

COLLEGE STUDENT SALARY DEMANDS FOR A MILITARY HITCH: A POTENTIAL SOLUTION TO THE MILITARY RECRUITING SHORTFALL

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This study offers an exploratory contrast of genders in self-reported salary demands to sign up for the U.S. military for ten years directly out of college. The data extends from January 1998 through September 2005 with 1,389 respondents. Results indicate that over five percent of both women and men subjects would be willing to enlist for annual salaries less than \$34,000 in December 2005 U.S. dollars. A four-year college graduate can enlist as an E-4 in the Army with a compensation package of \$33,514. These results suggest an untapped market for recruits.

INTRODUCTION

"The nation that will insist upon drawing a broad line of demarcation between the fighting man and the thinking man is liable to find its fighting done by fools and its thinking by cowards." Sir William Francis Butler – 1889

Sir William's statement makes the case for seeking the best minds possible for the military, but it appears that a decreasing number of people are currently interested in joining the U.S. armed forces. For the fiscal year 2005, the U.S. Army had its largest recruiting shortfall in 26 years (*The Associated Press* 2006). The shortfall was 6,627 out of a recruiting goal of 80,000 (Kiger 2005) and the near future may hold little promise. Major General Michael Rochelle, past head of the Army Recruiting Command, said the Army was facing the most challenging conditions of his career (Donnelly 2005). Of the various branches of the U.S. armed forces, the Army had the most difficulty reaching recruitment goals (Elliot 2005).

Since the 1973 inception of the all-volunteer Army (AVA), the U.S. armed forces looked primarily to high schools to find recruits to meet quotas. Recruiting college students was not a high priority (Moskos 2001). The notion that the military cannot meet college graduates' compensation and job satisfaction needs relative to high school graduates may play a major role in the military's less zealous pursuit of college graduates.

The purpose of this paper is to offer information about college students' yearly salary requirements they claim would induce them to join the military after graduation. Results indicate college graduates may offer a fine market for military recruiters.

MILITARY RECRUITMENT LITERATURE

A review of military recruiting literature begins with a theoretical perspective of the societal benefits of the AVA. This is followed by consideration of the military's primary target market for recruits and an overview of recruiting from the inception of the AVA to 2003. The final sections concentrate on the U.S. Army's current recruiting shortfall problems and reviews remedy options.

Societal Benefits of the All-Volunteer Army

Weary from the Vietnam War, the U.S. moved to an all-volunteer Army in 1973. From an economist's point of view, there were two main advantages of the all-volunteer Army. Perhaps the strongest argument is that the AVA is based on the recruit's choice and not the coercion of the enlistee (Dwight and McKenzie 1992). In a country where personal freedom and liberty is a cherished value, a draft may appear contradictory.

Second, economists argue the AVA is actually more efficient than the draft. This argument is based on the wage level needed to attract the young person to join the military. Eligible individuals now face the choice of joining the military or pursuing a civilian job. The wage level in which the individual is indifferent between those two choices is referred to as the "reservation wage" (Colin, Udis and McNown 1983 and Horne 1985). Economists argue that individuals with the lowest "reservation wage" (the opportunity cost of joining the military) will join the military. Consequently, the opportunity cost to individuals and society is lower with the AVA because the draft takes both low- and high-opportunity cost individuals (Dwight and McKenzie 1992).

The U.S. Army Target Market for Recruits

Since the U.S. Army is an all-volunteer Army, the focus is on recruiting young people to fill ranks. The primary recruiting target market is the high school graduate. With about two-thirds of the nation's high school graduates pursuing college, this leaves about one-third of the graduates as possible candidates for military service (Moskos 2002). The Army discovered that these potential recruits sought economic incentives such as a salary, job training, and job security (Moskos 2001). The Army detected another target market not initially anticipated. This group consisted of those planning to attend college, but seeking another experience before enrolling (Meese 2002). Nevertheless, according to Moskos (2001), the primary

segment for recruiting for the AVA continued to be high school students and graduates.

With the U.S. Army facing competition from the civilian labor market, recruiting high school graduates for the Army is an increasingly difficult task. Economists point out the importance of keeping the military compensation comparable to civilian pay (Dale and Gilroy 1985). However, the former head of the Army Recruitment Command, Major General Rochelle, flatly stated the Army would never be able to compete with the civilian market on wages (Kiger 2005). To further illustrate the difficulty of recruiting, Ash, Udis and McNown (1983) found the pay elasticity with military enlistments is less than one, thereby requiring the military to have a greater percent increase in pay to attract a certain percent of enlistments.

Logically, it follows that recruiting for the AVA is bolstered when the economy is less robust. At that time, high school recruits who enlist tend to have the lowest reservation wage. If the unemployment is high, the Army finds it easier to meet its recruiting goals (Knowles, Hosecheit, Ayer and Fancher 2002). Currently, almost two-thirds of the recruits enlisting in the Army come from households with income less than the U.S. median. Research also indicates that 44 percent of recruits come from rural areas where there may not be as many employment alternatives to the military (Tyson 2005). Segal and Verdugo (1994) found the Army demographic composition was influenced more by military and civilian wages than by the demographic composition of the population. Military demographics do not reflect a cross section of U.S. culture: African Americans and Hispanics enlist more than whites (Segal, Bachman, Freedman-Doan and O'Malley 1999).

Recruiting Efforts to 2003

After the start of the AVA to 1976, the army met success in recruiting. However, after 1976 the Army wages did not keep up with inflation

and the GI Bill lapsed, making recruiting much more difficult. To meet recruiting goals, the Army initially lowered its standards and followed this by the creation of the Army College Fund in 1982 (Meese 2002). This fund gave recruits the possibility of earning up to \$35,000 in educational benefits (Knowles, Hosecheit, Ayer and Fancher 2002). By 1990, the quality of recruits improved with the non-high school graduate enlistee being rare (Meese 2002).

Competition from the private sector was not to be surpassed. Civilian employers began offering incentives that matched or exceeded the Army's offer (Knowles, Hosecheit, Ayer and Fancher 2002). The increased competition did not severely affect the Army due to the end of the Cold War and resultant reduced manpower requirements (Moskos 2002). From 1990 to 1995, the Army reduced its ranks from 780,000 to 480,000 resulting in reduced recruiting requirements. With the reduction over by 1996, the need to attract new recruits again became a major priority (Knowles, Hosecheit, Ayer and Fancher 2002).

Prior to the mid-1990s, the Army recruiting efforts were targeted primarily toward high school seniors. The students' entry into the Army was delayed until they graduated from high school. However, not everyone who signed up actually enlisted. The loss rate was 60 percent in 1996. Consequently, the Army instituted a new program called Contract Forward Methodology that shifted the emphasis from recruiting high school seniors to recruiting high school graduates. The Army increased its presence on college campuses to attract college dropouts. This new methodology increased recruitment by 17.5 percent (Knowles, Hosecheit, Ayer and Fancher 2002).

Current Recruiting Shortfall

In 2003, the United States entered Iraq which evolved into a extended commitment confronting a violent insurgency. This development has negatively impacted recruiting

soldiers for the U.S. Army (Tyson 2005; CNN 2006). Many parents have discouraged their offspring from enlisting (Kiger 2005). The Pentagon has acknowledged the negative effects of the wars in Iraq and Afghanistan on recruiting (Cooper and Jaffe 2004).

By 2005, the Iraq war effects on recruiting began to show. For the 2005 fiscal year, the Army's goal to recruit 80,000 soldiers fell short by 6,627. Concurrently, the U.S. National Guard met only 80 percent of its recruitment goal (Kiger 2005). Even the nation's military academies experienced a decline in applications (*Women in Education* 2005). The Army's shortfall was the first since 1999, and the largest in 26 years (*The Associated Press* 2006). The shortage in recruiting was eased somewhat by increased re-enlistments by current members of the Army. Despite the increase of enlisted personnel leaving the military from 8.7 percent in 2002 to 10.5 percent in 2005 (Mendoza 2006), the Army surpassed its re-enlistment goal of 64,000 by 5,350 (Kiger 2005).

The recruiting shortfall is compounded by the Army's goal of increasing its size. The Army is striving to bolster its ranks to about 512,000 by 2007. However, the Secretary of the Army has indicated the ranks will return to a level of about 482,000 by 2011 (Shanker 2005).

Effects of the Shortfall

The consequences of the current recruiting difficulty are severe. Andrew Krepinevich, a retired Army officer, recently submitted an assessment report written under contract to the Army. In it he states that the rotation of Army units into Iraq was putting a strain on the Army. He also warns the war in Iraq could cause a disastrous decrease in recruitment (CNN 2006).

With fewer recruits available to fulfill the Army's missions, the shortage of recruits could easily lead to a reduced aptitude level for the recruits. In 2005, the education levels and test scores revealed the current recruits were the least qualified in a decade (Tyson 2005). With

this development, the implications for the Army's future effectiveness are disquieting.

Current Options for the Shortfall

The Army has not stood idle as recruiting fails to meet its goals; rather, it has redoubled its efforts to attract recruits. In December of 2005, the Army replaced its ad agency, Leo Burnett USA, with McCann Erickson Worldwide. The Army plans to spend \$1.35 billion over the next five years or about \$270 million per year on advertising the Army and Army Reserve (Elliot 2005). They had been spending about \$200 million a year for recruitment (*The Wall Street Journal* 2005a).

In addition to bolstered advertising spending, the Army offers increased financial remuneration and other incentives for enlisting. Congress recently increased new recruit maximum bonuses from \$20,000 to \$40,000 for the Army and \$10,000 to \$20,000 in the Army Reserve (*The Associated Press* 2006). Further, the Army will offer a signer's fee of \$1,000 to current soldiers who introduce a new enlistee (*The Wall Street Journal* 2005b).

To identify potential recruits, the military practices database marketing (Levey 2005; O'Brien 2005). As part of the No Child Left Behind Act, high schools must offer military recruiters the same 11th and 12th grader information they provide to civilian recruiters if the high schools receive federal funds (Hubler 2005a; Levy 2005; *Sojourners* 2005). Even Claritas and their segmentation system are employed to identify 18 groups with the most likely members to enlist (Arndorfer 2005).

Re-enlisting current personnel is also an important element in meeting manpower requirements. Re-enlisting a soldier saves the Army time and money. To entice former soldiers back into the ranks, the Army gives them the added incentive of re-enlisting at their former rank and eliminates undergoing basic training again (Elliot 2005). The maximum bonus for a soldier to re-enlist recently

increased from \$60,000 to \$90,000 (*The Associated Press* 2006). In some specialty areas, the bonuses are greater. U.S. military Special Forces personnel completing their stint are presently offered a \$150,000 re-enlistment bonus by the government. While certainly a considerable sum, it is still cheaper than the estimated \$300,000 cost to train a new person for Special Forces (Bedard 2005).

Consequences of the Current Recruiting Options

The Secretary of the Army, Francis Harvey, states that overcoming mothers' objections to the military is the biggest problem recruiters face (*The Wall Street Journal* 2005b). Parental fears inspired by the Iraq war have generated a resistance movement to the practice of high schools releasing information about students (Schaeffer-Duffy 2005). If parents notify high school officials that they do not want their child's name to be on the list, officials must remove the child's name. Many groups concerned with privacy as well as educational groups have national campaigns to inform parents of their rights (Hubler 2005b).

The final push for recruiting soldiers comes from the military recruiters. General Rochelle said Army recruiters are expected to recruit two new enlistees every month (U.S. Department of Defense 2005). Even with lower standards for the recruits (Tyson 2005), the pressure is intense to meet this goal. As a consequence, some recruiters have engaged in unethical practices. The Army recently ordered a one-day stand down so superiors could examine recruiters' ethic practices (Jaffe 2005; Gajewski 2005).

The Draft Possibility

A clear alternative to solve the Army's recruiting problems is a draft reinstatement. Beyond solving military staffing problems, some argue citizens should share the responsibility of military service more equitably as in a draft policy (Galston 2004).

Others contend the AVA is a better means to staff the military (Oi 2003). With even the military denying the need for a draft (Shanker 2004), the possibility of its return seems unlikely in the near future.

The College Graduate Possibility

According to the U.S. Department of Education's National Center for Educational Statistics (2006) for the 2002-2003 and 2003-2004 academic years (the latest available figures), the number of earned bachelor degrees was 1,348,503 and 1,399,542, respectively. The following sections reviews a 15-month college graduate enlistment possibility and introduces a longer-term college graduate enlistment possibility.

College Graduate 15-Month Enlistment

Charles Moskos (2001; 2002) argues the military concentration on high school graduates unnecessarily limits the population for military recruiting. He advocates expanding the military recruiters' target market to include college students and graduates. However, he asserts the enlistment requirement of three or four years discourages college students from joining. He supports a 15- or 18-month enlistment option. Moskos is a professor at Northwestern University who has surveyed his students on the possibility of military service. While positing that Northwestern students may not be representative of all college students, he found almost no support for the three- and four-year military service options. However, Moskos did find about 20 percent support for a 2-year option and 30 percent support for a 15-month option when both options were coupled with educational benefits.

Since it presently takes three to six months to train a soldier, some have questioned the effectiveness of a 15-month enlistment option. Despite this objection, the Army announced in May of 2005 that it would try the 15-month enlistment option. The Army test marketed the 15-month enlistment option in 10 U.S. cities

with unsatisfactory results. Major General Rochelle believes the poor results were based on insufficient advertising. Consequently, the Army plans to implement the 15-month option (Donnelly 2005).

College Graduate Long-Term Enlistment

General Rochelle said the military needs to be competitive, but it will never be able to pay as much as the private sector (Kiger 2005). This wage shortfall may be true for the overall average and maybe even the majority of potential recruits. However, marketers understand you cannot be all things to all people; consequently, markets must be segmented. It is possible there are fresh college graduates willing to serve at the pay levels the Army currently offers.

According to the U.S. Office of the Secretary of the Defense Military Compensation tables effective January 1, 2006, Second Lieutenant/Ensign rank personnel with less than two years of service earn monthly pay of \$2416.20. Basic allowance for housing without dependent for the same personnel is \$601.80. Basic allowance for subsistence for meals is \$187.49 per month (U.S. Office of the Secretary of the Defense 2006). So, roughly speaking, a beginning officer receives annual financial compensation of approximately \$38,465.88 plus health care, retirement pension, paid time-off, and discount shopping at commissaries and military exchanges, family support services, educational assistance, and other miscellaneous benefits.

The Army's website (GoArmy.com) also states a four-year college graduate may enlist as a Specialist (E-4). According to the U.S. Office of the Secretary of the Defense Military Compensation tables effective January 1, 2006, E-4 rank personnel with less than two years of service earn monthly pay of \$1662.90. Basic allowance for housing without dependent for the same personnel is \$857.70. Basic allowance for subsistence for meals is \$272.26 per month (U.S. Office of the Secretary of the

Defense 2006). So, roughly speaking, a beginning E-4 receives financial compensation of approximately \$33,514.32 plus health care, retirement pension, paid time-off, and discount shopping at commissaries and military exchanges, family support services, educational assistance, and other miscellaneous benefits.

Our research focuses on what may be a neglected college student market and what wage level they state would entice them to enlist into the military upon graduation. Unlike Professor's Moskos' student survey about a short enlistment possibility, our research focused on an enlistment of 10 years. The results detailed below may confirm General Rochelle's fears of the military's average salary being too low. However, the results may hold surprising possibilities for the military to meet its recruiting goals in a portion of the college graduate market. It also offers possibilities for raising the quality of the average recruit. The following sections detail our results.

SURVEY DATA

Sample

Data were obtained from 1,389 written surveys voluntarily completed from January 1998 through September 2005. A total of 1,434 surveys were distributed with 45 surveys not completed. The survey was completed by 738 females and 651 males. Assessment showed 28 females and 17 males did not complete the survey. The students surveyed were junior, senior, and graduate students taking marketing classes either at a U.S. Midwest university with approximately 23,000 students or at a U.S. Southeast university with approximately 9,000 students.

Questionnaire

The study's questionnaire items examined requested information about gender and writing in a response on a blank line with a dollar sign affixed to the question, "What annual salary would you require to join the U.S. military for

10 years right out of college?" The survey question was piloted on five university students as a trial for comprehensibility and was found understandable by all, based on discussion.

DATA RESULTS

Data offered below in Table 1 indicates the percentages of university students surveyed who claimed they are willing to sign up for a 10-year hitch in the U.S. armed forces for a stated annual salary. The dollar figures were adjusted for inflation using the Bureau of Labor Statistics of the U.S. Department of Labor CPI for all Urban Consumers for December 2005.

SUMMARY AND MANAGEMENT IMPLICATIONS

According to the U.S. Department of Education's National Center for Educational Statistics (2006) for the 2002-2003 and 2003-2004 academic years, the number of earned bachelor degrees was 1,348,503 and 1,399,542, respectively. The annual military financial compensation is \$33,514 for an E-4 (the four-year college graduate enlistment rank) and \$38,466 for a Second Lieutenant/Ensign. The stated salary demand is \$33,024 for 5 percent of the college survey subjects. This offers the military the possibility of appealing to approximately 69,977 college educated men and women. If only 1 percent of the college graduates were recruited, this would still amount to approximately 13,995 people. The Army's claim to need approximately 6,627 more recruits in the recent past might be addressed by considering the possibility of focusing attention on this pool of candidates.

Clearly, there are university students who are strongly averse to military service. Approximately 7 percent of the subjects specified they would sign up for the military only for \$1,000,000+ annual salary. For 10 percent of the subjects, the annual salary demanded was \$335,056 + to enlist in the military for ten years. Half of the subjects demanded \$73,281 + to enlist for the 10-year

TABLE 1
Inflation-Adjusted Results

	<u>Female</u>	<u>Male</u>	<u>Total</u>
Number of Responses:	738	651	1389
Mean:	\$788,339	\$1,149,384	\$966,674
Median:	\$71,926	\$73,069	\$72,543
Mode:	\$55,562	\$54,155	\$55,562
Minimum:	\$9,899	\$15,545	\$9,899
Maximum:	\$108,729,282	\$151,653,823	\$151,653,823
Standard Deviation:	\$6,824,768	\$8,955,861	\$7,897,576
Response at Cumulative Percent:	<u>Female</u>	<u>Male</u>	<u>Total</u>
1.0 percent(*)	\$22,225	\$21,253	\$21,891
2.0 percent	\$24,356	\$26,566	\$25,472
3.0 percent	\$27,413	\$29,164	\$27,781
4.0 percent	\$30,446	\$32,174	\$31,879
5.0 percent	\$32,619	\$33,337	\$33,024
10.0 percent	\$38,632	\$41,279	\$39,338
20.0 percent	\$46,663	\$48,740	\$46,885
25.0 percent	\$50,984	\$52,036	\$51,599

*This is interpreted as 1.0 percent of the female, male or total respondents indicated they were willing to join the U.S. military for 10 years right out of college for an annual salary of \$22,225, \$21,253, and \$21,891, respectively.

period. So, by no means are all student subjects indifferent about military service. Of course, those groups would not make up the military's target market. There is surely more than the financial dimension in a military service choice.

Price Point Propositions

While cognizant of the perils of ignoring the impact of inflation in examining the data, it may prove useful to consider the raw salary demands from the survey subjects. For example, survey respondents had an overwhelming tendency to name a salary rounded to the nearest thousand dollars. Out of 1,389 survey respondents, only eight people named a figure that was not rounded to the nearest thousand dollars. Of those eight, six people rounded to the nearest hundred dollars.

There was also a tendency for respondents to specify salary demands that were rounded to the nearest five thousand dollars. Data indicates 1,342 of the 1,389 respondents wrote in a dollar figure rounded to the nearest five

thousand dollars. This evidence suggests the notion of psychological price points may have a place in the military recruitment compensation communications to the target market.

The Untapped Degreed "Limbo" Segment

While certainly there are college graduates with a very sure notion of their immediate plans after graduation, there may be a graduate segment that find themselves at loose ends and may be receptive to what the military offers. What motivates college students toward or away from military service is beyond this study's scope. This analysis considered only salary demanded by university students to consider the military for a period of years.

Based on our results, the military may have a willing pool of well-educated applicants who may be ignorant of the military compensation package and post-service opportunities. Perhaps a systematic segmenting of college graduates accompanied by a targeted promotional campaign could generate the

recruits necessary for the military without additional increases in compensation. As ventured by Professor Moskos (2001; 2002), this group of graduates may seek a short-run adventure between schooling and a long-term career that is patriotic, challenging, and competitively compensated. While our survey posed the question of signing up the military for 10 years, a commitment of 15 months to 24 months might be viewed favorably by some "limbo" graduates.

Furthermore, the quality of the recruits should be bolstered by the college graduate segment. These accomplished recruits could alleviate the threat of reduced recruit aptitude levels and the resulting impact on the armed forces effectiveness.

STUDY LIMITATIONS

A primary study limitation is the level of commitment the survey subject feels to her or his item responses. It may be one thing to estimate the remuneration necessary to entice a person into the armed forces when sitting at ease in a comfortable environment and another if making the judgment knowing that shortly a military life would ensue.

The sample further acts as a limiting factor in the interpretation of the study results. Those sampled were living in the U.S. Midwest and U.S. Southeast. The geographical limitations may not be representative of the U.S. as a whole.

The majority of the study subjects were likely to be business majors since the data collection occurred in marketing classes. Business students may have a different expectation about occupational remuneration compared to students in disciplines such as the fine arts, social sciences, or health studies. Therefore, the subjects' salary stipulations may not be representative of university students as a whole.

Another factor may be that some subjects may have already secured jobs in their chosen area

prior to completing the survey. Those with assured compensation may have a different perspective on military service and necessary salary than subjects facing employment uncertainty after graduation.

Another point of inconsistency is the military compensation from the January 2006 information (the latest available at the time of writing), while the inflation adjustment uses the December 2005 CPI. This leaves approximately one month of the inflation unaddressed.

FURTHER RESEARCH

Our study focuses on the inflation-adjusted salary demanded by university students to sign up for the military for a ten-year hitch directly out of college. We offered a comparison between genders at varying percentile levels of those with the lower salary demands. Further investigation could encompass a broader array of students based on declared areas of academic interest, geographical locations, anticipated post-college career compensation, and family socio-economic background to name just a few.

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