

The Economics of U.S. Civil War Conscription

by

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Abstract

U.S. conscription in the Civil War is analyzed. Conscription was designed to gain federal control of enlistments, leaving state and local governments much of the responsibility for raising troops. Due to the hiring of substitutes, the payment of a fee to avoid service (*commutation*), and community provided funds for these activities, only 2% of those who served were conscripted. Theoretical analysis suggests federal pay and local government bonuses increase as the marginal opposition by citizens to the number of reluctant draftees increases, and commutation could have lowered social cost. Instead, commutation was a binding ceiling on the price of substitutes. Domestic politics and the expanded international role of the U.S. caused conscription to change significantly by World War I, with subsequent drafts (in World War II, Korea, and Vietnam) essentially following the WWI model.

1. Introduction

Military conscription---the draft---ended in the US more than 30 years ago. However, since then, whenever the U.S. enters a conflict, elected officials and other commentators speculate about whether there should be a return to conscription.¹ Economists tend to be critical of the draft.² Our Civil War (CW) experience has been used as an example of problems with a draft (Lindsay, 1968b, and Rafuse, 1970). In addition to the standard kinds of difficulties associated with the draft (*e.g.*, misallocation of resources because the “wrong” people are enlisted, and increased turnover and draft avoidance costs), CW conscription resulted in widespread violence and opposition. Also, CW conscription supposedly was highly inequitable: the rich could hire substitutes or buy their way out, and the average man had no choice (if not exempt) but to be inducted or evade the draft.

Five times the U.S. used military conscription during wars: in the CW, World War I, World War II, The Korean War, and in the Vietnam War.³ In the four 20th century wars in which conscription was used, the percentages of those who served during each war who were draftees⁴ were (beginning with World War I) 59, 61, 27, and 21. The same percentage for the CW is 2. It seems reasonable to wonder if a system in which draftees represented such a small percentage of those who served had a different purpose than did 20th century drafts, and whether the apparent opposition to the draft (manifested in riots) was actually opposition to a draft *per se*.

As will be discussed, contemporary elected officials and 20th century historians concur: Civil War conscription (CWC) was not designed to directly attract volunteers.⁵ A weak federal government used conscription to shift the private (payroll) cost of military personnel to state and local governments---in

¹ See, for example, Rangel (2002).

² For a recent brief elucidation of the problems with a draft, see Oi (2003).

³ As discussed in Section 2, conscription was also used in Colonial America and in the American Revolutionary War.

⁴ These percentages were derived from *The Report of the President's Commission on an All-Volunteer Armed Force* (1970), and from the web sites of the Department of Defense and the Selective Service System. Others report different percentages. For example, Rostker (2006), p.25, claims 72% of those who served in WWI were drafted.

⁵ See, for example, McPherson (1988).

contrast to 20th century conscription which involved shifting the tax burden to individual draftees.⁶ To minimize the number of reluctant draftees, individuals could hire a substitute, and, in the first two (of four) draft calls, could pay a *commutation* fee of \$300, enabling them to avoid service. Through bounties raised by states and communities, and the availability of draft insurance, even relatively poor individuals were able to avoid service.⁷

Although historians are aware CWC had a different purpose than conscription that followed in the U.S., no formal analysis of the objectives of the federal government (and local governments) exists. Also, historians have criticized features of CWC---such as substitution, commutation, and bounties⁸---when such criticism may not be warranted. Finally, the role commutation *could* and *did* play in the CW deserves further analysis. Thus, the goal of this paper is to provide analysis, including a theoretical model, of the objectives of CWC. A better understanding of the first use of conscription by the U.S.---what its objectives were and how it functioned---may be of value in future discussions regarding the merits of a draft.

In the next five sections, the following will be presented: an analysis of antecedents to CWC, how CWC worked, the bounty system, draft opposition, and the purposes of CWC. Sections 7 and 8 contain a formal model of the draft when there is substitution but no commutation. Commutation is considered in Sections 9 and 10, a discussion of how the draft changed in the 20th century is the focus of Sections 11 and 12, and conclusions are offered in Section 13

2. Antecedents to Civil War Conscription

The CW was not the first time a draft was used in America. Except for Pennsylvania, all of the colonies had similar militia laws: substitution was allowed, and some colonies permitted one to pay a fee to avoid service, what was known as commutation in the CW. Conscription was used to encourage

⁶ World War I conscription appears to have had, at least in part, a somewhat different purpose than did the other 20th century drafts. It exempted highly skilled individuals in occupations deemed important for the war effort (Oi, 1996), apparently to prevent such individuals from volunteering. For a more detailed discussion, see Sections 11 and 12 herein.

⁷ Murdock (1964) found no discernible difference in commutation rates between rich and poor counties in New York.

⁸ Murdock (1967) suggests problems with these features of CWC resulted in their abandonment in drafts in the U.S. after the CW.

volunteers (Levi, 1997). Decentralized militia drafts were used in Indian wars, in the Revolutionary War, and in the War of 1812 (Hummel, 2001). States used militia drafts in the late 1770s to maintain the Continental Army, and substitution was permitted (Chambers, 1987). During the Revolutionary War, annual recruiting began in 1777. The Continental Congress assigned a quota to each state, which assigned quotas to towns. A militia commander then called for volunteers in a town. Generally a few were obtained, and then the state, town, or private citizens (and sometimes all three) offered bounties to fill the quotas. One's term of service ended in December each year.⁹

Although there was no national conscription in the War of 1812, several proposals for conscription were advanced. These plans were offered separately by James Monroe (Secretary of War) and George Troup (Chairman of the House Committee on Military Affairs), but were very similar and will be discussed together. One version of these plans was close to being enacted when the war ended.

The Troup/Monroe plans essentially involved shifting the burden of financing the military to individual classes of 25 men, each class to consist of individuals of approximately equal wealth. If a member of a class could not be induced to volunteer, the class would pay a tax based on the wealth of its members. Lindsay (1968a) argues these plans did not really involve conscription since no one would be forced into the military, and those with less wealth would pay a lower tax if no one in their class was induced to volunteer. Indeed Lindsay (1968a) and Rafuse (1970) claim these plans were similar to the then proposed, and now existing, volunteer military in the U.S. In Section 6, it will be argued the CW draft was designed with the same objective as the proposed drafts in the War of 1812: to shift some of the tax burden to the local level without taxing only draftees or compelling anyone to enter military service.

3. The Draft and Volunteers in the Civil War

Early attempts to raise troops by the Union were left to the states. Recruiting declined in the summer of 1862. With increasing civilian opportunities along with, at some point, a realization the war would be bloody and long, one would expect a decrease in the supply of volunteers. The demand for men

⁹ See Royster (1979), pp.65-66.

rose, and the number of men enlisted in the Army increased significantly (if not monotonically) during the war. In January 1862, there were 575,917 men in the army; one year later there were 918,121; in January 1864, there were 860,737; and in January 1865, there were 959,460.¹⁰

Initially, the militia system was used to provide and finance troops. A variety of states appropriated funds in 1861 to pay for recruiting and equipping the militia. For example, New York raised \$3,000,000 and Rhode Island raised \$500,000.¹¹ Prior to the militia law of July 1862, calls for troops were voluntary; the states were supreme, and the federal government could merely request troops be provided. The Militia Act of 1862 was the beginning of the transition to federal authority in raising an army. The act provided for a draft of the militia if a state did not fill its quota of three-year volunteers. Exemptions and substitutions were allowed. It was now established the federal government had the authority to raise and support an army without state assistance (Geary, 1986). The prospect of a draft met with riots in many states. The draft was rescinded, and the use of bounties, along with the threat of a draft, enabled states to meet their quotas.¹²

The limitations of the militia system were clear as far back as Colonial America when the tradition of local defense meant the militia would often not cross state and national borders. Regular British units were required to fight the French and Indians (Rafuse, 1970). Other problems with the militia were the popular election of officers and relatively short terms (Murdock, 1967). Thus a system that may have been of value in local defense for limited conflicts was probably not well suited for a conflict of larger scope and longer duration.¹³

The Enrollment Act of 1863 completed the transition to federal control of recruitment and national conscription. Male citizens and those who had filed for citizenship between the ages of 20-45 were to be enrolled. Enrollment was similar to draft registration in recent history, except it was conducted

¹⁰ Livermore (1957), p.47.

¹¹ Shannon (1965, Vol.1), pp.23-24.

¹² The quotas were for 300,000 nine-month militia and 300,000 three-year volunteers. See Billings (1968), pp.335-336, and McPherson (1988), p.601. Prior to the Civil War, militia service had become voluntary throughout the U.S. With the Militia Act, compulsory militia service was restored, but states ignored it and filled quotas with volunteers by using bonuses (Cutler, 1923, p.171).

¹³ However, Hummel (2001), p.43, argues problems with the militia actually were the result of those militiamen who were drafted, which is ironic given conscription was part of the system that replaced the use of the militia.

as a census; individuals were sought out to be enrolled. Initially two classes of enrolled men existed. Class 1 consisted of all men age 20-35 and unmarried men age 35-45, and Class 2 was comprised of married men age 35-45. Those in Class 2 were not to be drafted until all those in Class 1 had been called; this apparently almost never happened.¹⁴

Enlistment quotas were assigned to each Congressional district by its pro rata share of the number called by the president, minus the number of previous enlistees from the district. After 50 days, a lottery would be held to obtain the remainder of a district's quota. Thus some districts might have drafts while others did not. The draft calls were in October 1863, March 1864, July 1864, and December 1864.¹⁵

One could furnish a substitute and avoid service for three years in all four drafts. In the first draft, one could pay a \$300 commutation fee and be excused from service for three years. In the second draft, commutation bought one out of service only for that draft. In July 1864, President Lincoln signed a bill eliminating commutation except for conscientious objectors. Effectively commutation ended after the second draft (see Table One). Until February 24, 1864, a substitute could come from those who were enrolled; after that date, a substitute could only come from those exempt from military service. Thus, for the last three drafts, substitutes consisted of those under age 20, honorably discharged veterans with two or more years of service, alien residents, and (later) black citizens.¹⁶

Due to re-enlistments and incomplete records, the number of individuals who served in the Union Army is not clear. Estimates range from 1.5 million to over 2.5 million (Geary, 1991). Chambers (1987) uses 2.1 million. Since this figure is roughly the midpoint of the numbers generally claimed, it will be used herein. Approximately 92% of those who served in the Union Army were from volunteer units.¹⁷ The remaining 8% were comprised of draftees, substitutes, and those who also volunteered---for the regular army. In the CW, the term "volunteer" did not mean what it does today. Soldiers in volunteer units were recruited, trained, and lead by local men. All officers (except generals) were commissioned by

¹⁴ McPherson (1988), pp.600-601, footnote 20. The two classes were combined in February, 1864 (Murdock, 1971, p.81).

¹⁵ A call might mean a series of requests for volunteers within a short period of time, so the precise date of a draft is somewhat ambiguous. Draftees served for three years or until the end of the war (Rostker, 2006, p.22).

¹⁶ See Murdock (1967), p.14, Geary (1986), p.217, and Levi (1997), p.98.

¹⁷ Chambers (1987), p.42.

governors. Upon approval by a regular army officer, a volunteer unit would be enrolled in federal service.¹⁸

The regular army was authorized to have 42,000 men, but it never approached this number.¹⁹ As will be discussed in Section 6, the strong attachment of an individual to his state, and the antipathy to federal control, both manifested in the relatively small regular army, are important phenomena in understanding the objectives of CWC.

4. Substitution, Commutation, and the Bounty System

Under the Enrollment Act, the four CW drafts allowed districts 50 days to meet their enlistment quotas. Most districts waited until the last week or so to fill their quotas. General meetings occurred---similar to religious revival meetings---in which individuals---particularly those who were draft eligible---were exhorted to contribute funds to hire volunteers or substitutes.²⁰ Not surprisingly, few volunteered prior to districts raising funds since individuals correctly anticipated the bounties they would receive. Substitutes were paid a price by individuals who were called (if a call occurred, which only happened if the quota was not met with volunteers), and received some, but not all, federal bounties. Volunteers received all of the available bounties. Since those not eligible for the draft could go as either volunteers or substitutes, their movement between these categories would tend to equate the full compensation received by volunteers and substitutes. Thus, there was essentially no difference between substitutes and volunteers.²¹

¹⁸ Chambers (1987), p.42.

¹⁹ Shannon (1965, Vol.1), p.47.

²⁰ Later in the war, real estate taxes were used to raise funds. See Murdock (1971), pp.154-155.

²¹ Randall and Donald (1969), p.314, suggest conscripts received the same federal bounty as volunteers. However, this was true only for the \$100 federal bounty paid throughout the war. Beginning in June 1863, an additional federal bounty of \$300 was paid to re-enlistees, and this was extended to all volunteers by the fall of 1863. These bounties were to be financed with commutation revenue. In April 1864, just after the end of commutation, the \$300 federal bounty was eliminated. In July 1864, a new federal bounty of up to \$300 was instituted (\$100 for each year of enlistment, up to three years). See Murdock (1963), p.9. From Table One, almost 74,000 men hired substitutes in the CW. Others report 116,000 substitutes were hired (Warner and Asch, 2001, p.173, footnote 7). The difference in these numbers is due to the more than 42,000 substitutes who were hired after a call for volunteers, but *before* a draft call. Murdock (1971), p.190, notes communities could hire substitutes before a draft, but does not explain why they would do so. One explanation is the following. Suppose a quota of 100 men had to be filled and sufficient funds were obtained from the community to hire 90 volunteers or substitutes. A draft would then be held for 10 men. If some of the

Government at all levels offered bounties. The total amount paid in federal bounties was approximately \$300 million, with over 1.7 million recipients.²² Local bounties were estimated at \$285 million.²³ These bounties were sometimes paid directly to volunteers and substitutes, but could be paid to men who had been called in order for them to hire a volunteer or a substitute.²⁴ An example (not necessarily typical) of the bounties available: in New York City in the fall of 1863, a volunteer could receive \$300 from the county and \$75 from the state; the \$100 federal bonus available to all who entered service; and the additional federal bonus of \$100-\$300 (for 1-3 years of enlistment), for a total possible bounty of \$775. Thus, one at that time and place who entered the army for three years would be indifferent to entering as a substitute (receiving only the basic \$100 federal bonus) and a volunteer if the price received for being a substitute equaled \$675.²⁵

The bounty system was rife with problems and has been criticized by CW historians. For example, Murdock (1967) claims the problems with bounties, substitution, and commutation resulted in future drafts without these features. The main problem with state and local bounties was they were paid in advance in order to maximize enlistments,²⁶ resulting in frequent bounty jumping. Apparently bounty men could show up at a rendezvous point, collect a bonus, be counted towards the district's quota, and then desert before reaching a training camp.²⁷

The weakness of the federal government may have been why the timing of bounties was not changed until late in the war. Had bounties been delayed, the expected return to bounty men would have decreased (with a lower gain from bounty jumping), decreasing their supply, and causing state and local governments to pay more to attract a given number of volunteers. The federal government was reluctant

draft-eligible men had not contributed to the community's funds, as a way to reward those who did, substitutes could be hired for particular men, even though they had not been called. Thus, these individuals would not be exposed to the subsequent draft.

²² Rafuse (1970), p.19. Levi (1997), p.64, reports federal bounties of \$217 million, with 1.4 million recipients, but the higher figures are the ones usually cited.

²³ Rafuse (1970), p.19. Army pay is estimated to have been about \$500 million for the Civil War (Rostker, 2006, p.23).

²⁴ In Brooklyn, when commutation was in effect, an individual who was called was given \$300 to commute, hire a substitute, or keep if he entered military service (Murdock, 1967, p.21).

²⁵ Substitute prices reached as high as \$1,500 in 1864 in some areas (Chambers (1987, p.74).

²⁶ Murdock (1967), p.20.

²⁷ The federal government attempted to address this problem in December 1964 when Provost Marshal General Fry ordered all funds in excess of \$20 to be taken from recruits and to be returned later (Shannon, 1965, Vol. 2, p. 85). One wonders how many recruits would have been foolish enough to show up with more than \$20.

to place restrictions on the states role in attracting troops, and apparently did not want to increase opposition from state and local governments by making them pay more to attract volunteers.²⁸

One of the criticisms of CWC is only the wealthy could afford to commute or hire a substitute.²⁹ The commutation fee was approximately the average annual earnings in manufacturing in 1860.³⁰ Murdock (1964) suggests commutation was feasible for most working men. Support for this position are the facts only 2% of those who served in the Union Army were draftees, and, of those who were called in a draft, only 6% were forced to enter service (Table Two). The low percentages of those drafted reflect the lack of difficulty for individuals who were called to pay for a substitute or to commute (when the latter was available).³¹ Individuals could afford to commute or hire substitutes because of the substantial state and local bounties that defrayed the amounts they had to spend, and because both informal and formal draft insurance existed with a price substantially below \$300.³² Thus, it does not appear most individuals found it difficult to avoid being drafted in the CW.

5. Opposition to the Draft and to Commutation

In anticipation of the forthcoming (first) draft, rioting occurred in many US cities in 1863. A particularly violent riot occurred over several days in July in New York City, resulting in the deaths of as many as twelve hundred individuals.³³ Opponents of the draft focused on the \$300 commutation fee, ignoring the possibility of even more expensive substitution absent commutation (see Sections 8-10

²⁸ “The sovereign rights of the states to regulate their own recruiting...had, at all costs, to be protected.” Shannon (1965, Vol.2), p.81. Federal bounties were initially paid upon discharge. By 1862, \$25 of the \$100 federal bounty was paid in advance. Later, with the additional \$300 federal bounty, payments of bounties were made fairly evenly over one’s enlistment period (Shannon, 1965, Vol. 2, pp. 54-55 and 62-63).

²⁹ Lindsay (1968b), p.133, claims \$300 was an unattainable amount for a laborer or farmer, and it implied a tax of that amount on those called who could not otherwise avoid service. He ignores the substantial bounties provided by local communities and the availability of draft insurance. See footnote 32 for examples of the latter.

³⁰ Long (1975) uses the census of manufactures to derive average annual earnings in manufacturing of \$297 and \$384 in 1860 and 1870 respectively. During the Civil War, civilian wages rose. Geary (1986), p.214, claims a common laborer could earn about \$300 per year in 1860, rising to over \$400 in 1864.

³¹ It also reflects the relative ease individuals had to simply not report when called. From Table Two, 20% of those called did not report, which should not be surprising in an era of little in the way of personal identification.

³² Enrolled men formed “mutual protective associations” to which each contributed funds. In Cleveland in February 1864, each man paid \$10. In other areas of Ohio the fee was \$10-\$20. After commutation ended, the fee was \$50 in Cleveland’s 2nd ward, and \$25-\$50 near Toledo (Murdock, 1963, pp.12-17). Late in the war, firms in Illinois and Indiana sold explicit draft insurance. Draftees who purchased insurance had substitutes hired for them (Murdock, 1971, p.172).

³³ See Lindsay (1968b), pp.133-135.

below). Lincoln was perplexed by the opposition to commutation; he believed substitution would be more expensive than \$300 should commutation be abolished.³⁴

Why was there opposition to commutation and the draft when the former would tend to lower the price of avoiding service, which as argued in Sections 3 and 4, did not appear to be difficult to do?

Lincoln believed substitution was not opposed because, unlike commutation, it was “...an old and well-known practice in the raising of armies...”³⁵ However, commutation was not new; payment of a fee to avoid military service was a feature of colonial militia drafts.

Consider three alternative (and non-mutually exclusive) reasons for opposition to commutation and the draft. First, Chambers (1975) suggests the apparent opposition to commutation was really opposition to the taxes (and coerced contributions) required to pay for volunteers, substitutes, and commutation. Opponents wanted the wealthy to pay for bounty funds. Thus, the riots may have partly expressed anti-tax sentiments. Since commutation placed a ceiling on the price of a substitute, it would have been natural for anti-tax sentiment to be expressed via anti-commutation rhetoric. Second, since the riots occurred before the first draft call, it is possible citizens were not aware of the bounties that would be raised to help them pay for commutation or substitution.³⁶ At some point, individuals became aware of their legal options to avoid the draft.³⁷ By the second draft, riots had subsided, even though commutation remained. Third, as with the proposed draft under the Militia Act (1862), riots simply expressed the anti-federal government sentiments of many citizens, which were inflamed by the prospect of a federal draft.³⁸

6. Why the Draft?

In July 1862, after a weak response to a federal call for volunteers (Murdock, 1967), Congress authorized the president to use militia drafts. The next year, the Enrollment Act (March 1863) was passed,

³⁴ *Opinion on the Draft, Never Issued or Published*, August 1863. Reprinted in Nicolay and Hay (1905, Vol.9).

³⁵ Nicolay and Hay (1905, Vol.9), p.78

³⁶ Of course, the riots likely communicated to state and local elected officials the depth of opposition to the draft, thereby providing the impetus to raise bounties.

³⁷ Levine (1981), p.827.

³⁸ Draftees were often viewed by the public as less worthy than other soldiers. “A stigma was placed upon the person drafted though not at all upon the person who volunteered solely to escape draft or upon the mercenary recipient of enormous bounties or substitute fees.” Shannon (1965, Vol. 2), p.57.

which contained provisions for drafting outside the militia system. Chambers (1987) argued the draft was imposed in 1863 because, after two years of indecisive fighting, some assertion of federal power was required to prevent disunion. Additionally, although many volunteered without the draft, again in 1863 the quantity of volunteers supplied was less than the quantity demanded.³⁹ A simple answer was for the federal government to raise military pay,⁴⁰ and the \$300 million offered in federal bounties during the CW suggest some pay increases occurred.

Although Chambers (1987) may be correct in the view the draft was an attempt to assert federal power, it was also a reflection of the weakness of the federal government. First, the federal government had limited power to tax. An income tax was enacted in 1862, with the first revenue, \$2.7 million, collected the next year. The income tax remained in effect until 1872, but it collected only about \$370 million over ten years, with \$74 million in 1866 the most that was collected in any year.⁴¹ Other taxes---on manufactured goods, tobacco, and spirits---collected more revenue than income taxes.⁴² However, approximately two-thirds of federal revenue came from loans.⁴³

Second, conscription gave the federal government more control over the total number of enlistees, leaving the states much discretion in providing the troops and some of the cost of doing so. As McPherson argued, essentially the draft was “...a clumsy carrot and stick device to stimulate volunteering. The stick was the threat of being drafted and the carrot was a bounty for volunteering.”⁴⁴ The threat of the draft induced communities---whose members were suspicious of centralized authority and opposed to coercion by the federal government---to provide sizable bounties to attract volunteers so the draft would be used as infrequently as possible.

³⁹ Oi (1996), p.39.

⁴⁰ Rafuse (1970) claims a union private earned \$6.40 per month in 1864. Lonn (1928) says pay was \$13 per month at the beginning of the war, rising to \$16 per month by May 1864. Shannon (1965, Vol. 2) says pay was \$11 per month at the outset of the war.

⁴¹ See Ratner (1942) for a thorough discussion of revenue collection in the Civil War.

⁴² For example, for the years 1863-1865, these additional taxes brought in approximately \$236 million, while income taxes in those years totaled approximately \$55 million. Income less than \$600 was never taxed, resulting in fewer than 1% of all earners paying income taxes. See Flaherty (2000), p.139.

⁴³ McPherson (1988), p.443.

⁴⁴ McPherson (1988), p.605.

Evidence the goal of conscription was not to forcibly compel individual service is in the facts individuals could hire a substitute or pay a fee to avoid service, and communities were given every chance to fill their quotas with volunteers (Murdock, 1967). Thus, contrary to the case with 20th century U.S. conscription, the CW draft appeared to have roots in the various conscription plans developed (but not adopted) in the War of 1812, which were designed to shift the tax burden of the military from the federal government to the population as a whole and not to drafted individuals (Section 2 above). A more formal analysis of the optimal choice of military compensation is found in the next section.

7. A Model of Conscription with Community Bonuses

The Market for Substitutes

Consider a world in which there are N individuals, all of whom are draft eligible. Since volunteers and substitutes are essentially the same, the former are ignored. One who is picked in a draft lottery will be referred to as having been *called*; one who is called and enters the military will be referred to as having been *drafted*. The federal government calls m individuals in a random lottery, $m < N$, and offers compensation of W_M to all who enter the military. After observing W_M , local government pays a bonus of B to each individual who enters the military. Commutation is ignored for now; it will be considered in Section 9. Those who are called may either enter the military, with total compensation equal to $W_M + B$, or may hire a substitute at a market-determined price, P . Those not called may go as substitutes, receiving total compensation equal to $W_M + B + P$. Assume the supply of labor to the military is uniformly distributed with a density of one on the interval $[0, N]$. Inverse labor supply to the military is then $W = L$ for $L \leq N$, where W is the reservation wage for individuals and L is the quantity of labor supplied. All those with $W - P > W_M + B$ will prefer to hire a substitute if called; others will enter the military as draftees. Thus, the price of a substitute is determined by setting demand and supply equal. With the probability one is called equal to $\frac{m}{N}$, and $\frac{N-m}{N}$ the probability one is not called, we have:

$$\frac{m}{N}(N - W_M - B - P) = \frac{(N - m)}{N}(W_M + B + P), \quad (1)$$

$$P = m - W_M - B. \quad (2)$$

Assuming the federal and local governments do not compensate draftees sufficiently so all would be happy to enlist in the military, so $W_M + B < m$, we have $P > 0$. Using eq.(2), those who are drafted--- those called who do not hire---have $W \leq m$; those not called who go as substitutes also have $W \leq m$. Thus, only those with the lowest reservation wages enter the military (Warner and Asch, 2001). There is no resource misallocation due to the “wrong people” entering the military, which would occur if substitution were not allowed. However, there are private and social costs of the military that would not exist if a voluntary military were employed. These costs result because reluctant draftees exist; they are reluctant because the total compensation for draftees is less than m .⁴⁵ Unlike those who enter as substitutes, reluctant draftees would not have entered the military voluntarily. All those with $W_M + B < W \leq W_M + B + P$ are reluctant if drafted. The number of reluctant draftees, D , is then:

$$D = \frac{m}{N}P = \frac{m}{N}(m - W_M - B). \quad (3)$$

Social costs due to reluctant draftees include costs associated with higher turnover and draft evasion (Warner and Negrusa, 2005).⁴⁶ The focus herein is on the cost to government from the political opposition to having anyone compelled to enter the military.

Draft insurance

⁴⁵ Becker (1957) argues a voluntary military and a draft with substitutes are essentially the same thing. That would be the case if draftees were allowed to go as substitutes, and if there were no costs of finding substitutes. On the latter, see Section 8.

⁴⁶ Some have argued the draft could be cheaper than a volunteer military due to the deadweight cost of taxation. See Johnson (1990), Lee and McKenzie (1992), and Ross (1994). For a contrary view, see Warner and Asch (1996).

If draft insurance were allowed, the price of fair insurance would equal the probability of being called times the price of a substitute, $\frac{m}{N} P$. However, unless individuals are risk averse or budget constrained---so they could afford to pay $\frac{m}{N} P$ but not P , draft insurance would have no impact on the market for substitution. Only the individuals who would hire a substitute without insurance would purchase insurance. Budget constraints could occur if a large part of one's reservation wage, W , did not reflect alternative earnings, but represented a high level of disutility from military service. Neither risk aversion nor a budget constraint for individuals is particularly germane to the issues of concern herein, so draft insurance will not be considered further.

The local government

In the first sub-section, it was assumed the local government paid B to each individual who entered the military. Now consider how B might be determined. Although it was argued above few individuals were actually drafted in the CW, the model herein does not force this result. It simply considers the tradeoffs to the local and federal governments when both prefer fewer reluctant draftees, other things equal.

In order to raise funds, the local government incurs a fixed cost, F . It thus spends $Bm + F = T$, with T the amount the local government collects in taxes. Assume the local government faces opposition, ϕ , based on D , the number of reluctant individuals who are drafted, and T , the amount collected in taxes. Thus $\phi = \phi(D, T)$, and it is assumed $\frac{\partial \phi}{\partial D}$ and $\frac{\partial \phi}{\partial T}$ are both positive and $\frac{\partial^2 \phi}{\partial D \partial T}$ is zero. The local government chooses B to minimize ϕ , given eq.(3). The first and second order conditions for a minimum are:

$$\frac{\partial \phi}{\partial B} = m \left(\frac{\partial \phi}{\partial T} - \frac{1}{N} \frac{\partial \phi}{\partial D} \right) = 0, \quad (4)$$

$$\frac{\partial^2 \phi}{\partial B^2} = m^2 \left(\frac{\partial^2 \phi}{\partial T^2} + \frac{1}{N^2} \frac{\partial^2 \phi}{\partial D^2} \right) > 0. \quad (5)$$

From the first order condition, the local government trades off the increased opposition from higher taxes with the reduced opposition from fewer reluctant draftees when it raises B. A one unit increase in B causes taxes to rise by m, and thus results in increased opposition equal to $m \frac{\partial \phi}{\partial T}$. The same change in B, reduces D by $\frac{m}{N}$, causing opposition to decline by $\frac{m}{N} \frac{\partial \phi}{\partial D}$. Given the intensity of the opposition to a draft in the Civil War, it is reasonable to believe $\frac{\partial^2 \phi}{\partial D^2}$ is positive. One might also expect $\frac{\partial^2 \phi}{\partial T^2}$ is positive, and, although that is not necessary for a minimum of ϕ (provided $\frac{\partial^2 \phi}{\partial D^2}$ is positive and sufficiently large), it will be necessary for a minimum of the federal government's cost.

Totally differentiating the local government's first order condition with respect to B, W_M , and F, we have:

$$\frac{dB}{dW_M} = \frac{-\frac{\partial^2 \phi}{\partial D^2}}{\frac{\partial^2 \phi}{\partial D^2} + N^2 \frac{\partial^2 \phi}{\partial T^2}} < 0, \quad (6)$$

$$\frac{dB}{dF} = \frac{-\frac{\partial^2 \phi}{\partial T^2}}{\frac{m}{N^2} \frac{\partial^2 \phi}{\partial D^2} + m \frac{\partial^2 \phi}{\partial T^2}} < 0, \quad (7)$$

using the second order condition for the local government and the assumption both $\frac{\partial^2 \phi}{\partial D^2}$ and $\frac{\partial^2 \phi}{\partial T^2}$ are

positive. With $\frac{\partial^2 \phi}{\partial T^2} > 0$, $\frac{dB}{dF} < 0$ and $\left| \frac{dB}{dW_M} \right| < 1$. A higher fixed cost means higher taxes and a higher $\frac{\partial \phi}{\partial T}$;

thus B is reduced as F increases. Also, a one dollar decrease in W_M will induce the local government to increase B by less than one dollar.

In the next sub-section, it will be of interest to consider an exogenous change in the marginal opposition to an increase in D . Thus, suppose $\phi = \frac{k_D}{2} D^2 + \frac{k_T}{2} T^2$, and $k_D, k_T > 0$. Consider the effect of a change in k_D . Total differentiation of the local government's first-order condition yields $\frac{dB}{dk_D} > 0$.

Unsurprisingly, an increase in the marginal opposition to a larger number of reluctant draftees will induce the local government to increase the bonus paid. Next we will see how the federal government would respond to a change in k_D .

The federal government

The federal government is assumed to trade off its payroll cost, mW_M , with opposition it receives from constituents. Local government has a cost in opposition from its constituents of ϕ . Suppose the opposition by constituents to the federal government is proportional⁴⁷ to ϕ . In particular, assume the federal government's cost, C , is $C = \lambda\phi + (1-\lambda)mW_M$, with $0 < \lambda < 1$. The federal government chooses W_M to trade off ϕ and mW_M . The first-order condition yields:

$$\frac{\partial C}{\partial W_M} = \lambda \frac{d\phi}{dW_M} + m(1-\lambda) = 0. \quad (8)$$

We have:

$$\frac{d\phi}{dW_M} = \frac{\partial\phi}{\partial B} \frac{dB}{dW_M} + \frac{\partial\phi}{\partial W_M} = \frac{\partial\phi}{\partial W_M}, \quad (9)$$

using the Envelope Theorem ($\frac{\partial\phi}{\partial B} = 0$). Since, using eq.(3), $\frac{\partial\phi}{\partial W_M} = \frac{\partial\phi}{\partial D} \frac{\partial D}{\partial W_M} = -\frac{m}{N} \frac{\partial\phi}{\partial D}$, we can rewrite the

first-order condition:

⁴⁷ Note it is not necessary for an interior solution for the federal government's choice problem to have C increase at an increasing rate in either of its arguments, ϕ and mW_M , as long as $\frac{\partial^2\phi}{\partial D^2}$ and $\frac{\partial^2\phi}{\partial T^2}$ are positive.

$$\frac{\partial C}{\partial W_M} = m(1 - \lambda) - \frac{m\lambda}{N} \frac{\partial \phi}{\partial D} = 0. \quad (8')$$

The federal government balances the additional payroll cost from raising W_M with the reduction in opposition from constituents as D is decreased, with these effects weighted by $1 - \lambda$ and λ respectively.

The second order condition for the federal government is:

$$\frac{\partial^2 C}{\partial W_M^2} = \frac{m^2 \lambda}{N^2} \frac{\partial^2 \phi}{\partial D^2} \left(1 + \frac{dB}{dW_M} \right) > 0, \quad (10)$$

which requires⁴⁸ $\left| \frac{dB}{dW_M} \right| < 1$.

Totally differentiating the first-order condition for the federal government yields $\frac{dW_M}{d\lambda} > 0$: as one would expect, the larger the weight, λ , for opposition from constituents in C, the higher the military wage set by the federal government. When higher payroll is more costly to the government (λ is smaller), because of the difficulty in raising taxes, the optimal level of W_M falls. Again, using

$\phi = \frac{k_D}{2} D^2 + \frac{k_T}{2} T^2$, totally differentiating the federal government's first order condition yields:

$$\frac{dW_M}{dk_D} = \frac{m - B - W_M}{k_D \left(1 + \frac{dB}{dW_M} \right)} > 0, \quad (11)$$

since the denominator is positive for a minimum of the federal government's cost, and $m > B + W_M$ or there would be no reluctant draftees. Thus, both the local and federal governments will increase what they

⁴⁸ From eq.(6), if $\frac{\partial^2 \phi}{\partial T^2} \leq 0$, $\left| \frac{dB}{dW_M} \right| \geq 1$, and the second-order condition for the federal government would not hold.

pay to enlistees (B and W_M , respectively) if there is an increase in the marginal opposition from constituents from reluctant draftees ($dk_D > 0$), so there should be an unambiguous reduction in D in this case. A large enough marginal opposition from constituents, k_D , from D could mean there would be few reluctant draftees in equilibrium.

In sum, the model in this section suggests the fixed cost to the local government of raising funds negatively affects the optimal choice of bonuses---by increasing the marginal opposition to taxes; the local government raises bonuses as federal pay decreases, but by less than \$1 for each dollar decrease in federal pay; and both federal pay and local government bonuses increase as the marginal opposition by the citizens to the number of reluctant draftees increases.

8. Costly Substitution

In the previous section, the usual results (*e.g.* Warner and Asch, 2001) were found when substitution is allowed with conscription: only individuals with the lowest opportunity cost enter the military, and the additional social cost with conscription (versus a volunteer army) is due to reluctant draftees. However, the previous analysis ignored any cost to individuals of finding substitutes. Such costs add directly to social cost, but also may indirectly increase social cost if they cause an increase in the number of reluctant draftees or result in resource misallocation because the wrong people are enlisted in the military.⁴⁹ Commutation may have allowed individuals to avoid costs of finding substitutes.

Levi (1997) suggests commutation may have been of particular value in rural areas where it was more costly to find a substitute. The use of brokers might reduce the cost of finding substitutes.⁵⁰ Brokers existed in New York as early as August 1862. However, using intimidation and the ignorance of potential volunteers and substitutes, these brokers had a virtual monopoly on recruiting, and were notorious for their dishonesty, essentially stealing a significant portion of the bounties and substitution prices owed

⁴⁹ Mulligan and Shleifer (2005) consider fixed costs associated with the draft, and argue civil-law countries---which have a significant regulatory apparatus in place, so incremental *fixed cost* with a draft would be lower than in common-law countries---are more likely to have a draft, as are more populous countries because they have lower fixed cost per person.

⁵⁰ I thank Todd Cherry for this point.

volunteers and substitutes.⁵¹ Thus, brokers may have raised substitute prices because their fees were so high. Also, to the extent local governments, and not individuals, incurred costs of finding volunteers/substitutes, commutation may have still have lowered the social cost of finding these individuals. Some areas may have avoided recruitment entirely by paying the commutation fee for the number of individuals in their quotas. Presumably more populous areas would have provided the volunteers/substitutes (subsidized with commutation revenue). Since some of the cost of finding troops is independent of the number of men recruited, the total cost of recruitment would be reduced if fewer areas had to recruit.

The cost of finding a substitute may be direct (out-of-pocket expenditures), indirect (time costs), or both; the analysis is essentially the same whether the cost is direct or indirect. Suppose an individual with reservation wage W has only a time cost of finding a substitute and this cost equals sW , $0 < s < 1$, with s independent of W . Now one will hire a substitute if called if:

$$W - sW - P > W_M + B,$$

$$W > \frac{W_M + B + P}{1 - s} \equiv W'.$$
(12)

Let $W' \equiv W_M + B + P$. The quantity of substitutes demanded is the number called who have $W > W'$. The quantity of substitutes supplied is the number not called who have $W \leq W'$. Setting supply of and demand for substitutes equal yields:

$$P = \frac{(1 - s)mN}{N - s(N - m)} - W_M - B.$$
(13)

It is easy to show $\frac{\partial P}{\partial s} < 0$, with $P = m - W_M - B$ if $s = 0$. Using P ,

⁵¹ Shannon (1965, Vol. 2), pp.53, 70, 84-85, and 93. Individuals often erroneously believed the use of a broker was necessary to obtain bonuses as a volunteer or substitute.

$$W' = \frac{(1-s)mN}{N-s(N-m)}, \quad (14)$$

$$W'' = \frac{mN}{N-s(N-m)}. \quad (15)$$

Note $\frac{\partial W'}{\partial s} < 0$, and $\frac{\partial W''}{\partial s} > 0$. The number of reluctant draftees is m/N times the number who have $W_M + B < W < W''$. Using eq.(15), we have:

$$D = \frac{m}{N} \left[\frac{mN}{N-s(N-m)} W_M - B \right]. \quad (16)$$

Now $\frac{\partial D}{\partial s} > 0$, and, when $s = 0$, $D = \frac{m}{N} (m - W_M - B)$ as was found in the last section.⁵² Figure One illustrates what now occurs. Suppose $s = 0$. In this case $W' = W'' = m$. As s increases, the demand for substitutes falls, lowering P . Thus, W' falls and W'' rises. The increase in W'' means the number of reluctant draftees has increased, and, along with the decrease in W' , means we now have the potential for resource misallocation because the wrong people are enlisted in the military. Given the likelihood one is called, m/N , the loss from this resource misallocation is positively related to the difference between W'' and W' . For those with, $W' < W < W''$, if called, they will not hire a substitute, and, if not called, they will not go as a volunteer. Consider two individuals, x and y , with respective reservation wages W_x and W_y , with $W' < W_y < W_x < W''$. If x is called and y is not called, x will enter the military and y will not do so, and society loses $W_x - W_y$ in foregone output.

Thus, if there are costs of obtaining a substitute, it is no longer the case there is no resource misallocation due to the wrong people going into the military when substitution is allowed. The extent of

⁵² From the first-order condition for the local government (eq.(4)), a larger D as s increases should cause an increase in B , and, it can be shown, there should also be an increase in W_M by the federal government. Since such changes reflect higher private cost for the local and federal governments, they are ignored herein to focus on the effects of s on private and social cost, given B , W_M , and m .

this resource misallocation and the costs associated with the number of reluctant volunteers both are positively related to the cost of obtaining substitutes.

9. What Could Commutation Do?

If there are no costs of obtaining a substitute, allowing individuals to pay a fee to avoid service---*commutation*---is no different than allowing substitutes (Warner and Asch, 2001). By setting the commutation fee equal to the price of a substitute if substitution were allowed, the same people who would have hired a substitute commute. If the commutation revenue is paid to volunteers, then volunteers receive the same compensation they would have if they had gone as substitutes.

If there were substitution, the cost of hiring a substitute would equal sW . Consider what commutation could do in the absence of substitution. Each individual may commute by paying z , and each volunteer receives $W_M + z$ from the federal government and B from the local government. As before, draftees receive $W_M + B$.

Proposition One. If z is set equal to what P would be if there were substitution and no commutation, eq.(13), too many would commute and commutation revenue would not enable the federal government to attract m individuals (draftees plus volunteers), given W_M and B .

Corollary. Setting z equal to the price of a substitute with no cost of finding a substitute, eq.(2), would lower social and private cost and result in m individuals being enlisted, given W_M and B .

Proof. Suppose z is set equal to what P would be if s were zero: $z = m - W_M - B \equiv z^*$. As shown with costless substitution in Section 7, those with $w > m$ would commute if called; those with $w \leq m$ would be drafted if called and would go as volunteers (as opposed to substitutes) if not called. Intuitively, given $W_M + B$, setting $z < z^*$ would increase the number who commute, decrease the number who are drafted, and produce too few volunteers.⁵³ ■

To compare P with hiring costs to z^* , use eqs.(2) and (13):

⁵³ See the Appendix for a formal proof $z < z^*$ will cause fewer than m individuals to be enlisted.

$$z^* - P \equiv \Delta = \frac{sm^2}{N - s(N - m)}, \quad (17)$$

with $\Delta > 0$ for $s > 0$, and $\frac{\partial \Delta}{\partial s} > 0$. For one who, with substitution and no commutation, would just be indifferent to hiring or being drafted, $W = W''$ (eq.(15)). For such an individual, the cost of finding a substitute is $sW'' = \frac{smN}{N-s(N-m)} > \Delta$; for all others who would hire a substitute, $sW > sW''$. If $z = z^*$, the amount by which the commutation fee exceeds what P would equal with substitution is less than the cost of hiring a substitute, which is why more will commute--- $\frac{m}{N} (N-m)$ ---than would hire--- $\frac{m}{N} (N-W'')$ ---with $W'' > m$.

Thus, using commutation and not substitution, and setting z equal to what P would be if s were zero, means *social cost* will be reduced for three reasons:

- 1) costs of obtaining substitutes are avoided;
- 2) there are fewer disgruntled draftees (eq.(3) versus eq.(16)), so the costs associated with draft avoidance and turnover (neither modeled herein) are reduced; and
- 3) there is no misallocation of resources due to the wrong people entering the military.

Of course, the *private cost* for the local and federal governments, ϕ and C respectively, are also reduced with commutation.

10. What Did Commutation Do?

With costs of finding a substitute, it has been demonstrated commutation could lower private and social costs when conscription is used, provided the commutation fee is set correctly, which requires the commutation fee exceed what the price of a substitute (absent commutation) would equal. There is no indication the \$300 commutation fee was chosen to reduce the private or social cost of the military.

Lincoln clearly stated commutation was intended to be a binding ceiling price on substitutes,⁵⁴ and it appears to have been just that. Even before the elimination of commutation (except for conscientious objectors) had gone into effect, the price of substitutes had risen to \$600 in New York City (Murdock, 1967). In 1862, with the militia system of attracting men for the military, the price of substitutes had reached \$1000.⁵⁵

It appears federal officials knew they had imposed a binding price ceiling.⁵⁶ The problem, as considered in the previous section, was not the fact commutation brought only funds, but was due to the commutation fee being so low too few dollars were earned via commutation to induce a sufficient number to volunteer.⁵⁷ Although federal officials understood commutation brought insufficient revenue, the elimination of the \$300 federal bounty to volunteers (funded with commutation revenue) on April 4, 1864 (just after the end of commutation) suggests a failure to understand bounties and substitution prices were too low (but see the next paragraph). The insufficiency of military compensation may have become apparent soon thereafter because, on July 19, 1864, a new federal bounty of up to \$300 was instituted (Murdock, 1963).⁵⁸

The Lincoln administration understood the critical importance of attracting sufficient forces as quickly as possible. Also, the effects of a binding price ceiling were well known to economists.⁵⁹ However, even with the knowledge too few individuals might be attracted, the political expediency of setting the commutation fee too low may have been irresistible to federal officials who wanted to reduce the opposition of those who were drafted.

⁵⁴ “Without the money provision, competition among the more wealthy might, and probably would, raise the price of substitutes above three hundred dollars...” Lincoln in Nicolay and Hay (1905, vol.9), p.79.

⁵⁵ Shannon (1965, Vol. 2), pp. 61-62 provides information on substitute prices in various areas in 1863. Prices as low as \$50 (in Philadelphia) and as high as \$500 (in parts of New York state) were found. In general, substitute prices were around \$300, which is to be expected since this was when one could pay the \$300 commutation fee and avoid service for three years---the same as if one had furnished a substitute. Substitute prices below \$300 may have occurred because some with low opportunity costs were unsure whether they would be hired as substitutes or bounty men. Afraid they would miss out, they may have accepted low prices as substitutes. Substitute prices in excess of \$300 may reflect the aversion to being part of a draft (see footnote 38), and the fact one could hire a substitute before a draft occurred (after a troop call).

⁵⁶ Becker (1957) discusses the problem with setting the commutation fee too low.

⁵⁷ After the first two drafts, Senator John Sherman expressed the general view of why commutation would end, which is commutation was too widespread, bringing funds and not troops (Geary, 1986).

⁵⁸ This bounty was for \$100 per each year for which one enlisted, up to three years.

⁵⁹ In this period, Mill’s *Principles of Political Economy* (first published in 1848) “...was the undisputed bible of economists” (Blaug, 1985, p.179). Mill discussed how a price ceiling would result in a shortage (Mill, 2004, pp.843-848).

11. Why the Draft Changed Significantly in the 20th Century

As discussed in Section 4, the bounty system and hiring of substitutes were fraught with problems. However, these problems were the result of the lack of ability to identify individuals (allowing some to accept bounties and then desert),⁶⁰ the weakness of the federal government at that time, and the ignorance of many who went as volunteers or substitutes and believed they could only do so by using brokers. These issues would be much less important today, and the problem of a weak central government no longer existed after the Civil War.

The dissatisfaction with some of the features of the draft was captured in the 1865 report by Illinois Assistant Provost Marshal General James Oakes (reprinted in O'Sullivan and Meckler, 1974, pp.93-101) which focused on the workings of the Civil War draft in Illinois. The Oakes report served as a blueprint for the next draft, in World War One (WWI); subsequent drafts in WWII, Korea, and Vietnam essentially followed the template used in WWI. The Oakes report was very critical of substitute brokers, and recommended no substitutes or bounties be used. If bounties were to be used, Oakes believed they should be paid only after some service. As noted in Section 4 above, the weakness of the federal government in the Civil War was the likely reason bonuses (other than those from the federal government) were paid up front. Without current means of identification, but with the more powerful central government by WWI, bonuses could have been paid over time in WWI. Today, the U.S. volunteer military uses bonuses, some of which are paid up front, given the ability to find deserters.⁶¹

For reasons discussed below, prior to WWI, there was an increased support for universal military training (UMT) and a draft. From the theoretical model above, $d\lambda < 0$ implies opposition from the public due to the draft is less important for the federal government. Totally differentiating the condition (eq.(8')) for the federal government's optimal military wage, W_M , with respect to W_M and λ :

⁶⁰ Becker (1957) notes desertion would be less of a problem today with modern communications and the identification of individuals. He also suggests bounties may have been a form of life insurance for enlistees.

⁶¹ In July 2007, the army offered a new \$20,000 bonus to those who signed up by September 30th (Shanker, 2007).

$$\frac{dW_M}{d\lambda} = \frac{m\left(1 + \frac{1}{N} \frac{\partial \phi}{\partial D}\right)}{SOC} > 0, \quad (18)$$

because $SOC \equiv$ the second-order condition for a minimum and is positive, and $\frac{\partial \phi}{\partial D} > 0$. Thus, if opposition to a draft is less costly to the federal government, a lower military wage would be paid, and more would be drafted. Because of (1) the changing role of the U.S. in international affairs, and (2) domestic politics, the view of the public towards the draft and UMT changed by the beginning of the 20th century. The first point has two parts: international trade and immigration.

Until the end of the 19th century, U.S. foreign policy involved isolationism along with economic and territorial expansion. Because of increased international trade, many of the elites in business, academia, and government were convinced the U.S. should take a more interventionist stance in the world. This view led them to support UMT and a draft. These individuals wanted the U.S. to be prepared for war and to have a foreign policy consistent with the country's growing economic clout; also, they believed a strong military was necessary for the maintenance of international trade and preservation of national honor.⁶² Additionally, in 1914, the U.S. had an army of 100,000. Germany and France had conscript armies of 800,000. The U.S. had relatively high civilian wages, so some feared the payroll costs of a US volunteer army would be too high; thus they agitated for a draft for this reason.⁶³

The second international factor that induced increased support for conscription was the increased immigration to the U.S. at the end of the 19th century which changed attitudes of many native-born Americans. There was a belief the new arrivals had not become assimilated to the U.S. Thus, some became convinced individuals should not be free to pursue their own interests; the majority demanded conformity with Anglo-American values and viewed citizen service as an obligation. Many of the elites who supported a greater international role for the U.S. viewed UMT as a means to assimilate recent immigrants. Once WWI began, there was increased willingness to use government power to induce

⁶² See Chambers (1987), pp.76, 84, 265, and 266, and Flynn (2002), p.35.

⁶³ See Chambers (1987), p.75. The fear of too high a U.S. payroll cost may have been overblown. Regular soldiers were paid \$15 per month, but, supposedly, the full cost per soldier was \$1700 per year, suggesting the wage bill was barely 10% of this cost. During WWI, pay was \$30 per month (plus food and housing), when civilian wages averaged about \$80 per month (Chambers, 1987, p.167).

conformity. Conscription and UMT were natural parts of this movement towards national citizenship (as opposed to allegiance to a state). Note, the Civil War had seen the beginnings of the emphasis on national citizenship.⁶⁴

Despite the clamor for a draft and UMT, President Wilson resisted both and never approved the latter. Initially, Wilson opposed conscription.⁶⁵ On March 25, 1917, Wilson told his generals he wanted to move quickly with volunteers. Yet, a few days later, he proposed volunteers be limited to regular army and national guard units. Post-WWI, Wilson's position might be viewed as supportive of volunteers, but the situation was considerably different in 1917. As described in Section 3, to volunteer in the Civil War meant serving in volunteer units. This practice continued in the Spanish-American War, and, as will be discussed below, was still considered viable by many in WWI.

In the Spanish-American War, future U.S. president Theodore Roosevelt lead the 1st U.S. Volunteer Cavalry Regiment, more commonly known as the Rough Riders.⁶⁶ Prior to the entrance of the U.S. into WWI, Roosevelt met with Secretary of War Baker, and, after the U.S. declared war, he met with President Wilson. On both occasions, Roosevelt wanted volunteers dispatched to Europe and requested permission to raise a division himself.⁶⁷ Both the French and British endorsed the use of U.S. volunteer units, and Roosevelt had found regular officers to lead these units.⁶⁸ In April 1917, the U.S. senate voted to *require* four volunteer divisions---a corps of 100,000 men. The final version passed by congress simply *allowed* for the volunteer divisions. In fact, no volunteer units were allowed during the war. After WWI, U.S. military officers admitted the Allied Expeditionary Force could easily have been staffed with volunteers.⁶⁹

⁶⁴ See Chambers (1987), pp.87-89, 93-95, 192, and 264, and Flynn (2002), p.99.

⁶⁵ See Rostker (2006), p.24.

⁶⁶ Roosevelt was initially a lieutenant colonel and second in command to Colonel Leonard Wood, but the latter was promoted prior to the famous charge at San Juan Hill, and Roosevelt was then promoted to colonel and given command of the regiment. The actual charge occurred on Kettle Hill, and most of the men charged on foot because they had been forced to abandon their horses before they got to Cuba. See Walker (1998), pp.143, 187, and 212-223.

⁶⁷ A division is larger than a regiment, which Roosevelt lead in the Spanish-American War. Regiments are no longer listed in U.S. Army organizational charts.

⁶⁸ See O'Toole (2005), pp.310-311, and 317-318, and Chambers (1987), pp.136-137.

⁶⁹ See Chambers (1987), pp.167-171.

Two historians---John Chambers (1987), who extensively studied U.S. wars and raising of troops, and Patricia O'Toole (2005), a biographer of Roosevelt---believe Wilson changed his mind on volunteer units because his party (the Democrats) feared Roosevelt would repeat his military heroics of the Spanish-American War and become a formidable Republican presidential candidate in 1920. One can not rule out the importance of the internationalists who clamored for a draft and UMT. However, UMT was not adopted, so the question is: why was a draft implemented, with no volunteer units, when UMT was not adopted? At the very least, it appears the Roosevelt factor raised the political cost of a volunteer military sufficiently so a draft was adopted and volunteers units were not employed.⁷⁰

12. U.S. Conscription in the 20th Century

World War One

The National Defense Act of 1916 allowed the regular army to expand to 175,000, asserted the principle of military service for able-bodied males age 18-45, and empowered the president to draft militia units if sufficient volunteers did not appear. A draft of individuals was adopted in May 1917.⁷¹ Secretary of War Baker coined the term *selective service*. The ostensible objective was to choose the men the army wanted, leaving out those who were valuable to the war effort or other non-military production. Although skilled workers were eligible for deferments, the Wilson administration rejected blanket deferments for categories of skilled workers, fearing these exemptions would erode support for the draft. Local draft boards classified ten million draft registrants into five categories by eligibility. This fit the era's view of scientific classification of manpower. A lottery was then used to draft those deemed least essential for the civilian war effort.⁷²

Cooper (1982) argues the WWI draft minimized the cost of those serving in the military because it chose only those with the lowest value elsewhere. Similarly, Warner and Negrusa (2006) argue a draft

⁷⁰ Individual volunteers were prohibited in 1918 (Chambers, 1987, p.73). Ironically, in trying to replicate his heroics in the Spanish-American War, Theodore Roosevelt, one of the strongest proponents of the volunteer system, helped to end the U.S. volunteer system (Chambers, 1987, p.268).

⁷¹ The first British draft occurred in 1916 (Chambers, 1987, p.118).

⁷² See O'Sullivan and Meckler (1974), pp.122, and 124, Chambers (1987), pp.188-192, and Flynn (2002), pp.37-39.

that targets those with the lowest civilian wages will tend to induct the same people who would volunteer, provided wages and non-pecuniary aspects of military service are unrelated. Some evidence in favor of this argument is the fact 70% of those drafted had been manual laborers.⁷³

However, it is not clear whether those actually drafted were the lowest opportunity cost individuals. First, there was much room for favoritism by local draft boards. This might be more likely for those who had higher wages or income, but there might have been, for example, dilettante sons of the wealthy who had low civilian earnings. Second, the draft board reflected the views of the upper and middle classes on what social and occupational groups were more valuable, which may not have always coincided with the actual value to society of some individuals' occupations.⁷⁴

Additionally, for some, civilian earnings and non-pecuniary aspects of the military may have been negatively related. Let ω reflect civilian monetary earnings, and η equal the value of non-pecuniary aspects of the military. If $\eta > 0$, civilian employment is preferred to that in the military, and vice versa. If there were individuals with a high value for ω , but a large (in absolute value) negative value for η , then these individuals could have a total opportunity cost, $\omega + \eta$, that was low, but, because ω was high, they would tend to be prevented from entering the military. There is some evidence such individuals existed in the Spanish-American War. Some of the Rough Riders represented the elites of society;⁷⁵ many of them included Harvard classmates of Theodore Roosevelt, and they came from some of the most famous names in the US, including Astor, Fish, and Tiffany.⁷⁶ With Roosevelt again trying to raise a volunteer unit for WWI just two decades after the Spanish-American War, there could very well have been such individuals who wished to enlist as volunteers.⁷⁷

⁷³ Flynn (2002), p.38.

⁷⁴ Chambers (1987), pp.191-192.

⁷⁵ Of course, as noted above, some of these individuals may have inherited wealth but low values for ω .

⁷⁶ See Walker (1998), pp.109-110.

⁷⁷ A more recent example of someone with a high value of ω and low (or negative) value of η was University of Chicago economist Paul Douglas. Although age 50 and a professed pacifist, Douglas was so upset at the atrocities committed by the Axis Powers in WWII he enlisted as a Marine private, and fought and was severely wounded at Okinawa, losing the use of his left arm. See Van Overtveldt (2007), p.333.

World War Two

By WWII, there no longer was even an ostensible effort to try to induct those with the lowest opportunity costs (ignoring non-pecuniary aspects of the military). The draft was enacted in September 1940 prior to U.S. involvement in WWII. Once the U.S. entered the war, the first few drafts were by lottery; after that, the oldest in the eligible pool were drafted first. Volunteers were allowed until December 1942. The draft was intended to share the obligation of military service, but, as in WWI (with a different objective), the goal may not have attained. Although there were no deferments for occupational groups, the president was allowed to provide exemptions for public health and safety. More importantly, local draft boards had a good deal of discretion, and generally preferred deferring married men and fathers over unmarried essential workers.⁷⁸

In particular, farm workers received a significant number of draft exemptions, even though group deferments supposedly did not exist. Although 9% of non-farm workers were deferred, 17% of farmers received job deferments.⁷⁹ Consequently, many single men left industrial jobs that paid better than farming, but in which one did not have as high a chance of receiving a deferment.⁸⁰ Thus, as was the case in WWI, the WWII draft did not result in either conscription of the lowest opportunity cost individuals or a random lottery in which occupational and social status played no role.

Korean War

In the Korean War, there was an attempt to return to the selective draft of WWI. Educational and occupational deferments were used in order to continue the flow into scientific and professional jobs.⁸¹ Even when no one was drafted, the draft was a tool to induce volunteers to apply. Although volunteers served for three years, as opposed to twenty-one months for draftees, the latter also had a five year reserve obligation. An estimated 40% of volunteers enlisted to avoid the draft, and volunteers were

⁷⁸ See O'Sullivan and Meckler (1974), p.177, Flynn (1993), p.54, Flynn (2002), pp.59, 100, 127, and 171, and Rostker (2006), p.26.

⁷⁹ See Flynn (1993), pp.58 and 65, and Flynn (2002), p.173.

⁸⁰ See Flynn (1993), p.68.

⁸¹ See Janowitz (1982), p.406.

allowed throughout the Korean War. Although the draft's goal seems to have been to protect the economy while maintaining war production, once again farm workers received a disproportionate number of deferments. In 1951, there were 24,000 deferments for those in key industrial jobs, and 85,000 deferments for farm workers.⁸²

Viet Nam

The draft during the Viet Nam War operated essentially in the same way as it did during WWII. Individuals registered at age 18 and were called between the ages of 18.5 and 26 for two years (plus a reserve obligation). In 1969, one out of six individuals in the military was a draftee, but 88% of infantrymen in Viet Nam were draftees.⁸³ As in the Korean War, educational and occupational deferments existed. The latter were based on lists from the Department of Commerce and the Department of Labor, which supposedly included jobs that were critical for the civilian sector.⁸⁴

It is often argued the opposition to the draft in Viet Nam was due to the unpopularity of the war. Another reason for more draft opposition during this war, as opposed to during WWII and the Korean War, was the relatively poor pay for those at the lowest ranks. Consider the change in real pay for military personnel from 1946 to 1966. During that period, median real family income had increased by 69%. The real pay of generals had almost kept pace, increasing by 64%. Senior sergeants' real pay had increased by 48%, but privates' real pay had declined by 24%.⁸⁵

13. Summary

Compared to the U.S. in the 20th century (particularly after the 1930s), the federal government had much less power during the Civil War. With roots in the conscription plans considered in the War of 1812, Civil War conscription was not intended to compel individual service. Instead, Civil War

⁸² See Flynn (1993), pp. 111, 118, and 129-130.

⁸³ See Flynn (2002), pp.75-76.

⁸⁴ See Curtis (1982), p.595.

⁸⁵ This information is contained in a July 1967 memo from Gardner Ackley, the chair of the Council of Economic Advisors, to Secretary of Defense McNamara (Ackley, 1967).

conscription appears to have been a second-best plan to shift some of the tax burden of the military from the federal government to state and local governments. Draft riots did not reflect difficulties in avoiding being conscripted. The time allowed state and local governments to provide volunteers (and avoid the draft) after a federal call for enlistments, along with substitution and commutation, meant few individuals were actually drafted---about 2% of all who served. Theoretical analysis suggests federal pay and local government bonuses would increase as the marginal opposition by citizens to the number of reluctant draftees increases.

Had the commutation fee been set appropriately---higher than the price of a substitute absent commutation---social and private costs associated with the military *could* have lowered, but the commutation fee was set too low---so it could function as a binding ceiling on the price of substitutes. With too many commuting, and insufficient funds received from commutation to pay volunteers, commutation was abandoned after two (of four) federal drafts.

By World War One, with the Oakes Report of 1865 and its criticisms of the bounty and substitution features of the Civil War, along with domestic political considerations (*i.e.*, Theodore Roosevelt) and a changing international role for the U.S., the system of volunteer units was abandoned. No longer was the threat of a draft used to stimulate communities to provide bonuses to induce volunteers or substitutes; the draft was used to directly acquire men.

Those who today advocate a draft to spread the burden of military service among various social and economic classes should understand the first use of the draft by the U.S. had no such goal. Only in the 20th century has the U.S. implemented a draft to directly produce enlistments.⁸⁶ The unique conditions---strong attachment to states and a weak central government---of the 1860s no longer exist, nor does even a second-best argument to justify a draft.

⁸⁶The proposed conscription plans in the War of 1812 have a modern counterpart. Consider the description of the Tibetan army (faced with a possible attack from China in the early 1950s). "Tibet had a standing army, to which every district contributed its quota in proportion to the number of the inhabitants...A man called up for service can buy a substitute....New regiments were formed and the national assembly decided to call on the richer classes to furnish and equip another thousand men. It was left to them to enlist in person or to find substitutes." Harrer (translated by Graves, 1954), pp.259-260. I thank Fred Wallace for this reference.

Appendix

Proof $z < z^$ will induce fewer than m to enlist, given W_M and B .*

With $z^* = m - W_M - B$, suppose $z = z^* - \varepsilon$, $\varepsilon > 0$. All those called with $W > W_M + B + z$ will commute, so:

$$\# \text{ who commute} = \frac{m}{N} (N - m + \varepsilon), \quad (\text{A1})$$

$$\text{commutation revenue} = \frac{m}{N} (m - W_M - B - \varepsilon)(N - m + \varepsilon). \quad (\text{A2})$$

Let the total compensation of each volunteer equal \hat{W} . Thus, $\frac{(N-m)}{N} \hat{W}$ volunteers will be attracted. Since the number of draftees is $\frac{m}{N} (m - \varepsilon)$, in order to have m enlistees:

$$\begin{aligned} \frac{(N-m)}{N} \hat{W} &= m - \frac{m}{N} (m - \varepsilon), \\ \hat{W} &= \frac{m(N-m+\varepsilon)}{N-m} = m \left(1 + \frac{\varepsilon}{N-m} \right), \end{aligned} \quad (\text{A3})$$

$$\# \text{ of volunteers} = \frac{m}{N} (N - m + \varepsilon), \quad (\text{A4})$$

which simply means the number of volunteers equals the number who commute. Since $\hat{W} = W_M + B + b$, where b is the federal bonus to volunteers required to induce m enlistees,

$$b = \hat{W} - W_M - B = m - W_M - B + \frac{m\varepsilon}{N-m}, \quad (\text{A5})$$

using eq.(A3). Using eqs.(A2), (A4), and (A5), the amount that must be paid in federal bonuses to induce m enlistees exceeds commutation revenue if:

$$m - W_M - B + \frac{m\varepsilon}{N-m} > m - W_M - B - \varepsilon, \quad (\text{A6})$$

which holds for $\varepsilon > 0$. ■

Table One. Draft Statistics from the U.S. Civil War.*

Draft #	# called (**)	# reporting	# discharged (***)	# examined	# exempted	# held to service	# commuted	# hiring subs.	# drafted
1	292,441	253,026	460	252,566	164,395	88,171	52,288	26,002	9,881
2	113,446	86,253	1,296	84,957	39,952	45,005	32,678	8,911	3,416
3	231,918	165,759	27,223	138,536	82,531	56,005	1,298	28,502	26,205
4	139,024	110,547	64,419	46,128	28,631	17,497	460	10,192	6,845
All	776,829	615,585	93,398	522,187	315,509	206,678	86,724	73,607	46,347

* Source: Murdock (1971), p.13.

** These are the numbers called in a draft after volunteers were obtained. The government calls for men were, as best as can be determined, 500,000, 200,000, 500,000, and 300,000, respectively (Geary, 1991, p.81).

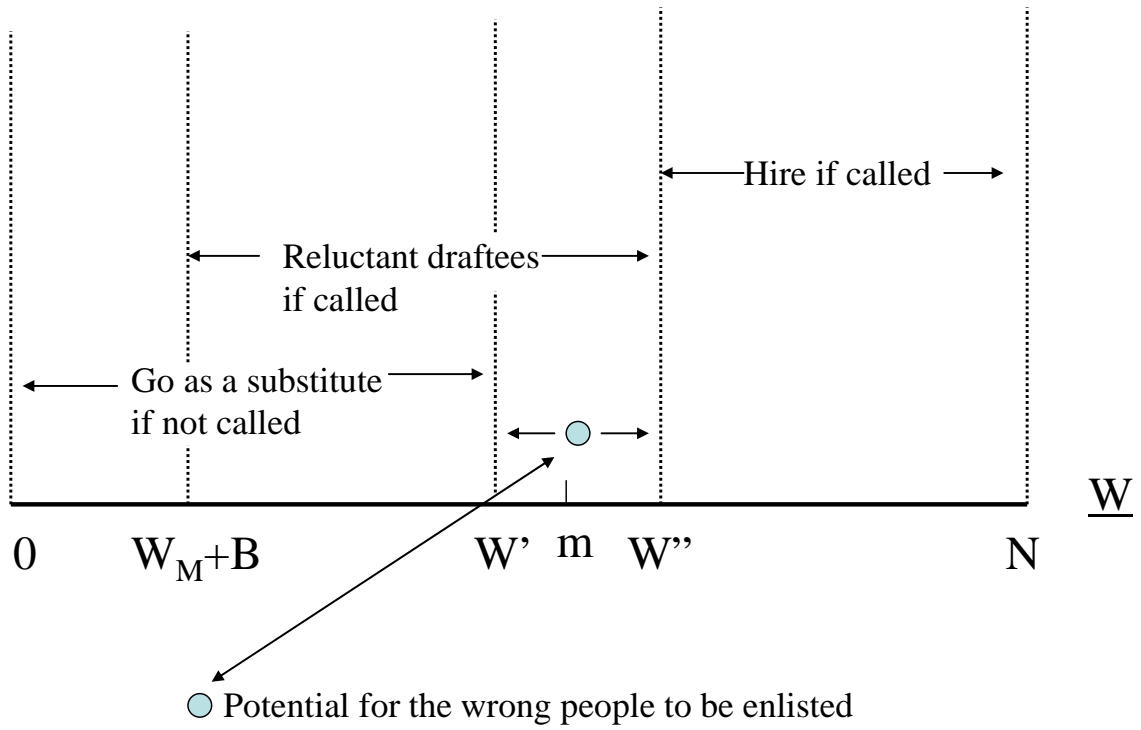
*** These individuals apparently were discharged because their districts had met their quotas.

Table Two. Various Draft Percentages.*

Draft #	% called who reported	% reported <u>not</u> discharged	% examined held to svc.	% held to svc. who were drafted	% called who were drafted
1	87%	100%	35%	19%	3%
2	76%	98%	53%	8%	3%
3	71%	84%	40%	47%	11%
4	80%	42%	38%	39%	5%
All	80%	85%	40%	22%	6%

* Source: Table One.

Figure One. Costly substitution.



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