this period (columns 4 and 5). Slow growth in earnings may explain some of the decline in health insurance coverage across cohorts, as well as the decline in coverage within cohorts, especially for poorly educated workers. For well-educated workers, however, earnings increased substantially over this period, so labor market experience is a less likely explanation for the experience of these groups.

Table 4: Changes in Hourly Wages Across Cohorts

	Wage at 25-29: Cohort born 1967- 1971 compared to cohort born 1952- 1956	Wages at 35-39: Cohort born 1957- 1961 compared to cohort born 1942- 1946	Growth in wages from 25-29 to 35- 39: Cohort born 1952-1956	Growth in wages from 25-29 to 35- 39: Cohort born 1957-1961
< HS	0.83	0.94	0.96	0.99
HS	0.89	0.90	1.09	1.12
Some College	0.96	0.92	1.27	1.24
College	1.1	1.27	1.49	1.48

Source: Current Population Survey. March 1981, 1986, 1991, 1996.

Estimates of the role of declining wages on health insurance coverage may be confounded by the costs of coverage itself. Economic theory suggests that for workers who obtain employer-sponsored coverage, hourly wages should decline to compensate for increases in the cost of health insurance. To take account of this effect, we compute personal health insurance adjusted hourly compensation for each person in the CPS samples. We do this by adding the hourly value of health insurance coverage (computed as the cost of health insurance multiplied by the employer share of individual coverage) to hourly wages. In order to perform this calculation, we must first compute the costs of health insurance in each year.

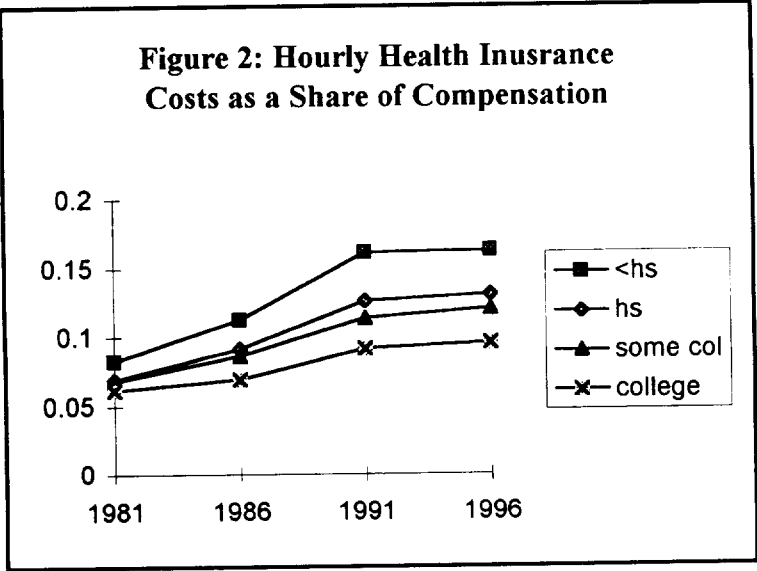
The Cost of Health Insurance Coverage

The cost of health insurance increased rapidly during the 1980s and early 1990s. In 1981, the annual per capita cost of health care was \$1970 in 1996 dollars. By 1996, the cost had risen to \$4318. Table 5 presents data on annual health insurance costs. The first row shows the cost of health insurance provided through an employer per worker in 1996 dollars. The 1986 and 1991 numbers are from the Employee Benefit Research Institute (1995). Unfortunately, comparable numbers were not available for 1981 and 1996. We use data on the rate of change in private health care spending from the Health Care Financing Administration to compute the corresponding costs of employer provided health insurance coverage for 1981 and 1996. The second row of Table 5 reports the cost to employers of providing health insurance to the employee only. We obtain the employer share of individual coverage from the Bureau of Labor Statistics Employee Benefits Surveys for 1983, 1986, 1991.

	1981 ^b	1986 ^a	1991 ^a	1996 ^b
Total Cost Per Employee	1970	2658	4153	4318
Employer Cost Per Employee ^c	1767	2318	3047	3169

a. Source: EBRI Databook on Employee Benefits, 1995
b. Calculated based on 1986 and 1991 figures, adjusting for increases in private health expenditures.
c. Adjusted using BLS reported percentage of employer health insurance costs paid by employer.

Clearly, health care costs have risen faster than other components of earnings, especially for the least educated groups. Figure 2 describes the relationship between hourly health insurance costs and hourly compensation for insured 25-29 year olds for each education group and year. The share of health insurance in total compensation has increased for each education group, but the increase has been most marked among those with the least education. In 1981, health insurance costs comprised 8.2 % of the hourly compensation of this group. By 1996, the health insurance share had increased to 16.2%.



Assessing the Contribution of Changing Productivity

To see the magnitude of the effects of these changes in labor supply and labor demand on health insurance coverage, we simulate how many men would have had health insurance in each year if the propensity to purchase health insurance given a set of characteristics had remained constant but labor supply and labor demand had changed. We perform this simulation by estimating a probit equation measuring the effects of labor supply and demand characteristics (age, educational attainment, marital status, employment status, full time status industry of employment, and hourly health-insurance-cost-adjusted compensation) on the propensity to hold health insurance in 1981. We then use the coefficients from the 1981 equation to predict the probability of holding health insurance at 1986, 1991 and 1996 wage levels. In doing so we can estimate how the changes in these factors affected workers' propensity to hold health insurance. In comparisons across cross-sections, the predicted propensity to hold health insurance declines for each age and education group examined. Table 6 reports these results for each education group over time for the cohort born between 1952-1956.

Table 6: Predicted Health Insurance Coverage Rates for Cohort Born 1952-1956 Based on 1981 Purchase Propensities and Actual Rates (in parentheses)					
	25-29	30-34	35-39	40-44	% Explained
Less than High School	56.7 (56.7)	55.3 (51.8)	47.1 (39.4)	46.6 (36.6)	0.50
High School	68.5 (68.5)	69.5 (69.3)	65.7 (60.7)	65.8 (61.2)	0.37
Some College	68.0 (68.0)	71.8 (73.2)	69.9 (66.4)	68.2 (63.9)	-0.05
College	76.7 (76.7)	80.2 (82.6)	75.3 (74.7)	73.0 (73.1)	1.03

Source: Predictions from March 1981 CPS using education, age, age squared, employment status, full time status, marital status, industry of employment, and health-insurance adjusted compensation applied to data for March 1981, 1986, 1991, 1996 CPS. Probit predictions do not return mean estimates so predictions have been rescaled to match actual figures.

Changes in labor supply and demand alone were enough to generate a declining propensity to hold health insurance among the least educated cohort from age 25-29 through age 40-44 (over the 1981-1996 period), and a declining propensity to hold employer-sponsored coverage for all education groups from age 30-34 through age 40-44 (over the 1986-1996 period). Among the least educated cohort, changes in labor supply and demand characteristics would have generated a 10 point drop in coverage between 1981 and 1996. The declines reported in Table 6, however, are much smaller than those actually experienced, except by the most educated cohort. Changing labor market conditions can explain only half of the 20 point decline in health insurance coverage among less-than-high-school educated workers born between 1952-1956 over the period between 1981 and 1996. For other groups of men, except the most educated, labor market changes explain a smaller share of the actual decline.

How much can changing health insurance costs explain?

As described above, the cost of health insurance has risen substantially relative to earnings. We simulate how many men would have held employer-sponsored health insurance in each year if compensation had remained constant by applying the lower-bound estimate (-0.2) of the price elasticity of health insurance demand computed in previous studies that use cross-sectional data. This cross-sectional price elasticity assumes that the quality of health insurance has remained constant. To the extent that the quality of health insurance has been changing, the cross-sectional elasticity estimates will be biased. Furthermore, the estimated price elasticities have not been computed to take account of differing levels of education or age in the population, except to the extent that these factors affect the initial cost of coverage. To the extent that low wage workers are more price-sensitive than higher wage workers, the use of a single estimated elasticity will tend to overstate the change in coverage among highly educated men and understate the change among poorly educated men.

Overall, the increase in the price of health insurance could have been expected to lead to a decline in insurance coverage of at least 15% between 1981 and 1996. Table 7 reports simulated estimates for each cross-section illustrating how rising health insurance costs could be expected to

affect the propensity to hold coverage. The results are quite similar to those in Table 1, especially for the higher age groups. Following the cohort who were 25-29 in 1981, the results show a decline in coverage almost exactly equal to that seen in the data in Table 1.

Table 7: Predicted Health Insurance Coverage Rates Given Changes in Health Care Costs (Price Elasticity of -0.2)

	1981	1986	1991	1996
25-29	67.9	63.7	59.9	59.2
30-34	72.4	67.9	63.6	63.1
35-39	73.4	68.8	64.5	64.0
40-44	70.6	66.2	62.0	61.5

Source: Simulation based on March 1981 CPS data and information in Table 5.

These results suggest that changes in the cost of health insurance, rather than changes in the labor market, were the principle reason for the decline in employer-sponsored coverage within cohorts between 1981 and 1996. For all but the least educated workers, changes in labor market characteristics explain almost none of the decline in health insurance coverage.

V. The Role of Changing Labor Market Structure Revisited

The standard set of labor market variables described above appears to explain little of the decline in health insurance coverage, while modest estimates of health insurance price elasticity are sufficient to generate the declines we observe. These results suggest that the decline in health insurance coverage has little to do with the role of employers in the health insurance system. Yet this evidence of a relatively stable labor market is at variance with the conventional wisdom that the labor market has changed. In this section, we explore structural changes in the labor market in more detail.

One change in the labor market that has garnered considerable attention has been the apparent disappearance of long-term jobs (Farber, 1996). The March Current Population Surveys do not include information on employment duration. Several January surveys, however, do contain information on duration of employment. We examine the experience of the same cohorts in 1981

and 1991 (the same years analyzed above) to see how average duration of employment has changed over time. Table 8 describes the percentage of 25-29 year olds and 35-39 year olds in each of these years who had held their current jobs for 5 years or more. The results show a striking decline in the propensity of less-educated workers to hold long-duration jobs. For each age and education group, fewer workers had held their jobs for 5 years or more in 1991 than in 1981. Nonetheless, the data show clear evidence of “graduation” to longer term employment. Despite the declines in job duration by age group, the data show a steady increase in the share of workers within each cohort who hold long term jobs. Furthermore, the decline in long-term job holding is much smaller, for every age-education category, than the decline in employer-sponsored health insurance coverage among workers. The decline in duration may explain some of the reductions in health insurance coverage for workers of a given age, but it cannot explain the decline in graduation rates within a cohort.

Table 8: Percentage of Male Workers Who Have Held the Same Job for 5 years or More

Education	Age	1981	1991
< High School	25-29	29	22
	35-39	54	43
High School	25-29	38	30
	35-39	62	51
Some College	25-29	32	27
	35-39	57	54
College	25-29	21	19
	35-39	57	55

Source: January 1981 and 1991 CPS.

We cannot examine the effects of changing employment duration on health insurance coverage directly, because the duration data have only a limited overlap with the health insurance data. Instead, as a final confirmation of our finding that changes in the labor market have had little impact on graduation rates, we turn from health insurance coverage to pension coverage. Over $\frac{3}{4}$ of men who held employer-sponsored health insurance coverage in 1981 also participated in an

employer group pension plan. If changes in the structure labor market explain much of the change in health insurance coverage, they should also show up in pension coverage. By contrast, if rising health insurance costs are the main source of the decline in coverage, we expect to observe a shift from health insurance toward pension coverage.

Table 9 describes the pattern of pension coverage from 1981 through 1996, using the March Current Population Survey. As prior research has shown, employer-group pension coverage rates have been declining for each age group of younger men (Bloom and Freeman, 1992). This decline has been most pronounced among the least educated workers (not shown in table). In 1981, one-third of men 25-29 with less than a high school education received employer-sponsored pension benefits. By 1996, only 18% of 25-29 year old men received such benefits. There has, however, been little decline in the propensity of more educated workers to receive pension benefits. Looking down the diagonals of Table 9, the pattern of pension coverage by cohort adheres more closely to the model suggested by the graduation hypothesis. Young men begin with relatively low rates of pension coverage, but these rates of coverage increase over time. Finally, rates of graduation have been increasing (slightly) in later cohorts, suggesting that the change in pension benefits may indeed be a consequence of increased job shopping. Clearly, the pattern of change in pension coverage has been quite different from that in health insurance coverage.

Table 9: Percentage of Men With Employer-Sponsored Group Pension Coverage, by Age

Age	1981	1986	1991	1996
25-29	50.7	44.8	47.4	46.9
30-34	56.4	51.4	50.2	50.8
35-39	59.0	56.5	54.9	55.9
40-44	57.5	57.1	57.9	55.4

Source: Current Population Survey. March 1981, 1986, 1991, 1996.

To get a better sense of the role of health insurance price effects, we examine the relationship between health insurance and pension coverage for cohorts born in 1952-1956 by education level. Table 10 describes the size of the overlap between health insurance and pension coverage over time. Except for the lowest education category, there was no decline at all over time in the proportion of the population who held both health insurance and pension coverage. The decline in health insurance coverage occurred almost entirely in the propensity to hold health insurance coverage by itself. By contrast, there was a small increase in the propensity to hold pension coverage by itself. Results for married and single men are quite similar, suggesting that this switch from health insurance alone to pensions alone did not occur entirely as a consequence of increases in spousal coverage.

Table 10: Overlap Between Health Insurance and Pension Coverage for Cohort born 1952-1956 (Percentage with Each Type of Benefit).

	Age	Health Insurance Only	Health Insurance and Pension	Pension Coverage Only
< High School	25-29	26	30	3
	40-44	15	21	8
High School	25-29	22	46	3
	40-44	15	46	6
Some College	25-29	20	48	3
	40-44	15	49	9
College	25-29	18	55	7
	40-44	14	59	10

Source: March 1981 and March 1996 CPS.

The results from the pension data lend credence to the results of the decomposition analysis above. We confirm this by repeating the multivariate decomposition analysis, including pension coverage as a proxy for unmeasured job characteristics (such as duration) that may affect health insurance coverage. The results for all groups except the least educated are almost identical to the results omitting pension coverage. Among the least educated workers, including pension coverage

increases the explanatory power of the simulation by about 5%. Changing labor market structure has affected health insurance coverage almost entirely through its effects on earnings, and that effect explains little of the erosion in health insurance coverage.

VI. Policy Implications

There has been a substantial decline in the employer-sponsored health insurance coverage of young men over the past 15 years. This decline deserves policy attention. Men who lack coverage when they are young do not seem to gain it as they grow older. Instead, employer-sponsored coverage rates have declined within cohorts.

In principle, this dramatic decline in coverage rates could have had its roots in a change in the structure of the American labor market. Our results suggest, however, that changes in the structure of the labor market are not to blame for much of this decline. The decline in health insurance coverage can be explained, instead, almost entirely by the increase in health insurance costs. The increase in these costs has led workers to drop coverage and, to some extent, to substitute pension benefits for health insurance benefits. If health care costs stabilize, relative to earnings, health insurance coverage rates are likely to increase.

While the decline in health insurance coverage cannot be blamed on the changing structure of the labor market, the current system of subsidies for employer-sponsored insurance clearly fails to address the problem of rising health costs combined with declining income among low wage workers. Health insurance is now subsidized by exempting the costs of coverage from an employee's taxable income. Thus, as with other tax-based subsidies for employer-sponsored benefits, the value of the subsidy rises with income tax rates. The subsidy rate is lowest for low wage workers and declines, rather than rising, as incomes fall. The main change in the labor market over the past 15 years has been a decline in the earnings of low skilled workers. The tax-based subsidy system has exacerbated the effects of that decline in earnings on health insurance coverage.

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