## University of Michigan Journal of Law Reform

Volume 35 Issues 1&2

2001

# **Civil War Pension Attorneys and Disability Politics**

Peter Blanck University of Iowa

Chen Song Resolution Economics, LLC

Follow this and additional works at: https://repository.law.umich.edu/mjlr

Part of the Disability Law Commons, Legal History Commons, Military, War, and Peace Commons, and the Social Welfare Law Commons

#### **Recommended Citation**

Peter Blanck & Chen Song, *Civil War Pension Attorneys and Disability Politics*, 35 U. MICH. J. L. REFORM 137 (2001). Available at: https://repository.law.umich.edu/mjlr/vol35/iss1/6

This Symposium Article is brought to you for free and open access by the University of Michigan Journal of Law Reform at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in University of Michigan Journal of Law Reform by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact mlaw.repository@umich.edu.

Peter Blanck\* Chen Song\*\*

> Professor Blanck and Dr. Song provide a detailed examination of the pension disability program established after the Civil War for Union Army Veterans. They use many original sources and perform several statistical analyses as the basis for their summary. They draw parallels between this disability program and the ADA, and they point out that current ADA plaintiffs encounter many of the same social, political and even scientific issues that Union Army veterans dealt with when applying for their disability pensions. The Article demonstrates that history can help predict the trends within, and evolution of, the ADA—essentially leading to a better understanding of the ADA and what it might be able to accomplish for disabled Americans.

#### INTRODUCTION

This Article is part of an investigation on the lives of Union Army (UA) Civil War veterans.<sup>1</sup> One primary goal of the investigation is to provide an historical basis for comparison with contemporary public policies affecting the lives of Americans with disabilities. The United States instituted the Civil War pension policy in 1862, with the immediate goal of compensating disabled

<sup>† © 2002</sup> Peter Blanck and Chen Song.

Charles M. and Marion Kierscht Professor of Law, and Professor of Public Health and of Psychology (by courtesy) at The University of Iowa, and Director, Law, Health Policy & Disability Center; B.A. 1979, University of Rochester; Ph.D. 1982, Harvard University; I.D. 1986, Stanford Law School. Research on the lives of the Civil War veterans would not have been possible without the generous assistance of Dr. Robert Fogel and his colleagues at the University of Chicago. Hugh Berry, Dora Costa, Robert Fogel, Claudia Linares, Michael Millender, Mario Sanchez, Michael Stein and Peter Viechnicki provided helpful comments on earlier versions of this Article. Special thanks to John Craiger, Helen Schartz, James Schmeling, and Quan Vu for their invaluable research support. We have benefited from presentation of this work at symposia and faculty workshops at the Stanford, Michigan, Houston, and William & Mary Law Schools, at the National Bureau of Economic Research (NBER), and from discussions on econometric methods with Dean Hyslop at UCLA's Department of Economics. Additional thanks are due to the editors of this *Journal* for their helpful suggestions. The program of research described herein is supported, in part, by grants from The University of Iowa College of Law Foundation, the National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and The National Institute on Health. For further information, see http://www.its.uiowa.edu/law.

<sup>\*\*</sup> Economist, Resolution Economics, LLC. B.A. 1993, Agnes Scott College; M.A. 1995, Ph.D. 2000, University of Chicago.

<sup>1.</sup> Center for Population Economics, Investigation of the Aging of the Union Army, The University of Chicago, *available at* http://www.cpe.uchicago.edu.

veterans injured during the war. Later, the pension scheme expanded to provide income support to qualified UA veterans and their families. By 1900, the Civil War pension scheme became America's first large-scale program for disabled veterans. This scheme would remain among the largest of government benefit programs until the advent of Social Security in the mid-1900s.

Among its aftereffects, the Civil War changed conceptions of disabled persons in American society. To a great extent, political and economic forces coinciding with the growth of the Civil War pension system shaped attitudes toward UA veterans with disabilities.<sup>2</sup> As historian Richard Bensel notes, by the late nineteenth century, the United States had developed into an industrialized country that was "the product of a calculated manipulation of the domestic political economy.<sup>8</sup> In this regard, Bensel concludes, the UA pension scheme was associated with a major "engine of national development," which was the protective tariff on industrial goods.<sup>4</sup>

Bensel eloquently set out this close association:

Because (UA) pension recipients allied themselves with the core industrial elite and thus formed a coalition large enough to successfully defend a high tariff as a part of the national political economy, the redistribution of this tariff revenue (a budget surplus at the time) through the Civil War pension system became a major element in the political strategy of development.<sup>5</sup>

In this Article, we present new empirical information examining the association after the Civil War among public conceptions of disability, the UA pension scheme, and pension politics and advocacy.

<sup>2.</sup> See MARY KLAGES, WOEFUL AFFLICTIONS: DISABILITY AND SENTIMENTALITY IN VIC-TORIAN AMERICA 10 (1999) (concluding that the cultural meaning of disability depends largely on social and political context); THEDA SKOCPOL, PROTECTING SOLDIERS AND MOTH-ERS: THE POLITICAL ORIGINS OF SOCIAL POLICY IN THE UNITED STATES (1992) [hereinafter SKOCPOL, SOLDIERS] (providing an extensive discussion of the political and social forces behind the growth of the Civil War Pension System); Theda Skocpol, America's First Social Security System: The Expansion of Benefits for Civil War Veterans, 108 POL. SCI. Q. 85 (1993).

<sup>3.</sup> RICHARD FRANKLIN BENSEL, SECTIONALISM AND AMERICAN POLITICAL DEVELOP-MENT 1880–1980, 60 (1984) (discussing pension and other policies related to the development of American industrialization).

<sup>4.</sup> *Id.* (noting that after Reconstruction and before First World War, the United States emerged as an industrial power by using the import tariff, which protected new industries, largely in the Northeast and Midwest, from the competition of established European corporations).

<sup>5.</sup> Id.

By the early twentieth century, as the number of pensioners decreased because of sickness and old age, the Civil War pension system faded as a political force, along with the policy of protective tariffs that withdrew America from the growing world economy.<sup>6</sup> More equitably distributed and "needs-based" social insurance programs emerged, reflecting the progressive view toward disability policy. In contrast to the UA pension system, under which benefits were paid regardless of a claimant's income level, supplemental disability support programs such as Social Security offered economic assistance to disabled citizens whose income fell below subsistence levels.

Yet, not until 1990, more than one hundred years after the height of the Civil War pension scheme, did Congress pass a national comprehensive law aimed at improving the lives of disabled citizens. The Americans with Disabilities Act (ADA) of 1990<sup>7</sup> reflected Congress' intent to end discrimination against people with disabilities in all aspects of life, including the workplace and private and public settings.

Even with strong bi-partisan support, the implementation of the ADA has not been without challenge. Judges have narrowly interpreted the ADA,<sup>8</sup> and defendants have prevailed in the majority of discrimination cases brought under the law.<sup>9</sup> Still, an even greater hurdle to the ADA's success has been the public's long-standing negative attitudes about people with disabilities. In the area of disability advocacy, for instance, many ADA claimants today are cast as undeserved, frivolous, and motivated by their fee-driven attorneys.<sup>10</sup>

<sup>6.</sup> *Id.* at 404 (discussing this evolution and noting that "even though the political saliency of Civil War pensions declined after the turn of the [nineteenth] century, tariff battles continued until the beginning of the New Deal").

<sup>7.</sup> Peter Blanck, *Civil War Pensions and Disability*, 62 OH10 ST. L.J. 109, 216–17 (2001) (discussing the relevance of empirical findings to the ADA).

<sup>8.</sup> See Susan Schwochau & Peter David Blanck, The Economics of the Americans with Disabilities Act, Part III: Does the ADA Disable the Disabled?, 21 BERKELEY J. EMP. & LAB. L. 271 (2000) (discussing trends prior to and after the ADA).

<sup>9.</sup> Peter Blanck & Michael Millender, Before Disability Civil Rights: Civil War Pensions and the Politics of Disability in America, 52 ALA. L. REV. 1, 2 (2000) (citing studies of case outcomes); see also Ruth Colker, The Americans with Disabilities Act: A Windfall for Defendants, 34 HARV. C.R.-C.L. L. REV. 99, 103–10 (1999); ABA Commission on Mental and Physical Disability Law, Study Finds Employers Win Most ADA Title I Judicial and Administrative Complaints, 22 MENTAL & PHYSICAL DISABILITY L. REP. 403, 403–07 (1998).

<sup>10.</sup> See Peter Blanck & Mollie W. Marti, Attitudes, Behavior, and the Employment Provisions of the Americans with Disabilities Act, 42 VILL. L. REV. 345, 345–408 (1997) (reviewing research on attitudes about disability); Blanck & Millender, supra note 9, at 1–5 (same).

James Bovard has written:

[The ADA] has turned disabilities into prized legal assets, something to be cultivated and flourished in courtrooms to receive financial windfalls. The ADA creates a powerful incentive to maximize the number of Americans who claim to be disabled, since the claim of disability amounts to instant empowerment in the eyes of the law.<sup>11</sup>

Likewise, Michelle Stevens has commented:

I fear ... that many able-bodied Americans are latching onto the Americans with Disabilities Act. If these parasites keep filing lawsuits claiming eligibility under a law designed to remedy discrimination against people with genuine shortcomings—and winning—how soon before there's a national backlash that unfairly encompasses the blind, the lame and others with serious handicaps?<sup>12</sup>

Despite criticisms, the ADA is not the first national policy to impact the lives of disabled Americans.<sup>18</sup> Moreover, it is not the first time in our history that negative attitudes have been brought to the fore about persons with disabilities and their attorney advocates.<sup>14</sup>

In prior studies, we compared lessons learned from the Civil War disability pension system in the context of the social, political, and economic dynamics of nineteenth century America.<sup>15</sup> This Article continues our examination of the ways in which attitudes and stigma about disability and disability advocacy were introduced into

<sup>11.</sup> James Bovard, Disability Intentions Astray, WASH. TIMES, May 20, 1996, at A16, available at 1996 WL 2955317; see also WALTER OLSON, THE EXCUSE FACTORY: HOW EMPLOYMENT LAW IS PARALYZING THE AMERICAN WORKPLACE 134 (1997) (arguing that "[f]ew laws have done as much as the Americans with Disabilities Act to make a note from your doctor something you can take to the bank"); Daniel Gallipeau, Juror Perceptions and the ADA, SF49 ALI-ABA 485, 489 (2000) (discussing a study of 507 jury pool members from around the U.S. finding that 53% of those surveyed believed that "too many employees falsely claim a disability or exaggerate a disability today," 19% disagreed with that statement and 28% were neutral); Editorial, Cleaning Up the Mess, LAS VEGAS REV.-J. 6B, Jan. 12, 1999, available at 1999 WL 9273810 (arguing that the ADA has generated more litigation than predicted, mostly by persons with questionable disabilities).

<sup>12.</sup> Michelle Stevens, Editorial, *Disability Law Falls Down*, CHI. SUN TIMES, Sept. 20, 1998, at 37.

<sup>13.</sup> Blanck, *supra* note 7, at 216–17 (discussing the relevance of empirical findings to ADA).

<sup>14.</sup> See Schwochau & Blanck, supra note 8, at 271 (discussing trends prior to and after the ADA).

<sup>15.</sup> Blanck & Millender, supra note 9, at 1, 2 (citing studies of case outcomes).

American public consciousness after the Civil War with passage of the UA pension scheme.<sup>16</sup>

A major focus in this investigation is on the attorneys representing UA veterans in their quest for compensation and their impact on pension outcomes.<sup>17</sup> Never before in American history had advocates been involved in an activity of such grand social and political scale, in efforts to help veterans pursue monetary gain, public acceptance and recognition.

We examine the characteristics of UA veterans who engaged attorneys, how attorney usage related to the partisan politics of the time, and the social, political, and economic factors that predicted successful pension outcomes. In addressing these and other questions, we hope to better understand the motives and forces that shape contemporary policies toward disabled Americans.

Part II of this Article highlights the evolution of the UA pension system from 1862 to 1907 and describes the controversy surrounding the partisan nature of the scheme and the role of pension attorneys. Part III presents our empirical findings. Part IV concludes with implications for future study of historical and contemporary attitudes about disability.

#### I. UA PENSIONS AND POLITICS

#### A. UA Pension System

At its peak during the turn of the nineteenth century, the Civil War pension scheme provided approximately \$140 per annum to one million UA veterans with disabilities and their dependents.<sup>18</sup> As a result of, or perhaps because of, such scale, UA veterans, their dependents, and their advocates were bombarded with negative public opinion about the legitimacy of the disability compensation system. In 1887, Democratic President Grover Cleveland vetoed a disability pension bill saying:

In the execution of this proposed law under any interpretation, a wide field of inquiry would be opened for the establishment of facts largely within the knowledge of the

<sup>16.</sup> *Cf. supra* note 11.

<sup>17.</sup> Cf. supra note 12, at 37.

<sup>18.</sup> See Blanck, supra note 7, at 126–27; SKOCPOL, SOLDIERS supra note 2, at 102–51; Maris Vinovskis, Have Social Historians Lost the Civil War? Some Preliminary Demographic Speculations, 76 J. AM. HIST. 34, 51–56 (1989).

claimants alone; and there can be no doubt that the race after the pensions offered by this bill, would not only stimulate weakness and pretended incapacity for labor, but put a further premium on dishonesty and mendacity.<sup>19</sup>

In 1884, the New York Sun wrote of pension attorneys:

[T]he war claim agents now substantially control the finances of this country.... They have concocted the schemes, and then drummed up the support for them.<sup>20</sup>

Even contemporary historians, such as Herbert Agar, have denounced the practices of UA pension attorneys: "As a result [of the UA pension scheme] claim agents traveled the country looking for ex-soldiers who had something the matter with them and persuading them to blame it on the war."<sup>21</sup>

In prior empirical studies, we documented the ways in which disabled UA veterans and their advocates were marked in newspapers either as not in need of pension benefits or as taking advantage of the system.<sup>22</sup> Historian Mary Dearing described the experiences of *New York Times* reporters, who were sent out in the late 1890s to expose pension applicants and their agents, as finding the rolls "honeycombed with fraud."<sup>23</sup> An editorial in *Harper's* 

<sup>19.</sup> See WILLIAM H. GLASSON, FEDERAL MILITARY PENSIONS IN THE UNITED STATES 211 (quoting President Cleveland's veto message, and noting that Cleveland believed that the tax revenues needed to fund the law would obstruct his plan for reform of the federal taxation system); see also BENSEL, supra note 3, at 64–66 (discussing President Cleveland's views about UA pensions and the associated political battles with the Republicans, the Grand Army of the Republic (G.A.R.), and pension lobbyists and attorneys). Note that in his criticism of the UA pension system, Bensel relies heavily on progressive-era scholar William H. Glasson, who taught at Trinity College in North Carolina, who believed that the provision of UA pensions reflected a flawed partisan-based policy and that Confederate pension schemes were "calculated to show the practical devotion of the South" to the lost cause. William H. Glasson, The South's Care for Her Confederate Veterans, 36 THE AMERICAN MONTHLY REVIEW OF REVIEWS: AN INTERNATIONAL MAGAZINE 40, 44–47 (1907) (providing overview of southern pension systems); see Blanck & Millender, supra note 9, at 34 (same).

<sup>20.</sup> MARY DEARING, VETERANS IN POLITICS: THE STORY OF THE G.A.R. 286 (1959) (citing the Washington National Tribune, Feb. 7, 1884).

<sup>21.</sup> HERBERT AGAR, THE PRICE OF UNION 582 (1950); see also BENSEL, supra note 3, at 62–63 (arguing that pensions were distributed "in a fashion that encouraged fraudulent claims").

<sup>22.</sup> See Blanck, supra note 7; Blanck & Millender, supra note 9; see, e.g., Leonard Woolsey Bacon, A Raid Upon the Treasury, FORUM, Jan. 1889, at 540–49; H.V. Boynton, Fraudulent Practices of the Pension Sharks: Uselessness of Pension Attorneys, 42 HARPER'S WKLY. 230 (1898); The Pension Arrears Bill, N.Y. TIMES, June 27, 1878, at 4; William M. Sloane, Pensions and Socialism, 42 CENTURY 179–88 (1891); Henry W. Slocum, Pensions-Time to Call a Halt, FORUM, Jan. 1892, at 646–51 (1892); John DeWitt Warner, Half a Million Dollars a Day for Pensions, FORUM, June 1893, at 439–51.

<sup>23.</sup> DEARING, *supra* note 20, at 437–38.

Weekly blamed the pension situation on "greedy pension attorneys."<sup>24</sup> In 1910, World's Work magazine published a series of articles entitled "The Pension Carnival." The articles had titles such as "Staining a Nation's Honor-Roll with Pretense and Fraud" and "Favorite Frauds for Tricking the Treasury: Particular Cases of Masqueraders, Rogues, Perjurers, Fake-Veterans, and Bogus Widows in the Merry Game of Swindling the Government."<sup>25</sup> The prevalent public view of the day was that at least one-quarter of UA pension claims filed involved illegitimate or fraudulent disabilities.<sup>26</sup>

The sheer magnitude of the pension scheme, which from 1880 to 1890 accounted for almost half the federal budget,<sup>27</sup> might suggest that UA veterans and their attorney agents had won the disability battle on the economic front. But was the unprecedented outpouring of funds from the federal government motivated by partisan politics or humanitarian ends? To what extent did the pension scheme equitably compensate the UA veterans? To what degree was pension compensation based on disability severity or type, as the system was supposed to operate? Or, was it affected significantly by other non-health related factors such as the time and place of claimants' applications, applicants' social status, and stigma toward their particular disabilities? Lastly, did pension attorneys help or hinder the disabled veteran's quest for pension compensation?

In addressing these questions, we highlight how disabled Americans historically, and in contemporary society, have struggled and often succeeded in ensuring their social and economic recognition. In large part, this struggle began after the Civil War, with thousands of returning and disabled UA veterans re-entering society. The national debate about the Civil War pension scheme

<sup>24.</sup> Id. at 438.

<sup>25.</sup> See also Charles Francis Adams, Pensions-Worse and More of Them, WORLD'S WORK, vol. 23(2), Dec. 1911, at 188-96 [hereinafter Adams, Pensions]; Adams, Pensions vol. 23(3), Jan. 1912, at 327-34; Adams, Pensions vol. 23(4), Feb. 1912, at 385-98. These and other articles are described in SKOCPOL, SOLDIERS, supra note 2, at 272-77. The World's Work magazine was editorially controlled by southerner Walter Hines Page, who opposed the expansion of the pension system and who had been the editor of the Forum which had published critical articles on the operation of the pension system. This series of articles argued that the nation should not repeat the mistakes of the Civil War pension system in adopting proposed legislation at that time establishing a non-contributory old-age pension system. Id.

<sup>26.</sup> See SKOCPOL, SOLDIERS, supra note 2, at 143 (citing sources in accord); John William Oliver, History of Civil War Military Pensions, 1861–1885, 4 BULL. U. WIS. HIST. SERIES 1, 42 (1917) (citing Congressman, later President, Garfield's view, in Cong. Globe, 42nd Cong. 2nd Sess., at 962).

<sup>27.</sup> See SKOCPOL, SOLDIERS, supra note 2, at 113 (Figure 2 illustrating pensions as a proportion of total federal receipts).

began when notions of disability civil rights were not conceivable, certainly as embodied today in the ADA.

Our analyses in this investigation employ a sample of over 27,000 federal pension applications filed by more than 8,000 white UA recruits between the years 1862 and 1907. Using a multivariate regression analysis, first we test a model for predicting UA claimants' use of pension attorneys. After examining the characteristics of UA recruits who employed pension attorneys, we explore the degree to which pension attorney representation impacted pension outcomes. To determine this relationship, we develop two outcome measures: (1) the odds of a claimant's pension application being accepted, and (2) the monthly dollar amount granted upon acceptance.<sup>28</sup>

The regression method allows us to control simultaneously for several factors impacting pension decisions (e.g., economic, political, and social factors) that we have explored in our earlier studies.<sup>29</sup> These factors include variables such as the UA pension applicant's occupation, age, disability type and related stigma (e.g., as measured by its visibility), and application date and location.

As a result, we more confidently address questions such as the extent to which visible or less stigmatized disabilities (e.g., gunshot wounds) were compensated with higher monthly pension awards, relative to hidden disabilities such as nervous disorders.<sup>30</sup> In fact, we find a relative dollar premium for applicants with certain visible disabilities, and this result is statistically independent of other factors in our research model, such as the applicant's occupation, age, and date of pension application.<sup>31</sup>

In this Article we test for the first time the impact on pension outcomes of the political inclination of the state (Republican, Democratic, or swing) in which claimants' applications were made. In prior articles, we chronicled the long-acknowledged view that disabled UA pensioners enjoyed the political support of the Republican Party.<sup>32</sup> Bensel argues further that:

<sup>28.</sup> For the first outcome measure of pension acceptance, we apply a logistic regression model; for the second dollar amount outcome measure, we apply a linear regression model. *See infra* Methodological Appendix.

<sup>29.</sup> See Blanck, supra note 7, at 153 (describing research variables).

<sup>30.</sup> To address this question, we would examine the estimated coefficient on the variable that measures the visibility of disabilities in the linear regression model where the monthly dollar amount is the dependent variable.

<sup>31.</sup> See generally Blanck, supra note 7.

<sup>32.</sup> Id. at 129-39.

The [Republican] machine that supported industrialization used the protective tariff to produce revenue which then was distributed, in a fashion that encouraged fraudulent [UA pension] claims, to hundreds of thousands of Civil War veterans and their survivors.<sup>33</sup>

Despite Bensel's claim, the economic benefit or the premium of this partisan factor on disability pension compensation has not been previously examined. Likewise, the conclusion of widespread fraud in the administration of the pension scheme has not been heretofore questioned. Here, we attempt to estimate the Republican Party's "pension payoff," in terms of additional dollars granted and the increased probability of favorable results, for claimants who applied in states, and during years, of Republican majorities.

Elsewhere, we described the evolution of the UA pension system and have touched upon the role of pension attorneys.<sup>34</sup> Briefly in 1862, Congress created the General Law pension scheme. The 1862 Act benefited only veterans with war-related wounds and illnesses. When conceived, the 1862 General Law established a medical screening system for rating and compensating disabilities. Although the Pension Office in Washington was charged with scrutinizing claims, the scheme relied on local surgeons to examine applicants to confirm their medical conditions and rate the severity of their disabilities.

Under the General Law, an army private in 1862 received \$8 per month if rated "totally disabled," which was defined as the inability to perform manual labor.<sup>35</sup> A veteran whose disability was less than total received a proportionally reduced sum; for instance, a veteran who lost a finger was deemed to be 2/8 disabled and received a \$2 monthly pension.<sup>36</sup> Congress revised the pension laws in 1864 and 1866, thereby increasing the maximum compensation for certain disabilities.

The 1873 Pension Consolidation Act compensated veterans for conditions contracted during military service that subsequently resulted in a disability. Given the state of medical diagnostic

<sup>33.</sup> BENSEL, *supra* note 3, at 62–63 (associating the efforts of the Grand Army of the Republic with the Republican party objectives); *see also* AGAR, *supra* note 21, at 582 (discussing pension politics).

<sup>34.</sup> See Blanck & Millender, supra note 9; see also Hugh Rockoff, The Changing Role of America's Veterans, Working Paper 8595, National Bureau of Economic Research (2001), available at http://www.NBER.org/papers/w8595 (summarizing America's veterans pension scheme).

<sup>35.</sup> See Blanck & Millender, supra note 9, at 10.

<sup>36.</sup> See id. at 11-12.

146

knowledge in the 1870s, the legislation posed difficulties for physicians responsible for screening applicants. Eligibility criteria led to charges that corrupt doctors validated veterans' false and exaggerated claims of disability. Press accounts referred to "bogus" pension applicants and labeled their pension lawyers as "bounty hunters."<sup>37</sup>

The Pension Arrears Act in 1879 proved to be as controversial as the 1873 Act. The Arrears Act granted lump sum back payments for war-related disabilities,<sup>38</sup> which led to a striking increase in the number of veterans applying for and receiving pensions. The Act established the Pension Bureau as a major administrative agency.<sup>39</sup> Although almost half of all pension requests were rejected in the period between 1880 and 1885, critics asserted that the Arrears Act was riddled with abuses.<sup>40</sup> An 1887 editorial in the *Chicago Tribune* was typical in its claim that the Act put "a premium upon fraud, imposition, and perjury."<sup>41</sup>

The next major reform of the system occurred in 1890, when Congress passed the Disability Pension Act.<sup>42</sup> Unlike prior laws, the 1890 Act allowed veterans to claim pensions for disabilities unrelated to military service, so long as they were not the result of "vicious habits or gross carelessness."<sup>43</sup> The 1890 Act reduced the length of military service needed to qualify for a pension to 90 days.<sup>44</sup>

Criticism of the Pension Office abated in the early twentieth century, when the Service and Age Pension Act of 1907 transformed the pension system into a general old-age insurance scheme for veterans, declaring that old age itself was a disability covered by the 1890 Act.<sup>45</sup> Subsequent legislation between 1908 and 1920 increased pension rates solely on the basis of age and length of military service.<sup>46</sup>

46. See id. at 22-24.

<sup>37.</sup> Id. at 13-14.

<sup>38.</sup> See Pension Arrears Act, ch. 187, 20 Stat. 469 (1879).

<sup>39.</sup> See DEARING, supra note 20, at 250 (describing the effect of the Arrears Act on the rise of the Pension Bureau).

<sup>40.</sup> See Blanck, supra note 7, at 122–23.

<sup>41.</sup> A Serpent of Temptation, CH1. TRIB., cited in 2(44) PUB. OPINION 369 (Feb. 12, 1887).

<sup>42.</sup> See Disability Pension Act of 1890, ch. 634, 26 Stat. 182 (1890).

<sup>43.</sup> Blanck, *supra* note 7, at 124–25.

<sup>44.</sup> See Disability Pension Act of 1890, ch. 634, § 3, 26 Stat. 182 (1890).

<sup>45.</sup> See generally Blanck & Millender, supra note 9, at 8-24 (discussing pension laws).

#### B. UA Pension Politics and Attorneys

Civil War military service became an important link to UA veterans' post-war political behavior and to Republican Party strategy.<sup>47</sup> At the time of the debates preceding the 1890 Disability Pension Act, the Republicans believed it to be in their party's interest to advocate broader and more generous pension awards. Republican Senator, soon to be President, Benjamin Harrison, echoed the pension's expansion theme that "there ought to be a place in the Ambulance for every faithful disabled [soldier]."<sup>48</sup> Historian Heywood Sanders aptly stated that the "Democrats were left to protect the pension list as a 'roll of honor,' protesting improper decisions by previous administrations, and searching out and publicizing fraud and abuse."<sup>49</sup>

For the first time in American history, the Civil War pension system also created an ongoing relationship among the federal government, individual veterans, and the advocates and lobbying organizations that represented the veterans' interests. After the war, UA veterans transformed their national organization, the Grand Army of the Republic (G.A.R.), into a political machine. The G.A.R.'s activities kept the veterans' wartime sacrifices in the public consciousness and their lawyer advocates and lobbyists played an important role in the pension system's expansion.<sup>50</sup>

Prior studies show the tie of pension awards to local political party dominance and loyalty.<sup>51</sup> Historian Larry Logue finds that under a Republican national administration in the early 1880s, Republican-dominated counties evidenced a higher proportion of pensioners.<sup>52</sup> In contrast, in the mid-1880s under President Cleveland's administration prior to passage of the 1890 Act, Democratic-dominated counties evidenced greater numbers of successful pensioners.

Likewise, researchers Gerald McFarland and Kazuto Oshio find that Civil War veterans were disproportionately loyal to the

<sup>47.</sup> See Heywood T. Sanders, Paying for the "Bloody Shirt:" The Politics of Civil War Pensions, in POLITICAL BENEFITS: EMPIRICAL STUDIES OF AMERICAN PUBLIC PROGRAMS 137 (Barry S. Rundquist ed., 1980) (arguing that pension policies played a central part in Republican party strategy for ensuring continuing party loyalty).

<sup>48.</sup> DEARING, supra note 20, at 285 (quoting President Harrison).

<sup>49.</sup> Sanders, supra note 47, at 149.

<sup>50.</sup> See also BENSEL, supra note 3, at 63-64 (discussing link of G.A.R. to Republican party politics and the pension scheme).

<sup>51.</sup> See supra notes 48-51 (discussing research findings).

<sup>52.</sup> See Larry M. Logue, Union Veterans and their Government: The Effects of Public Policies on Private Lives, 22 J. INTERDISC. HIST. 411, 424 (1992).

Republican Party in the mid-1880s.<sup>53</sup> Yet, by the mid-1890s, when virtually all UA veterans were receiving pension awards under the 1890 Act, economist Dora Costa predictably finds that pension awards did not vary according to the strength of the dominant political party in the claimant's county of residence.<sup>54</sup> The political salience of the pension issue had washed out.

With passage of the 1862 General Law, the Pension Bureau allowed veterans to hire lawyers to navigate their cases through the application process. Attorney fees were limited to a fixed amount of \$10 per application, paid regardless of whether the Bureau approved the application.<sup>55</sup> As a result, the more soldiers who applied for pensions, the greater the attorneys' profits, since it was a volume business. For obvious reasons, therefore, pension attorneys tried to enlarge their claimant pool.

Claim agents and attorneys lobbied aggressively in Washington for the expansion of the pension system. They were a strong force behind the passage of the Arrears Act in 1879.<sup>56</sup> Pension attorneys realized that the law would grant millions of arrears dollars on claims already allowed, and that it offered arrears dating from the time of discharge to all future applicants who could succeed in establishing original Civil War claims. Claim attorneys were keenly aware that the economic incentives of receiving one thousand dollars or more of arrears per claim would trigger a flood of new original claims from all parts of the country.<sup>57</sup>

For the promise of these immediate economic benefits, and for partisan reasons such as those related to the tariff question, claim agents and attorneys reached out for veterans through newspapers and pamphlets. Not surprisingly, many Republican newspapers were owned by prominent pension attorneys of the day. In 1877, George Lemon, a leading pension attorney, started the *National Tribune*, which became the largest and most influential UA veterans' paper. The paper prominently displayed advertisements of Lemon's pension services, such as the following (Figure A).

57. Id.

<sup>53.</sup> See Gerald W. McFarland & Kazuto Oshio, Civil War Military Service and Loyalty to the Republican Party: 1884, 15(2) HIST. J. MASS. 169, 169–74 (1987) (examining party loyalty in Massachusetts and New York in the 1884 election).

<sup>54.</sup> See DORA COSTA, THE EVOLUTION OF RETIREMENT: AN AMERICAN ECONOMIC HIS-TORY, 1880–1990, 164–65 (1998) (commenting on the resulting de-politicization of the pension system by the late 1800s).

<sup>55.</sup> The mean ruling amount per month over 16,996 applications in our sample is \$9.52 (see Figure 15). The \$10 application fee was more than the median monthly pension award.

<sup>56.</sup> See GLASSON, supra note 19, 155–57.

FIGURE A

# CLAIMS !

# CLAIMS !

### This Claim House Established in 1865!

# GEORGE E. LEMON,

#### Attorney-at-Law,

OFFICES, 615 Fifteenth St., (Citizens' National Bank,) WASHINGTON, D.C.

P.O. DRAWER 325

#### Pensions.

If wounded, injured, or have contracted any disease, however slight the disability, apply at once. Thousands entitled.

#### Heirs.

Widows, minor children, dependent mothers, fathers, and minor brothers and sisters, in the order named, are entitled.

#### War of 1812.

All surviving officers and soldiers of this war, whether in the Military or Naval service of the United States, who served fourteen (14) days; or, if in a battle or skirmish, for a less period, and the widows of such who have not remarried, are entitled to a pension of eight dollars a month. Proof of loyalty is no longer required in these claims.

#### Increase of Pensions.

Pension laws are more liberal now than formerly, and many are now entitled to a higher rate than they receive.

From and after January, 1881, I shall make no charges for my *services* in claims for increase of pension, where no new disability is alleged, unless successful in procuring the increase.

#### Restoration to Pension Roll.

Pensioners who have been unjustly dropped from the pension roll, or whose names have been stricken therefrom by reason of failure to draw their pension for a period of three years, or by reason of re-enlistment, may have their pensions renewed by corresponding with this house.

#### Desertion

from one regiment or vessel and enlistment in another, is not a bar to pension in cases where the wound, disease, or injury was incurred while in the service of the United States, and in the line of duty.

#### Land Warrants.

Survivors of all wars from 1790, to March 3, 1866, and certain heirs are entitled to one hundred and sixty acres of land, if not already received. Soldiers of the late war are not entitled.

Land warrants purchased for cash at the highest market rates, and assignments perfected.

Correspondence invited.

Appearing at first monthly and later weekly, the *Tribune* professed devotion to the interests of soldiers and pensioners. The *Tribune*, like most pension newspapers, collected subscription fees from the beneficiaries of the pension acts.<sup>58</sup> In January 1885, Lemon testified before a House Committee that his weekly *Tribune* had 112,000 paid subscribers.<sup>59</sup> The payoff was enormous. Yet, by the end of the nineteenth century, the Bureau's critics would denounce pension attorneys as parasites who were responsible for defrauding the government and their clients. One of the central empirical questions we test in the next part is whether the hiring of attorneys enhanced or hindered pension outcomes.

#### II. ATTORNEYS, POLITICS, AND PENSION OUTCOMES

#### A. Research Model and Data Sources

This Part examines empirically the ways in which disabled UA veterans and their advocates participated in the social construction of disability in America. We present two general theoretical models: the "Attorney Usage Model" and the "Pension Outcome Model."

In the Attorney Usage Model, we assume that the match of applicant and pension attorney was the result of several factors, such as the claimant's disability and claim type, geographic location, the year of application, and the economic incentives of the parties. All else equal, at least early on during the pension scheme, there likely was greater effort exerted by veterans to seek out pension attorneys than the converse.<sup>60</sup> This was because pension attorneys collected a fixed \$10 fee regardless of the merits of the claim. By contrast, a

<sup>58.</sup> *Id.* at 150, 156–57 (noting the attempt by Captain Dimmick and his associate lobbyists to raise a "money testimonial" through subscriptions collected from the beneficiaries of the Arrears Act).

<sup>59.</sup> Id. at 150 n.1 (noting the Tribune was delivered to more than 18,000 post offices at that time); see also DAVID W. BLIGHT, RACE AND REUNION: THE CIVIL WAR IN AMERICAN HISTORY 181 (2001) (discussing Lemon's National Tribune as the principal G.A.R. newspaper); DEARING, supra note 20, at 248, 268–69 (describing the practices of Lemon and N.W. Fitzgerald who published the Soldier's Journal to spur pension claimants and concluding that Lemon's efforts mushroomed when he partnered with the G.A.R., and the G.A.R. became a powerful political machine arguing for pension expansion).

<sup>60.</sup> One way to test the hypothesis that a claimant took an active part in seeking out attorneys is to relate pension outcome to the odds of repeated hiring of the same attorney. In the event of a success, we would expect that the same attorney was engaged for the subsequent pension applications. In the event of a failed claim, we would expect to find the claimant switching to a different attorney the next time. We thank Peter Viechnicki for bringing up this point.

veteran sought to maximize his probability of a successful claim by retaining an attorney with a good record and strong political connections.<sup>61</sup>

The Pension Outcome Model examines the degree to which the distribution of pensions depended on the applicant's disability type, class or occupational level, degree of advocacy (as defined here by attorney involvement), and the politics surrounding the pension system at the time of application.<sup>62</sup> Historian Heywood Sanders found that UA claimants tended to live in rural farming areas, with relatively low levels of wealth, where the Republican Party was strong.<sup>63</sup> Sanders noted that the percentage of rejected pension applications tended to decrease when Republicans held the White House but rose during Democratic administrations.<sup>64</sup>

As mentioned, in prior studies we also have classified the disabilities claimed by veterans into those subject to more and less prejudice.<sup>65</sup> We found that veterans claiming less visible and more stigmatized diseases and disabilities were twice as likely to be rejected outright by pension doctors.<sup>66</sup> However, applicants who persuaded examiners that they possessed a stigmatized yet pensionworthy disability received, on average, comparably higher disability severity ratings than those with less prejudicial conditions.<sup>67</sup> Our investigation here returns the focus of inquiry to the pension claimants and their advocates. We test whether veterans with particular disabilities more successfully navigated the Bureau's application process when engaging attorney advocates.

The data used in this study were derived from Civil War records stored at the United States National Archives. A random sample of 39,616 white male recruits with enlistment papers, henceforth referred to as "M-5" (the Military File), was drawn from the National Archives, representing 331 companies (chosen randomly from the UA regimental books) mustered into the UA during the Civil War.<sup>68</sup>

66. Id.

<sup>61.</sup> Nevertheless, pension attorneys collected their fee for each application filed. This amounted to large sums of money, even compared to the pension a claimant received over the course of the claimant's life. *See infra* notes 111–19 and accompanying text.

<sup>62.</sup> See Sanders, supra note 47, at 148–57.

<sup>63.</sup> Id.

<sup>64.</sup> Id.

<sup>65.</sup> See Blanck, supra note 7, at 156 (illustrated in Figure 8).

<sup>67.</sup> See id. at 160–66 (illustrated in Figure 10).

<sup>68.</sup> See id. at 160–66 (illustrated in Figure 10). These books were created by the regimental clerks during the Civil War and contain more than 20,000 companies. See Robert W. Fogel, Military, Pension, and Medical Records Dataset, 1820–1940, Version (M-5), Chicago, Center for Population Economics (2000).

Approximately two-thirds of the recruits were linked to the Pension Bureau data set (referred to as "Pension File"). We obtained records on 8,280 recruits from the Pension File,<sup>69</sup> which provided information such as the recruit's name, birthplace, age at enlistment, occupation at enlistment, application date, state of residence at the time of application, primary disability claimed, and attorney information.<sup>70</sup>

#### **B.** Descriptive Findings

1. Geographic Trends—Figure 1A displays the geographic distribution of the UA recruits sampled at enlistment from the Military File.<sup>71</sup>

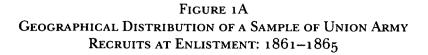
Figure 1A illustrates that large numbers of UA recruits were enlisted for the first time in New England and the Midwest. The state with the highest proportionate enlistment rate in our sample was New York (21%), where 7,387 of 34,855 total recruits enlisted. Other large enlistment states sampled were Ohio (5,925), Illinois (4,043), and Pennsylvania (3,131). We find that, because large numbers of farmers resided in Midwest states such as Ohio, Illinois, and Indiana, almost 60% of the enlisted men in our sample reported their occupation as farmers.

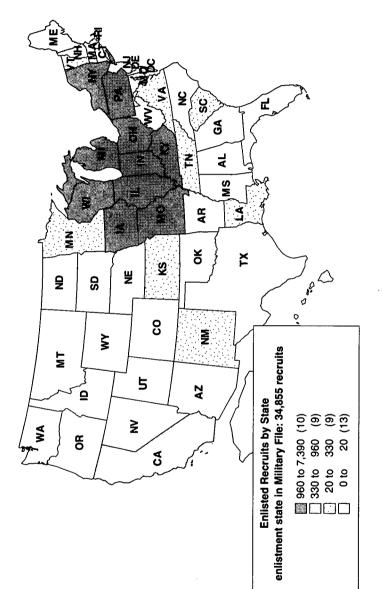
71. Note that the use of the contemporary map of the United States presented in Figures 1–3 reflects enlistment distributions of states and territories at the time of sampling.

<sup>69.</sup> We maintain a recruit in our sample if he applied for a pension at least once and one of his applications had an application date.

<sup>70.</sup> The sample was restricted to white volunteer infantry regiments. We excluded officers, black recruits, and other branches of the military. Research by Robert Fogel indicates that this sample is representative of the contemporary white male population who served in the UA. See Robert W. Fogel, New Sources and New Techniques for the Study of Secular Trends in Nutritional Status, Health, Mortality and the Process of Aging, 26(1) HIST. METHODS 5, 5–43 (1993) (finding the samples representative of the white northern males after the Civil War); see also Sven E. Wilson & Louis L. Nguyen, Secular Trends in the Determinants of Disability Benefits, 88(2) AEA PAPERS & PROC. 227, 227–31 (1998) (same).

For proposed study of black UA recruits and their subsequent pension outcomes, see Robert Fogel, Principal Investigator, *Early Indicators of Later Work Levels, Disease, & Death* (N.I.H. Grant Proposal, Mar. 1, 2001) (on file with authors). *Cf.* BLIGHT, *supra* note 59, at 193–94 (discussing lower survival rates of black relative to white veterans); C.N. BLISS, A TREATISE ON THE PRACTICE OF THE PENSION BUREAU, GOVERNING THE ADJUDICATION OF ARMY AND NAVY PENSIONS 51–69 (1898) (discussing the separate pension claims by UA veterans, widows, minors, dependent relatives, and mothers); SKOCPOL, *supra* note 2, at 138 (describing anecdotal accounts that certain groups of northern free blacks fared as well as their white counterparts in the pension application process).





# Notes:

1) Enlistment states are taken from the first instance of reported enlistment states.

2) State boundaries are contemporary.

For purposes of comparison to our sample, Figure 1B displays the geographic distribution of all white UA recruits at enlistment.<sup>72</sup> The distribution in Figure 1B mirrors that found in Figure 1A, confirming that our sample of UA recruits between 1861 and 1865 is representative of the larger population of veterans.

In 1884, Republican Pension Commissioner W.W. Dudley had his staff prepare a detailed statement or enlistment directory for all states, not unlike that illustrated by Figures 1A and 1B.<sup>73</sup> The directory proved to be an extremely valuable canvassing tool to the Republicans during the subsequent presidential election. Figure 2 displays the geographic distribution of the UA pension applications sampled from 1862 to 1907.<sup>74</sup>

Consistent with the findings of Dudley's enlistment directory complied in 1884, Figure 2 supports the contention that large numbers of pension claimants lived in swing or politically doubtful states, such as New York, Pennsylvania, Ohio, and Illinois. Historian Mary Dearing concluded that it was in these crucial states "where the elections were likely to be determined by the pensioners' votes."<sup>75</sup> This is exactly where Republican Pension Commissioner Dudley ordered that pension applicants be given preference.<sup>76</sup>

We also may infer UA claimants' postwar migration patterns by observing the difference in geographic distributions between Figure 1A and Figure 2. For example, veterans moved from Wisconsin to neighboring states such as Minnesota, Indiana, Illinois, and Iowa. Additionally, we observe that pension claimants migrated after the war westward and south to Kansas, Nebraska, and Texas.<sup>77</sup>

In a new line of study, we are examining UA claimants' migration patterns over time as a function of the establishment of nearby G.A.R. posts. Mary Dearing has observed that after the G.A.R. began its pro-Republican pension lobbying efforts in the early 1880s,

154

<sup>72.</sup> See FREDERICK DYER, A COMPENDIUM OF THE WAR OF THE REBELLION 11 (1909, *re-printed in* 1950) (compiling enlistment statistics).

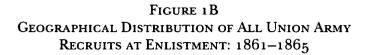
<sup>73.</sup> See DEARING, supra note 20, at 301.

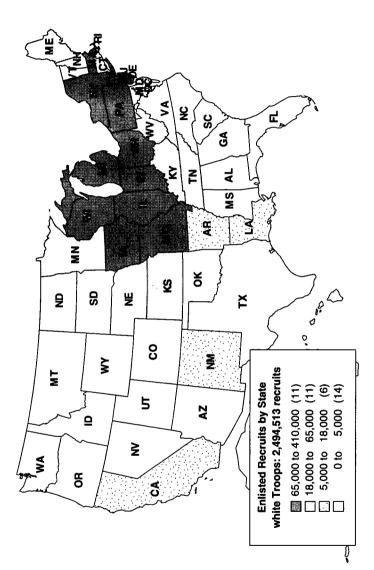
<sup>74.</sup> Although the Pension File does not contain explicit information on application states, it is possible to infer that information from the recruits' residential states and periods of residence. For each application, we first match the application date to a residential period, then match the residential period to a residential state.

<sup>75.</sup> DEARING, supra note 20, at 301.

<sup>76.</sup> See id.

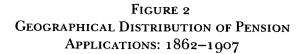
<sup>77.</sup> See Mario Sanchez, Internal Mobility of Post-Bellum Americans: Using a Panel Data of Civil War Recruits (2001) (unpublished manuscript presented at the Conference on Health and Labor Force Participation Over the Life Cycle: Evidence from the Past, National Bureau of Economic Research) (on file with authors) (describing research on the migration patterns of UA Civil War veterans).

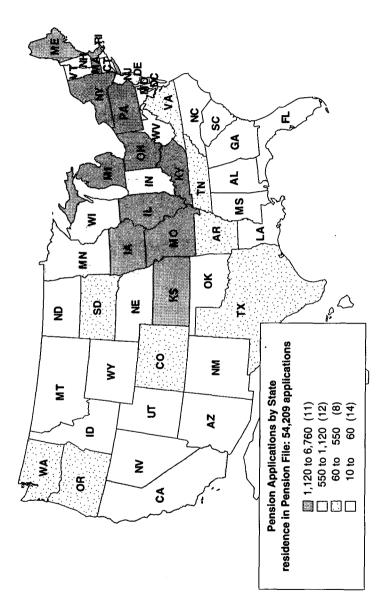




Note:

1) State boundaries are contemporary.





Note:

1) State boundaries are contemporary.

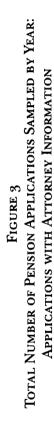
posts expanded rapidly in the southern and western states.<sup>78</sup> In 1883, for instance, a large regional post was organized in Kentucky, which would support our findings in Figure 2 showing relatively higher numbers of pension applicants in that state.<sup>79</sup>

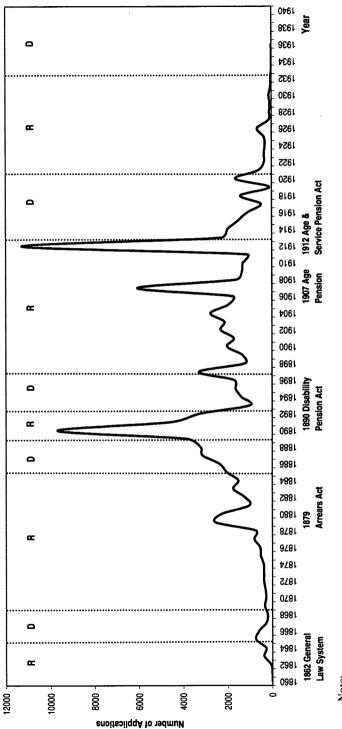
As expected, pension application rates coincided with expansion of the pension laws, with this trend illustrated by Figure 3. The dramatic spikes in Figure 3 indicate influxes of applications that coincide with passage of the 1879 Arrears Act, the 1890 Disability Pension Act, and the 1912 Age and Service Pension Act. We observe that of 112,625 pension applications with non-missing application dates sampled, 2,555 were processed in 1879 when the Arrears Act became effective and 2,293 were processed the following year. By comparison, there were 747 applications filed in 1878. Substantially larger application rates occurred after passage of the 1890, 1907, and 1912 pension laws.

Figure 3 also suggests that a large number of veterans who applied for pensions survived until at least age 65. This is because when the Age and Service Pension Law was implemented in 1907, the average age of veterans was between 65 and 70, and our sample has captured 6,076 such applications.

The 1912 Age and Service Pension Act consolidated the earlier 1907 Law, and our sample identifies that 11,301 applications were filed during 1912. This number of claimants exceeds the number filed under the 1890 Act (showing a spike of 9,705 applications). The high survival rate of the UA veterans Pension File sample (both within and across disability types) bolsters our ability to conduct a representative investigation with a sufficiently large cohort over the primary period of the pension scheme from 1862 to 1907.

<sup>78.</sup> DEARING, supra note 20, at 411.





Note:

The sample plotted contains 112,442 applications with non-missing application year information and non-missing attorney hiring information. R = Republican Presidency; D = Democratic Presidency

2. Pension Attorney Usage—When a pension application was filed with an attorney's assistance, the Bureau recorded the attorney's name or the name of the agency that the attorney represented. We consider a pension application to be filed through an attorney if his name or the name of his agency is recorded. Consistent with historical anecdotes documented by Progressive-era political scientist William Glasson, we have identified prominent claim agents in the Pension File records.<sup>80</sup>

Of the 35,598 applications in our sample with non-missing agency names, 9.3% (i.e., 3,296) were handled by "LEMON GEORGE." Two other prominent claim agents at the time were Nathan Ward Fitzgerald, who was the editor of the newspaper *Citizen Soldier*, and Captain R. A. Dimmick from Washington. Glasson noted that these three attorneys had been major advocates for the Arrears Act.<sup>81</sup>

In our sample, the proportions of cases handled by Fitzgerald and Dimmick were 1.3% and 0.1%, respectively, which were substantially smaller than Lemon's clientele base. This would suggest a "winner-get-all" phenomenon in the pension attorney business, in which George Lemon, the highest profile pension attorney and lobbyist, gauged a substantially larger share of the application business than others.

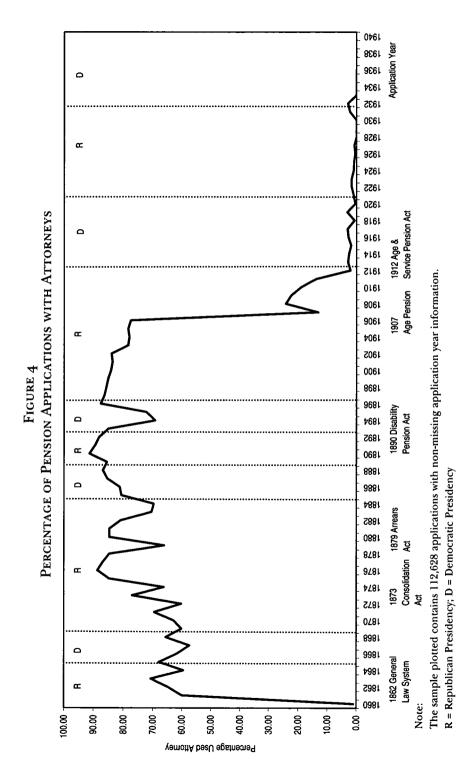
We regard an application to be filed by the recruit himself if the attorney name entry on the application form is blank. Figure 4 shows the percentage of applications that referenced attorneys in the pension scheme beginning in 1862. We compute this percentage by counting the number of applications per year with non-missing attorney name entries, and then dividing this number by the total number of applications in that year (e.g., with non-missing application dates).

Although we have shown in Figure 3 that the 1907 and the 1912 Acts triggered large numbers of pension applications, Figure 4 shows after 1912 almost no applications were filed with the assistance of attorneys. Attorney involvement, therefore, was tied closely to particular pension legislation. After 1907 and 1912, when age alone qualified a veteran for a pension, the role of attorneys diminished because veterans did not need advocates to argue for their entitlement.<sup>82</sup>

<sup>80.</sup> See Glasson, supra note 19, at 156-57.

<sup>81.</sup> Id. at 157. These attorney pension practitioners, lobbyists, and newspaper owners also were based in Washington, D.C. because the larger UA hospitals were located in the area. See GEORGE WORTHINGTON ADAMS, DOCTORS IN BLUE: THE MEDICAL HISTORY OF THE UNION ARMY IN THE CIVIL WAR 149–58 (1996) (discussing operation of UA hospitals in the Washington, D.C. area).

<sup>82.</sup> Pension agents were abolished formally by the 1912 Act. See FEDERAL LAWS RELAT-ING TO VETERANS OF WARS OF THE UNITED STATES, at Ch. II, sec. 185–90 (Annotated, Aug. 1932) (discussing allowed fees of pension agents and attorneys).



By contrast, we see in Figure 4 that under the earlier General Law attorneys were involved in 60% to 70% of all applications. And, because of the large influx of claimants after the 1873 Consolidation Act and the 1879 Arrears Act, the Bureau tightened its selection and proof of disability requirements.<sup>83</sup> In Figure 4 we observe a corresponding decline in attorney usage rates to approximately 65% in 1874 and again in 1879, followed each time by increases to more than 80%.

The pattern suggests that veterans may have initially viewed the 1873 and 1879 laws optimistically with regard to their application success. This optimism was tempered, however, when veterans realized the Bureau had tightened its selection and evidentiary criteria and that attorney assistance was needed more than before. Thereafter, during the years 1890 to 1907, attorney usage remained high, with more than 70% of the applications filed through agency.

With passage of the 1907 Age Law, there was a dramatic decrease in the proportion of applications filed by attorneys. In 1906, 77.6% of the applications had attorney involvement. By 1907, this number dropped to less than one in six (13.1%). Although there was a slight recovery of attorney usage between 1908 and 1911, the number never again exceeded 25%. At the time of the 1912 Law, attorneys, with even lower proportions thereafter, filed only 2.1% of applications. Given that attorneys played a minor role in the filing of applications after 1907, we focus our analyses below on the time period between 1862 and 1907.

If it were the case that relatively relaxed admission to the pension system existed in Republican dominated states, we would predict a lower average percentage of attorney usage by claimants in Republican states. Figure 5A provides the percentage of attorney-assisted applications by state, where the states are grouped according to their party affiliation: solid Republican or solid Democratic.<sup>84</sup>

<sup>83.</sup> See supra notes 34-46 (discussing evidentiary requirements for pension applications).

<sup>84.</sup> A "solid" Democratic state had Democratic majority votes in all election years between 1862 and 1907. Democratic majority vote prevailed for a given state in an election year when the number of votes dedicated to the Democratic party exceeded the number of votes dedicated to the Republican party. Political statistics were derived from U.S. Census Electoral Data, at the U.S. Census website, *available at* http://www.census.gov.

#### Figure 5A Relationship between Attorney Involvement and Political Affiliation of States

#### Solid Republican States from 1862 to 1907

	Percentage of	
	Applications with	NUMBER OF
State	Attorneys	Applications
North Dakota	64.10	39
New Hampshire	73.30	976
Massachusetts	76.00	1,332
lowa	76.20	3,412
Maine	76.50	1,207
Vermont	76.50	775
Minnesota	77.10	918
Pennsylvania	77.20	6,067
Michigan	78.50	3,666
Ohio	81.80	6,411
Rhode Island	82.60	46
Total	78.15**	24,849

#### Solid Democrat States from 1862 to 1907

	Percentage of	
	Applications with	NUMBER OF
STATE	Attorneys	Applications
Florida	66.70	45
Virginia	72.50	342
Mississippi	75.90	29
Alabama	77.80	18
North Carolina	78.90	19
Texas	80.60	242
Georgia	81.00	42
Kentucky*	82.80	1,376
South Carolina	85.70	14
Total	80.37**	2,127

 Between 1862 and 1907, Kentucky had either democratic majority votes or equal votes. We consider Kentucky as a solid democratic state during this period.

\*\* t-test indicates that the mean attorney usages of 78.15% and 80.37% are significantly different with a p value of 0.0128.

Figure 5A shows that although pension attorney involvement was high overall during the years 1862 to 1907, claimants residing in solid Republican states were significantly less likely to engage pension lawyers than those from solid Democratic states (attorney usage 78.15% versus 80.37%, respectively).<sup>85</sup> Figure 5A illustrates that northern Republican states such as Iowa, Michigan, Pennsylvania and Ohio processed thousands of applications during the pension period, with the majority of those applications filed by agents.<sup>86</sup> By contrast, Kentucky was the lone solid Democratic state that processed relatively large numbers of pension applications (1,376) with high attorney involvement (82.80% filed with attorneys).<sup>87</sup>

The degree of attorney involvement in any given state may be attributed to at least three closely related factors. First, a large number of veterans resided in states that provided a strong clientele base for claim agents and attorneys. Second, we hypothesize and test empirically below—that the political climate in certain states—Republican, Democratic, or swing—was important to the proportion of pensions filed, particularly given the timing and strength of relevant partisan politics around the protective tariff issue.<sup>88</sup> Third, the aggressiveness of particular claim agents themselves in attracting clients and marketing their services, such as George Lemon's use of the *National Tribune*, served an important role in stimulating filings.

As we have said, it is well documented (though not empirically) that pro-pension attitudes were common among the Republican states with a countervailing attitude in Democratic states.<sup>89</sup> Indeed, as Figure 5A shows, Republican states processed more than ten times as many pension applications as Democratic states (24,849 versus 2,127 applications, respectively). This large difference may be due to many factors, in particular that Democratic states were predominantly southern and few UA veterans moved to the postwar South.<sup>90</sup> But this finding more likely is due to the fact that claimants and their attorneys realized that residence in Republican

<sup>85.</sup> Although 78.15% does not appear to be substantially smaller than 80.37%, because a large number of applications are used to calculate those two percentages, they are considered different from a statistical standpoint. T-test to detect whether mean attorney usages between solid Republican and solid Democratic states were significantly different, p = .0128.

<sup>86.</sup> Some southern states such as South Carolina and Georgia showed high percentages of attorney usage. However, the total number of applications in those states was small and did not exceed 100.

<sup>87.</sup> As we highlight below, Kentucky proved to be an important jumping off point to the South for the establishment of G.A.R. posts.

<sup>88.</sup> See BENSEL, supra note 3, at 404 (discussing the partisan debate about the tariff issue).

<sup>89.</sup> See Sanders, supra note 47, at 323-24.

<sup>90.</sup> BENSEL, *supra* note 3, at 66–67 (noting that most pensions for veterans residing in southern states were granted as a result of their service in the Mexican-American War or to carpetbag supporters of the Republican party).

164

states greatly increased the chances of receiving more generous pensions.

The partisan influence in the pension process may be demonstrated dramatically when we examine the degree of attorney involvement in swing states, where, by definition, party affiliation moderated between 1862 and 1907.<sup>91</sup> Thus, Figure 5B shows that for swing states the overall number of applications was more than twice as large under periods of Republican majority than under Democratic majority vote (i.e., 18,437 in the first part of Figure 5B versus 7,867 in the second part of the Figure). Second, although the average percentage of applications with agent assistance in swing states was high under Republican majority votes (74.12%), the proportion rose substantially to 83.02% under Democratic majority votes.<sup>92</sup>

<sup>91.</sup> A "swing" state held Democratic majority votes during some years, but switched to Republican majority votes during other years throughout the period of 1862 to 1907. See supra note 84 (defining political inclination of states).

<sup>92.</sup> T-test indicates that mean attorney usages of 74.12% and 83.02% are significantly different, p = .0001.

FALL 2001–WINTER 2002]

State	PERCENTAGE OF	NUMBER OF
STATE	Applications with	Applications
	ATTORNEYS	AFFLICATIONS
Missouri	48.30	540
Louisiana	50.00	6
Idaho	54.50	33
Wyoming	57.10	35
Washington	60.20	201
South Dakota	61.50	91
New Jersey	61.90	375
Utah	63.60	11
Connecticut	64.30	442
West Virginia	64.30	322
Oregon	69.30	261
California	69.70	597
Wisconsin	72.60	573
Nevada	75.00	8
New York	. 75.10	4,994
Colorado	75.90	290
Kansas	75.90	2,485
Illinois	76.30	4,894
Delaware	76.70	270
Nebraska	78.60	1,007
Montana	79.20	24
Indiana	84.60	777
Maryland	85.30	197
Arkansas	100.00	3
Tennessee	100.00	1
Total	74.12***	18,437

## FIGURE 5B

FIGURE 5	В	(CONTINUED)
----------	---	-------------

<b>S</b>	D	N
State	PERCENTAGE OF	NUMBER OF
	APPLICATIONS WITH	Applications
	ATTORNEYS	
Utah	66.70	3
Wisconsin	67.10	79
Louisiana	73.70	38
New York	74.50	1,110
Arkansas	76.70	257
Nebraska	79.30	111
Illinois	79.50	380
Maryland	81.40	429
California	81.50	27
Connecticut	82.30	457
Montana	82.40	17
Idaho	82.60	23
Tennessee	83.50	139
Indiana	84.50	277
Kansas	84.50	245
Missouri	85.90	2,559
New Jersey	86.00	687
West Virginia	87.40	570
Delaware	88.40	284
South Dakota	88.50	26
Colorado	88.60	88
Washington	92.50	53
Nevada	100.00	4
Oregon	100.00	1
Wyoming	100.00	3
Total	83.02***	7,867

RELATIONSHIP BETWEEN ATTORNEY INVOLVEMENT AND POLITICAL AFFILIATION OF STATES: SWING STATES FROM 1862 TO 1907 UNDER YEARS OF EQUAL REPUBLICAN AND DEMOCRATIC VOTES		
State	Percentage of Applications with Attorneys	NUMBER OF Applications
Maryland	51.30	119
California	79.20	53
New York	79.90	656
Kentucky	87.10	155
Total	77.54	983

#### FIGURE 5B (CONTINUED)

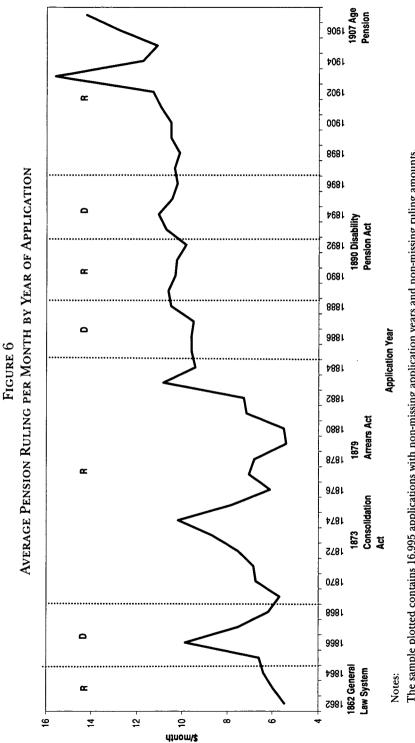
\_ .

In a politically important swing state such as Missouri, party affiliation had a striking influence on the hiring of pension attorneys. Missouri overall was Democratically inclined during the pension period. Yet, during those years of Republican Party inclination (Panel 1), less than half (48.30%) of applications were filed with attorneys. In comparison, when Missouri was under Democratic majority vote, Figure 5B (Panel 2) shows that attorneys filed almost nine out of ten (85.90%) applications. A similar but less robust trend is shown for Illinois where attorney involvement under Republican Party inclination was 76.30%, and 79.50% under Democratic inclination.

The final panel of Figure 5B shows the four states in our sample— California, Kentucky, Maryland, and New York—that experienced the most equal (i.e., neutral) non-majority party votes between the years 1862 to 1907. The average attorney involvement in these neutral states was 77.54%, which predictably was roughly the midpoint found between the levels of attorney usage under Republican and Democratic periods of dominance.

In essence, we have shown empirically that during periods of Republican majority votes, individual states were politically friendlier towards pension applicants *and* claimants were less likely to use pension attorneys. Does this conclusion imply, as has been suggested by prior scholars without the aid of the present data set, that for party patronage reasons, Republican presidents blindly supported generous pensions relative to Democratic presidents? We explore this conjecture next. Figure 6 depicts, during the years 1865 to 1907, the average pension ruling<sup>93</sup> per month by periods of applications, where periods are separated by party affiliation of sitting U.S. presidents. As expected, after the Civil War from 1865 to 1869 during the General Law, there was a sharp spike in average monthly pension rulings, even under Democrat President Andrew Johnson. This spike is attributable to the large number of war-related pension claims for gunshot wounds (GSWs) and battle injuries in our sample.

<sup>93.</sup> The term "pension ruling" refers to the amount of the pension awarded to an applicant/claimant by the Pension Bureau.



The sample plotted contains 16,995 applications with non-missing application years and non-missing ruling amounts. R = Republican Presidency; D = Democratic Presidency 170

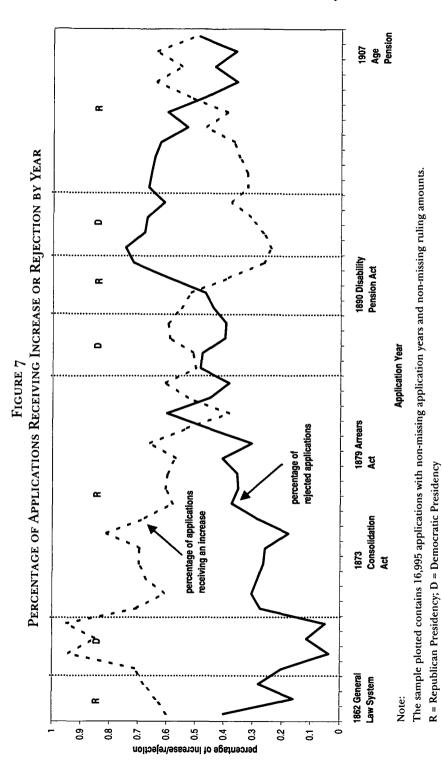
However, during the longer period of Republican sitting presidents between 1869 and 1885, Figure 6 also shows two noticeable spikes, as well as two noticeable troughs.<sup>94</sup> After 1890, when the Disability Act provided pensions regardless of whether the claimant's disability was war-related, and with reduced political salience of the protective tariff issue, presidential party dominance did not significantly influence average pension rulings (that is, except with passage of the Age Pension Law in 1907).

Figure 7 further supports the conclusion that from 1890 until 1907, the proportion of increases and rejections in pension applications was not associated strongly with the presidential administration in power. The proportion of applications receiving increases was high under Democratic presidential administrations and the proportion of pension rejections also was high under Republican presidents.

Therefore, with the advent of American industrialization and the decline of the protective tariff issue at the turn of the nineteenth century, Republican and Democratic administrations alike lessened their support for the continued expansion of UA pensions.<sup>95</sup> Lastly, Figure 7 illustrates that toward the end of the disability pension scheme, under Progressive President Theodore Roosevelt (1901–1909), the proportion of pension increases rose and rejections declined.

<sup>94.</sup> See infra Figure 7 (demonstrating that evidence on pension ruling increases or rejections is mixed).

<sup>95.</sup> But see infra note 138 and accompanying text (providing Professor Pam Karlan's suggestion that partisan effects toward the pension system may have been more obvious in local political races, such as in congressional contests).



3. Disability and Stigma—We have focused our study on pension applications between the years 1862 and 1907, when disability status was the basis for receipt of pensions and when attorney usage was high. From this pool, we further extract a sub-sample of applications with non-missing claimed disabilities from the Pension File. The claimed disabilities may be categorized into twelve types, each representing a distinct disability.<sup>96</sup>

We examine the first listed disability in the pension application.<sup>97</sup> The information contained in this variable combines the Pension Board's recommended disability type and level of disability or disease severity according to the examining surgeon's certificate, as well as claimant self-reports about his disability type and severity. In cases where a discrepancy existed between disabilities determined by the Board and those reported by the claimant, we employ the Board's recommendation in our analysis. These selection criteria yield a sub-sample of 27,191 pension applications for purposes of the present analysis.

Prior research shows that the twelve disability types may be arranged into those that are more or less subject to stigma and attitudinal prejudice.<sup>98</sup> Economist Marjorie Baldwin found in contemporary studies that individuals with disabilities who are subject to more prejudice are seriously disadvantaged by employment dis-

<sup>96.</sup> In every application, a veteran could claim up to twelve disabilities.

<sup>97.</sup> We used the first disability that appeared on the pension claim list and assumed this to be the claimant's primary disability. To verify this assumption, we drew a random sample of sixty recruits from the Pension File. We retrieved hard copies of the sixty application papers from the National Archives in Washington D.C. For each application, we coded one primary disability by reviewing the recruit's complaint and the doctor's diagnosis. Finally, we compared our judgment of the primary disability with the first claimed disability.

Out of 630 potential applications, we found ninety-seven cases where the first claimed disability exactly coincided with the primary disability indicated by the actual forms. We conclude that the first claimed disability did not necessarily match the primary claimed disability.

To explore which disability was primary, one would have to link the Pension File to the Surgeons' Certificates File. Each Surgeon's Certificate granted several disability ratings that were converted to disability awards by the Pension Bureau. We would have to compare among several disability ratings, select the disability assigned the highest rating, and consider it as the primary disability. This will be a necessary next step in future research. We thank Noelle Yetter for retrieving the application papers from the National Archives and James Schmeling for developing the coding scheme so that comparisons could be made between the information from the actual forms and the Pension File.

<sup>98.</sup> See Marjorie L. Baldwin, Can the ADA Achieve its Employment Goals?, 549 ANNALS AM. ACAD. POL. & SOC. SCI. 37, 45 (1997) (summarizing research and providing basis for categorization). The disability categories may be grouped in a variety of ways, including from those that are more apparent or visible to those that are less apparent. Future studies will address the impact on the findings of other groupings. See also Michelle Fine & Adrienne Asch, Disability Beyond Stigma: Social Interaction, Discrimination, and Activism, 44 J. Soc. ISSUES 3, 21 (1988) (discussing sources of disability stigma).

crimination and lower wage rates.<sup>99</sup> Mental illnesses and infectious diseases are impairments particularly subject to severe prejudice, while musculo-skeletal injuries and more visible conditions (e.g., GSWs or hernias in our sample) are subject to less prejudice.<sup>100</sup>

Based on contemporary studies and our prior work with the Civil War data set, Figure 8 classifies disability categories into those subject to more and less prejudice and stigma. Of course, it is not possible to determine with certainty the relative levels of prejudice experienced by persons with disabilities in the late nineteenth century.

The comparisons in Figure 8 rely on the assumption that attitudes toward disability present in the contemporary population may be ascribed to physicians more than one century earlier. Blanck and Millender have argued that contemporary attitudes toward disability had their roots in nineteenth-century views and indeed, it is likely that physicians would have found it difficult to set aside their views on disability and illness when they encountered UA pension claimants.<sup>101</sup>

<sup>99.</sup> Baldwin, supra note 98, at 45 (summarizing research findings); see also Harlan Hahn, Antidiscrimination Laws and Social Research on Disability: The Minority Group Perspective, 14 BEHAV. SCI. & LAW 41, 41-59 (1996) (finding that stigmatizing attitudes are the primary source of discrimination against disabled persons). The primary functional definition of disability for applicants was their inability to work.

<sup>100.</sup> See Baldwin, supra note 98, at 45 (summarizing research findings).

<sup>101.</sup> Blanck & Millender, supra note 9, at 17-18.

# FIGURE 8

Summary of Studies Classifying Impairments/Disabilities Into Categories Subject to More and Less Attitudinal Prejudice (top) and as Applied to Disease/Disability Categories Derived from the Surgeon's Certificates (bottom)

# Impairments Subject to Less Predudice

Back or spine problems Broken bone or fracture Head or spinal cord injury Hernia or rupture High blood pressure Learning disability Stiffness or Deformity of Limb Thyroid trouble or goiter Tumor, cyst, or growth Stomach trouble Arthritis or rheumatism Lung or respiratory trouble Diabetes Heart trouble

# Impairments Subject to More Predudice

Missing legs, arms, hands, or fingers Blindness or vision problems Deafness or hearing impairment Speech disorder Stroke Paralysis Epilepsy Cerebral palsy Mental retardation Alcohol or drug problem Mental or emotional problem Acquired immunodeficiency syndrome

# CATEGORIZATION OF DISEASE CATEGORIES FROM SURGEON'S CERTIFICATES

Less Prejudice

Cardiovascular Diarrhea Endocrine Gastrointestinal Hernia Injury/gun-shot wound Rectum/hemorrhoids Respiratory Rheumatism/musculo-skeletal Tumor Varicose veins More Prejudice

Ear diseases Eye disorders General appearance Genito-urinary Liver Infectious Diseases/fever Nervous system

Acknowledging these caveats, Figures 9A, 9B, 9C, and 9D separate disability types into the two categories—as subject to more and less prejudice—as predictors of pension awards. Figure 9A groups the claimed disabilities during the period 1862 to 1907. From 1862 to 1907, the disability category with the highest prevalence in all applications is battle injury and gunshot wounds (hereinafter referred to as "injury and GSWs"), which accounted for 28.30% (almost 17,000 applications) of claimed conditions. Other frequently claimed disabilities included rheumatism and musculo-skeletal conditions (20.80%), and diarrhea (12.80%). These conditions presumably were subjected to less attitudinal prejudice and evidenced a higher prevalence in pension applications, as compared to those subject to more prejudice (i.e., in Figure 9A, 81.80% or 48,499 of the total for conditions subject to less prejudice versus 18.10% or 10,672 of the total for conditions subject to more prejudice).

Figures 9B–9D are broken down further by period of pension legislation—General Law in Figure 9B, Arrears Act in Figure 9C, and Disability Pension Law in Figure 9D. This approach enables us to examine the degree to which applications for particular claimed disabilities varied under the different pension schemes. When examining the trends over time and with the aging of the claimants, the proportion of applications claiming GSWs predictably declined, even though the raw number of claimants increased.

We find that the majority of all applications (61.10%) claimed GSWs under the General Law, as compared to 34.50% under the Arrears Act period and 19.30% under the 1890 Act. With the aging of the claimants, we observe that the number of applications claiming rheumatism and musculo-skeletal conditions increased over time, with the proportion of applications for this disability showing 5.70% under the General Law, 13.90% under the Arrears Act and 27.20% under the 1890 Act.

In contrast, with the exception of hearing impairments,<sup>102</sup> disabilities subject to more prejudice generally did not show strong increases in the proportion of applications over time. Figures 9B-9D show that 2.60% and 2.20% of applications filed under the General Law claimed either infectious and parasitic diseases or nervous disorders, respectively, each a disability type that required high degrees of evidentiary proof to be shown war-related and each subject to high attitudinal stigma.<sup>103</sup> The Arrears Act brought a modest rise in claims for infectious disorders (5.20%) but not for nervous conditions, and the 1890 Act did not spur a rise in either of these conditions.

<sup>102.</sup> Figures 9B-D show for ear (loss of hearing) conditions the proportion of applications to be 2.60% during the General Law, 4.90% under the Arrears Act, and 7.40% under the 1890 Act.

<sup>103.</sup> Blanck, *supra* note 7, at 162–64 (discussing strong degree of prejudice toward these conditions).

Separating into Categories subject to More versus Less Attitudinal Prejudice: Between 1862 and 1907 DISTRIBUTION OF FIRST DISABILITY CLAIMED IN PENSION APPLICATIONS FIGURE 9A

18,000 16,000 14,000 12,000 10,000 number of applications 8,000 6,000 4,000 2,000 0 accidents injury & gsw hernia liver spleen poold ear eye nfectious & parasitic nervous system general appearance meumatism & musculo-skeletal diarrhea respiratory gastrointestinal genito-urinary hemorrhoids /aricose veins neoplasms skin & tissue cardiovascular endocrine **More Prejudice:** ess Prejudice: Applications 10,672 Total Applications 48,499 Total Disabilities subject to Disabilities subject to ......

59,171 Total Applications from the Pension File

Applications Applications & masculatory & general appearance ear appearance & applications & previous system a postanance accidents injury & general appearance accidents free injury & general appearance herma free masculo-skeletal free masculo-skeletal hermia	ear lisitic	-			•				
infectious & nervou e nervou general api e inju inju inju inju neumatism & muscult			-	-	_	-	_	_	
intectious & nervou & nervou general app general app inju terminatism & muscult nervouter nervou	.2	-	-	-	-	-	-	-	
nervou general api inju fheumatism & muscult	Ļ	-	-	-	-		-	-	
general app general app inju fheumatism & muscuto	;	-	-	-	-	-	-	-	
general apy s inju meumatism & muscult		-	-	-	-	-	-	-	
theumatism & muscult		-	-	-	-	-	-	-	
theumatism & muscult	Ļ	-	-	-	-	-	-	-	
inju uscult re	S	-	-	-	-	-	-	-	-
usculc	×								
usculc	a								
lsau		-	-	-	-	-	-		
respirator			-	-	-	-	-	-	
hern	2	_	-				-		
		-	-	-	-	-	-	-	
	Ļ	Ţ	-	-	-	-	-	-	
	s ۲	-	-	-	-	-	-	-	
UISADIITUES genito-urinary	2			-		-		-	
subject to /	, <b>.</b>	-	-	-	-	-	-	-	
Less Preiudice:	<b>-</b>	-	-	-	-	-	-	-	
E 116 Total	ş	-	-	-	-	-	-	-	
astrointestinal			-	-	-	-	-	-	
Applications	Ļ	-	-	-	-		-	-	
neoplasms	2 2		-	-	-	-	-	-	
skin & tissue	e			-	-	-		-	_
	 ;	-	-	-	-	-	-	-	
Caruiovascuiai	-,	-	-	-		-		-	
[ spleen		-	-			-	-	-	
endocrine	le l	•						-	<u> </u>
plood	d_								
	- 4		-		-				

DISTRIBUTION OF FIRST DISARULTY CLAIMED IN PENSION APPLICATIONS FIGURE 9B

Fall 2001–Winter 2002]

5,800 Total Applications from the Pension File

number of applications

Separating into Categories subject to More versus Less Attitudinal Prejudice: Between 1879 and 1889 DISTRIBUTION OF FIRST DISABILITY CLAIMED IN PENSION APPLICATIONS FIGURE QC

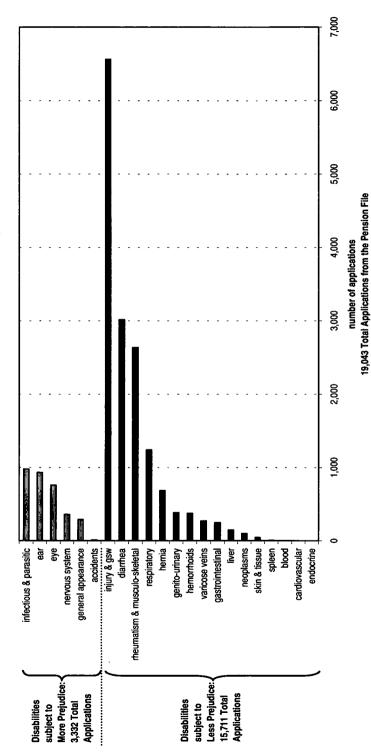


FIGURE 9D	DISTRIBUTION OF FIRST DISABILITY CLAIMED IN PENSION APPLICATIONS	Separating into Categories subject to More versus Less Attitudinal Prejudice: Between 1890 and 1907
-----------	--	---

		2				' L					1-0
-	ear 1										Γ
Dicabilities		-		-	-	-		-	-	-	
	eye		-	-		-	-		-	-	
subject to	intertions & namethic		-			-	-			-	
More Preiudice: 4		-	-	-	-	-	-	-	-	-	
E EEE Total	nervous system		-	-		-			•	-	
	general appearance				•	-	-		-		_
Applications	•	-	-	-	-	-	-				
		-	-	-	-		-	-	•	-	
	meumatism & musculo-skeletal										
	inimu 8. new										
		-	-	-			-		-	-	
	diarrhea						-	-	-	-	
	rechiration			-	-			-		-	
		-	•	-	-	-		-	-	-	
	hemia	-	-	-		-	-			-	
Pischilities.	gastrointestinal		-	-	-	-				-	
DISGUILLES											
subject to	gentto-urinary		-	-	-	-	-	-	-	-	_
	hamorrhoide		-	-	-	-	-	-	-	-	
Less Prejudice:		-			•	-	-	-	-	-	
27.662 Total	varicose veins	-	-	•	-	-	-				
		-	-	-			-	-	-	-	-
Applications		[_	-	-	-	-	-	-	-		
	liver	-	-	-		-	-				
	skin & tissue	-	-		-	-					
		-		-	-				•		
	bieeu	-		-	-	-	-	-			_
	endocrine	-			-	-	-		-		
	hinned	-	-	-		-	-		-	-	
		-	-	-	-	-	-		-	-	
	cardiovascular	-		-				-	-	•	
			-	-	-	-	-	-	-	-	-
	~	0 1,000	2,000	3,000	4,000	5,000	6,000	2,000	8,000	000'6	10,000
					num	number of applications	tions				
				6 V C	In Total And	lientione from	the Donoion 6				
				2.12	וחלא ומוח הוו	Indunia italii	טיאיטוט וטומו אטטוונעום ווטוו גופ רפוואטוו רווב				

We conclude that two non-disability factors contributed to the prevalence of applications during system sub-periods. The first may be described as a "political-pension law effect," whereby certain disabilities received recognition from the Bureau for the political, party patronage, and social reasons we have identified previously, such as year of application and political affiliation of the state in which the claimant filed his application. Despite this effect, it is not surprising that GSWs accounted for over 60% of the applications under the General Law, compensating conditions with clear ties to the war.

The second factor is an "age-disability effect." As veterans aged, their health deteriorated. We have shown elsewhere that a claimant's occupation and social class moderated this effect.<sup>104</sup> With age, claimants were more likely to contract conditions such as rheumatism and ear or eye disease that were not direct products of warrelated injuries. The age-disability effect is indicative of the negative stigma we have found to be attached to certain disabilities claimed, because they were considered less deserving for military pensions.<sup>105</sup>

We have suggested that after the war, infectious diseases and nervous conditions were regarded to be particularly less deserving of awards due to stigma and lack of direct ties to the war. In contrast, veterans with GSWs, in many cases with less severe medical conditions than those with nervous disorders, received greater public approval for their claims. Thus, in prior analyses we found that pension rejection rates for applications with more stigmatized disabilities were significantly higher relative to conditions subject to less stigma.<sup>106</sup> Yet, our prior studies show that once admitted into the pension system, veterans received on average higher monthly awards for more stigmatized disabilities.<sup>107</sup>

Figure 9A shows that disabilities subject to more prejudice accounted for 18.10% of the total claims (10,672 out of 59,171

<sup>104.</sup> Id. at 166-69 (finding relation of occupation and social class to pension awards).

<sup>105.</sup> See Blanck & Millender, supra note 9, at 23-27 (discussing findings for disability stigma).

<sup>106.</sup> Blanck, *supra* note 7, at 162–64 (discussing findings regarding degree of prejudice and awards); *see also* BLISS, *supra* note 70, at 27–32 (discussing the Bureau's classification of diseases into "obscure" and "not obscure," whereby obscure diseases generally can be distinguished only by a physician and not obscure may be distinguished by non-physicians). The Bureau recognized that at some stages proof required in claims of all diseases can be either obscure or not obscure depending on the development and symptoms of the disease and the competency of the witness describing the condition. *Id.* For purposes of the present analysis, therefore, disease type and severity are more focused indicators of pension outcomes.

<sup>107.</sup> Blanck, supra note 7, at 163.

applications) between the years 1862 and 1907. When separated into the three major pension time periods, we observe predictably that the proportion of applications claiming more stigmatized disabilities was relatively lower under the General Law (11.79%, or 684 of 5,800 applications) and more prevalent after the 1890 Act (19.39%, or 6,656 of 34,318 applications). This trend is consistent with the political-pension law effect, in that the rising proportion of claims with disabilities subject to negative stigma was a direct response to a more expansive pension system and a pandering political environment, given the continuous exertion of lobbying and advocacy by politicians, veterans and their agents.

An alternative hypothesis for the present findings is not as complementary of the motivations of claimants and their agents.<sup>108</sup> Economic incentives to apply for a pension were changing dramatically over time, as were pensionable conditions. It is conceivable that the pool of applications (and the sample from the present data set) was not drawn randomly from the total distribution of all possible disabilities and diseases associated with veterans, or with what we describe as reflective of their deservingness and moral character. Therefore, there may be sample selection bias associated with those UA veterans who chose to and not to apply for pensions.

In this last regard, economist Mario Sanchez has noted that, hypothetically, under any one of the pension laws it is possible to classify applicants and their agents into two groups: those who privately knew that they "deserved" a pension, and those who knew that they did not deserve a pension.<sup>109</sup> Individuals initially applying after the war for pensions predominantly were from the first group ("the knowing deserved"). For this first group, particularly under the more narrowly defined General Law, the proportion of applicants receiving awards should be high and attorney usage correspondingly low.

However, we know that pension rates and the types of pensionable impairments increased over time. Veterans who did not apply for pensions under the 1862 General Law had greater economic incentives to do so under the 1890 Act. The influx of applications, and higher application rejection rates over time, is consistent with the findings that increasingly more veterans with less apparent (i.e., more obscure and stigmatized) disabilities may have taken the risk of rejection and of being "morally exposed." Application rejections, therefore, likely were a function of the moral quality of the

<sup>108.</sup> Id. at 198 (citing correspondence with Mario Sanchez on this hypothesis).

<sup>109.</sup> Id. (discussing this suggestion).

pensioners *and* their attorneys, which was not fixed over time but was responsive to the economic incentives provided in the changing pension laws.<sup>110</sup>

### C. Attorney Usage Model

1. Summary Statistics—To set up this part, Figure 10 provides the definitions of the key variables under study, as well as their prevalence (means) in this sample, for purposes of the subsequent regression analyses.

VARIABLE USED IN THE LOGISTIC OR OLS REGRESSIONS	VARIABLE DEFINITION	Variable Mean (27191 Observations)
	Attorney Variable	
Attorney	1 if application assisted by attorney, 0 otherwise	84.65%
•	Award Variable	
Ruling Increase	1 if an increase in monthly pension, 0 otherwise	34.49%
Ruling Amount	\$ amount of pension per month for a successful application	\$9.52 (16861 Observations)
	Occupational Variable	
Professional	1 if professional, skilled, or serni-skilled, 0 otherwise (omitted group in the regressions)	27. <del>9</del> 4%
Agricultural	1 if farm owner or farm laborer, 0 otherwise	59.99%
Manual Labor	1 if manual labor, 0 otherwise	12.07%

# FIGURE 10 Variable Definition and Variable Mean Application-Recruit Pairs, All Disabilities

<sup>110.</sup> Other factors such as a veteran's marital status, the number of dependents, regional economic conditions, and labor force opportunities might have influenced application filings.

VARIABLE USED IN THE LOGISTIC OR OLS REGRESSIONS	VARIABLE DEFINITION	Variable Mean (27191 <sup>-</sup> Observations)
	Political Variable	
Democrat	<ol> <li>if Democratic majority vote in the year</li> <li>&amp; state of application, 0 otherwise</li> <li>(omitted group in the regressions)</li> </ol>	22.15%
Republican	1 if Republican majority vote in the year & state of application, 0 otherwise	75.71%
Neutral	1 if no majority party vote in the year & state of application, 0 otherwise	2.14%
	Pension Law Dummy Variable	
Year 1862–1878	1 if applied under the General Law, 0 otherwise	12.11%
Year 1879–1889	(omitted group in the regressions) 1 if applied under the Arrears Act, 0 otherwise	33.32%
Year 1890–1907	1 if applied under the Disability Pension Act, 0 otherwise	54.57%
	Application Type Dummy Variable	
Original/New	1 if original or new application, 0 otherwise (omitted group in the regressions)	37.55%
Additional Increase	1 if applied for additional increase, 0 otherwise	4.33%
Disability	1 if applied for disability increase, 0 otherwise	49.28%
Reissue	1 if applied for automatic increase, 0 otherwise	5.70%
Change of Law	1 if applied for increase due to a change in pension law, 0 otherwise	1.86%
Re-rate	<ol> <li>if applied for increase resulting from an investigation, 0 otherwise</li> </ol>	0.98%
Type Missing	1 if application type missing, 0 otherwise	0.30%

### FIGURE 10 (CONTINUED)

Figure 10 shows the high proportion of claimants (84.65%) assisted by attorneys between 1862 and 1907. Over the time period, roughly one third (34.49%) of claimants received a ruling increase in their pensions,<sup>111</sup> with the average amount of pensions per

<sup>111.</sup> A zero is assigned to the ruling increase dummy variable if the decision was a decrease, a rejection, or if the decision was not known. Excluding the unknown observations, the percentage of applications is 49.3% for ruling increases, 49.4% for rejections, and 1.3% for ruling decreases.

month for a successful application at \$9.52. We examine below the predictors of attorney usage, and whether the hiring of attorneys affected the probability of a ruling increase, or a raise in the monthly dollar amount of pension granted by the Bureau.

In addition, we compare pension outcomes for the different claimed disabilities. We have hypothesized that the Pension Bureau treated varying disabilities differently for several reasons. First, depending on the phase of pension legislation, some disabilities were more convincing as a consequence of the war than were others. We have shown that injury and GSWs formed the largest claim category under the General Law because they were directly war-related.

Second, some disabilities were defined by the Bureau as more debilitating than others; for instance, the ability to perform manual labor was thought to be dramatically limited by blindness but less affected by deafness, and the debilitating nature of a disability varied as a function of the claimant's occupation.<sup>112</sup>

Third, negative stigma was attached to disabilities such as infectious or nervous conditions because they were contagious, less understood or less visible (i.e., more obscure), or made individuals less physically attractive, and thereby not perceived worthy of a pension. Consequently, the necessity for legal advocacy in the application process may have differed as a function of disability type, severity, and visibility.

In the analyses that follow, we control statistically for individual application characteristics identified in Figure 10, such as enlistment occupation, application year, and the state's political affiliation in the year of application. This control is necessary, given that we have established above the influence of year and state of pension application as general indicators of political inclination or environment (i.e., Republican, Democratic, or swing state).

In addition, as an indicator for claimant social status, we suggested that occupation likely affected pension attorney usage at time of application, and in turn might have influenced application outcomes.<sup>118</sup> Since it is possible that a recruit had several different jobs pre- and postwar, in our analysis we focus on occupation at the time of enlistment, given prior findings of the strong predictive relation between claimant occupation at enlistment and postwar.<sup>114</sup>

<sup>112.</sup> For example, a desk clerk who lost a leg in the war would be relatively less debilitated in performing manual labor.

<sup>113.</sup> Blanck, supra note 7, at 158 (finding relation between occupation and pension awards).

<sup>114.</sup> See Chulhee Lee, Effects of Occupation, Nativity, Height, and Age at Enlistment on the Assignment of Rank and Duty, and Promotion in the Union Army, University of Chicago, Center for Population Economics Working Paper Series (1994).

Figure 10 illustrates that farm owners or farm laborers (59.99%) filed the majority of applications in our sample, while manual laborers filed 12.07% of applications.<sup>115</sup> To the degree that educational level, or other relevant social characteristics such as literacy, was related to occupational status, then agricultural and manual laborers may have been more likely to retain pension attorneys and designate them to prepare pension paperwork, relative to those in professional or skilled occupations (comprising 27.94% of the sample).

In addition, veterans who worked and lived in rural farming areas, which tended to be Republican strongholds, may have had less geographical accessibility to attorneys who clustered in larger urban areas where manual laborers or professionals were more likely to work and live.<sup>116</sup> There also may exist disability-related variation in attorney usage; for instance, occupational health hazards may vary as a function of claimants working in urban (e.g., risk of spread of contagious disease) or hazardous manual jobs (e.g., coal mining) relative to agricultural work.<sup>117</sup>

We have observed that attorney usage declined dramatically after the Age Laws were passed in 1907 and 1912. Before 1907, year of application was an important factor related to attorney involvement and subsequent application outcomes.<sup>118</sup> As the pension scheme expanded in scope and generosity, the number of applications soared.

From Figure 10 we see that although 12.11% of the applications pertained to the General Law, one-third of the applications (33.32%) were filed during the Arrears Act period, and almost half (54.57%) of the applications were filed after the 1890 Disability Act. As mentioned, Republican lobbyists and pension bar leaders such as George Lemon, along with the industrial elite, were largely

<sup>115.</sup> Farm owners and farm laborers were two different social groups. Farm owners were a wealthy class, whereas the laborers were considered working class. The enlistment occupation information drawn from the enlistment paper suffered a shortcoming that often the recording official wrote "F" in the occupation entry. It was left to the discretion of the data entry coders to interpret in the context of the file the meaning of "F" to be "farmer" or "farm laborer." In the future, we will examine the census occupation for those recruits who were successfully linked to the 1850, 1860, 1900, and 1910 Census Files; however, this focus would result in fewer observations.

<sup>116.</sup> As mentioned, disabled UA veterans initially may have clustered around the large army hospitals in the Washington D.C. area where the major pension attorneys practiced.

<sup>117.</sup> See COSTA, supra note 54 (noting that in the case of respiratory disorders, artisans who were millers, carpenters, and painters had higher rates than artisans who were blacksmiths, machinists, or coopers, because the former three were exposed to dust and fumes more frequently); see also Blanck, supra note 7, at 158 (Figure 9 illustrating claimants' various occupations).

<sup>118.</sup> Supra Figures 3, 4, and 5.

responsible for the promotion and expansion of the pension scheme. In fact, three-quarters (75.71% in Figure 10) of pension applications were filed during years and in states of Republican strength.

Another predictor of attorney usage is application type. We examine later whether claimants who applied for automatic increases (e.g., "reissue" cost of living adjustment in Figure 10) or increases from substantive law changes for particular disabilities (e.g., "additional increase" in Figure 10) were less likely to engage attorneys, in part because proof of eligibility was not at issue. In accord, Figure 10 shows that the highest proportions of application types in our sample were for disability-specific increases (49.28%) and for new or original pensions (37.55%).

2. Regression Analysis on Determinants of Attorney Usage—The prior analyses examined descriptive relationships in the research model. Regression or multivariate analyses are used next to explore the extent to which identified outcome measures, such as attorney usage or pension increases, may be predicted by a set of other variables (e.g., those identified in Figure 10) while controlling statistically for the independent effects of those variables.

Figure 11 presents the logistic regressions on attorney usage separately by disability type. Consistent with our results described earlier, there are three common findings across disabilities.<sup>119</sup> First, there tended to be a substantial reduction in attorney usage during the years when a Republican (or neutral) majority vote was present in the state of the claimant's application. The negative relationship between the variable attorney usage and Republican (or neutral) electoral majority evidenced in the regression model bolsters our analysis set out in Figure 5B. This is because the regression model statistically controls for factors other than party affiliation that might have independently affected attorney usage rates.

In Figure 11, we observe that filing in a Republican state for injury and GSWs (a visible impairment) reduced the probability of attorney involvement substantially by 6.5% (column 1). Even for the less visible and stigmatized condition of infectious and parasitic disease (column (6) in Figure 11), filing in a Republican state at the time of application cuts the odds of attorney involvement significantly by 9.5%, and filing in a state without majority votes cuts the odds by 10.8%. Likewise, filing in a Republican state for nervous conditions reduced the probability of attorney usage by 6.7%, and filing in a neutral state cut the odds strikingly by 20.5% (column (9) in Figure 11).

<sup>119.</sup> Infra Methodological Appendix for a description of the logistic model (LOGIT).

VARIABLES IN THE LOGISTIC REGRESSION <sup>(1),(4)</sup>	Injury & GSW	Musculo- Skeletal	Diarrhea	EAR	Respiratory System	Infectious & Parasitic
	дE(Y)/дx <sub>k</sub> <sup>(3)</sup>	<b>дЕ(Y)/дх<sub>k</sub></b>	ӘЕ(Y)/Әх <sub>k</sub>	дE(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>
_	(Column 1)	(Column 2)	(Column 3)	(Column 4)	(Column 5)	(Column 6)
Intercept	0.2293"	0.2008"	0.2557	0.2937	0.2023"	0.2634"
Agricultural	0.0277	-0.0222	-0.0311	0.0306	0.0227	0.0097
Manual Labor	0.0619"	-0.0228	-0.0539	0.0499	0.1284	0.0469
Republican	-0.0652	-0.0135	-0.0090	-0.0315	-0.0429	-0.0950
Neutral	-0.0161	0.0014	-0.0900	(5)	0.0338	-0.1080
Year 1879-1889	0.0523	0.0406	0.0229	0.0033	0.0307	0.0368
Year 1890-1907	0.0886"	0.0821	0.0311	0.0072	0.0693	0.0863
Additional Increase	0.0509	-0.0023	0.0183	-0.0613	-0.0229	-0.0734
Disability	-0.0366	-0.0749	-0.0654	-0.1028	-0.0714	-0.0612
Reissue	-0.0709	-0.0820	-0.0095	-0.1491	-0.0259	-0.0540
Change of Law	-0.3171	-0.0841	-0.1451	-0.1298	-0.0002	(8)
Re-rate	-0.0794	-0.1742	0.1368	(2)	-0.1337	-0.2425
Type Missing	-0.1023	-0.0262	-0.1664	(2)	-0.1129	(9)
Number of Applications	7811	5721	3366	1694	1656	1239
Dependent Variable Mean	0.8117	0.8726	0.8681	0.8495	0.8786	0.8418
-2 Log L (p-Value) <sup>(4)</sup>	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

VARIABLES IN THE	Hernia	Eve	NERVOUS	GENITO-	GENERAL	HEMOR-
LOGISTIC REGRESSION			SYSTEM	Urinary	APPEARANCE	RHOIDS
	ӘЕ(Ү)/Әх <sub>k</sub>	дЕ(Y)/дx <sub>k</sub>	дЕ(Y)/дx <sub>k</sub>	дЕ(Y)/дx <sub>k</sub>	дЕ(Y)/дх <sub>k</sub>	дE(Y)/дx <sub>k</sub>
	(Column 7)	(Column 8)	(Column 9)	(Column 10)	(Column 11)	(Column 12)
Intercept	0.1647	0.1706	0.2273	0.1344	0.2216	0.2756
Agricultural	0.0548"	0.0281	-0.0196	0.0346	0.0265	0.0626
Manual Labor	0.0860"	0.0235	0.0722	0.0822	0.0595	0.0466
Republican	0.0001	0.0047	-0.0673	-0.0146	-0.0418	-0.1309"
Neutral	-0.1223	(8)	-0.2046	(10)	(11)	(12)
Year 1879-1889	0.0328	0.1166"	0.1072	0.0266	0.0754	0.0261
Year 1890-1907	0.0674	0.0844"	0.0796	0.0892	0.0219	-0.0060
Additional Increase	0.1208	-0.1110"	0.0420	-0.0042	0.0088	(12)
Disability	-0.0384	-0.0960	-0.0415	-0.0106	-0.0347	-0.0502
Reissue	-0.1602	-0.1562	-0.1199	-0.0011	-0.0805	-0.1073
Change of Law	-0.0895	-0.1923	-0.1239	(10)	-0.0922	(12)
Re-rate	(2)	(8)	(8)	(10)	(11)	(12)
Type Missing	(2)	(8)	(6)	(10)	(11)	(12)
Number of Applications	1116	1064	673	594	491	464
Dependent Variable Mean	0.8418	0.8543	0.8455	0.8653	0.8310	0.8664
-2 Log L (p-Value)	0.0001	0.0001	0.0118	0.1967	0.7574	0.0029

VARIABLES IN THE	GASTRO-	VARICOSE	ACCIDENT, BLOOD SYSTEM, CARDIOVASCULAR,
LOGISTIC REGRESSION	INTESTINAL	VEINS	Endocrine, Liver, Neoplasm, Skin Tissue, and Spleen
	дE(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>	$\partial E(Y)/\partial x_k$
	(Column 13)	(Column 14)	(Column 15) <sup>(15)</sup>
Intercept	0.0361	0.3551***	0.3036***
Agricultural	0:0690*	0.0042	0.0316
Manual Labor	0.0403	(14)	0.0439
Republican	-0.0076	-0.0914	-0.0716*
Neutral	(13)	(14)	-0.0448
Year 1879-1889	0.2192**	0.0204	-0.0681
Year 1890-1907	0.2122**	0.1072*	-0.0131
Additional Increase	(13)	(14)	0.0294
Disability	-0.1224***	-0.1861***	-0.0849
Reissue	(13)	-0.3661***	-0.0899
Change of Law	(13)	(14)	(16)
Re-rate	(13)	(14)	(16)
Type Missing	(13)	(14)	(16)
Number of Applications	408	350	544
Dependent Variable Mean	0.8407	0.7914	0.8695
-2 Log L (p-Value)	0.0083	0.0001	0.0172

LOGISTIC PROCEDURE EXPLAINING ATTORNEY USAGE, BY DISABILITY DEPENDENT VARIABLE = 1 IF APPLIED WITH ATTORNEY, 0 IF NOT FIGURE 11 (CONTINUED)

. i

# Figure 11 (Continued) Notes

- 1) The omitted categories are professional occupation, democratic party majority, year 1862 to 1878, and original/new application.
- 2) The symbol "\*\*" indicates a statistical significance of 1%, the symbol "\*" indicates a statistical significance of 5%, and the symbol "" indicates a statistical significance of 10%.
- 3) See Methodological Appendix for an explanation of the symbol " $\partial E(Y)/\partial x_k$ ."
- 4) See Methodological Appendix for an explanation of the symbol "-2log L (p-Value)."
- 5) There was only one application under neutral political affiliation which did not use attorney. In addition, there were only eight applications with application type being "a change in pension amount resulting from an investigation," and four applications with application type missing. Including those three dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 6) There were only four applications with application type "increase due to change in pension law," and three applications with type missing. The number of observations with a value of one in each of those two dummy variables is so small that including those two dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 7) There were only three applications with application type "change in pension amount resulting from an investigation," and six applications with type missing. Including those two dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 8) There was no application under neutral political affiliation which did not use attorney. In addition, there were only three applications with type "a change in pension amount resulting from an investigation," and four applications with type missing. Including those three dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 9) There were only three applications with application type "change in pension amount resulting from an investigation," and no application with type missing. Including those two dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 10) There was only one application under neutral political affiliation which did not use attorney. In addition, there were only six applications with application type "increase due to change in pension law," five applications with type "change in pension amount resulting from an investigation," and one application with type missing. Including those four dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.

# FIGURE 11 (CONTINUED) NOTES

- 11) There was no application under neutral political affiliation which did not use attorney. In addition, there were only four applications with application type "change in pension amount resulting from an investigation," and one application with type missing. Including those three dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 12) There was no application under neutral political affiliation which did not use attorney. In addition, there was only one application with application type "additional increase" which did not use attorney, and there was no application with type "change in pension amount resulting from an investigation" which did not use attorney. There were only four applications with type "increase due to change in pension law," and two applications with type missing. Including those five dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 13) There were only three applications under neutral political affiliation. In addition, there was only one application with application type "additional increase," and only one application with type "automatic increase" that did not use attorney. There was no application with type "increase due to change in pension law" or type missing. There were only two applications with type "change in pension amount resulting from an investigation." Including those six dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 14) There was no application under the manual labor occupation which did not use attorney. In addition, there was no application with application type "additional increase" which did not use attorney. There were only five applications under neutral political affiliation. There were only three applications with type "increase due to change in pension law," two applications with type "change in pension amount resulting from an investigation," and no application with type missing. Including those six dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.
- 15) We combine those eight disabilities, because the number of applications under each of those disabilities alone was not large enough for a regression analysis.
- 16) There were only four applications with application type "increase due to change in pension law," two applications with type "change in pension amount resulting from an investigation," and two applications with type missing. Including those three dummy variables in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.

Figure 11 (bottom column 1) shows that attorneys assisted in 81.17% of all applications filed under the injury and GSWs category. The attorney usage result implies an overall 8% relative drop (i.e., 6.5% divided by 81.17%) in using attorneys in Republican states and years. Also, we observe in Figure 11 (bottom column 6) that 84.18% of applications filed under the infectious disease cate-

gory involved attorneys, implying an 11% relative drop (i.e., 9.5% divided by 84.18%) in using attorneys in Republican states and years. In addition, there is a 13% relative drop (i.e., 10.8% divided by 84.18%) in attorney usage in neutral states and years.

The second major finding is that relative to the General Law period, applications under later pension laws had a substantially higher proportion of filings with attorney involvement for the majority of claimed disabilities. For injury and GSWs (the largest subsample of 7,811 applications), filing between 1879 and 1889 increased the odds of attorney involvement by 5.23%, and filing between 1890 and 1907 increased the odds of involvement by 8.86% (column (1) in Figure 11).

For musculo-skeletal conditions (the second largest sub-sample of 5,721 applications), filing between 1879 and 1889 increased the probability of attorney usage by 4.06%, and filing between 1890 and 1907 increased the odds of usage by 8.21% (column (2) in Figure 11). Additionally, we observe for nervous disorders (sub-sample of 673 applications), filing between 1879 and 1889 increased the odds of attorney involvement by 10.07%, and filing between 1890 and 1907 increased the odds of involvement by 7.96% (column (9) in Figure 11).

We have suggested that the General Law was less inclusive than the 1879 Arrears Act and the 1890 Pension Act because only defined war-related disabilities were pensionable. The later pension laws allowed less clearly defined and less visible disability categories, with critics claiming at the expense of more "deserving" claimants. As we have examined, in part to halt alleged abusive practices, the Bureau sought to strengthen its gate-keeping functions.<sup>120</sup> Requiring more rigorous proof of disability and exacting medical screening procedures performed by multiple surgeons accomplished this effect.

The findings in Figure 11 support the view that over time, as the gate-keeping activities of the pension system were examined and refined, demand for attorney involvement increased. Attorney demand was particularly apparent for applications claiming certain types of disabilities, such as nervous disorders that were less visible and more stigmatized. Greater attorney involvement in later years also may stem from the increasingly aggressive marketing effort by attorneys themselves.

Like George Lemon, prominent attorneys were lobbyists and owners of pro-pension newspapers or pamphlet services, and they

<sup>120.</sup> See Blanck, supra note 7, at 131-33 (discussing bureau's gate keeping strategies); Blanck & Millender, supra note 9, at 12-33 (same).

mined the promising potential for profitability in the expanding business. We have seen that in our sub-sample the name of Attorney George E. Lemon appeared in 9.3% (more than 3,000) of the applications. As mentioned, Lemon owned and published the widely read newspaper the *National Tribune*, which had a large subscription rate and ardently advocated for pensions.

The third major finding derived from Figure 11 is that relative to new applications, other application types had a much lower probability of attorney involvement. Claimants of injury and GSWs, and of musculo-skeletal conditions, applying for a disability-related increase over previous applications were substantially less likely to use attorneys; their odds of hiring attorneys would be lowered by 3.66% and 7.49%, respectively (Figure 11, columns 1 and 2). Claimants with infectious disorders applying for a disability increase likewise were less likely to use attorneys, with the probability of attorney usage reduced by 6.12% (Figure 11, column 6).

Similarly, if claimants with GSWs or musculo-skeletal conditions applied for an automatic increase or a reissue, the odds of attorney usage would be lowered by 7.09% and 8.20%, respectively (Figure 11, columns 1 and 2). The same is true for those with nervous conditions applying for a reissue—attorney usage was lowered by 11.99% (Figure 11, column 9). The findings suggest that, once admitted into the system, claimants were more likely to be successful in their re-applications for award increases, and therefore the probability of attorney usage declined.<sup>121</sup>

Despite the within-disability similarities illustrated above, there exists strong between-disability variation (e.g., across disability types). Review of Figure 11 suggests that the differences across disability types in attorney usage largely are attributable to the independent effect of claimant occupation. In this regard, some historians have cast the Civil War as a "poor man's fight," because wealthier men could avoid enlistment by paying poorer substitutes to serve.<sup>122</sup> Also, wealthier men often received more formal education; therefore, they were more literate. As a result, when wealthier men joined the army they tended to be assigned higher ranks, so usually they were not the first to be injured, die in battle, or suffer harsh camp conditions.<sup>123</sup>

<sup>121.</sup> In future studies, we plan to examine the extent to which first time applicants who hired attorneys continued to retain their services in applications; this analysis will be possible when the attorney variable in the Pension File is fully standardized.

<sup>122.</sup> See Vinovskis, supra note 18 at 51-56.

<sup>123.</sup> Chulhee Lee contested this belief by studying the pattern of the mortality differentials among UA recruits. He found that native-born farmers represented the highest proportion of military service casualties. Since native-born farmers were well fed and not

We extend this line of inquiry by examining the degree to which the use of pension attorneys was related to claimant occupational and class status. Based on prior studies we assume that those in skilled and professional occupations were more likely to be in the higher, agriculturists in the middle, and manual laborers in the lower socio-economic class. We ask whether pension attorneys and their agents most aggressively marketed their services toward the social underclass. Conversely, we explore whether attorney assistance was a privilege that was more accessible to the rich.

The findings in Figure 11 imply that the effect of claimant social class on attorney usage is more complex than previously suggested. We find that for claimants from different socio-economic classes, the likelihood of attorney usage varies with the type of disability claimed. In Figure 11, reading across the rows "Agriculture" and "Manual Labor," we observe for GSWs, ear diseases, genito-urinary conditions, hernias, infectious diseases, eye disorders, general appearance, hemorrhoids, and respiratory disorders, the less socially advantaged were more likely to hire attorneys (i.e., a positive coefficient). Whereas for diarrhea and musculo-skeletal problems, the more advantaged social class applicants used pension attorneys (i.e., a negative coefficient).

It is not obvious why strong variations in attorney usage exist among the different disability types. It may be that for visible conditions difficult to feign, such as GSWs or hernias, agents had a relatively easier time in convincing poorer and less educated veterans to accept their services.<sup>124</sup> For chronic and episodic conditions, such as diarrhea or musculo-skeletal problems which required sustained advocacy to prove legitimacy to be pensionable, perhaps wealthier applicants were more likely to employ agents to argue their cases. At this point, however, definitive patterns related to claimant socio-economic status are not apparent.

considered to be poor in the mid-nineteenth century, he concluded that the Civil War was not necessarily a poor man's fight. Chulhee Lee, *Selective Assignment of Military Positions in the Union Army: Implications for the Impact of the Civil War*, 23 Soc. Sci. Hist. 67, 67–91 (1999). Moreover, Daniel Scott Smith found that among prisoners of war, officers had lower death rates due to disease (39.8 per 1,000) or wounds and other causes (19.5 per 1,000) than enlisted men (156.6 per 1,000, and 32.7 per 1,000, respectively, for disease and wounds and other causes). See also Daniel Scott Smith, Seasoning, Disease Environment, and Conditions of Exposure: New York Union Army Regiments and Soldiers (2001) (unpublished manuscript presented at the Conference on Health and Labor Force Participation Over the Life Cycle: Evidence from the Past, National Bureau of Economic Research) (on file with authors).

<sup>124.</sup> Literacy was measured crudely by whether a veteran could sign his own name. Therefore, even though over 90% of sampled UA veterans claimed literacy, additional study is needed to assess the degree to which they may have needed an attorney's assistance in processing an application.

The impact of claimant occupation and socio-economic status is an area worthy of additional study, as macro and micro factors in the American economy, particularly those tied to the protective tariff issue and the federal budget surplus, changed over the course of the late nineteenth century. Moreover, because the economic incentives to apply for pensions increased with time, the motivation to apply certainly would have increased for people with relatively lower wealth even within the same profession.

This conjecture is consistent with the suggestion that the wealthy classes of the late 1800s increasingly did not embrace pension expansion. Mary Dearing argued, that although attorney and *Tribune* editor Lemon "used economic issues as a club with which to force consent to further [pension] concessions,"<sup>125</sup> "Lemon admitted that his resentment stemmed from the property holders' resistance to the pension movement."<sup>126</sup>

### D. Pension Outcome Model

1. Regression Analysis on the Effectiveness of Attorney Usage—The next step in the investigation examines factors affecting the probability of a ruling increase and monthly pension award. Attorney usage is included as an independent variable in the analysis to examine the degree to which this factor alone and in combination with other measures in our model influenced pension application outcomes.

Figure 12 presents the results of the logistic regression on the probability of a ruling increase, and Figure 13 the Ordinary Least Squares (OLS) regressions on the monthly pension amount granted.<sup>127</sup>

<sup>125.</sup> DEARING, supra note 20, at 324.

<sup>126.</sup> Id. Dearing notes that the wealthy class resentment of pension expansion was tied to the debate over tariffs and federal budget surplus expenditures. Id. at 364–65.

<sup>127.</sup> See infra Methodological Appendix for a description of ordinary least squares (OLS) regression models with robust standard error corrections. Thanks to Dean Hyslop for helping us in the explanation.

FIGURE 12	LOGISTIC PROCEDURE EXPLAINING SUCCESS, BY DISABILITY	DEPENDENT VARIABLE = 1 IF AN INCREASE WAS GRANTED, 0 IF NOT
-----------	--	---

VARIABLES IN THE LOGISTIC REGRESSION <sup>(1),(2)</sup>	Injury & GSW	Musculo- Skeletal	DIARRHEA	EAR	RESPIRATORY System	INFECTIOUS & Parasitic
	дЕ(Y)/дx <sub>k</sub> <sup>a</sup>	дE(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>	ӘЕ(Ү)/Әх <sub>k</sub>	дE(Y)/дx <sub>k</sub>
	(Column 1)	(Column 2)	(Column 3)	(Column 4)	(Column 5)	(Column 6)
Intercept	-0.1416	-0.2042	-0.2959	-0.1257	-0.2579	-0.3214
Agricultural	-0.0059	-0.0120	0.0052	0.0018	0.0083	-0.0018
Manual Labor	-0.0080	-0.0202	-0.0127	-0.0212	-0.0102	0.0492
Republican	0.0575	0.1171	0.0435	0.2153"	0.0613	0.1456
Neutral	0.0946	0.1444 <sup></sup>	0.1525	0.1455	0.0676	-0.0110
Year 1879-1889	0.0768	0.0658	0.1806""	0.1207 <sup>"</sup>	0.1264""	0.0605
Year 1890-1907	0.0127	0.0115	0.1587"	0.0056	0.0947"	0.0067
Attorney	-0.0771	-0.0829"	-0.0443	-0.1609""	-0.0455	-0.0282
Number of Applications	7811	5721	3366	1694	1656	1239
Dependent Variable Mean(4)	0.3669	0.3101	0.3559	0.4445	0.3394	0.2785
-2 Log L (p-Value)(5)	0.0001	0.0001	0.0001	0.0001	0.0252	0.0004

VARIABLES IN THE	HERNIA	EYE	NERVOUS	GENITO-	GENERAL	HEMOR-
LOGISTIC REGRESSION			SYSTEM	Urinary	APPEARANCE	RHOIDS
	дE(Y)/дx <sub>k</sub>	дЕ(Y)/дx <sub>k</sub>	ӘЕ(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>	дЕ(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>
	(Column 7)	(Column 8)	(Column 9)	(Column 10)	(Column 11)	(Column 12)
Intercept	-0.1749	-0.1173	-0.0399	-0.2930"	-0.4403	-0.3334
Agricultural	0.0045	-0.0080	-0.0101	0.0274	-0.0231	-0.0643
Manual Labor	-0.0410	-0.0945	0.0041	0.0515	0.0091	-0.0314
Republican	0.0560	0.1019"	0.0756	0.0543	0.1217	0.1144
Neutral	0.1316	0.2283	-0.1335	(8)	0.0407	-0.0260
Year 1879-1889	0.0907	0.0239	-0.0741	0.1288	0.3184	0.2011
Year 1890-1907	0.0506	-0.0830	-0.1163	0.0590	0.2965	0.1141
Attorney	-0.0682	-0.0742	-0.0395	-0.0548	-0.1094	-0.0122
Number of Applications	1116	1064	673	594	491	464
Dependent Variable Mean	0.3620	0.3336	0.3804	0.2475	0.3259	0.3233
-2 Log L (p-Value)	0.0599	0.0001	0.2234	0.2007	0.0333	0.1038

VARIABLES IN THE	GASTRO-	VARICOSE	ACCIDENT, BLOOD SYSTEM, CARDIOVASCULAR, ENDO-
LOGISTIC REGRESSION	INTESTINAL	VEINS	crine, Liver, Neoplasm, Skin Tissue, and Spleen
	дЕ(Y)/дх <sub>k</sub>	дЕ(Y)/дx <sub>k</sub>	дE(Y)/дx <sub>k</sub>
	(Column 13)	(Column 14)	(Column 15)
Intercept	-0.4640	-0.1488	-0.1875
Agricultural	-0.0029	-0.0027	0.0619
Manual Labor	0.0634	-0.1708	0.0849
Republican	0.1562	0.1566	0.0407
Neutral	0.1231	0.2187	0.1884
Year 1879-1889	0.4069	0.0513	0.0233
Year 1890-1907	0.2567	0.0441	-0.0207
Attorney	-0.1592	-0.2100	2620.0-
Number of Applications	408	350	544
Dependent Variable Mean	0.2990	0.3486	0.2996
-2 Log L (p-Value)	0.0017	0.0075	0.3458

ž

The omitted categories are professional occupation, democratic party majority, and year 1862 to 1878.

The symbol """ indicates a statistical significance of 1%, the symbol "" indicates a statistical significance of 5%, and the symbol "" indicates a statistical significance of 10%. **5 1** 

See Methodological Appendix for an explanation of the symbol "  $\partial E(Y)/\partial x_k$  ." (55) (4) (3)

Almost all the known ruling decisions were either increases (49.3) or rejections (49.4%). There were very few decreases (1.3%).

See Methodological Appendix for an explanation of the symbol "-2log L (p-Value) "

There were only four applications under neutral political affiliation. Including this dummy variable in the logistic procedure would cause a convergence problem in the maximum likelihood estimation.

RECRUIT
THE SAME
FOR
APPLICATIONS
DJACENT /
NS BETWEEN A
CORRELATIO
SERIES
TIME
D FOR
CORRECTED

DEPENDENT VARIABLE = PENSION DOLLARS GRANTED PER MONTH CORRECTED FOR TIME SERIES CORRELATIONS BETWEEN ADJACENT APPLICATIONS FOR THE SAME RECRUIT VARIABLES IN THE INJURY & MUSCULO- DIARRHEA EAR RESPIRATORY INFECTIOUS & OLS RECRESSION <sup>(1),(3)</sup> GSW SKELETAL SYSTEM PARASITIC M	200 T	)2]			C	ivi	<i>!</i> W	lar	Per	isio	m 1	Atta	n 
Infectious & Parasitic	(Column 6)	5.7186	-0.0875	0.9701	2.4236	0.3385	2.9267	5.6898"	-2.2846	717	\$9.29	0.0634	
RESPIRATORY System	(Column 5)	7.1572	-0.8048	-0.1191	1.4693	-0.1749	1.1064	3.7664"	-0.0916	1081	\$9.72	0.0637	
Ear	(Column 4)	6.9977	0.5935	1.0600	1.5468	-1.1174	2.8031	2.9407	-1.3682	1175	\$10.30	0.0368	
DIARRHEA	(Column 3)	6.0087	-0.0828	-0.0533	0.5708	-0.0050	2.1814	6.5501"	-1.4926	2162	\$8.78	0.1287	
MUSCULO- Skeletal	(Column 2)	7.5150"	-0.6313	-0.9950	0.8648"	-0.0897	1.3603	3.7081	-1.4691"	3455	\$9.33	0.0678	
Injury & GSW	(Column 1)	9.3334"	0.2584	0.9111	1.3476	2.6585"	2.4947"	5.7355"	-4.5862"	4788	\$9.53	0.1239	
VARIABLES IN THE OLS REGRESSION <sup>(1),(2)</sup>	•	Intercept	Agricultural	Manual Labor	Republican	Neutral	Year 1879-1889	Year 1890-1907	Attorney	Number of Applications	Dependent Variable Mean	Adjusted R Square	

JED	
JULL	
LNO	
Ũ	
_	
13	
-	
-	

OLS REGRESSION WITH ROBUST STANDARD ERRORS EXPLAINING PENSION AWARD FOR SUCCESSFUL APPLICATIONS, BY DISABILITY **Dependent Variable = Pension Dollars Granted per Month** 

CORRECTED FOR TIME SERIES CORRELATIONS BETWEEN ADJACENT APPLICATIONS FOR THE SAME RECRUIT

	HERNIA	Ече	NERVOUS	GENITO-	GENERAL	HEMOR-
			SYSTEM	URINARY	APPEARANCE	RHOIDS
	(Column 7)	(Column 8)	(Column 9)	(Column 10)	(Column 11)	(Column 12)
	5.6543	14.8870	15.9554	4.0910	6.5418	6.3205
	0.2790	0.8611	-1.0731	0.3430	0.1120	0.2401
	0.1927	-0.4063	-2.0367	-0.6462	-0.5526	-0.5164
	0.8021	2.0003	-0.1220	0.4254	-0.1346	1.3210
	-0.3833	0.6516	1.2887	-3.1951	-2.2245	0.7907
	2.1388"	-2.2201	-3.8169	2.7611	3.0749"	1.1631
	4.2748	-1.4560	-2.5944	5.3630"	5.2068"	3.9331
	-0.4843	-4.7994	-1.2056	0.2568	-1.9561	-1.3198
	734	646	429	319	302	311
	\$9.07	\$11.19	\$11.49	\$8.67	\$9.19	\$8.89
	0.1662	0.0276	0.0106	0.1276	0.0568	0.1070
l						

			r	1								1		
ACCIDENT, BLOOD SYSTEM,	CARDIOVASCULAR, ENDOCRINE, I TUED MEADIACM SUM TREETE	AND SPLEEN	(Column 15)	7.9577	-0.1243	-1.4076	0.0138	-2.0073	1.9201	4.9173	-1.5396	302	\$10.04	0.0312
VARICOSE VEINS			(Column 14)	7.0755"	1.8093	-1.4118	0.8873	-2.5225	2.6459""	4.2809"	-2.5559	212	\$9.73	0.0957
GASTRO-	INTESTINAL		(Column 13)	7.4447**	-0.6976	-0.4140	1.7338	-1.0502	0.9084	3.0994	-1.7008	228	\$9.35	0.0236
VARIABLES IN THE	OLS REGRESSION			Intercept	Agricultural	Manual Labor	Republican	Neutral	Year 1879-1889	Year 1890-1907	Attorney	Number of Applications	Dependent Variable Mean	Adjusted R Square

Notes:

1

The omitted categories are professional occupation, democratic party majority, and year 1862 to 1878.

The symbol """ indicates a statistical significance of 1%, the symbol """ indicates a statistical significance of 5%, and the symbol "" indicates a statistical significance of 10%. 5)

There are several primary findings from the regression analyses that are common across most claimed disabilities. First, scanning across the rows "Agriculture" and "Manual Labor" in Figures 12 and 13, occupational category does not have a strong impact on the probability of a ruling increase or on monthly pension awards.

The major exceptions were evidenced in the musculo-skeletal category. Where outcome is measured by monthly dollars in Figure 13, there is evidence that relative to professionals, on average, farmers received sixty-three cents less and manual laborers received almost one dollar less in monthly pensions (column 2).

If we consider occupation as a proxy for social class, the fact that pension outcomes had little to do with claimant occupation suggests that although the Civil War may have been perceived as a poor man's fight, subsequent pension outcomes had little basis in class orientation for those who applied. In other words, the pension scheme was not a needs-based system.

Consistent with the fact that Republicans supported a more generous pension program, we predictably find that relative to applying in states with Democratic majority votes, applications filed in states with Republican majorities enjoyed a higher probability of being granted a ruling increase and a higher average dollar award per month. In Figure 12, for instance, the Republican premium for the probability of pension increases for GSWs is 5.75% (column 1), for musculo-skeletal conditions is 11.71% (column 2), for infectious diseases is 14.56% (column 6), and for nervous conditions is 7.56% (column 9). In many disease categories in Figure 12, applications in states with neutral, relative to Democratic, affiliations also received significantly more favorable outcomes.

Similarly, in Figure 13, relative to applications in states with Democratic majorities, applications filed in Republican states enjoyed a greater probability of being granted higher average dollar awards per month. In Figure 13, the Republican premium for GSWs is \$1.35 for average pension award per month (column 1), \$0.86 for musculo-skeletal conditions (column 2), and \$2.42 for infectious conditions (column 6).

Our third major finding shows that relative to applications under the General Law, later applications were treated with more generosity. Figure 12 shows that applications during 1879–1889 for GSWs had 7.68% greater probability of a ruling increase (column 1). However, the advantage previously enjoyed by GSW applications from 1890 to 1907 declined to 1.27%, perhaps because by that time applications for other chronic disabilities became more prevalent. A similar pattern is seen for musculo-skeletal conditions (column 2).

Later year applications not only enjoyed a higher probability of ruling increases, but also higher average monthly pension awards. In Figure 13 (column 1) for GSWs, applications filed during 1879 and 1889 received on average \$2.49 more per month than those filed between 1862 and 1878. The premium more than doubled for GSW applications filed between 1890 and 1907 to \$5.74 more per month (column 1). These values reflected substantial premiums considering that the average monthly pension for GSWs was \$9.53 (bottom column 1, Figure 13). Similar patterns are observed in Figure 13 for the majority of conditions. The only disability category that shows a substantial penalty in average monthly awards during later years is nervous condition (a highly stigmatized condition), with relatively strong declines during 1879 to 1889 of \$3.82, and lesser so during 1890 to 1907 of \$2.59.

The degree of the later year generosity varies by other disability types. For conditions such as general appearances, which is a coded variable in the study, the reward for applying in later years was a premium of 31.84% in the probability of a ruling increase under the Arrears Act, and 29.65% under the Service Pension Act (column (11) in Figure 12). Differences in the time profile of pension awards among various claimed disabilities likely reflected the Bureau's, as well as the public's, attitudinal change over time towards those disabilities.<sup>128</sup> Except for eye and nervous disorders, applications claiming other conditions were more successful in later years.

Lastly, a counter-intuitive finding emerges. Attorney usage did not always help applicants in obtaining favorable pension outcomes. In fact, the use of attorneys often made outcomes less favorable. Across the disability categories, the coefficient estimates on the attorney variable in Figure 12 are negative (as are all the coefficients in Figure 13 except for genito-urinary conditions). In nine of the fourteen disability categories in Figure 12 the coefficients are statistically significant, which means that these applications with attorney involvement had a substantially lower probability of being granted a ruling increase. The trend is supported in Figure 13, where in all but one disability category applicants using attorneys received lower monthly pension awards.

Thus, we observe claims for ear disease suffered a decrease of 16.09% in the probability of a ruling increase when attorneys were

<sup>128.</sup> See Blanck, supra note 7, at 129-48 (discussing evolution of attitudes toward the pension program).

204

involved (column (4) in Figure 12). Considering that 44.45% of applications under this category successfully received an increase, the discount represents a dramatic relative fallback of 36.2% (i.e., 16.09% divided by 44.45%) in the success probability. Likewise, the attorney discount under the ear disease is \$1.37 per month on average (column (4) in Figure 13).

It does not seem plausible to suggest that attorneys actually jeopardized the success of these applications. Indeed, if that were the case, why would the veterans continue to hire them and at such high rates? One possible explanation for the apparent negative attorney effect is that within each disability type veterans who were more severely ill tended not to hire attorneys. This presumably was because their cases already were convincing to the Bureau.<sup>129</sup>

It also is possible that those who hired attorneys may have had objectively weaker claims. These applicants received less favorable outcomes simply because they were not as debilitated,<sup>130</sup> not because of their attorneys' efforts. This suggestion is consistent with Costa's finding that recruits who were more severely wounded tended to apply during earlier years when pension admission was more restrictive.<sup>131</sup> It also is consistent with our prior findings in Figure 11, that relative to General Law period applications, later year applicants were more likely to engage attorneys.

<sup>129.</sup> In preliminary analyses, we statistically controlled for the degree of disability severity for hernia claimants, and we find that attorney usage still does not enhance claimants in obtaining favorable pension outcomes. Additional study is underway to assess the attorney usage effect in other disability categories controlling for severity. *See* Song, *infra* note 130.

<sup>130.</sup> Song and Nguyen found weak evidence of the influence of hernias on the labor force participation of older Civil War veterans between 1900 and 1910. They attribute this result to the possibility that hernias in most cases did not hinder the performance of manual labor, so what modern medical practices believe to be "debilitating" may have been, in fact, only discomforting. They further suggest that to accurately determine the consequence of a combination of disabilities (co-morbidity effect) on economic behavior such as labor force participation decisions, it is necessary to construct a composite health index either directly from the surgeons' ratings for each disability, or indirectly from diagnosed symptoms pertaining to each disability.

One future extension of our research is to study disease-specific ratings, which are continuous measures that more precisely capture the degree of debilitation with respect to performing manual labor. Based on preliminary analyses, we find that even when controlling for disability severity (i.e., for hernia disability), the attorney effect evidenced in this study is still present. See Peter Blanck & Chen Song, "With Malice Toward None and Charity Toward All": Civil War Pensions for Native and Foreign-Born UA Veterans, 11 TRANSNAT'L & CON-TEMP. L. J. 1 (2001); Chen Song & Louis Nguyen, The Effect of Hernias on the Labor Participation of Civil War Veterans, (2001) (unpublished manuscript presented at the Conference on Health and Labor Force Participation Over the Life Cycle: Evidence from the Past, National Bureau of Economic Research), at http://www.nber.org/books/ healthandlabor/index.html.

<sup>131.</sup> Dora Costa, Height, Weight, Wartime Stress, and Older Age Mortality: Evidence from the Union Army Records, 30 EXPLORATIONS IN ECON. HIST. 424, 449 (1993).

In essence, different disabilities varied in the way the regression control variables influenced application outcomes. Attorneys were sometimes not only ineffectual, but also strongly hindered outcomes for disabilities such as GSWs, diarrhea, ear and eye defects, gastro-intestinal disorders, general appearance, hernias, musculo-skeletal problems, and varicose veins. Relative to the other disability types, these disabilities were more visible, easily recognized and diagnosed by examining surgeons and the Bureau, and, importantly, less stigmatized.

2. Regression Analysis on Impact of Disability Stigma—Figures 14 and 15 present the regressions for all disabilities, but adding the independent control variable of disability stigma as defined by more versus less visible types. The interaction effects between disability visibility and the other variables are added. Apart from results similar to Figures 12 and 13—a Republican premium, a later year premium, and an attorney discount on the probability of getting a pension increase—Figure 14 reveals two additional results.

FIGURE 14	
LOGISTIC PROCEDURE EXPLAINING SUCCESS, ALL DISABILITIES	
Dependent Variable = 1 IF an Increase Was Granted, o IF Not	

VARIABLES IN THE LOGISTIC REGRESSION <sup>(1),(9)</sup>	VARIABLE MEANS	$\partial \mathbf{E}(\mathbf{Y})/\partial \mathbf{x_k}^{(3)}$
Intercept		-0.2475
Agricultural	60.02%	0.0066
Manual Labor	12.11%	0.0092
Republican	75.62%	0.0861
Neutral	2.13%	0.0135
Year 1879–1889	33.10%	0.0670
Year 1890–1907	54.88%	0.0279
Attorney	84.68%	-0.0417
Disability Visible <sup>(4)</sup>	80.32%	0.0794
Interaction Term b/w Visible & Agricultural	0.4731	-0.0129
Interaction Term b/w Visible & Manual Labor	0.1007	-0.0252
Interaction Term b/w Visible & Republican	0.6118	0.0038
Interaction Term b/w Visible & Neutral	0.0179	0.1122
Interaction Term b/w Visible & Year 1879–1889	0.2613	0.0116
Interaction Term b/w Visible & Year 1890-1907	0.4390	-0.0104
Interaction Term b/w Visible & Attorney	0.6770	-0.0435
Number of Applications	27,417	
Dependent Variable Mean	0.3450	
-2 Log L (p-Value) <sup>(5)</sup>	0.0001	

Notes:

- 1) The omitted categories are professional occupation, democratic party majority, and year 1862 to 1878.
- 2) The symbol """ indicates a statistical significance of 1%, the symbol "" indicates a statistical significance of 5%, and the symbol "" indicates a statistical significance of 10%.
- 3) See Methodological Appendix for an explanation of the symbol " $\partial E(Y)/\partial x_k$ ."
- 4) "Visible" disabilities include injury and GSW, diarrhea, ear defects, eye defects, gastro-intestinal disorders, general appearance, hernias, musculo-skeletal problems, and varicose veins.
- See Methodological Appendix for an explanation of the symbol "-2log L (p-Value)."

First, there was a substantial premium in claiming under a more visible disability type, which significantly improved the probability of a pension increase by 7.94% (main effect in right column in Figure 14). Second, for those who claimed more visible (less obscure) disabilities, hiring attorneys actually significantly *reduced* their probability of a pension upgrade by 4.35% (interaction effect

in right column in Figure 14), and their average monthly pension by \$1.95 (interaction term in Figure 15). The findings support those mentioned earlier of a general attorney discount across all disabilities. Again, this finding may be confounded by the fact that even among veterans whose disabilities were more recognizable and less stigmatized, those who used attorneys had objectively less severe conditions than those who did not.

# FIGURE 15

OLS Regression with Robust Standard Errors Explaining Pension Award for Successful Applications, All Disabilities Dependent Variable = Pension Dollars Granted per Month Corrected for Time Series Correlations between Adjacent Applications for the Same Recruit

Variables in the Logistic Regression	COEFFICIENT ESTIMATES
Intercept	8.1463
Agricultural	-0.3223
Manual Labor	-0.5179
Republican	1.2609
Neutral	-0.3026
Year 1879–1889	0.6371
Year 1890–1907	3.0806
Attorney	-1.0497
Disability Visible <sup>(3)</sup>	0.4620
Interaction Term b/w Visible & Agricultural	0.3149
Interaction Term b/w Visible & Manual Labor	0.7397
Interaction Term b/w Visible & Republican	-0.1889
Interaction Term b/w Visible & Neutral	1.0517
Interaction Term b/w Visible & Year 1879–1889	1.0755
Interaction Term b/w Visible & Year 1890–1907	0.9404
Interaction Term b/w Visible & Attorney	-1.9537 <sup>77</sup>
Number of Applications	16,996
Dependent Variable Mean	\$9.52
Adjusted R Square	0.0688

Note:

- 1) The omitted categories are professional occupation, democratic party majority, and year 1862 to 1878.
- 2) The symbol """ indicates a statistical significance of 1%, the symbol "" indicates a statistical significance of 5%, and the symbol "" indicates a statistical significance of 10%.
- 3) "Visible" disabilities include injury and GSW, diarrhea, ear defects, eye defects, gastro-intestinal disorders, general appearance, hernias, musculo-skeletal problems, and varicose veins.

The non-statistically significant coefficient on disability visibility in Figure 15 suggests that this factor did not strongly affect average monthly pension awards. On closer examination, however, the visibility factor had a positive slope effect on later year dummies (i.e., the coefficients on interaction terms between visibility and year dummies). For veterans who applied between 1879 and 1889, those who claimed more visible disabilities received on average \$1.08 more per month (right column in Figure 15). Those who applied between 1890 and 1907 claiming visible disabilities received on average \$0.94 more per month.

As the pension laws became more inclusive, therefore, those with obvious impairments faired relatively better. Yet, consistent with the result in Figure 14, there was a substantial penalty to pay, in the amount of \$1.95 per month, for those claiming more visible disabilities engaging attorneys (i.e., Figure 15 interaction effect, disability visible by attorney involvement).

A lack of visibility, however, likely was not the only disadvantage for certain disabilities such as genito-urinary, liver disease, and respiratory disease. These conditions tended to be associated with "vicious habits" (e.g., sexually transmitted conditions, alcoholism, and smoking) deemed undeserving by the Bureau for pensions.<sup>132</sup> Even if applicants' bad habits did not provoke doctors to label them as fakes,<sup>133</sup> we have found that those habits had an effect on many veterans' claims and presumably their use of attorneys. In earlier studies, UA veterans whose examining physicians noted their alcohol and drug use, malingering behavior, or sexually transmitted disease were substantially more likely to receive a lower pension rating or to have their claims rejected outright.<sup>134</sup>

In future analysis, we will examine further the concept of disability stigma and its impact on the variables identified in the research model, as well as other new measures.<sup>135</sup> For example, comparing

<sup>132.</sup> Blanck & Millender, supra note 9, at 24-25; see also BLISS, supra note 70, at 98-99.

<sup>133.</sup> See Blanck, supra note 7, at 165–66 (discussing findings that less than 1% of the surgeons' certificates sampled referred to claimants as malingers or as engaged in vicious habits).

<sup>134.</sup> Id. (discussing findings); Blanck & Millender, supra note 9, at 155-56 (same).

<sup>135.</sup> Other variables to consider include the migration patterns of UA veterans. See Mario Sanchez, Geographical Mobility and the Effect of Migration on the Mortality of Union Army, presented at the Conference on Health and Labor Force Participation Over the Life Cycle: Evidence from the Past, sponsored by the National Bureau of Economic Research (2001). For instance, after the war, thousands of UA veterans joined former UA General Dodge moving westward to build the Union Pacific Railroad. See generally, STEPHEN AMBROSE, NOTHING LIKE IT IN THE WORLD: THE MAKING OF THE TRANSCONTINENTAL RAILROAD (2000) (proposing that it may be possible to track migration patterns in the data set as tied to this railroad endeavor). See also Stuart Seely Sprague, More African Americans Speak: The

gastro-intestinal disorders to GSWs in Figure 12, we observe that the Republican premium is three times as high for gastro disorders (15.62%, column (13)) than for GSWs (5.75%, column (1)). This means that applying in a state where the votes were Republicandominated helped claimants three times as much for gastrointestinal conditions than for GSWs. Those differences illustrate the unique and complex effect of disability type (and probably partisan politics) on pension outcomes.<sup>136</sup>

### **III. CONCLUSION**

This Article continues our examination of the lives of UA veterans. We have presented information on the ways in which UA veterans, their lawyer advocates, and partisan politics played a complex role in shaping the policies aimed at the then new class of disabled Americans. We have shown that, like many contemporary disability policies, the Civil War pension scheme disproportionately benefited those disabled who society, politicians, and advocates deemed "worthy."<sup>137</sup>

We find that UA claimants hired pension lawyers at high rates. However, extra-disability forces, such as disability type and stigma, claimant occupation, application year and type, and political affiliation of the state in which the claimant applied affected the use of pension attorneys and, importantly, pension awards. Thus, we find that large numbers of pension claimants lived in swing or politically doubtful states, such as New York, Pennsylvania, Ohio, and Illinois. And, it was in these crucial states where national elections were often determined by the pensioners' votes and where Republican pension commissioners focused their attention.

*New Mother Load*, 78 J. NEGRO HIST. 258, 265 (1993), for a discussion of potential research on migration patterns of black UA veterans after the Civil War.

<sup>136.</sup> A technical difference among disability categories relates to how well the regression models "fit" (i.e., conform to a linear equation). In Figure 11, the logistic model fits well in all but two categories: general appearance (p = 0.7574) and genito-urinary disorders (p = 0.1967). In Figure 13, the LOGIT model fits well in all but four categories: genito-urinary disorders (p = 0.2007), hemorrhoids (p = 0.1038), nervous system (p = 0.2234), and the combined sample of eight disabilities (p = 0.3458). In Figure 14, the OLS model has lower adjusted R squares in ear (3.68%), eye (2.76%), gastro-intestinal (2.36%), nervous system (1.06%), and the combined sample of eight disabilities (3.12%), compared to the rest of the categories.

<sup>137.</sup> See DEBORAH A. STONE, THE DISABLED STATE 85 (1984); Matthew Diller, Entitlement and Exclusion: The Role of Disability in the Social Welfare System, 44 UCLA L. REV. 361, 416–17, 433 (1996) (noting Social Security Death Index's "emphasis on disability as a status that can be objectively determined through scientific and uniform methods").

Confirming prior conjecture about the partisan nature of the pension system, we find a substantial reduction in pension attorney usage during years when a Republican (or neutral) majority vote was present in the state of the claimant's application. Applications filed in states with Republican majorities enjoyed a higher probability of being granted a pension ruling increase and a higher average dollar award per month. As Professor Pam Karlan suggests, the analysis of local political races (e.g., congressional contests of the period that tended to be volatile in swing states) may illustrate further the strength of the pension-related Republican strategy we have identified.<sup>138</sup>

Nevertheless, we may infer from our findings, as Richard Bensel has argued without the benefit of the present empirical data set, that the UA pension scheme was associated with a major Republican cause, the protective tariff on industrial goods.<sup>139</sup> The tariff cause, in turn, was supported by a coalition of UA veterans, pension attorneys, local merchants (who relied on veterans' purchasing dollars), and the industrial elite. The partisan nature of the debate culminated in the 1888 Presidential election, when President Cleveland, who led the Democratic Party's movement for tariff reform, lost to Republican candidate Benjamin Harrison, who garnered the veterans' vote.

Despite the strong influence of partisan forces, we still find that extra-disability forces affecting attorney use and pension outcomes varied by disability type and whether the claimed condition was subject to stigma. Claimants with more visible (less obscure) disabilities, such as musculo-skeletal conditions, were less likely to use attorneys and enjoyed better pension outcomes. There also was a substantial dollar premium in claiming under a more visible disability type. Strikingly, claimants with visible conditions actually lowered their probability of being granted a pension ruling increase when they used attorneys.

We are pursuing several new lines of study in our examination of the extra-disability forces on the lives of UA veterans and the adjudicative aspects of the Pension Bureau. First, we are beginning a study of other aspects of the pension application process, such as the legal and evidentiary proof presented in support of claims. In their quest for pensions, veterans enlisted the help of friends, army companions, and family members. The Bureau allowed veterans

<sup>138.</sup> In addition, Professor Tom Campbell has suggested that analysis of pension outcomes in swing states may be tracked over time through Republican and Democratic presidential administrations to examine relative changes in outcomes as a function of partisan swings. Professors Karlan and Campbell offered helpful comments at our presentation of an earlier version of this Article at the Stanford Law School Colloquium series.

<sup>139.</sup> See BENSEL, supra note 3, at 70 (discussing this coalition).

and their attorneys to support their claims with *ex parte* affidavits that testified to their medical condition before and after the war, as well as the military origins of their disability.<sup>140</sup> The Civil War data set allows us to examine claimants' use and quality of deponent and affidavit testimony, and, therefore, their impact on pension outcomes and attorney usage.

Second, in a new study, data coding is near completion on the county and city locations of all G.A.R. posts. Once finished, we will use this information to fashion a measure of local G.A.R. strength or influence, which may be illustrated by the number and size of G.A.R. posts per county divided by the county population at the time of interest.<sup>141</sup> We then are in a position to combine a G.A.R. strength measure with our state political affiliation measures to more closely investigate issues such as: Did states with strong and more numerous G.A.R. posts show relatively stronger Republican Party affiliation in certain national and local election years? Were UA claimants' migration patterns over time influenced by the establishment of nearby G.A.R. posts as a link to pension payoffs? Were claimants who applied in locations with strong G.A.R. influence less likely to need or use attorneys? And, were pension outcomes more favorable for those who resided near and joined strong G.A.R. posts?

Third, we have argued that one possible explanation for the finding that attorneys hindered pension outcomes could be that those with less severe disabilities were more likely to hire attorneys. Therefore, what we have described to be an attorney usage discount or penalty may be an artifact of the negative relationship between disability severity and pension award. Put differently, attorney usage may reflect a selection bias toward easier cases by attorneys.

We recently tested this possibility by performing analyses that statistically control for claimants' degree of disability severity in hernia applications. We find that, even controlling for disability severity, attorney usage still did not increase claimants' chances of obtaining favorable pension outcomes. The next step is to construct a general composite health index, either directly from the surgeons' ratings for each disability or indirectly from diagnosed symptoms pertaining to each disability, to separate the disability contribution from the attorney contribution on pension

<sup>140.</sup> BLISS, *supra* note 70, at 1-13 (detailing Bureau's policies regarding the use of affidavits).

<sup>141.</sup> We thank Peter Viechnicki for this point and for collecting information on G.A.R. posts.

outcomes.<sup>142</sup> This study is underway to assess the attorney usage effect on other disability categories, while controlling for impairment severity as well as for claimant general health and mortality rates.<sup>143</sup>

Fourth, study is underway to understand other social, economic, and political forces underlying contemporary and historical attitudes about disability policy and advocacy in our society.<sup>144</sup> To this end, we are beginning a comparative study of foreign-born and African-American UA veterans. In one series of studies, we have compared pension outcomes, disability type and severity ratings, attorney usage, and other variables in our research model for native versus non-native born UA veterans.<sup>145</sup>

Ella Lonn's seminal work *Foreigners in the Union Army and Navy* chronicles the important contribution of non-native born UA veterans to the outcome of the Civil War.<sup>146</sup> Indeed, in 1860 more than 85 percent of foreign-born persons in the United States lived in the North. Using the Civil War data set, we have begun to address the degree to which native and foreign-born UA veterans enjoyed equal access to, as well as equitable rewards from, the pension scheme. And, if inequality of access to the pension system existed, what disability and extra-disability factors–such as ethnicity, attitudinal prejudice or attorney usage—accounted for such a disadvantage?

Additionally, with the expansion of the Civil War data set, we are beginning to compare black and white UA pension claimants' disability types and severity, attorney usage, and pension outcomes.<sup>147</sup> Carrie Kiewitt, in a study of seventy-three African-American UA veterans in Baltimore, finds that one unethical pension attorney overcharged and preyed on these veterans while defrauding the pension bureau.<sup>148</sup>

<sup>142.</sup> See Song & Nguyen, supra note 130.

<sup>143.</sup> Disability-specific ratings and diagnostic records on diarrhea and cardiovascular disease have been standardized and are available for use.

<sup>144.</sup> Blanck & Millender, supra note 9, at 33-44.

<sup>145.</sup> See Blanck & Song, supra note 130, 69–72 (discussing findings related to nativity and pension outcomes).

<sup>146.</sup> Ella Lonn, Foreigners in the Union Army and Navy 1 (1951).

<sup>147.</sup> See Dora Costa, Memorandum, Early Indicators of Later Work Levels, Disease, and Death (Feb. 13, 2001) (unpublished manuscript, on file with authors) (discussing study of black UA veterans).

<sup>148.</sup> Carrie Kiewitt, A Study of Fraud in African-American Civil War Pensions: Augustus Parlett Lloyd, Pension Attorney, 1882–1909, 73–78 (1996) (unpublished M.A. thesis, University of Richmond) (on file with authors); *see also* Blanck & Millender, *supra* note 9, at 31–32 (discussing pension attorneys).

In a more recent study, Donald Shaffer compares the pension experiences of 1,100 white and black UA veterans.<sup>149</sup> He finds that a substantially smaller proportion of black veterans received pensions. Shaffer contends that racial inequality in receipt of UA pensions did not stem from the pension laws themselves, which were written to apply to white and black veterans equally. Rather, discrimination in pensions against African-American UA veterans was the result of social, attitudinal, and economics forces. These negative forces included that black veterans were more likely to face poverty and illiteracy, lack of support in the application process, prejudice by pension bureaucrats, and inability to retain honorable attorney advocates. As Shaffer has found for African-American UA veterans, we find that the use of pension attorneys by certain types of claimants, such as those with obvious visible disabilities, actually hindered pension outcomes.

However, as Blanck and Millender have argued generally with regard to UA veterans,<sup>150</sup> Shaffer illustrates that many African-Americans with their attorney advocates successfully exerted their pension rights and proved their "worthiness."<sup>151</sup> They often successfully pursued their rights "in an era that held little other hope of fair treatment for African-Americans."<sup>152</sup> Likewise, today many disabled Americans have successfully asserted their civil rights in the context of political, social, economic, and attitudinal adversity. From the United States Supreme Court cases pitting golfer Casey Martin against the Professional Golf Association to grass-roots advocacy efforts to make county courthouses accessible, disabled Americans and their advocates are fighting discrimination against people with disabilities.

Lastly, our studies examining the evolution of and attitudes toward contemporary disability policies like the Americans with Disabilities Act are enhanced by an appreciation of the experiences of disabled Americans and their advocates historically.<sup>153</sup> Research questions such as the following may be examined: In comparison to the aggressive advocacy efforts of disabled UA veterans and their attorneys, in what ways has ADA advocacy been persistent and

<sup>149.</sup> Donald R. Shaffer, "I Do Not Suppose that Uncle Sam Looks at the Skin": African Americans and the Civil War Pension System, 1865–1934, 46 CIV. WAR HIST. 132, 133–36 (2000) (describing empirical findings).

<sup>150.</sup> Blanck & Millender, supra note 9, at 49.

<sup>151.</sup> Shaffer, supra note 149, at 145.

<sup>152.</sup> Id. at 147.

<sup>153.</sup> See, e.g., PETER DAVID BLANCK, THE EMERGING WORKFORCE ON PERSONS WITH DIS-ABILITIES (1999) (discussing contemporary studies); EMPLOYMENT, DISABILITY, AND THE AMERICANS WITH DISABILITIES ACT (Peter David Blanck ed., 2000) (same).

broad despite narrowing interpretations of the law by courts? In contrast to the G.A.R. as a formidable lobbying organization for disabled UA veterans, how have contemporary disability lobbyists focused their efforts to influence areas such as employment, welfare, and health care reform?<sup>154</sup> And, compared to the UA pension entitlement scheme and other prior disability laws, has contemporary disability policy promoted independence and inclusion into society for disabled Americans?<sup>155</sup>

In closing, our investigation illustrates that historically, as in contemporary American society, forces external to an individual's disability—class status, occupation, stigma, local and national political inclinations—influence conceptions of disability legitimacy, deservingness, and advocacy. Political scientist Harlan Hahn has noted that a society's conception of disability primarily is understood through such social attitudes, public policy, and political events.<sup>156</sup> Study of the modern disability rights movement and the ADA is enhanced by recognition of the historical constructions of disability in American society.

<sup>154.</sup> Peter David Blanck & Helen A. Schartz, Toward Researching a National Employment Policy for Persons with Disabilities, in EMERGING WORKFORCE ISSUES: W.I.A., TICKET TO WORK, AND PARTNERSHIPS, SWITZER MONOGRAPH SERIES 1 (2001) (discussing new disability policy agenda).

<sup>155.</sup> We thank Hugh Berry for his suggestions in this regard. See also Susan Schwochau & Peter Blanck, Does the ADA Disable the Disabled?—More Comments, INDUS. REL. (forthcoming 2002) (discussing related empirical issues).

<sup>156.</sup> Harlan Hahn, Disability Policy and the Problem of Discrimination, 28(3) AM. BEHAV. Sci. 293, 294 (1985).

#### METHODOLOGICAL APPENDIX

### A. Ordinary Least Squares (OLS) Models with Robust Standard Errors

A critical assumption required for the OLS standard errors to be correct (i.e., unbiased and consistent) is that we have a random and representative sample (i.e., the sample observations are independent). Although it is reasonable to assume that the pension applications are independent across different UA veterans, the assumption of independence is inappropriate for different applications from the same veteran. The assumption of independence implies that a veteran's application in one year is unrelated to his applications in other years, which is almost surely false.

One way to think about the breakdown of this assumption of independence for applications on the same veteran is that there is not as much independent information in the sample as implied by the total sample size. The magnitude of the problem depends on the degree of correlation between applications for the same individual. It is an artifact that year-to-year applications for the same veterans are highly correlated, in which case ignoring the nonindependence will lead to substantial understatement of the true standard errors and incorrect statistical inference.

The statistical package we use, STATA, enables the standard errors to be adjusted for correlations within veterans. The command "regress" used together with the "cluster" option gives OLS estimates, while allowing the dependent variable to have between-year correlations for a given individual. The standard error adjustment is achieved by assuming an individual-specific random effect that is normally distributed. The correlation between any two different years is assumed to be constant for an individual.

#### B. Logistic Models (LOGIT)

When we attempt to explain a decision or an outcome measure that is discrete rather than continuous, we can use binary choice models that explain a binary (0/1) dependent variable. For example, we can model the decision for hiring an attorney by creating a variable called "attorney" that consists of only veteran hiring (attorney = 1) versus not hiring (attorney = 0). Likewise, we can measure a pension ruling outcome by a variable called "ruling increase," which assumes the value of 1 if the applicant received an increase in monthly pension award, and 0 if monthly pension" award stayed the same or was reduced.

To link a binary variable to a set of socioeconomic factors, we can construct a regression model where the probability of an event occurring (e.g., getting a pension increase) is a function of the set of socioeconomic factors. Although the actual values of the dependent variable are either 1 or 0, the predicted values of the dependent variable from the regression model are viewed as probabilities with values between 0 and 1.

The problem with using the ordinary least squares (OLS) method to explain a discrete dependent variable is that OLS suffers a major conceptual flaw. There is no assurance that predictions from the OLS model will reflect probabilities because we cannot constrain the predictions to the zero-one interval. This effect produces nonsense probabilities and negative variances. A minor flaw of OLS is that the error terms are not independent of the explanatory variables; that is, OLS produces non-biased estimates only if the error terms are independent of the explanatory variables. If the error terms are correlated with the explanatory variables, as is the case with a binary dependent variable, OLS estimates are biased.

The Logistic model (LOGIT) produces predictions, expressed as probabilities. In the LOGIT, the probability that a veteran used an attorney or the probability that a ruling increase was granted has a logistic distribution. Unlike the linear OLS model, LOGIT models are nonlinear. Therefore, the parameters of the LOGIT are not necessarily the marginal effects. Instead, the marginal effects vary with levels of the explanatory variables. In interpreting the estimated model, a common practice is to present the marginal effects at the mean of the explanatory variables.

In Figures 11, 12, and 14, the symbol " $\partial E(y)/\partial X_k$ " stands for the marginal effect of the k-th factor on the dependent variable, evaluated at the mean of all the factors. For example, in Figure 11, under Injury and GSWs, the coefficient on the agricultural occupation is 0.0277. This means that if a recruit was a farm owner or a farm laborer, his odds of using an attorney to process his pension application was on average 0.0277 higher than a recruit who was a skilled worker (i.e., the omitted occupational category), everything else being equal. Standard errors of the LOGIT estimates are calculated using the maximum likelihood (MLE) method. One can use the Wald statistics to test the hypothesis that a subset of the coefficients is zero. If the subset consists of only one coefficient, say the coefficient estimate on the k-th factor, the Wald statistics carries the similar interpretation as the t-statistics of an OLS regression coefficient. For example, in Figure 11 (column 1), for injury and GSW, the coefficient estimate on the factor "agricultural" is significantly different from zero at the 1% level; (""") indicates significance at the 1% level. This means that if the true coefficient on "agricultural" would be zero, there is a very slim chance of less than 1% of obtaining the current coefficient of 0.0277. It follows that the true coefficient on "agricultural" must be different from zero.

Although we use in the current study the adjusted R squared as a measure of goodness of fit of an OLS regression model, for the LOGIT model a likelihood ratio (LR) is used to achieve a similar goal. The LR test hypothesizes that all the explanatory factors in the LOGIT regression are irrelevant. In other words, the true coefficients on those factors are jointly zero.

To implement the LR test, the log likelihood of a LOGIT specification containing only a constant as the right-hand-side variable (restricted model) is compared with the log likelihood of a LOGIT specification containing both a constant and a set of socioeconomic factors as the right-hand-side variables (unrestricted model). If the difference in the log likelihood between those two specifications is sufficiently large, then it must be that the set of socioeconomic factors provides significant explanatory power to the LOGIT regression.

Following convention, we present -2logL, which is equal to -2 times the difference between the log likelihood of the restricted model and the log likelihood of the unrestricted model. A p value of 0.0001 for -2logL means that if all the socioeconomic factors were irrelevant, there would be a very slim chance of 0.01% that we would obtain the current value for -2logL. In other words, it must be correct to include all the socioeconomic factors because they are not irrelevant.

For a more detailed technical explanation of the regression techniques employed, see WILLIAM H. GREENE, ECONOMETRIC ANALYSIS, ch. 21 (1993).