Racial differences in Wages and Non-Wage Compensation[*]

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[PRELIMINARY AND INCOMPLETE]

Abstract

This paper examines differences in two important components of non-wage compensation, employer provided health insurance and pensions, across African Americans and the whites in the United States. Using data from the Current Population Survey (CPS) and the National Longitudinal Survey of Youth (NLSY), we study the recent trends in the recipiency of these non-wage compensation across race groups. Our results suggest that while African American men on average are less likely to receive employer-provided health insurance and pension than whites in the last decade, the gap has become smaller over time. We also find that the inclusion of racial differences in ability as measured by the Armed Forces Qualification Test (AFQT) score reduces the unexplained racial gap in fringe benefit offers for men. Our results highlight the importance of labor supply factors (or human capital differences) when looking at racial differences in important components of non-wage compensation. Finally, we re-examine racial inequality in the labor market by using a measure of total labor compensation that includes non-wage compensation.

JEL codes: I11, J15, J32

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I. Introduction

Racial gaps in the labor market have persisted, and in some cases, have even increased recently (for example see Altonji and Blank[1] and Neal[25]. Racial differences in wages are fairly well documented; however, there is less work examining the racial differences in non-wage compensation such as employer-provided health insurance and pension coverage. This paper seeks to ask several questions: What are the racial differences in health insurance and pension coverage for men and women? What component of the racial difference in health insurance and pension coverage can be explained as a result of racial differences in characteristics? What are the racial differences in total compensation, and how do these differ from racial differences in wages?

To date, little work examines racial differences in non-wage compensation. Most studies use firm level data on fringe benefits (Woodbury[31] and Pierce[27]). While firm characteristics are extremely important in the provision of fringe benefits, unfortunately such data does not allow us to examine differences in fringe benefits by race, gender or other important individual level variables. A limited number of studies do examine race and gender differences in fringe benefits: Even and Macpherson[8] look at gender differences in pension coverage. Solberg and Laughlin[29] find that inclusion of fringe benefits reduces the gender wage gap. Levy[20] uses the Current Population Survey to examine racial and gender differences in health insurance and finds that the inclusion of health insurance results in a smaller estimate of gender compensation inequality than one that is based solely on wages. Our work contributes to the literature by further examining racial and gender differences in offers of pension coverage as well as health insurance using data from both the Current Population Survey (CPS) and the National Longitudinal Survey of Youth (NLSY). To our knowledge, this is the first study that examines the role of ability in racial differences in fringe benefits using NLSY data.

We find that white men have significantly higher offers of health insurance coverage and of pension coverage than do African American men. Differences in characteristics favor higher offers of health insurance and pension coverage for African American men in the CPS. Therefore, the unexplained racial differences in offers of health insurance and pension coverage are even larger than the observed differences. However, once we control for racial differences in ability (using AFQT test scores) in the NLSY data, much of the unexplained racial differences for men disappear. Unexplained differences in non-wage compensation that continue to favor white men could be an indication of discrimination in provision of non-wage benefits to African American men; however, these could also be the result

of racial differences in preferences or other omitted characteristics.

For women, we find that racial differences in fringe benefit offers are smaller than for men. We find that white women do not have significantly higher offers for health insurance and pension coverage than do African American women. White women have more offers for employer-provided health insurance than do African American women using CPS data, but the difference is not significant; for employer-provided pensions, white women have significantly more offers than African American women. Racial differences due to differences in characteristics favors higher offers of health insurance coverage for African American women in the CPS data. We dont find large racial differences in fringe benefit offers for women when using the NLSY data.

Finally, we estimate total compensation by including the value of wages, health insurance and pension coverage. Using the CPS data, we find that the racial difference in non-wage compensation to be significant. For women, racial differences in non-wage compensation are smaller than for men. For men, the racial difference in non-wage compensation increases slightly for later cohorts, for women it also increases slightly. Finally we find the unexplained racial differences in total compensation are smaller once we include AFQT scores in the set of characteristics that are allowed to differ across groups.

In section 2, we begin with a discussion of the empirical facts about fringe benefits and the economics behind these benefits. In Section 3, we discuss the datasets used in this study. In Section 4, we consider the issue of fringe benefit take-up and look at the descriptive statistics on fringe benefits recipiency by racial and gender groups. In Section 5, we examine in detail how different individual and firm level characteristics explain the racial difference in fringe benefit recepiency at the extensive margin. In Section 6, we examine how total compensation differs between blacks and whites when the value of non-wage compensations is included. Section 7 discusses a series of caveats and ideas for future research and Section 8 concludes.

II. Reasons for fringe benefits

a. Fringe Benefits in the United States

The fraction of employee total compensation attributed to fringe benefits has been rising in the last few decades. Table 1 shows the average employer-cost per hour worked and the amount of which is

paid for fringe benefits between 1997 and 2008. The data are published by the Department of Labor, and are based on civilian employment. In 1997, fringe benefits constituted only about 16 percent of the average employee's total compensation, but this percentage had risen to about 20 percent by 2008. We discuss two of the most popular fringe benefits studied in this paper - employer provided health insurance, and pension plans.

Health Insurance

Table 1 reveals also that employer-provided health insurance has become a rising cost to the employer - in 1997 it constituted 5.9 percent of the hourly average cost, but had risen to 8.4 percent by 2008. Health insurance is also a significant part of all fringe benefits paid - about 42 percent of fringe benefits were due to health insurance. Health Insurance is often provided by an employer, the employee will normally be asked to pay a fraction of the total premium cost with the rest of the sum paid by the employer. Pierce[27] estimates that in 1997 about 73 percent of jobs have some forms of health insurance that require employer contributions. Health Insurance has been an important part of the employee's total compensation, especially for those who would be ineligible to purchase it privately (e.g. due to pre-existing conditions).[1] The cost of an average health insurance policy has risen significantly in the last 10 years - data from the Kaiser/HRET Survey of Employer Sponsored Health Benefits[17][18] suggest that the average annual premium for single health insurance coverage has more than doubled between 1999 and 2008, rising from 2,916 dollars to 4,704 dollars in nominal terms. Average annual premiums for family coverage have also risen by a similar percentage, from 5,791 dollars in 1999 to 12,680 dollars in 2008. In terms of the costs borne by the employers, the average per-employee health insurance premium contribution has risen from 1,878 dollars (86 percent of the total premium) in 1999, to 3,983 dollars (85 percent of the total premium) in 2008. These data suggest that employer provided health insurance has become more valuable to the average employee, and represent a greater proportion of his total compensation over the last ten years.

Pension Plans

Pierce[27] estimates that pension amounts to about 3 percent of the employee's total compensation. Columns 6-8 of Table 1 also show that the cost to the employer in providing pension has increased,

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[1]Pierce[27] also has estimated that in 1997, employer-provided health insurance constitutes about 5.4 percent of the employee's total compensation.

from 75 cents in 1997 (per hour worked) to $1.26 in 2008. However, as a fraction of total fringe benefits, the cost of pension has remained steady at around 21-23 percent.

b. Reasons for Employers Provided Health Insurance and Pension Plans

There are several reasons for why employers choose to provide these fringe benefits and why employees choose to accept these benefits. Many possible reasons are discussed in Woodbury[31] and Currie and Yelowitz[5][2]:

1. Cost Advantage - In accordance with the 1943 Internal Revenue Code, compensation in the form of health insurance and pensions are tax deductible for the employer.

2. Risk Pooling - The fact that health status is an unobservable variable implies that the individual may find it cheaper to purchase health insurance through their employers selected schemes. Other than public health insurance which is not universal, those who cannot or cannot afford to purchase health insurance may find employer-provided health insurance the only way of getting insured.

3. Productivity - If the productivity of a company is positively correlated with the health of its workforce, then providing health insurance is certainly important to the firm's profitability.

4. Human Resource Management - Fringe benefits may give an impression to the employees that by losing their job, they will lose more than their wages. Those whose entire family is covered by employer-provided health insurance may find it especially costly to quit their job. Since the cost to the employer in providing these benefits is lower due to risk pooling (or group discounts), it is a cost-effective human resource control tool.

III. Data

We primarily use two different datasets in our analysis. First, we use the 1996-2006 data from the Annual Demographic File/Annual Social and Economic Supplement to the Current Population Survey (CPS) to examine the trends in the recipiency of employer-provided pension and health insurance. Second, we use data from the National Longitudinal Survey of Youth (NLSY) to analyze racial differences in the recipiency of these benefits. Three additional datasets are used to aid our

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[2]In addition to the following reasons Woodbury[31] also discusses the impact of rising unionization, changing age structure of the labor force and rising income as the reasons behind the *rise* in proportion of total compensation going to fringe benefits over the 1960s and 1970s

analyses of employer provided health insurance take-up, and for the imputation of the values of these fringe benefits. Additional descriptions of these datasets will be provided in their respective sections.

a. The Current Population Survey (CPS)

The CPS is a monthly survey of about 60,000 nationally representative households. Our data come from a further supplement questionnaire was administered in March of each year. This supplement, known as the Annual Social and Economic Supplement (ASEC),[3] provides additional data on work experience, income for the previous year, non-cash benefits received, and employment situations. We use the 1996-2006 ASEC in this study.

The pension recipiency indicator that we use in our analysis comes from two questions asked of all CPS interviewees: 1) *Other than social security did the employer or union that the interviewee worked for in (the previous year) have a pension or other type of retirement plan for any of the employees?* 2) *Was he/she included in that plan?* Exactly how we define recipiency of employer-provided pension will be discussed below.

For employer-provided health insurance, individuals are asked: *At any time in (previous calendar year), (were you/was anyone in this household) covered by a health insurance plan provided through (their/your) current or former employer or union?* The CPS ASEC also collect information about the specifics of the plan, such as how the plan was paid (in part or full), and how much the contribution the employer made (if the individual was covered by employer provided health insurance). Note that these questions do not address the issue of 'Take-Up' - an individual may be offered employer-provided health insurance but decides to decline the offer, and thus he would answered that he is not covered by employer-provided health insurance. We shall return to this issue below.

b. The National Longitudinal Survey of Youth

We also use the 1979 cohort of the National Longitudinal Survey of Youth (NLSY79). The NLSY79 is a panel study of a sample of 12686 young men and women who were 14-22 years old when they were first interviewed in 1979.[45] Since then, they have been re-interviewed yearly from 1979 to

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[3]The ASEC was called Annual Demographic Supplement (ADF) prior to 2003.

[4]The sample size diminished over time due to funding limitation. Sample size of the survey dropped from 12686 respondents in 1979 to 10436 respondents in 1990.

[5]The NLSY79 is formally constituted by 3 subsamples: 1) A cross sectional sample of 6111 young people residing in US in 1979. 2) A supplemental sample of 5295 young people. This sub-sample is designed to over-sample hispanics, blacks and economically disadvantaged whites. 3) A sample of 1280 young people who were enlisted in one of the 4

1994, and bi-annually since 1996. The NLSY79 documents each respondent's experience, mainly with the labor market- such as labor market attachment, training and education. A particularly attractive feature of using the NLSY79 to analyze wage differentials is that it provides a proxy for the individual's ability - the Armed Forces Qualification Test (AFQT) score. In 1980, over 90 percent of the NLSY79 respondents were given a set of 10 tests from the Armed Services Vocational Aptitude Battery (ASVAB)[6] and a subset of 4 of these tests constitutes the AFQT. The AFQT score is used by the military services to screen applicants and thereby assigning various jobs within the military. The use of the AFQT score as a measure of the ability of the individual has been fairly widespread in economics and sociology.[7]

We mainly focus the 1996-2004 periods, because many variables of interest, such as labor union status, employer pension provision, employer health insurance provision, are not available in the early waves of the survey. It is also important to point out that the results generated by the NLSY79 are not comparable with those of the CPS, because the sample in the NLSY79 is not nationally representative.

The questions in the NLSY regarding employer-provided health insurance and pension are phrased as follows: *Did the employer MAKE AVAILABLE to you (type of benefit)?*

c. Take-Up of Fringe Benefits- Offer Rates versus Coverage Rates

A close examination of the wording of the fringe benefit questions in the CPS and the NLSY reveals that there are two different underlying concepts - offer and coverage. In the CPS, questions about whether the employer offers a pension plan are asked, but for health insurance, the individual is asked about whether he/she is 'covered' by such fringe benefit. For the NLSY, the questions ask whether a particular fringe benefit was offered by the employer.

This poses a non-trivial conceptual question - whether we should use the 'offer rate' or the 'coverage rate' as an indicator of recipiency as neither one of these questions address 'recipiency' directly. This issue arises because of the 'take-up' problem - a worker may not receive the benefit even if his employer offers him a plan. Intuitively, if most workers decide not to take-up these benefits because

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branches of military as of 30th September 1978.

[6]Formally, the tests in the ASVAB consist of (1) general science, (2) arithmetic reasoning, (3) word knowledge, (4) paragraph comprehension, (5) numerical operations, (6) coding speed, (7) auto and shop information, (8) mathematical knowledge, (9) mechanical comprehension, and (10) electronics information.

[7]For example, see Neal and Johnson (1992).

of *endogenous* reasons (such as his disliking of the plan, or that he/she is covered by other plans), then the racial difference in the offer rate might be a better measurement of inequality as it is the worker's own decision that led them not receiving the benefit and using the coverage rate understates the true level of recipiency. Similarly, if most workers are not taking up these benefits because of *exogenous* reasons (e.g. the worker is on a temporary contract and this ineligible for fringe benefits or that the insurance company refused to accept the worker because of his risk characteristics), then the racial difference in the coverage rate is a more valid measurement of inequality as the reasons for not receiving the benefit is beyond the worker's own control and using the offer rate overstates the level of recipiency. Moreover, if take-up behavior differs enormously between race groups, then using simply the difference in the offer rate/coverage rate between race/gender groups will bias the true level of inequality.

We use the Survey of Income and Program Participation (SIPP) to study whether there are racial differences in the take-up of employer-provided health insurance. For simplicity, we focus on health insurance only. In future versions of this paper we hope to also look at reasons for not taking up employer-provided pension plan.

SIPP is a series of short panel datasets based on a sample of nationally representative non-institutionalized civilian population. Interviews are implemented every 4 months and individuals are asked to provide detailed demographic and income information for the 4 months prior to the interview month.[8] Occasionally, SIPP interviewees are asked additional questions on a variety of topics such as health and physical well-being, financial history, etc in its topical modules. We use the wave 5 topical modules for both the 1996 and 2001 panels (these correspond to the year 1997 and 2003 respectively). In these topical modules, interviewees are first asked: *Does your employer offer a health insurance plan to ANY of its employees?(Yes/No).* For those who are not covered by employer-provided health insurance (as reported in the core questionnaire), the interviewer asks for the reasons of non-coverage. For this analysis, we restrict our sample to those who are 22-64 years of age and are working in private companies.

Table 2 presents the results. The upper panel (lower panel) tabulates the results for the 1996 panel (2001 panel). Columns 1-5 show the percentages of those who are not taking up employer-provided health insurance by various reasons (individuals can give more than one reason so the rows do not sum to one, and we also omit the "other reasons" category). For those white men who are

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[8]Readers are encouraged to refer to U.S. Census Bureau (2001) for a more thorough description of SIPP.

not taking up employer-provided health insurance, 29 percent in the 1996 panel did so because they are ineligible due to their type of employment (e.g. in temporary or part-time positions). For blacks, the rate is 37 percent. A small fraction of those who are offered health insurance did not take up because of being denied by the insurance companies. We also see that white men are more likely than black men to decide not to take-up because they are covered by other plans, while black men are more likely to decline employer-provided health insurance because the plans are too expensive.

These results suggest that 'ineligibility due to the type of employment' is the primary exogenous reason for non-takeup. Therefore, we believe that by restricting our attention to only on those who are working full-time, most of the non-takeup will be due to endogenous reasons. Thus, upon this restriction the offer rate is a better measure of fringe benefit recipiency.

Nevertheless, the CPS ASEC do not give us the employer-provided health insurance offer rates. Instead, questions about whether the individual's current employer offers health insurance are asked in the CPS February supplements. Unfortunately, these supplements are available only in some years (since 1996, they are available in 1997, 1999, 2001 and 2005). Given the CPS structure, we merge these February CPS data with the CPS ASEC, thus allowing us to have access to variables in both supplements for the individual. The cost of doing so is a sample reduction as we cannot use individuals who were interviewed in March but not February and vice-versa.

In these CPS February supplements, those who are not taking up employer-provided health insurance are also asked about the reasons for doing so. In Appendix Table , we report the percentage of those who are not taking up such benefit, by various reasons. We focus on those who are working full time and more than 35 hours per week. Indeed, upon making this restriction, we see that most of the non-takeups are doing so due to endogenous reasons.

IV. Trends in the Provision and Coverage of Fringe Benefits

a. In the Provision and Coverage of Employer-Provided Health Insurance

Table 3 shows the percentages of workers who are offered employer-provided health insurance using the February and March supplements of the 1997, 1999, 2001 and 2005 Current Population Surveys. We report these percentages for white men, black men, white women and black women separately. We restrict our sample to those 25-64 years of age who work over 35 hours a week in the private

sector.

Overall, the percentage of workers who were offered health insurance by their employers has not changed significantly in the 1997-2005 period. However, we do observe a racial difference in the offer rates - in 1997 about 89 percent of white men worked in jobs that offer health insurance, while that percentage for black man is only 85 percent. This gap persists over the 1997-2005 period. It is somewhat interesting to see that the racial gap exists for women in the recipiency of this fringe benefit is smaller than for men.

b. Trends in Employer Provided Pension

Table 3 also reports the percentages of workers who are offered a pension plan (defined contribution or defined benefit) in 1997-2005. Here we see that the racial gap in pension recipiency is much larger than that of health insurance. Both black men and women are less likely to work in jobs that provide them a pension plan. In 1997, 70 percent of white male workers are offered pension plans, for black male workers however, this percentage is about 65 percent. In 2005, the gap is wider with 69 percent and 62 percent for white and black men respectively. For women, about 69 percent of white women and 67 percent of black women are offered pension plans in 2005.

V. Explained and Unexplained Racial Differences in Health Insurance and Pension Coverage

a. Racial Differences

There are important differences in characteristics across black and white workers. How much of the difference in fringe benefits such as employer provided health insurance and pension can be explained by racial differences in characteristics across black and white workers and how much of this difference remains unexplained by differences in characteristics? To answer this question we estimate a set of simple regressions of the following type, which include race as well as other worker and firm controls, separately for men and for women and for health insurance and pension recepiency:

$$C_i^* = Z_i d_C + e_{C,i} \tag{1}$$

$$C_i = \begin{cases} 1 & \text{if } C_i^* > 0 \\ 0 & \text{if } C_i^* = 0 \end{cases} \tag{2}$$

$C \in \{HI, P\}$ is a dummy variable taking the value one if individual i is offered non-wage compensation (health insurance HI or pension P) from the employer and the value zero if not, C_i^* is a latent variable that determines whether or not an individual gets offered non-wage compensation (health insurance or pension) and Z_i is the vector of individual and workplace characteristics that determine whether or not an individual gets offered health insurance and pension. We assume the error term $e_{C,i}$ is distributed normally so we carry out probit estimation of the above equations.

As a complement to the above, we also carry out the regressions separately for each racial group and look at the differences across racial groups. In other words, we also report unexplained differences in non-wage compensation (health insurance and pension) across racial groups separately for men and for women, by carrying out non-linear decompositions. The non-linear decomposition is a variant of the well-known Blinder-Oaxaca decomposition, given by

$$C^W - C^B = [(Z^W - Z^B)d_C^W] + [Z^B(d_C^W - d_C^B)] \tag{3}$$

where (as above) Z^j is the row vector of average values of the independent variables and d_C^j is the vector of coefficient estimates for benefit type C and race j. Since we want to estimate unexplained differences in a discrete binary variable, we need a modification of the method that decomposes the non-linear equation, $C = F(Zd_C)$, since C does not necessarily equal $F(Zd_C)$. Following the method proposed in Fairlie (2005), we use the non-linear decomposition, given by

$$C^W - C^B = [\sum_{i=1}^{N^W} \frac{F(Z_i^W \delta_C^W)}{N^W} - \sum_{i=1}^{N^B} \frac{F(Z_i^B \delta_C^W)}{N^B}] + [\sum_{i=1}^{N^B} \frac{F(Z_i^B \delta_C^W)}{N^B} - \sum_{i=1}^{N^B} \frac{F(Z_i^B \delta_C^B)}{N^B}] \tag{4}$$

In the above decompositions, the first term represents the part of the racial gap in non-wage compensation due to group differences in distribution of Z while the second term represents the part of the gap due to differences in group processes determining the level of $C \in \{HI, P\}$. The second component is the part of the racial gap in non-wage compensation which cannot be explained by the racial differences in individual and workplace characteristics.

In order to estimate the contribution of racial differences in individual characteristics using Fairlie (2005), the standard errors associated with these are estimated by the delta method. The decompo-

sition method involves a one to one matching between the black and white groups. Since there are fewer black workers than white workers, samples are drawn randomly from the white sample. Fifty different samples are drawn, racial differences estimated using each sample and the mean results from across the fifty different samples reported.

Table 4 reports the estimation results for health insurance when using the CPS data for full time workers working in the private sector from the 1997, 1999, 2001 and 2005 cohorts. The cohorts are pooled together, and year dummies included in the estimations. Panel A gives the results when race dummies are included in the probits and Panel B gives the results from the non-linear decompositions. In (I), estimation results are reported when we use individual level controls only such as education, age, region, children, and spouse salary. We use a set of dummy variables for education: whether the worker has no education, some high school education, high school education or college/grad school education. We use four region dummies. According to the estimations being African American is associated with significantly lower health insurance for men; for women it is associated with insignificantly higher health insurance. In (II), estimation results are reported when workplace or firm level controls are included in addition to the individual level variables. These include union membership, [9] firm size, occupation, and industry. We use five dummy variables for firm size: whether number of employees in the firm are less than 25, between 25 and 99, between 100 and 499, between 500 and 999 or greater than 1000. We use eight dummies for occupation and thirteen dummies for industry. Inclusion of these controls increases the coefficient and marginal effect associated with the black dummy to almost twice its level without the firm level controls for the male samples; for women, the coefficients and marginal effect is now negative but still insignificant. In the decomposition results, inclusion of the latter set of control variables changes the component of the explained difference from positive to negative. In other words, racial differences in firm level controls such as union membership, firm size, occupation, and industry favor health insurance coverage for black men and women. The unexplained differences in health insurance coverage across race, however, favor white men and women.

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[9]Since 1983, questions on union/employment association membership are asked only to a quarter of the sample (the outgoing rotation groups) in each month (Hirsch and Macpherson). To obtain information of union membership for the remaining three quarters of the sample in each year, we make use their responses to the Basic CPS survey in the following months. Specifically, we look at their responses to the questions on union membership during their outgoing interviews. We also restrict to those who do not experience unemployment between the ASEC and their outgoing interview. Doing so essentially eliminate those who changed jobs during this period, which will contaminate our data (i.e. the employer that offers pension may not be the employer the interviewee worked for during the month when he answered the union membership questions).

Table 5 gives the estimation results for pension with a race dummy included in the set of regressors in section A and from non-linear decompositions in section B. Table 5 uses CPS data for full time workers working in the private sector from 1997, 1999, 2001 and 2005 cohorts. In (I), estimation results are reported when individual level controls only are included. In (II), estimation results are reported when firm level controls are included in addition to individual level controls. Inclusion of firm level controls increases the coefficient and marginal effect associated with the black dummy so that it is significantly negative, for both the male and female sub-samples. In the decomposition results, inclusion of the firm level controls changes the component of the explained difference from positive to negative. As for health insurance, the racial differences in firm level variables such as union membership, firm size, occupation, industry and work type favor pension recipiency for black men and women. The unexplained differences in health insurance coverage across race favor white men and women.

b. The Role of Ability in the Racial Differences of Fringe Benefits

Using the NLSY allows us to a more rich set of individual level controls in our models of recipiency of non-wage compensation. In particular we are interested in how racial differences in ability, as proxied by the AFQT test score, have an impact on racial differences in employer provided health insurance and pensions.

Tables 6 and 7 give the estimation results from probit regressions on health insurance offers with a race dummy in section A and from non-linear decompositions in section B. We use data for full time workers from 1996 to 2006 rounds of the NLSY, the data being pooled with year dummies included in the estimations. In (I), estimation results are reported when we use individual level controls such as education, age, region, children, and spouse salary in the regressions. In (II) estimation results are reported with the addition of the AFQT test score, standardized by age. In (III), estimation results are reported when we include firm level controls such as union membership, firm size, occupation, and industry but exclude AFQT. In (IV) we again add standardized AFQT scores to the set of regressors. With the addition of AFQT test scores the race dummy for men is still negative but the level is smaller than without the inclusion of AFQT scores. For women the race dummy is not significant in any model although it is negative and smaller in level with the inclusion of the AFQT score than without its inclusion. This can also be seen in the non-linear decompositions; inclusion of

the AFQT score for men increases the difference between rows (6) and (7), which is the difference in health insurance offer rates not explained by differences in characteristics.

Tables 8 and 9 give the estimation results from probit regressions on pension offers with a race dummy in section A and from non-linear decompositions in section B. Tables 8 and 9 use NLSY79 data for full time workers who work in the private sector from 1996 to 2006 rounds, the data being pooled with year dummies included in the estimation. (I) gives the estimation results when individual level controls such as education, age, region, children, and spouse salary are used as the control variables. In (II) estimation results are reported with inclusion of the AFQT test score, standardized by age. In (III), estimation results are reported when we include firm level controls such as union membership, firm size, occupation, and industry but exclude AFQT. In (IV) we again add standardized AFQT scores to the set of regressors. The race dummy is significantly negative for men in (I), but addition of standardized AFQT test scores makes the dummy insignificant and reduces the level of the coefficient and the marginal effect. For women the race dummy is insignificant in all the models, although inclusion of the AFQT changes the level of the coefficient on the black dummy and the associated marginal effect from negative to positive. This can also be seen in the non-linear decompositions; inclusion of the AFQT score for men reduces the difference between rows (6) and (7), which is the difference in pension offers not explained by differences in characteristics. For women we have the somewhat counter-intuitive result that high ability women seem to be less likely to be offered fringe benefits, but the overall racial differences in fringe benefit offers for women are too small.

VI. Racial Differences in Wages and Total Compensation, and the Role of Ability

We define total compensation as the combined value of wages, health insurance and pension. While both the NLSY and the CPS ASEC ask about the magnitude of the wage the individual gets, the values of health insurance and pension are not asked. A plausible reason is that they are extremely difficult to measure from the perspective of the employee. The value of employer provided health insurance depends on the individual's health status, the nature of the plan, the coverage particulars. Similarly, the value of pension to the employee depends on the current and future interest rates, the individual's assessment of future inflation, the self assessed probability of death before retirement etc.

From the perspective of the employer, however, the values of these non-wage compensation items are not simple to assess either. Provision of such non wage compensation may improve the productivity of employees and increase the retention rates, which are both beneficial to the employer, making the value of non-wage compensation depend on more than just the costs involved in providing them.

To abstract from the complexity in modeling the value of non wage compensation, we assume their values are just the direct costs to provide them. In the CPS ASEC, individuals who are covered by employer-provided health insurance are also asked about the amount of contribution of the employer. Since the CPS asks about the dollar amount of health insurance premium contributed by the employer, we estimate a regression of these dollar amount on age, gender, occupations, industries, regions, unionization, years, nature of the plan (single or family) and number of employees in the place of work. We use the resulting estimates to impute the employer's contribution of health insurance premium for those who are offered but not covered. For pension, however, the CPS ASEC does not ask about the amount of employer's contribution. To estimate the amount paid by the employer, we use the Survey of Consumer Finances (SCF) which ask about the amount of employer's contribution towards the employee's pension (as a percent of the employee's wage). [10] We then apply these contribution rates to the CPS data and estimate the employer's contribution.

For NLSY, however, the issues involved in imputing values of non wage compensation schemes are more complicated. First, as we discussed previously, the NLSY asks whether the individual's employer makes a certain type of non-wage compensation available to him, rather than whether the individual is covered by such compensation. Second, for health insurance, we do not know the amount paid by the employer as well as the type of health insurance (such as whether it is a single or family plan). Thus we assume that in the NLSY, individuals who are offered non-wage compensation schemes always accept them. To impute the value of employer-provided pension, we again use the contribution rates estimated using the SCFs. For health insurance, we again use the CPS ASEC to estimate the amount paid by the employer based on the individual's demographic and occupational characteristics (see footnote above).

We find and report in tables 10 and 11 the difference in mean hourly wages and in total compensation for full time working blacks and whites using CPS data by year. The two tables give the

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[10]The SCF is a triennial cross-sectional survey containing detail data about the interviewees' income, assets and investment portfolios. We use the 1995, 1998, 2001, and 2004 SCF to estimate the average pension contribution rates (employers). We use the averages of the 1995 and 1998 rates, 1998 and 2001 rates, 2001 and 2004 rates as the rates in 1996-1997, 1999-2000, and 2002-2003 respectively.

male and female sub-samples from the CPS data. The first thing to note is that racial differences in non-wage compensation for women are much lower than those for men, among full-time workers. Secondly, the racial difference in non-wage compensation for men is significant and slightly increases in later cohorts compared to earlier cohorts. For women, however, the racial difference in non-wage compensation is not significant in all cohorts, and it actually declines in later cohorts compared to early cohorts.

We also carry out a preliminary examination of how unexplained differences in total compensation across racial groups are affected by inclusion of AFQT test scores. We do this by carrying out quantile decompositions of total compensation, with and without including AFQT in the set of characteristics (other characteristics include education, tenure and the square of tenure). While the Oaxaca-Blinder and non-linear decompositions given in equations 3 and 4 estimate the average treatment effect on the treated by using linear/non-linear regressions (the first parts of equations 3 and 4 or the explained difference across groups), quantile decompositions extend the method to quantiles by using linear quantile regressions (see Melly[23]). These allow us to examine the unexplained differences across racial groups at different points of the distribution of total compensation.

In our preliminary analysis we pool the different rounds of observations of full time, private sector workers in the NLSY79 from 1996 to 2006. The results for men are given in figure 3; for women the analogous figure is 6. The figures give the explained and unexplained differences across racial groups, with confidence intervals around unexplained differences estimated using 100 bootstrap replications. From figure 3, including the AFQT score for men reduces the unexplained racial difference in compensation at all points of the compensation distribution. For women, the unexplained racial difference in compensation is smaller than for men at all points of the distribution of total compensation. Inclusion of AFQT reduces the unexplained difference in total compensation for women, particularly at the lowest quantiles of the compensation distribution.

VII. Caveats and Directions for Future Work

Several caveats are in order. First, our assumption that by focusing only on those who are employed full-time and work over 35 hours per week, we eliminate all those who are not taking up Health Insurance because of exogenous reasons. It is however plausible that those who know that they cannot take up employer-provided health insurance due to exogenous reasons may instead report

that non-takeup is a personal choice. If this happens, the offer rate overstates the recipiency of these fringe benefits. More seriously, if this behavior differs across race and gender groups, then our results may be invalid. This issue is not easy to resolve as one would need to find out whether those who reject employer-provided health insurance due to personal decision are actually ineligible for such benefit.

Second, our empirical strategy has made a large number of simplifications. In the case of imputing the value of an employer-provided pension plan, our strategy is somewhat over-simplified due to data limitations. In future revisions of this paper, we hope to devise a more sophisticated method of calculating the value of a pension plan, if we have better data.

Third, we have utilized only the employer-cost of fringe benefits rather than their values in analyzing racial difference in total compensation. In the case of employer-provided health insurance, it is likely that those with bad health would value such benefit much higher than the cost (because they have difficulties to purchase the insurance privately due to their risks). If there is a significant difference in health status across the racial groups, it may be viable to derive a measure of the personal value of total compensation rather than just its monetary value.

Fourth, there are other fringe benefits that we hope to incorporate in our paper, such as life insurance.

Fifth, we can also study total compensation inequality for those in the lower section of the income distribution (or those with less education). Such an analysis may capture a somewhat different picture compared with that of using wages alone. It will also be interesting to see how the inclusion of the value of fringe benefits affects the poverty rates.

VIII. Conclusion

We find that white men have significantly higher employer-provided health insurance and pension coverage than do black men. Of the unexplained racial differences that favor white men, a large component disappears when we control for racial differences in AFQT scores. Possible reasons for the differences that persist may be possible discrimination against black men in the provision of health insurance and pension, or due to racial differences in preferences. The racial differences for women are smaller than for men in fringe benefit recepiency, for both health insurance and pensions.

When we examine racial differences in total compensation, we find them to be similar to racial

differences in wages. This result is somewhat surprising since we find non-wage compensation is different for different racial groups. Possible reasons for this could be that there is substitution across wage and non-wage characteristics (compensating differentials), which are different for different racial groups.

Several questions remain unanswered. For instance, it is not clear what causes racial differences in non-wage compensation to be so different for men and women. Our study also suggests a number of ideas for future research. Given the increasing interest in the Hispanics population, one can also explore more about the racial inequality between Hispanics and whites. Second, our investigation of take-up behavior suggests a substantial number of individuals are not taking-up employer provided health insurance for personal reasons such as not believing health insurance and do not like the plan. With longitudinal data, one can investigate the long-term health well-being of these individuals as well as for their family members. With firm level data, one can also investigate the characteristics of health insurance plans that make employees not to take up. Future studies should look at a greater variety of non-wage compensation benefits provided to employees in addition to health insurance and pensions. A better understanding of the differences in non-wage compensation across racial groups is important in proper measurement of the extent of racial inequalities in labor markets.

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Table 1: Employer Cost per Hour Worked and Fringe Benefits per Hour Worked - 1997-2008

Year	Total Employer-Cost per hour worked	Total Fringe Benefits per hour worked	Health Insurance			Pension		
			Cost per hour worked	% of Total Employer-Cost	% of Fringe Benefits	Cost per hour worked	% of Total Employer-Cost	% of Fringe Benefits
1997	19.22	3.25	1.13	5.9%	34.8%	0.75	3.9%	23.1%
1998	19.76	3.30	1.15	5.8%	34.8%	0.75	3.8%	22.7%
1999	20.29	3.39	1.18	5.8%	34.8%	0.76	3.7%	22.4%
2000	21.16	3.55	1.25	5.9%	35.2%	0.77	3.6%	21.7%
2001	22.15	3.75	1.46	6.6%	38.9%	0.78	3.5%	20.8%
2002	23.15	4.00	1.50	6.5%	37.5%	0.80	3.5%	20.0%
2003	23.93	4.25	1.65	6.9%	38.8%	0.85	3.6%	20.0%
2004	24.95	4.58	1.81	7.2%	39.5%	0.99	4.0%	21.6%
2005	25.87	4.89	1.93	7.5%	39.5%	1.11	4.3%	22.7%
2006	26.86	5.21	2.05	7.6%	39.3%	1.15	4.3%	22.1%
2007	27.82	5.45	2.19	7.9%	40.2%	1.16	4.2%	21.3%
2008	28.46	5.66	2.40	8.4%	42.4%	1.26	4.4%	22.3%

[1] Source: U.S. Department of Labor (various years)

Table 2: Employer-Provided Health Insurance Take-Up Rates, and Reasons for Not Taking Up, by race and gender

SIPP Panel		Reasons for Not Taking Up Employer HI (Among Those Not Taking Up)				
		Ineligible due to type of employment (1)	Denied by the Insurance Company (2)	Covered by Other Plans (3)	Too Expensive (4)	Personal Reasons other than cost (5)
1996	White-Male	0.291	0.012	0.355	0.164	0.084
	White-Female	0.300	0.013	0.461	0.112	0.059
	Black-Male	0.370	0.003	0.242	0.199	0.079
	Black-Female	0.362	0.014	0.302	0.153	0.050
2001	White-Male	0.244	0.012	0.375	0.160	0.069
	White-Female	0.265	0.007	0.471	0.099	0.046
	Black-Male	0.223	0.006	0.332	0.179	0.095
	Black-Female	0.305	0.016	0.287	0.217	0.058

[1] Data come from the wave 5 topical modules of the 1996 and 2001 SIPP panels.

[2] The sample is restricted to those who are currently working in private companies and those who are 22-64 years of age.

[3] Column 1 shows the percentage of workers who are offered health insurance by their employers. Column 2 shows the percentage of workers who are covered by employer-provided health insurance. Columns 3-7 show the percentages of those who are not taking up employer provided health insurance due to various reasons (individuals may elect more than one reason for not taking up).

Table 3: CPS Health Insurance and Pension Plans Offer Rates

A. Health Insurance Plans

	All	Men		Women	
Year	HI Offered	White	Black	White	Black
1997	0.8782	0.8895	0.8462	0.8678	0.8571
1999	0.8759	0.8914	0.8568	0.8577	0.8537
2001	0.8802	0.8878	0.8620	0.8725	0.8716
2005	0.8660	0.8722	0.8280	0.8625	0.8561

B. Pension Plans

	All	Men		Women	
Year	P Offered	White	Black	White	Black
1997	0.6963	0.7028	0.6492	0.6976	0.6551
1999	0.7094	0.7224	0.6836	0.6986	0.6670
2001	0.7043	0.7103	0.6285	0.7119	0.6583
2005	0.6850	0.6880	0.6231	0.6896	0.6691

[1] Data come from the CPS February Supplements and CPS Annual Demographic Files/Annual Social and Economic Supplements.

[2] We restrict the sample to those 25-64 years old who work above 35 hours a week in the private sector.

Table 4: Coefficients and decompositions of race differentials in health insurance, CPS data

	Male Sample		Female Sample	
	(I)	(II)	(I)	(II)
Controls:				
(1) Education, age, region, children, spouse salary	Yes	Yes	Yes	Yes
(2) Add union membership, firm size, occupation, industry	No	Yes	No	Yes
(A) Combined sample with race dummies				
(3) Black coefficient	-0.0944***	-0.2058***	0.0192	-0.0816
	(0.0353)	(0.0384)	(0.0401)	(0.0435)
(4) Black marginal effect	-0.0161***	-0.0293***	0.0043	-0.0164
	(0.0064)	(0.0062)	(0.0088)	(0.0091)
(B) Non-linear decompositions				
(5) Total difference	0.0301	0.0301	0.0025	0.0025
(6) Explained by characteristics	0.0125	-0.0001	0.0081	-0.0094

[1] Combined dataset from 1995, 1997, 1999 and 2005 CPS cohorts, full time workers in private sector only.
[2] In all regressions and decompositions, year dummies are included.
[3] Standard errors in parentheses.

Table 5: Coefficients and decompositions of race differentials in pensions, CPS data

	Male Sample		Female Sample	
	(I)	(II)	(I)	(II)
Controls:				
(1) Education, age, region, children, spouse salary	Yes	Yes	Yes	Yes
(2) Add union membership, firm size, occupation, industry	No	Yes	No	Yes
(A) Combined sample with race dummies				
(3) Black coefficient	-0.1065***	-0.2437***	-0.0059	-0.1546***
	(0.0286)	(0.0310)	(0.0344)	(0.0372)
(4) Black marginal effect	-0.0354***	-0.0791***	-0.0020	-0.0522***
	(0.0098)	(0.0107)	(0.0117)	(0.0130)
(B) Non-linear decompositions				
(5) Total difference	0.0609	0.0609	0.0182	0.0182
(6) Explained by characteristics	0.0263	-0.0048	0.0176	-0.0226

[1] Combined dataset from 1995, 1997, 1999 and 2005 CPS cohorts, full time workers in private sector only.
[2] In all regressions and decompositions, year dummies are included.
[3] Standard errors in parentheses.

Table 6: Coefficients and decompositions of race differentials in health insurance, male sample of NLSY79

	Male Sample			
	(I)	(II)	(III)	(IV)
Controls:				
(1) Education, age, region, children, spouse salary	Yes	Yes	Yes	Yes
(2) Add standardized AFQT score	No	Yes	No	Yes
(3) Add union membership, firm size, occupation, industry	No	No	Yes	Yes
(A) Combined sample with race dummies				
(4) Black coefficient	-0.2987*	-0.2920	-0.4276***	-0.4350**
	(0.1491)	(0.1643)	(0.1665)	(0.1801)
(5) Black marginal effect	-0.0163*	-.0159	-0.0169***	-0.0172**
	(0.0091)	(0.0100)	(0.0081)	(0.0088)
(B) Non-linear decompositions				
(6) Total Difference	0.0195	0.0195	0.0195	0.0195
(7) Explained by Characteristics	-0.0021	-0.0044	-0.0039	-0.0066

[1] Combined dataset from 1996 to 2006 NLSY cohorts, full time workers only.

[2] In all regressions and decompositions, year dummies are included.

[3] Standard errors in parentheses.

Table 7: Coefficients and decompositions of race differentials in health insurance, female sample of NLSY79

	Female Sample			
	(I)	(II)	(III)	(IV)
Controls:				
(1) Education, age, region, children, spouse salary	Yes	Yes	Yes	Yes
(2) Add standardized AFQT score	No	Yes	No	Yes
(3) Add union membership, firm size, occupation, industry	No	No	Yes	Yes
(A) Combined sample with race dummies				
(4) Black coefficient	-0.1244	-0.0561	-0.1028	-0.0305
	(0.1136)	(0.1252)	(0.1270)	(0.1396)
(5) Black marginal effect	-0.0113	-0.0050	-0.0070	-0.0020
	(0.0105)	(0.0113)	(0.0088)	(0.0092)
(B) Non-linear decompositions				
(6) Total Difference	0.0240	0.0240	0.0240	0.0240
(7) Explained by Characteristics	0.0169	0.0162	0.0374	0.0382

[1] Combined dataset from 1996 to 2006 NLSY cohorts, full time workers only.

[2] In all regressions and decompositions, year dummies are included.

[3] Standard errors in parentheses.

Table 8: Coefficients and decompositions of race differentials in pensions, male sample of NLSY79

| | Male Sample | | | |
	(I)	(II)	(III)	(IV)
Controls:				
(1) Education, age, region, children, spouse salary	Yes	Yes	Yes	Yes
(2) Add standardized AFQT score	No	Yes	No	Yes
(3) Add union membership, firm size, occupation, industry	No	No	Yes	Yes
(A) Combined sample with race dummies				
(4) Black coefficient	-0.2738*	-0.2311	-0.3409**	-0.3168*
	(0.1286)	(0.1410)	(0.1383)	(0.1493)
(5) Black marginal effect	-0.0227*	-0.0189	-0.0256**	-0.0235*
	(0.0116)	(0.0123)	(0.0116)	(0.0123)
(B) Non-linear decompositions				
(6) Total Difference	0.0305	0.0305	0.0305	0.0305
(7) Explained by Characteristics	0.0015	0.0018	0.0035	0.0052

[1] Combined dataset from 1996 to 2006 NLSY cohorts, full time workers in the private sector only.

[2] In all regressions and decompositions, year dummies are included.

[3] Standard errors in parentheses.

Table 9: Coefficients and decompositions of race differentials in pensions, female sample of NLSY79

| | Female Sample | | | |
	(I)	(II)	(III)	(IV)
Controls:				
(1) Education, age, region, children, spouse salary	Yes	Yes	Yes	Yes
(2) Add standardized AFQT score	No	Yes	No	Yes
(3) Add union membership, firm size, occupation, industry	No	No	Yes	Yes
(A) Combined sample with race dummies				
(4) Black coefficient	-0.1267	0.0111	-0.1100	0.0446
	(0.1051)	(0.1161)	(0.1153)	(0.1275)
(5) Black marginal effect	-0.0151	0.0013	-0.0108	0.0041
	(0.0127)	(0.0132)	(0.0115)	(0.0116)
(B) Non-linear decompositions				
(6) Total Difference	0.0349	0.0349	0.0349	0.0349
(7) Explained by Characteristics	0.0139	0.0245	0.0354	0.0483

[1] Combined dataset from 1996 to 2006 NLSY cohorts, full time workers in private sector only.

[2] In all regressions and decompositions, year dummies are included.

[3] Standard errors in parentheses.

Table 10: Racial differences in wages and total compensation, male samples

	Wages	Non-wage Comp	Total Comp
1997			
(1) Mean of white	22.73	3.26	25.99
(2) Mean of black	17.20	2.63	19.83
(3) Difference, (1) − (2)	5.52***	0.63***	6.15***
	(0.85)	(0.11)	(0.94)
1999			
(1) Mean of white	24.27	3.03	27.29
(2) Mean of black	17.35	2.30	19.65
(3) Difference, (1) − (2)	6.90***	0.74***	7.64***
	(0.71)	(0.29)	(0.84)
2001			
(1) Mean of white	24.59	3.02	27.61
(2) Mean of black	18.70	2.24	20.94
(3) Difference, (1) − (2)	5.89***	0.77	6.66***
	(0.74)	(0.76)	(1.22)
2005			
(1) Mean of white	24.73	3.36	28.09
(2) Mean of black	17.83	2.58	20.41
(3) Difference, (1) − (2)	6.89***	0.78***	7.68***
	(0.78)	(0.10)	(0.84)

[1] Data from 1997, 1999, 2001 and 2005 cohorts of the CPS, full time workers in the private sector only.

[2] Standard error in parentheses.

[3] *** significant at the 1 percent level, ** significant at the 2.5 percent level, * significant at the 5 percent level.

Table 11: Racial differences in wages and total compensation, female samples

	Wages	Non-wage Comp	Total Comp
1997			
(1) Mean of white	16.26	2.59	18.85
(2) Mean of black	15.00	2.36	17.36
(3) Difference, (1) − (2)	1.26***	0.23	1.49***
	(0.49)	(0.15)	(0.56)
1999			
(1) Mean of white	17.41	2.29	19.69
(2) Mean of black	14.63	2.01	16.63
(3) Difference, (1) − (2)	2.78***	0.28***	3.06***
	(0.65)	(0.07)	(0.71)
2001			
(1) Mean of white	17.50	2.17	19.67
(2) Mean of black	14.83	1.96	16.78
(3) Difference, (1) − (2)	2.67***	0.22***	2.89***
	(0.46)	(0.07)	(0.52)
2005			
(1) Mean of white	18.06	2.75	20.82
(2) Mean of black	15.99	2.47	18.47
(3) Difference, (1) − (2)	2.07***	0.28**	2.35***
	(0.48)	(1.61)	(0.54)

[1] Data from 1997, 1999, 2001 and 2005 cohorts of the CPS, full time workers in the private sector only.

[2] Standard error in parentheses.

[3] *** significant at the 1 percent level, ** significant at the 2.5 percent level, * significant at the 5 percent level.

[4] Outlier dropped from the CPS for one observation with per hour salary=$10,000, gender=female, race=African American.

Figure 1: Quantile Decomposition of Wages using the Pooled NLSY79 Male Samples
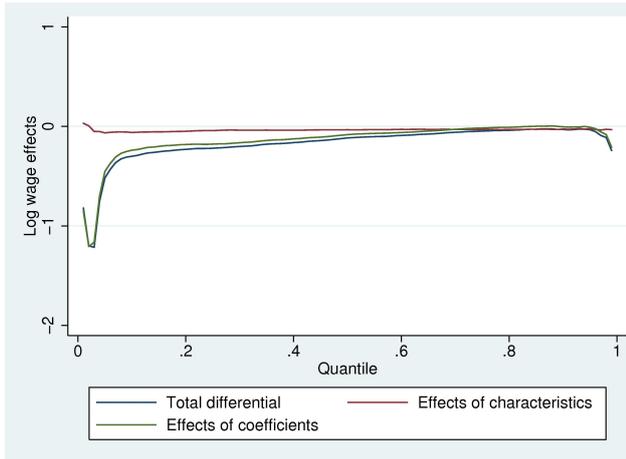
(a) Decomposition when AFQT is excluded
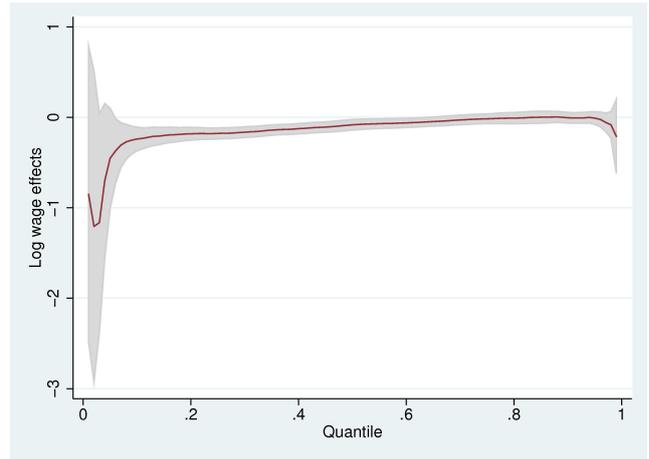
(b) Unexplained differences when AFQT is excluded
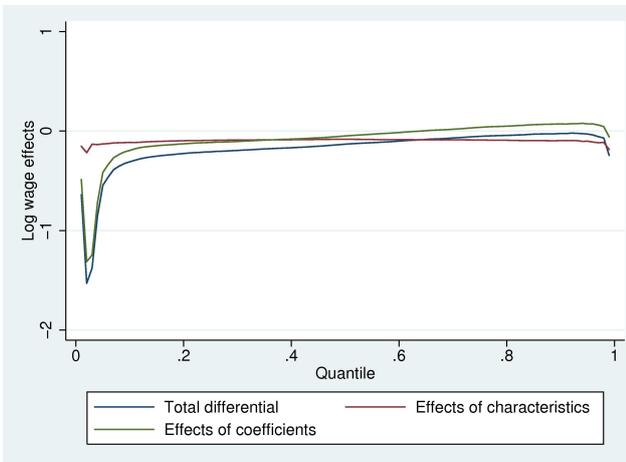
(c) Decomposition when AFQT is included
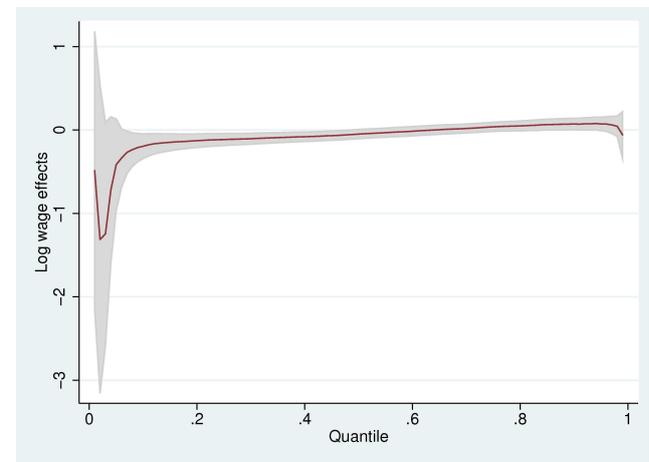
(d) Unexplained differences when AFQT is included

[1] Data from 1996 to 2006 NLSY cohorts, full time workers in private sector only.

[2] Outcome is the log of hourly wage.

[3] Set of characteristics in quantile decompositions includes a set of dummies for education, tenure and the square of tenure.

[4] AFQT scores are standardized by age.

Figure 2: Quantile Decomposition of Non-Wage Compensation using the Pooled NLSY79 Male Samples
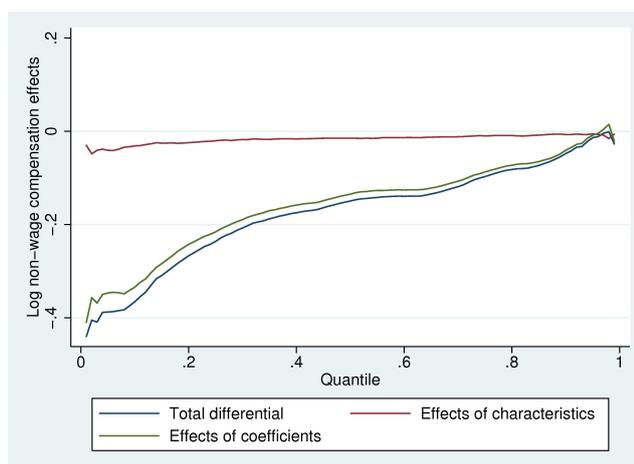
(a) Decomposition when AFQT is excluded

(b) Unexplained differences when AFQT is excluded

(c) Decomposition when AFQT is included

(d) Unexplained differences when AFQT is included

[1] Data from 1996 to 2006 NLSY cohorts, full time workers in private sector only.

[2] Outcome is the log of hourly non-wage compensation, which includes imputations for health insurance and pension benefits divided by hours worked.

[3] Set of characteristics in quantile decompositions includes a set of dummies for education, tenure and the square of tenure.

[4] AFQT scores are standardized by age.

Figure 3: Quantile Decomposition of Compensation using the Pooled NLSY79 Male Samples
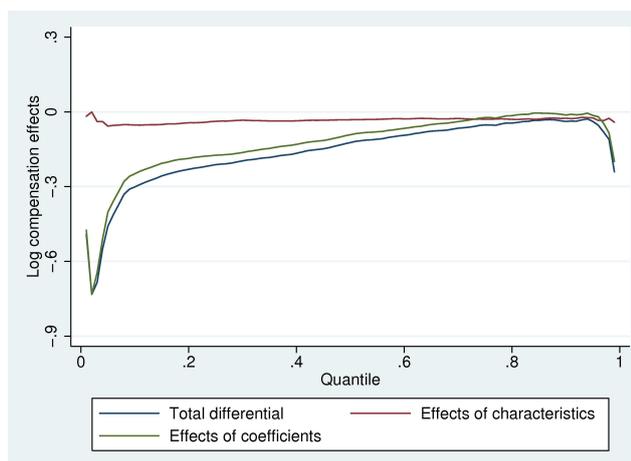
(a) Decomposition when AFQT is excluded

(b) Unexplained differences when AFQT is excluded

(c) Decomposition when AFQT is included

(d) Unexplained differences when AFQT is included

[1] Data from 1996 to 2006 NLSY cohorts, full time workers in private sector only.

[2] Outcome is the log of hourly compensation, which includes the hourly wage and imputations for health insurance and pension benefits divided by hours worked.

[3] Set of characteristics in quantile decompositions includes a set of dummies for education, tenure and the square of tenure.

[4] AFQT scores are standardized by age.

Figure 4: Quantile Decomposition of Wages using the Pooled NLSY79 Female Samples
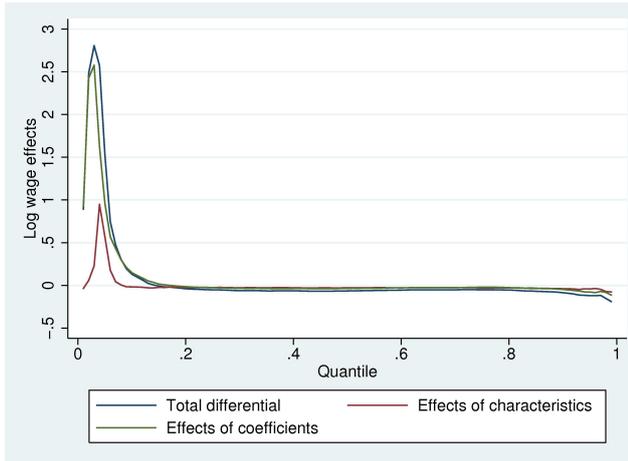
(a) Decomposition when AFQT is excluded
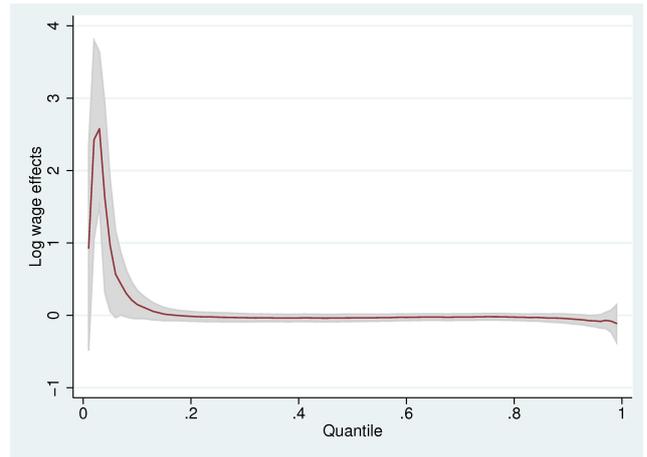
(b) Unexplained differences when AFQT is excluded
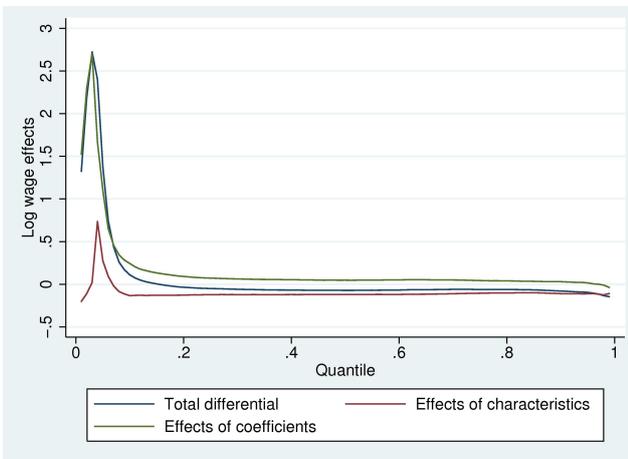
(c) Decomposition when AFQT is included
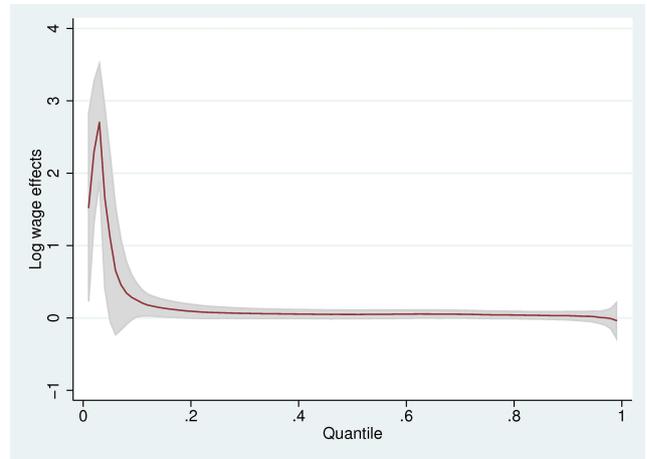
(d) Unexplained differences when AFQT is included

[1] Data from 1996 to 2006 NLSY cohorts, full time workers in private sector only.
[2] Outcome is the log of hourly wages.
[3] Set of characteristics in quantile decompositions includes a set of dummies for education, tenure and the square of tenure.
[4] AFQT scores are standardized by age.

Figure 5: Quantile Decomposition of Non-Wage Compensation using the Pooled NLSY79 Female Samples
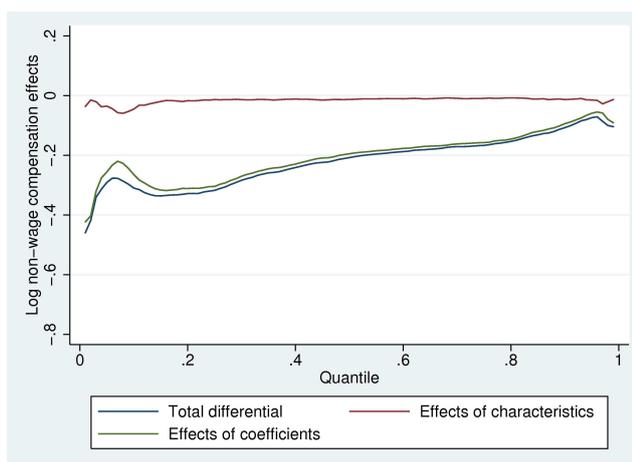
(a) Decomposition when AFQT is excluded

(b) Unexplained differences when AFQT is excluded

(c) Decomposition when AFQT is included

(d) Unexplained differences when AFQT is included

[1] Data from 1996 to 2006 NLSY cohorts, full time workers in private sector only.
[2] Outcome is the log of hourly non-wage compensation, which includes imputations for health insurance and pension benefits divided by hours worked.
[3] Set of characteristics in quantile decompositions includes a set of dummies for education, tenure and the square of tenure.
[4] AFQT scores are standardized by age.

Figure 6: Quantile Decomposition of Compensation using the Pooled NLSY79 Female Samples
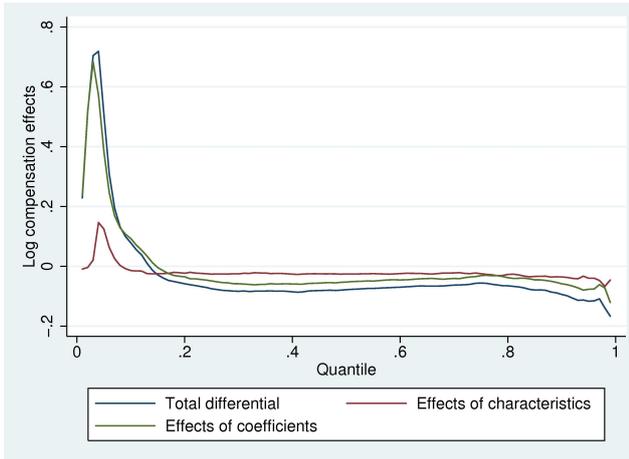
(a) Decomposition when AFQT is excluded

(b) Unexplained differences when AFQT is excluded

(c) Decomposition when AFQT is included

(d) Unexplained differences when AFQT is included

[1] Data from 1996 to 2006 NLSY cohorts, full time workers in private sector only.

[2] Outcome is the log of hourly compensation, which includes the hourly wage and imputations for health insurance and pension benefits divided by hours worked.

[3] Set of characteristics in quantile decompositions includes a set of dummies for education, tenure and the square of tenure.

[4] AFQT scores are standardized by age.

Appendix Tables

Reasons for Non-Takeup in Employer-Provided Health Insurance				
	Men		**Women**	
	White	Black	White	Black
Reason for not taking up				
Another plan	0.5933	0.4892	0.7399	0.5817
Traded for higher pay	0.0048	0.0039	0.0060	0.0050
Too expensive	0.2140	0.2750	0.1438	0.2562
Don't need Health Insurance	0.0157	0.0236	0.0094	0.0111
Pre-existing condition	0.0053	0.0039	0.0018	0.0012
Havent worked for long	0.0662	0.0864	0.0358	0.0656
Contract or temp employee	0.0017	0.0059	0.0006	0.0000
Other	0.0991	0.1120	0.0627	0.0792
	5874	509	7832	808

[1] Data come from the February Supplements of the 1995, 1997, 1999, 2001 and 2005 Current Population Surveys.

[2] As a fraction of White (Black) Men (Women) who do not receive HI from the employer

[3] Includes all workers between ages 25 and 65 who work more than 35 hours per week, are not enrolled in school and not in the armed forces