



## Testimony

**Statement of  
Carla Tighe Murray  
Senior Analyst for Military Compensation and  
Health Care**

### **Evaluating Military Compensation**

**before the  
Subcommittee on Personnel  
Committee on Armed Services  
United States Senate**

**April 28, 2010**

*This document is embargoed until it is delivered at 10:00 a.m. (EDT) on Wednesday, April 28, 2010. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.*

Mr. Chairman, Senator Graham, and Members of the Subcommittee, I appreciate the opportunity to discuss the Congressional Budget Office's (CBO's) analysis of compensation for members of the armed forces. To attract and retain the military personnel it needs, the Department of Defense (DoD) must offer a competitive compensation package—one that adequately rewards service members for their training and skills as well as for the rigors of military life, particularly the prospect of wartime deployment.

The best barometer of the effectiveness of DoD's compensation system may be how well the military attracts and retains high-quality personnel. Between 2005 and 2008, the services periodically had trouble recruiting or retaining all of the high-quality personnel they needed.<sup>1</sup> To address those problems, the Congress authorized increases in both cash compensation (such as pay raises and bonuses) and noncash compensation (such as expanded education benefits for veterans and their families). All of the services met their recruiting and retention goals in 2009 and are continuing to do so in 2010. However, the relationship between specific changes in pay rates and benefits and the amount of recruiting and retention is not clear, and changes in recruiting and retention may be too gradual or too ambiguous to guide all decisions about compensation. In particular, a variety of factors—including economic conditions—may have significant effects on DoD's ability to recruit and retain personnel during a given period. Therefore, it is difficult to determine the appropriate increase in compensation solely on the basis of recent patterns of recruiting and retention.

Even when overall goals for recruiting and retention are met, shortages or surpluses may exist in specific occupations or among people with certain years of service or rank. In those cases, the military services have other tools at their disposal. For example, they can enhance their efforts to attract recruits and can fine-tune their bonus programs to retain existing personnel who possess particular occupational skills.

Another way to determine whether military compensation is competitive is to compare it with civilian compensation. This testimony will focus primarily on such comparisons—which can be useful but not definitive, in part because of the significant differences in working conditions and benefits between military and civilian jobs.

My remarks today will address three questions:

- *How does military cash compensation compare with civilian wages and salaries?* CBO's most recent analysis, for calendar year 2006, found that average cash compensation for service members (including tax-free cash allowances for housing and food) exceeded the median compensation for civilians of comparable age and educational achievement. Since then, military pay raises have continued to exceed the increases of civilian wages and salaries, so that finding has not changed.

---

1. Congressional Budget Office, *Recruiting, Retention, and Future Levels of Military Personnel* (October 2006). Data for later years come from DoD's Directorate for Accession Policy and Directorate for Officer and Enlisted Personnel Management.

- *Is there a “gap” between civilian and military pay raises over the past few decades?* The answer depends on how narrowly military cash pay is defined. One common method of comparison is to calculate the cumulative difference between increases in military and civilian pay using military basic pay, a narrow measure of cash compensation that does not include, for example, tax-free allowances for housing and food. Applying that method would indicate that cumulatively, civilian pay rose by about 2 percent more than military pay between 1982 and the beginning of 2010. But that measure does not encompass the full scope of military cash compensation. Using a broader measure that includes cash allowances for housing and food indicates that the cumulative increase in military compensation has *exceeded* the cumulative increase in private-sector wages and salaries by 11 percent since 1982. That comparison excludes the value of noncash and deferred benefits, which would probably add to the cumulative difference, because benefits such as military health care have expanded more rapidly than corresponding benefits in the private sector.
- *How would the costs of using bonuses to enhance recruiting and retention compare with the costs of adding more to basic pay?* Traditionally, service members receive an across-the-board increase in basic pay each calendar year, and proposals are frequently made to boost the rate of increase. Changing the basic-pay raise that will take effect on January 1, 2011, from the 1.4 percent requested by the President and DoD to 1.9 percent, for example, would increase DoD’s costs by about \$350 million in 2011 and by a total of about \$2.4 billion through 2015, CBO estimates. A larger pay raise would probably enhance recruiting and retention, although the effect would be small. One possible alternative would be to increase cash bonuses by enough to achieve the same recruiting and retention effects as a higher across-the-board pay raise. That approach would have a smaller impact on DoD’s costs because bonuses can be awarded only to the types of service members the military needs most. Bonuses can also be focused on current personnel or potential enlistees who are at the point of making career decisions. Unlike pay raises, bonuses do not compound from year to year (a higher pay raise in one year will cause the following year’s raise to be applied to a higher base), and bonuses do not affect retirement pay and other elements of compensation.

## **The Structure of Military Compensation**

Earnings can be measured in several different ways, but most studies begin with cash compensation. For the military, the narrowest measure of cash compensation is basic pay. All members of the armed services on active duty receive basic pay, which varies according to rank and years of service. A broader measure of cash compensation—called regular military compensation (RMC)—consists of basic pay plus service members’ basic allowances for housing and subsistence, as well as the tax advantage that arises because those allowances are not subject to federal income taxes. All personnel are entitled to receive RMC, and DoD has used it as a fundamental measure of military pay since at least 1962.<sup>2</sup>

---

2. Department of Defense, Under Secretary of Defense for Personnel and Readiness, *Report of the 9th Quadrennial Review of Military Compensation*, vol. 1 (March 2002), p. 29.

While on active duty, service members may also receive various types of special pay, incentive pay, bonuses, and allowances that are not counted in RMC. Those cash payments help compensate service members for unique features of military life. They may be awarded to personnel who possess particular skills or undertake hazardous duty, including deployment and combat. Personnel may also earn bonus payments when they reenlist after completing their contracted term of service, especially if they have occupational skills that are in short supply. Because those special types of pay are earned irregularly or by a small number of specialists, they are generally excluded when comparing military and civilian compensation.

The broadest measure of military compensation includes noncash or deferred benefits, such as retirement pay, health care, and veterans' benefits. In both the armed forces and civilian jobs, such benefits can be sizable and can influence people's decisions about employment, including whether to enlist or reenlist in the military. Non-cash benefits make up about half of total compensation for the average service member, CBO estimates—compared with about one-third for the average civilian worker. Thus, a measure of compensation that includes all noncash and deferred benefits gives a broader and clearer picture of the military's entire compensation package and provides a useful framework for analyzing service members' cash compensation. However, such a comprehensive measure combines funds in different defense appropriation titles and in departments other than DoD; thus, it is more difficult to use than narrower measures of cash compensation to assess a particular department's budget.

## **How Does Military Pay Compare with Civilian Pay?**

The results of pay comparisons differ depending on the definition of military compensation and the segment of the civilian population used in the comparison. Most enlisted personnel join the military soon after high school, but they generally receive some college-level education while on active duty. (The share of enlisted personnel with at least one year of college education grew from 32 percent in 1985 to 72 percent in 2005, CBO estimates.) DoD has asserted that in order to keep experienced personnel in the force, military pay must compare favorably with the wages of college-educated civilians rather than high school graduates. Specifically, DoD's goal has been to make RMC comparable with the 70th percentile of earnings for civilians who have some college education.<sup>3</sup>

CBO estimated that in calendar year 2006, average basic pay for enlisted personnel closely matched the 50th percentile of estimated earnings for civilians with some

---

3. Ibid. Two years ago, DoD's 10th Quadrennial Review of Military Compensation developed a new measure of compensation—called military annual compensation (MAC)—that would include selected noncash elements and deferred compensation. The review's authors recommended making MAC comparable to the 80th percentile of civilian earnings (including similar noncash elements). DoD has not adopted the new measure and continues to use RMC; see, for example, the statement of Clifford L. Stanley, Under Secretary of Defense for Personnel and Readiness, before the Subcommittee on Personnel, Senate Armed Services Committee, March 10, 2010.

college education—in other words, roughly half of those civilians had earnings that were higher than average basic pay and half had earnings that were lower.<sup>4</sup> CBO also estimated that average RMC (which includes cash allowances and associated tax advantages) exceeded the 75th percentile of earnings for civilians with some college education, surpassing DoD’s goal. Lawmakers have continued to authorize military pay raises that exceed the average rise in civilian wages and salaries, so those measures of military compensation would probably match higher percentiles of civilian earnings today. CBO’s study also concluded that service members have access to a range of benefits not routinely offered in the private sector, including free or low-cost health care, housing, education assistance, and discount shopping. Other studies of cash and noncash compensation have reached similar conclusions.<sup>5</sup>

Comparisons of military and civilian pay have several important limitations. First, working conditions can differ markedly between military and civilian jobs. For example, military personnel are generally expected to change locations every few years—in addition to deploying for specific operations—whereas most civilians can choose to remain in the same area throughout their career. Military personnel may work longer hours or in more hazardous conditions than civilians do, even if their type of occupation is the same. At the same time, military life includes features that people may find more attractive than comparable civilian jobs. Some military personnel receive greater responsibility earlier in their career than civilians do. Job security and group solidarity can also be greater for military personnel than for civilians. Pay comparisons cannot easily incorporate those intangible job characteristics.

Second, pay comparisons may ignore the value of training and education that are provided on the job. DoD generally tries to enlist capable young people with high school diplomas or some college education and then trains them for military life and for their occupational specialty. Civilian employers, by contrast, generally hire people who have already been trained, often at their own expense (although most large employers offer work-related education assistance). In addition, civilian employers are more likely to hire people who have more experience. Adding in the value of government-provided training and education would generally make the noncash share of total military compensation even greater relative to civilian compensation.

---

4. Congressional Budget Office, *Evaluating Military Compensation* (June 2007).

5. See Department of Defense, Under Secretary of Defense for Personnel and Readiness, *Report of the 10th Quadrennial Review of Military Compensation*, vol. 1 (February 2008); James E. Grefer, *Comparing Military and Civilian Compensation Packages* (Alexandria, Va.: CNA, March 2008); Government Accountability Office, *Military Personnel: DoD Needs to Improve the Transparency and Reassess the Reasonableness, Appropriateness, Affordability, and Sustainability of Its Military Compensation System*, GAO-05-798 (July 2005); Beth J. Asch, James Hosek, and Craig Martin, *A Look at Cash Compensation for Active-Duty Military Personnel*, MR-1492-OSD (Santa Monica, Calif.: RAND Corporation, 2002); and Congressional Budget Office, *Military Compensation: Balancing Cash and Noncash Benefits*, Issue Brief (January 16, 2004).

Third, differences between military and civilian career patterns complicate pay comparisons. Because the military “promotes from within,” pay may need to be higher for new recruits than for civilians of similar ages and education levels as DoD tries to compete for the best pool of applicants from which to select the best career personnel. Also, data on average civilian compensation include the pay of people who are successful in their civilian career as well as the pay of people who are not. But in the military, the “up-or-out” promotion system means that the least successful personnel have generally left military service before reaching senior levels.

## **Is There a “Gap” Between Military and Civilian Pay Raises?**

Because basic pay makes up the majority of regular military compensation, one of the most common comparisons is between changes in military basic pay and changes in the employment cost index (ECI) for wages and salaries of private-sector workers. In 1981 and 1982, relatively large increases in basic pay were enacted to address shortfalls in recruiting and retention. For much of the following two decades, however, basic pay increased more slowly than the ECI did. Some observers have measured the percentage by which the cumulative increase in military basic pay since 1982 has fallen short of the cumulative increase in the ECI for private-sector wages and salaries, referring to that difference as a military “pay gap.” By 1998, the gap totaled nearly 14 percent (see Figure 1).

Lawmakers enacted several measures that helped narrow the perceived gap. In November 2003, for example, they passed a provision stipulating that the increases in basic pay for 2004, 2005, and 2006 exceed the corresponding increases in the ECI by 0.5 percentage points.<sup>6</sup> Each year since then, the Congress has continued to set the basic-pay raise at 0.5 percentage points above the increase in the ECI.<sup>7</sup> As a result, the cumulative difference between increases in basic pay and the ECI since 1982 has shrunk to a little over 2 percent.

As a basis for evaluating pay, however, the gap between military and civilian raises since 1982 has some significant limitations.<sup>8</sup> First, the ECI is based on a survey that includes a broad sample of civilian workers; on average, those workers are older than military personnel and more likely to have college degrees. Since 1980, the pay of college-educated workers has risen faster than that of high school graduates in the civilian sector. Also, the pay of older civilian workers has generally grown faster than that of younger workers. Because the military mainly recruits young high school

---

6. Section 602 of the National Defense Authorization Act for Fiscal Year 2004 (117 Stat. 1498, 37 U.S.C. 1009).

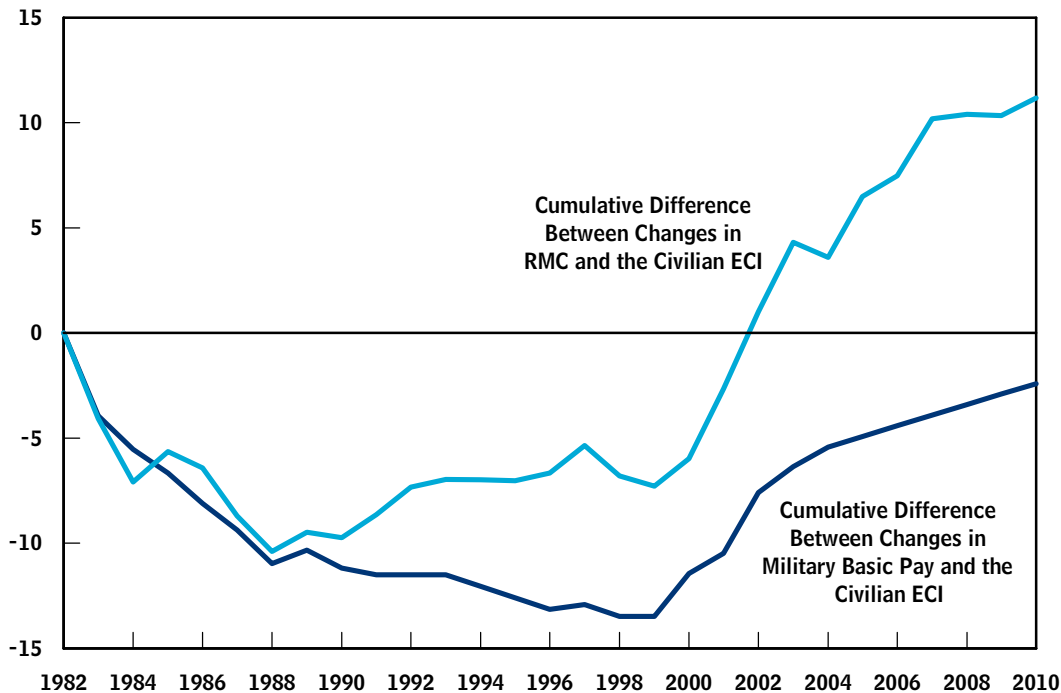
7. For example, the President requested a 2.9 percent increase in basic pay for 2010, which equaled the percentage increase in the ECI. The Congress authorized a 3.4 percent pay raise in section 601 of the National Defense Authorization Act for Fiscal Year 2010 (123 Stat. 2347, 37 U.S.C. 1009).

8. CBO produced a technical analysis of those limitations in 1999, and they continue to exist today. See Congressional Budget Office, *What Does the Military “Pay Gap” Mean?* (June 1999).

**Figure 1.**

## Difference Between Changes in Military and Civilian Compensation Since 1982

(Percent)



Source: Congressional Budget Office based on data from the Department of Defense and the Department of Labor.

Notes: RMC = regular military compensation (basic pay, cash allowances for housing and subsistence, and the federal tax advantage that occurs because those allowances are not taxed); ECI = employment cost index for wages and salaries in private industry.

These comparisons exclude noncash benefits and the military's various types of special pay and bonuses.

graduates, pay raises that were smaller than increases in the ECI would not necessarily hamper DoD's efforts to attract new personnel.

Second, the pay-gap calculation focuses on one part of military compensation—basic pay—and ignores changes in other cash and noncash components. In 2000, besides raising basic pay, lawmakers authorized a restructuring of housing allowances that eliminated out-of-pocket expenses typically paid by service members (which had averaged about 20 percent of housing costs).<sup>9</sup> Other changes included linking

9. Those changes were enacted in section 605 of the National Defense Authorization Act for Fiscal Year 2001 (114 Stat. 1654A-147, 37 U.S.C. 403).

housing allowances more closely to increases in local housing prices and giving service members “rate protection” from any declines in those prices.

With RMC substituted for basic pay in the comparison, the total growth in military compensation since 1982 has exceeded the growth in the ECI for private-sector wages and salaries by about 11 percent (see Figure 1). Including the value of noncash and deferred benefits would probably add to that cumulative difference.

## **What Are the Effects of Changing Basic Pay Versus Awarding Higher Bonuses?**

Increasing basic pay in 2011 will affect DoD’s budgetary requirements in future years. Pay raises compound from one year to the next, because a higher raise this year will cause next year’s rate of increase to be applied to a higher base. Changes in basic pay also affect other components of compensation, such as retirement pay. CBO estimates that increasing the basic-pay raise that will take effect on January 1, 2011, from 1.4 percent, as requested by DoD and the President, to 1.9 percent would boost DoD’s personnel costs by about \$350 million in 2011 as well as by a total of about \$2 billion over the following four years (see Table 1).

A higher pay raise would most likely enhance recruiting and retention, but the effect would be small. The annual difference between a 1.4 percent increase and a 1.9 percent increase in basic pay for the average enlisted member is about \$150. CBO estimates that roughly 1,000 people who would not choose to enlist or reenlist in 2011 if basic pay rose by 1.4 percent would do so with the higher raise.

Alternatively, the same result might be accomplished by increasing bonuses for enlistment and reenlistment or by stepping up recruiting efforts. A bonus program generally requires smaller increases in spending than a basic-pay raise does to achieve the same effect on recruiting and retention, for several reasons. Bonuses can be targeted toward those service members (or potential recruits) whom the military needs most. Bonuses do not compound, as pay raises do, and they do not affect retirement pay and other elements of compensation. Bonuses also do not involve expending resources on service members who do not have the option of leaving in a particular year; they can be focused on the years of service in which personnel make career decisions and can be curtailed if other factors (such as economic conditions or deployment requirements) change. In addition, larger bonuses could create more-meaningful differences in pay between occupations, which could be a cost-effective tool for improving military readiness.

However, amplifying pay differences between occupations or between people at slightly different stages of their career could run counter to the long-standing principle of military compensation that personnel with similar amounts of responsibility should receive similar pay. Also, increasing bonuses rather than adding to basic pay would reduce retirement and other benefits for service members relative to what they would receive if the extra money was part of basic pay throughout their career.



**Table 1.**

---

**Costs to DoD of Increasing the Basic-Pay Raise from 1.4 Percent to 1.9 Percent in 2011**

---

(By fiscal year, in millions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
											2011–	2011–
											2015	2020
Budget Authority	367	495	502	511	524	538	554	571	588	606	2,399	5,256
Outlays	348	488	501	510	523	537	553	570	587	604	2,370	5,221

---

Source: Congressional Budget Office based on data from the Department of Defense (DoD).

Note: Although the numbers shown here are for fiscal years, military pay raises generally take effect on January 1 (the beginning of the second quarter of the fiscal year). These numbers apply to active-duty and reserve personnel but not to members of the Coast Guard or other branches of the uniformed services.

---

How much it would cost to attract and retain the same number of personnel with bonuses rather than a larger increase in basic pay would depend on how the services structured their bonus programs. In any event, the lack of compounding means that in 2012 and beyond, virtually all service members would have lower overall compensation than they would receive with a larger increase in basic pay. That outcome could also affect recruiting and retention in future years. If DoD wanted to attain the same levels of recruiting and retention as it would achieve with the higher basic pay, an augmented bonus program would need to continue in future years as well.