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# Expectations About Civilian Labor Markets and Army Officer Retention

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Michael L. Hansen, Shanthi Nataraj

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# Summary

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## Background

Despite relatively high levels of officer retention overall, Army personnel management officials have noted that junior officer retention is lowest for the individuals in whom the Army has made the largest investment. These officials are concerned that these officers might not have a full and accurate picture of the socioeconomic environment that they face if they leave active-duty service. If these personnel currently underestimate the additional costs of civilian employment, a more complete picture of the socioeconomic environment could raise retention and assist the Army in its competition with civilian employers.

The goal of this monograph is to develop a comprehensive picture of the socioeconomic environment officers will encounter if they leave active-duty service and to analyze the potential impact of these factors on Army retention. Ultimately, officers' expectations about civilian employment affect their retention decisions. Therefore, we also consider how major differences between military and civilian employment can be effectively communicated to officers making stay/leave decisions.

## Junior Officer Retention

The data are consistent with the Army's perceptions about junior officer retention compared with the investment made in these officers. U.S. Military Academy (USMA) graduates cost the most to recruit. Reserve Officer Training Corps (ROTC) scholarship graduates cost less than

half of what it takes to recruit a USMA graduate, but this is appreciably more than ROTC nonscholarship and Officer Candidate School (OCS) graduates. However, junior officer retention is lowest for USMA graduates; we estimate that, by the eighth year of service, less than half are still on active duty. Similarly, only about half of ROTC scholarship graduates are still on active duty at that point. In contrast, about two-thirds of ROTC nonscholarship and OCS graduates are still on active duty at their eighth year of service.

## **Socioeconomic Differences Between Military and Civilian Employment**

To identify major differences between the civilian and military employment environments, we reviewed two research strands. The first is the military manpower and personnel literature. The relevant research focuses on comparisons of benefits provided to service members with those available to civil-service and private-sector workers, and on characteristics of service that affect retention. Second, we reviewed the large labor economics literature. The relevant research focuses on general characteristics of labor markets and tries to identify causal explanations for these characteristics.

From this review, we identified several socioeconomic differences between military and civilian employment. Because officers understand how much they receive in their paychecks and the wages and salaries associated with civilian employment are the most visible benefit of leaving active-duty service, we concentrate on other differences between military and civilian employment in addition to cash compensation.

For clarity, we have organized these other differences into three major categories:

- unemployment and cash compensation, including
  - unemployment
  - underemployment
  - job instability
  - gender and race pay differentials

- noncash and deferred compensation, principally the availability and generosity of
  - health-care benefits
  - retirement benefits
  - quality-of-life (QoL) programs and conditions
- other characteristics of jobs, including
  - geographic relocation
  - spousal employment
  - deployments and time spent away from home.

## **Unemployment and Cash Compensation**

### **Unemployment**

The risk of unemployment lowers expected civilian compensation. There is not a single unemployment rate that represents this risk to officers. The possibility of unemployment varies by several factors, including

- gender, race and ethnicity, age, and educational attainment
- geographic region
- industry or occupation.

We estimate that, on average, civilian college graduates become unemployed once every 6.5 years and that, currently, the expected duration of an unemployment spell is about 22 weeks. However, some civilians have longer unemployment spells, including those who are involuntarily separated. In addition, about 7 percent of the unemployed left their employers voluntarily but were then unable to find work (authors' calculations based on BLS, 2011c, Tables A-11 and A-12, and 2009c).

### **Underemployment**

Underemployment in the private sector represents an additional risk to officers making stay/leave decisions. In particular, some civilians are

- employed part time but prefer to work full time
- in jobs that do not fully use their skills or abilities
- earning less than they prefer or feel that they deserve.

Although there are no official statistics on underemployment, some researchers estimate that as many as 25 percent of the employed are underemployed (Lim and Golinelli, 2006). In general, underemployment leads to low job satisfaction and QoL, and underemployed workers are more likely than fully employed workers to consider quitting their jobs (Maynard, Joseph, and Maynard, 2006).

Although the risk of underemployment lowers the benefits of a civilian career, it does not always mean lower earnings. For example, some individuals work in jobs that do not fully use their skills or abilities, but they *voluntarily choose* to work in these occupations because of the pay they receive.

### **Job Instability**

The economics literature generally concludes the following:

- Job stability has substantial, positive effects on civilian earnings.
- The number of jobs held by new labor-market participants adversely affects earnings later in their careers.

The average civilian holds seven different jobs in the first ten years of his or her career. Some of this instability is due to a poor job match, which lowers both job satisfaction and QoL. Although job stability and tenure generally have positive effects on earnings, switching jobs can have a significant payoff for some workers who voluntarily transition from one employer to another early in their careers. In fact, switching jobs accounts for about one-third of early-career wage growth in the private sector (Topel and Ward, 1992).

Officer wage growth is comparable to that of civilians, despite the fact that a significant portion of civilian wage growth is due to switching jobs. In other words, the structure of military compensation allows officers who remain on active duty to experience wage growth comparable to that of civilians without having to switch employers.

## **Gender and Race Pay Differentials**

Comparisons of wages earned by men and women, and by white and black workers, in civilian jobs consistently show gaps between groups. Although there are differences between workers other than by gender and race that explain some of these differences, they cannot completely account for earnings disparities. Even if female and black officers find civilian jobs offering competitive salaries, the possibility of future discrimination during a civilian career does exist. Our analysis of recent veterans' civilian labor-market experiences demonstrates that college-educated veteran minorities also have earnings disparities.

## **Noncash and Deferred Compensation**

### **Health-Care Benefits**

Twenty percent of civilian workers, and approximately 10 percent of college-educated civilians, are not offered any health-care benefits (Cunningham, Artiga, and Schwartz, 2008). Participation in employer-sponsored health insurance plans has declined, most likely because of significant increases in premiums. We estimate that veterans without access to military health-care benefits are slightly more likely than non-veterans are to participate in employer-provided health plans.

Military health-care benefits are more generous than the benefits available to both private-sector and civil-service employees. Unlike most private-sector plans, TRICARE plans do not charge members a premium. Furthermore, civilians have higher out-of-pocket costs than officers do when they use health-care services. Therefore, it costs civilians more than it costs officers to purchase the equivalent level and quality of health care. For those with employer-provided health-care benefits, we estimate that it would cost civilians between \$1,200 and \$3,000 per year, on average, to obtain health care similar to that offered in the military. For those without employer-provided health-care benefits, the cost is much higher, between \$5,000 and \$11,800 per year, because employers often pay a sizable share of the premiums.

### **Retirement Benefits**

The military retirement benefit is more generous than any private-sector benefit. Forty percent of private-sector workers, and 20 to 30 percent of white-collar workers, are not offered any retirement benefits (Costo, 2006), and the private-sector shift from defined-benefit to defined-contribution plans places more risk on employees and increases uncertainty about the value of retirement benefits. However, private-sector workers are vested in retirement systems much earlier in their careers and retain their account balances even if they leave their employer before retirement. Consequently, a higher percentage of private-sector workers actually receive the retirement benefits offered to them.

In addition, for officers making stay/leave decisions before the 20-year point, the *present value* of the military retirement benefit is much lower than the amount they will eventually receive. Because of a preference for immediate over deferred compensation, individuals are willing to accept immediate financial incentives that are smaller than expected future compensation. For this reason, future retirement benefits, although generous at the time they are actually received, can be worth relatively little to officers at the time they make stay/leave decisions.

### **Quality-of-Life Programs and Conditions**

A relatively small percentage of civilian workers have access to QoL programs. In contrast, service members have access to a wide variety of these programs. With a few notable exceptions, however, less than 50 percent of service members use these programs (Lien et al., 2008). There is strong evidence that job satisfaction is tied to employee retention. However, several data limitations have prevented researchers from accurately measuring the relationship between QoL programs and both job satisfaction and retention. The limited evidence suggests that the relatively few QoL benefits available to civilians do *not* lead to low QoL in the private sector.

## Other Characteristics of Jobs

There are several aspects of employment that affect officers more than civilians and are generally thought to reduce the value of military employment. Geographic relocation is much more prevalent in the military than in civilian settings. Furthermore, most civilian relocations are voluntary. Voluntary relocation can improve the QoL of individuals who choose to relocate, while involuntary relocation results in some individuals moving to locations that they (or their families) do not like. Furthermore, when families migrate, the spouse's employment and earning opportunities generally decline. This effect is similar for both military and civilian families who relocate; the difference between military and civilian families is the *extent* to which geographic relocation occurs. All of these factors suggest that officer QoL is lower because of geographic relocation.

Compared with civilians, officers also spend a disproportionate amount of time away from home; the nature of work-related travel is also very different for civilians and officers. Officers not only expect some deployment; many of them indicate that they would prefer it. However, there can be limits to the preferred amount of time away from home.

Although these characteristics reduce the value of military employment, it is not clear that officers have *unrealistic* expectations about these differences. Officers expect to migrate on a regular basis and have chosen to serve on active duty with the knowledge that they will be expected to relocate every few years. Officers with families have chosen to serve, implicitly accepting the deleterious effects on spousal employment as a condition of service. Finally, although the exact timing and nature of deployments remain uncertain, officers expect to deploy on a regular basis.

## The Potential Impact on Retention

Economic theory suggests that retention depends, in part, on officers' *expectations* about civilian compensation. Unfortunately, we have very

little information on expectations about civilian employment opportunities, and we have no empirical evidence of officer impressions of the socioeconomic differences between military and civilian employment. As a result, we are unable to provide precise estimates of the impact that retention has on providing officers with a more complete picture of the socioeconomic environment.

However, officers probably overestimate the ease of finding civilian employment that offers income comparable to what they receive while on active duty. Because they overestimate the most visible benefit of civilian employment, it also is likely that they underestimate the additional, less visible costs of leaving active-duty service. This is consistent with a phenomenon in the psychology literature known as *optimism bias*, in which individuals overestimate the probability of positive outcomes and underestimate the probability of negative outcomes. If this is the case, improving the accuracy of officer expectations will *lower* expectations of civilian compensation and *improve* officer retention.

To estimate the potential impact on retention, we first estimate the potential impact on officer expectations about civilian compensation. We combine these estimates with estimates of the pay elasticity of retention; this allows us to link changes in officer expectations with potential changes in retention. For each socioeconomic difference, we consider three scenarios that, for convenience, we label “optimistic,” “realistic,” and “cautiously optimistic.”

The optimistic scenario is an environment in which officers are completely unaware of the socioeconomic differences between military and civilian employment or presume that it will not affect them when they leave active duty; in other words, they assume this cost of civilian employment to be zero. The realistic scenario is an environment in which officers have an accurate understanding of the additional costs of civilian employment and presume that, on average, these factors will affect them in the same way. The cautiously optimistic scenario is somewhere between the optimistic and realistic scenarios: Officers have some knowledge of the additional costs of civilian employment.

The difference in expected compensation between the optimistic and realistic scenarios is our estimate of the potential impact on expected compensation that communicating these socioeconomic dif-

ferences to officers who know little about the costs of civilian labor markets, or who have extremely optimistic expectations about their potential labor-market outcomes, can have. The difference in expected compensation between the cautiously optimistic and realistic scenarios is our estimate of the potential impact on expected compensation of communicating these socioeconomic differences to officers who have some knowledge of the costs of civilian labor markets, or who have somewhat optimistic expectations.

We regard these estimates as merely proxies for the actual changes in expected compensation because it is likely that some officers currently anticipate some of the additional costs of civilian employment and there will always be some officers with inaccurate expectations. In addition, some officers might *realistically* expect to have better-than-average outcomes in the civilian labor market. Our estimates are meant to reflect the average potential effects.

Some of the socioeconomic differences are not easily described in financial terms, but we can describe their *qualitative* impact on the value of civilian employment and, by extension, on retention. For example, some civilians are underemployed, working jobs that do not fully utilize their skills and abilities but that provide them with a desired level of earnings. Although this type of underemployment does not result in lower civilian compensation, it does lower the value of civilian employment because individuals are not working in the types of jobs they would prefer.

Of the socioeconomic characteristics for which we have quantitative estimates, health-care benefits appear to have the largest potential impact on retention. Better educating officers about the risk of civilian unemployment and about the value of military retirement are expected to have more-modest impacts on retention. In contrast, involuntary part-time employment has a much smaller predicted impact on expected civilian compensation and, by extension, on retention. Of course, the relative magnitudes depend on the plausibility of our assumptions. For some socioeconomic differences (e.g., the value of military retirement pay), it is likely that officers already have some understanding of the difference between military and civilian employment.

## Communicating the Socioeconomic Differences to Officers

Effective communication is a critical element in improving officer retention. The financial education and literacy literatures indicate that identifying the appropriate channels through which information can be disseminated is a critical element in ensuring effective communication. This process, then, involves two steps. First, one must develop a method for gathering the information that the Army wishes to disseminate, including a mechanism for updating this information if and when it changes. Second, one must identify the delivery mechanism for disseminating the information to officers.

One option for gathering and updating information is to rely on external groups to collect the data and then to periodically retrieve this information from those groups' publications or Internet sites. Indeed, much of the data presented in this report are published in press releases and reports or are available on the Internet; however, the specific publications or other sources of the desired information are not always easily found on these groups' websites, and the data are not always tabulated or presented in a way that is amenable to the needs of the Army. An alternative would be to approach these groups and request that they (1) collect, analyze, and present the data in a way that is most useful to the Army and (2) disseminate this information on a periodic basis to the Army. If the Army were to coordinate with the other services and with the Office of the Secretary of Defense (OSD) when approaching these groups, the likelihood that they would be willing to provide the Army with regular updates rises.

The social marketing literature has identified several ways in which information can be disseminated. In the context of the stay/leave decision, there are three relevant methods to disseminate information to officers: through interpersonal communications, through collateral materials, or via the Internet. Each of these channels has its advantages, and the literature concludes that the most effective strategy is to use multiple channels.

Interpersonal, one-on-one communication is considered to be very effective. The primary advantages are that any officer questions

can be answered immediately, and the information can be tailored to address the costs and benefits that are relevant to the individual service member's particular situation. For enlisted personnel, the Army has a natural candidate for initiating these interpersonal communications through its career counselors. Army officers do not have comparable career counselors available to them, although the Army is experimenting with a program that will provide retention counseling to junior officers.

Collateral materials are written materials created for distribution to a target audience. Their primary advantage is that they can convey detailed information, usually at low cost. They are an effective way to follow up on interpersonal communications with more in-depth information or to reinforce the message being disseminated. Another strategy is to place collateral materials in locations where individuals are likely to read them. For example, officers already receive annual notification of the value of all their benefits; this could be supplemented with additional information about the relative costs and benefits of military and civilian employment. Information about differences in health-care benefits could be placed in medical treatment facilities, while information about the relative generosity of morale, welfare, and recreation and other QoL programs could be placed in these facilities.

Finally, the Internet has changed the way in which many individuals receive and process information, and it offers an additional opportunity for the Army to effectively communicate with officers. The primary advantages of the Internet are its immediacy (i.e., individuals can access information at their convenience) and its interactive capabilities (i.e., individuals can focus on the specific information in which they have a particular interest). Each of the services and OSD has developed a website as a way to disseminate information to both the public and to officers. These websites could be adapted to provide additional information about the socioeconomic differences between military and civilian employment. However, these websites are not specifically targeted to individuals making stay/leave decisions. The Army is experimenting with a junior officer retention website that has the potential to provide information these officers need to evaluate differences between military and civilian employment.

Our analysis indicates a need to strategically target USMA and ROTC scholarship graduates because junior officer retention is lowest for those in whom the Army has made the largest investment. Indeed, providing information on the costs of civilian employment *before these individuals even receive their commission* has its advantages. This would allow the Army to get a head start on junior officer retention at a time when these individuals are in a structured environment. For ROTC cadets, the cadre is well suited to the task of communicating these relative costs because its responsibilities already include motivating, educating, and preparing these individuals for service. Similarly, for USMA cadets, it is the West Point faculty's job to both counsel and mentor in preparation for service. Training these groups to effectively communicate the relative benefits of military service, and providing cadets with a framework to assess these factors as they approach stay/leave decision points, could be an effective way to ultimately improve retention.