

NBER WORKING PAPER SERIES

AFTER JOHNNY CAME MARCHING HOME:
THE POLITICAL ECONOMY OF VETERANS' BENEFITS IN THE NINETEENTH CENTURY

Sung Won Kang
Hugh Rockoff

Working Paper 13223
<http://www.nber.org/papers/w13223>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
July 2007

We are very grateful for the comments on previous drafts that we received during presentations at the National Bureau of Economic Research Summer Institute (Cambridge, July 2006), the International Economic History Meetings (Helsinki, August 2006), and the Southern Economic Association Meetings (Charleston, November 2006). We owe a special debt to John James and Robert Whaples who were the discussants on the latter occasion. Lloyd DeWitt Bockstruck and Lee Craig graciously took time to answer questions about their areas of expertise. Daniel Fleisch and Adam Yaari provided thoughtful research assistance. The views expressed herein are those of the author(s) and do not necessarily reflect the views of the National Bureau of Economic Research.

© 2007 by Sung Won Kang and Hugh Rockoff. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

After Johnny Came Marching Home: The Political Economy of Veterans' Benefits in the Nineteenth Century

Sung Won Kang and Hugh Rockoff

NBER Working Paper No. 13223

July 2007

JEL No. N11,N4

ABSTRACT

This paper explores new estimates of the number of veterans and the value of veterans' benefits -- both cash benefits and land grants -- from the Revolution to 1900. Benefits, it turns out, varied substantially from war to war. The veterans of the War of 1812, in particular, received a smaller amount of benefits than did the veterans of the other nineteenth century wars. A number of factors appear to account for the differences across wars. Some are familiar from studies of other government programs: the previous history of veterans' benefits, the wealth of the United States, the number of veterans relative to the population, and the lobbying efforts of lawyers and other agents employed by veterans. Some are less familiar. There were several occasions, for example, when public attitudes toward the war appeared to influence the amount of benefits. Perhaps the most important factor, however, was the state of the federal treasury. When the federal government ran a surplus, veterans were likely to receive additional benefits; when it ran a deficit, veterans' hopes for additional benefits went unfilled. Veterans' benefits were, to use the terms a bit freely, more like a luxury than a necessity.

Sung Won Kang

Samsung Economic Research Institute

7th floor, Kukje Center Building

191, Hangangro 2-Ga, Youngsan-Gu

Seoul, Korea 140-702

sungwon90.kang@samsung.com

Hugh Rockoff

Department of Economics

75 Hamilton Street

Rutgers University

College Avenue Campus

New Brunswick, NJ 08901-1248

and NBER

rockoff@fas-econ.rutgers.edu

“let us strive on to finish the work we are in, to bind up the nation's wounds, to care for him who shall have borne the battle and for his widow and his orphan,…”¹

- Abraham Lincoln

1. Veterans' Benefits by War²

This paper compares veterans' benefits across America's nineteenth-century wars and explores the determinants of the level of benefits. These comparisons are based on new estimates of the number of pensions, the value of cash pensions, and the amount and value of land grants. The amount of benefits, it turns out, varied substantially from war to war and depended on several factors – the wealth of the United States, the previous history of veterans' benefits, the number of veterans relative to the general population, lobbying by agents for the veterans, and so on. Perhaps the most important factor, however, was the state of the federal treasury. Veterans' benefits were, to use the term somewhat freely, a luxury: When the federal treasury was in the black demands for additional benefits were approved; when it was in the red demands for additional benefits were denied.

By veterans' benefits we mean simply money or other assets paid to former members of the armed forces. In many cases benefits were simply cash paid to a veteran, often in the veteran's old age, or to the veteran's widow or children. In-kind benefits, however, were important in some cases. Land grants were important before the Civil War. Old soldier's homes, as they were termed, have been important since the Civil War, although facilities for retired army and naval personnel were established earlier. Health care provided through the veterans system has been important since the First World War, although military hospitals were sometimes pressed into service even earlier.

¹ From Lincoln's second inaugural, this statement became the motto of the Veterans Department.

² The idea for this paper emerged from a conversation that one of us had many years ago with Lawrence Fisher of Rutgers University, Newark.

Educational benefits were first provided, as far as we are aware, for veterans of World War I and became famous with the GI bill for veterans of World War II. Veterans have also been the beneficiaries of veterans' preference laws that give veterans a leg up in the pursuit of civil service jobs. Private firms could also introduce a preference for veterans. Here we will focus on the amounts spent by the federal government for cash payments and the amount and value of the land grants. Although it is hard to be certain, we believe that our totals include the great bulk of benefits paid to America's veterans in the nineteenth century.

Since benefits were paid after, sometimes long after, a war ended and the veteran returned to civilian life, we will use present values to compare veterans' benefits of different wars. In effect, we are asking what the value would be of a bond given to each veteran at the end of the war that would have produced income equal to the benefits the veteran later received. As soon as one begins to calculate present values, of course, various questions arise: what discount rate should be used, how money paid to widows and children should be counted, and so on. We address these questions by computing variants, for example by using alternative discount rates. As it turns out, the broad differences to which we draw attention do not depend on the way present values are calculated.

2. What Explains the Level of Benefits?

In many cases veterans' benefits were simply deferred pay. When soldiers volunteered or were drafted they were promised a reward after the war. The contract might have been explicit or implicit: Retirement benefits might have been part of the recruitment package; but even when there was no explicit promise soldiers might have assumed that they would be rewarded after the war simply because legislation rewarding veterans was passed after previous wars.

Sometimes there is more to veterans' benefits, however, than deferred pay. We also reward veterans to express our gratitude for the risks they have taken and the hardships they have suffered. The analogy with gratuities paid for more mundane services, although it may be unpleasant to think about it in these terms, is apt. We often give a gratuity because it is part of the pay for the services rendered, but sometimes we give a larger gratuity to reward extraordinary service. Sometimes we use military language to describe a civilian gratuity: we reward someone generously because they "went beyond the call of duty." In the nineteenth century civilian language was used, on occasion, to describe veterans' benefits: Veterans' benefits were referred to as the "veterans' gratuity." George Washington referred to the distinction between deferred pay and gratuities in a circular letter to the governors defending the pension awarded his officers. The pension was part of their hire, "...it was the price of their blood, and of your independency; it is therefore more than a common debt, it is a debt of honor; it can never be considered as a pension or gratuity, nor be cancelled until it is fairly discharged."³

The decision to reward veterans was always a contentious political decision that was influenced by a number of factors. We will discuss these factors in this section in general terms and then apply them to the cases that follow. Most of these forces can be grouped under six headings:

(1) *The previous history of veterans' benefits.* Veterans' benefits are a good example of a path-dependent process. The amount veterans received after the last war produces a strong gravitational force. If veterans of the last war received \$100 per month starting at age 62, a strong presumption is established that veterans of the next war should get same pension. If they receive less, they have a strong basis for claiming that they have been treated unfairly. If they receive more, they can be criticized for being greedy, and the way is opened for veterans of previous wars who can demand more benefits based on equity.

³ Quoted in Glasson (1918, 43).

This does not mean that benefits inevitably ratchet upward. At times benefit systems have come under heavy criticism. Perhaps after the last war benefits were extended to individuals with dubious claims to service. Or perhaps benefits were extended through "pension marriages" – aged veterans marrying young women so the women and their children could receive a pension after the veterans died. If so, there may be a reaction in the form of stricter eligibility requirements when the next set of veterans ask for benefits. As with other path-dependent processes, the accidents of history may shape the course of events. The occupant of the White House might be important: A former military officer, for example, might be more sympathetic to veterans.

(2) *Secular changes in national wealth.* As the United States has grown richer it has been able to reward its veterans more generously. Indeed, for some purposes it makes more sense to measure benefits relative to national wealth when comparing benefits across wars. In other words, the right question might be whether veterans of one war received more or less relative to wealth in their era compared with veterans of another war.

(3) *The number of veterans.* The number of veterans is an important determinant of their political influence. As usual, numbers cut two ways. A larger number of veterans means that veterans (and their families) have more votes to offer politicians who support higher benefits. On the other hand, a larger number of veterans means that taxes have to be raised in order to pay for higher benefits, or that the benefits provided other citizens have to be cut. Either decision involves heavy political costs. It may be possible to provide a small number of veterans with higher benefits without raising taxes to the point that the increase is visible to tax payers.

(4) *The effectiveness of individuals and organizations working on behalf of veterans.* After every war veterans have joined new or existing veterans' organizations that have lobbied on their behalf. The effectiveness of those organizations and their leaders has played a role in determining

the level of benefits. At times lawyers, or other paid agents of veterans have carried out important lobbying efforts, hoping to profit if they win additional benefits for veterans.

(5) *Public attitudes towards the war.* How much did the veterans actually suffer during the war? How much did they accomplish? How just was the war? Our first reaction is that the answers to these questions should not matter: all veterans should be well treated. But as we will show below, the answers to these questions did influence the level and timing of benefits.

(6) *The state of the federal treasury.* If the treasury is running a surplus, and more surpluses are in the offing, the demands of veterans can be met easily; if the treasury is running a deficit, and more deficits are in the offing, veterans will find the road to higher pensions difficult. The crucial thing, of course, is how the public and the politicians view the state of the treasury. The same budget will look very different to politicians who hold a balanced budget sacrosanct than to politicians who believe a deficit is a good way of assuring full employment.

The state of the treasury will be more important when benefits are paid from general revenues. In the early part of the nineteenth century some naval benefits were paid from a fund derived from the sale of captured foreign merchant ships and their cargoes. This method of finance changes the role of the taxpayer. Naval pensions and the role of the Naval Prize Fund are discussed in detail in Clark, Craig, and Wilson (2003). Most nineteenth century veterans, however, were army veterans, so the state of the treasury was the key factor. In the antebellum period the federal government's and the states's "land budgets" were often as important as fiscal budgets.⁴ There were times when generous grants of land could be made to veterans even when cash grants seemed difficult; in other words times when governments were land rich and cash poor.

Veterans' benefits, we will argue, can be characterized like consumer spending. Benefits to compensate veterans who were injured in the course of the war are analogous to necessities: The

⁴ Grubb (2005) stresses the importance of land to the "net asset" position of the United States.

government will pay without regard to the current state of the budget. Old-age pensions, however, were like luxuries: The government would “buy” them provided its income was high enough relative to its expenditures.

These six factors have often been cited in previous studies of veterans benefits in the nineteenth century such as Bodenger (1971), Oberly (1990), Skocpol (1992), Resch (1999), Teipe (2002), Clark, Craig, and Wilson (2003), and the classic with which all other studies of nineteenth-century pensions begin, Glasson (1918). We cannot claim, therefore, that our analysis, including our emphasis the state of the federal treasury, is unprecedented. Indeed, any explanation of something as important as veterans' benefits that was based on an entirely new set of explanatory factors would be highly suspect. Rather, our claim is that we have sharpened the existing portrait of the political economy veterans' benefits and established more rigorously some of the empirical generalizations already in the literature by developing and exploring data on the number and value of cash pensions and land grants. We will begin by comparing cash pensions awarded to veterans of the antebellum wars.

3. Service Pensions for Veterans of the Antebellum Wars

Figure 1 compares the present discounted value of the cash benefits received by veterans for service in the Revolution, the War of 1812, and the Mexican War. In each case we deflated the annual amount spent on a pension by a cost of living index (*Historical Statistics* 2006, series Cc2), discounted the resulting series back to the end of the war at three percent or six percent,⁵ and divided by the number of soldiers and sailors who served in the war (Table 1). Evidently, the

⁵ Over the years 1798 to 1860 the yield on U.S. long-term bonds averaged (in years when it is available) 5.71 percent; the yield on New England municipals averaged 5.11 (*Historical Statistics* 2006, series Cj1192, Cj1194).

veterans of the War of 1812 received substantially less than did the veterans of the Revolution or the Mexican War. The difference between the benefits when discounted at three percent and when discounted at six percent points to the important role of timing: The veterans of the War of 1812 do relatively better when a low rate of discount is used.

A natural if somewhat cynical conclusion that follows from Figure 1 is that it is the difference in the success of American arms that explains the difference in benefits. America won the Revolutionary War and the Mexican War – indeed America won great empires in these wars – but lost, or at least accomplished very little, in the War of 1812. This interpretation, we argue below in more detail, may have an element of truth to it, although another, perhaps more important factor, the state of the federal treasury, was also at work: Veterans of the Revolution benefited from periods of treasury surpluses, while veterans of the War of 1812 came due for their pension when the budget was in deficit.

In terms of nominal amounts, the idea that veterans of a given war should be given what veterans of the proceeding war were given worked to an unusual extent in the nineteenth century. The standard rate of \$8 per month did not change from 1818 to 1903. Some variation in the real value of pensions was introduced, as shown in Figure 2, by movements in prices and wages. It is evident, however, that price movements were not a major source of the differences revealed by Figure 1. Thus, the main factor behind the differences in Figure 1 was the time that veterans had to wait for their service pensions.

One way to highlight the role of timing is to calculate the pensions of a hypothetical standardized veteran. Consider a private or noncommissioned officer, who (1) survived a war without a disability entitling him to a pension, who (2) was eligible for a service pension when it became available, who (3) lived for 70 years after the war, and who (4) left no dependents. Although

hypothetical, these calculations provide a picture of the relative size of the pensions; both in terms of what the legislators had in mind, and in terms of what the veterans ultimately received. When we do this we find that our hypothetical long-lived veteran of the Revolution would have received a service pension worth \$64 in 1860\$, our hypothetical veteran of the War of 1812 would have received \$27, and our hypothetical veteran of the Mexican War would have received \$143. These figures are higher than the estimates in Figure 1 that reflect the actual experience of the veterans, but the ordering is similar. Evidently, the Veterans of the War of 1812 received less in large part because they had to wait so long for their service pensions. We therefore need to look at the history of how and when these benefit programs were established to explain why the veterans of the War of 1812 did less well than the veterans of the other antebellum wars.

4. Service Pensions: The Revolutionary War

The Revolutionary War was no exception to the rule that debate over veterans' benefits starts with what was awarded to veterans of the last war. English and colonial practice was to pay compensation to all soldiers who were injured and unable to work, but to pay service pensions only to officers. Legislation promising compensation for Revolutionary soldiers was passed soon after the Revolution began. The rate for privates and noncommissioned officers was \$5.00 per month.⁶ Pensions for widows and orphans of officers were also well accepted. One of the first awards, in April 1777, was to the youngest son of General Mercer who died in the Battle of Princeton. All told, General Mercer's youngest son would receive \$3,876, perhaps \$1.6 million

⁶ A crude estimate of daily wages of unskilled labor during the Revolution varies between \$.40 and \$.56. So \$5.00 represents what an unskilled laborer could earn in 9 to 13 days: a small sum to live on, but an important supplement for veterans who had other sources of income. Wages during the Revolution were estimated by using an index money wages for unskilled labor available during the Revolution (*Historical Statistics* 2006, series Ba4218) to backdate daily wages for unskilled labor in Philadelphia (*Historical Statistics* 2006, series Ba4219), a series that first becomes available in 1785.

in today's money (2004) using the wages of unskilled labor as an inflator (U.S. Senate 1877; Williamson 2004).

But the officers' demand for half-pay for life, although based on current British practice, proved highly controversial. At first Washington opposed the idea of half pay on the grounds that it would be too expensive; but when conditions in the army deteriorated in 1777-78, and officers began returning home, Washington changed his mind and supported half-pay for life. In May 1778 Congress promised half pay, although only for seven years, for officers who served until the end of the war, and \$80 mustering out pay (one year's pay) for common soldiers, about \$33,000 in today's money (2004) using the wages of unskilled labor as an inflator (Williamson 2004). In October 1780 Congress, under pressure from the officers and from Washington, increased the offer to officers to half pay for life for those who served until the end of the war.

The story, however, was not to end so happily for the officers. Early in March 1783 the officers with the American army at Newburgh, New York became increasingly anxious about whether arrears of pay and the commitment to half-pay for life would be fulfilled once a treaty of peace was signed. On March 10, 1783 an anonymous letter appeared urging the officers not to lay down their arms and disband until their demands for back pay and pensions were met: the famous "Newburgh Conspiracy." Washington met this challenge by calling a general meeting of the officers on March 15. At that meeting Washington addressed his men and assured them that Congress would fulfill its promises. The story goes that during the speech Washington began to read a letter from Congress and said "you will permit me to put on my spectacles, for I have not only grown gray but almost blind in the service of my country."⁷ Supposedly his officers, some of whom did not know

⁷Flexner (1984 [1974], 168-178) provides a clear and moving account of the conspiracy. Historians are not agreed on how far the plotters were really prepared to go. In an interesting exchange in the *William and Mary Quarterly*, Richard H. Kohn (1970) argued that it was a full blown conspiracy; a position strongly disputed by Edward C. Skeen (1974).

that he wore glasses, were so overcome with emotion that they began to cry. On March 22, with the threat quashed, and the budget once more on the front burner, Congress passed the "Commutation Act," which promised former officers cash or interest bearing securities amounting at face value to full pay for five years in lieu of half-pay for life.⁸ About 2,500 officers received securities under the Act (Bodenger 1971, 21).

The events in Newburgh made up the most extreme case of a conflict between the claims of the veterans and the state of the federal treasury. Indeed, Flexner (1984 [1974], 177) claims that the meeting on March 15 "was probably the most important single gathering ever held in the United States." But the conflict was to be repeated in some form after every war in the nineteenth century.

The fear of the officers that Congress would fail to pay them once their services were no longer needed proved well-founded. Under the Confederation the government failed to pay interest on the commutation bonds. Eventually, these debts were assumed by the federal government under Hamilton's plan for reorganizing the debt. Indeed, they were the largest part of the debt assumed by the federal government. In the meantime, however, many officers and enlisted men had sold their securities to investors at heavy discounts. E. James Ferguson (1954) studied what happened in Maryland, the state with the best-preserved records, and found that about 52 percent of the securities issued to Maryland's soldiers had been acquired by the State of Maryland because they could be used to satisfy state debts. Of the 48 percent that remained in private hands about 82 percent had been transferred to private investors at a price that might have been, according to Ferguson (1954, 41), 20 to 40 cents on the dollar. The officers continually petitioned Congress for additional compensation. And in 1818 officers in "reduced circumstances" received a pension of \$20 per month, about \$4,200 per month in today's money (2004) using the wages of unskilled labor as the inflator (Williamson

⁸ The par value of the commutation bonds equaled half pay for 16 years discounted at 6 percent.

2004). This was, as we will explain below, a period of extraordinary federal budget surpluses. Finally, in 1828, the surviving officers were granted full pay for the remainder of their lives.

There was no precedent, as far as we are aware, in the American experience for a service pension for privates or noncommissioned officers. It was natural, however, in a new nation that took democracy seriously that privates and noncommissioned officers would feel they deserved a pension, and would be viewed as deserving by the public. In their case the pension received by the officers was the precedent. The enlisted men, moreover, could point to the same failures on the part of Congress to live up to its promises, as could the officers. Congress had paid in Continental dollars that had depreciated rapidly, and sometimes had failed to pay altogether. True, Congress had given the enlisted men interest-bearing securities for the arrears in pay and for the \$80 bonus, but Congress had failed to pay interest on these securities, as it had on the securities given to the officers.

In the years following the War of 1812, moreover, the state of the federal treasury was promising for the passage of a service pension for veterans of the Revolution.⁹ The United States ran large deficits during the War of 1812; in 1816 and 1817, however, the treasury ran large surpluses, as can be seen in Figure 3. The surplus was 56 percent (measured as a percentage of expenditures) in 1816, and 52 percent in 1817 (*Historical Statistics* 2006, series Ea584, Ea585). The surpluses were temporary, the result of a postwar surge in imports that produced increased tariff revenues. One result, nevertheless, was an important piece of veterans' legislation. The law of 1818, mentioned above in connection with the officers, also provided a pension of \$8 per month for privates and noncommissioned officers who had served nine months during the Revolution and were now in "reduced circumstances." As can be seen in Figure 3, spending on pensions ratcheted upward as a result. Spending on pensions under the law of 1818

⁹ The following two paragraphs are based on John Resch (1999).

significantly exceeded compensation for wounded veterans including those wounded in the War of 1812 and for the dependents of soldiers and sailors who died while in service (the lowest line in Figure 3).

The new law was soon in trouble. The War Department was overwhelmed with applications and it was clear that many veterans were misrepresenting their resources. The widely discussed case of Ebenezer Huntington, a wealthy former officer from Connecticut who had managed to get a pension, personified the corruption. The problem even reached into the War Department where bureaucrats enrolled veterans whose assets exceeded the Department's standards. The treasury surpluses, moreover, disappeared soon after the law of 1818 took effect: In 1820 the deficit was two percent of expenditures, and in 1821, eight percent of expenditures (*Historical Statistics* 2006, series Ea584, Ea585). Congress responded to the public's outrage over corruption in the pension system and the deterioration in the budget by striking all of the veterans from the rolls and requiring that they reapply. In the summer of 1820 Americans watched in fascination as veterans of the Revolution mustered prior to presenting their applications. Old soldiers shouldered their crutches as they had once shouldered their muskets. The effect of the re-enrollment amendment shows up clearly in Figure 3 as a sharp contraction in net expenditures in 1821.¹⁰

The 1820 amendment, and its vigorous enforcement by Secretary of War John C. Calhoun and the head of the pension bureau James L. Edwards, put an end to the scandals and saved the program. Now public attention shifted from men who had been unfairly added to the rolls to men who had been unfairly excluded. There were many possible inequities. A veteran who had gone into debt to buy property on the expectation of a pension might now be denied a

¹⁰ Our estimates of net expenditure are the differences between warrants issued and repayments. Since repayments could be based on warrants issued in previous years, our estimate of zero net expenditure in fiscal 1821 is consistent with some veterans receiving payments from the government.

pension on the grounds that his gross assets (one of the criteria used by the War Department) were too high. A veteran who deeded his property to his children in exchange for long-term care, a common practice, would qualify for a pension; a veteran in similar circumstances who kept title to his assets would not. The budget, moreover, having recovered from the effects of the Panic of 1819, was now solidly in the black: the surplus was about 30 percent of expenditures in 1822 and 1823 (*Historical Statistics* 2006, series Ea584, Ea585). In 1823, therefore, Congress allowed veterans to submit amended applications. Veterans were now free to restate their assets in a way that met War Department standards. The 1823 amendment does not seem to have left a strong imprint on the pension rolls (Table A1 column 4), but it does illustrate the willingness of Congress to address inequities provided the budget was favorable.

Pressure now began to build for a non-means-tested pension and a reduction in the required term of service. The legislation of 1828, mentioned above, that awarded officers who served until the end of the war full pay for life, made a similar award to privates and noncommissioned officers who had enlisted in the Continental Army and served until the end of the war. This law, however, pensioned few soldiers.

With this precedent on the books, however, it is easy to see why pressure then built to expand benefits further. Veterans who had served, but not until the end of the war, or who had served in state or local militias rather than the Continental Army, now had a basis for claiming a pension. In his first State of the Union Message in 1829 Andrew Jackson, a hero of the War of 1812 and the Indian Wars, advocated extending benefits to the militia who served in the Revolution, although only when a veteran "... is unable to maintain himself in comfort."¹¹ Legislation passed in the House, but stalled in the Senate. Among those opposed to increased benefits was Senator Robert Y. Hayne of

¹¹ Andrew Jackson, State of the Union Message, December 8, 1829. The American Presidency Project: <http://www.presidency.ucsb.edu/>, accessed June 12, 2007.

South Carolina. Hayne pointed out, among other things, that there was a connection between the protective tariff – the famous "Tariff of Abominations" had been passed in 1828 – and veterans' pensions. To increase the pension rolls was to delay the day when tariffs could be reduced (Glasson 1918, 77-78). In 1832, however, despite opposition from men like Hayne, legislation was passed that provided full pay for life to all veterans without regard to their economic or physical status who had served for two years in the regular army, the navy, or (significantly) the militias. Those who had served for shorter periods received proportionately less.

As can be seen in Figure 4, the Act of 1832 was passed during a run of years when the federal budget was in surplus, and following two years of record surpluses. Indeed, the surplus had been larger, measured as a percentage of expenditures, in only two preceding years (*Historical Statistics* 2006, series Ea584, Ea585). Spending on Revolutionary pensions increased as a result of the legislation. The amounts of additional spending, however, were relatively small, although the effect on the surplus was not negligible. Fifty years had passed since the end of the war, and the number of eligible veterans had been greatly reduced. Nevertheless, an important precedent had been established. From this time onward veterans could claim that equity with veterans of the Revolution required that they be given a pension based on service alone when they reached an advanced age. Shortly after passing this bill, which increased the need for long-term taxes, Jackson signed the tariff legislation that led to the Nullification Crisis.

The Revolutionary War also set the precedent for pensioning widows. During the war the widows of soldiers or sailors killed in battle were pensioned, a colonial tradition. But under the Act of July 4, 1836 widows who were married before 1794 to revolutionary officers, soldiers, seamen, and marines were made eligible for a pension. Thus, to put it somewhat differently, women who had married a non-commissioned officer or soldier who had survived the war became eligible for a

pension. The effect of the pensioning of widows, orphans, and other dependents can be seen in Figure 4 as the opening of the gap after 1836 between total expenditures and Act of 1832 expenditures. This law was a remarkable break with colonial tradition. At the peak over 9,000 widows and other dependents would be on the rolls (Table A1 column 5). Pensioning the widows of ordinary soldiers and seamen who had survived the war set a dominant precedent: The widows of veterans of all future wars would be pensioned.

An attempt was made at about this time to pension the veterans of various engagements with Native Americans that had taken place in the years immediately following the Revolution (U.S. House 1836). This effort ran into opposition based on the political morality of the war. It was contended that the Indian Wars were different from the Revolution – they were carried on by private individuals with the goal of private gain. The veterans of the Indian Wars, as they were known, would have to wait for their pensions.

Legislation in March 1837 directed the Navy Pension Fund to pay the widows and orphans who were now eligible for a pension from the time of the veteran's death. This legislation, according to Clark, Craig, and Wilson, although passed when the Navy Pension Fund appeared to be in good financial shape, doomed it. In a few years the fund was gone (2003, 58-60). Clark, Craig, and Wilson are probably right that the increase in benefits for veterans was partly due to the attempt to build up the navy because of the tensions with Britain over the U.S. boundary with Canada. And Theda Skocpol is probably right that the expansion of the franchise made it more important politically to pension the widows of ordinary soldiers and sailors (1993, 92). However, the pensioning of the widows and orphans is also consistent with a simple fiscal theory of the pensions: Fiscal 1836 saw the last and largest in a series of surpluses. The federal budget would go into deficit after the Panic of 1837.

Time soon took its toll. By 1848 little more than 3,000 widows remained on the rolls (Table A1, column 5). An act of July 29, 1848 pensioned widows who were married before January 1800. In other words it pensioned women who had married veterans between 1794 (the cutoff under the law of 1836) and 1800. This amendment, a subsequent amendments along the same lines, produced small increases in the number of widows on the rolls.

As we have seen, Revolutionary War Veterans had to wait 35 years (1783 to 1818) for a means-tested service pension, and 45 years (1783 to 1828) for a non-means-tested service pension. Given that the precedent of an old-age pension had been established and that the United States had grown richer one might have expected that the veterans of the War of 1812 would have received their old-age pension in fewer years. In 1845, 30 years after the end of the War of 1812, for example, real per capita income was 30 percent higher than it was in 1818 when the Revolutionary War Pension was created (*Historical Statistics* 2006, series Ca11). However, this was not to be. Veterans of the War of 1812 would have to wait longer for their service pensions even though the country had grown richer.

Before exploring the cash pensions received by the veterans of the War of 1812 and subsequent wars, however, we need to look at the land grants made to veterans of the Revolution and subsequent wars. As Farley Grubb (2005) has recently argued, it is a mistake to look solely at cash expenditures, because land was an important part of the government's "net asset position." It is possible that including land grants would alter our conclusion that the veterans of the War of 1812 did badly compared with the veterans of other nineteenth-century wars. The land grant story, however, reinforces the cash pension story.

5. Land Grants

Land grants for military service were a long-standing colonial tradition.¹² Land was awarded, for example, to soldiers who had participated in the Pequot War in 1637. Maryland awarded land in 1645 for help in suppressing the rebellion led by the pirate Richard Ingle. Land was also awarded to the veterans of King Philip's War in 1675-76. The French and Indian War of 1754-1763 provided the immediate precedent for the Revolutionary land grants. The war began in the west with the campaigns in which George Washington took part. A proclamation by Governor Dinwiddie of Virginia issued in 1754 authorized land grants to soldiers who participated. At the conclusion of the War, George III's Royal Proclamation of 1763 rewarded veterans with 50 to 5,000 acres depending on their rank.¹³

The reliance of colonial authorities on land grants is easily understood. As Paul Wallace Gates put it in his magisterial *History of Public Land Law Development*, America in that era was “long on land and short on money” (Gates 1968, 249). It was natural, therefore, that America would reward veterans of the Revolution with land grants. The earliest offer came in 1776, but ironically it was an offer of 50 acres to British soldiers who deserted (Gates 1968, 251). To make sure that the offer reached the Hessians, it was printed in German on the backs of tobacco wrappers (Hibbard 1965 [1924], 118).

¹² The examples in this paragraph are drawn from the "Introduction" to Lloyd DeWitt Bockstruck's forthcoming volume on bounty and donation land grants in British North America. We thank Dr. Bockstruck for making the Introduction available to us prior to publication.

¹³ The Proclamation can be read at <http://www.ushistory.org/declaration/related/proc63.htm>. (Accessed Friday, May 25, 2007).

Both the Continental Congress and the states made grants. The grants made by the Continental Congress went to veterans of the Continental Army; the grants made by the states went to veterans of their militias and as supplemental grants to their citizens who served in the Continental Army. The southern states were especially generous. Virginia, the most populist state and the one with the most western land, steadily increased its bounties during the course of the war as it became harder and harder to enlist men. Toward the end of the war ordinary soldiers and sailors were promised 300 acres and a slave to work the land. North Carolina made the largest grants. Under a law of 1780 the North Carolina scale started with 640 acres for privates and 1000 acres for noncommissioned officers.

The rewards to officers, in many cases, were far more generous than the rewards for enlisted men. The Continental Congress gave brigadier generals 850 acres and major generals 1,100 acres. North Carolina added 12,000 for both brigadier and major generals, but rewarded Major General Nathaniel Greene, the hero of the Revolution in the South, with a “little dukedom,” as one Tennessee legislator put it, of 25,000 acres (Gates 1968, 252-53). Virginia added an additional 10,000 acres for brigadier generals and 15,000 for major generals. Virginia granted Major General Charles Lee, 16,875 acres, Brigadier General Daniel Morgan, 23,328 acres, and Major General Horatio Gates, 31,000 acres (Bockstruck 1996, 196, 308, 376).¹⁴ Washington undoubtedly could have had an enormous amount of land. He refused, however, to accept any land for his service during the Revolution, even though his personal economy depended on the extensive lands awarded to him for his service in the French and Indian War (Flexner 1984 [1974], 53-54, 194). The Northern states made smaller distinctions among ranks. Whereas Virginia gave privates 300 acres and major generals 15,000, a ratio of 50 to one; New York gave privates 500 acres and major generals 5,500, a ratio of 11 to one

¹⁴ The area of the island of Manhattan is about 13,000 acres; the borough, which includes some water and adjacent islands, is about 22,000 acres.

(Gates 1968, 252). The states with large claims on western lands were, of course, in a position to reward their veterans generously. The expectation that those claims might have to be surrendered to the central government simply added another incentive to reward their own citizens generously.

Although the veterans of the Revolution were promised a great deal of land, its monetary value is difficult to estimate, and may not have been very great. Some preliminary efforts to distribute federal land were made in the mid-1780s, but it was not until 1796 that a military track in Ohio was made available where small holders could exercise their warrants (Gates 1968, 259). In the meantime most veterans had sold their warrants to speculators. The largest of the speculators in federal warrants was the New Jersey politician Jonathan Dayton who acquired 90,936 acres by buying warrants (Gates 1968, 260). The story of how land was distributed by the states varied from state to state, but the tendency for veterans to experience long delays and to sell their warrants to speculators and developers was the norm.

The policy of rewarding soldiers with land grants continued after the Revolution. Texas, as might be expected based on its vast acreages, made generous grants. The Texas constitution of 1836 promised families who were loyal to the state "a League and Labor" of land, 4606 acres; single men over the age of 17 were promised a third of a league, 1,476 acres. An act of December 21, 1837, awarded 640 acres to veterans who had participated in various engagements during the Texas War of Independence such as the Goliad campaigns of 1835 and 1836, and the battle of the Alamo.¹⁵

Initially, veterans of the War of 1812 who served in the regular army received bounties of 160 acres; an amount that was raised to 320 acres toward the end of the war (Hickey 1989, 243-44). About 29,000 of the 60,000 regulars took them up. There were, however, several problems with the

¹⁵ See Land Grants in *The Handbook of Texas Online*; <http://www.tsha.utexas.edu/handbook/online/articles/LL/mp11.html>, accessed 6/28/2007.

grants from the point of view of the veterans. First, the grants were located in a few restricted western areas, in part because it was hoped that the veterans would be a buffer against Native Americans. This was also true of the Revolutionary warrants, but many of the Revolutionary grants were in highly productive farmland, such as those in South Central Ohio. One area in Michigan reserved for veterans of the War of 1812 was replaced when it was found to be too swampy, although some of the other areas reserved for the veterans of 1812 did contain good farmland. The warrants, moreover, could not be sold to a broker, at least not without some legal maneuvering; they were not "assignable" in the language of the time. Although veterans and their agents found various ways around this limitation, it undoubtedly raised the cost of selling the warrants. An even more important factor, however, was simply that the veterans who had served in state militias were not entitled to grants. State governments rewarded many veterans who had served in militias during the Revolution. However, this was no longer possible because the states had ceded their western lands to the federal government.

It was undoubtedly the officers of the War of 1812 who felt most aggrieved. As we noted, the officers of the Revolutionary War received handsome land grants. In 1811, however, when bounties were first offered to soldiers for the War of 1812, there was nothing extra for the officers. Further attempts to reward the officers were made during the war and in 1817, but nothing came of them (Gates 1968, 262 fn. 37). As Gates suggests, Congress was probably reacting to the perception that great estates had arisen as a result of the huge grants made at the close of the Revolution. Congress also may have been reacting to the related perception that the land grants had produced excessive speculation in western lands, always a political liability.

There was also the perception that the fighting was not very intense. In a memorial to Congress in 1831 a group of War of 1812 officers pointed out the Revolutionary War precedents and

asked for similar treatment. They also pointed out that U.S. citizens living in Canada in 1812 and who had volunteered to serve with the American forces had received land bounties, and in that case the officers had been given larger bounties than the enlisted men – up to 960 acres for a colonel. The officers conceded that they may not have suffered as much as the officers of the Revolutionary armies, but they insisted that they had accomplished as much. "The [officers in the War of 1812] ... exhibited the same valor and love of liberty [as the officers in the Revolution], and, although they may not as a body have suffered as much, yet their zeal was not less, nor their exertions less meritorious or successful" (U.S. House 1831). One wonders, of course, whether Congress found the last part of their claim persuasive. Unlike their brethren in the Revolution and the Mexican War, the veterans of the War of 1812 had conquered little land for the United States.

No legislation responding to these complaints was forthcoming, however, until the land grants given to the veterans of the Mexican-American war (1847-48) ignited a campaign to secure additional land for the veterans of 1812. The "Ten Regiments Act" of 1847 designed to fill the ranks for the Mexican War provided more valuable benefits than had the 1812 grants: a warrant for 160 acres of land anywhere in the public domain for every regular and volunteer who joined the war against Mexico and served for 12 months or until the end of the war. The warrants, moreover, could be sold to a broker for cash if the veteran did not want to settle the land; they were assignable. According to Oberly "After the act's passage and the president's signature, army recruiters busily signed up men on the basis of the new bounty (1990, 11)."

The passage of the Ten Regiments Act reminded the surviving veterans of the War of 1812 of their old grievances. They demanded parity with the veterans of the Mexican War, and Congress obliged soon after the war with Mexico ended. This is not surprising. The veterans of 1812 had a strong claim based on equity, and granting it was easy given the immense booty, including

California, taken from Mexico. The Bounty Land Act of 1850 provided veterans of the War of 1812, of various Indian Wars, and of various other fights with up to 160 acres depending on length of service. The warrants, however, could not be sold to brokers, a nod to the opponents of "speculators." It was implausible, however, that the veterans of the War of 1812, many now in their sixties, would move West to take up farming or even that they would go through the laborious process of taking possession of and selling their land. The veterans wanted assignable bounties.

The brokers were also an important voice for liberalization of the Bounty Land Act because they were running out of warrants issued under the Ten Regiments Act. Congress responded with what was popularly known as the Assignment Bill of 1852, which allowed veterans of the War of 1812 to sell their land warrants through brokers. The 1850 and 1852 Acts required one month of service for 40 acres and nine months for the full 160 acres.

The fight to secure bounties for the veterans of the War of 1812 was led by the United Brethren of the War of 1812. It was headed by Joel B. Sutherland, a physician in the War of 1812, a successful politician in the postwar era, and as it proved, a skillful champion of the veterans. In 1855 the veterans held a march on the White House holding aloft a banner bearing the slogan under which they had gone to war in 1812: "Free Trade and Sailor's Rights." President Pierce met with a delegation, but did not commit himself to their demands (Oberly 1990, 35-36). Further pressure, however, produced the Old Soldiers Act of 1855, which gave 160 acres to any soldier, whether in the regular army or the militia, who had served at least two weeks in the War of 1812. This was the high point for the United Brethren, which never held another national convention.

We have made some preliminary estimates, shown in Figure 5, of the amount of land given to the veterans of the Revolution, the War of 1812, and the Mexican War. These estimates are subject to a wide margin of error. Nevertheless, we believe that the impression created by the chart is

probably broadly correct. The details of how we made the estimates are in the appendix. The bar for the War of 1812 is divided into two parts. The lower part shows the amount awarded during the war. The upper part shows the amount awarded to the veterans of the War of 1812 after the Mexican War. The veterans of the War of 1812, evidently, received less initially, but caught up many years later. Without the latter grants the veterans of the War of 1812 would have done less well in terms of total land received, than the veterans of the Revolution.¹⁶

We have also made some back-of-the envelope estimates of the real value to the veterans of the land grants. These estimates are subject to larger margins of error than the estimates of the total amount of land received because we lack data on exactly when veterans disposed of their land, how much they were paid for it, and what they were charged in transaction costs. Nevertheless, we made some estimates by assuming various schedules according to which veterans disposed of their land, and by using some available information on prices. The details of our calculation are in the appendix. These estimates show that on average the veterans of the Revolution received the equivalent \$28 in 1860 dollars in land warrants, veterans of the War of 1812 received \$14, and veterans of the Mexican War received \$137. These estimates again suggest that the veterans of the War of 1812 did less well than either the veterans of the Revolution or the Mexican War.

6. Service Pensions: The War of 1812 and the Mexican War

Sutherland, after his success with the land grants, began to lobby for a non-means-tested cash pension. He did not live, however, to see it finally awarded in 1871, 56 years after the end of the

¹⁶ Veterans of subsequent wars also received help in buying land, but it appears that the Mexican War was the last in which land grants were a prominent component of benefits. Under the Homestead Act (1862) land could be acquired by paying \$1.25 per acre or by farming the land for 5 years. Veterans could substitute military service for residence down to one year. Veterans of the Civil War also received the right to buy supplemental amounts of land. Many veterans probably made use of their military service in this way. However, the lack of transferability of the benefit limited its value to most soldiers.

war. By this time the ranks of the veterans had been greatly thinned, and hence the potential cost of the program was relatively low. Nevertheless, there was some strong opposition to a non-means-tested pension based on the budget. Senator John Sherman, the Chair of the Committee on Finance, warned that a bill that pensioned all veterans of the War of 1812 would be too expensive; he wanted it restricted to indigent veterans. Sherman mentioned the precedent set by the law of 1832 but dismissed it on the grounds that the veterans of the Revolution had been paid initially with worthless paper.¹⁷ Sherman complained, moreover, that the Revolutionary War pension had produced pension marriages, and wanted the War of 1812 pensions limited to widows who had been married to soldiers at the time of the war. To add all of the widows would add \$5 million to annual expenditures.¹⁸ When the law was finally enacted a pension was granted to all soldiers and sailors who had served 60 days – with no requirement that the veterans be in reduced circumstances – but it did limit benefits to widows who had been married to a veteran before the treaty of peace was signed and who had not remarried.

In 1878 the service pension for the War of 1812 was liberalized: only two weeks of service in the war were required. This change produced a small increase of about 1,200 in the number of survivors on the rolls (Table A1 continued, column 6). There was at the time, we should no longer be surprised, a surplus in the federal budget. Indeed, the federal budget had been in surplus in every year after the Civil War. This was consistent with the policy of deflating prices and returning to the gold standard at the prewar par. Running a surplus was a way of retiring the greenbacks and the federal debt. By the late 1870s the dollar was close to the prewar par, and return to the gold standard

¹⁷ There was considerable inflation during the War of 1812, but it was of a lower order of magnitude than the Revolutionary War inflation. The cost of living seems to have risen about 30 percent between 1812 and 1814, before subsiding to its prewar level in 1815-1817 (*Historical Statistics* 2006, series Cc2).

¹⁸ "Forty-First Congress; Third Session," *New York Times*, Feb 4, 1871, p. 2. Federal expenditures in 1871 were \$292 million (*Historical Statistics* 2006, series Ea585).

was in sight. The monetary case for maintaining a surplus was less compelling, and therefore the case for spending more on the veterans was more attractive.

Why did the veterans of the War of 1812 and their heirs do less well than did the veterans of the Revolution? One factor, clearly, was the state of the treasury when the veterans of the War of 1812 came due for their pensions. The veterans of the Revolution in "reduced circumstances" won lifetime pensions, as we noted above, 35 years after the end of the Revolution, and a non-means-tested 10 years after that. With the same lags, the veterans of the War of 1812 would have been "due" for their means-tested pension in 1850 and due for their non-means-tested pension in 1860. The timing was unfortunate. In 1850 the veterans of the War of 1812 were in the midst of their fight for land bounties on a par with the veterans of the Mexican War. Indeed, the land bounties that they won, since they were easily convertible into cash, were a substitute for a cash pension. The amounts they actually received from the land grants were small compared with a cash pension at the Revolutionary rate. However, this might not have been obvious at the time: The rapid distribution of the public lands soon depressed the value of federal lands. The second date, 1860, falls just before the Civil War. Congress did not put all other projects aside simply because the nation was at war. Nevertheless, pensioning the veterans of the War of 1812 during the Civil War probably appeared injudicious in light of the rapid increase in the number of wounded veterans, widows and orphans on the pension rolls and the inflation and large deficits that marked the Civil War years. The number of pensions compensating for death and disability rose from 7,991 in 1860 to 154,477 in 1867 (Table A1 columns 2, 3); the deficit rose from \$7 million in 1860 to close to a billion in 1865 (*Historical Statistics* 2006, series Ea586); and the price level doubled. So part of the explanation for why the veterans of the War of 1812 received less than the veterans of the Revolution was simply bad timing:

Their pension obligations fell due when the federal treasury was stretched to the limit by the Civil War.

There may have been something more at work: the perception that American arms had done badly in the War of 1812. Perhaps, as mentioned in our discussion of the land grants, this group of veterans did not deserve as large a "gratuity" as the veterans of more successful wars. It is hard to prove that the lack of success of American arms contributed to the delay in the awarding of the service pension. Few politicians would have admitted to this concern even if it had consciously or unconsciously influenced their thinking. However, it was from the start one of the most controversial wars in American history. The Federalists, the dominant party in New England, and with sizable groups of supporters in the South and West, opposed the war at every turn. Donald Hickey writes that in Congress the Federalists "unanimously opposed the declaration of war in June of 1812, and thereafter they voted against almost every proposal to raise men or money, to foster privateering, or to restrict trade with the enemy" (Hickey 1989, 255). To be sure, once the war was over, many Americans adopted the view that the war had been a great moral victory, even if the treaty had restored the status quo antebellum. The Federalists party disappeared as a result of its opposition to the war. Andrew Jackson and William Henry Harrison parlayed wartime victories into the Presidency. Nevertheless, it is possible that some remaining bitterness may have influenced the treatment of the veterans.

One piece of suggestive evidence is that the successful fight for land bounties in the 1850s was accompanied by an effort to burnish the image of the war. In 1847, just as the Mexican War began, Congressman Charles J. Ingersoll, who proved to be a strong ally of the veterans, published a two-volume revisionist history of the War of 1812. The Ingersoll volumes, soon followed by others along the same lines, argued that the army and navy had fought praiseworthy campaigns and

accomplished a great deal for the country (Oberly 1990, 30). In the end we probably will never know for certain that the controversial nature of the war and its ambiguous conclusion slowed the awarding of service pensions to the veterans of the War of 1812. But we cannot rule out the conclusion reached by the *U.S. President's Commission on Veterans' Benefits* (1956, 66) that one factor was that "There was little land fighting during the war, not many men were engaged in any one battle, and it was felt that the army did not accomplish much."

The veterans of the Mexican War turned to the National Association of Mexican War Veterans to lobby for their pensions.¹⁹ Its founder and leader was Alexander Kenaday, an eccentric and sometimes radical populist labor leader from California. The principal demand was for the same pension, \$8.00 per month, that veterans of the Revolution and the War of 1812 had gotten. After continual lobbying, this pension was granted in 1887 for veterans aged 62 or more. From a fiscal point of view it was a favorable period for awarding a pension. The budget had been in surplus for several years; in 1886 the surplus was close to 30 percent of revenues. Thus, veterans of the Mexican War had to wait a shorter period (39 years) for their pension than did the veterans of the War of 1812 (56 years). The wait for veterans of the Mexican War, however, was comparable to that experienced by the veterans of the Revolution: 35 years for a means-tested pension and 45 years for a non-means-tested pension.

The awarding of the pension created a period of confusion for Kenaday, who was also the editor of the organization's newspaper and, not incidentally, a prominent pension agent. He soon turned, however, to the next logical step: an increase in the pension. An increase to \$12 per month was finally achieved in 1903. The pensioners got their raise, it should not surprise us, during a period of surplus. From 1894 through 1899 the budget was always in a deficit averaging

¹⁹ The next two paragraphs are based on Davies (1948).

-10.25 percent per year; from 1900 through 1903 the budget was in a surplus averaging +10.74 percent per year (*Historical Statistics* 2006, series Ea584, Ea585).

Thus it appears that the major determinants of the old-age pension for the veterans of the Mexican War were what the veterans of earlier wars had received and the state of the federal budget. Public attitudes toward the war, however, did play a role in the timing. The Mexican War, although highly successful from a military point of view and highly profitable in terms of the wealth added to the United States, had aroused opposition from the start. Many Northerners saw it as an imperialist war undertaken by a southern president (James K. Polk) designed to add new slave territories to the United States. Ulysses Grant in a famous passage from his *Memoirs* recalled his opposition to the annexation of Texas and to the Mexican War which he regarded as "one of the most unjust ever waged by a stronger against a weaker nation" (Grant 1885, vol. 1, 53). Many of the soldiers who had taken part, moreover, were southerners who then fought for the Confederacy during the Civil War. Robert E. Lee was the most prominent example. According to Wallace E. Davies (1948, 226-228), early efforts to secure a pension for the Mexican War veterans failed during Republican administrations "because of apprehensions that such a measure might benefit many ex-Confederates." It was not until 1887 when the South-friendly Democrats were in power that the Mexican War veterans secured their service pension, and even then some ex-Confederates were disqualified.

7. Service Pensions: The Civil War²⁰

²⁰ We discuss only the pensions for Union veterans. Confederate veterans did not receive federal pensions. The Confederates, however, did receive pensions from southern states. These are described in Ratchford and Heise (1938). Short (2001) explores the (small) effect of these pensions on the retirement behavior of Confederate veterans.

The Civil War pension proved highly contentious. The reason was not that the individual pension was significantly larger than the earlier pensions. Controversy on that issue, as we have seen, was minimized by keeping the nominal pension constant. Economists looking for sticky nominal prices would have to look hard to find a better example. As can be seen in Figure 2, the post-Civil War deflation raised the purchasing power of the standard \$8 per month pension, measured with the consumer price index, until at the end of the century it was on a par with the level in the late antebellum period.

In terms of wage units the standard pension, as shown by the lower line in Figure 2, was worth less in the postbellum era. In 1818, to put it somewhat differently, the standard annual pension could hire a farm laborer for 10 months; but by 1899 it could hire a farm laborer for only 7 months.²¹ Deflating the pension by the wage of unskilled labor is relevant to the actual pattern of consumption of many veterans. As the veteran aged he spent more of his income, in many cases, on services such as nursing care and less on goods. The Civil War pension system was often criticized because it led to corrupt "pension marriages." An elderly veteran would marry a young woman simply so that she would be eligible for a pension. One defense offered for the pension marriages was that they were really part of an exchange that benefited the veteran. The veteran received nursing care from a young woman for which the veteran was unable to pay out of his current income (because it was fixed in nominal terms and wages had risen), and in return the young woman entered into a pension marriage and received the pension after the veteran died.

Rather than the amount per veteran, the real sources of contention were the large number of veterans who received pensions, which meant that transfers to veterans materially affected taxes, and the disparity between the North and the South. As shown in Table 1 Union forces amounted to 6.84

²¹ The monthly earnings with board for farm laborers is from (*Historical Statistics* 2006, series Bc 4234-4243).

percent of the 1861 population. This percentage meant that the cost of the pensions was visible to the average taxpayer. The federal government, moreover, was financed to a substantial extent by tariffs. Southerners, therefore, saw themselves as twice abused.²² First they paid high tariffs on imported goods, a tariff that protected northern industries from competition, but made it harder for southerners to export cotton and other cash crops. Then the proceeds of the tariff were distributed to union veterans and their families. In 1895, for example, tariffs accounted for 47 percent of total revenues; and pensions (mainly Civil War pensions) accounted for 40 percent of total federal expenditures (U.S. Bureau of the Census 1975, series Y353, Y352, Y457, and Y463).

The legislation providing pensions for the Civil War veterans evolved along much the same lines as the legislation providing pensions of the veterans of earlier wars. A general law of 1862 provided a pension at the rate of \$8 to \$30 per month (depending on rank) for totally disabled soldiers, or to the widows, orphans, or mothers of soldiers killed in battle. Subsequent legislation refined the table of benefits, creating specific benefits for a long list of disabilities.

Two pieces of legislation were crucial to the postwar expansion of the Civil War pension: the Arrears Act of 1879, and the Dependent Pensions Act of 1890. The Arrears Act became law in January 1879. Many soldiers had been placed on the rolls and started receiving benefits from dates well after the end of the war. There was, as many veterans and their advocates pointed out, a potential inequity here. A soldier who had shown great courage in battle might be receiving less than another soldier with an inferior military record simply because the first soldier had been slow to apply for a pension out of pride or lack of understanding. The Arrears Act would make good this inequity by paying any soldier who had qualified for a pension an additional amount to cover what they were due from the time of their discharge to the beginning of their pension. The Arrears Act,

²² Only Union veterans, with one exception, received federal pensions. The exception was the last surviving Confederate veteran who was pardoned and given a lifetime Federal pension – at age 105.

moreover, applied not only to those currently on the rolls but also to those who would be added in the future.

There was some uncertainty about the cost of the Arrears Act, and the plausibility of a relatively low estimate may have aided passage of the act. At a cabinet meeting at which the bill, having already passed both houses, was discussed, the Secretary of the Treasury, John Sherman, offered a figure of \$150 million, while Carl Schurz, the Secretary of the Interior, offered a figure of \$50 million based on an estimate by the Pension Office. President Hayes expressed some concern about the cost of the additional pensions, but signed the bill.²³ The cost of the Arrears Act eventually reached \$200 million (U.S. President's Commission 1956, 81).

Skocpol (1993, 98-99) has argued that the Arrears Act was not as closely associated with a bulging surplus in the federal treasury as was the law of 1890 (discussed below). Nevertheless, some account should be taken of the budget. The budget was in surplus, had been for a number of years. The surplus, moreover, was needed no longer to deflate the price level because the United States had returned to gold at the prewar par. Although we shouldn't make too much of the coincidence in timing, the return to the gold standard was accomplished on January 1, 1879 and the Arrears Act was passed by Congress on January 25.

The Dependent Pensions Act of 1890 clearly owed its existence to large budget surpluses. The law pensioned all veterans who had been honorably discharged and who now suffered from a disability that prevented them from performing manual labor.²⁴ There was no requirement, as there had been under previous laws, that the disability be the result of wounds suffered during the war. The law was not technically a service pension. It would not be until 1907 that a pure service pension

²³ *New York Times*, "Yesterday's Cabinet Session," January 22, 1879, p. 1

²⁴ The infirmity could not be the result of the veteran's "own vicious habits."

became law. The Pension Office, however, was instructed to grant a pension to all veterans who were 65 or older unless they were unusually vigorous, so in effect the law of 1890 was close to a service pension. The notion that the law of 1890 amounted to a service pension has been widely accepted (Costa 1995, 300-301). Figure 6 shows that the spending that resulted from this law (and from previous liberalizations) was sufficient to erase the surpluses that had persisted in the second half of the 1880s.

The close connection between the bulging surpluses in the federal treasury, which were produced by the tariff, and the liberalization of the pension in the early 1890s was no secret. Republican politicians made their support for generous pensions and high tariffs clear. As the Republican Party platform put it in 1888:

The legislation of Congress should conform to the pledges made by a loyal people and be so enlarged and extended as to provide against the possibility that any man who honorably wore the Federal uniform shall become the inmate of an almshouse, or dependent upon private charity. In the presence of an overflowing treasury it would be a public scandal to do less for those whose valorous service preserved the government.

The next, and last, plank in the platform invited "...all workingmen, whose prosperity is seriously threatened by the free-trade policy of the present Administration," to vote for the Republican candidate.²⁵

After the election President Harrison followed through on Republican promises. His first appointment to head the Pension Bureau was James Tanner a legless Union veteran who soon got into trouble. In one of his bombastic speeches, Tanner promised that as Pension Commissioner he would raise the pensions of veterans receiving only a pittance – often less than a dollar a week for small disabilities – even if his decisions raised from some lips the prayer: "God help the surplus"

²⁵ Republican Platform 1888, American Presidency Project, <http://www.presidency.ucsb.edu/index.php>. The Democratic platform noted that the Cleveland Administration had paid out more in pensions than any previous administration, but made it clear that the Democrats intended to cut the tariff and other Civil War taxes.

(McMurry 1926, 345-347). Green B. Raum, a staunch but more discreet friend of the veteran, soon replaced Tanner.

The erosion of the surplus may have affected the next major piece of legislation. When legislation was passed in 1892 to provide pensions for veterans of the Indian Wars the youngest veterans who became eligible were veterans of the Seminole wars between 1832 and 1842. In other words, the minimum time that veterans of the Indian Wars had to wait was 50 years (1842 – 1892): Veterans of later engagements with Native Americans were not yet old enough for a pension.

The association between budget surpluses and veterans' pensions that we have identified for the 19th century is less surprising than it would be in the twentieth century because surpluses were common. Indeed, between 1800 and 1899 the federal budget was in surplus in 69 out of 100 years, and in most of those years the surplus was fairly large. Nevertheless, one can show that there was a strong association between surpluses and pension legislation. Perhaps the simplest calculation that illustrates the association between budgets and pension legislation is the following. If the chance of a surplus was .69 the probability that all nine major pieces of pension legislation that we have identified (Table 2) would have fallen by chance in surplus years was only about 3.5 percent ($.69^9$). If we confine our attention to periods in which there was a run of years with surpluses an even clearer association between surpluses and pension laws emerges. The probability that by chance all 9 pieces of legislation would have fallen into a year in which the budget was in surplus and had been in surplus in the two previous years was only .20 percent ($.50^9$).

A more formal method of making the same point is to estimate a regression in which the dependent variable is a binary variable that takes the value one in years when legislation expanding benefits for veterans was passed and the independent variables are current and lagged values of the surplus in the federal budget measured as a percentage of revenues. We ran several regressions of

this sort. We started with both the surplus and the first lagged value of the surplus. We dropped the former because it was not significant, although it was signed correctly. The result was the following.

$$\text{Legislation} = -2.21 + .038*\text{Surplus}(-1) \quad (\text{McFadden } R^2 = .20) \\ (2.36)$$

This was a probit regression. The number in parentheses is the z-statistic, which indicates that Surplus(-1) was significant at the .02 level. Adding additional lags of the surplus did not yield significant variables or improve the fit. The results were similar when logit or extreme value methods were used to estimate the equation. Evidently, as both the narratives and the equations suggests there was a strong association between the condition of the federal treasury and pension legislation for veterans.

8. Some Tentative Generalizations

Veterans' benefits varied substantially from war to war in the nineteenth century and were usually the subject of bitter controversy. Veterans of the War of 1812 received less than veterans of either the Revolution or the Mexican War. Union veterans of the Civil War did well compared with veterans of earlier wars, but only after a contentious political debate.

Several factors account for the differences across wars. Veterans' benefits evolved, first of all, along a path-dependent process. The precedent set by past policies shaped what was considered a fair reward for service. Veterans of a given war would point to how veterans of previous wars were treated and demand equity. Veterans who served in the militia would point to veterans who had served in the regular army and demand equity. Privates and noncommissioned officers would point

to the awards made to commissioned officers and demand equity. Opponents of generous benefits pointed to what they regarded as abuses of previous systems and demanded greater economy.

We would like to believe that feelings toward veterans were independent of the war they fought. There are some suggestions in the historical record, however, that the politics of a war influenced how and when its veterans were rewarded. This is an inherently difficult proposition to prove because the it is not the sort of thing that people involved in the political process are likely to talk about. Nevertheless, we can point to several possible examples: (1) In the years immediately following the Revolutionary War, veterans of the militia were considered the real heroes, and veterans of the Continental Army were sometimes perceived as lesser soldiers, as mere mercenaries. With the rise of the image of the suffering soldier, associated especially with Valley Forge, however, pressure built for cash benefits for veterans of the Continental Army. (2) Attempts were made to add veterans of campaigns carried out against Native Americans in the wake of the Revolution to the service pension rolls, but these efforts ran into opposition based partly on the contention that these were wars carried out for private gain. (3) The veterans of the War of 1812 received less in cash and land than either the veterans of the Revolution or the veterans of the Mexican War. There were a number of reasons, but one may have been that the war itself was politically divisive, and went badly for the United States. (4) The Mexican War was much more successful from a military point of view than the War of 1812. Nevertheless, in the 1880s the veterans of the Mexican War were frustrated on some occasions in their campaign for a service pension for political reasons. Republican Congresses were unsympathetic to what they regarded as a southern war undertaken by a southern president to expand slavery, and fought by men who later served in the Confederate military. (5) Confederate veterans, of course, received nothing from the federal government. Even pensioners from antebellum

wars who lived in the South during the Civil War had to prove their loyalty during the Civil War to remain on the rolls (U.S. Senate 1867).

We would also like to believe that veterans' benefits are independent of fiscal politics. After all, since it's founding the United States has been a wealthy nation compared to most other nations, and has always been in a position to reward veterans generously whatever the current balance of taxes and spending. Nevertheless, in case after case, the state of the treasury was an important determinant of the level of benefits: When federal coffers were full, additional benefits were provided; when coffers were empty, claims for additional benefits were rejected.

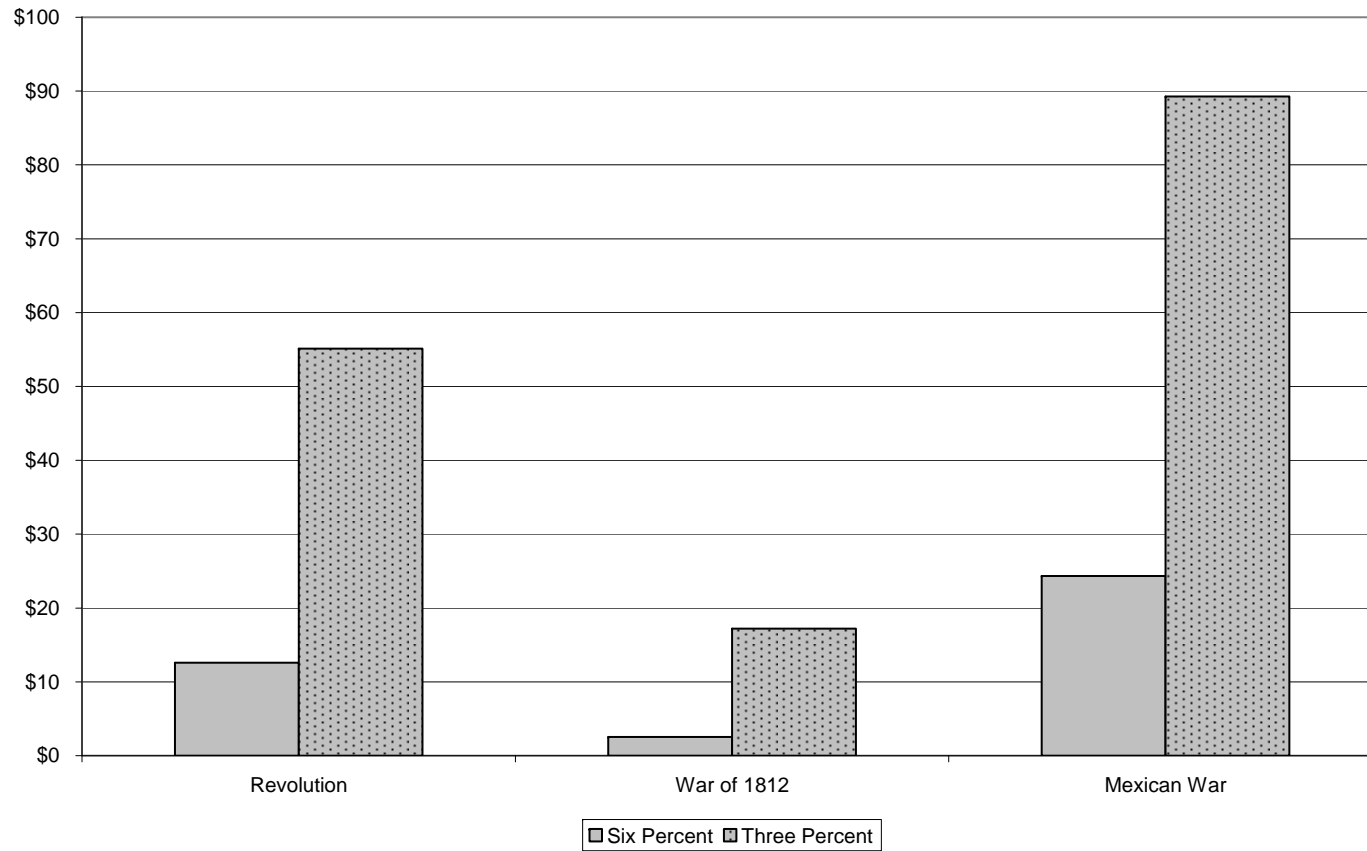
Here are some examples. (1) The officers of the Revolutionary Army asked for half-pay for life, the practice in the British army. The American officers, however, were forced to settle for bonds worth five year's pay at face value. Under the Confederation, moreover, Congress failed to pay the interest on the bonds, and many former officers parted with their bonds at a fraction of their face value. (2) In 1818, however, after a two-year run of treasury surpluses, The Continental Army's officers and common soldiers in "reduced circumstances" received a lifetime pension. In 1828 and in 1832, after another run of surpluses that began in 1825, benefits were awarded to veterans without regard to their economic status, and in 1836, after the last and largest of these surpluses; widows of ordinary soldiers were pensioned, even when the marriage took place after the war. (3) The veterans of the War of 1812 were not successful in winning postwar rewards until the Mexican War created the precedent for a generous land bounty and, not incidentally, the means – the vast lands won from Mexico – for awarding it. The veterans of the War of 1812 eventually qualified for a cash service pension in 1871 in the middle of a run of double-digit surpluses. Even in 1871, moreover, 56 years after the end of the war, there was some sentiment for means-testing the pension to save expenses. (4) The Arrears Act of 1879, which increased the incentives for Civil War veterans to apply for pensions,

also was passed during a period of surpluses, and when the surpluses could no longer be defended on the grounds that they were needed to deflate prices and restore the gold standard. (5) The Dependent Pensions Act of 1890 was passed during a period of large treasury surpluses, and the connection with the budget was explicit. The Republicans promised to support a high tariff and to expand pension benefits.

One might hope that decisions on veterans' benefits would be above politics. In the nineteenth-century, at least, the opposite was true. Affection for the veterans as individuals often took second place to the politics of war and to current budget realities.

Figure 1

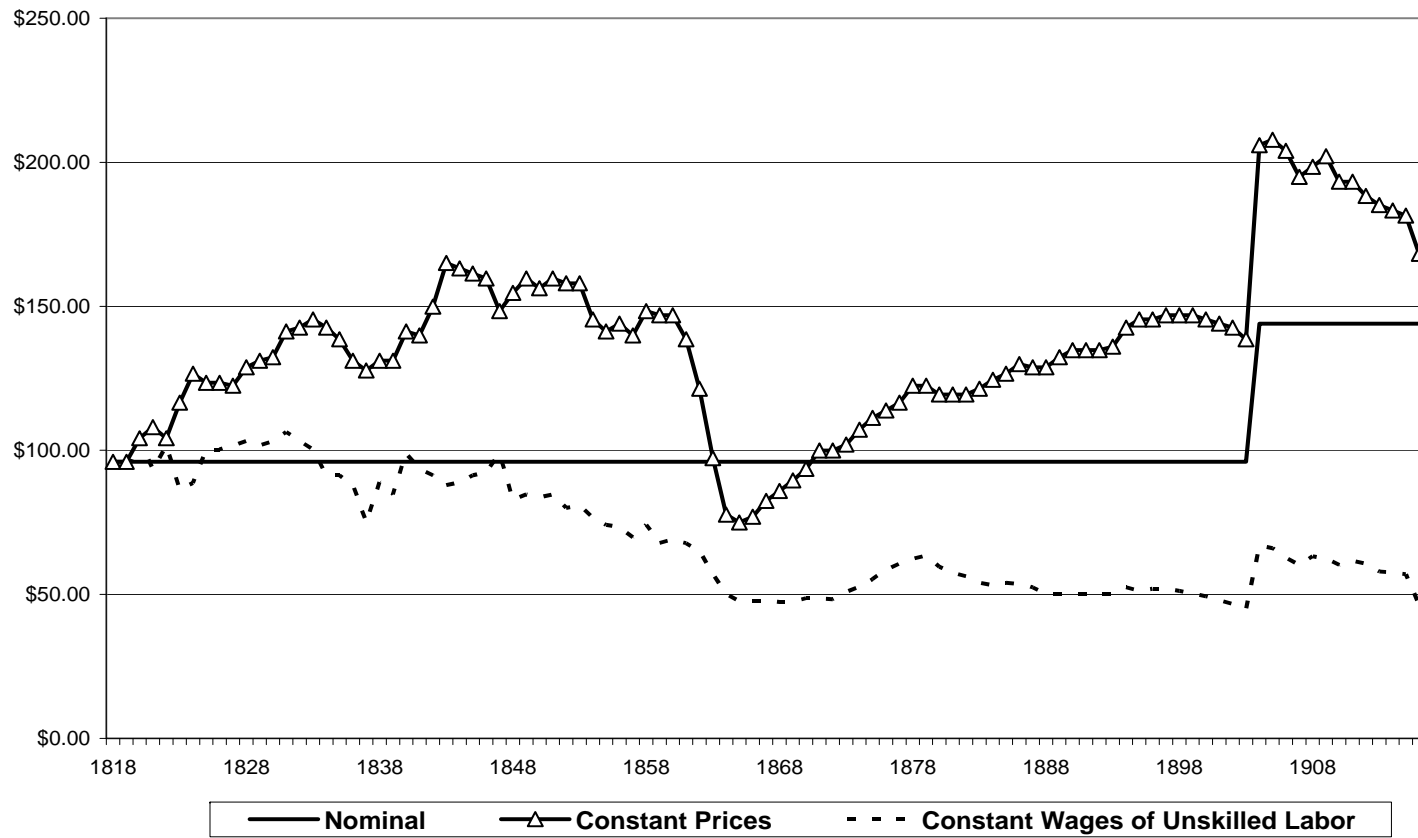
Present Value of Service Pensions (1860 \$s)



Source: Appendix Table A2.

Figure 2

Standard Annual Pension, Non-Commissioned Officers and Privates, 1818-1916



Source: Glasson (1918, *passim*) and *Historical Statistics* (2006, series Cc2, Ba4218).

Figure 3

Service Pensions for Veterans of the Revolution, 1816-1824



Source: Appendix Table A2 and (*Historical Statistics 2006*, series Ea584, Ea585).

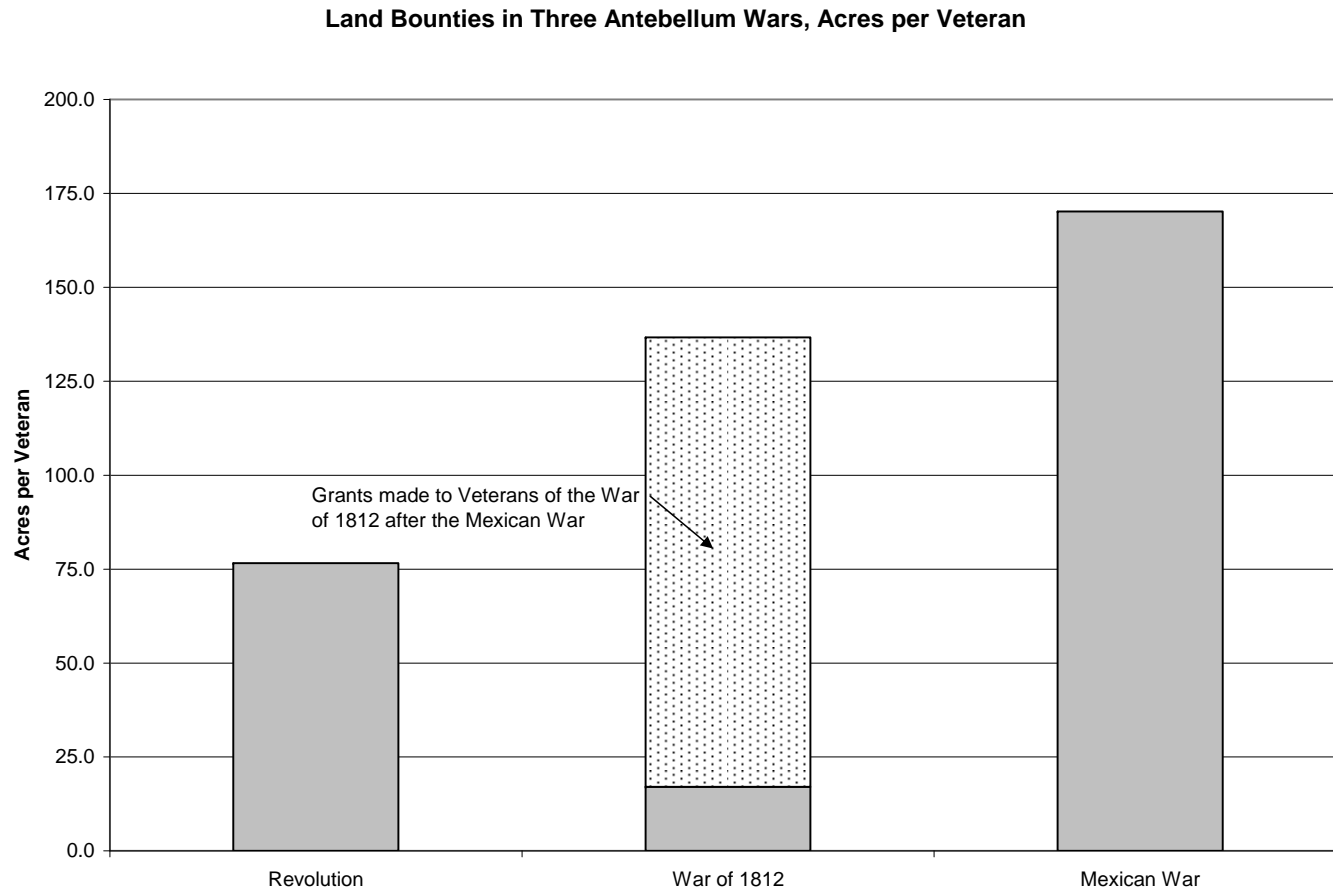
Figure 4

Service Pensions for Veterans of the Revolution, 1830-1839



Source: Appendix Table A2, (U.S. Senate 1877), and (*Historical Statistics 2006*, series Ea584, Ea585).

Figure 5



Sources: Appendix Table A3.

Figure 6

Service Pensions for Veterans of the Civil War and the Surplus, 1885-1895



Sources: Appendix Table A2 and (*Historical Statistics 2006*, series Ea584, Ea5853).

Table 1. Basic War Statistics				
War	American Revolution	War of 1812	Mexican War	Civil War (Union)
(1) Start	1775	1812	1846	1861
(2) End	1783	1815	1849	1865
(3) Number Serving	217,000 ^a	286,730	78,718	2,213,363
(4) Number Serving as a Percent of the Population	8.81	3.71	0.37	6.84 ^b
(5) Battle Deaths per 1000	20.4	7.9	22.0	63.4
(6) Casualties per 1000	n.a.	n.a.	221.5	292.0
(7) Start of a Service Pension	1818	1871	1887	1890
(8) Service pensions (per capita, \$1860, discounted at 6%)	\$12.59	\$2.52	\$24.35	\$104.87
^a The exact number is not known. This is the midpoint of figures frequently used by the Department of Defense. ^b The figure is 10.09 percent if the 1,050,000 estimated Confederate soldiers is added. Sources by Row. (1-6): <i>Historical Statistics</i> 2006, Table Ed1-5. (7): See narrative sections 3-6. (8): Authors' calculation based on Table A2 and <i>Historical Statistics</i> 2006, Series Ed327.				

Table 2. Pension Legislation in the Nineteenth Century

Year	Purpose of legislation
1818	Service Pensions for veterans who served in the Continental Army and who were in "reduced circumstances."
1828	Full pay for life granted to certain officers and to noncommissioned officers and privates who served in the Continental Army until the end of the war.
1832	Service Pensions for veterans of the Revolution who served in the Continental Army or in a militia, whether or not in reduced circumstances.
1836	Pensions for widows of veterans of the Revolution
1855	Land grants for veterans of the War of 1812.
1871	Service Pensions for veterans of the War of 1812
1879	The Arrears Act awarded pensioners a lump sum to cover the time between the end of the war and the time when they qualified for a pension.
1887	Service pensions for veterans of the Mexican War
1890	Service pensions for veterans of the Civil War

Source: The narrative in sections 3-7.

References

Black, John D. and Charles D. Hyson. 1944. "Postwar Soldier Settlement." *The Quarterly Journal of Economics*, Vol. 59, No. 1 (Nov.): 1-35.

Bockstruck, Lloyd DeWitt. 1996. *Revolutionary War Bounty Land Grants: Awarded by State Governments*. Baltimore, MD: Genealogical Pub. Co.

_____. 2002. *Naval Pensioners of the United States, 1800-1851*. Baltimore, MD: Genealogical Pub. Co.

Bodenger, Robert George. 1971. *Soldiers' Bonuses: A History of Veterans' Benefits in the United States, 1776-1967*, Ph.D. dissertation, Pennsylvania State University.

Clark, Robert L., Lee A. Craig, and Jack W. Wilson. 2003. *A History of Public Sector Pensions in the United States*. Philadelphia: University of Pennsylvania Press.

Costa, Dora L. 1995. "Pensions and Retirement: Evidence from Union Army Veterans." *The Quarterly Journal of Economics*, Vol. 110, No. 2 (May): 297-319.

_____. 1998. *The Evolution of retirement: An American Economic History, 1880-1990*. Chicago: The University of Chicago Press.

Davies, Wallace E. 1948. "The Mexican War Veterans as an Organized Group." *The Mississippi Valley Historical Review*, Vol. 35, No. 2. (September): 221-238.

Donaldson, Thomas. 1884. *The Public Domain, Its History and Statistics*. Washington: GPO. Issued also in the Congressional series as House misc. doc. 45, pt. 4, 47th Cong., 2d sess.

Farnam, Henry W. 1938. *Chapters in the History of Social Legislation in the United States to 1860*. Washington, D.C: Carnegie Institution of Washington.

Ferguson, E. James. 1954. "Speculation in the Revolutionary Debt: The Ownership of Public Securities in Maryland, 1790." *The Journal of Economic History*, Vol. 14, No. 1 (Winter): 35-45.

Flexner, James Thomas. 1984 [1974]. *Washington: the Indispensable Man*. New York: Signet, New American Library.

Gates, Paul Wallace. 1968. *History of Public Land Law Development*. Washington: U.S. Govt. Print. Off.

Glasson, William H. 1918. *Federal Military Pensions in the United States*. Edited by David Kinley. New York: Oxford University Press, American Branch.

Grant, U.S. 1885. *Personal Memoirs of U.S. Grant*, 2 vols. New York: Charles L. Webster and Company.

Grubb, Farley. 2005. "The Net Asset Position of the U.S. National Government, 1784-1802: Hamilton's Blessing or the Spoils of War?" NBER Working Paper No. 11868.

Hibbard, Benjamin Horace. 1965 [1924]. *A History of the Public Land Policies*. Madison and Milwaukee: The University of Wisconsin Press.

Hickey, Donald R. 1989. *The War of 1812: A Forgotten Conflict*. Urbana: University of Illinois Press.

Historical Statistics of the United States: Earliest Times to the Present, Millennial ed. 2006. Carter, Susan B., et al., editors in chief. Cambridge and New York: Cambridge University Press.

Kinley, David. 1918. "Editor's Preface." In William H. Glasson, *Federal Military Pensions in the United States*, pp. vii-x. New York: Oxford University Press, American Branch.

Kohn, Richard H. 1970. "The Inside History of the Newburgh Conspiracy: America and the Coup d'Etat." *The William and Mary Quarterly*, 3rd Ser., Vol. 27, No. 2 (Apr.): 187-220.

Lebergott, Stanley. 1985. "The Demand for Land: The United States, 1820-1860." *The Journal of Economic History*, Vol. 45, No. 2, The Tasks of Economic History (June): 181-212.

McConnell, Stuart Charles. 1992. *Glorious Contentment: the Grand Army of the Republic, 1865-1900*. Chapel Hill: University of North Carolina Press.

McMurry, Donald L. 1922. "The Political Significance of the Pension Question, 1885-1897." *The Mississippi Valley Historical Review*, Vol. 9, No. 1 (June): 19-36.

_____. 1926. "The Bureau of Pensions During the Administration of President Harrison." *The Mississippi Valley Historical Review*, Vol. 13, No. 3 (December): 343-364

Oberly, James W. 1990. *Sixty Million Acres: American Veterans and the Public Lands Before the Civil War*. Kent, Ohio: Kent State University Press.

O'Calaghan, Jerry. 1954. "The War Veteran and the Public Lands." *Agricultural History*, 28: 163-68.

Ratchford, B. U. and K.C. Heise. 1938. "Confederate Pensions." *Southern Economic Journal* 5 (October): 207-17.

Resch, John Phillips. 1999. *Suffering Soldiers: Revolutionary War Veterans, Moral Sentiment, and Political Culture in the Early Republic*. Amherst: University of Massachusetts Press.

Severo, Richard. 1989. *The Wages of War: When America's Soldiers Came Home - from Valley Forge to Vietnam*. New York: Simon and Schuster.

Short, Joanna Sandra. 2001. *The Retirement of the Rebels: Georgia Confederate Pensions and Retirement Behavior in the New South*. Ph.D. Dissertation, Indiana University.

Skeen, C. Edward. 1974. "The Newburgh Conspiracy Reconsidered (with a Rebuttal by Richard H. Kohn)" *The William and Mary Quarterly*, 3rd Ser., Vol. 31, No. 2 (Apr.): 273-298.

Skocpol, Theda. 1992. *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States*. Cambridge MA: Belknap Press of Harvard University Press.

_____. 1993. "America's First Social Security System: The Expansion of Benefits for Civil War Veterans." *Political Science Quarterly*, Vol. 108, No. 1 (Spring): 85-116.

Teipe, Emily J. 2002. *America's First Veterans and the Revolutionary War Pensions*. Lewiston, N.Y.: Edwin Mellen Press.

U.S. Bureau of the Census. 1975. *Historical Statistics of the United States, Colonial Times to 1970, Bicentennial Edition*. Washington, DC: Government Printing Office.

U.S. Department of Veterans Affairs. 2005. "America's Wars" Office of Public Affairs, Washington DC. <http://www1.va.gov/OPA/fact/docs/amwars.doc>, accessed May 17, 2006.

U.S. House. 1826. "Number of Land Warrants Issued to the Officers and Soldiers of the Revolution." 19th Congress, 1st Session, Publication No. 477.

_____. 1830. "Claims for Virginia Military Bounty Lands." 21st Congress, 1st Session, Publication No. 852.

_____. 1831. "Memorial of Sundry Officers of the United States' Army in the Late War, Praying for a Grant of Land in Consideration of their Services." 21st Congress, 2nd Session, H. Doc. 25.

_____. 1836. "Pensions to persons engaged in Indian Wars." 24th Congress, 1st Session, H. Rpt. 338.

U.S. President's Commission on Veterans' Pensions. 1956. *A Report on Veterans' Benefits in the United States, Staff Report No. I: The Historical Development of Veterans' Benefits in the United States*. Printed as U.S. House of Representatives, House Committee Print No. 244, 84th Cong., 2nd Sess.

_____. 1956. *Staff Report No. II: Veterans' Benefits Administered by the Department and Agencies of the Federal Government, Digest of Laws and Basic Statistics*. Printed as U.S. House of Representatives, House Committee Print No. 262, 84th Cong., 2nd Sess.

U.S. Senate. 1841. "Message from the President ... Showing the Number and Names of the Soldiers Enlisted during the late War, and Entitled to Bounty Land." 26th Congress, 2nd Session, S. Doc. 50.

_____. 1867. "Report of the Commissioner of Pensions."

_____. 1877. "Statement of Annual Appropriations and Expenditures for Army and Navy Pensions from March 4, 1789 to June 30, 1876." 45th Congress, 1st Session, S. Exec. Doc. 4.

Weber, Gustavus A., and Laurence F. Schmeckebier. 1934. *The Veterans' Administration: Its History, Activities and Organization*. Washington: The Brookings Institution.

Williamson, Samuel H. 2004. "An Index of the Wage of Unskilled Labor from 1774 to the Present." Economic History Services, December, 2004, URL: <http://www.eh.net/hmit/databases/unskilledwage/>. Accessed June 10, 2007.

Appendix: Nineteenth-Century Veterans' Statistics.

For the 1956 edition of *Historical Statistics* the Veterans Administration made estimates of the number of veterans receiving pensions by period of service (in the case of deceased veterans their descendants received the benefits) and the amount of expenditures. These estimates were carried over in the *Bicentennial* and *Millennial* editions. The estimates for the nineteenth century, however, were incomplete: There was no information on the number or dollar amount of pensions before 1866. More information was given for the postbellum, but no distinction was made between pensions for military personnel and pensions for their heirs. Some additional data was available in Glasson (1918) who presented separate estimates on number of pensions and their dollar value for veterans and heirs for the War of 1812, the Mexican War, the Indian Wars, and the Civil War. Glasson also did not present figures for the period prior to the Civil War. He also did not present figures for the period after 1866 for compensation, except at 5-year intervals, or for Revolutionary war pensions. No estimates were presented, moreover, in these sources of the amount of land given to veterans, an important source of benefits in the antebellum era. To fill these gaps we made annual estimates by period of service for the whole of the nineteenth century of the annual number and dollar value of pensions and of the total amount and total dollar value of land. Tables A1-A4 contain our estimates.

The Number of Pensions. Table A1, which is divided into A1 and A1 continued, shows the number of pensions annually from 1791 until 1900. These estimates were compiled mainly from the *Annual Reports* of the Commissioner of Pensions. Column (1) shows the total number of pensions on the rolls. Columns (2) and (3) show the number of pensions awarded as compensation to soldiers or sailors for disabilities incurred while in

service – these were known as "invalid pensions" in the nineteenth century – and to widows or other dependents as compensation for the death of a soldier or sailor in service. Columns (4) and (5) of Table A1 show pensions awarded for service in the Revolution. Table A1 continued shows the number of pensions awarded for service during the War of 1812, the Mexican War, the Civil War, and the Indian Wars. These pensions were awarded after the Civil War, so Table A1 continued begins in 1870.

There are certain limitations to these series. (1) Each pension was awarded because an individual served in the armed forces. In some cases, however, the pensions were divided among several descendants. This is the reason the tables refer to the number of "pensions" rather than the number of "pensioners." (2) The tables exclude some awards paid as lump sums, perhaps because the number on the rolls was meant to serve as a predictor of future expenses. The Commissioner of Pensions, moreover, may have missed some pensions paid by other federal offices. (3) The rolls listed some pensioners who had died and whose heirs were not entitled to a pension. The decrease in the number of pensions in 1841 and 1842 was the result of a purging of the names of pensioners assumed to be dead. Despite these limitations, we believe the number of pensions provides a good picture of the growth of the pension system in the nineteenth century.

The series in Table A1 may be of interest for issues aside from those explored in this paper. The series showing the number of pensions compensating for death and disability, for example, is new, and puts into perspective the amount of fighting in the War of 1812, the Seminole War, the Mexican War, and the Civil War.

Table A1. The Number of Pensions: Total, Pensions Compensating for Death and Disability, and Revolutionary Service Pensions, 1791-1900.

Year	Total Number of Pensions	Compensation for Death or Disability (All wars)		Revolutionary War Service Pensions	
		Army ^a	Navy	Survivors	Widows and other dependents
	(1)	(2)	(3)	(4)	(5)
1791	1,356	NA	NA	0	0
1792	1,472	NA	NA	0	0
1793	NA	NA	NA	0	0
1794	NA	NA	NA	0	0
1795	1,444	NA	NA	0	0
1796	NA	NA	NA	0	0
1797	NA	NA	NA	0	0
1798	NA	NA	NA	0	0
1799	NA	NA	NA	0	0
1800	1,711	NA	NA	0	0
1801	NA	NA	22	0	0
1802	1,661	NA	NA	0	0
1803	NA	NA	37	0	0
1804	NA	NA	37	0	0
1805	1,593	1,544	49	0	0
1806	NA	NA	65	0	0
1807	1,530	1,452	78	0	0
1808	NA	NA	85	0	0
1809	NA	NA	90	0	0
1810	1,544	1,451	93	0	0
1811	NA	NA	107	0	0
1812	NA	NA	122	0	0
1813	1,501	1,353	148	0	0
1814	NA	NA	176	0	0
1815	2,050	1,798	252	0	0
1816	3,597	3,345	252	0	0
1817	3,658	3,300	358	0	0
1818	12,350	3,814	358	8,178	0
1819	22,189	NA	438	16,270	0
1820	NA	NA	480	16,355	0
1821	NA	NA	191	13,968	0

Table A1. The Number of Pensions: Total, Pensions Compensating for Death and Disability, and Revolutionary Service Pensions, 1791-1900.

Year	Total Number of Pensions	Compensation for Death or Disability (All wars)		Revolutionary War Service Pensions	
		Army ^a	Navy	Survivors	Widows and other dependents
	(1)	(2)	(3)	(4)	(5)
1822	NA	NA	431	12,071	0
1823	17,254	3,870	423	12,961	0
1824	17,496	3,736	524	13,236	0
1825	17,194	3,743	524	12,927	0
1826	17,068	3,805	533	12,730	0
1827	16,858	3,805	534	12,519	0
1828	16,447	3,786	270	12,391	0
1829	16,591	3,794	596	12,201	0
1830	16,484	3,873	536	12,075	0
1831	16,280	3,868	536	11,876	0
1832	NA	3,806	NA	13,883	0
1833	NA	3,875	NA	34,472	0
1834	NA	3,940	NA	38,544	0
1835	41,445	3,893	442	37,110	0
1836	41,718	4,044	466	37,208	0
1837	42,446	4,116	678	36,187	1,465
1838	42,717	4,200	847	34,440	3,230
1839	44,875	4,236	901	32,925	6,813
1840	45,308	4,289	914	31,759	8,346
1841	32,831	2,605	959	21,076	8,194
1842	26,016	2,662	981	19,671	2,702
1843	28,254	2,720	566	18,774	6,194
1844	29,544	2,778	540	17,733	8,493
1845	28,894	2,834	728	16,002	9,330
1846	28,352	2,949	752	15,460	9,191
1847	23,798	2,946	780	12,388	7,684
1848	16,216	3,126	930	9,031	3,129
1849	22,319	6,119	999	9,017	6,184
1850	21,472	6,766	1,097	6,932	6,677
1851	22,875	7,109	1,228	6,324	8,214
1852	20,156	8,086	1,288	5,502	5,280

Table A1. The Number of Pensions: Total, Pensions Compensating for Death and Disability, and Revolutionary Service Pensions, 1791-1900.

Year	Total Number of Pensions	Compensation for Death or Disability (All wars)		Revolutionary War Service Pensions	
		Army ^a	Navy	Survivors	Widows and other dependents
	(1)	(2)	(3)	(4)	(5)
1853	15,097	7,564	999	1,466	5,068
1854	15,082	7,014	1,017	1,069	5,982
1855	14,468	7,352	838	726	5,552
1856	13,914	7,397	836	514	5,167
1857	13,287	7,290	949	346	4,702
1858	11,615	6,261	892	253	4,209
1859	11,585	6,788	918	165	3,714
1860	11,284	7,052	939	89	3,204
1861	10,709	6,961	957	63	2,728
1862	8,159	5,363	916	30	1,850
1863	14,780	12,068	1,121	18	1,573
1864	51,135	48,200	1,505	12	1,418
1865	85,986	83,013	1,856	3	1,114
1866	126,722	123,577	2,213	1	931
1867	155,474	152,096	2,381	0	997
1868	169,643	166,136	2,618	1	888
1869	188,850	185,125	2,838	0	887
1870	199,413	195,739	2,947	0	727
1871	208,129	203,718	3,050	0	634
1872	232,700	208,923	3,179	0	471
1873	238,411	211,447	3,200	0	445
1874	236,241	209,563	3,336	0	410
1875	234,821	209,984	3,420	0	379
1876	232,137	209,237	3,387	0	320
1877	232,104	210,992	3,439	0	262
1878	223,998	206,071	3,558	0	237
1879	242,755	206,111	3,616	0	213
1880	250,802	211,795	3,930	0	189

Table A1. The Number of Pensions: Total, Pensions Compensating for Death and Disability, and Revolutionary Service Pensions, 1791-1900.

Year	Total Number of Pensions	Compensation for Death or Disability (All wars)		Revolutionary War Service Pensions	
		Army ^a	Navy	Survivors	Widows and other dependents
	(1)	(2)	(3)	(4)	(5)
1881	268,830	229,542	4,195	0	166
1882	285,697	249,442	4,316	0	144
1883	303,658	272,893	4,375	0	123
1884	322,756	294,688	4,554	0	104
1885	345,125	320,211	4,671	0	86
1886	365,783	345,947	4,831	0	69
1887	406,007	379,401	5,254	0	54
1888	452,557	413,865	5,898	0	37
1889	489,725	449,045	6,813	0	29
1890	537,944	497,240	7,734	0	25
1891	676,160	522,134	8,017	0	23
1892	876,068	498,406	7,646	0	22
1893	966,012	468,564	7,365	0	17
1894	969,544	461,008	7,153	0	12
1895	970,524	453,172	7,201	0	12
1896	970,678	442,460	7,210	0	14
1897	976,014	431,564	7,163	0	16
1898	993,714	420,280	7,133	0	12
1899	991,519	408,084	7,014	0	11
1900	993,529	395,089	6,936	0	11

^aBeginning in 1893 this column includes nurses.

Sources: Column (1) is the sum of (2) through (5) of Table A1 and (6) through (13) of Table A1 continued. (2), (4), and (5) were compiled from the *Annual Reports of the Pension Office*. (3) through 1840 is from Clark, Craig, and Wilson (2003, 55); 1841-1900 is from the *Annual Reports of the Pension Office*.

Table A1 continued. Pensions for Service in the War of 1812, Mexican War, Civil War, and Indian Wars, 1871-1900.

	War of 1812		War with Mexico		Civil War		Indian Wars	
	Survivors	Widows, Orphans, and other Dependents	Survivors	Widows, Orphans, and other Dependents	Survivors	Widows, Orphans, and other Dependents	Survivors	Widows, Orphans, and other Dependents
	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1871	683	44	0	0	0	0	0	0
1872	17,100	3,027	0	0	0	0	0	0
1873	18,266	5,053	0	0	0	0	0	0
1874	17,620	5,312	0	0	0	0	0	0
1875	15,875	5,163	0	0	0	0	0	0
1876	14,206	4,987	0	0	0	0	0	0
1877	12,802	4,609	0	0	0	0	0	0
1878	10,407	3,725	0	0	0	0	0	0
1879	11,621	21,194	0	0	0	0	0	0
1880	10,138	24,750	0	0	0	0	0	0
1881	8,898	26,029	0	0	0	0	0	0
1882	7,134	24,661	0	0	0	0	0	0
1883	4,931	21,336	0	0	0	0	0	0
1884	3,898	19,512	0	0	0	0	0	0
1885	2,945	17,212	0	0	0	0	0	0
1886	1,539	13,397	0	0	0	0	0	0
1887	1,069	11,831	7,503	895	0	0	0	0
1888	806	10,787	16,060	5,104	0	0	0	0

1889	603	9,964	17,065	6,206	0	0	0	0
1890	413	8,610	17,158	6,764	0	0	0	0
1891	284	7,590	16,379	6,976	101,112	13,645	0	0
1892	165	6,651	15,215	7,282	293,068	47,613	0	0
1893	86	5,425	14,149	7,369	377,202	81,952	2,544	1,338
1894	45	4,447	13,461	7,686	375,084	94,260	3,104	3,284
1895	21	3,826	12,586	7,868	378,115	100,800	3,012	3,911
1896	14	3,287	11,800	8,017	383,818	107,103	2,718	4,237
1897	7	2,810	10,922	8,072	392,440	116,359	2,373	4,288
1898	3	2,407	10,012	8,143	413,909	125,729	2,019	4,067
1899	1	1,998	9,204	8,175	420,912	130,266	1,656	3,899
1900	1	1,742	8,352	8,151	430,657	135,726	1,370	3,739

Sources: Columns (6) through (13) were compiled from the *Annual Reports of the Pension Office*.

Cash payments. For the years up to 1865, we relied on *The Statement of Annual Appropriations and Expenditures for Army and Navy Pensions, March 4, 1789, to June 30, 1876* (U.S. Senate 1877). We checked these figures against the figures in the *Annual Reports* of the Commissioner of Pensions. In broad terms the figures in the two sources agree, although there are many small discrepancies that may be the result of accounting differences. There are also a number of differences between *Historical Statistics* (2006 series Ea643) and column 1 of Table A2. The former seems to have been carried over from the 1876 *Finance Report*. The Senate document (1876, 30-31) explains the differences between its estimates and those in the *Finance Report*. The main differences are that the Senate document includes expenditures made by the Naval and Privateer Pension Funds, excludes certain transfers made to Virginia to settle claims for previous payments to veterans, and includes a number of miscellaneous expenditures. On the whole, the Senate series would appear to give a more accurate account of current spending. There are still probably omissions.

Beginning in 1866 we relied on the estimates of total spending in *Historical Statistics* (2006, series Ed297) and Glasson (1918). Glasson compiled the data from the *Annual Reports* of the Commissioner of Pensions for the War of 1812 (p. 113), the Indian Wars (p. 115), the Mexican War (p. 119), and the law of 1890 (p.271). We also included annual estimates from the *Annual Reports* of the Commissioner of Pensions for expenditures for general compensation since Glasson (1918, 144) only included estimates at 5-year intervals, and for the Revolutionary War pensions which Glasson omitted.

Table A2. Cash Expenditures for Veterans Benefits by Period of Service, 1791-1900 (dollars)

	Total	Compensation for Death and Disability ^a	Revolutionary War Service Pensions		War of 1812 Service Pensions
			Survivors	Widows, Orphans, and other Dependents	Survivors
	(1)	(2)	(3)	(4)	(5)
1791	\$175,814	\$175,814	\$0	\$0	\$0
1792	109,243	109,243	0	0	0
1793	80,088	80,088	0	0	0
1794	81,399	81,399	0	0	0
1795	68,673	68,673	0	0	0
1796	100,844	100,844	0	0	0
1797	92,257	92,257	0	0	0
1798	104,845	104,845	0	0	0
1799	95,444	95,444	0	0	0
1800	94,015	94,015	0	0	0
1801	124,688	124,688	0	0	0
1802	126,080	126,080	0	0	0
1803	62,902	62,902	0	0	0
1804	80,093	80,093	0	0	0
1805	81,855	81,855	0	0	0
1806	82,084	82,084	0	0	0
1807	70,500	70,500	0	0	0
1808	82,576	82,576	0	0	0
1809	87,834	87,834	0	0	0
1810	83,744	83,744	0	0	0
1811	82,150	82,150	0	0	0
1812	91,880	91,880	0	0	0
1813	213,373	213,373	0	0	0
1814	248,254	248,254	0	0	0
1815	178,104	178,104	0	0	0
1816	286,056	286,056	0	0	0

Table A2. Cash Expenditures for Veterans Benefits by Period of Service, 1791-1900 (dollars)

	Total	Compensation for Death and Disability ^a	Revolutionary War Service Pensions		War of 1812 Service Pensions
			Survivors	Widows, Orphans, and other Dependents	Survivors
	(1)	(2)	(3)	(4)	(5)
1817	426,480	426,480	0	0	0
1818	972,361	672,361	300,000	0	0
1819	2,416,829	568,928	1,847,901	0	0
1820	3,218,495	452,055	2,766,440	0	0
1821	244,779	244,779	0	0	0
1822	1,947,968	305,377	1,642,591	0	0
1823	1,778,760	329,663	1,449,097	0	0
1824	1,355,069	87,469	1,267,600	0	0
1825	1,384,625	75,815	1,308,811	0	0
1826	1,560,891	255,696	1,305,195	0	0
1827	978,341	182,329	796,013	0	0
1828	850,574	127,439	723,135	0	0
1829	934,070	169,577	764,492	0	0
1830	1,356,797	267,769	1,089,028	0	0
1831	1,031,931	26,096	1,005,836	0	0
1832	1,343,478	284,605	1,058,873	0	0
1833	4,589,751	294,890	4,294,861	0	0
1834	3,363,391	246,198	3,117,193	0	0
1835	1,929,240	116,944	1,812,296	0	0
1836	2,832,787	277,051	2,555,737	0	0
1837	2,432,578	-36,165	1,916,769	551,973	0
1838	2,303,617	417,250	836,608	1,049,759	0
1839	3,126,864	255,376	1,280,425	1,591,063	0
1840	2,623,520	272,272	1,211,760	1,139,488	0
1841	2,504,384	380,176	1,120,037	1,004,171	0
1842	1,467,011	343,257	769,674	354,080	0
1843	857,073	123,440	498,023	235,610	0
1844	2,027,442	189,971	1,090,237	747,234	0

Table A2. Cash Expenditures for Veterans Benefits by Period of Service, 1791-1900 (dollars)

	Total	Compensation for Death and Disability ^a	Revolutionary War Service Pensions		War of 1812 Service Pensions
			Survivors	Widows, Orphans, and other Dependents	Survivors
	(1)	(2)	(3)	(4)	(5)
1845	2,500,748	253,548	790,040	1,457,160	0
1846	1,905,335	253,280	540,552	1,111,504	0
1847	1,837,124	301,807	416,227	1,119,090	0
1848	1,290,840	237,541	280,099	773,200	0
1849	1,246,281	317,157	191,145	737,979	0
1850	1,622,385	496,626	304,165	821,594	0
1851	2,226,569	598,760	270,997	1,356,812	0
1852	2,382,872	603,911	442,284	1,336,677	0
1853	1,736,262	529,006	221,356	985,900	0
1854	1,232,368	492,703	-118,641	858,306	0
1855	1,473,599	535,788	24,249	913,563	0
1856	1,296,230	503,443	43,325	749,462	0
1857	1,310,381	711,373	140,750	458,258	0
1858	1,219,768	663,263	78,931	477,575	0
1859	1,222,223	779,817	7,671	434,735	0
1860	1,100,802	661,121	18,735	420,947	0
1861	1,032,768	659,588	23,208	349,972	0
1862	852,170	541,098	35,620	275,452	0
1863	1,078,513	806,091	24,970	247,452	0
1864	4,985,274	4,620,967	0	364,307	0
1865	16,338,155	15,989,116	0	349,039	0
1866	15,858,000	15,741,369	125	116,505	0
1867	21,276,000	21,139,565	0	136,435	0
1868	24,164,000	24,037,371	142	126,487	0
1869	29,658,000	29,518,043	0	139,957	0
1870	30,543,000	30,431,242	0	111,758	0
1871	30,081,000	29,986,022	0	91,912	2,555
1872	31,454,000	29,076,697	0	63,794	1,977,515

Table A2. Cash Expenditures for Veterans Benefits by Period of Service, 1791-1900 (dollars)

	Total	Compensation for Death and Disability ^a	Revolutionary War Service Pensions		War of 1812 Service Pensions
			Survivors	Widows, Orphans, and other Dependents	Survivors
	(1)	(2)	(3)	(4)	(5)
1873	28,681,000	25,859,556	0	53,534	2,078,607
1874	31,908,000	29,647,774	0	55,377	1,588,833
1875	31,106,000	29,167,195	0	50,205	1,355,600
1876	29,887,000	28,310,991	0	41,199	1,089,037
1877	30,145,000	28,848,793	0	0	934,658
1878	28,764,000	27,700,509	0	0	768,918
1879	35,526,000	32,318,775	0	0	1,014,526
1880	58,585,000	55,136,231	0	0	790,710
1881	52,771,000	49,767,586	0	0	621,613
1882	56,882,000	54,379,518	0	0	478,275
1883	64,361,000	62,121,123	0	0	357,335
1884	62,184,000	60,218,809	0	0	278,889
1885	70,196,000	68,470,015	0	0	207,783
1886	68,931,000	67,327,714	0	0	144,390
1887	79,451,000	77,523,884	0	0	105,837
1888	84,512,000	80,396,923	0	0	73,659
1889	95,066,000	91,125,241	0	0	52,800
1890	112,647,000	108,921,831	0	0	38,847
1891	125,351,000	113,063,145	0	0	22,505
1892	147,784,000	93,425,047	0	0	11,909
1893	165,315,000	93,966,832	0	0	10,494
1894	147,408,000	85,830,628	0	0	5,312
1895	147,606,000	84,953,908	0	0	3,583
1896	145,789,000	84,011,962	0	0	1,972
1897	147,903,000	83,059,120	0	0	1,440
1898	152,814,000	83,541,420	0	0	791
1899	146,822,000	79,712,387	0	0	193
1900	146,887,000	78,538,922	0	0	96

Table A2. Cash Expenditures for Veterans Benefits by Period of Service, 1791-1900 (dollars)

	Total	Compensation for Death and Disability^a	Revolutionary War Service Pensions		War of 1812 Service Pensions
			Survivors	Widows, Orphans, and other Dependents	Survivors
	(1)	(2)	(3)	(4)	(5)

^a This column includes some expenditures from the Naval Pension Fund and Privateer Pension Fund that may have been service pensions rather than compensation.

Sources: 1791-1865: (U.S. Senate 1877). 1866-1900, column (1): (*Historical Statistics 2006*, series Ed297); columns 2-4: *Annual Reports* of the Commissioner of Pensions; column 5, Glasson (1918, 113).

Table A2 continued. Cash Expenditures for Veterans' Benefits by Period of Service, 1791-1900 (dollars)

Year	War of 1812	Indian Wars		Mexican War		Civil War (Law of 1890)	
	Widows, Orphans, other Dependents		Survivors	Survivors	Survivors	Survivors	Widows, Orphans, and other Dependents
	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1871	\$511	\$0	\$0	\$0	\$0	\$0	\$0
1872	335,994	0	0	0	0	0	0
1873	689,304	0	0	0	0	0	0
1874	616,016	0	0	0	0	0	0
1875	533,000	0	0	0	0	0	0
1876	445,773	0	0	0	0	0	0
1877	361,549	0	0	0	0	0	0
1878	294,572	0	0	0	0	0	0
1879	2,192,700	0	0	0	0	0	0
1880	2,658,058	0	0	0	0	0	0
1881	2,381,801	0	0	0	0	0	0
1882	2,024,208	0	0	0	0	0	0
1883	1,882,542	0	0	0	0	0	0
1884	1,686,302	0	0	0	0	0	0
1885	1,518,202	0	0	0	0	0	0
1886	1,458,896	0	0	0	0	0	0
1887	1,765,582	0	0	53,149	2,548	0	0
1888	1,596,605	0	0	1,861,756	583,056	0	0
1889	1,397,487	0	0	1,796,899	693,572	0	0
1890	1,263,239	0	0	1,728,028	695,055	0	0
1891	1,040,284	0	0	1,622,115	695,315	7,812,108	1,095,529
1892	827,081	0	0	1,425,258	686,734	43,845,071	7,562,900
1893	721,060	158,076	66,434	1,396,392	736,173	54,568,610	13,690,927
1894	645,297	377,884	456,652	1,388,707	803,346	45,062,151	12,838,023
1895	541,923	308,365	460,161	1,433,691	802,033	46,478,227	12,624,108
1896	456,848	268,778	468,694	1,368,686	814,096	45,257,663	13,140,301
1897	388,292	227,580	442,083	1,279,188	818,564	46,514,122	15,172,610
1898	347,070	189,981	418,997	1,213,509	846,560	49,947,222	16,308,449
1899	293,097	165,327	403,872	1,107,595	818,068	49,045,132	15,276,329
1900	248,913	138,143	379,035	1,011,504	804,308	50,431,124	15,334,956

Sources: Glasson (1918, 113, 115, 119, 271).

Land Grants. Table A3 shows a preliminary estimate of the amount of land awarded to veterans of the Revolutionary War, the War of 1812, and the Mexican War. We started with 2,666,080 acres awarded by the Continental Congress and the federal government (Gates 1968, 276; Weber and Schmeckebier 1934, 451). We then added the amounts awarded by the states cited in Gates (1968): New York, Pennsylvania, Virginia (and Indiana), and Georgia. Gates did not include figures for four other states that granted land: Massachusetts (and Maine after it became a separate state), Maryland, North Carolina, and South Carolina.²⁶ For these states we included a rough estimate equal to .497 times the amount awarded by the states for which we had estimates. The ratio .497 was based on bounties listed on 10 pages randomly selected from Bockstruck (1996). Although small, the sample contains 469 records, and the ratio quickly settled in the neighborhood of one half. The total awarded to veterans of the Revolution, according to the last line of Table A3, was 16,599,283 acres, of which only 16 percent came from the Continental Congress and federal government, while 37 percent came from the extraordinary grants made by Virginia to its veterans.

Our estimate for the veterans of the War of 1812, based on the legislation passed during and immediately after the war, is 4,891,000 acres (Gates 1968, 276; Weber and Schmeckebier 1934, 451). To estimate the amount of the land awarded to veterans of the War of 1812 after the Mexican War we relied on James W. Oberly (1990). Oberly's Table 4 (1990, 18) shows a distribution of land warrants by period of service under the Act of 1850 based on a sample of warrants, Table 5 (Oberly 1990, 20) shows a distribution for the Act of 1852, and Table 6 (Oberly 1990, 22) shows a distribution for the Act of 1855. We blew up the sample

²⁶ New Hampshire, Vermont, Rhode Island and Connecticut, apparently, did not grant land to veterans. Connecticut, however, did award land to citizens as compensation for property damaged during the Revolution.

estimates by 200 (Oberly's sampling ratio) to produce estimates of the total amount of acres transferred to veterans by period of service (War of 1812, Mexican War, and other 19th century conflicts) under each law.

To estimate the amount of land awarded to veterans of the Mexican War we also included the amount of land awarded under the Law of 1847 (Oberly 1990, 3) in addition to the estimates for the Mexican War derived from Tables 4, 5, 6. The total amount issued to veterans of the Mexican War, 16,885,640 acres, is less than the total amount issued to veterans of War of 1812 after the Mexican War, 34,304,000 acres, because more soldiers served in the War of 1812 (Table 1). The estimate of land per veteran for the Mexican War in Figure 5 was computed by dividing the total amount of land awarded to veterans of the Mexican War by the standard estimates of the number who served (Table 1). This results in a rather large acreage per veteran. We do not have a definitive explanation for this anomaly. It is possible that some men who received bounties did not actually join the expeditionary force and proceed to Mexico.

Table A3. Land Awarded to Veterans of the Antebellum Wars (acres)	
Revolutionary War	
Continental Congress and the Federal government	2,666,080
New York	1,022,500
Pennsylvania	1,336,500
Virginia	6,190,117
Georgia	750,000
Other Land Bounty States	4,634,086
Total	16,599,283
War of 1812	
Awards made before the Mexican War	4,891,000
Awards made after the Mexican War	34,304,000
Total	39,195,000
Mexican War	
Total	16,885,640
Native American Wars	
Total	10,062,000
All Antebellum Wars	
Total	82,741,923
<p><i>Sources and Notes.</i> Revolutionary War: Gates (1968, 276). This figure is also given in Weber and Schmeckebier (1934, 451). New York: We multiplied the 2,045 officers and privates entitled to land (Gates 1968, 255) by 500 acres, the minimum entitlement. Pennsylvania: We added two tracts reserved for veterans, Gates (1968, 253, 253 fn. 11). Virginia: Gates (1968, 257). This is a lower bound estimate that combines the amount of federal land office scrip that was exchanged for Virginia warrants and the amount of Virginia land warrants located in the Virginia Military Track in Ohio. It omits warrants located in Kentucky. Georgia: Gates (1968, 253). Other Bounty Land States (Massachusetts, Maryland, North Carolina, and South Carolina): 49.7% of the total for New York, Pennsylvania, Virginia, and Georgia based on a sample of bounties from Bockstruck (1996), a comprehensive list of warrants issued by state governments. War of 1812, original grants: Gates (1968, 276); Weber and Schmeckebier (1934, 451). War of 1812, post Mexican War grants: Oberly (1990, 18, 20, 22). Mexican War: Oberly (1990, 3, 18, 20, 22). See the text of the appendix for additional details. Native American Wars: Oberly (1990, 18, 20, 22). Grants by state governments are excluded except for the Revolutionary War.</p>	

The Value of the Land Grants. The estimates cited in the text of the value of land grants in the antebellum era are back-of-the-envelope calculations intended only to provide a sense of relative magnitudes. For the Revolution we started with our estimate of total land grants to revolutionary officers and soldiers from Table A3. We assumed that 30 percent of these grants were sold in the first year after the war, 25 percent in the second year, and so on. We priced land at \$.50 per acre. Stanley Lebergott (1985, 186) used \$1.00 per acre for federal land circa 1800. Farley Grubb (2005, 25-26) zeros in on the same figure. Discussions of the revolutionary land grants, however, stress that most of the land was sold to speculators at relatively low prices before 1800, hence the lower estimate. We then deflated by a cost of living index (*Historical Statistics* 2006, series Cc2) to put the resulting value in 1860 dollars and computed the present value at the end of the war at 6 percent. The final figure was \$6,179,593. A slower schedule of sales, in which only 25 percent of the land was disposed of in the first year after the war, yielded a figure of \$4,654,508.

To estimate the value of the land bounties awarded to veterans of the War of 1812, we started with the estimates in Table A3. We assumed that the warrants issued during the war were generally disposed of quickly after the war was over, 40 percent in the first year, 30 percent in the second year, 20 percent in the third year, and 10 percent in the fifth year. The assumption of rapid disposal is consistent with most descriptions of the process. We then multiplied the amount disposed of in each year by a rough estimate of \$.72 per acre (Oberly 1990, 9-10). This is very likely an upper bound estimate. The nominal amounts received in each year were then deflated by the consumer price index and the present value was taken in 1815 at 6 percent.

The estimates of the value of the warrants issued to veterans of the War of 1812 after the Mexican War and the warrants issued to the veterans of the Mexican War were computed analogously. We assumed that 40 percent of the warrants were disposed of in the first year, 30 percent in the following year, 20 percent in the year after that, and 10 percent in the fifth year after the war. We then multiplied the acreage figures disposed of in each year by Oberly's estimate of the value of land warrants (1990, Table 28, 170). We then deflated these figures by the cost of living index (*Historical Statistics* 2006, series Cc2) and discounted them at 6 percent to the end of the War of 1812 or the end of the Mexican War as appropriate.

Table A4: Present Value of Land Awarded to Veterans in 1860 Dollars at 6 Percent

War	Total	Per Veteran
Revolutionary War	\$6,179,593	\$28.00
War of 1812 (Immediately after the War)	1,601,260	5.58
War of 1812 (After Mexican War)	4,778,271	8.50
Mexican War	22,348,881	136.52

Sources. Quantity of Land: Table A3. Prices of Land: Lebergott (1985, 186), Grubb (2005, 25-26), Oberly (1990, 9-10, 170). See the discussion in the Appendix for more details.