

# Gender, Race, and Denied Claims for Unemployment Insurance: The Role of the Employer

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## Abstract

Are female, Black, Hispanic, Asian, and American Indian claimants for unemployment insurance (UI) more likely than white non-Hispanic claimants to see their claims disputed by an employer?<sup>2</sup> And are these UI claimants ultimately more likely to have their UI claims denied, either by the UI agency or following a dispute? We address these questions by examining UI administrative wage and claim records from Washington state during 2005:Q1–2013:Q4. Overall, female claimants in the sample were statistically significantly more likely than males to have their claims disputed or denied; however, once we control for differences in observable characteristics of females' claims, we find they were less likely to be disputed or denied than males' claims in the sample. In particular, the findings suggest that females and males sort to employers with different propensities to dispute claims. Differences in denials and disputes by race/ethnicity are more difficult to characterize because they are divergent. Hispanic claimants were less likely than white non-Hispanics to have their claims

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<sup>2</sup> For brevity, in the text we refer to white non-Hispanic claimants as "white," to Black non-Hispanic claimants as "Black," to Asian/Pacific Islander claimants as "Asian", and to American Indian or Alaskan Native claimants as "American Indian." The tables preserve the full race/ethnicity designations provided in the data; see also the list of abbreviations.

disputed or denied; however, after accounting for observable characteristics of those claims, the differences were not statistically significant. Black, Asian, and American Indian claimants were more likely than White non-Hispanics to have their claims disputed or denied, in some cases after controlling for observables.

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**List of acronyms used in the text**

ESD— Employment Security Department

NAICS— North American Industry Classification System

UI—Unemployment insurance

**List of abbreviations for race/ethnicity groups used in the text<sup>3</sup>**

White—white non-Hispanic

Black—Black non-Hispanic

Asian—Asian/Pacific Islander

American Indian—American Indian or Alaskan Native

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<sup>3</sup> The tables indicate the full race/ethnicity designations provided in the data.

Research during the last decade has raised important concerns about the equity of the unemployment insurance (UI) system in the United States, in particular whether its treatment of claimants differs depending on the gender or race/ethnicity identity of the claimant. For example, Nichols and Simms (2012) examined Survey of Income and Program Participation data for 2010 and found that the percentage of Black unemployed workers who received UI benefits—the *UI reciprocity rate*—was 23.8%, compared with 33.2% for white unemployed workers. And an analysis of the UI Non-Filer Supplement to the May 2005 Current Population Survey by Gould-Werth and Shaefer (2012) found that, whereas 56.3% of white job losers applied for UI, 41.8% of Black job losers and 48.4% of Hispanic citizens who were job losers applied.

More recently, O’Leary, Spriggs, and Wandner (2022), using data from the USDOL’s Office of Unemployment Insurance, found that the UI reciprocity rate for Black unemployed workers was about 22–23% during 2013–2019, at least 4 percentage points below the rate for white unemployed workers. Also, Kuka and Stuart (2021), using data from the 1986–2014 panels of the Survey of Income and Program Participation, found that unemployed Black workers who appear to be eligible for UI were 24% less likely than similar white workers to receive UI, and that the lower UI application rate of Black workers accounted for up to half the Black-white gap in UI reciprocity.

Women’s access to UI has received less attention in the recent literature than has the access of different race/ethnicity groups, but Forsythe and Yang (2021) and Bell et al.

(2021) have examined disparities in UI reciprocity by gender during the period surrounding the pandemic recession. Women's access to UI figured prominently in discussions that led to the UI Modernization provisions included in the American Recovery and Reinvestment Act of 2009.<sup>4</sup> These provisions encouraged states to adopt less stringent UI eligibility requirements, such as an alternative base period, allowing former part-time workers to search for part-time work without jeopardizing their eligibility, and including voluntary quits for compelling family reasons (such as domestic violence and illness or disability of a family member) as "good cause" quits that do not disqualify a UI claimant.

Several possible reasons for these lower reciprocity and UI application rates have been discussed and examined in the literature—lower UI benefit generosity and more stringent eligibility requirements in states with relatively high populations of Black and Hispanic workers (Skandalis, Marinescu, and Massenkoff 2022; O'Leary, Spriggs, and Wandner 2022), limited information about the program (Shaefer 2012), and the hassle of claiming UI (Ebenstein and Stange 2010). But a longstanding concern is that experience rating of the UI payroll tax gives employers an incentive to challenge or appeal the UI claims of workers they lay off to avoid facing a higher UI payroll tax rate (Advisory Council on Unemployment Compensation 1996, pp. 109–110, 143–145).<sup>5</sup> This

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<sup>4</sup> See Shelton and Whittaker (2010) and Callan, Lindner, and Nichols (2015), as well as the discussion in section 1 below.

<sup>5</sup> Section 1.2 provides information about experience rating.

concern has been supported indirectly by Anderson and Meyer (2000), who found that adoption of experience rating in Washington in 1985 led to increased denials and reduced UI claim rates. More recently, Lachowska, Sorkin, and Woodbury (2021) have found that workers laid-off by employers who were more likely to dispute the UI claims of their former workers have lower UI application rates. This finding is consistent with the idea that some employers may try to deter workers from claiming UI benefits by challenging the eligibility of their claims.

A least two important questions related to these concerns about access to UI have not been addressed. First, are individual employers more likely to dispute the UI claims of females and claimants other than white non-Hispanics they have laid off? And second, are the disputed UI claims of females and claimants other than white non-Hispanics ultimately more likely to be denied? If either of these conditions exists, then workers in these groups could in effect be discouraged from claiming benefits.

To address these questions, we use administrative wage records and data on UI claims and appeals from Washington state's Employment Security Department (ESD) during 2005:Q1– 2013:Q4. Specifically, we examine whether female, Black, Hispanic, Asian, and American Indian workers are systematically more likely than male and white non-Hispanics to have their UI claims denied or disputed by employers, and if they are disputed, whether they are ultimately denied. If so, such disparate use of UI appeals by employers could help explain the relatively low UI application rates of these groups.

In section 1, we review the process of determining eligibility for UI. This institutional background is important to understanding and interpreting the estimated differences in denials and disputes between males and females, and among different race/ethnic groups. Section 2 describes the data and the methods we use to estimate inter-group differences in denials and disputes. Section 3 examines factors other than gender and race/ethnicity that are correlated with denials, disputes, and denials following disputes. These early discussions lay the groundwork for an analysis of differences in denials and disputes by gender (section 4) and by race/ethnicity (section 5). The concluding section 6 offers some caveats and discusses further research that we believe is needed.

## 1. Institutional Background<sup>6</sup>

Two features of UI are central to the questions we are addressing. First, the eligibility conditions for UI are complex and include the worker's employment history, conditions of separation, and availability and willingness to search for reemployment.<sup>7</sup> Section 1.1 describes the process of eligibility determination in Washington State, which is the source of the data we examine. Second, UI benefits are financed by a payroll tax, collected from employers, that is experience rated. In general, UI benefits paid to a worker laid off by a firm are "charged" to the firm, and those benefit charges enter a formula that determines the UI payroll tax rate paid by the firm. As a result, experience rating gives employers a financial interest in the outcome of UI claims. Section 1.2 further describes experience rating and its implications for UI eligibility.

### *1.1. Eligibility for UI benefits*

UI benefits are not paid automatically to laid off workers. The worker needs to act. Figure 1 illustrates the process of claiming and determining eligibility for UI benefits, and we refer to it both to describe the process and to indicate what we do and do not observe in the available data.<sup>8</sup>

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<sup>6</sup> Parts of this section draw on the institutional description in Lachowska, Sorkin, and Woodbury (2022).

<sup>7</sup> See, for example, <https://esd.wa.gov/unemployment/basic-eligibility-requirements> (last accessed November 17, 2022) for a description of eligibility rules in Washington state. See also Revised Code of Washington, Chapter 50.20 ("Benefits and Claims"), on which this description is based.

<sup>8</sup> The claiming process is broadly similar among the states, but we refer to specifics of the process used in Washington, which are described in an extensive "Unemployed Worker Handbook" (Employment Security Department 2019) as well as in Revised Code of Washington, Chapter 50.20 ("Benefits and Claims"). In 2013, most initial claims in Washington were filed either online (about 47%) or by telephone (51%), with



If a worker files a claim, the state UI agency (in this case, the Washington Employment Security Department, ESD) determines the worker's eligibility for benefits based on three sets of criteria:

- whether the worker has an adequate work history to qualify for benefits (that is, whether the worker is "monetarily" eligible)
- whether the worker lost their job due to lack of work and through no fault of their own (that is, whether the worker meets the "separation" requirements for eligibility)
- whether the worker is able, available, and searching for work (that is, whether the worker meets the "nonseparation" requirements for eligibility)

In Washington, the monetary eligibility requirement is met if the worker accumulated at least 680 hours in covered employment in approximately the year before the claim—that is, the "base period."<sup>9</sup> The ESD determines previous work hours by referring to

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most of the remainder filed by employers. Nationally in 2013, 63% of claims were filed online and 30% by telephone, with the remainder filed by employers, in person, or by mail. (These estimates come from the U.S. Department of Labor's Benefit Accuracy Measurement program, which randomly samples between 400 and 600 initial claims in each state annually.) Ebenstein and Stange (2010) show that telephone and internet claims largely replaced in-person claims between 1995 and 2005, but they find this apparently dramatic change had no appreciable effect on UI claim rates overall or on the mix of claimants by previous earnings.

<sup>9</sup> The base period can be defined in either of two ways. The regular base period is the first four of the last five completed quarters before the quarter in which a claim is filed. For claimants who do not meet the 680-hour requirement in the regular base period, an alternative base period can be applied—the last four completed quarters before the quarter of filing. Note that "monetary" eligibility is a misnomer in Washington because the state uses base-period *work hours* to determine past work-attachment. All other states use some measure of previous earnings to gauge work history, hence "monetary" eligibility, which we use by convention. See Revised Code of Washington, Chapter 50.20 ("Benefits and Claims").

administrative wage records—the quarterly employer reports of work hours and earnings on which much of our analysis is based—so it is relatively straightforward.

To determine the conditions of a worker’s separation, the ESD first asks claimants questions about why they became unemployed.<sup>10</sup> In general, workers who quit voluntarily or were discharged for work-related misconduct are disqualified from receiving benefits; however, workers discharged because they did not have the skills to perform a job, or who quit “for good cause,” may still qualify. Washington currently has several good-cause reasons for quitting: sickness or disability; need to care for an immediate family member who is sick or disabled; a cut in usual pay or work hours by 25% or more; and moving with a spouse or partner who is relocating, among many.<sup>11</sup>

If, based on the claimant’s answers to questions about separation, the ESD believes the worker meets the separation eligibility requirements, the ESD routinely informs the worker’s base period employer(s) that the worker has claimed benefits and requests information about why the worker separated. If the employer either does not respond or indicates the worker separated due to lack of work and not as a result of misconduct, the claim is typically certified, and the worker can expect to receive benefits

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<sup>10</sup> The process of determining non-monetary eligibility—under both separation and nonseparation criteria—varies substantially among the states and has been described and analyzed in Corson, Hershey, and Kerachsky (1986) and Fishman et al. (2003).

<sup>11</sup> The criteria are fully described in Employment Security Department (2019) and Revised Code of Washington, Chapter 50.20 (“Benefits and Claims”) (<https://app.leg.wa.gov/RCW/default.aspx?cite=50.20>, last accessed April 21, 2022).

within four to five weeks.<sup>12</sup> If the claimant's and employer's reasons for separation differ, the agency detects a separation issue and may make a formal "determination," requesting additional information and adjudicating the claim.<sup>13</sup> Either the claimant or the employer can appeal the outcome of this determination to a separate state agency—in Washington, the agency is called the Office of Administrative Hearings.<sup>14</sup> Appeals are conducted by an administrative law judge who hears testimony and evidence given under oath. Hearings are usually conducted by telephone, and the judge reaches a decision and sends that decision to the parties within two to three weeks.<sup>15</sup>

The separation requirements for eligibility are difficult to administer both because they are not entirely straightforward (and hence may not be well understood) and because workers and employers may have incentives to behave strategically in giving reasons for a separation (Corson, Hershey, and Kerachsky 1986; Fishman et al. 2003). For example, a worker discharged because he or she was unable to perform the work would

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<sup>12</sup> Under the U.S. Department of Labor's performance standards, a first UI payment is considered "prompt" if it is made within 28 days of the end of the week in which the initial claim is made. Washington met this standard for at least 90% of initial claims in most months during the period we are examining. See U.S. Department of Labor, "Benefits: Timeliness and Quality Reports." Employment and Training Administration. <https://oui.doleta.gov/unemploy/btq.asp>.

<sup>13</sup> Differing claimant and employer reasons for separation are only one event that might trigger a formal determination. More often, the agency detects a separation issue or finds the claimant is not able and available for work based on the claimant's responses alone. See Corson, Hershey, and Kerachsky (1986) and Fishman et al. (2003).

<sup>14</sup> For a readable description, see Employment Security Department (2019).

<sup>15</sup> The U.S. Department of Labor also has standards for timeliness of non-monetary eligibility determination (within 21 days from the date of detecting an issue) and for the age of pending appeals (within 30 days of the date of filing the appeal). These time lapse standards matter because if a worker receives benefits during an appeal, and the appeal is decided in favor of the employer, the worker must repay the benefits. See U.S. Department of Labor, "UI Performs Core Measures of Acceptable Performance," [https://oui.doleta.gov/unemploy/pdf/Core\\_Measures.pdf](https://oui.doleta.gov/unemploy/pdf/Core_Measures.pdf).

in general be eligible for UI benefits, but many workers who lose a job for inability to perform the work might believe (or their employers might believe or tell them) they were “fired,” and hence ineligible.<sup>16</sup> This could either lead a worker not to claim benefits or lead an employer to dispute a UI claim made by that worker (Gould-Werth, 2016).<sup>17</sup>

To remain eligible, the claimant must be “able, available, and searching for work”—that is, must satisfy the work test.<sup>18</sup> Typically, the claimant needs to keep a record of employer contacts and the job search activities and be prepared to review these with ESD. A claimant may also be required to attend job search workshops and receive other employment services, including job referrals by the agency. If a claimant refuses an agency referral to a suitable job (a job that is consistent with his or her training and experience), the claimant will be disqualified from receiving further benefits.

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<sup>16</sup> From the standpoint of UI eligibility, the terms “fired,” “terminated,” and “discharged” are ambiguous, and include separations that may or may not be disqualifying. Washington’s webpage “Were you laid off or fired?” defines “layoff” as a separation where a worker will not be replaced, and “firing” as a separation “because of performance, behavior or other ‘just cause’ reason.” (See <https://esd.wa.gov/unemployment/laid-off-or-fired> last accessed August 27, 2022.) The page goes on to explain that workers may qualify for unemployment benefits if they were “fired through no fault of [their] own, such as not having the skills to do the job,” but “may not qualify if [they] were fired for misconduct or gross misconduct.” This ambiguity about “firing” or “discharge” is longstanding. As Haber and Murray note (1968, pp. 297–301), “an employer unfamiliar with unemployment insurance would probably [believe] that no worker whom he (sic) has discharged should be entitled to benefits.” As they explain, however, “To be disqualifying, the discharge must be for misconduct.”

<sup>17</sup> Verifying the claimant’s declaration about the reasons for separation is widely viewed as important to the integrity of the UI system because a worker who has quit voluntarily or been discharged for cause has an incentive to tell the UI agency that the separation was for lack of work (Advisory Council on Unemployment Compensation 1996, chapters 7 and 9).

<sup>18</sup> For more on work search requirements in Washington and their effects, see Lachowska, Meral, and Woodbury (2016).

## *1.2. Experience rating and the employer's role in UI eligibility determination*

Washington State finances regular UI benefits using its own experience-rated payroll tax, which is collected entirely from employers. In Washington, the tax rate paid by an employer depends on the UI benefits that have been “charged” to that employer in the previous four years.<sup>19</sup> Specifically, benefits paid to each UI recipient are traced to the recipient’s former employer(s), then each employer’s benefit charges are used to calculate a measure of layoff experience that is mapped into a tax rate.<sup>20</sup> The measure used in Washington is the “benefit ratio,” defined as the sum of UI benefits charged over the last four years as a percentage of the sum of UI taxable wages over the last four years. The benefit ratio for an employer maps into a UI payroll tax rate and is applied to the employer’s taxable wage payments to calculate the payroll tax.

Experience rating is a unique feature of the U.S. system and was originally advanced to distribute the cost of UI equitably among employers, to maintain the integrity of the system by involving employers so as to avoid paying benefits to workers who are ineligible (for example, because they quit voluntarily), and to discourage employers from laying off workers (Blaustein 1993). It has been shown repeatedly to reduce temporary layoff unemployment (for example, Topel 1983 and Card and Levine

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<sup>19</sup> For details, see <https://esd.wa.gov/employer-taxes/determining-rates> (last accessed on November 16, 2022).

<sup>20</sup> Not all benefits received by workers are chargeable; for example, those paid to workers who have quit with good cause. To cover these benefits, every state’s UI payroll tax has a relatively small flat-rate component that is not experience rated and applies to all employers. See, for example, Vroman (2009) and Vroman and Woodbury (2014).

1994), but it may create an incentive for an employer to dispute UI claims to prevent an increase in the payroll tax rate work (Advisory Council on Unemployment Compensation 1996, chapters 7 and 9). UI agencies routinely notify employers when their laid off workers claim UI benefits and request information about the conditions under which a worker separated. As already discussed, differences in the reasons given by the worker and employer that have implications for whether the worker is eligible may be adjudicated by the agency or appealed in a hearing to determine eligibility. An employer might dispute the conditions of separation associated with a UI claim so that a UI claimant does not receive benefits; for example, attesting that a worker quit voluntarily or was discharged for misconduct.

### ***1.3. Reasons for separation given by workers and employers***

Table 1 shows the joint distribution of claims in Washington during 2005:Q1–2013:Q4, classified by the reasons for separation given by the claimant and by the employer.<sup>21</sup> The claimant’s reason for separation was reported in 95% of the cases. In contrast, employers rarely reported a reason for separation—it was *not* reported in 97% of the cases—showing that in all but about 3% of cases, the employer decided not to dispute or appeal the UI claim of the laid-off worker.

When the employer did give a reason for the separation, it was usually because the worker had given “lack of work” as the reason for separation, and the employer

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<sup>21</sup> The figures in Table 1 are based on a sample of 1,235,875 claims described in section 2.1 (see column 2 of Table 2).

disagreed, usually saying the worker had quit voluntarily (11,382 cases) or had been discharged (15,178 cases).<sup>22</sup> One of these two types of disagreement occurred in about 2% of the claims (26,560 out of 1.2 million), which is small but not negligible.

Table 1 also shows the percentage of claims for which benefits were denied under each of the circumstances shown. For example, in 49.4% of the cases in which the worker said the separation was due to lack of work and the employer said the worker had quit voluntarily, the claim was denied; and in 32.4% of the cases in which the worker said the separation was due to lack of work and the employer said the worker had been discharged, the claimant was denied benefits.<sup>23</sup>

Table 1 points to a role for employers in the determination of UI eligibility, but it also makes clear the important role of the UI agency. Again, employers did not give a reason for separation for 97% of the claims in the sample, but in many of these cases the agency denied benefits. For example, in 66.7% of the cases in which the claimant said the reason for separation was “voluntary quit,” the agency denied benefits, apparently without input from the employer. Similarly, in 36.8% of the cases in which the

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<sup>22</sup> “Discharge” is the classification given in the federal UI program data (U.S. Department of Labor 2017, section I-1, “ETA 207—Nonmonetary Eligibility Determinations”) and reported in the database we are using. This classification has the weaknesses and ambiguities described above in footnote 16.

<sup>23</sup> This latter outcome again suggests ambiguity about what is meant by “discharge” under UI laws—that is, it can refer either to discharge for misconduct, which is not compensable, or to inability to perform the job, which generally is. This ambiguity is further illustrated by the strikingly large number of cases (174,898 or about 14%) in which the claimant gave “discharge,” as the reason for separation, but the employer did not dispute the claim. In 63.2% of these cases, the claimant received benefits, suggesting that in most of these cases the ESD determined the claimant had not been discharged for misconduct. In contrast, claimants received benefits in only 33.3% of the cases in which they said they had quit voluntarily, but the employer gave no reason for separation (another relatively common circumstance).

claimant said the reason for separation was “discharge,” and the reason was discharge, the agency denied benefits, again with no apparent input from the employer.

Figure 1 displays the shows of the claim process we observe in boldface. For example, we observe job separation, whether the worker files a claim and is monetarily eligible, and whether the claimant ultimately receives benefits. As described in the previous section, we observe a reason for separation given by the claimant in 95% of the cases, but we observe an employer’s reason for separation in only 3% of the cases. Because the employer has discretion over responding to the agency’s request for a separation reason, we take an employer’s reason that differs from the claimant’s reason as indicating the employer disputed the claim.

The information in Table 1 allows us to construct an indicator of whether a claim was disputed. Specifically, we refer to a difference between the claimant’s and the employer’s reasons for separation as an employer dispute (or simply a dispute), although we do not observe whether the claim was settled through an agency determination or a formal appeal. We know the outcome of a dispute because we know whether the claimant received benefits. A negative eligibility determination could also be made by the agency alone (without information from the employer), and this determination could be appealed by the claimant.<sup>24</sup>

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<sup>24</sup> Again, as indicated in Figure 1, we do not observe whether the denial resulted from adjudication by ESD or from a formal appeal to the Office of Administrative Hearings.



Figure 2 shows bar charts of the benefit denial rate, the dispute rate, and the denial rate conditional on a dispute. The bar chart for denial rates (panel A) shows that 25.9% of female claimants and 28.4% of Black non-Hispanic claimants were denied benefits, substantially higher than the percentages of male (20.1%), White non-Hispanic (21.7%), and Hispanic (20.0%) claimants who were denied. The bar chart for dispute rates (panel B) shows a different pattern: the gender gap for disputes is only 0.2 percentage points (3.1% for female claimants, and 2.9% for male claimants), whereas the differences among white, Black, and Hispanic claimants are substantial (2.9%, 3.8%, and 2.3%, respectively), with Hispanic claimants being the least likely to be face a dispute.

The gender and race/ethnicity differences shown in Figure 2 could reflect differences among the claimant groups in employment histories, conditions of separation, and characteristics of claims and the claimants; that is, they could reflect the correct application of UI law and administrative regulations to each claim regardless of the claimants' gender or race/ethnicity. Alternatively, it is possible that the differences (or some portion of the differences) could reflect disparate treatment of claimants depending on their gender or race/ethnicity differences. To examine the extent to which the gaps in denials and disputes reflect these alternatives, we turn to regression analysis.

## 2. Data and Methods

### 2.1. Data

The data we examine consist of UI administrative claim and wage records from 2005:Q1–2013:Q4, provided by the Washington State Employment Security Department (ESD). Each claim record identifies the worker and includes information on the date the worker filed the claim, the weekly and maximum benefit amounts, and the benefits actually paid to the claimant. Claim records also include basic demographic information (age, race and ethnicity, gender, educational attainment, veteran status, and disability status) and information on the reason for separation given by the worker and by the employer. The wage records are quarterly reports made by each UI-covered employer of the work hours and earnings of each worker, along with a year-quarter identifier, a worker identifier, employer identifier, and the NAICS industry code of the employer.<sup>25</sup>

We start with more than 130 million wage records, each with information on a worker-quarter matched to an employer (Table 2, column 1).<sup>26</sup> When a claimant has

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<sup>25</sup> The employer is the entity from which UI payroll taxes are collected. The employer is a firm when a firm has a single establishment or multiple establishments all located in Washington (although in some cases, a multi-establishment firm may be divided into more than one employer for UI payroll tax purposes). For firms with multiple establishments some of which are located outside Washington, the employer covers only the firms' establishments located in Washington. The only employers not required to report quarterly earnings and hours are so-called reimbursable employers—government agencies, private non-profits, and federally recognized Indian tribes who elect to reimburse the UI agency for benefits paid to their laid off workers. Also, self-employed workers do not file quarterly earnings reports, and underground earnings are not reported. See Washington Administrative Code Title 192, Chapter 300, Section 060.

<sup>26</sup> For each quarter, each worker has a separate record for each employer from whom he or she had earnings or work hours. A worker with multiple employers in a quarter has multiple wage records for the quarter.

more than one base period employer, more than one employer may be chargeable for benefits paid on the claim, so to simplify the analysis and ensure that we correctly identify the chargeable employer, we restrict the sample to observations where the worker had only one base period employer (Table 2, columns 2–6). Specifically, we draw the quarters in which a worker (a) would be eligible for UI benefits if he or she were to separate in that quarter, and (b) had only one (and the same) employer in that quarter and the previous five quarters, as shown in Table 2 (column 2).

We then restrict the sample to all initial claims filed during 2005–2013 and link each claim to the wage record for the quarter in which the claim was filed, along with wage records from the preceding and the following quarter. Table 2 (column 3) displays means of these records. The remaining columns of Table 2 show descriptive statistics for this sample, further restricted to claims that were denied (column 4), claims that were disputed (column 5), and disputed claims that resulted in a denial (column 6).

## ***2.2. Estimating equations***

The analysis dataset allows us to estimate models of whether a UI claim was denied (*denied* = 1; 0 otherwise), disputed (*dispute* = 1; 0 otherwise), and for a claim that was disputed, whether the claim was ultimately denied (*denied* | *dispute* = 1; 0 otherwise). Specifically, we estimate equations of the following form:

$$\Pr(y = 1 \mid \bullet)_i = \alpha + \beta X_i + \delta D_i + \psi_{j(i)} + \gamma_t + u_i \quad (1)$$

where  $y$  denotes one of the three dependent variables, and  $X_i$  denotes a set of variables indicating the claimant's age, educational attainment, veteran status, disability status, employment history (past earnings, work hours, and quarters of employment before separation), the reasons for separation reported by the claimant and the employer, characteristics related to the claim (which include potential benefit duration, the replacement rate, and a flag for out-of-state earnings), whether the claimant was recalled or permanently separated from the employer, the size of the separating employer, and indicators of whether the employer reduced total work hours by  $\geq 5\%$ ,  $\geq 10\%$ ,  $\geq 15\%$ , and  $\geq 20\%$  between the quarter before the worker's UI claim and the quarter of the claim.<sup>27</sup>

As Gould-Werth's (2016) invaluable qualitative study shows, the outcomes we examine are influenced by many factors in addition to those we are able to observe in the data. Much is left in the error term ( $u_i$ ), which denotes unobserved factors that cannot be included in the model. The importance of unobserved factors in determining the outcome of a claim will be discussed in drawing conclusions about the relationships of gender and race/ethnicity to the outcomes examined.

To estimate differences by gender and race/ethnicity, we specify a set of twelve gender and race/ethnicity indicators for claimant  $i$  denoted by  $D_i$ . (We interact indicators

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<sup>27</sup> We refer to these as mass layoff indicators and define them using the total hours or work reported by the employer on a quarter. The indicators also require at least 5 separations to have occurred between the quarter before the worker's UI claim and the quarter of the claim.

for male and female with each of six race/ethnicity groups: white non-Hispanic, Black non-Hispanic, Hispanic, Asian/Pacific Islander, American Indian/Alaskan Native, and race/ethnicity missing. These are the categories provided in the UI claim records.<sup>28)</sup> Because the data allow us to link claimants to their separating employers, we can also include binary indicators (indexed by  $j$ ) of either the NAICS sector (sector fixed effects) or the specific employer (employer fixed effects) from which the claimant separated (both denoted by  $\psi_{j(i)}$ ).<sup>29</sup> Finally, we include a set of year indicators (year fixed effects), denoted by  $\gamma_t$ .

In sections 4 and 5, we estimate four specifications of equation (1). In specification 1, we include only the gender and race/ethnicity indicators ( $D_i$ ), so the estimates of  $\beta$  give simple (unadjusted) differences among the gender and race/ethnicity groups—for example, the simple difference between the average proportion of white non-Hispanic males and Black non-Hispanic males whose UI claim was denied.

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<sup>28</sup> For brevity, in the text below we will refer to the white non-Hispanic group as “white,” to the Black non-Hispanic group as “Black,” to the Asian/Pacific Islander group as “Asian,” and to the American Indian or Alaskan Native group as “American Indian.” The tables preserve the full race/ethnicity designations provided in the data.

<sup>29</sup> In the models reported in Table 3 (specifications 1 and 2), we include 67,257 employer fixed effects, and the computational difficulty of estimating a nonlinear model like probit or logit with such a large number of employer fixed effects is the main reason we estimate a linear probability model (LPM). Although the LPM has well-known drawbacks—heteroskedasticity and the possibility of predictions outside of the 0-1 interval—it has the advantages of being straightforward to compute and interpret (Wooldridge 2019, sections 7-5 and 8-5). Some applied econometricians prefer the LPM in most cases because heteroskedasticity can be handled using Huber-White standard errors, and the predictions outside the 0-1 intervals are usually rare—see for example Angrist and Pischke (2008, p. 98) and Pischke (2012).

In specification 2, we add characteristics of the claimant and the claim ( $X_i$ ) and year fixed effects ( $\gamma_t$ ). This model suggests the extent to which the simple differences can be accounted for by observable claim and claimant characteristics that appear in the data.

In specifications 3 and 4, we add either the sector fixed effects or the employer fixed effects to specification 2. Including these fixed effects allow us to gauge the extent to which differences among the gender and race/ethnicity groups are the result of workers sorting to sectors or employers; that is, whether differences in UI denials and disputes by gender or race/ethnicity result from differences “between” or “within” sectors or employers. For example, if all gender differences in disputes were the result of females sorting to employers who tend to dispute many claims, regardless of a claimant’s gender, the gender gap in disputes would be the result of differences “between” employers, and we would see the estimated gender gap fall to insignificance (or zero) when employer effects are added to the model. Alternatively, if all gender differences in disputes occurred *within* employer, individual employers would treat UI claims by former female and male employees differently (perhaps disputing claims by females more frequently than those by males), and we would see no change in the estimated gender gap when employer effects are added to the model.

When discussing the results, we focus mainly on comparing gender and race/ethnicity differences that control for claim and claimant characteristics

(specification 2) with (i) unadjusted differences (specification 1) and (ii) differences that control for sector and employer (specifications 3 and 4).

### 3. Correlates of UI Claim Denials, Disputes, and Denials Following Disputes

The institutional background in Section 2 implies that UI claims are denied and disputed for many reasons. These reasons may be correlated with characteristics of workers, their employment histories, their reasons for separation, and characteristics of their previous employer(s). Accordingly, it makes sense to begin by looking at the relationships between these observables and denials and disputes, without controlling for the gender or race/ethnicity of the claimant.

In general, we would expect the likelihood of denial to be higher for workers who are closer to the threshold of monetary eligibility, who are more likely to quit a job voluntarily (or have less stable employment), or to be less likely to actively search for a job after separating from an employer. We would also expect the likelihood of a dispute (and of a denial following a dispute) to be higher for these workers. These higher likelihoods could result from correct eligibility determinations made by the UI agency, or they could result from determination errors. For example, workers just below the monetary eligibility threshold might incorrectly believe they are eligible, but it is also more difficult for the agency to make accurate eligibility determinations for a claimant who is close to a threshold.

To examine the importance of these factors, we begin by estimating a version of equation (1) (section 2.2) that omits gender and race indicators,  $D_i$  but controls for  $X_i$  as well as the year indicators ( $\gamma_t$ ) and firm indicators ( $\psi_{j(i)}$ ). We chose this specification



because it is the richest specification that omits gender and race/ethnicity. Table 3 displays estimates of this model for the three outcomes we are examining: the probability that an initial UI claim was denied (column 1), the probability that an initial UI claim was disputed (column 2), and the probability that a disputed UI claim was denied (column 3).

The estimates in column 1 of Table 3 show the relationship of a claimant's demographic characteristics to the probability of a claim being denied. Claims by older workers were less likely to be denied than those by younger workers—workers aged 55 or older were more than 13 percentage points less likely to be denied than workers younger than 25, suggesting that, other things equal, younger workers were less likely to satisfy one or more of the UI eligibility requirements. (The average denial rate was about 22%, so the difference between younger and older claimant is quite substantial—see the dependent variable mean in Table 3). Also, claimants with a bachelor's degree were 3 percentage points less likely to be denied claimants who had not completed high school.

Employment history also appears to be an important correlate of denial probability. Claimants with more work hours in the base period were less likely to have their claim denied, consistent with the threshold for monetary eligibility being 680 work

hours in the base period,<sup>30</sup> and conditional on work hours, an uneven work history (that is, fewer base period quarters with positive hours) was associated with a higher probability of denial.

The reason for separation given by the claimant is especially strongly related to the probability of denial, consistent with the importance of conditions of separation to UI eligibility. For example, those who said they quit voluntarily were nearly 45 percentage points more likely to be denied than those who said they lost their job due to lack of work. (It follows that these claimants had a denial rate about three times the average denial rate of 22%.) Similarly, those who said they were discharged were more than 15% more likely to be denied benefits.

The larger the employer from whom a claimant separated, the more likely was the probability of denial, which is a puzzling finding in light of the finding that large employers are less like to dispute claims (see below). In contrast, claimants laid off by employers experiencing a mass layoff of more than 20% were less likely to be denied than stable employers, although the probability of denial was roughly the same for

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<sup>30</sup> We specify the relationship between work hours in the base period and the probability of denial to be quadratic, and the positive estimated coefficient on the quadratic term shows that the negative relationship between work hours and denial probability is convex and diminishes at higher work hours. The implication is that additional hours beyond the 680-hour threshold are less and less likely to reduce the probability of denial.

claimants laid off by stable employers and those experiencing contractions smaller than 20%.<sup>31</sup>

As linear probability models go, the estimated model in column 1 explains a substantial proportion of the variation in whether a claim is denied in this sample (about 24%). Nevertheless, factors we do not observe or measure explain most of the variation (the remaining 76%).

Column 2 in Table 3 shows estimates of the relationships between the correlates of a claim's characteristics and the likelihood of the claim being *disputed*—where again we define a dispute as conflicting (and not missing) reasons for separation being given by the claimant and by the employer. As Table 3 shows, only about 3% of claims in the sample were disputed in this sense, so disputes are far less common than denials (which are 22% of the sample). Nevertheless, many of the correlates predicting a dispute are similar to those predicting a denial. Older claimants, those with more educational attainment, and those with higher base period hours and wages were less likely to have a claim disputed. Similarly, those with a more quarters of pre-layoff employment and with more quarters of job tenure were less likely to see their claim disputed, as were workers on temporary layoff (i.e., those recalled to their previous employer).

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<sup>31</sup> The literature on displaced workers' losses has used various drops in employment to gauge the severity of an employer's contraction. See for example Lachowska, Mas, and Woodbury (2020).

Compared with claimants who indicate they were laid off due to lack of work, those who said they quit voluntarily or were discharged were *less* likely to be disputed, probably because most of these claimants were denied.

Claimants laid off by larger employers were no more likely to have their claims disputed than claimants working for smaller employers. This runs counter to the idea that denials (which were more likely for claimants laid off by larger employers) are driven by larger employers having the means to systematically dispute claims as a way to limit benefits paid and control layoff costs.

Finally, claimants laid off by employers experiencing a mass layoff were generally less likely to face a dispute than claimants laid off by employers with stable employment.

The model of disputes is less satisfactory than the model of denials, in that the estimates explain about 10% of the variation in the probability of a dispute. This suggests the importance of unobserved factors to whether a dispute occurs.<sup>32</sup>

The estimates in column 3 of Table 3 focus on whether a claim that was disputed was ultimately denied. The analysis sample here is limited to the 26,590 claims that were

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<sup>32</sup> This appears to be a problem of omitted variables, as opposed to functional form (i.e., our use of the linear probability model as opposed to a nonlinear alternative like logit or probit). It is feasible to estimate the models in columns 1, 2, and 3 by logit and probit if the employer fixed effects are dropped, and when we do this, the estimates are similar to the estimates from the analogous LPM.

disputed, out of the 1,235,875 claims in the full sample.<sup>33</sup> Among these disputed claims, about 38% were denied.

As was the case for denials and disputes, age and educational attainment are among of the strongest predictors for whether a disputed claim was denied: older and more educated claimants were less likely to have their disputed claim denied. Also, measures of a worker's employment history and the characteristics of the claim predict whether a disputed claim is denied. However, the claimant's reason for separation is related to the outcome of a disputed claim only when the reason was "discharge," and when the claimant gave this reason, the claim was less likely to be denied by nearly 10 percentage points. This is a strong relationship, and it points again to the ambiguity and misunderstanding of the term "discharge" in the context of UI eligibility.

Also, employer size and whether the claimant was laid off by a contracting employer do not significantly predict the outcome of a dispute, in contrast to their ability to predict denials and disputes.

The bottom row of Table 3 shows that the correlates included in the model explain almost 17% of the variation in whether a disputed claim is denied.

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<sup>33</sup> Note that the sample size in Table 3, column 3, is smaller than in Table 2, column 5. This difference occurs because claims originating from a single base-period employer ("singleton observation") are dropped in the regression analysis.

## 4. Gender Differences

Table 4 displays differences between female and male UI claimants in the probability of a claim being denied (panel A), a claim being disputed, (panel B), and a claim being denied following a dispute (panel C). The “baseline probability for males” column shows the proportion of male UI claimants in the designated race/ethnicity group whose claim was denied, disputed, or denied following a dispute. The *difference* between this proportion for males and the proportion for females in the same race/ethnicity group is shown in columns 1 through 4.

### 4.1. Gender differences in denials

Column 1 of Table 4 shows simple differences obtained by specification 1—that is, without controlling for any observables. Panel A shows that females overall were 5.6 percentage points more likely to have their claims denied than males (whose “baseline” probability of denial was 20.1%—see the “All males and females” row in panel A). Also, within each of the race/ethnicity subgroups, females were more likely to have their claim denied than males (by between 2.7 percentage points for Asian females to 11.0 percentage points for American Indian or Alaska Native females).

Column 2 shows estimated gender differences from specification 2—that is, after controlling for characteristics of the claimant and the claim (the  $X_i$  variables described in section 2.2). Accounting for these observables reverses the gender gap in denials for females overall: conditional on the characteristics of the claimant and the claim, female

claimants were nearly 1 percentage-point *less* likely than males to be denied. The female-male gap in denials becomes statistically insignificant for Black and Asian women after controlling for the characteristics of the claimant and the claim, and the gap is reversed for white and Hispanic females.<sup>34</sup>

Columns 3 and 4 show estimated gender gaps after including sector fixed effects (specification 3) or employer fixed effects (specification 4). For all female and male claimants, and for all subgroups except American Indians, the absolute values of the estimated gaps are larger (i.e., more negative) than those in column 2. This has two implications: first, female claimants were more likely than males to be employed in sectors and by employers whose UI claimants were more likely to be denied overall; and second, within those sector and employers, female claimants were less likely to be denied benefits than males.

#### ***4.2. Gender differences in disputes***

Panel B of Table 4 shows the probability of a dispute for males in each of the race/ethnicity categories (the baseline probability column), along with gender differences in disputes (columns 1 through 4). (Recall that a dispute is defined as a difference between the claimant's and the employer's reasons for separation, so long as neither is missing.)

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<sup>34</sup> For American Indian females, the expected probability of denial remains higher than for males after controlling for observables.

The reference proportions for male claimants show that on average, 2.9% of all claims by males were disputed; that is, disputes were a relatively uncommon occurrence. They were higher among Black and Asian males (about 4%) than among males in the other race/ethnicity categories (closer to 3%). These differences by race/ethnicity are discussed further in section 5.

The estimated gender differences in column 1 show that overall, claims by females were 0.2 percentage point more likely to be disputed than claims by males (that is, 2.9% of male claims were disputed, so 3.1% of female claims were disputed.) This difference appears to occur mainly because the claims of *white* females were more likely to be disputed than those of other females: the UI claims of Black, Hispanic, and Asian females are somewhat *less* likely to be disputed than those of Black, Hispanic, and Asian males. (The simple gender differences are statistically insignificant for American Indians and those with missing race/ethnicity.)

After controlling for observables, claims by females overall were slightly *less* likely to be disputed than claims by males (see column 2); that is, conditional on the characteristics of the claims, females' claims were disputed less frequently than would be expected.<sup>35</sup> This follows the pattern seen for denials in panel A.

Controlling for sector effects (column 3) or employer effects (column 4) increases the absolute value of the gender gap somewhat (i.e., makes it even more negative) for

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<sup>35</sup> When a differential is zero after controlling for observables, its predicted value and its observed value are equal; that is, the residual is zero and the observed value equals its statistical expectation.



white females and those with missing race/ethnicity. As with denials, this suggests that female claimants were more likely to be employed in high-dispute and sectors and by high-dispute employers, but within those sectors and employers, their claims were less likely to be disputed.

This has two implications: first, female claimants were more likely than males to be employed in sectors and by employers who were more likely overall to dispute claims; second, within those sector and employers, once the comparison between males and females in disputes and denials is made within a sector/employer females appear to be disputed less than males.

#### ***4.3. Gender differences in denials following disputes***

Panel C of Table 4 shows estimated probabilities of UI claims being denied following a dispute (for male claimants, in the baseline probability column) and the estimated difference in those probabilities for female claimants (columns 1 through 4). The baseline probabilities show that, for disputed claims overall and for disputed claims of males in each of the race/ethnicity categories except American Indians, the majority of disputes were resolved in favor of the claimant. That is, the proportion of disputed claims that were denied for males overall was 0.394 (39.4%), so more than 60% of the disputed claims were ultimately determined to be eligible. The denial rate for disputed claims was lowest for white males (and those with missing race/ethnicity) and highest

for Hispanic and American Indian males (45.3% and 50.6%). We examine these differences by race/ethnicity further in section 5.

The simple gender differences in column 1 show that disputed claims by females overall were 4 percentage points less likely to be denied than those by males. (The difference is  $-0.04$ , so the proportion of disputed claims that were denied for females was  $0.394 - 0.040$ , or 35.4%.) The gap was negative (and statistically significant) for white, Hispanic, and Asian female claimants whose claims were disputed, and statistically insignificantly different from zero for the remaining three groups (Black, American Indian, and those with missing race/ethnicity).<sup>36</sup>

Controlling for the observable characteristics of disputed claims (column 2) widens the overall female-male gap from  $-4.0\%$  to  $-5.9\%$ , so disputed claims of female claimants were less likely to be denied than similar male disputed claims. Controlling for sector or employer fixed effects (columns 3 and 4) does not change the estimated female-male gap overall or for white, Black, or Hispanic females, so whether a disputed claim by a female was denied was unrelated to the sector or the employer from which the claimant separated.<sup>37</sup> That the gender gap in the likelihood of a disputed claim being denied is unaffected by controlling for the sector or employer from which a

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<sup>36</sup> Point estimates of the gap are *positive* for Black females and females with missing race/ethnicity, meaning disputed claims of females in these groups may have been more likely than disputed claims of males in the same groups to be denied; however, the estimates are too noisy to be statistically significant.

<sup>37</sup> For Asian and American Indian claimants, controlling for sector does not change the estimated female-male gap, but controlling for the employer makes those gaps statistically insignificant.

claimant separated suggests that, in deciding eligibility, the process of adjudication and appeals is not influenced by the identity of the sector or employer.<sup>38</sup>

All disputed claims are subject to agency adjudication, and some are subject in addition to a formal appeal. As a result, one possible interpretation of the eligibility determination of a disputed claim is that it is the “correct” determination; that is, it has been examined closely by agency personnel and (in some cases) by an administrative law judge who are experienced in applying state UI law and administrative regulation. If so, then gender gaps in UI denials that remain after a dispute could be interpreted as reflecting characteristics and circumstances of a claim that are not captured by the variables we are able to observe and include in the model.

This interpretation would suggest that the disputed claims of females overall, and of white, Hispanic, and American Indian female groups, were on average associated with one or more unobserved characteristics that made them more likely to be eligible for UI. For example, it is possible that female claimants who voluntarily quit their previous job were more likely than male claimants to do so for good cause; that is, for compelling family reasons, as described in section 1.1. It follows that the “voluntary quit” variable we observe is an incomplete indicator of the conditions of separation associated with a

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<sup>38</sup> Two possible exceptions are Asian and American Indian females, for whom negative gaps in column 2 become insignificant (although still negative) when employer fixed effects are included (column 4). Because the differences between the estimates in columns 2 and 4 are statistically insignificant for these two groups, it seems unwise to draw any conclusion here.

claim, and the gender gaps in column 4 of Table 4 reflect the unobserved characteristics of UI claims made by females.

The alternative to this interpretation is that the processes of adjudication and appeal discriminate in favor of female claimants and/or their claims, in the sense that adjudicators and administrative law judges treat the disputed claims of females more favorably than those of males. Based solely analysis of the available data, we have no way of determining which of these two interpretations—unobservable characteristics associated with claims or discrimination—is correct, and we leave it to the reader to decide which is more plausible.

## 5. Differences by Race and Ethnicity

Table 5 displays differences between claimants in each of five race/ethnicity groups and white claimants in the probability of a claim being denied (panels A and B), a claim being disputed (panels C and D), and a claim being denied following a dispute (panels E and F). We examine differences for male and female claimants separately (panels A, C, and E pertain to males, and panels B, D, and F to females). The setup of Table 5 is similar to that of Table 4, with columns 1 through 4 showing differences estimated using each of the four specifications discussed in section 2.

### *5.1. Race/ethnicity differences in denials*

The simple race/ethnicity gaps in column 1 (estimated without controlling for any variables) show that denial rates were higher for Black male and female claimants than for white male and female claimants, as well as for Asian males, American Indian males and females, and males and females with missing race/ethnicity. For example, the probability of a Black male's claim being denied was higher by 6 percentage points (0.060) than the probability of a white male's claim being denied. White male claimants were denied in 19.6% of their claims, so Black male claimants were denied in 25.6% of their claims.

Hispanics were the largest group of claimants in Washington after white non-Hispanics (see the "sample size" column in Table 5), and both male and female Hispanic claimants differ from the other groups in that their denial probabilities were somewhat

lower (and statistically significantly so) than for white claimants (1.2 percentage points for males, and 3.9 percentage points for females). We discuss this finding further below.

The extent to which the differences in column 1 are accounted for by characteristics of the claims varies among the groups (see column 2). For Black males, the gap falls from 0.060 to 0.013, which implies that more than three-quarters of the simple difference between Black and white males in denial probability is accounted for by the observable characteristics of the claim. That is, the observable characteristics associated with claims by Black males were on average less favorable to eligibility (and more likely to result in denial) than the characteristics associated with claims by white males. Controlling for observables attenuates the other gaps in column 1 as well, although generally by less than for Black males. For example, for Asian males and American Indian females, the gap falls by less than one-half (from 0.030 to 0.021 for Asian males, and from 0.100 to 0.055 for American Indian females).

For male and female Hispanic claimants, the estimated denial rate gaps also shrink (move closer to zero) when controlling for observables. For male Hispanic claimants, the denial rate shrinks by half and becomes statistically insignificant, which implies that the denial rate of Hispanic males is what would be expected given the characteristics of the claims. For Hispanic females, the denial rate shrinks by about one-third, from  $-0.039$  to  $-0.024$ , which implies that the denial rate of Hispanic females is 2.4 percentage points less than would be expected given the characteristics of the claims.

Including sector or employer effects in the model (columns 3 and 4) moves the estimated denial gaps still closer to zero for all groups, but the denial gaps remain statistically significant for Asian and American Indian male and female claimants, as well as for male and female claimants with unknown race. There are two implications. First, for Black and Hispanic claimants, there appear to be no within-employer differences in denial rates, compared with white non-Hispanic claimants; that is, Black and Hispanic claimants who separated from a given employer had the same probability of denial as white non-Hispanics, conditional on claim characteristics. Second, for Asian and American Indian claimants (and those with unknown race) there do appear to be within-employer differences in denial rates conditional of claim characteristics; that is, Asian, American Indian, and race-unknown claimants who separated from a given employer had higher probabilities of denial than white non-Hispanics, conditional on claim characteristics. For example, the within-employer denial rates Asian male and females claimants were higher by 1.2 and 2.3 percentage points (respectively), and the within-employer denial rates of American Indian male and females claimants were higher by 1.1 and 4.0 percentage points.

## ***5.2. Race/ethnicity differences in disputes***

Panels C and D of Table 5 show race/ethnicity gaps for disputes. The dispute rate for white males was 0.028 (2.8%), and for white females it was 0.032 (3.2%). The simple differences in column 1 show that dispute rates for Black and Asian male claimants were

higher by 1.3 and 1.2 percentage points (or 4.1% for Black males, and 4.0% for Asian males, compared with 2.8 for white males), and for Asian female claimants the dispute rate was higher by 0.3 percentage point (or 3.5%, compared with 3.2% for white females). For Hispanic claimants (both male and female) dispute rates were lower than for white claimants (by 0.3 percentage points for males, and 1.2 percent for females). Differences in dispute rates between the other race/ethnicity groups and white claimants are statistically insignificant.

The estimates in column 2 of panels C and D show that observable claim characteristics explain none of the gap for Black males in column 1 (the gap remains 0.013) and explain only about one-third of the gap for Asian males (the gap falls from 0.012 to 0.008); however, claim characteristics do explain the gap for Asian females (the gap falls from 0.003 to statistically insignificant). In general, however, the dispute rates conditional on observables (column 2) are very similar to the simple unadjusted dispute rates (column 1).

Controlling for sector of employment appears to have little influence on the gaps in dispute rates of Black and Asian males compared with white males, but inclusion of employer effects reduces the unexplained dispute gap for Black males from 0.013 to 0.006, and for Asian males from 0.008 to 0.003. The implication is that, for both Black and Asian male claimants, about one-half of the dispute gap that cannot be explained by claim characteristics occurs because Black and Asian males separate from employers



who dispute more claims than the average employer; that is, they dispute more claims regardless of the race on the claimant—a “between-employer” effect. The other half of dispute gap that cannot be explained by claim characteristics can be attributed to Black and Asian males separating from employers who were more likely to dispute the claims of Black and Asian males than those of white non-Hispanic males.

### ***5.3. Race/ethnicity differences in denials following disputes***

Panels E and F of Table 5 show estimated race/ethnicity gaps in the rates at which UI claims were denied following a dispute. For male white claimants, about 38% of disputed claims were ultimately denied, and for female white claimants, about 34% were denied, so the majority disputed claims were resolved in favor of the claimant.

For most groups other than whites, however, disputed claims were denied at higher rates, as shown in column 1. For example, compared with the relevant reference group, the rates at which disputed claims were denied were higher for Hispanic males and females (gaps of 7.1 and 7.4 percentage points), Asian males and females (5.3 and 6.1 percentage points), and American Indian males and females (12.1 percentage points in both cases). For Black males the gap was statistically insignificant, but for Black females, it was nearly 11 percentage points.

For Black females, Asian males, and American Indians (both males and females), these gaps become smaller but remain substantial after accounting for claim characteristics (see column 2). For Hispanic claimants (both male and female) the

controlling for claim characteristics eliminates the gap entirely. Asian female claimants are an exception; including claim characteristics has little effect on the gap in denials following a dispute (the point estimate of the gap increases slightly, from 6.1 percentage points to 6.2 percentage points).

Few differences appear between the estimates that control for sector effects and those that control for employer effects (compare columns 3 and 4), although there are differences in statistical significance, due mainly to the relatively small samples of disputed claims we observe. For Asian males, including employer effects reduces the gap from 0.044 to 0.023 (and statistically insignificant). Similarly, including employer effects reduces the gaps for American Indian claimants (both males and females) from between 5.8% and 6.7% and statistical insignificance (compare columns 2 and 4). Asian female claimants are again an exception. For Asian females, the gap is little affected by the inclusion of sector effects or employer effects (compare columns 2, 3, and 4).

Considerations similar to those raised at the end of section 4.3 also apply here. That is, if we take the view that eligibility determinations resulting from the adjudication and appeals process are correct, then the race/ethnicity gaps in UI denials that remain after a dispute could be interpreted as reflecting claim characteristics that are unobserved in the data and not included in the model. The alternative view is that the adjudication and appeals process could be discriminate against Asian claimants (both men and women), American Indian claimants (both men and women), and female

claimants whose race was not reported. We repeat that, based solely analysis of the available data, we cannot distinguish between these two interpretations—unobservable characteristics associated with claims or discrimination.

## 6. Summary and Conclusions

The analysis in section 3 shows that the probabilities of a UI claim being denied, disputed, and denied following a dispute are all related to characteristics of workers other than gender, race, and ethnicity; and those relationships accord broadly with the eligibility criteria for UI described in section 2. Nevertheless, the analyses in sections 4 and 5 suggest that gender and race/ethnicity do play a role in the outcomes of UI claims and that part of the gender and race/ethnicity gap results from how workers sort to sectors and employers.

In this concluding section, we first summarize the empirical findings from sections 4 and 5. We then discuss questions that remain to be answered and how they might be addressed. These open questions and the possible ways of addressing them make up our agenda for further work on this project.

### *6.1. Synopsis of findings on gender differences*

The estimates in Table 4 show that, without controlling for any other observable personal employment characteristics, female UI claimants, overall and for each race/ethnicity group, were more likely to see their claims denied than were male claimants (panel A, column 1). But in general, if we take account of observable characteristics, it appears that the denial rates of females' claims are somewhat *lower* than for males (panel A, column 2). That is, the estimates suggest that, overall and for Black and Hispanic claimants, claims by females were denied at a substantially lower

rate, conditional on observable characteristics. (The estimated coefficients in column 2 are negative for females overall and for the race/ethnicity groups except American Indians.) That claims by females were denied at an even lower rate once sector or employer identity is controlled for implies that males and females separate from somewhat different sectors or employers.

The rates at which claims by females overall were disputed by employers were somewhat higher (by 0.2 percentage points) than those for males, although they were somewhat lower for Black, Hispanics, and Asian female claimants. Including observables reverses or eliminates these female-male differences, implying that claims by females were disputed at a lower rate conditional on the claims' characteristics. Whether a claim by a female was disputed was largely unrelated to the sector or the employer from which a claimant separated.

When a claim by a female was disputed, it was 4 percentage points less likely to be denied than a claim by a male. Also, controlling for observables suggests that females' disputed claims were denied at an even lower rate than those of males. Including sector or employer fixed effects has little influence on the estimated female-male differences.

## ***6.2. Synopsis of findings on differences by race/ethnicity***

The estimated differences by race/ethnicity in Table 5 are more difficult to summarize because they differ among groups both in sign and size. Without accounting

for the characteristics of claims, Hispanic claimants (both male and female) were somewhat less likely than white non-Hispanic claimants to be denied UI, and part of this gap persists after controlling for the characteristics of claims. Claims of Hispanic workers were slightly less likely to be disputed than those of white-non-Hispanics. The rates at which disputed claims of Hispanic male and female workers were denied were higher than for whites without controlling for observable characteristics, but similar to white non-Hispanics' given the characteristics of those claims.

Black and American Indian claimants, as well as Asian male claimants, were more likely to be denied than white non-Hispanics, and the gaps between these groups and white non-Hispanics in denial rates are "explained" in varying degrees by the characteristics of claims. The majority of the gap is explained for Black claimants, whereas one-half or less of the gap is explained for Asian males and American Indian male and female claimants. Dispute rates were also higher for Black and Asian claimants than for white non-Hispanics, but the differences were smaller once we account for the characteristics of the claims. In contrast, rates of denial following a dispute were higher for Black female, Hispanic, Asian, and American Indian claimants than for white claimants. Although for Hispanic claimants all of the gap was explained by observables, for Black female, Asian male, and American Indian claimants, only about one-half of the gap could be explained.

### *6.3. Discussion*

The following novel findings emerge from the analysis. First, the positive female-male gap in disputes and denials reverses to negative once we control for observables related to the claim or to the claimant. Second, these negative gaps become even more pronounced once the female-male comparison is made within employer. This implies that males and females tend to sort to different sectors and employers who differ in their propensity to dispute claims. Third, when compared to white male non-Hispanic claimants, there is evidence of a Black-white gap in dispute rates even within employer. In other words, Black male claimants are more likely to have a claim disputed than comparable white male claimants even if they separate from the same employer. A similar pattern emerges for male Asian claimants. Fourth, we find that by and large, the gender and race/ethnicity gaps in the likelihood of a disputed claim being denied appear unaffected by controlling for the sector or employer from which a claimant separated. Accordingly, given existing group differences in the denial rates of disputed claims, the UI agency or the appeals process do not appear to systematically alter the eligibility determinations based on the sector or employer of the claimant.

In sections 4.3 and 5.3, we outlined two alternative interpretations of the differences by gender and by race/ethnicity in UI denials, disputes, and denials following disputes that cannot be accounted for by the characteristics of a claim. The first is that these differences reflect differences in claim characteristics that are unobserved or

measured with error in the data we are using. For example, the “voluntary quit” and “discharge” classifications of separation are both ambiguous, as shown in Table 1 and the related discussion in section 1.3. In short, we do not observe all the conditions of separation that are relevant to UI eligibility without error.

The alternative interpretation of the unexplained gaps by gender and race/ethnicity is that they result from different treatment of different groups by employers, the UI agency, or by administrative law judges. Again, the data and analysis we have described cannot by themselves resolve which of these possible interpretations is correct, or if the part of the unexplained gaps stem partly from unobserved differences and partly from discrimination. In short, we believe further research on this topic is needed, using data from other states and time periods. In addition, qualitative methods such as focus groups and interviews with participants (claimants, employers, UI administrators, and administrative law judges) could shed light on the issue we have discussed. A combination of additional data and analysis, along with interviews and focus groups, could provide insights into why denial rates, dispute rates, and rates of denial following a dispute differ among gender and racial/ethnic groups, and among and within sectors employers.



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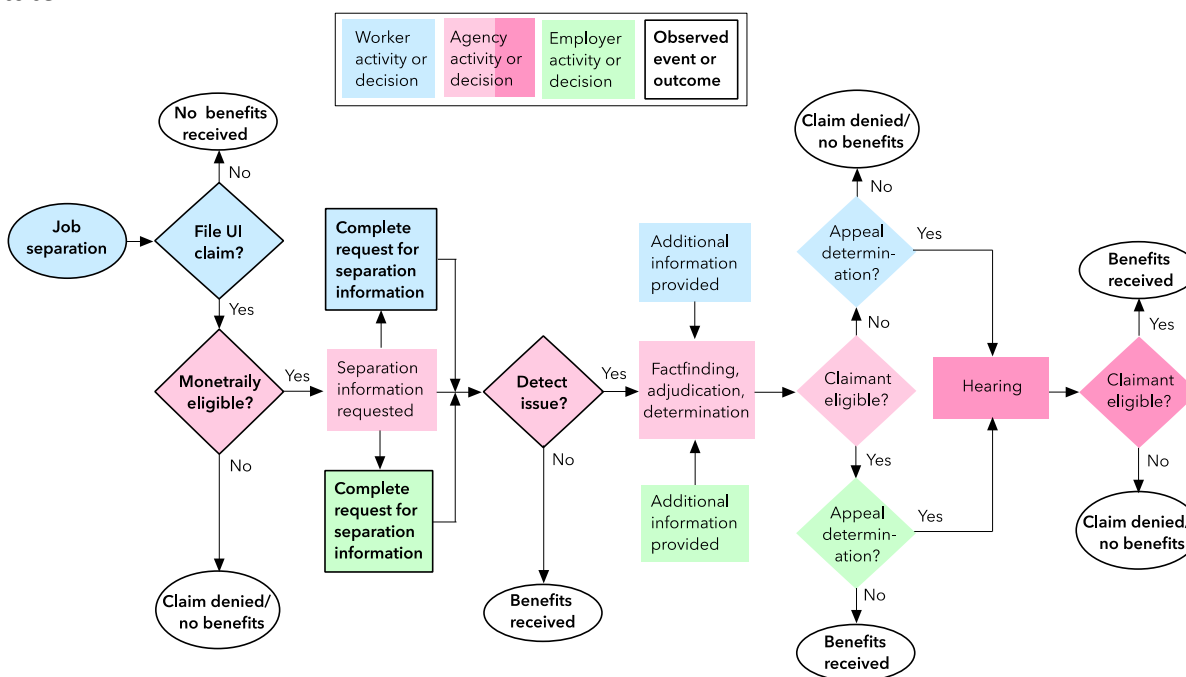
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Figure 1

Flowchart summarizing the claiming, determination, and appeals process in Washington state

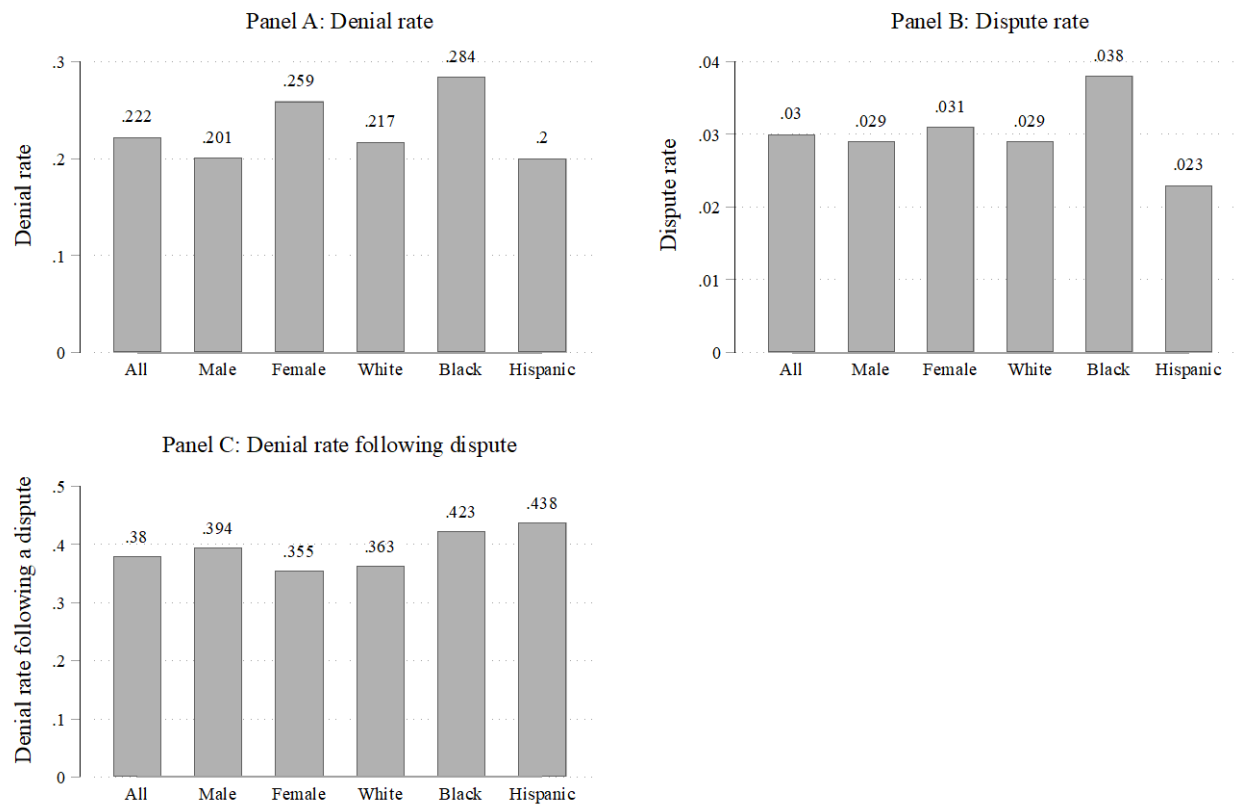


*Notes:* This flowchart illustrates the process of claiming and determining eligibility for UI benefits. Events and decisions we observe in the data are shown in boldface. Following job separation, a worker decides whether to claim benefits, and if the worker does, the UI agency determines whether the claimant is monetarily eligible (i.e., has an adequate work history to qualify). If the claimant is monetarily eligible, the agency requests information about the worker's conditions of separation from both the worker and the employer(s). If the agency detects a separation issue (for example, due to conflicting reasons for separation conflict), the agency requests further information to adjudicate the issue and make a formal eligibility determination. The outcome of this determination can be appealed by either the worker or the employer, and the appeal will be heard by an administrative law judge, who makes a final eligibility determination.

*Sources:* Authors' summary of the claim determination process, based on Revised Code of Washington, Title 50 ("Unemployment Insurance"), Employment Security Department (2014, 2019), Corson, Hershey, and Kerachsky (1986), and Fishman et al. (2003).

Figure 2

Rates of unemployment insurance (UI) denial, dispute, and denial following a dispute by gender and race/ethnicity, Washington, 2005:Q1–2013:Q4



*Notes.* The figure displays bar charts of three outcomes by gender and race/ethnicity. Panel A shows UI denial rates (proportion of UI initial claims resulting in zero unemployment insurance benefit payments); Panel B shows dispute rates (proportion of claims resulting in difference between the claimant and the employer in the reason for job separation); and Panel C shows denial rates following a dispute. Note that “white” refers to white non-Hispanic claimants, “Black” refers to Black non-Hispanic claimants, “Asian” refers to Asian/Pacific Islander claimants, and “American Indian” refers to American Indian or Alaskan Native claimants. In all three panels, the rates for each of the subgroup (female, white, Black, and Hispanic) are statistically significantly different from the male rate at the 10-percent level or less.

*Source.* Authors’ calculations using UI claims records from Washington state, 2005:Q1–2013:Q4. The samples are described in section 2.1. Estimates in Panels A and B are based on a sample of 1,235,875 claims summarized in column 3 of Table 2; those in Panel C are based on a sample of 36,549 disputed claims sample summarized in column 5 of Table 2.