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Working Paper

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IFN Working Paper, No. 965

Provided in Cooperation with:

Research Institute of Industrial Economics (IFN), Stockholm

Suggested Citation: Asoni, Andrea; Sanandaji, Tino (2013) : Rich Markets War, Poor Markets Fight? Socio-economic Representativeness in the Modern Military, IFN Working Paper, No. 965, Research Institute of Industrial Economics (IFN), Stockholm

This Version is available at:

<https://hdl.handle.net/10419/81482>

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IFN Working Paper No. 965, 2013

Rich Man's War, Poor Man's Fight? Socio-economic Representativeness in the Modern Military

Andrea Asoni and Tino Sanandaji

Rich Man's War, Poor Man's Fight?

Socio-economic representativeness in the modern military

Andrea Asoni¹, Tino Sanandaji²

Abstract

Having a military that is representative of the population is a stated social goal by policy makers. Since the armed forces do not gather data on the family income of recruits, studies on the socioeconomic background have relied on potentially biased geographic data, reaching conflicting conclusions. We use the National Longitudinal Survey of Youth 1997 to study population representativeness in the years 1997–2011 based on individual level data. In contrast to previous periods, and contrary to popular perception, those who joined the military had higher than median family income and wealth. The lowest and highest parental income categories are both underrepresented in the military. Those who joined were more likely to pursue higher education and had higher self-reported life satisfaction.

Recruits had 0.2 standard deviation higher cognitive tests scores than the civilian population. Higher cognitive test scores strongly increases the probability of joining for those from lower and middle income families while interestingly lowering the probability of joining for those from high-income homes. The over-representation of minorities in the military has declined in recent decades. In sharp contrast to the Vietnam War, Non-Hispanic Whites are significantly over-represented as casualties in Iraq and Afghanistan.

Key words: military service; occupational choice; human capital.

JEL Codes: H41; J18; J24;

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1. Introduction

It is often considered a societal goal that the burden of serving in the armed forces and risking fatality in war does not fall on only one or a few social groups (for example, Cooper 1977, CBO 2007, Wright 2012). The Democratic Leadership Council (1988) argued the United States “cannot ask the poor and under-privileged alone to defend us while our more fortunate sons and daughters take a free ride, forging ahead with their education and careers.” The Department of Defense (1997) points out that: “Imbalances in socioeconomic representation in the military have often been a controversial social and political issue. In debate over the establishment of the volunteer force, opponents argued that it would lead to a military composed of those from poor and minority backgrounds, forced to turn to the military as an employer of last resort.”

Concerns about population representativeness and shared sacrifice were already important during the American Revolution and the Civil War. Discussing compulsory service, Benjamin Franklin is reported as having written “The question will then amount to this; whether it be just in a community, that the richer part should compel the poor to fight for them and their properties” (Warner and Asch 2001). A popular saying since the Civil War has been the phrase “It is a rich man’s war and a poor man’s fight.” (Moore 1924)

Concerns were raised again during the Vietnam War, where young men from higher socioeconomic background had better opportunities of evading the draft (Rostker 2006, Rohlf 2012). Studies of Vietnam era veterans found that recruits of high socioeconomic background were underrepresented by half compared to their representation in the overall population (Boulanger 1981).

In association with the creation of the volunteer army the problem has changed from disparities in the opportunity to evade service to disparities in incentives to join. The idea is that the under-privileged, lacking outside options, are pushed or lured into the armed forces. One of the main arguments against replacing the draft with a volunteer military was that relying on economic incentives to enlist personnel would lead to overrepresentation of the poor among casualties. According to Laurence (2004) opponents of a volunteer military argued that “economic incentives used as the key to ending conscription were tantamount to luring the poor to their deaths.” Besides fairness, there are other concerns with a military primarily recruited among the poor. For example, Janowitz (1975) argued that by recruiting primarily among lower socioeconomic groups, a volunteer military would lead to divisions between the military and the rest of society.

The impression remains that low income individuals and ethnic minorities are disproportionately forced to bear the burden of defending the United States (for example, Rangel 2004, Tyson 2005, DLC 1988, Kristof 2012). Representative Charles Rangel has referred to the war in Iraq as a “death tax...on the poor” (Rangel 2004). In order to ensure “shared sacrifice” in war congressman Rangel has called for the reinstatement of the draft. A New York Times column recently described joining the military as “a traditional escape route for poor, rural Americans” (Kristof 2012).

It has proven difficult to settle this issue since the United States armed forces does not track parental income of recruits. This is in part due to the experience of the military that “recruit-aged youth are not accurate at estimating their parents’ income” (DoD 2000). CBO (2007) points out that “The socioeconomic backgrounds of service members have been less well documented than other characteristics because data on the household income of recruits before they joined the military are sparse.” Studies which attempt to estimate representativeness have instead relied on proxies such as the median income in the recruit zip code or parental education (Kane 2005, DoD 2011). However geography-based studies are inherently limited in determining individual level behavior. In this paper we rely on the National Longitudinal Survey of Youth 1997 (NLSY97) to estimate population representativeness at the individual level. The NLSY97 collects detailed data and follows a large, representative sample of young Americans. Between 1997 and 2011 a significant share of the sample joined the military, which allows us to compare recruits with the rest of the population.

This paper proceeds as follows. The next section discusses previous studies. Next we describe results derived from the Department of Defense data and compare when possible with the NLSY97 data. The fourth section illustrates the NSLY97 data and our empirical approach. The results are presented in section five while the sixth section concludes.

2. Previous Studies

Since 1989 the US military has administered “The Survey of Recruit Socioeconomic Backgrounds” at recruit training centers to ascertain recruits’ background, including information on “parents’ education, employment status, occupation, and home ownership.” However household income of the youth, arguably the most straightforward proxy for social position, is not included in the data. The reason is that the military believes that “While income is a widely used measure of socioeconomic status, research provides evidence that recruit-aged youth are not accurate at estimating their parents’ income. Therefore, home ownership is included as a proxy

for income” (DoD 1998). In 1995 a survey conducted by the military found that recruits scored lower than the general population in terms of socioeconomic index (DoD 1997).

The NLSY79 was used to study the socioeconomic background of recruits, finding that those who served in the military in 1979 were from lower than average socioeconomic background (Fredland and Little 1982). This was a few years after the abolition of the draft in 1973. Earlier studies that followed the end of the draft confirmed that recruits were disproportionately drawn from lower socioeconomic backgrounds (for example, Cooper 1977 and Fernandez 1989).

Kane (2005) conducted an influential analysis of post 9/11 recruits’ demographic characteristics that relied on census bureau zip codes of recruits. The median household income of the five digit zip code area from where the recruit came was used as the measure of income. The study concluded that the burden of service was not as unbalanced as believed, and that middle and higher middle income groups were in fact disproportionately represented among the recruits. The lowest and highest income groups were instead under-represented. The study found that the share of recruits from zip code areas with median income above the national average has increased since 9/11 (Kane 2005). Kriner and Shen (2010) also rely on geographic data. Looking at casualty rather than service, they come to the opposite conclusion, finding that lower income communities were over-represented as casualties in wars since the Korean War, including the war in Iraq.

There are doubts about results relying on geographic data. The department of defense writes (DoD 2000) “While this type of data is useful for demographic trend analysis and advertising and marketing research, it is not reliable for comparing socioeconomic representation in the military to that of the general population. For example, applicants and recruits may not come from the background indicated by the zip code for their current address (i.e., these individuals may move away from home to go to college or to work).”

Mann (2012) relies on the NLSY79 for an extensive economic model of military participation. He demonstrates that participation is sensitive to military pay, to expected combat death risk and to current conditions in the labor market. The Civilian sector is shown to place a higher premium on civilian sector experience than military experience, which helps explain why veterans tend to earn less in the civilian sector.

Bound and Turner (2002) demonstrate that the G.I Bill dramatically increased educational attainment among World War II veterans. It appears that World War II and Korea War veterans from higher socio-economic background disproportionately benefited from the G.I Bill (Stanley 2003). Though outside the immediate focus of this paper, Angrist (1998) measures the effect of

serving on income and employment, overall finding a small positive effect, especially for minorities.

3. Population representativeness in the Department of Defense Data

We rely on the NLSY97 to study recruitment among a representative sample, in part because this enables us to study variables such as income which are otherwise hard to gather. For many other variables the Department of Defense provides data on the universe of recruits. This includes the state of residence of recruits and the race and ethnicity of military fatalities. This data is hard to accurately estimate using the NLSY97. We also report the race and ethnicity of recruits from the Department of Defense data. Since this can also be estimated using the NLSY97, it is interesting to compare the DoD universe of recruits data with the NLSY97 corresponding data as a measure of external validity for using the latter to study the background of recruits.

Minorities were historically over-represented in the military, but this has changed recently. African-Americans' share of recruits has fallen since the 1990s: in 2011 they accounted for 15 percent of the civilian population aged 18–24, and 16 percent of recruits. Hispanics were 19 percent of the civilian population and 17 percent of recruits (DoD 2011).

Recruits also differ in terms of geographic patterns. The propensity to join the military can be estimated through the recruit-to-population ratio, based on the 18–24 year old population in each state. We average the recruit-to-population ratio for the years 2006 through 2011, with results in table 1. This figure is calculated using the annual Department of Defense Population Representation in the Military Services report, supplemented by figures provided by Watkins and Sherk (2008). The sample is divided in states carried by Mitt Romney in the 2012 elections (“Red States”) and those carried by Barack Obama (“Blue States”). Overall, young residents of “Red States” were 36 percent more likely to join the military than young residents of “Blue States.” The correlation between the recruit-to-population ratio and Mitt Romney’s share of the vote is 0.48.

Joining the military is not the same as serving in combat, and the socioeconomic background of combat fatalities can differ from recruits as a whole. During the Vietnam war African-Americans were over-represented in fatalities. While they constituted 10 percent of the military-aged population, they accounted for 12 percent of fatalities (CBO 2007). On a per capita basis during

the Vietnam War, African Americans were 27 percent more likely than Whites (including Hispanic Whites) to die in service. This overrepresentation was highest in the beginning of the war, where almost one fifth of those killed were black, and was reduced somewhat in later periods partially due to active political action to achieve more balance (CBO 2007).

This pattern has reversed sharply during the wars in Iraq and Afghanistan. The Department of Defense provides data on fatalities in the wars in Iraq and Afghanistan on its homepage. As of December 2012, Non-Hispanic Whites account for 76 percent of fatalities in these wars compared to their population share of 61 percent among the military aged. On a per capita basis non-Hispanic Whites were almost twice as likely as African-Americans to die in the wars in Iraq and Afghanistan, in stark contrast to the Vietnam War. Asians and Hispanics are also underrepresented as fatalities, while Native-Americans are roughly evenly represented compared to their population share.

Fatalities and total recruits differ in part because Non-Hispanic Whites are more likely to be in combat units. Differences in the motivation for joining may account for some of these patterns. African-Americans are more likely to join the military as a career while non-Hispanic whites are more likely to join for non-pecuniary reasons. In one survey, 47 percent per African-Americans listed material reasons and 20 percent the desire to serve the country as primary reason to join. By contrast among Non-Hispanic whites 20 percent listed material motivation compared to 38 percent who listed the desire to serve (Peachey 2006).

4. The National Longitudinal Survey of Youth

Our main source of data is the National Longitudinal Survey of Youth 1997 cohort (NLSY97). The NLSY97 is a nationally-representative social science survey maintained by the U.S. Bureau of Labor Statistics. The survey contains a rich set of data about the participants, including labor market history, cognitive test scores, socioeconomic background and military service. The sample is comprised of 8,984 youths born between 1980 and 1984 who were initially interviewed in 1997 and in every year since.

The individual is determined to have joined the military if he or she reports to as having served at least one year in the regular military or the reserve. Those who serve in the National Guard but no other service are excluded from the analysis.

The United States military screens its recruits based on a number of criteria. Potential recruits who have poor health, are obese or have a criminal record are less likely to be admitted. The military also tends to require a high-school degree. Recruitment is made to a large extent based on the Armed Forces Qualification Test (AFQT), a composite score which estimates cognitive skill. The AFQT is derived from the ten part test Armed Forces Vocational Aptitude Test Battery (ASVAB). Only a small fraction of those who score among the lowest 30 percent in the AFQT are allowed to join the military. A version of the AFQT was administered to the NLSY97 sample, which allows for an estimate of the cognitive skill level. The AFQT has a high weight in recruitment of soldiers. The United States armed forces state that: “AFQT scores are the primary measure of recruit potential.” (DoD 2006).

Socioeconomic status is estimated through family income and family wealth in 1997, when nearly the entire sample still lived with their parents. We also calculate education as the number of years of education completed by 2010. In 2008 the NLSY includes a question asking the respondents “All things considered, how satisfied you with your life as a whole are these days? Please give me an answer from 1 to 10”. This variable is used to estimate self-reported life satisfaction.

5. Demographic Characteristics of Recruits

This section reports the results of our analysis of military recruits. Each sub-section focuses on a few demographic characteristics. In the end we present a comprehensive regression analysis that includes some of these variables and a few additional ones. All analyses use population weights designed to correspond to the demographic distribution of the general population.

5.1 Gender and Mortality

Table 2 lists the characteristics of those who joined the military and those who did not; the latter we refer to as civilians.

Between 1997 and 2011, 465 individuals from the sample joined the military, representing 5.3 percent of the reference population using sample weights. Of these, 442 joined the regular military. Another 32 individuals joined the National Guard. Among men 8.5 percent joined the military, compared to 2.0 percent of women.

We looked at mortality rates among those who served and civilians. We do not find evidence of people who joined the military being more likely to die: only 0.37% of men who served are

reported dead in 2010 while this number is approximately 1.63% for civilians. Among women, none of those who served is reported dead in 2010 while 1% are reported dead among civilians. Needless to say military and civilian death rates are not comparable due to population heterogeneity, such as the requirement for recruits to be healthy. Armed Forces Health Surveillance Center (2012) looks at the deaths of active duty personnel in the armed forces in the period 1990–2011. They also find that the death rate is significantly lower in the military than for similarly aged members of the civilian population. While this may appear surprising, it is worth noting that even during the wars in Iraq and Afghanistan, no more than one third of deaths among active duty personal were caused by combat. The single biggest cause of death is transportation accidents. Suicides have increased during and following the wars in Iraq and Afghanistan as a cause of death for recruits and veterans.

5.2 Parental Income and Wealth

Table 2 shows that median family income was \$68,000 for men and \$71,000 for women who joined the military. These figures are higher than the median family income of civilians which was around \$61,000.³ The average family income of those who joined was around 4 percent higher than that of civilians. Table 3 shows the probability of joining the military by quintile of parental income. The income group most likely to join is the 4th quintile. Figure 1 shows the distribution of income and the likelihood of joining.⁴ The figure shows that the probability of joining follows a reversed U-shape, with both the poorest and the richest youngsters being less likely to join while middle-income individuals are more likely to do so. The figure shows that the probability of joining the military peaks above the median and average income in the sample.

Again in table 2, it is shown that the median household wealth of males who served is also higher than civilians. In contrast to median, average parental wealth is lower among male military recruits than civilians. The reason is the high inequality in the distribution of wealth. Since much of wealth is owned by the very rich and since the children of the rich are less likely to join, the average wealth of recruits is lower than civilians. Table 3 shows the probability of joining the military by quintile of parental wealth. The income groups most likely to join are the 3rd and 4th quintile. Figure 2 shows the likelihood of joining against the distribution of parental

³ Family income refers to income in 1996, reported in 2011 dollars.

⁴ The probability of joining is estimated through a logistic regression that includes only income and income squared together with a constant as regressors. The dependent variable is a dummy indicator that is equal to one if the individual joined the military anytime between 1997 and 2010.

wealth. Once more we observe a reversed U-shaped curve, with the richest and poorest under-represented.

These results are similar to those provided by the zip-code based analysis of Kane (2005); recruits in recent years have disproportionately come from somewhat higher than average income groups, and both the richest and the poorest are under-represented. We thus observe a reversal of patterns with respect to studies of the NLSY79. For the year 1979, Fredland and Little (1982) found that those who served were disproportionately from lower socio-economic background.

5.3 The Effect of Parental Income by Cognitive Skills and Race

A natural question that arises from the analyses presented so far is whether the effect of income differs across races and ethnicities, cognitive skills levels or education. In order to investigate the effect of the interaction between parental income and cognitive skills on the probability of joining the military we employ a standard regression analysis technique. We use a Logit model to estimate the effect of the different variables illustrated above and some additional ones on the probability of joining the military in the years 1998–2010. Marginal effects derived from the regression are reported in table 4. We employed various specifications that included an increasing number of independent variables in order to test the robustness of our findings.

The dependent variable is a dummy indicator, equal to one if the individual has joined the military in any of the years under scrutiny and equal to zero otherwise. The regression analysis confirms the findings illustrated earlier. Both income and the cognitive abilities measure have a positive effect on the probability of joining the military. The negative coefficients on the square of income and the square of the cognitive abilities indicate that as these increase, the positive effects of income and intelligence decrease. These findings confirm the reverse U-shape we illustrated earlier for income and suggest a similar shape for the effect of cognitive abilities. Note that the coefficient on the square of income is not always statistically different from zero.

The positive and statistically significant coefficients on the African-American and Hispanic dummies indicate that minorities are more likely to join the military, but only after controlling for cognitive skills. Without controlling for cognitive skills as measured by the AFQT, we are left with the impression that on average minorities are not more likely to join the military. Other coefficients have the expected signs: being male, healthy, from the South and not obese are all

positively associated with the probability of joining the military.⁵ Being born in the US and coming from a rural area do not seem to have a statistically significant effect on the probability of joining the military.

5.3.1 Parental Income and Cognitive Skills

Columns (5) to (7) in table 4 show that the coefficient on the interaction between parental income and the AFQT score is negative and statistically significant. The negative sign indicates that the positive effect of cognitive skills (income) on the probability of joining the military decreases with income (cognitive skills). In other words, cognitive skills increase the likelihood of joining the military more for individual from a low-income family than for high-income earners.

In fact the effect of cognitive skills changes sign from positive to negative for high levels of income, as shown in figure 3. For yearly family incomes higher than around \$130,000 the effect of the AFQT score becomes negative, and grows more negative as income increases. Thus higher cognitive skills significantly increase the probability of individuals from low-income homes to join the military while at the same time reducing the likelihood of individuals from high-income families joining. We speculate that a reason for this phenomenon is that high income, high-cognitive skill individuals have greater access to higher education. Low income, high-cognitive skill individuals by comparison may join the military in order to finance their studies. This group may moreover view the military as a substitute carrier to the civilian sector which values cognitive ability without entry barriers in the form of costly higher education.

5.3.2 Parental Income and Parental Education

In column (7) we add both parental education and the interaction between parental education and parental income to the regression. Note that while parental education does not have a statistically significant effect by itself, the coefficient on the interaction between parental income and parental education is negative and statistically significant. Similarly to what we have discussed above for cognitive skills, the arguably positive effect of income on the probability of joining the military decreases with parental education.

⁵ We also tested a specification with a more complete geographic characterization. We found that only the “South” dummy is statistically significant. Department of Defense data shows an over-representation for the south of 20% compared to the national average 2006–2011.

We also looked at the interaction between parental income and race and ethnicity, being from the South and a rural dummy but found statistically significant result. These regressions are not reported in the table.

5.4 Education

There is no statistically significant difference between civilians and recruits in terms of parental education. There is however a statistically significant difference among recruits and civilian youths themselves. By 2010, when the sample was aged 25 to 31, military recruits have on average 0.25 more years of education than the civilian sample. One possible reason for this is that educational subsidies are an important form of payment for military service. Of course no claim about causality can be made, since those who join the military differ in many ways from civilians, which could explain these differences. Teachman (2007) finds that among the cohorts included in the NLSY79, joining the military was associated with lower educational outcomes.

5.5 Life Satisfaction

Those who joined the military tend to have higher than average self-reported life satisfaction. The average difference is 0.13 standard deviations, which is statistically significant. Interestingly Fredland and Little (1982) found that in the 1979 NLSY, those who served had lower job satisfaction than those with civilian jobs, though they did not measure overall life satisfaction. Once again since civilians and recruits differ in many others ways this result cannot be interpreted as a causal effect of military service.

5.6 Interest in joining the military

Participants in the NLSY who took the ASVAB skill test were asked “How likely are you to join the military in the future?” Perhaps not surprisingly this question strongly predicts the probability of joining the military. 12 percent of those who answered “likely” or “very likely” joined, compared to merely 3 percent of those who answered “unlikely” or “very unlikely”. Respondents who are interested in joining the military tend to come from homes with lower than average income compared to the general population. Hispanic and African-American respondents were substantially more likely than white respondents to answer “likely” or “very likely” to this question, despite the fact that they are not substantially more likely to join the military. On average recruits who were interested in joining the military but did not enlist scored poorly on the ASVAB, which indicates that screening may have been a factor.

6. Summary and Discussion

DoD (1997) points out that “Many of the assertions about the class composition of the military have been based on impressions and anecdotes rather than on empirical data.” Historically, recruits were indeed more likely to come from lower income households. This has led to the widespread belief that the poor, to this day, bear a disproportional burden of fighting in America’s wars.

Individual level analysis relying on the NLSY97 however suggests that unlike 1979, recruits in recent years tend to have higher than average socioeconomic background. Recruits come disproportionately from the middle of the family income, family wealth and cognitive skill distribution, with both tails underrepresented. On a per capita basis Non-Hispanic Whites have been over-represented as casualties in the Iraq and Afghanistan Wars, once more a shift in patterns compared to the Vietnam War, for example. We confirm that recruits tend to have higher cognitive skill levels than the general population, in part due to screening by the military.

We can speculate about the causes of the historic shift from lower toward higher socioeconomic background of recruits. One explanation is that a smaller and more technology intense military has become more selective in admitting recruits since the late 1970s. It appears that military recruits in recent years have been positively selected in terms of background variables, in particular cognitive ability. Warner and Asch (2001) document that the average AFQT score increased from the 53rd in 1978 percentile to the 59th percentile in 1998. Kane (2005, 2006) speculates that a sense of patriotism following the September 11th attacks led to more middle class recruits joining the military. One result of these factors is that the United States relies less on recruits from lower socioeconomic background to fight its wars. If bearing the burden of military service and war fatalities is viewed as a “tax”, the tax is paid disproportionately by the upper middle class, with both the poor and the rich underrepresented in the military.

Tables and Figures

**Table 1: Propensity of young people to join the military relative the national average
2006-2011**

State	Relative Propensity	Voting Record
Alabama	1.278	"Red State"
Alaska	1.174	"Red State"
Arizona	1.172	"Red State"
Arkansas	1.124	"Red State"
California	0.83	"Blue State"
Colorado	1.144	"Blue State"
Connecticut	0.66	"Blue State"
Delaware	0.832	"Blue State"
District of Columbia	0.298	"Blue State"
Florida	1.352	"Blue State"
Georgia	1.296	"Red State"
Hawaii	1.166	"Blue State"
Idaho	1.326	"Red State"
Illinois	0.826	"Blue State"
Indiana	1.038	"Red State"
Iowa	0.886	"Blue State"
Kansas	1.056	"Red State"
Kentucky	0.936	"Red State"
Louisiana	0.902	"Red State"
Maine	1.25	"Blue State"
Maryland	0.9	"Blue State"
Massachusetts	0.612	"Blue State"
Michigan	0.952	"Blue State"
Minnesota	0.746	"Blue State"
Mississippi	0.918	"Red State"
Missouri	1.174	"Red State"
Montana	1.488	"Red State"
Nebraska	1.064	"Red State"
Nevada	1.29	"Blue State"
New Hampshire	1.034	"Blue State"
New Jersey	0.638	"Blue State"
New Mexico	1.012	"Blue State"
New York	0.664	"Blue State"
North Carolina	1.186	"Red State"
North Dakota	0.56	"Red State"

Ohio	1.058	"Blue State"
Oklahoma	1.268	"Red State"
Oregon	1.27	"Blue State"
Pennsylvania	0.84	"Blue State"
Rhode Island	0.61	"Blue State"
South Carolina	1.284	"Red State"
South Dakota	0.922	"Red State"
Tennessee	1.146	"Red State"
Texas	1.27	"Red State"
Utah	0.678	"Red State"
Vermont	0.696	"Blue State"
Virginia	1.222	"Blue State"
Washington	1.134	"Blue State"
West Virginia	1.082	"Red State"
Wisconsin	0.952	"Blue State"
Wyoming	1.186	"Red State"

Table 2: General Characteristics of enlisted men and women, and civilians

	Join		Don't Join	
	Male	Female	Male	Female
Median Income	\$ 68,098	\$ 70,965	\$ 61,105	\$ 61,532
Average Income	\$ 76,863	\$ 81,222	\$ 75,403	\$ 74,352
Median Wealth	\$ 87,452	\$ 54,120	\$ 75,266	\$ 72,399
Average Wealth	\$ 145,189	\$ 137,559	\$ 162,786	\$ 154,113
Intelligence	102.4	103.1	99.4	100.6
% Whites	68.9%	53.0%	66.0%	67.3%
% Hispanics	13.4%	15.4%	13.0%	11.8%
% Blacks	13.4%	24.9%	15.9%	15.6%
Education	13.57	14.17	13.30	13.95
Parental Education	12.90	12.89	12.95	12.84
Life Satisfaction	7.75	8.09	7.59	7.69

Notes:

[1] Income is family income in 1997 (in 2011 dollars)

[2] Intelligence is derived from the AFQT score

[3] Education is measured as the average number of years of education in 2010

[4] Life Satisfaction is an index collected in 2008. It ranges between 1 (Extremely Dissatisfied) and 10 (Extremely Satisfied)

Table 3: Share of people who join the military by Quintile of income, wealth and cognitive ability

Quintile	Income	Wealth	Cognitive
I	4.4%	5.0%	2.4%
II	5.6%	5.3%	5.2%
III	5.8%	6.5%	7.0%
IV	7.4%	6.4%	8.3%
V	6.1%	5.6%	6.0%

Notes:

[1] Income measure excludes the top coded incomes

[2] Wealth measure excludes the top coded wealth levels and wealth below - 200,000

[3] Income and Wealth are measured in 1997

Table 4: Marginal Effects from Logit Regression

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Male	0.065 [0.005]***	0.062 [0.005]***	0.067 [0.006]***	0.063 [0.006]***	0.061 [0.006]***	0.057 [0.006]***	0.058 [0.006]***
Black	-0.004 [0.005]	0.014 [0.007]*	0.003 [0.007]	0.020 [0.009]**	0.022 [0.009]**	0.019 [0.009]**	0.017 [0.009]*
Hispanic	0.003 [0.006]	0.016 [0.008]**	0.013 [0.008]	0.021 [0.010]**	0.022 [0.010]**	0.018 [0.009]*	0.020 [0.010]**
South	0.012 [0.005]***	0.015 [0.005]***	0.013 [0.006]**	0.014 [0.006]**	0.014 [0.006]**	0.016 [0.006]***	0.018 [0.006]***
Cognitive Skills		0.154 [0.022]***		0.161 [0.027]***	0.148 [0.027]***	0.138 [0.027]***	0.132 [0.027]***
Cognitive Skills^2		-0.007 [0.001]***		-0.007 [0.001]***	-0.006 [0.001]***	-0.006 [0.001]***	-0.006 [0.001]***
Parent. Income			0.005 [0.002]**	0.003 [0.002]	0.016 [0.006]***	0.017 [0.006]***	0.019 [0.006]***
Parent. Income^2			-0.000 [0.000]*	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.000]	0.000 [0.000]
Par. Inc. * Cog. Skill					-0.001 [0.001]**	-0.001 [0.001]**	-0.001 [0.001]*
Rural						-0.007 [0.005]	-0.008 [0.005]
Obese						-0.026 [0.006]***	-0.026 [0.006]***
Health						-0.015 [0.004]***	-0.015 [0.004]***
Born in US						-0.006 [0.013]	-0.011 [0.014]
Parent. Edu.							0.003 [0.002]
Par. Edu * Par. Inc.							-0.001 [0.000]**
Observations	8,984	7,053	6,452	5,240	5,240	4,876	4,714

Notes:

[1] Robust standard errors in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%

Figure 1: Distribution of Income and Military Service

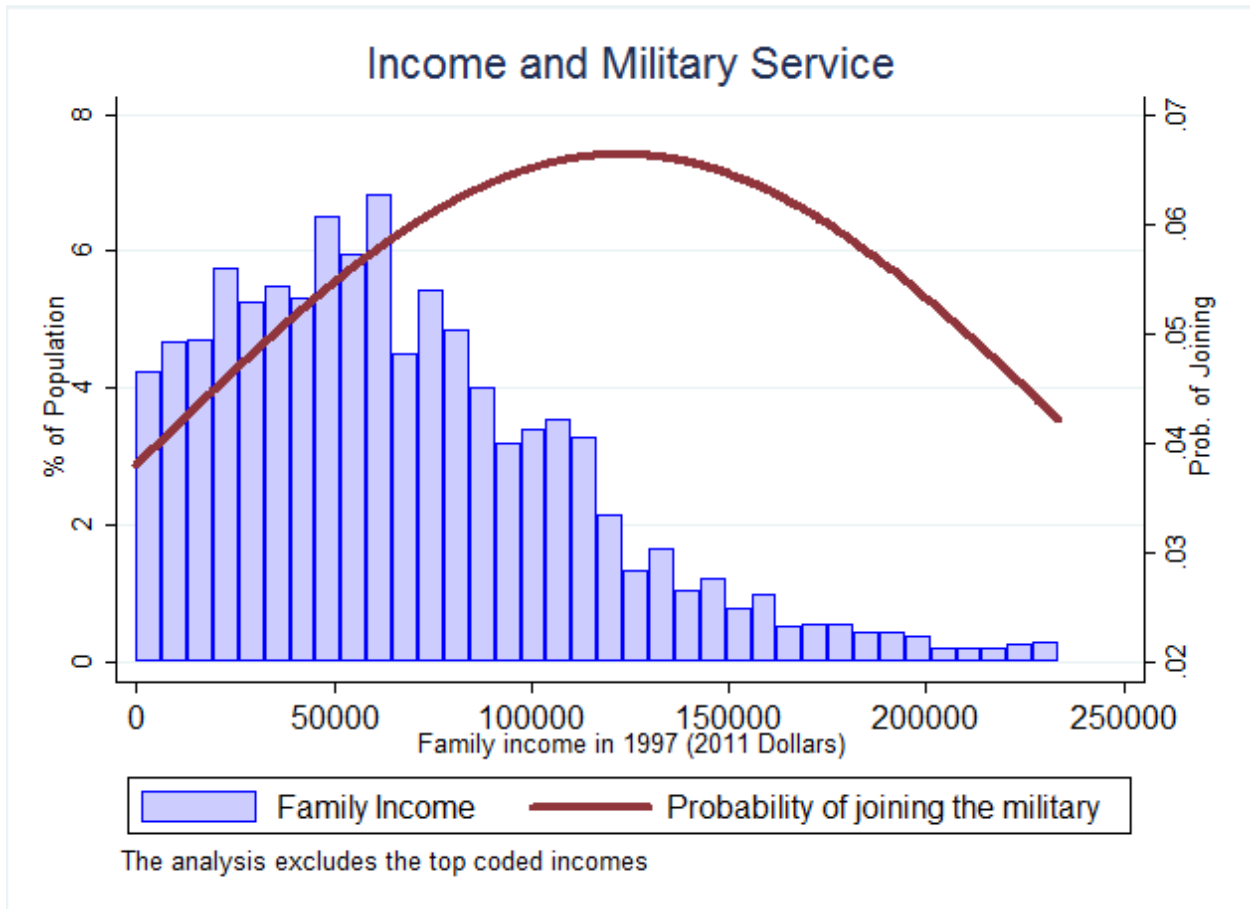


Figure 2: Distribution of Wealth and Military Service

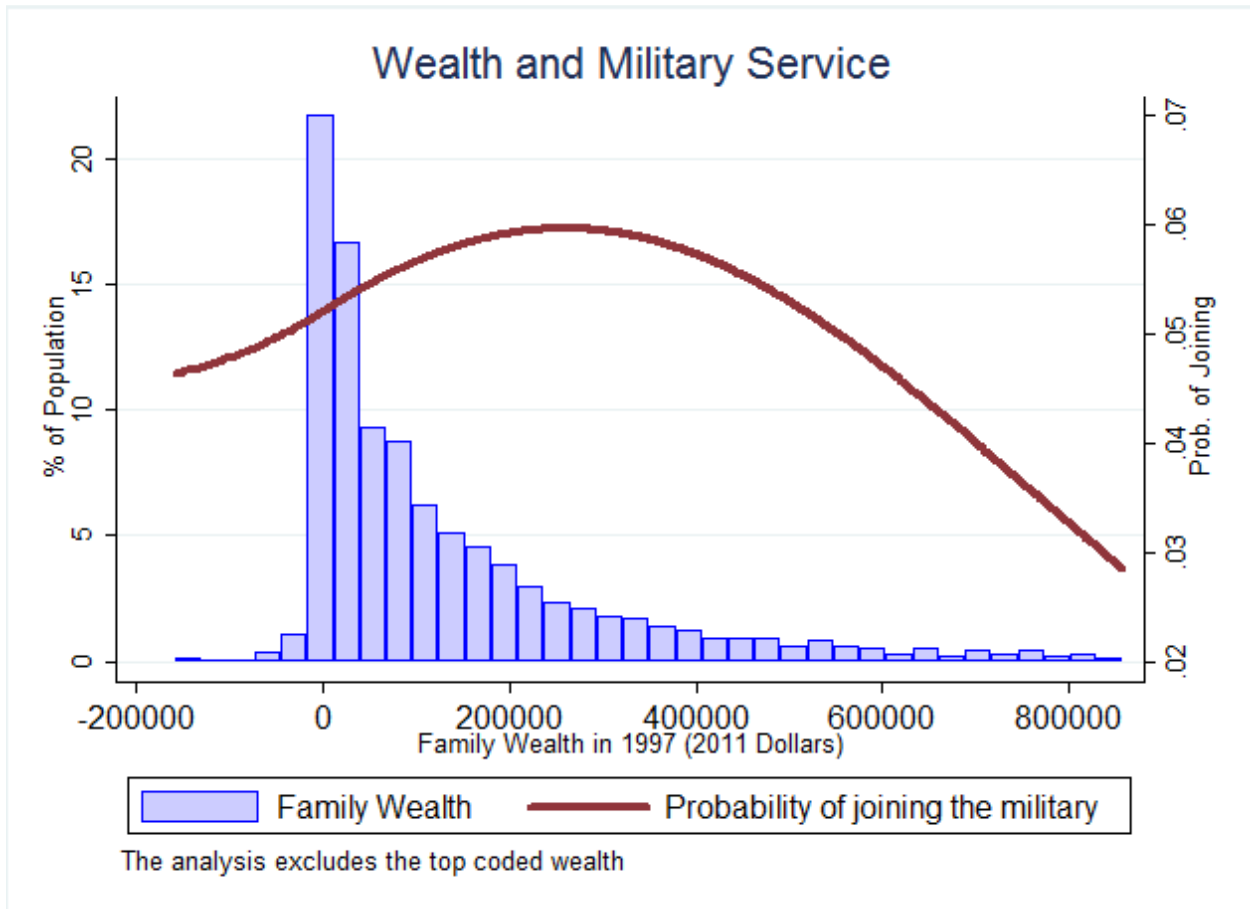
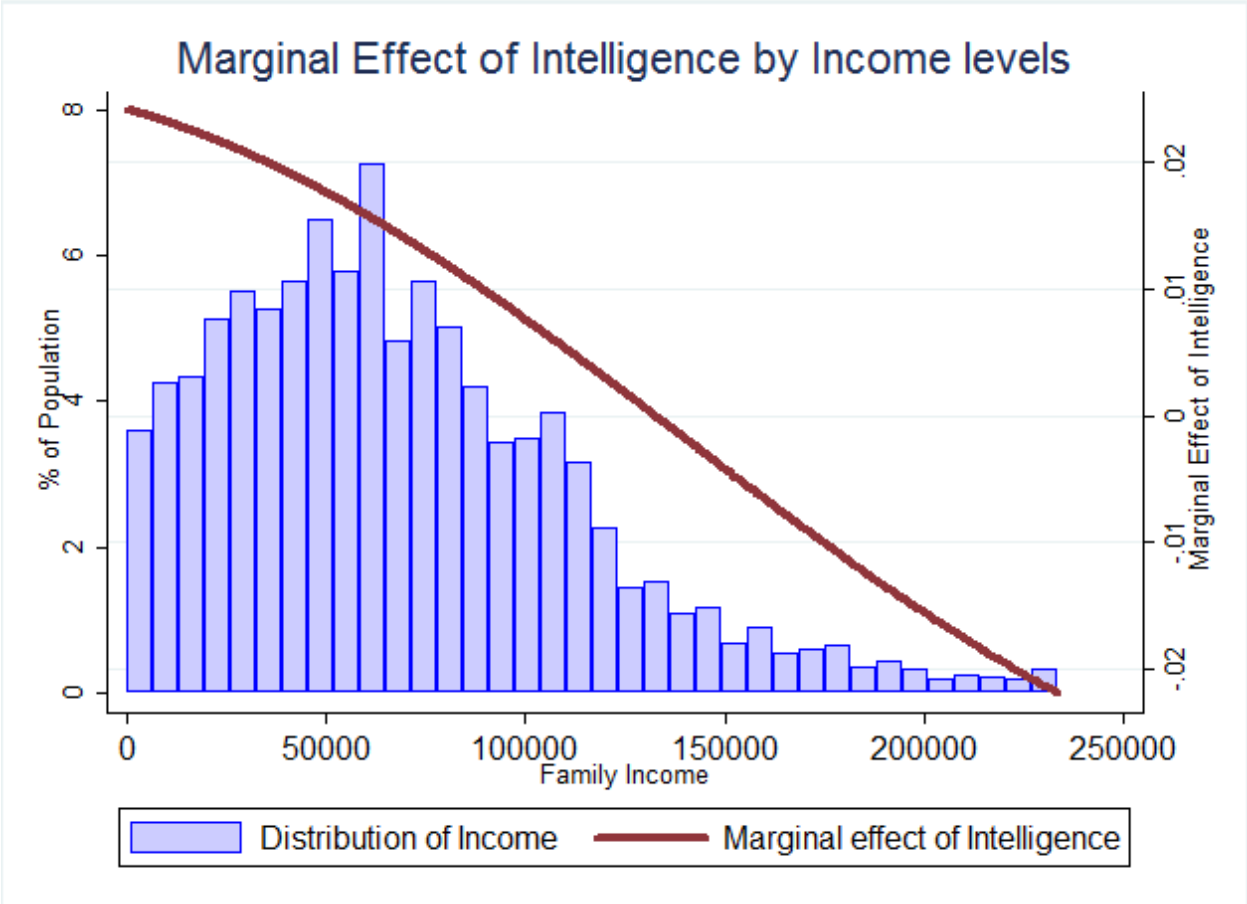


Figure 3: Marginal Effect of Intelligence by Income level



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