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**OFFERS OR TAKE-UP: EXPLAINING
MINORITIES' LOWER HEALTH INSURANCE COVERAGE**

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Abstract

Coverage under employment-based health insurance has declined in recent years among full-time workers. The decrease has been particularly dramatic among minority workers, especially Hispanic men and women. By 2001, there was a 21 percentage point differential between the coverage rates of non-Hispanic white and Hispanic men and a 15 point gap among women. These disparities in coverage between white and minority workers reflect differences in employer offers rather than household decisions regarding the take-up of offered coverage.

Using data from the 1996 Panel of the Survey of Income and Program Participation (SIPP), we estimate offer and take-up probabilities on a pooled sample of full-time workers. We find that race and ethnicity have significant effects on offer and take-up after controlling for a wide array of demographic and job characteristics. We also estimate offer and take-up functions separately for white and minority workers and find important differences in the determinants of the probabilities of receiving an offer and of electing coverage. Wage rates and employment in professional and technical occupations have significantly larger effects on the probabilities that minority workers are offered health benefits and that they elect coverage. Because we observe racial and ethnic differences in mean offer and take-up rates by household composition, we estimate offer and take-up functions separately for dual-earner, one-earner, and single-person households.

Coverage under employment-based health insurance declined among U.S. workers over the last 15 years. Coverage rates of full-time, private sector minority workers, lower than those of white workers at the beginning of the period, fell more rapidly than those of whites, especially among Hispanic workers. This trend is a matter of public policy concern if workers already at the margin of risk of incurring substantial health costs are excluded from the primary source of insurance coverage in the U.S.

We document the decline in coverage of minority relative to white workers from 1988-2001 using several supplements to the CPS. We then examine differences in mean offer and take-up rates between non-Hispanic whites, non-Hispanic blacks, non-Hispanic other races, and Hispanics, using the 1996 Panel of the Survey of Income and Program Participation (SIPP). We estimate offer and take-up probabilities on a pooled sample of full-time, private sector workers to determine whether race and ethnicity exert an additional influence once differences in job and demographic characteristics are taken into account. We find statistically important differences by race and ethnicity, especially in the likelihood that workers will be offered health benefits; these disparities differ by marital status, by number of workers in the household, and by gender. Finally, we estimate offer and take-up functions separately for white and minority workers and find significant differences in the determinants of both offers and take-up.

The next sections discuss the decline in employment-based health insurance coverage, and report mean offer and take-up rates in 1996 by race, ethnicity, gender, and household structure.

The following section discusses estimation of offer and take-up probabilities in a sample-selection framework and provides estimates on pooled samples of white and minority dual-earner, single-earner married, and single-person households. The last section presents offer and take-up probabilities estimated on separate samples of white and minority workers for single-earner and single-person households, followed by a brief summary.

I. Changes in employment-based health insurance coverage, 1988-2001

Table 1 reports coverage rates for private sector, full-time wage and salaried workers by race, ethnicity, and gender. We examine changes over time using five CPS supplements that provide information on own-employer health benefits.¹ We also compare coverage rates reported in the 1997 CPS supplement with those from Wave 5 of the 1996 SIPP (interviews July-October, 1997). Looking first at changes in the CPS from 1988-2001, we observe that coverage rates of non-Hispanic whites and of minorities as a group declined over this period among both men and women. The decline was marginally greater for minority workers. Disparities in coverage rates between whites and minorities increased among men to 13 percentage points by 2001 (.77 compared to .64) and to 6 percentage points among women (.70 compared to .64).

The pattern of change differed dramatically across the three minority groups, however.

¹ Unfortunately, it is not possible to examine changes in offer, eligibility, and take-up using supplements because survey questions differ between the May 1988 Employee Benefits Survey and the 1995-2001 February Contingent Work Supplements, the only sources of detailed information on employment-based health insurance in the CPS. In the February supplements, information on offers, eligibility, and take-up is obtained only from respondents covered under some form of health insurance. Workers offered but declining employment-based insurance, and not covered by any other source, are not represented in the base population for these questions. This information is available only in the May 1988 Employee Benefits Supplement. Appendix Table 1 compares offer, eligibility, and take-up rates by race, ethnicity and gender using this supplement. Among both men and women, offer rates differ between minority and non-Hispanic white workers. In particular, offer rates of non-Hispanic black and Hispanic men, as well as of women of other races (primarily Asian) and Hispanic women are significantly lower than those of non-Hispanic whites. There are no differences in take-up rates between white and minority workers for either men or women, with the exception of non-Hispanic black men.

Differences between black and Hispanic workers, relative to white workers, are particularly striking. There were no significant declines in coverage over this period among black men and women. Rates of black women were, in fact, nearly identical to those of whites throughout. Coverage rates of black men were 11 percentage points lower than those of whites in 1988, but the difference actually narrowed somewhat over the period.

Coverage among Hispanic men, in sharp contrast, declined 8 percentage points from 1988 to 2001, increasing the gap with whites from 17 percentage points in 1988 to 21 points by 2001 (rates of .56 compared to .77 among whites). Rates of Hispanic women also declined significantly, compared to nearly constant rates among white women. By 2001, only 55 percent of Hispanic women working full-time in the private sector were covered by their own employment-based insurance, compared to 70 percent of white women. Coverage rates of workers of other races (primarily Asians) also changed over this period, but the changes are not significant in these smaller samples.

Finally, because the CPS and the SIPP provide information on insurance coverage on relatively large samples of minority workers and are thus attractive sources of information for researchers, we compare coverage rates for a common year.² We identify statistically significant differences between CPS and SIPP rates in the two SIPP columns by plus signs (“+”). The patterns that emerge are intriguing. SIPP coverage rates are consistently lower than those reported in the CPS supplement. These differences are smaller among men than women, and also smaller among male whites than male minorities. Interestingly, while rates of black and Asian men are significantly lower in SIPP than in the CPS, there is no difference between the two surveys in the reported rates of Hispanic men. Among women, rates of all three minority

² Wave 5 of the 1996 SIPP was collected July-October 1997; information in the 1997 CPS Contingent Work Supplement was collected February 1997.

groups are lower in the SIPP than in the CPS. These differences in coverage rates by ethnicity between the CPS and the SIPP are clearly worthy of further examination.³

To summarize the findings in Table 1, coverage under employment-based health insurance of Hispanic workers deteriorated both in absolute and relative terms compared to white workers between 1988 and 2001. By the end of the period, only 56 percent of Hispanic men and 55 percent of Hispanic women were covered under their own employers' health insurance, compared to 77 and 70 percent of white men and women. Coverage rates, of course, do not answer the important question for public policy regarding health insurance for minorities: Is coverage lower because minorities are less likely to receive offers or because they are less likely to elect offered coverage? We turn now to these questions.

II. Racial and ethnic differences in household offer and take-up rates

Studies to date that have examined racial and ethnic differences in health insurance coverage have focused on workers rather than on households (see Crow, Harrington and McLaughlin, 2002, for a review of previous research). This choice was no doubt dictated by the unavailability of information on other workers in households and on their options for coverage. Dual-earner households are now the modal married household, however, and both casual observation and economic theory suggest that the opportunities and choices of these households may differ from those of one-earner households, and that the choices of the latter may differ from those of single persons. It is, moreover, reasonable to assume that if there are racial and ethnic differences in the likelihood of being in a job that offers health benefits, or in the decision to elect offered coverage, they may vary by household composition.

³ Other studies have compared coverage rates between CPS and SIPP (Bennefield 1996; Bhandari 2004). However, differences in sample populations and survey dates limit the value of comparisons with our findings.

To examine these possibilities, we use the 1996 panel of SIPP. The SIPP is conducted by the Bureau of the Census on a nationally representative sample of the civilian non-institutionalized population.⁴ All household members are interviewed at four-month intervals over a four-year period and are asked a series of core demographic and economic questions. In addition, topical modules (waves) focus on specific areas of interest. The Wave 5 module asked every worker in a household about their employers' offers of insurance, their eligibility, participation, out-of-pocket premiums, and cost-sharing arrangements. They were also asked whether alternative benefits were offered such as employer contributions to a 401(k) plan, a medical savings account, tax-free employee contributions to a flexible spending account, or cash or salary bonuses. Demographic information on respondents includes race and ethnicity, education, age, health status, and family characteristics including income, home ownership, and presence and number of children.

Table 2 reports offer and take-up rates of full-time private sector wage and salaried workers in 1996 by race, ethnicity, gender, and household structure. The top panel summarizes offer and take-up rates of workers across all households. Focusing first on offers, the top two rows indicate that among both men and women, offer rates of Hispanics are significantly lower than those of Non-Hispanic whites. Among women, offer rates of blacks and Asians are also lower than those of white women. By contrast, and somewhat surprising, offer rates of Non-Hispanic black men are nearly identical to those of whites.

The lower panels reveal that the disparities in offer rates between Hispanics and whites occur in all household compositions, but that the magnitudes of the differences vary. Among men, the disparity is largest among married men in one-earner households (20 percentage points) and smallest for single men (12 percentage points). Among women, the gap is largest among

⁴ The 1996 Panel contains 40,188 households and 95,402 individuals.

women in dual-earner households (15 percentage points). Among Asian workers, offer rates of men do not differ from those of white men; however, offer rates of single Asian women are significantly lower than those of white women (by 12 percentage points). Similarly, the offer rate of single black women is significantly lower than that of single white women. Although not a focus of this study, it is interesting that gender differences in offer rates are observed only in white households.⁵

Finally, differences by race and ethnicity in take-up rates are small compared to disparities observed in offer rates. The only statistically important differences in take-up are between white and Hispanic married men who are the sole earners in their households (rates of the latter are 10 percentage points lower) and between white and Hispanic single women (rates of the latter are 8 percentage points lower). Gender differences in take-up rates occur in black dual-earner and white one-earner married households (take-up is lower among women in these households).

To summarize the evidence in Table 2, there are significant differences between the offer rates of Hispanic and white men that vary in magnitude by household composition. There are also important differences between Hispanic and white women in dual-earner households and among single workers. Offer rates of black and Asian single women are also substantially lower than those of single white women. Take-up rates of Hispanic men, moreover, are lower than those of white men in one-earner married households.

⁵ Rates of women are lower than those of men in all household configurations. *P*-values of the differences between male and female rates are reported in brackets below offer rates.

III. Household offer and take-up probabilities

We next examine racial and ethnic differences controlling for covariates likely to influence whether household members receive offers and whether the offered coverage is elected. Because of the differences in offers and take-up by household composition observed in Table 2, we estimate offer and take-up equations separately for each household type. A brief description of our model follows.⁶

We first consider the demand for insurance by a single worker or a married worker who is the sole earner in the household. Let TU be the probability that a worker i elects offered insurance coverage, which is a function of worker characteristics X , price P , and unobservables including tastes for insurance ϵ_i :

$$TU_i = \alpha_0 + X_{i-1} + P_{i-2} + \epsilon_i \quad (1)$$

The parameters of this demand equation estimated on workers offered health insurance are biased if workers select into jobs that offer health insurance based on their preferences for insurance, which are unobserved. We thus estimate insurance take-up in a sample-selection framework:

$$\begin{aligned} TU_i &= \alpha_0 + X_{i-1} + P_{i-2} + \epsilon_i \\ Off_i &= \beta_0 + X_{i-1} + Z_{i-2} + \eta_i \end{aligned} \quad (2)$$

where Off is the probability of worker i receiving an offer, X is a vector of individual characteristics, Z is a vector of job characteristics, and the ϵ 's are error terms. If job sorting is an important aspect of worker behavior, $Cov(\epsilon_i, \eta_i) > 0$. If workers also sort along the dimension of price, P is endogenous to take-up and we treat it as such in our estimations. For one-earner married households and for single workers, we estimate offer and take-up as in (2) above.

⁶ A full discussion may be found in Honig and Dushi (2004).

Estimation of insurance demand in the case of a worker in a dual-earner household is more complex because of the option of coverage under a spouse's employment-based plan. Assuming that dual-earner households maximize household rather than individual utility, the couple may decide whether to select into jobs with offers of insurance coverage, which member should do so if not both and, based on offer outcomes, who should elect coverage if there is more than one offer. The wife's take-up, shown below, may thus be jointly determined with both her own and her husband's offer:

$$\begin{aligned}
 TU_{wi} &= \beta_0 + X_{wi_1} + P_{wi_2} + \beta_3 Off_{hi} + \beta_{1i} \\
 Off_{wi} &= \beta_0 + X_{wi_1} + Z_{wi_2} + \beta_3 Off_{hi} + \beta_{2i} \\
 Off_{hi} &= \beta_0 + X_{hi_1} + Z_{hi_2} + \beta_3 Off_{wi} + \beta_{3i}
 \end{aligned} \tag{3}$$

The husband's take-up is determined similarly:

$$\begin{aligned}
 TU_{hi} &= \beta_0 + X_{hi_1} + P_{hi_2} + \beta_3 Off_{wi} + \beta_{1i} \\
 Off_{hi} &= \beta_0 + X_{hi_1} + Z_{hi_2} + \beta_3 Off_{wi} + \beta_{2i} \\
 Off_{wi} &= \beta_0 + X_{wi_1} + Z_{wi_2} + \beta_3 Off_{hi} + \beta_{3i}
 \end{aligned} \tag{3'}$$

Estimating demand for health insurance by dual-earner households is complicated because the offer decisions of the two partners are jointly determined. Estimating Model (3) for the wife, for example, contains elements of both a structural model of household offers, Off_w and Off_h (each partner's offer is endogenous to the other's offer) and a sample selection model (wife's offer, Off_w , and her take-up, TU_w). Ideally, these three equations should be estimated simultaneously; currently, however, there is no estimation procedure to do this.

We thus estimate Off_h separately and include its predicted value in both equations, Off_w and TU_w , of her selection model. Specifically, we estimate a reduced form probit equation of the probability that her spouse has an offer as a function of his own individual and job

characteristics, as well as those of his wife (instead of including his wife's offer, Off_w , as in simultaneous estimation).⁷ We then include the fitted value of her husband's offer as a regressor in both the wife's offer and take-up equations.⁸ Off_w and TU_w are then estimated jointly using a standard Heckman selection procedure.⁹

A. Offer and take-up probabilities: Dual-earner households

Table 3 reports estimates of the probabilities that workers in dual-earner households receive offers of insurance from their employers and that they elect coverage. We include indicator variables for each racial/ethnic group (non-Hispanic whites are the omitted group). We use a matched sample of wives and husbands in 1,268 dual-earner households; sample sizes by race/ethnicity are reported in Table 3.¹⁰

Coefficients of the Hispanic indicator variables confirm the pattern revealed in the sample means in Table 2: Offer rates of Hispanic husbands and wives are significantly lower than those of white dual-earners. Differences in offer rates are smaller after controlling for demographic and job-related characteristics, however. Coefficients in Table 3 imply that the offer rate of Hispanic husbands is 7.8 percentage points lower than that of white husbands, compared to the 16 percentage point differential observed in Table 2, and the rate of Hispanic

⁷ We estimate the probability of the spouse having an offer conditional on the spouse working. Because of the complexity of the joint optimization decision, we do not correct for the spouse's decision to work.

⁸ To assess the robustness of our results using this reduced form approach, we also estimated a structural model of the two offers by 2SLS and 3SLS. The signs and significance levels of the coefficients of spouse's offer in the offer equations were consistent in the three approaches.

⁹ The husband's offer and take-up equations, Off_h and TU_h , are estimated similarly. In one-earner and single-person households, own offer and take-up are estimated jointly.

¹⁰ This sample of dual-earners is identical to that used in calculating mean offer and take-up rates in Table 2.

wives is 10 percentage points lower than that of white wives, compared to the 15 percentage point difference in sample means.¹¹

Table 3 reveals an interesting pattern for black husbands in dual-earner households. While sample means in Table 2 indicate no significant difference in offer rates between black and white men, the coefficient on the indicator variable in Table 3 reveals that the offer rate of blacks is significantly lower than that of whites (by 7.1 percentage points) once characteristics of jobs and demographic factors are held constant. These findings suggest that the relatively high mean offer rate of black dual-earner husbands observed in Table 2 results from their greater representation (relative to their share of workers in dual-earner households) in industries and occupations likely to offer health insurance. Once these characteristics, as well as personal attributes are controlled for, their offer rates are lower than those of white husbands.

Across all racial/ethnic groups, the probability that husbands in dual-earner households receive offers increases with the wage rate, home ownership and firm size, and decreases with poor health, employment in technical and service occupations and in goods-producing industries. Among wives, offer probabilities increase with wages and firm size, and decrease with spouses with offers, children in the household, union membership, and employment in service occupations and goods-producing industries.

Table 3 does not reveal any racial or ethnic differences among dual-earners in the take-up of offered insurance, findings consistent with those reported in Table 2. Covariates including the out-of-pocket premium, alternative options such as contributions to 401(k) plans or tax-free medical spending accounts, spouses with insurance offers and residence in urban areas, have statistically important negative effects on take-up. Differences in race or ethnicity do not,

¹¹ In tables 3-6, we report the coefficients from Heckman selection estimations, which indicate signs and significance levels of regressors. In the text, we also report elasticities for continuous variables of interest and marginal effects of a change from 0 to 1 for binary variables.

however, exert an independent influence among either husbands or wives. Coefficients of the out-of-pocket premium indicate price elasticities of .05 for husbands and .24 for wives, estimates within the range found in previous studies.

B. Offer and take-up probabilities: One-earner married households and single workers

Disparities in offer rates between whites and Hispanics observed among dual-earner households are also evident among married men who are the sole earners in their households (Table 4, col. 1 and 2).¹² The coefficient on the Hispanic indicator in the offer equation implies an offer rate of Hispanics that is 6 percentage points below that of whites. This difference is considerably smaller than the 20 percentage point difference in sample means reported on the same sample in Table 2, suggesting that differences in demographic and job characteristics account for a considerable fraction of the simple mean differential. A similar pattern is evident in take-up rates: While there is a sizable difference in mean rates (Hispanic take-up 10 percentage points below those of non-Hispanic whites), the disparity disappears once job and demographic characteristics are held constant. Finally, there are no differences in offer or take-up rates – in either unconditional or conditional means -- between white and either black or Asian men.

Across all racial/ethnic groups of one-earner married men, the probability of an offer increases with the wage, higher educational level, employment in professional and technical occupations, in larger firms, and with union membership, and decreases with poor health. Interestingly, take-up of employment-based insurance among these men is influenced by only one factor, their wealth, as measured by whether they own their homes. None of the

¹² We report estimates for male one-earner households only. The sample of married households in which the wife is the sole earner is not large enough for selection model estimation.

characteristics of the offered plan -- its price or whether alternatives are available -- nor the wage or demographic characteristics of the worker influence take-up decisions in these households.

We now turn to estimates of offer and take-up probabilities of single workers (cols. 3-6, Table 4). Surprisingly, neither coefficient on the Hispanic indicators in the two offer equations, nor the coefficient in the female take-up equation, are significant, in contrast to the large differences (especially in offers) between whites and Hispanics in the sample means reported in Table 2. As above, this discrepancy suggests that single Hispanic men and women are under-represented in jobs offering insurance, relative to their representation in the populations of single workers.

The coefficient on the indicator variable for black single men in the offer equation is positive, also a surprising finding, although the difference in rates is relatively small (3.8 percentage points). Mean offer rates in Table 2 are essentially identical, which suggests that, like single Hispanic men and women, single black men are under-represented in industries and occupations offering insurance benefits. Unlike Hispanics, however, once job characteristics and personal attributes are controlled for, their offer rates are actually higher than those of whites. There is no similar discrepancy between conditional and unconditional means for black women. The mean offer rate of black single women is 6 percentage points lower than that of white single women in Table 2, and the negative and significant coefficient on the black indicator variable in Table 4 implies a 5.1 percentage point lower offer rate. With respect to take-up, there are no significant differences among black single workers in Table 4, findings also consistent with those in Table 2.

Among single Asian women, the significantly lower offer rate observed in Table 2 is confirmed in Table 4. Controlling for job and personal characteristics, the percentage point

differential (14) is even larger. Lastly, many of the determinants of offers and take-up among single workers are similar to those of married men in one-earner households, with the notable exception that the presence of children has a significant dampening effect on both offers and take-up among male and female single workers.

To summarize the discussion of Tables 3 and 4, once other factors likely to determine offers and take-up are controlled for, offer probabilities of dual-earner Hispanic husbands and wives and black husbands are lower than those of whites. The offer probability of Hispanic men who are the sole earners in their households is also lower than that of white men. Among single workers, the likelihood of black and Asian women receiving an offer is lower than that of white women, and the likelihood of black men is higher than that of white men.

C. Offer and take-up probabilities: Comparing Non-Hispanic whites and minorities

The evidence reported thus far indicates important differences, particularly in offer rates, between white and minority workers. To understand the underlying causes of these differences, we compare offer and take-up functions of non-Hispanic white workers with those of minorities. We estimate functions separately for households in which minority samples are large enough to support sample selection estimation

Table 5 reports estimates of offer and take-up functions of married men who are the sole earners in their households. While white and minority functions are quite similar, there are some notable differences.¹³ In particular, the wage rate plays a larger role, relative to whites, in the probability that minority workers are offered insurance. A ten percent increase in the wage is associated with a 17 percent increase in the probability that minority workers will be offered

¹³ A “+” next to coefficients in the columns for minorities indicates that coefficients are significantly different from the coefficients of whites.

insurance, compared to a 4 percent increase among white workers. Being in a professional and technical occupation (rather than a laborer), and in a goods-producing rather than a service industry, also raises the probability of an offer for minorities by significantly more than for white workers. Finally, and inexplicably, a college degree raises the probability of being offered insurance among white workers, but lowers it for minorities. Interestingly, union membership increases the likelihood of being in a job offering insurance coverage equally for minority and white workers.

Looking now at take-up of offered insurance, there are only two significant differences between white and minority workers. The wage has a larger effect on the decisions of minorities -- a ten percent increase in the wage increases the probability of take-up by 23 percent among minorities -- while it does not play a role in the decisions of white workers. In addition, a high school diploma does not affect the probability that white workers will elect coverage, while it substantially increases minorities' take-up. Interestingly, the out-of-pocket premium has no effect on the decisions of either group.

Tables 6 and 7 report estimates of offer and take-up for single men and women. Among single men, the wage rate has a significantly larger impact on the probability of receiving an offer for minorities than for white workers, similar to the findings for male single-earners. A ten percent increase in the wage increases the probability of being in a job offering insurance by 17 percent among minorities, compared to 11 percent among white workers. In addition, home ownership is associated with a higher probability of receiving an offer among minorities, but has no effect on the offer probabilities of white single men. The probability of receiving an offer increases with age among white workers but not among minorities. Interestingly, region plays a powerful role in the probability of being offered insurance among single minority men, but much

less so for white men. Offer probabilities are significantly higher for minorities in the midwest, south, and west, compared to the northeast.

There is a much larger payoff, in terms of insurance offers, to a college degree for minority than for white single men, in contrast to the results for married single-earners in Table 5. Employment in mid-size and large firms (25+ employees) and in professional occupations results in higher probabilities of being offered insurance among minority single men. With respect to take-up, there are no significant differences between whites and minorities in the probabilities of electing coverage.

Table 7 reports estimates of the offer and take-up equations of single women. The presence of children does not affect the offer probability of minority women, but substantially reduces the likelihood that single white women will receive an offer. Age increases the probability that single minority women will be in jobs with offers to a greater extent than it does for white women. Finally, while there are no regional differences in the probabilities of being offered insurance among minority women, white single women are considerably more likely to be in jobs offering insurance in the midwest (compared to the northeast).

Among single women, the interesting differences between white and minority women are in the take-up decision. Minority women are far more likely to elect coverage if the offered plan is an HMO, while the type of coverage plays no role in the take-up decisions of white women. The decisions of the latter are, however, affected by the price of coverage: a ten percent increase in the price of coverage decreases the probability that white single women will elect coverage by two percent.

IV. Conclusion

Coverage under employment-based health insurance has fallen in recent years, even among full-time workers. This trend is a matter of public policy concern, especially because the decline has been greater for minority workers, Hispanic men and women in particular. By 2001, a 21 percentage point differential existed between the coverage rates of non-Hispanic white and Hispanic men, and a 15 point gap existed among women. Our evidence suggests that these gaps in coverage between white and minority workers reflect disparities in employer offers rather than differences in household decisions regarding the take-up of offered coverage.

Minority-white differentials remain after differences in job characteristics and personal attributes, including marital status and number of earners in the household, are taken into account. In dual-earner households, offer probabilities of Hispanic husbands and wives, as well as those of black husbands, are significantly lower than those of whites, but offers of black women are not different from those of white women. In one-earner married households, the offer probabilities of Hispanic men is lower than that of white men, but no differences are observed among single Hispanic and white men. Offer probabilities of single black and Asian women, but not of Hispanic women, are lower than those of white women.

These differences by household composition and by gender suggest that there may not be a simple answer to the question of why full-time minority workers are disadvantaged with respect to the provision of health benefits by their employers. It is, certainly, a question for further research.

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Table 1. Employment-based health insurance coverage rates of full-time private sector workers, by race/ethnicity and gender (%), 1988-2001

	<i>Male</i>						<i>Female</i>					
	<i>CPS</i>					<i>SIPP¹</i>	<i>CPS</i>					<i>SIPP¹</i>
	1988	1995	1997	1999	2001	1997	1988	1995	1997	1999	2001	1997
All race/ethnic groups	78 (.01)	75 (.00)	73 (.01)	74 (.01)	73 ^{***} (.01)	71 ⁺⁺⁺ (.01)	71 (.01)	70 (.01)	67 (.01)	68 (.01)	68 ^{***} (.01)	59 ⁺⁺⁺ (.01)
Non-Hispanic White	81 (.01)	78 (.00)	76 (.01)	77 (.01)	77 ^{***} (.01)	74 ⁺⁺ (.01)	72 (.01)	71 (.01)	67 (.01)	69 (.01)	70 (.01)	60 ⁺⁺⁺ (.01)
Minority	69 (.02)	66 (.01)	63 (.01)	63 (.01)	64 ^{***} (.01)	59 ⁺⁺ (.01)	67 (.02)	66 (.01)	66 (.01)	65 (.01)	64 [*] (.01)	58 ⁺⁺⁺ (.01)
Non-Hispanic Black	70 (.02)	72 (.02)	70 (.02)	69 (.02)	69 (.02)	63 ⁺⁺ (.02)	72 (.02)	71 (.02)	72 (.02)	67 (.02)	69 (.02)	63 ⁺⁺⁺ (.02)
Non-Hispanic Other	81 (.04)	76 (.02)	72 (.02)	71 (.03)	76 (.02)	63 ⁺⁺ (.03)	60 (.05)	62 (.03)	68 (.03)	67 (.03)	66 (.03)	58 ⁺⁺ (.03)
Hispanic	64 (.03)	57 (.02)	56 (.02)	56 (.02)	56 ^{***} (.02)	55 (.02)	62 (.04)	59 (.02)	56 (.02)	62 (.02)	55 [*] (.02)	51 ⁺ (.02)

Notes: ¹Coverage rates are authors' tabulations from May 1988 and February (1995-2001) CPS supplements and the 1996 SIPP wave 5 (interviews July-October 1997). Standard errors in parentheses. The sample is private sector full-time wage and salaried workers ages 20-64. Sample means are weighted using CPS supplement weights and SIPP person weights. The significance of the difference between 1988 and 2001 is denoted by asterisks (***) $p < .01$, (**) $p < .05$, (*) $p < .10$. The " + " in the SIPP columns denote significant differences between the 1997 CPS and 1997 SIPP rates. Differences in coverage rates between non-Hispanic white and minority workers (rows 2 and 3) are significant at the 1% level in all years, with the exception of females in the CPS in 1988 (5%) and 1997 (not significant) and in the SIPP (not significant).

Table 2. Mean offer and take-up rates of full-time wage and salaried workers in the private sector, ages 20-64, by race/ethnicity, gender, and household type, 1996

		Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanics
		All Households			
Offer					
	Male	0.70 (0.01)	0.67 (0.03)	0.66 (0.04)	0.54*** (0.02)
	Female	0.67 (0.01)	0.62* (0.02)	0.60* (0.04)	0.54*** (0.03)
	<i>Difference between male/female (p-value)</i>	<i>[0.013]</i>	<i>[0.171]</i>	<i>[0.247]</i>	<i>[0.950]</i>
Take-up					
	Male	0.84 (0.01)	0.84 (0.02)	0.84 (0.03)	0.81 (0.02)
	Female	0.78 (0.01)	0.79 (0.02)	0.81 (0.04)	0.74 (0.03)
	<i>Difference between male/female (p-value)</i>	<i>[0.000]</i>	<i>[0.138]</i>	<i>[0.526]</i>	<i>[0.094]</i>
		Dual-earner Married Households			
Offer					
	Male	0.75 (0.01)	0.69 (0.05)	0.68 (0.07)	0.59*** (0.05)
	Female	0.67 (0.02)	0.67 (0.06)	0.71 (0.07)	0.52*** (0.05)
	<i>Difference between male/female (p-value)</i>	<i>[0.000]</i>	<i>[0.828]</i>	<i>[0.726]</i>	<i>[0.304]</i>
Take-up					
	Male	0.78 (0.02)	0.81 (0.05)	0.73 (0.08)	0.79 (0.05)
	Female	0.63 (0.02)	0.59 (0.07)	0.66 (0.08)	0.63 (0.07)
	<i>Difference between male/female (p-value)</i>	<i>[0.000]</i>	<i>[0.016]</i>	<i>[0.545]</i>	<i>[0.071]</i>

Table 2 (cont.)

		Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanics	
		One-earner Married Households				
Offer	Male	0.75 (0.01)	0.70 (0.06)	0.73 (0.06)	0.55 ^{***} (0.03)	
	Female	0.65 (0.04)	0.63 (0.09)	0.54 (0.12)	0.51 (0.10)	
	<i>Difference between male/female (p-value)</i>		<i>[0.010]</i>	<i>[0.519]</i>	<i>[0.146]</i>	<i>[0.711]</i>
Take-up	Male	0.86 (0.01)	0.87 (0.05)	0.83 (0.06)	0.76 ^{**} (0.04)	
	Female	0.76 (0.04)	0.74 (0.11)	-- ¹	0.82 (0.10)	
	<i>Difference between male/female (p-value)</i>		<i>[0.018]</i>	<i>[0.306]</i>	--	<i>[0.623]</i>
		Single-person Households				
Offer	Male	0.65 (0.01)	0.66 (0.03)	0.61 (0.05)	0.53 ^{***} (0.03)	
	Female	0.68 (0.01)	0.62 ^{**} (0.02)	0.54 ^{**} (0.06)	0.56 ^{***} (0.04)	
	<i>Difference between male/female (p-value)</i>		<i>[0.103]</i>	<i>[0.298]</i>	<i>[0.363]</i>	<i>[0.533]</i>
Take-up	Male	0.85 (0.01)	0.84 (0.03)	0.91 (0.04)	0.85 (0.03)	
	Female	0.87 (0.01)	0.82 (0.03)	0.88 (0.05)	0.79 [*] (0.04)	
	<i>Difference between male/female (p-value)</i>		<i>[0.349]</i>	<i>[0.737]</i>	<i>[0.718]</i>	<i>[0.223]</i>

Notes: Source: Wave 5 of 1996 panel of SIPP. Sample size: 2,536 in dual-earner households, 1,687 in one-earner households, and 5,169 single-person households. Respective sample sizes for take-up are 1,776, 1,179, and 3,345. The table reports means and standard errors in parentheses; *p*-values associated with a t-test of the significance of the difference between men and women within each race/ethnicity category are in brackets. The significance of the difference between non-Hispanic whites and other race/ethnic categories is denoted by asterisks (^{***}*p* < .01, ^{**}*p* < .05, ^{*}*p* < .10). Sample means are weighted using SIPP person weights.

¹ Sample size insufficient.

Table 3. Heckman selection estimates of the probability of receiving a health insurance offer from own-employer and of electing coverage, dual-earner married households, 1996

Independent variable	Husbands		Wives	
	Take-up	Offer	Take-up	Offer
Constant	1.899 (1.294)	-3.020*** (0.440)	3.358*** (1.151)	-1.100*** (0.403)
Non-Hispanic black	0.054 (0.216)	-0.212** (0.098)	-0.182 (0.170)	-0.116 (0.104)
Non-Hispanic other	-0.191 (0.270)	-0.116 (0.114)	0.162 (0.215)	0.191 (0.127)
Hispanic	-0.161 (0.233)	-0.233** (0.093)	-0.156 (0.170)	-0.268*** (0.099)
Out-of-pocket premium ^a	-0.0192*** (0.006)	---	-0.0190*** (0.004)	---
Cost sharing	-0.227 (0.149)	---	-0.117 (0.125)	---
HI alternatives	-0.307** (0.152)	---	-0.377*** (0.121)	---
Plan is HMO	0.120 (0.099)	---	-0.008 (0.082)	---
Spouse has offer ^a	-0.513*** (0.122)	-0.005 (0.052)	-0.563*** (0.126)	-0.257*** (0.068)
Log weekly wage	0.179 (0.132)	0.287*** (0.036)	0.522*** (0.095)	0.569*** (0.051)
Home ownership	0.143 (0.153)	0.215*** (0.062)	0.114 (0.117)	0.023 (0.073)
Children ^b	-0.082 (0.111)	0.010 (0.077)	-0.354*** (0.092)	-0.368*** (0.082)
Number kids < age 18	---	-0.015 (0.037)	---	-0.006 (0.037)
Poor/fair health	-0.206 (0.254)	-0.280*** (0.107)	0.137 (0.193)	-0.037 (0.120)
Age	0.006 (0.042)	-0.022 (0.019)	-0.050 (0.039)	0.012 (0.022)
Age ²	-0.0002 (0.001)	0.0002 (0.000)	0.0004 (0.001)	-0.0003 (0.000)
Midwest	-0.055 (0.175)	-0.111 (0.068)	-0.169 (0.137)	0.104 (0.080)

Table 3 (cont.)

Independent variable	Husbands		Wives	
	Take-up	Offer	Take-up	Offer
South	0.010 (0.174)	0.057 (0.068)	-0.054 (0.145)	0.362*** (0.077)
West	0.020 (0.175)	-0.068 (0.075)	-0.073 (0.153)	0.108 (0.092)
MSA	-0.242** (0.120)	-0.036 (0.046)	-0.189* (0.100)	-0.230*** (0.051)
Firm size 25-99	---	0.486*** (0.090)	---	0.718*** (0.093)
Firm size 100+	---	0.809*** (0.082)	---	0.716*** (0.084)
Firm multiple locations	---	0.046 (0.062)	---	0.102 (0.066)
Union member	---	-0.011 (0.095)	---	-0.333*** (0.107)
Professional occupation	---	-0.096 (0.079)	---	-0.056 (0.115)
Technical occupation	---	-0.205*** (0.079)	---	0.009 (0.095)
Service occupation	---	-0.357*** (0.127)	---	-0.347*** (0.130)
Prod./craft/repair occupation	---	0.055 (0.105)	---	0.014 (0.167)
Goods-producing industry ^c	---	-0.163*** (0.052)	---	-0.133* (0.079)
$\hat{\rho}$ (rho)		0.098		0.785
<i>p</i> -value		(0.886)		(0.069)
Sample means	0.78	0.74	0.63	0.66
N: Overall	940	1268	836	1268
Non-Hispanic White	788	1034	692	1030
Non-Hispanic Black	57	82	50	74
Non-Hispanic Other	33	49	38	53
Hispanic	62	103	56	111

Notes. Source: Wave 5 of 1996 panel of SIPP. Sample: Full-time wage and salaried workers in the private sector ages 20-64. Dependent variables: Take-up = 1 if individual elects own coverage; Offer = 1 if individual offered health insurance by employer. Robust standard errors in parentheses. Omitted racial, region, firm size and occupational categories are non-Hispanic white, northeast, firm size < 25, and laborers, respectively. Sample is married couples with non-missing data for both husband and wife. All estimates are weighted using SIPP person weights.

^a Treated as endogenous.

^b Children = 1 if children present in household.

^c Industry = 1 if agriculture, mining, construction or manufacturing; 0 if transportation, utilities, trade or services.

*** $p < .01$, ** $p < .05$, and * $p < .1$

Table 4. Heckman selection estimates of the probabilities of receiving a health insurance offer and of electing coverage, married one-earner and single-person households, 1996

Independent variable	One-earner households ¹		Single-person households			
	Male		Male		Female	
	Take-up	Offer	Take-up	Offer	Take-up	Offer
Constant	0.528 (1.013)	-3.365** (0.407)	0.268 (0.640)	-3.602*** (0.254)	1.346** (0.668)	-3.640*** (0.270)
Non-Hispanic black	0.287 (0.247)	0.085 (0.102)	-0.042 (0.127)	0.104* (0.058)	-0.123 (0.104)	-0.138*** (0.049)
Non-Hispanic other	-0.066 (0.249)	0.103 (0.109)	0.279 (0.228)	0.123 (0.095)	0.245 (0.224)	-0.374*** (0.098)
Hispanic	-0.078 (0.165)	-0.163** (0.074)	0.088 (0.138)	0.034 (0.069)	-0.087 (0.138)	-0.078 (0.069)
Out-of-pocket premium ^a	-0.0007 (0.002)	---	-0.002 (0.007)	---	-0.011 (0.008)	---
Cost sharing	-0.144 (0.129)	---	0.036 (0.091)	---	-0.063 (0.093)	---
HI alternatives	-0.203 (0.150)	---	0.056 (0.129)	---	-0.093 (0.114)	---
Plan is HMO	0.031 (0.101)	---	-0.043 (0.076)	---	0.080 (0.075)	---
Log weekly wage	0.027 (0.089)	0.208*** (0.035)	0.171** (0.083)	0.356*** (0.029)	0.115 (0.076)	0.347*** (0.042)
Home ownership	0.484*** (0.118)	-0.006 (0.056)	0.06 (0.078)	0.035 (0.037)	0.031 (0.076)	-0.067* (0.035)
Children ^b	-0.071 (0.139)	0.119 (0.073)	0.046 (0.113)	-0.172** (0.078)	-0.234*** (0.086)	-0.111* (0.059)
Number kids < age 18	---	0.004 (0.025)	---	0.018 (0.040)	---	-0.071** (0.029)
Poor/fair health	0.181 (0.204)	-0.238*** (0.086)	0.128 (0.196)	-0.057 (0.084)	0.179 (0.165)	-0.064 (0.077)
Age	0.021 (0.037)	0.067*** (0.017)	0.020 (0.024)	0.052*** (0.012)	-0.009 (0.024)	0.071*** (0.011)
Age ²	-0.0004 (0.000)	-0.0007*** (0.000)	-0.0003 (0.000)	-0.006*** (0.000)	0.0001 (0.000)	-0.0008*** (0.000)
Midwest	0.185 (0.159)	0.095 (0.068)	-0.214* (0.118)	0.127** (0.054)	0.164 (0.115)	0.196*** (0.050)
South	0.098 (0.155)	0.258*** (0.064)	-0.046 (0.115)	0.035 (0.052)	0.160 (0.109)	0.222*** (0.050)
West	0.102 (0.175)	-0.025 (0.074)	-0.049 (0.139)	-0.149** (0.059)	-0.020 (0.124)	0.103* (0.056)
MSA	-0.056 (0.114)	0.147*** (0.046)	-0.093 (0.078)	0.058 (0.037)	-0.148* (0.082)	-0.029 (0.036)
High school graduate	0.071 (0.161)	0.277*** (0.075)	-0.077 (0.139)	0.299*** (0.065)	0.189 (0.148)	0.155** (0.073)
Some college	0.076 (0.176)	0.282*** (0.078)	-0.143 (0.139)	0.116* (0.068)	0.271* (0.146)	0.135* (0.075)

Table 4 (cont.)

Independent variable	One-earner households ¹		Single-person households			
	Male		Male		Female	
	Take-up	Offer	Take-up	Offer	Take-up	Offer
College graduate	0.314 (0.195)	0.041 (0.089)	0.009 (0.154)	0.107 (0.079)	0.026 (0.162)	0.164** (0.084)
Firm size 25-99	---	0.522*** (0.081)	---	0.453*** (0.062)	---	0.545*** (0.065)
Firm size 100+	---	0.759*** (0.081)	---	0.639*** (0.059)	---	0.555*** (0.058)
Firm multiple locations	---	-0.037 (0.061)	---	0.100** (0.050)	---	-0.023 (0.046)
Union member	---	0.181*** (0.063)	---	0.029 (0.054)	---	0.051 (0.064)
Professional occupation	---	0.316*** (0.074)	---	0.150** (0.064)	---	0.188*** (0.069)
Technical occupation	---	0.161** (0.081)	---	0.111** (0.057)	---	0.121** (0.061)
Service occupation	---	-0.120 (0.123)	---	-0.326*** (0.178)	---	-0.433*** (0.077)
Prod./craft/repair occupation	---	0.068 (0.066)	---	0.154*** (0.055)	---	0.542*** (0.098)
Goods-producing industry ^c	---	-0.41 (0.047)	---	0.059 (0.043)	---	0.316*** (0.048)
$\hat{\rho}$ (rho)	-0.454		-0.674		-0.714	
<i>p</i> -value	(0.142)		(0.006)		(0.000)	
Sample means	0.85	0.71	0.85	0.64	0.86	0.65
N: Overall	1,008	1,413	1,608	2,513	1,737	2,656
Non-Hispanic White	782	1,042	1,251	1,911	1,285	1,882
Non-Hispanic Black	52	72	166	252	281	460
Non-Hispanic Other	46	64	59	99	48	91
Hispanics	128	235	132	251	123	223

Notes. Source: Wave 5 of 1996 panel of SIPP. Sample: Full-time wage and salaried workers in the private sector ages 20-64. Dependent variables: Take-up = 1 if individual elects own coverage; Offer = 1 if individual offered health insurance by employer. Robust standard errors in parentheses. Omitted education, racial, region, firm size and occupational categories are high school dropout, non-Hispanic white, northeast, firm size < 25, and laborers, respectively. All estimates are weighted using SIPP person weights.

¹ We do not report results for female one-earner households due to small sample.

^a Treated as endogenous.

^b Children = 1 if children present in household.

^c Industry = 1 if agriculture, mining, construction or manufacturing; 0 if transportation, utilities, trade or services.

*** $p < .01$, ** $p < .05$, and * $p < .1$

Table 5. Heckman selection estimates of the probabilities of receiving a health insurance offer and of electing coverage among non-Hispanic white and minority married men in one-earner households, 1996

Independent variable	Non-Hispanic White		Minorities ¹	
	Take-up	Offer	Take-up	Offer
Constant	1.126 (0.924)	-2.896*** (0.457)	-5.249*** (1.171)	-5.060*** (0.827)
Out-of-pocket premium ^a	-0.001 (0.002)	---	-0.001 (0.002)	---
Cost sharing	-0.176 (0.145)	---	-0.050 (0.106)	---
HI alternatives	-0.207 (0.164)	---	-0.090 (0.127)	---
Plan is HMO	-0.0007 (0.113)	---	0.020 (0.114)	---
Log weekly wage	-0.016 (0.084)	0.143*** (0.036)	0.491***+++ (0.106)	0.445***+++ (0.087)
Home ownership	0.425*** (0.131)	0.0004 (0.067)	0.376*** (0.144)	-0.115 (0.101)
Children ^b	-0.056 (0.157)	0.049 (0.083)	0.257 (0.171)	0.197 (0.143)
Number kids < age 18	---	0.007 (0.031)	---	0.032 (0.043)
Poor/fair health	-0.017 (0.218)	-0.171* (0.096)	0.431 (0.271)	-0.411* (0.220)
Age	0.018 (0.039)	0.069*** (0.020)	0.071 (0.050)	0.042 (0.038)
Age ²	-0.0003 (0.000)	-0.0007*** (0.000)	-0.0006 (0.001)	-0.0002 (0.001)
Midwest	0.203 (0.162)	0.062 (0.072)	0.247 (0.230)	0.361* (0.208)
South	0.208 (0.168)	0.207*** (0.067)	-0.044 (0.209)	0.494*** (0.192)
West	0.052 (0.201)	-0.029 (0.089)	0.052 (0.194)	0.085 (0.173)
MSA	-0.099 (0.127)	0.172*** (0.050)	0.005 (0.155)	0.053 (0.107)
High school graduate	-0.037 (0.199)	0.286*** (0.099)	0.537***++ (0.162)	0.416*** (0.127)
Some college	-0.014 (0.213)	0.387*** (0.102)	0.475*** (0.162)	0.179 (0.144)
College graduate	0.251 (0.232)	0.194* (0.110)	0.065 (0.226)	-0.367*++ (0.209)

Table 5 (cont.)

Independent variable	Non-Hispanic White		Minorities ¹	
	Take-up	Offer	Take-up	Offer
Firm size 25-99	---	0.545 ^{***} (0.095)	---	0.505 ^{***} (0.122)
Firm size 100+	---	0.709 ^{***} (0.096)	---	0.681 ^{***} (0.149)
Firm multiple locations	---	-0.049 (0.071)	---	0.016 (0.121)
Union member	---	0.172 ^{**} (0.071)	---	0.240 [*] (0.128)
Professional occupation	---	0.325 ^{***} (0.084)	---	0.727 ^{***+} (0.175)
Technical occupation	---	0.164 [*] (0.093)	---	0.583 ^{***++} (0.116)
Service occupation	---	-0.233 (0.201)	---	0.165 (0.160)
Prod./craft/repair occupation	---	0.113 (0.074)	---	-0.013 (0.122)
Goods-producing industry ^c	---	-0.007 (0.052)	---	0.200 ^{***+} (0.100)
$\hat{\rho}$ (rho)		-0.827		0.999
<i>p</i> -value		(0.045)		(0.009)
Sample means	0.86	0.75	0.79	0.61
N	782	1042	226	371

Notes. Source: Wave 5 of 1996 panel of SIPP. Sample: Full-time wage and salaried workers in the private sector ages 20-64. Dependent variables: Take-up = 1 if individual elects own coverage; Offer = 1 if individual offered health insurance by employer. Robust standard errors in parentheses. Omitted education, region, firm size and occupational categories are high school dropout, northeast, firm size < 25, and laborers, respectively. All estimates are weighted using SIPP person weights.

¹ Minority group includes non-Hispanic blacks, non-Hispanic other races, and Hispanics.

^a Treated as endogenous.

^b Children = 1 if children present in household.

^c Industry = 1 if agriculture, mining, construction or manufacturing; 0 if transportation, utilities, trade or services.

*** $p < .01$, ** $p < .05$, and * $p < .1$; +++ $p < .01$, ++ $p < .05$, and + $p < .1$

Table 6. Heckman selection estimates of the probabilities of receiving a health insurance offer and of electing coverage among among non-Hispanic white and minority single men, 1996

Independent variable	Non-Hispanic White		Minorities ¹	
	Take-up	Offer	Take-up	Offer
Constant	0.479 (0.676)	-3.501*** (0.289)	-0.243 (1.607)	-4.264*** (0.542)
Out-of-pocket premium ^a	-0.001 0.008	---	-0.013 0.018	---
Cost sharing	0.024 (0.105)	---	0.039 (0.187)	---
HI alternatives	0.052 (0.141)	---	0.169 (0.314)	---
Plan is HMO	-0.097 (0.085)	---	0.065 (0.172)	---
Log weekly wage	0.098 (0.089)	0.337*** (0.032)	0.438* (0.243)	0.486***++ (0.062)
Home ownership	0.123 (0.084)	-0.039 (0.041)	-0.077 (0.180)	0.224***+++ (0.083)
Children ^b	-0.105 (0.125)	-0.199* (0.107)	0.289 (0.245)	-0.268** (0.127)
Number kids < age 18	---	0.061 (0.059)	---	-0.023 (0.053)
Poor/fair health	0.043 (0.210)	-0.088 (0.086)	0.359 (0.496)	-0.101 (0.227)
Age	0.032 (0.027)	0.068*** (0.014)	-0.012 (0.056)	0.008+ (0.026)
Age ²	-0.001 (0.001)	-0.001*** (0.001)	0.001 (0.001)	0.001+ (0.001)
Midwest	-0.158 (0.129)	0.025 (0.056)	-0.306 (0.311)	0.671***+++ (0.153)
South	0.008 (0.128)	-0.038 (0.057)	-0.265 (0.273)	0.464***+++ (0.136)
West	-0.052 (0.151)	-0.278*** (0.066)	0.107 (0.325)	0.355***+++ (0.139)
MSA	-0.064 (0.085)	0.089** (0.040)	-0.264 (0.210)	0.042 (0.088)
High school graduate	-0.160 (0.171)	0.272*** (0.078)	0.140 (0.267)	0.223* (0.120)
Some college	-0.173 (0.173)	0.066 (0.081)	-0.080 (0.263)	0.101 (0.123)
College graduate	-0.027 (0.188)	0.031 (0.088)	0.156 (0.330)	0.351***+ (0.170)

Table 6 (cont.)

Independent variable	Non-Hispanic White		Minorities ¹	
	Take-up	Offer	Take-up	Offer
Firm size 25-99	---	0.314 ^{***} (0.071)	---	0.843 ^{***++} (0.130)
Firm size 100+	---	0.543 ^{***} (0.066)	---	0.901 ^{***++} (0.131)
Firm multiple locations	---	0.072 (0.056)	---	0.222 ^{**} (0.108)
Union member	---	-0.015 (0.060)	---	0.195 (0.121)
Professional occupation	---	0.097 (0.070)	---	0.432 ^{***+} (0.151)
Technical occupation	---	0.199 ^{***} (0.062)	---	-0.210 ⁺⁺ (0.130)
Service occupation	---	-0.351 ^{***} (0.094)	---	-0.305 ^{**} (0.142)
Prod./craft/repair occupation	---	0.114 [*] (0.061)	---	0.197 (0.133)
Goods-producing industry ^c	---	0.111 ^{**} (0.049)	---	-0.116 ⁺ (0.098)
$\hat{\rho}$ (rho)		-0.762		-0.441
<i>p</i> -value		0.001		(0.265)
Sample means	0.85	0.65	0.85	0.59
N	1251	1911	357	602

Notes. Source: Wave 5 of 1996 panel of SIPP. Sample: Full-time wage and salaried workers in the private sector ages 20-64. Dependent variables: Take-up = 1 if individual elects own coverage; Offer = 1 if individual offered health insurance by employer. Robust standard errors in parentheses. Omitted education, region, firm size and occupational categories are high school dropout, northeast, firm size < 25, and laborers, respectively. All estimates are weighted using SIPP person weights.

¹ Monority group includes non-Hispanic blacks, non-Hispanic other races, and Hispanics.

^a Treated as endogenous.

^b Children = 1 if children present in household.

^c Industry = 1 if agriculture, mining, construction or manufacturing; 0 if transportation, utilities, trade or services.

*** $p < .01$, ** $p < .05$, and * $p < .1$; +++ $p < .01$, ++ $p < .05$, and + $p < .1$

Table 7. Heckman selection estimates of the probabilities of receiving a health insurance offer and of electing coverage among non-Hispanic white and minority single women, 1996

Independent variable	Non-Hispanic White		Minorities ¹	
	Take-up	Offer	Take-up	Offer
Constant	1.418* (0.814)	-3.182*** (0.317)	1.344 (1.353)	-4.960*** (0.484)
Out-of-pocket premium ^a	-0.015* 0.009	---	0.006 (0.014)	---
Cost sharing	-0.075 (0.111)	---	0.011 (0.184)	---
HI alternatives	-0.170 (0.128)	---	0.154 (0.248)	---
Plan is HMO	-0.076 (0.089)	---	0.483***+++ (0.144)	---
Log weekly wage	0.164* (0.092)	0.315*** (0.051)	0.003 (0.152)	0.428*** (0.071)
Home ownership	-0.024 (0.092)	-0.069* (0.041)	0.174 (0.141)	-0.063 (0.069)
Children ^b	-0.224** (0.108)	-0.210** (0.083)	-0.216 (0.151)	0.004+ (0.092)
Number kids < age 18	---	-0.037 (0.042)	---	-0.090** (0.039)
Poor/fair health	0.085 (0.204)	-0.098 (0.091)	0.344 (0.308)	-0.028 (0.136)
Age	0.002 (0.029)	0.052*** (0.013)	-0.077* (0.047)	0.121***+++ (0.022)
Age ²	-0.0001 (0.000)	-0.0006*** (0.000)	0.001*+ (0.001)	-0.001*** (0.000)
Midwest	0.068 (0.136)	0.250*** (0.056)	0.405* (0.244)	0.027+ (0.115)
South	0.022 (0.130)	0.261*** (0.057)	0.525**+ (0.222)	0.124 (0.099)
West	-0.054 (0.145)	0.134** (0.064)	0.179 (0.245)	-0.046 (0.111)
MSA	-0.182* (0.096)	0.012 (0.041)	-0.053 (0.165)	-0.146**+ (0.072)
High school graduate	0.192 (0.194)	0.196*** (0.096)	0.156 (0.248)	0.085 (0.109)
Some college	0.284 (0.192)	0.155 (0.098)	0.256 (0.233)	0.153 (0.116)
College graduate	-0.059 (0.203)	0.162 (0.105)	0.355 (0.298)	0.210 (0.150)

Table 7 (cont.)

Independent variable	Non-Hispanic White		Minorities ¹	
	Take-up	Offer	Take-up	Offer
Firm size 25-99	---	0.606 ^{***} (0.074)	---	0.403 ^{***} (0.141)
Firm size 100+	---	0.563 ^{***} (0.067)	---	0.546 ^{***} (0.121)
Firm multiple locations	---	-0.066 (0.054)	---	0.090 (0.086)
Union member	---	0.074 (0.083)	---	-0.031 (0.107)
Professional occupation	---	0.246 ^{***} (0.080)	---	0.018 (0.158)
Technical occupation	---	0.132 [*] (0.072)	---	0.049 (0.123)
Service occupation	---	-0.518 ^{***} (0.096)	---	-0.288 ^{**} (0.139)
Production/craft/repair occupation	---	0.518 ^{***} (0.121)	---	0.570 ^{***} (0.163)
Goods-producing industry ^c	---	0.332 ^{***} (0.054)	---	0.295 ^{**} (0.124)
$\hat{\eta}$ (rho)		-0.724		-0.648
<i>p</i> -value		(0.000)		(0.100)
Sample Means	0.87	0.68	0.83	0.58
N	1285	1882	452	774

Notes. Source: Wave 5 of 1996 panel of SIPP. Sample: Full-time wage and salaried workers in the private sector ages 20-64. Dependent variables: Take-up = 1 if individual elects own coverage; Offer = 1 if individual offered health insurance by employer. Robust standard errors in parentheses. Omitted education, region, firm size and occupational categories are high school dropout, northeast, firm size < 25, and laborers, respectively. All estimates are weighted using SIPP person weights.

¹ Minority group includes non-Hispanic blacks, non-Hispanic other races, and Hispanics.

^a Treated as endogenous.

^b Children = 1 if children present in household.

^c Industry = 1 if agriculture, mining, construction or manufacturing; 0 if transportation, utilities, trade or services.

*** $p < .01$, ** $p < .05$, and * $p < .1$; +++ $p < .01$, ++ $p < .05$, and + $p < .1$

Appendix Table 1. Employment-based health insurance coverage, offer, eligibility and take-up rates by gender and race/ethnicity (%), 1988 CPS

	<i>Male</i>				<i>Female</i>			
	Coverage	Offer	Eligibility ^a	Take-up ^b	Coverage	Offer	Eligibility ^a	Take-up ^b
All race/ethnic groups	78 (.01)	86 (.01)	97 (.00)	94 (.00)	71 (.01)	84 (.01)	96 (.00)	88 (.01)
Non-Hispanic White	81 (.01)	88 (.00)	97 (.00)	95 (.00)	72 (.01)	86 (.01)	96 (.00)	87 (.01)
Minority ^c	69 ^{***} (.02)	79 ^{***} (.01)	94 ^{***} (.01)	93 (.01)	67 ^{**} (.02)	79 ^{***} (.02)	97 (.01)	88 (.01)
Non-Hispanic Black	70 ^{***} (.02)	81 ^{***} (.02)	95 (.01)	91 ^{**} (.02)	72 (.02)	84 (.02)	96 (.01)	89 (.02)
Non-Hispanic Other	81 (.04)	87 (.03)	96 (.02)	97 (.01)	60 ^{**} (.05)	77 ^{**} (.05)	98 ^{**} (.01)	80 (.04)
Hispanic	64 ^{***} (.03)	73 ^{***} (.03)	93 ^{**} (.02)	94 (.02)	62 ^{***} (.04)	72 ^{***} (.03)	96 (.02)	90 (.03)

Notes. Data shown are authors' tabulations from May 1988 CPS Employee Benefits Supplement. Standard errors in parentheses. Sample: Full-time wage and salaried workers in private sector ages 20-64. Sample means are weighted using supplement weights. Significance of difference between non-Hispanic white (row 2) and other race/ethnic groups (rows 3 to 6) denoted by asterisks (*** $p < .01$, ** $p < .05$, * $p < .10$).

^a Conditional on offer.

^b Conditional on eligibility.

^c Minorities include non-Hispanic black, non-Hispanic other, and Hispanic.

