# In Military We Trust: The Effect of Managers' Military Background on Mutual Fund Flows\*

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#### ABSTRACT

This paper shows that trust-building characteristics of fund managers affect purchase decisions of mutual fund investors. We exploit variation in fund managers' prior affiliations with the well-trusted U.S. military institution and relate it to fund flows. Results show that funds with ex-military managers receive significantly higher flows and grow by 6.5% p.a. faster relative to other funds. Investor inclination toward military managers strengthens with managers' military involvement and its salience, and nationwide confidence in the military. Military managers' superiority in competition for investor funds is not due to variation in fund or managerial attributes and robust to several alternative explanations.

JEL classification: G11, G23.

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What determines the decision to invest in one mutual fund over another? It has long been shown that on average, mutual funds persistently underperform passive investment strategies net of fees (Jensen (1968); Carhart (1997)). Nonetheless, investors are paying billions of dollars in fees to managers and advisers that do not seem to provide sufficient performance to compensate for their fees (Bergstresser, Chalmers, and Tufano (2009); Fama and French (2010); Hoechle, Ruenzi, Schaub, and Schmid (2018)). That is, either the market for asset management is inefficient (investors pay fees without being compensated) or the decision to invest in a mutual fund may be determined by other fund or manager-specific factors beyond fund returns alone (Hortaçsu and Syverson (2004)). In this paper, we provide support for the view that distinct trust-building attributes of fund managers may affect purchase decisions of mutual fund investors.

Trust plays a pivotal role in various decisions we make, from facilitation of personal relationships to participation in economic activities (Knack and Keefer (1997)). Investment decisions are no exception to this. Trust as a general reliance on the integrity and fairness of the financial system, as suggested by Guiso, Sapienza, and Zingales (2004), can be an explanation to the limited stock market participation puzzle. More closely related to asset management, Mullainathan, Schwartzstein, and Shleifer (2008) indicate that the majority of advertisement campaigns by investment advisers and mutual funds are based on trust, among other things, and less on past performance. Kostovetsky (2015) shows that investors attach value to their relationship with the asset management company, which affects their capital allocation decisions at the time of ownership change. In the model of Gennaioli, Shleifer, and Vishny (2015), trust in the manager drawn from managerial qualities, personal connections, familiarity and persuasive advertising helps reduce the investor's perception of the riskiness of investments, correspondingly justifying manager fees and influencing investment decisions. Following this line of reasoning, we investigate whether potentially trust-related biographical characteristics of the mutual fund manager, specifically his prior engagement in the military, affect the investment choices of mutual fund investors.

There are several reasons to believe that manager's prior military affiliation is among these characteristics that promote investor trust. We argue that military background may serve as a signal that alleviates the investor's uncertainty regarding the manager's motives and prospective actions. First, military service demands a high degree of personal commitment and dedication that may result in more compliant and ethical behavior in later civilian employment. Koch-Bayram and Wernicke (2018) find that ex-military CEOs are less inclined to engage in financial misconduct. In this regard, trust functions as an implicit contract, which serves as a substitute for costly monitoring, and investors likely prefer monitoring-light managers. Evidence from peer-to-peer lending suggests that lenders discriminate in

favor of individuals that display signs of military involvement (Pope and Sydnor (2011)). Further, serving in the military may indicate a high level of patriotism and signify social identity. Patriotism is found to provide important guidance for social behavior (Huddy and Khatib (2007)). Individuals tend to follow the actions of others seen as members of their own social group (Cialdini and Goldstein (2004)) and likely increase cooperation with them (Blader and Tyler (2009)). Thus, a shared social identity between investor and manager may induce trust. Finally, ex-military personnel may be perceived to have better ability to fulfill the investor's expectations. Perceived qualities of ex-military individuals are found to cast candidates in a positive light during electoral campaigns (Teigen (2013)), serve as a productivity screening device in a civilian labor market (De Tray (1982)), and enhance success in corporate executive positions (Duffy (2006)).

In this paper, we posit that mutual fund managers with prior military background have an advantage when competing for investor funds because they resemble certain military-associated characteristics that foster trust. Consequently, investors are more likely to allocate capital to funds managed by military-experienced individuals, even if these managers may not exhibit superior investment skill compared to their nonmilitary peers. In addition, we posit that such trust-mediated allocation of assets is likely to be more pronounced during episodes of extreme performance realizations, heightened confidence in the military, and when background information is presented saliently.

To investigate this, we use a novel data set of U.S. equity mutual funds that contains biographical information of fund managers. The U.S. mutual fund setting entails unique opportunities for studying the effects of fund manager's military background on investor capital allocation decisions for two reasons: first, it allows disentangling military background-related effects from differences in other fund or managerial attributes, including performance. Second, the U.S. military is the most trusted of all institutions in American society and is historically perceived to be an effective and well-run establishment. Likewise, the U.S. Military personnel is associated with highest levels of honesty and ethical standards.

The main empirical findings indicate that public information about a manager's prior military experience affects fund flows. Mutual funds that are managed by individuals with prior military background on average have 10.6 percentage points higher annualized net flows relative to comparable funds with managers who do not have a background of this kind. Further, all else equal, a military-managed mutual fund has an up to 6.5% higher annualized growth relative to other funds. The observed economically sizable effect of managers' military

<sup>&</sup>lt;sup>1</sup>Historical survey data by Gallup Poll suggests that U.S. citizens – independent of their party affiliation – give the military the highest confidence rating of all institutions in society, including, church, education, congress, presidency, newspapers (media), the police, the criminal justice and medical systems, etc., in every year over the 1975-2017 period.

background on fund flows is not subsumed by variation in commonly used flow-related fund or manager-specific attributes, is robust to several alternative explanations, and remains unchanged even when we restrict the analysis to almost identical funds in terms of main observable characteristics.

The results from several additional tests indicate that the content and salience of information disclosures of the military background influence mutual fund investor decisions. We find that fund managers whose prolonged military service is disclosed and draws attention to heroic achievements and meritorious service in a combat zone attract additional annual flows of 6.5% compared to managers who only disclose that they served in the military. The fund flow effect is more pronounced when investors are exposed to salient, eye-catching information and when the effort that an investor has to put forth to obtain this information is low. Moreover, the effect of managers' military background is only present in the sample of single-managed funds, but gets suppressed in team-managed funds. In addition, conforming to the presumption that military background may serve as a substitute for costly monitoring and reduce investors' perception of investment riskiness, we find that ex-military managers are less likely to engage in window dressing activities and overall exhibit more ethical behavior relative to their nonmilitary peers.

We perform a number of tests in an effort to investigate the relation between the managers' military experience and fund flows more closely. Our findings shed light on the role that trust may play in investor decisions. Investors' buying and selling behavior toward military-managed mutual funds is related to the nationwide confidence in the U.S. military and perception of security. We find that periods of high level of trust in public institutions, and the military in particular, are associated with distinct investors' partisan attitudes toward military-managed funds. In contrast, during the periods of relatively low confidence in the military and low perceived security, investors tend to allocate less capital to funds managed by ex-military individuals. Moreover, we observe that ex-military managers' fund flows plunge following the exogenous events of military-related scandals that may have adversely affected trust in the military.

To further support the trust-related asset allocation conjecture, we conduct a difference-in-differences analysis around the dates of managerial turnover. In absence of any other fundamental events and all else equal, managers with military background receive 5.7 percentage points higher net fund inflows during the first month of active management relative to other managers. The difference in fund flows following the induction of military-experienced managers is persistent, while the two groups exhibit parallel movements in fund flow outcomes in absence of the manager change. In addition, we show that flow differences between military and nonmilitary-managed funds are particularly large for extreme performance real-

izations. Military managers have higher fund flows relative to their nonmilitary counterparts following both extremely good and poor performance. Collectively, the results of these tests support the conjecture that military-induced trust in the manager influences mutual fund investors' decisions.

In addition, we check that a substantial fraction of investors is likely to consider fund manager background information when making investment decisions. To do so, we first perform an online survey among mutual fund investors. The survey results indicate that the majority of mutual fund investors know their fund managers and are aware of the manager's profile at the time of investing. Second, we conduct an online fund investment experiment to provide additional evidence on the relation between a manager's military background and fund flows. In the experiment, we ask subjects (U.S. mutual fund investors) to allocate money between two funds. We keep the fund and basic manager information constant, but randomly assign a military background to managers. Results indicate that subjects in our experiment invest significantly more money into a fund when managed by an ex-military manager. In contrast, when we specify no prior military affiliation to managers of both funds, we find no significant difference in asset allocation.

Our finding of ex-military managers' relative superiority in attracting fund flows raises an intriguing equilibrium question. Why then would not all mutual funds employ military-experienced individuals? A potential answer to this question is that qualified individuals with military experience may be in limited supply to match the increasing demand for mutual fund managers over the sample period of our study. This may prevent fund management companies from appointing more ex-militaries to their funds, even though this would be advantageous. In the same vein, Benmelech and Frydman (2015) suggest that firms are constrained in hiring corporate executives with military background due to insufficient supply of such individuals. In addition, we consider several alternative mechanisms, for instance, that fund management companies may simply be unaware of the flow effect we uncover or that ex-military managers may perform worse, but do not find them to be consistent with our data. Finally, we acknowledge other potential costs of hiring ex-military managers, e.g. the possibility of higher compensation, which we are not able to address within our setting and leave for future research.

The empirical findings are consistent with the broad implications of portfolio management delegation models, which emphasize the role of trust (Gennaioli et al. (2015)). In particular, our findings support the view that trust in the manager, induced by salient background information, may reduce investors' perception of investment riskiness. Investors who seek to reduce anxieties of risky investment choices hire a money manager and do so based on manager characteristics. Thus, military-experienced managers are likely to be perceived as

money guardians having military-associated qualities. While our paper is not a direct test of the Gennaioli et al. (2015) theory, our key results can be interpreted naturally under the description of trust-mediated fund allocation offered in this theory. Our findings of trust inducing fund flows also support the key premises of theoretical models of coarse thinking (Mullainathan et al. (2008)) and strategic persuasion (Glazer and Rubinstein (2004)).

The empirical findings in our study further contribute to the vast literature on the determinants of mutual fund flows. Previous studies relate fund flows to various fund and managerial characteristics, including past fund performance (Berk and Green (2004), among others), advertisement (Jain and Wu (2000)), fund name changes (Cooper, Gulen, and Rau (2005)), fund ratings (Del Guercio and Tkac (2008)), manager gender (Niessen-Ruenzi and Ruenzi (2018)), manager name (Kumar, Niessen-Ruenzi, and Spalt (2015)) and many others. On a general level, our paper relates to Cici, Gehde-Trapp, Göricke, and Kempf (2018) who show that both fund managers and fund families can benefit from manager's experience outside the fund management industry.

More broadly, our paper adds to the literature that emphasizes the role of unique attributes of military-experienced managers on economic outcomes (Malmendier, Tate, and Yan (2011); Benmelech and Frydman (2015)). Evidence of this paper also complements the earlier literature on the effect of individual's military experience on later life socioeconomic achievements (Sampson and Laub (1996); MacLean and Elder Jr (2007)) and on the development of qualities that can be beneficial in the labor market (Jackson, Thoemmes, Jonkmann, Lüdtke, and Trautwein (2012)). To the best of our knowledge, our paper is the first that relates prior military experience to asset management and is the first that analyzes customer-based perception of ex-military individuals.

The remainder of the paper proceeds as follows. Section I describes the data set, the data collection process, and provides basic statistics. Section II turns to the relationship at the center of the study and examines the effect of a manager's military background on fund flows. Section III presents evidence that the observed relationship can be attributed to military-associated partisanship. Section IV presents the supplementary analysis, followed by Section V that concludes the paper.

# I. Data and Sample Design

We rely on multiple sources to identify our sample and to obtain the data for the empirical analysis. In this section, we describe these data sources, outline the process of identifying managers with military background, and provide the sample descriptive statistics. This paper also incorporates an Appendix A that provides supplementary details on the construction of

all of the variables used in the empirical part.

#### A. Data on Mutual Funds

Data on mutual funds comes from CRSP Survivor-Bias-Free U.S. Mutual Fund Database (CRSP MF) and Morningstar Direct Mutual Fund Database (MS Direct). First, we obtain data on fund share class characteristics for the set of actively managed domestic equity-only U.S. mutual funds from the CRSP MF. The data is then aggregated at the fund-level by weighting the respective fund share classes with the corresponding total net assets. The main variable of interest in the empirical analysis is fund net flows. Since we do not observe flows directly, we infer flows from fund returns and total net assets. Following standard practice in the literature (e.g., Sapp and Tiwari (2004); Frazzini and Lamont (2008)), we compute flows  $F_t^i$  for fund i in month t as

$$F_t^i = \frac{TNA_t^i - TNA_{t-1}^i}{TNA_{t-1}^i} - r_t^i \tag{1}$$

where  $TNA_t^i$  is fund i's total net assets in month t and  $r_t^i$  stands for fund i's net return in month t. To ensure that the results are not unduly stirred by outliers, we follow Kumar et al. (2015) and drop fund flow observations below the 1st percentile and observations above the 99th percentile.<sup>2</sup>

Second, we establish a match between MS Direct and CRSP MF fund classes by carefully following the data appendix provided by Pástor, Stambaugh, and Taylor (2015), who identify matches relying not solely on CUSIPs but also based on the funds' tickers. Further, the sample is restricted to include only those funds that were managed by a single manager for at least one month over their entire lifespan.<sup>3</sup> Following the rationale of Agarwal, Ma, and Mullally (2015), we exclude cases in which single managers run more than four funds at the same time, as these managers are likely to be team managers. Funds reportedly managed by anonymous managers are removed.

In order to obtain the data on fund holdings, we match CRSP MF with Thomson Reuters Mutual Fund Holdings Database (MF Holdings) using the MFLINKS tables. Only holdings of common stocks (share codes 10 and 11) are considered and information on stocks is obtained from CRSP and Compustat databases.

<sup>&</sup>lt;sup>2</sup>Additionally, we check that the main results persist when we use raw fund flows, winsorize the observations, drop observations below the 5th and above the 95th percentile, or exclude funds with total net assets lower than \$1 million.

<sup>&</sup>lt;sup>3</sup>Although we also consider a sample of team-managed funds in Table VI, the focus of the paper is on single-managed mutual funds.

#### B. Identifying Managers with Military Background

We obtain the fund manager names as well as the start and end dates of their management period at the respective fund via MS Direct. The choice of this database is in line with Patel and Sarkissian (2017), who show that the fund manager information provided by MS Direct is more accurate than the data provided by CRSP MF. We extract the fund managers' short profiles and, if available, information on academic degrees, certifications and affiliations from MS Direct. We restrict the sample to all fund-month observations when there is a single manager that was in the fund for at least one month. In total, after the Morningstar-CRSP match, we identify 2,903 funds over the sample years from 1991 to 2017.

In order to establish the complete profile for each manager we perform a comprehensive cross-database search and obtain additional information from Morningstar, Bloomberg, Marquis Who's Who, Financial Industry Regulatory Authority (FINRA), LinkedIn, SEC filings, Intelius database, GI Search engine, Ancestry.com, Legacy.com, fund company websites, and articles in U.S. newspapers from LexisNexis and Newspapers.com. To arm against the possibility of wrong matches, we drop observations from the sample whenever we get multiple matching profiles or conflicting information from various sources. We restrict our sample to those fund managers for whom we observe Morningstar and/or Bloomberg profiles and identify the date of birth. As a result, we are able to collect information on the personal characteristics and complete biographical information, including the prior military background of the fund managers. In case there is a military affiliation, we can usually extract an extensive military profile of the managers, including information about training, dates of service, involvement in military conflicts, military rank, and military awards. Figure B1, Figure B2, and Figure B3 in Appendix B provide military profile examples from Morningstar, Bloomberg, and fund firm advertising materials.

Importantly, we define a fund manager as having military experience prior to joining the fund management industry only if this information was available to the investors during the manager's corresponding active management period. For example, if the manager's Morningstar, Bloomberg, or fund company website profile is clearly stating the prior military experience at the time of active management. If the manager was active in the past, we make sure that such information was freely circulating and was available to investors at some point in time during the manager's active period. In case we find no such evidence, we drop this

<sup>&</sup>lt;sup>4</sup>However, in some cases we have to rely only on vague background description, e.g. "... was a decorated officer in the U.S. Marine Corps..."

<sup>&</sup>lt;sup>5</sup>Specifically, for each of the 1858 fund managers in our sample we check whether information on military affiliation was disclosed in SEC filings, prospectuses, U.S. newspapers, or any of the manager and fund family-related internet resources during the active period of the corresponding manager. In order to get a retrospective look at internet resources we use archive.org search engine.

observation from the sample. In total, our final sample consists of 1,858 (73,92% of total) individuals single-managing 2,448 funds (84,33% of funds that were single-managed for at least one month). Within this set, 229 of the funds (9.35% of the sample) are single-managed by 123 (6.62% of the sample) managers with military background (served in the military).<sup>6</sup> Additionally, we identify 159 funds that were managed by teams including at least one manager with military experience.

#### C. Sample Characteristics

Table I separately reports statistics for funds managed by individuals with and without prior military experience. Comparing the sample means for the two groups of funds, we find a significant difference in the net fund flow measure but not in other characteristics. Mutual funds run by managers with military background have 10.6 percentage points higher annualized fund flows (t-statistic of 5.06) relative to funds managed by nonmilitary individuals. In contrast, we observe no economically or statistically significant variation across the groups in any other fund characteristic, including return, risk, size, age, expenses, and turnover. There are no differences in the distribution channels, the Morningstar ratings, or the share of expenses set aside for marketing purposes. Importantly, we observe virtually no heterogeneity in portfolio holdings between military and nonmilitary managers. Managers with military experience do not invest more in defense stocks relative to other managers.

Turning to the manager characteristics reveals no statistically significant variation across the two groups in most of the cases. In particular, we find no difference between military and nonmilitary managers' marital status, educational background, mutual fund industry experience, fund tenure, name-specific attributes, or media coverage. The only exception to this is that managers with prior military experience tend to be older. Later in the paper, we show that the main result on the relation between military background and fund flows remains unaltered after controlling for the managers' biological age.

# D. A first look at the Military Trust – Fund Flow Relationship

In order to preliminarily explore whether military-related attitudes affect the decisions of U.S. mutual fund investors, we plot the average annual fund flow difference between

<sup>&</sup>lt;sup>6</sup>This number compares favorably to the share of military-experienced managers documented in the corporate finance literature. Benmelech and Frydman (2015) show that the share of ex-military corporate executives is around 6% in recent years. Moreover, the overall share of individuals who served in the military is 6.3% of the total U.S. population according to the Department of Veterans Affairs veteran population projection model 2016.

managers with and without military background against Gallup Poll's survey-based military confidence index.

As an illustrative example for this link, Figure 1 depicts the evolution of the two indicators over time. The dynamics of the fund flow difference coincides reasonably well with the evolution of the military confidence index. Managers with military experience enjoy higher relative fund inflows during periods of high confidence in the U.S. military institution, while the episodes of relative fund outflows occur around periods of low confidence in the military. The correlation coefficient is 0.41. Further, the extreme values of Gallup Poll's measure of satisfaction in the nation's military strength and preparedness (for the periods when available) also correspond to the episodes of relatively large inflows/outflows into/from the funds managed by military-experienced individuals. This simple relationship suggests a potential role of the military-related partisanship in the asset allocation process of mutual fund investors.

# II. Military Background of Mutual Fund Managers and Fund Flows

This section presents empirical results on the relation between military experience of mutual fund managers and fund flows.

#### A. Baseline results

Given that the U.S. military has the highest confidence (trust) rating among all institutions in American society throughout the sample years, we conjecture that social affection and military-associated partisanship may affect asset allocation decisions of mutual fund investors. Therefore, prior military experience of mutual fund managers, other traits equal, could lure capital flows into funds managed by such individuals. To test this conjecture, we examine aggregate investor behavior at the fund level and investigate whether militarymanaged funds attract higher inflows than nonmilitary-managed funds. In particular, we estimate regressions with monthly net fund flows as the dependent variable.

In the regression analysis, we relate net fund flows to a *Military* dummy variable that equals one if the fund is single-managed by an individual with prior military experience in a given month and zero if a manager does not have a military background. Importantly, the *Military* indicator variable covers only fund managers whose background information is publicly available for the investors during their active management period. The set of controls is comprised of fund characteristics, including *Fund return*, *Fund performance rank*,

Fund size, Fund age, Fund risk, Expense ratio, Turnover ratio, Family flows and Lagged fund flows, and manager-specific attributes, such as Fund tenure and mutual fund Industry tenure. Fund performance rank is computed as relative performance to all other funds in the same market segment in a given month. Fund risk is the time series standard deviation of the fund return using the rolling past twelve month return observations. Segment is based on the Morningstar fund style indicator. Controls are lagged by one month. We double-cluster standard errors by year and fund to allow for correlation between repeated observations from the same fund and show that our results are unlikely to be induced by some unobservable factors or any heterogeneous trends by including period, segment, family, fund, and interaction fixed effects. Estimation results are presented in Table II.

The results of the flow regressions are consistent with the conjecture that military-experienced mutual fund managers, all else equal, attract higher fund flows. Flows into military-managed funds are significantly higher than those into nonmilitary-managed funds. The coefficients on the main variable of interest, the *Military* dummy, are positive and statistically significant in all of the model specifications. In column (1), we present the estimates after including time-varying control variables but no fixed effects. The impact of the *Military* dummy is positive and significant at the 1% level (coefficient = 0.005, t-stat.=3.80). In columns (2) through (6), we add various fixed effects as well as alternative controls for fund performance and lagged fund flows.

Specifically, in columns (2) through (4), we present estimates of the specifications with segment, year, and segment-by-month-year fixed effects. The coefficient estimates on the Military dummy are positive and significant at the 1% level, ranging from 0.003 to 0.005. Further, there exists a possibility that fund families that are better in attracting client flows are also better in attracting managers with potentially beneficial characteristics such as military experience. In addition, families that are better at marketing may also provide more information about their managers. Thus, in column (5) we include family-by-monthyear fixed effects. In this setting we are able to compare flows to funds with and without ex-military manager in the same family at the same time. Comparing within family-monthyear, we observe a similar magnitude of the military effect with the point estimate on the Military dummy being once again positive and statistically significant (coefficient = 0.003, t-stat.=2.16). In column (6), we include fund fixed effects, which allows us to identify the military manager effect from managerial turnover within funds and to control for unobservable factors at the fund level that can potentially influence fund flows. The estimate on the Military indicator is positive (coefficient = 0.003) and statistically significant (t-stat.=1.93). This suggests that neither time invariant unobserved heterogeneity at the segment, family, or fund level, nor time varying heterogeneous trends drive our results. Overall, this section indicates that fund managers' military experience is positively related to fund flows.

The effect is also economically significant: the coefficient estimates imply that a fund managed by an individual with military background, depending on the model specification, grows by about 3.2 to 6.5 annualized percentage points more than a comparable fund ran by a manager with no military experience. The magnitude compares favorably to the mean annual net fund flows of 22.4 percent in Table I.

### B. Robustness of the Results

In this section, we carefully consider several alternative explanations for our baseline findings. Results are presented in Table III.

First, we ensure that our results are robust to several conventional alterations of our main setup. Sialm 2019 shows that saliently presented information about long-term mutual fund performance, particularly one-year returns, affects investor capital allocation decisions. Therefore, in tests (1) through (3) we augment the baseline flow regression (column 3 of Table II) with controls for past performance, namely three-months, one-, and five-year returns. Results of these tests indicate that, while past performance appears to be an important determinant of flows, the observed military effect is not attenuated. We find that the estimates are significant and remarkably similar in economic magnitude to the baseline results, even in a more limited sample of test (3).

Demographic attributes of mutual fund managers may influence fund flows. Niessen-Ruenzi and Ruenzi (2018) show that gender-related discrimination affects fund flows, such that female-managed funds receive significantly lower inflows than similar male-managed funds. Roussanov and Savor (2014) show that single men, including mutual fund managers, are substantially different in managerial behavior relative to married men, while research in psychology suggests that people tend to trust married individuals more than singles (Rahn and Transue (1998)). Inclusion of demographic controls in test (5) shows that inferences remain unchanged, suggesting that our results are not simply a by-product of demographic attributes.<sup>8</sup>

Alternatively, our main variable of interest may indirectly proxy for manager's educational background as military service can pave the way to a better and cheaper education

<sup>&</sup>lt;sup>7</sup>In addition, we check that the observed military effect remains unchanged when we double-cluster standard errors on fund family and month-year (coefficient = 0.003, t-stat.=2.79) instead of fund level and month-year as it is in the baseline specification (3) of Table II.

<sup>&</sup>lt;sup>8</sup>Even though previous research consistently finds no significant impact of manager's biological age on fund flows, we also control for age, because it is the only managerial attribute that shows statistically significant variation across the two groups in Table I, panel B.

through various military's tuition assistance programs. Indeed, in Table I, we show that military managers on average are slightly better educated, being more likely to have a graduate degree. However, the results reported in test (6) indicate that our inferences do not change when we account for the educational effects on fund flows.

Network may be another factor that affects fund flows. Agarwal, Lu, and Ray (2018) show that money managers in fact use opportunities to network and attract fund flows even when attending charitable events. Cohen, Frazzini, and Malloy (2008) report that mutual fund managers benefit from shared educational networks with corporate board members, which is particularly pronounced for graduates of highly recognized institutions. In test (7), we check whether higher networking potential of Ivy League graduates affects our results. Along with that, wealth and income of mutual fund managers' parents affect future fund performance (Chuprinin and Sosyura (2018)). Correspondingly, we propose that the parental professional network may help managers to build connections and facilitate fund inflows. With this in mind, in specification (10) we check if the parental involvement in fund management can explain our results. Results of both tests indicate that our findings are robust to alternative explanations related to educational and parental networks.

Another explanation for our baseline results is that investors pay more attention to salient managerial characteristics such as names, and military managers may simply have names that sound familiar to U.S. investors. This, in turn, can explain the observed heterogeneity in fund flows. Kumar et al. (2015) document significantly lower inflows into funds managed by individuals with foreign-sounding names than into other funds. We implement a machine-learning algorithm from Ye, Han, Hu, Coskun, Liu, Qin, and Skiena (2017) to define foreignness of a manager's name. The results reported in test (9) indicate that both magnitude and significance of the main coefficient estimate remain when we control for foreignness of managers' names.

Recent evidence shows that experience outside of the fund management industry gives managers an information advantage, which results in a higher propensity to hold more and to pick better stocks from the area of their expertise (Cici et al. (2018)). Therefore, we check that investors' preference for military-managed funds is neither due to a potentially higher share of defense stocks in total holdings (test (4)) nor it is affected by the manager's expertise in other industries (test (8)).

Mutual fund investors may be attracted to funds that try to reinforce their market position and acquire customers by conducting a marketing campaign. Barber, Odean, and Zheng (2005) show that investors tend to purchase funds that draw their attention through marketing or advertising. We therefore control for marketing expenses, which we define as the share of a fund's expenses for marketing (from NSAR-B filings) in total expenses.

Indeed, funds with higher share of marketing expenses seem to attract higher fund flows, but importantly the effect of military experience of mutual fund managers on fund flows remains unchanged in the joint regression specification (11). Additionally, we control for the media coverage of fund managers (test (13)). This is important for two reasons: (i) media coverage has been shown to affect net investor flows (Kaniel, Starks, and Vasudevan (2007)); and (ii) military managers may generally have a higher profile in U.S. society. We find that the effect of military background is not attenuated by including the managers' media coverage control.

Next, we exclude index funds from the sample test (14) and control for distribution channels (12). Results for each of these alterations indicate that the coefficient estimate on the *Military* indicator variable is still statistically significant and economically meaningful. Finally, another concern is that the fund flow effect we uncover in Table II may simply be driven by investor preference for military individuals that is unrelated to presumed managerial qualities. If that is the case we should observe similar military-related flow patterns for index funds. However, results reported in test (15) indicate that the military background effect is not present in the sample of index funds, which renders a simple preference explanation unlikely.

#### C. Degree of Involvement in the Military and Fund Flows

Previous sections suggest a robust link between the military experience of mutual fund managers and fund flows. This implies that information disclosures about the military background of an active manager influence mutual fund investor decisions. However, both the amount of information revealed and details about the military experience vary considerably across managers. Some managers in the sample come as medal-decorated war veterans, while others communicate that they only served in the military. In this regard, if there is an information of prolonged military service that draws attention to heroic achievements and meritorious service in a combat zone, one might imagine a much larger effect on flows into funds managed by such an individual. To investigate this, we differentiate managers by their degree of involvement in the military and estimate flow regressions.

Table IV provides evidence of heterogeneity in fund flow effects across managers with various degrees of military involvement and recognition. The *Conflict/Medal* indicator variable is coded as one for funds managed by an individual who served a tour of duty in a conflict zone. In total, we identified 66 such funds of which 20% have managers who received United States Armed Forces awards and decorations, including the Bronze Star Medal, Purple Heart, Combat Action Ribbon, service stars, etc. Further, to cover the other extreme of

military involvement, we additionally identified 43 funds that are managed by managers who have only undergone military training, but have never served in the military. In particular, the *Military training* dummy takes the value of one if a manager graduated from any of the U.S. military schools and academies or voluntary participated in any type of military training, but never served a period of active duty. The regression setup is similar to that applied in the previous section.

Consistent with the view that partisan investors allocate funds, among other things, based on fund manager's military background, we find that in both univariate sorting (panel A) and regression analysis (panel B) the Conflict/Medal variable is significantly positively related to fund flows. Comparing the sample means for funds managed by individuals who served a tour of duty and for peer funds with managers who do not have such background, we find a remarkable difference of 21.9 annualized percentage points (t-statistic of 3.39) in net fund flow between the two groups. The coefficient on the interaction term Military × Conflict/Medal is positive and significant (coefficient = 0.005, t-stat.=2.06). The magnitude compares favorably to the estimates of the Military dummy, indicating that managers who promote themselves as war veterans are able to attract more flows in comparison to those who just disclose that they served in the military. In contrast, Military training produces negative and not statistically significant estimates across all specifications. By construction, this variable largely captures military-related education of fund managers. In this, our results are consistent with prior research that documents no fund flow effects of managers' education (Niessen-Ruenzi and Ruenzi (2018)).

# D. Salience of Information and Fund Flows

Previous research suggests that cosmetic effects irrationally influence investor decisions. Hirshleifer (2001) suggests that even irrelevant, redundant, or outdated news affect security prices if presented saliently. Cooper, Dimitrov, and Rau (2001) document stock price reactions to timely firm name changes. Similarly, asset allocation decisions of mutual fund investors are influenced by cosmetic features of funds and fund managers, for instance, by style-related fund name changes (Cooper et al. (2005)), fund manager name disclosures (Kumar et al. (2015)), or other salient attention-grabbing information (Barber et al. (2005)). In this section, we explore if the observed relation between military experience and fund flows differs in the salience of information investors are exposed to.

While we only consider managers whose prior military background is publicly available during the period of active fund management, the investor's level of effort to obtain this information varies by manager. Therefore, we next differentiate managers by the source of disclosing the respective information. Additionally, we identify 37 funds with managers who served in the military but have never publicly disclosed it. In this case, military service information only becomes available in manager's obituaries.

Table V provides evidence on the fund flow effect for four different means of information disclosure. The first group, Investment media, includes cases in which information on prior military experience is disclosed through investment media sources, namely, Morningstar and Bloomberg. The second group, Personal disclosures, covers cases in which this information is not available in investment outlets but on fund company websites or professional networks, such as LinkedIn. The third group, Other sources, includes cases in which military background information is only disclosed via major or regional newspapers and other alternative media outlets. The last group, Post-mortem disclosure, covers managers for whom military affiliation is disclosed only in obituary notices after manager passing, but not prior to that. This categorization differentiates the investor's effort to obtain information. Correspondingly, we suggest that the probability of the investor becoming aware of the manager's biographical facts is higher for the first two groups relative to the last two.

The average flow differences between military and nonmilitary managers indicate sharp distinction between the groups. Mutual funds with a manager whose prior involvement in the military is disclosed via investment media have 17.2 percent higher annualized fund flows (t-statistic of 3.52). Managers with slightly more salient disclosures attract 22.1 percent p.a. higher fund flows (t-statistic of 6.27). In contrast, revealing this information through other less eye-catching sources has no effect on fund flows. The magnitudes of the monthly flow regression coefficient estimates favorably support the notion that the fund flow effect is more pronounced when investors are exposed to salient, attention-grabbing information.

Thus far, the analysis has focused only on single-managed funds and excluded all teammanaged funds. Next, we examine whether funds managed by teams that include managers with prior military experience are able to attract more fund flows relative to funds that do not have such managers as a part of their teams. For this purpose, we additionally identify 159 funds with at least one military manager being part of the team and re-estimate the baseline regressions using the sample of team-managed funds. The regression setup is otherwise similar.

The fund flow effect of a manager's military background is suppressed in team-managed funds. Table VI relates monthly net fund flows to a *Military team* dummy variable that equals one if the fund is managed by a team that includes a manager with prior military background in a given month and zero otherwise. In columns (1) and (2), we present the estimates of regressions after including various controls along with segment and time fixed effects. The coefficient on the main variable of interest is positive but not statistically or

economically significant (in the specification with lagged fund flows). Adding the share of military managers in a team and several interaction terms with sources of information disclosure neither changes the baseline evidence nor reveals new results. The table's main message is that there is no significant flow effect between funds with military managers in teams and funds managed by nonmilitary teams. This is consistent with the supposition that a manager's personal background information is much less salient and eye-catching in team-managed relative to single-managed funds.

# III. Evidence of Military-Based Partisanship

This section presents evidence that the observed relationship between a manager's military background and fund flows can be attributed to the military-associated partisanship that affects asset allocation decisions of mutual fund investors.

#### A. Fund Flows and Social Attitudes toward the Military

Figure 1 provides illustrative evidence on how social attitudes toward the military institution and military-related partisanship affect the decisions of U.S. mutual fund investors. This example suggests that investors' buying and selling behavior toward mutual funds managed by individuals with military background positively correlates with the level of confidence and satisfaction in the U.S. military. In other words, investors tend to allocate more capital to military-managed funds when confidence in the military is high, while the difference in fund flows between military and nonmilitary-managed funds is less pronounced in times of low confidence.

To provide formal statistical evidence on the link between partisan mutual fund investor decisions and a manager's military experience, we conduct three additional tests. First, we repeat regressions of monthly net fund flows on the military indicator for periods of high and low levels of confidence in the military, as classified based on the median level of the Gallup Poll's confidence in the military index from Figure 1. Second, we collect National Instant Criminal Background Check System (NICS) data on purchases of firearms from the Federal Bureau of Investigation (FBI), and consider it as an alternative proxy for nationwide confidence in the military institution. Third, we use four prominent military-related scandals and two successful high profile military operations as natural experiments to provide further support for a trust-based explanation of our findings.

Table VII, Panel A first reports evidence on the fund flow effect for periods of low and high confidence in the military. The results reported in columns (1) and (2) show that in both

cases the *Military* dummy is significantly positively related to fund flows, with estimates of 0.002 (t-statistic of 1.83) and 0.003 (t-statistic of 3.07) for low and high confidence periods, respectively. The magnitudes of the coefficients favorably support the notion that the fund flow effect is more pronounced when confidence in the military is relatively high.

Next, Table VII, Panel A relates an alternative measure of confidence in the military, i.e. the change in purchases of firearms, to monthly net fund flows. Studies in psychology and political science document a strong link between the perception of insecurity and associated trust in public institutions. Blanco and Ruiz (2013) show that an individual's perception of insecurity is negatively related to satisfaction in the political regime and confidence (trust) in public institutions, including the military. In the context of Figure 1, when the confidence in the military institution is low the aggregate level of perceived insecurity is likely to be high and vice versa. Alongside, Diener and Kerber (1979), Cao, Cullen, and Link (1997), and Carlson (2012), among others, show that U.S. citizens perceive firearm purchases as a potential complex response to distrust in public institutions and anxieties regarding insecurity. 10 Therefore, we consider purchases of firearms as an alternative measure of the confidence in the military. 11 The results reported in column (3) show that the coefficient on the interaction term between Firearm checks (NICS) and the Military dummy is negative and significant (coefficient = -0.003, t-stat. = -2.70). This indicates that fund flows are lower for militarymanaged funds when the nationwide perceived insecurity is high and, correspondingly, the confidence in the military institution is low.

In specifications (4) and (5), we split the sample into periods of relatively high and low levels of insecurity, respectively. Results in column (4) suggest that during periods of positive change in firearm purchases, when the aggregate level of perceived insecurity is likely to be high, funds managed by military-experienced individuals tend to draw less pronounced investor affection and have difficulties in attracting fund flows. In contrast, results for the periods of negative changes in firearm purchases, column (5), show that the estimate on the *Military* dummy is positive (coefficient = 0.004), statistically significant at the 1% level, and much higher in magnitude relative to its counterpart in column (4). This suggests that periods of relatively low perceived insecurity and high level of trust in public institutions are associated with distinct investors' partisan attitudes toward military-managed mutual

<sup>&</sup>lt;sup>9</sup>Other studies in political science suggest that trust in public (political) institutions is positively related to partisan strength (Hooghe and Oser (2017)), while an apparent distrust in politics can result in unwillingness to publicly declare a partisan identity despite attitudes to the contrary (Petrocik (2009)).

<sup>&</sup>lt;sup>10</sup>Noteworthy, aforementioned papers do not explicitly state which public institution failures (the police or the military) trigger gun purchases the most, however, in all of these papers the need for protection and the perception of insecurity are found to be the main psychological reasons for firearm purchases.

<sup>&</sup>lt;sup>11</sup>Importantly, according to the Gallup survey data from 34% to 51% of U.S. households had a gun in possession over the sample period of our study.

funds.

In order to provide further support for a trust-based explanation of our findings, we next use six natural experiments that occurred over the sample period of our study. Specifically, we consider the following events: the Tailhook scandal; the U.S. Naval Academy's cheating scandal; the Abu Ghraib scandal; the Lackland AFB sex scandal; the success of the Operation Red Dawn (capture of Saddam Hussein); and the success of the Operation Neptune Spear (death of Osama bin Laden). The first four events are widely considered among the biggest military-related scandals, while the last two are among the most successful missions in history of the U.S. military. Importantly, in these tests we exploit the fact that each of these events plausibly generated an exogenous shock to the trust in the military and the strength of military-associated partisanship in the U.S.

Table VII, Panel B presents the results of natural experiments and provides evidence on flows into funds managed by military-experienced individuals following the aforementioned events. Specifically, in each case we interact the *Military* dummy with indicator variables that cover three months following a given event. The coefficient estimates of the interaction terms reveal that military managers experience significantly lower fund flows following the scandals that likely had a negative effect on nationwide trust in the military. The estimates show that military-managed funds experience an abnormal decline in fund flows after the Tailhook scandal (coefficient = -0.004), the Naval Academy's cheating scandal (coefficient = -0.006), the Abu Ghraib scandal (coefficient = -0.006), and the Lackland AFB sex scandal (coefficient = -0.010). In contrast, results indicate that military managers experience an increase in fund flows following the two high profile successful military operations, with coefficient estimates of 0.009 (t-statistic of 1.97) and 0.014 (t-statistic of 2.58) for the Red Dawn and the Neptune Spear missions, respectively.

Overall, this evidence is consistent with the view that military-associated partisanship exists among mutual fund investors and provides additional support for the conjecture of trust-based investor asset allocation behavior toward military-managed mutual funds.

# B. Fund Flows and Managerial Turnover

Mutual fund managers come and go. It has long been recognized that the event of a fund manager change is one of the most informative occurrences in a mutual fund's lifetime. Khorana (1996) shows that on average the replacement of a mutual fund manager leads to subsequent underperformance. Chevalier and Ellison (1999) build on this evidence and, among other findings, indicate the potential inflow-related benefits of replacing a poor performing manager. In a theoretical model, Dangl, Wu, and Zechner (2006) suggest that

management replacements may be accompanied by capital inflows, depending on the tenure of the manager that is being replaced. Importantly, regardless of the reason why the change occurred, such an event draws the investors' attention and puts an incoming manager in the spotlight, providing a perfect setting for exploring the existence of military-based partisanship among mutual fund investors.

Therefore, we investigate the fund flow dynamics around the dates of managerial turnover. In particular, we examine whether funds that shift to managers with military background exhibit subsequently different fund flows relative to funds that employ nonmilitary fund managers. We only consider instances when the incoming manager single-handedly manages the fund and overlapping periods of management are excluded.

Figure 2 illustrates an increase in average monthly net inflows into both types of funds after the management change. Noteworthy, flows into funds managed by individuals with military background are substantially higher than the ones into funds with nonmilitary managers. For both groups, fund inflows reach their maximum in the month of the manager change. In the subset of military-managed funds, inflows remain high for all the subsequent months, while funds managed by nonmilitary individuals experience an inflow decline to around the pre-turnover level. The differences in net inflows between the two groups over the ten months following the managerial turnover are economically significant. Funds managed by individuals with military experience receive between 6.6% and 38.4% higher annualized fund flows.

Figure 3 provides additional evidence by presenting average flows for the two groups around the dates when a single manager leaves the fund. By contrast, we observe an outflow from funds previously managed by individuals with military background during the month of managerial turnover, while flows into nonmilitary funds are essentially unaffected. The month of manager change is the only period in the twenty months surrounding it in which there is an actual outflow. The difference amounting to a sizable -12.0 annualized percentage points.

While the above descriptive tests present some evidence of heterogeneity in fund flows between the two groups around the dates of managerial turnover, one can argue that the observed inflows are induced by the change in management itself and not due to investor military-related partisanship that affects asset allocation decision. That is, a fund company can choose to heavily advertise the fact that it has replaced a manager, drawing attention to the superiority of an incoming manager relative to the manager that is being replaced. Jain and Wu (2000) show that advertised funds indeed are able to attract significantly higher inflows.

To alleviate this concern and address possible endogeneity between the two groups, we

implement a difference-in-differences approach by comparing changes in fund flows around the dates of managerial turnover of funds with military management (treatment funds) to changes in fund flows of funds with nonmilitary managers (control funds). In this, we restrict the sample to funds that only had one change from team to solo management over the sample period of our study and use the following specification:

$$F_t^i = \alpha_0 + \beta_1 Treat_i + \beta_2 (Treat_i \times Post_t) + \gamma X + \eta_j + \tau_t + \epsilon_{i,t}$$
 (2)

where  $F_t^i$  is the net fund inflow of fund i as in (1);  $Treat_i$  is an indicator for funds that were ever managed by individuals with military background and affected by the managerial turnover;  $Post_t$  is an indicator variable that equals one for months of solo management period and zero otherwise; X is a vector of control variables; and,  $\eta_j$  and  $\tau_t$  are segment and period fixed effects, respectively. In the above model, the treatment occurs at different times and the full set of period dummies is included. Our main results are unaffected if we standardize the treatment periods. The primary coefficient of interest in the above specification is the coefficient  $\beta_2$  on the difference-in-differences estimator,  $Treat_i \times Post_t$ , which indicates if the average change in fund flows from before to after change to solo management was different in the two groups.

Table VIII reports the results for a difference-in-differences estimation in regression (2). The coefficients on the interaction,  $Treat_i \times Post_t$ , are uniformly statistically significant regardless of the model specification. Coefficients equal to 0.006 (t-stat. = 7.24) and 0.002 (t-stat. = 2.48) in columns (1) and (2), respectively. In column (1), we report the estimates after including just the segment and period fixed effects and no control variables and in column (2), we introduce a set of control variables detailed in Section II. These findings are also economically meaningful: all else equal, the coefficient estimates imply that individuals with military background receive up to 6.7 annualized percentage points higher net fund inflows than others do. Importantly, we find that in both specifications  $Treat_i$  indicator reports small and insignificant coefficients, suggesting that the treatment and control funds exhibit parallel movements in their fund flow outcomes in the absence of the treatment shock. The pre-change parallel trend in fund flows between the two groups is further confirmed in columns (3) and (5) where we augment the difference-in-differences design with interaction terms of the  $Treat_i$  variable with periods preceding the managerial change. Findings indicate that no statistical difference in the outcome variable exists prior to the management rotation. In contrast, the coefficients on the interaction terms of the  $Treat_i$  variable with post change periods in column (4) and (5) suggest that the net fund inflows increase following the induction of military-experienced managers. The fund flow effect is the most pronounced in the first month of active management  $(Treat_i \times Post0)$ , indicating that managers with military background receive 5.7 percent higher inflows during the first month of active management relative to other managers. The difference in fund flows between the two groups is persistent, however, slightly weakens over time.

The evidence of this section is hard to reconcile with an alternative fundamental-based explanation and supports the notion that military-induced trust in the manager affects investors' buying and selling behavior toward mutual funds.

# C. A Closer Look at the Flow-Performance Relationship of Military-Managed Funds

Investors are ultimately concerned about performance outcomes. Thus, in this section we investigate if the observed flow patterns are also reflected in the distribution of performance realizations of mutual funds. Specifically, we explore whether an investor's willingness to allocate more capital to military-managed funds than to other funds persists after both extreme positive and negative performance months. <sup>12</sup> Given our previous results, we expect that managers with prior military background attract relatively more flows regardless of the extremity of performance outcomes.

Table IX relates monthly net fund flows to the performance of mutual funds. Column (1) shows that the coefficients on the main variable of interest, the interaction term  $Military \times Performance \ rank$ , is positive and statistically significant (coefficient = 0.010, t-statistic of 6.10). This suggests that fund flows are higher for those military-managed funds that are at the top of the performance ranking. In other words, the observed differences in fund flows between the two groups can be attributed to significantly higher capital inflows into mutual funds with military-experienced managers following the months of outperformance.

Barber et al. (2005) show that the fund flow-performance relationship is in fact nonlinear. Therefore, the remaining specifications in Table IX estimate a quadratic performance-flow relationship. The coefficient estimates in columns (3) to (4) reveal that the interaction term of the dummy for military managers with squared past performance is uniformly statistically significant and positive, while the interactions with linear past performance are negative, emphasizing the non-linearity of the flow-performance relationship. This indicates that the difference between military and nonmilitary-managed funds is especially large for extreme performance realizations. In particular, results suggest that military-managed mutual funds not only have higher fund flows following extremely good performance, but also following months of very poor return realizations relative to their nonmilitary-managed counterparts.

<sup>&</sup>lt;sup>12</sup>We rely on scaled performance ranks to gauge the performance outcomes. Performance rank represents the position of the fund's monthly return relative to all other funds in the same market segment (based on Morningstar style boxes).

These findings are largely unaffected by the inclusion of various fixed effects in the regressions.

# D. Microlevel evidence from an online experiment

The key assumption of this paper is that majority of investors are likely to be sensitive to fund manager background information when making investment decisions. To ensure that this is the case, we perform an online survey among U.S. mutual fund investors via Amazon Mechanical Turk (AMT). Specifically, we ask 200 mutual fund investors whether they knew and considered the fund manager's profile at the time of investing. Results indicate that this is the case for 67% of the respondents.

Results of the Section IIC and Section IID suggest that investors are likely to base their purchase decisions partially on a manager's personal background information and that military-associated partisanship exists among mutual fund investors. However, it is, of course, not possible to empirically control for all other potential drivers of fund flows in our setting. Thus, we conduct an online experiment via AMT to further investigate the relation between managers' military affiliation and fund flows. The procedure allows us (i) to control for fund characteristics, thus we can rule out statistical discrimination-related explanations of our results, and (ii) to examine the impact of investor characteristics on investment decisions, while the previous empirical analysis focuses on aggregate investor behavior at the fund level. As in Kumar et al. (2015), we recruit individuals at AMT to complete a hypothetical fund investment task in which they are required to split an investment of 100 dollars between two funds, which are labeled "fund A" and "fund B".<sup>13</sup>

Our investment experiment is conducted with 804 individuals who self-report that they are located in the U.S. and own mutual funds. We provide subjects with information about each fund A and B, i.e. fund segment, size, inception date, expense ratio, annual turnover, the top five holdings, a short description of the investment objective, past performance, and a fund manager's short profile. The experiment lasts four rounds. In each round, participants split 100 dollars between two funds. To avoid that subjects learn that the experiment is about military affiliation and to ensure that our experimental results are robust, only in round 2 and 4 one of the two funds is managed by an ex-military manager, while in rounds 1 and 3 neither fund is managed by such individual. In round 2 both funds have very similar fund attributes, but in round 4 we assign negative past returns to fund A.

Next, subjects are randomly assigned to one of two groups. The key feature of the experiment is that in rounds 2 and 4 half of the individuals observe that fund A is managed

<sup>&</sup>lt;sup>13</sup>We thank Alexandra Niessen-Ruenzi for providing us with the experimental setup.

<sup>&</sup>lt;sup>14</sup> Each of the fund profiles represent a hypothetical diversified equity mutual fund singlehandedly run by a male manager with an American-sounding name, e.g. "Charles Miller".

by an ex-military fund manager, whereas fund B is managed by a nonmilitary manager. In rounds 1 and 3, individuals of both groups observe only nonmilitary-managed funds. Hence, any difference in investment behavior between the two groups can solely be attributed to the fund manager's military background.

Table X presents the results of this experiment. Table X, Panel A shows that AMT participants invest 3.36 dollars more in the fund A when managed by a manager with military experience. Results of both rounds 2 and 4 uniformly suggest that subjects allocate more money to the fund with an ex-military manager. Moreover, the inclination toward military-experienced managers persists when subjects are confronted with negative past returns of the military-managed fund (round 4), corroborating the evidence in Section IIIC. In contrast, when we specify no prior military affiliation to managers of both funds (untabulated placebo rounds 1 and 3), we find no significant difference in asset allocation.

Results reported in Table X, Panel B provide further evidence on the relation between fund manager military background and fund flows, while focusing on the specific investor characteristics. In columns (2) and (3), we investigate subsamples of subjects by party affiliation, i.e. Democrats and Republicans. Party identification is self-reported by the participants. We find the military background effect on investment allocation decisions in both subsamples, with the coefficients of 4.32 (t-stat of 1.72) for the Democrats and 4.53 (t-stat of 1.89) for the Republicans. This is consistent with the Gallup Poll survey evidence that U.S. citizens, independent of their party affiliation, perceive military-affiliated individuals as trustworthy. In column (4), we use several additional interaction terms and show that our results are more pronounced among older investors.

We find that the effect of a fund manager's military background on the amount invested in a fund is economically sizable, but lower in magnitude than the effect that we document in our CRSP/Morningstar sample.<sup>16</sup> This makes intuitive sense, since participants are likely to pay less attention to a manager's profile when they do not have their own money at stake. Further, in our experimental setting, the military background effect is lower in magnitude compared to the relatively more salient gender and manager name-related effects documented in Kumar et al. (2015) and Niessen-Ruenzi and Ruenzi (2018).

Overall, the results of this section further confirm the previously observed relation between managerial military background and fund flows and suggest that the majority of in-

<sup>&</sup>lt;sup>15</sup> Additionally, when we exclude AMT participants from our sample who spent less than two minutes on the experiment, we find that the observed effect strengthens with participation time showing that our results are not induced by AMT workers who did not take the task seriously. These results are unreported and available upon request.

<sup>&</sup>lt;sup>16</sup> To the best of our knowledge there were no major military-related events around the dates of the experiment (August, 2019) that could negatively impact our results.

vestors consider manager background information when making their investment decisions.

### IV. Additional Tests

### A. Military Background and Window Dressing

Previous research suggests that investors likely prefer monitoring-light managers (Gennaioli et al. (2015)). In the context of our paper, investors may view managers' military background as an indicator of potentially more compliant and ethical behavior that reduces perceived investment risk. An intriguing question is then whether ex-military managers live up to investors' expectations and actually act more ethically relative to others.

To answer this question, we examine whether managers with military experience are less likely to engage in window dressing activities relative to nonmilitary managers. Solomon, Soltes, and Sosyura (2014) argue that investors pay attention to portfolio holdings reports and, among other things, evaluate managers based on their particular stock picks. Consequently, some fund managers window dress their portfolios (remove poorly performing holdings) before filing dates in an attempt to deceive investors. These practices are generally viewed as unethical at best and even illegal (Lakonishok, Shleifer, Thaler, and Vishny (1991); Patel and Sarkissian (2013)). Following Agarwal, Gay, and Ling (2014), we rely on two measures of window dressing, namely Rank Gap and Backward Holding Return Gap (BHRG). Rank Gap is a relative window dressing measure that captures inconsistency between a fund's performance rank and the two ranks based on winner and loser stocks proportions in the reported holdings. BHRG is the difference between the net return of a hypothetical portfolio that is based on the fund's reported holdings and the fund's actual return. The time period is from 2003—the year from which funds were required to file holdings information on a quarterly basis—to 2017.

Table XI relates a manager's military background to the two window dressing measures. The coefficients on the military dummy variable are uniformly negative and statistically significant. This suggests that managers with military background engage in significantly less window dressing relative to their nonmilitary peers. In other words, they are less likely to remove poorly performing holdings before filing dates. Moreover, we observe this pattern regardless of whether the fund is in the top or bottom quintile of performance within its segment prior to the holdings report. While acknowledging the existence of other potential explanations for these results, we suggest that these findings point to the conclusion that ex-military managers show signs of more compliant and ethical behavior relative to others. Additional cross-database screening for evidence of managerial misconduct of various kinds

revealed no instances of ex-military managers in our sample being involved in any illegal activity.  $^{17}$ 

#### B. Matched Sample Analysis

To guard against the possibility that the relationship between military background and fund flows is spuriously caused by some sample-specific unobserved characteristics of funds or managers, we perform two different matching procedures. In doing so, we attempt to bring the sample properties of the control (nonmilitary) funds as close as possible to the military-managed funds. Thus, we assume that if the observed characteristics of the two groups of funds are identical, then the unobserved attributes are likely to be similar as well.

Table XII presents results from a matched sample analysis. We use two approaches to match funds. First, for each observation with a military-experienced manager, we search for nonmilitary-managed twin funds with similar fund or managerial characteristics. In doing so, we require values of the non-categorical variables for nonmilitary fund in a given month to be in the range of five percent from those of a military-managed fund. The set of characteristics includes fund's segment, family, size, age, share of marketing expenses, performance, and manager's gender, biological age, industry tenure, and foreignness of a name. In all cases, we require the matching attributes to be from the same month and drop all other nonmilitary funds' observations that do not have a matching military counterpart in a given month. Second, we perform the propensity score nearest neighbourhood matching procedure on the set of fund characteristics, including fund performance, fund size, expense ratio, turnover, fund age, and lagged fund flows. Then we re-estimate the baseline flow regression (column 3 of Table II) based on the resulting matched samples.

Results of the matched sample analysis show a uniformly positive and statistically significant impact of the *Military* dummy on fund flows. The magnitudes of the coefficients in specifications (2) to (16) compares favorably to the estimate in (1), suggesting that in 13 out of 15 cases confining the sample to better matches in terms of observable characteristics results in a similar or more pronounced effect of manager's military background on fund flows. Moreover, when we match funds based on fund segment, manager gender, and additionally require the matching funds to be in the same fund family (in (5)) or to have very similar returns (in (10)), and when we perform propensity score matching (in (12) to (16)) the sample size shrinks significantly, but statistical significance remains. This evidence indicates that restricting the analysis to more similar funds does not alter the baseline results

<sup>&</sup>lt;sup>17</sup>Similar to Egan, Matvos, and Seru (2019), we collect data from FINRA BrokerCheck. The data includes all disciplinary events, including civil, criminal, and regulatory events, and disclosed investigations for all registered brokers and the set of investment advisers who are also registered as brokers.

on the military background effect, indicating that an unobservable variable explanation of our results is unlikely.

#### C. Alternative Measures of Fund Flows

Thus far, the main dependent variable of this paper has been relative net fund flows, that is the percentage change in total assets under management, net of internal growth. However, recent studies question the reliability of the relative fund flow measure due to apparent violations of additive constraint. Spiegel and Zhang (2013), for instance, suggest using fund's market share instead. Therefore, in this section, we test two alternative specifications of the fund flow measure, namely the absolute dollar flows and the change of a fund's market (segment) share as dependent variables.

Table XIII reports results for the two alternatively specified fund flow measures. Our findings confirm the existence of a positive impact of the managerial military experience on fund flows for both measures. In columns (1) and (2), coefficient estimates of the *Military* dummy in all-inclusive flow regressions with the absolute dollar flows as the dependent variable are still positive and significant. Results are also economically meaningful, as on average military managers receive \$3.3 million higher monthly fund flows relative to their nonmilitary counterparts. Further, results of the quantile regression with the change of a fund's segment share as the dependent variable also reveal that the coefficient estimate of the main variable of interest, the *Military* dummy, is positive and significant at the 1% level (t-statistic of 5.15). Thus, the inference that military background of mutual fund managers affects fund flows remains unchanged.

# D. Fund Performance and Persistence

Next, we examine whether the observed relationship between military background and fund flows arises from the possibility that investors rationally prefer managers with military background due to their potential superiority in generating risk-adjusted performance or higher performance persistence. Table XIV, Panel A, reports the risk-adjusted alpha estimates of a hypothetical long-short portfolio that assumes a long position in all military-managed funds and a short position in all nonmilitary-managed funds in our sample. Regardless of the factor model, the difference portfolio does not deliver any economically or statistically significant risk-adjusted alphas. All of the alpha estimates, based on either net or gross performance, are close to zero and far from being statistically significant (t-statistics ranging from 0.38 to 1.50). This suggests that significant performance differences between military and nonmilitary managers are unlikely. As an additional test, we compare fund

performance persistence of military and nonmilitary managers. Performance persistence is computed as the average time-series standard deviation of monthly performance ranks. The results of Table XIV, Panel B reveal no statistically significant difference between the two groups, indicating that military managers do not deliver more stable performance relative to other managers.

The evidence of this section suggests that investor inclination toward military-managed funds is unlikely to be associated with rational performance-chasing investor behavior. Rather, it provides additional support to the notion that military-induced trust in the manager affects investors' buying and selling behavior toward mutual funds.

#### E. Potential Equilibrium Outcomes of Hiring Ex-Military Managers

Our findings suggest that fund management companies are likely to benefit from hiring managers with military background because those managers are associated with relatively higher fund flows. However, taking into account the advantages of hiring ex-militaries, an important question remains: why then it is not so that most of the mutual funds are managed by individuals with military experience?

A potential answer to this question is that qualified military-experienced individuals may be in lower supply to match the increasing demand for mutual fund managers over the sample period of our study. Figure 4A plots the share of ex-military fund managers and education level of veterans by birth cohort, illustrating the shift in educational attainment of military personnel. This evidence suggests that in the first part of the twentieth century the likelihood of highly educated individuals serving in the military was higher relative to all other men in the population. Perhaps, among other things, this may be related to the fact that prior to 1951 potential military inductees were not permitted to postpone service to attend college. <sup>18</sup> Following the change in the selection process the fraction of men with college degrees in the military substantially decreased. Consequently, the share of ex-military personnel among mutual fund managers followed a similar path and remained low from the mid-1950s cohorts onward. Thus, decreased supply of highly educated military-experienced individuals is likely to be inadequate to meet the demand for fund managers, illustrated in Figure 4B by the steadily declining share of fund managers with military background among all managers over the sample period.

There are several other potential reasons why fund management companies do not widely employ military-experienced fund managers. First, there may be a possibility that they are simply unaware of the flow effect that we uncover in this paper. However, we observe that

 $<sup>^{18}</sup>$ For more information on other potential reasons for the observed differences in educational attainment of military personnel across various cohorts see Bound and Turner (2002).

within our data set the vast majority of fund companies reveal general background about their active managers through easily accessible media sources. Along with that, the results of Section IID indicate that fund companies have fund flow benefits associated with disclosing information through such information outlets, suggesting that most of the fund management companies are likely to act strategically in revealing information about a manager's military background. Another possibility is that fund companies are reluctant to employ ex-military managers, because these managers perform worse than others. However, we find that managers with military background do not exhibit significantly different skills or managerial traits relative to other managers, and if anything tend to act more ethical. Overall, we find no supportive evidence for these mechanisms. We acknowledge that there may be other potential equilibrium mechanisms, e.g. the possibility of higher compensation paid to managers with military experience, which we are not able to address in our setting.

#### V. Conclusions

In this paper, we investigate whether biographical characteristics of mutual fund managers, specifically prior engagement in the military, influence investor asset allocation decisions. We suggest that distinct trust-building attributes of fund managers with prior military experience result in investors perceiving them as money guardians with military-associated qualities. Thus, investors are more likely to allocate capital to funds managed by military-experienced individuals even when these managers do not exhibit superior investment skill compared to their nonmilitary peers. We find that mutual funds with military-experienced managers have 10.6 percentage points higher annualized net fund flows and grow by up to 6.5% p.a. faster relative to comparable funds run by managers who do not have such background. Military managers' superiority in competing for investor funds cannot be explained by fund or managerial attributes, including performance, and is robust to several alternative explanations. Additionally, we find that the content and salience of disclosures about the military background also influence investor decisions; that is, the fund flow effect is more pronounced when investors are exposed to salient, accentuated information.

While we observe no evidence of rational statistical reasons for such investor decisions, results from several tests provide support for trust-mediated allocation of assets. We find that investors' buying and selling behavior toward military-managed funds is related to the nationwide confidence in the military, ratified by distinct investors' partisan attitudes toward these funds during the episodes of heightened trust. Consistently, we observe that ex-military managers experience significantly lower fund flows following the exogenous events of military-related scandals that have adversely affected nationwide trust in the military. Further, we

find that military managers have higher fund inflows relative to their nonmilitary counterparts following both extremely good and poor performance. The difference-in-differences analysis around the dates of managerial turnover reveals that, even without any other fundamental events and all else equal, incoming managers with military background receive significantly higher net fund flows relative to other managers. In an experimental setting in which we randomly assign military background to managers and eliminate the possibility for rational choice explanations, we find that subjects invest significantly more money in a fund when managed by an ex-military manager. Last, using investor-level information, we observe that military-induced asset allocation is unaffected by investor political party identification and is more pronounced among older investors.

Taken together, the findings of this paper suggest that military-associated trust-building attributes of fund managers influence mutual fund investor decisions. The empirical findings of this paper provide support to portfolio management delegation theories, in particular to those emphasizing the role of trust, and can be interpreted under the description of trust-mediated fund allocation offered in them. Future research could further investigate the causes and effects of trust in the asset management industry. One direction for future research would be to explore the potential for trust-induced investor decision-making related to other economic agents, e.g., corporate executives, financial analysts, and hedge fund managers. Finally, it might be useful to explore other managerial characteristics that could potentially foster investor trust and affect investor purchase decisions.

# Appendix A. Variable Description

Table AI. Descriptions of Main Variables and Sources.

This table provides descriptions and sources of variables used in our study. The following abbreviations are used: CRSP - CRSP Survivorship Bias Free Mutual Fund Database; MS - Morningstar Direct Database; BL - Bloomberg; MQ - Marquis Who's Who database; FINRA - BrokerCheck; LI - LinkedIn, SEC - SEC filings, NSAR-B filings; INT - Intelius database; GI - GI Search engine; ANC - Ancestry.com; LEG - Legacy.com; FW - Fund company websites; LN - LexisNexis; NP - Newspapers.com; Gallup - The Gallup polls; FBI - Federal Bureau of Investigation NICS database; AE - Authors' estimations; MC - Manually collected.

Variables	Description	Source			
Panel A: Dependent Variables					
Fund flows	Monthly net percentage mutual fund flows, computed as $(TNA_t^i - TNA_{t-1}^i(1 + r_t^i))/TNA_{t-1}^i$ , where $TNA_t^i$ is the fund $i$ 's total net assets in month $t$ and $r_t^i$ stands for the net return in month $t$ .	CRSP, AE			
Absolute dollar flows	Monthly absolute dollar value of fund flows, computed as $TNA_t^i - TNA_{t-1}^i(1+r_t^i)$ , where $TNA_t^i$ is the fund $i$ 's total net assets in month $t$ and $r_t^i$ stands for the net return in month $t$ .	CRSP, AE			
Change of a fund's mar- ket (segment) share	A fund's segment share in a given month divided by fund's segment share in the previous month, where the segment share is a fraction of a fund's TNA in the average segment TNA.	CRSP, AE			
Panel B: Main Independer	Panel B: Main Independent Variables				
Military	Dummy variable equal to 1 if a fund is single-managed by an individual with a military background in a given month and 0 if an active manager does not have a military background.	MS, BL, MQ, FW, LI, SEC, GI, LN, NP, AE, MC			
Military team	Dummy variable equal to 1 if a fund management team includes a manager with prior military back- ground in a given month and 0 otherwise.	MS, BL, MQ, FW, LI, SEC, GI, LN, NP, AE, MC			
Conflict/Medal	Dummy variable equal to 1 if a fund is single-managed by an individual who served a tour of duty in a conflict zone and 0 otherwise.	MS, BL, MQ, FW, LI, SEC, GI, LN, NP, AE, MC			
Military training	Dummy variable equal to 1 if a manager has never served in the military but has graduated from any of the U.S. military schools and academies or voluntary participated in any type of military training and 0 otherwise. Based on additionally collected data.	MS, BL, MQ, FW, LI, SEC, GI, LN, NP, AE, MC			
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Table  ${\bf AI}$  – continued from previous page.

Variables	Description	Source
Panel C: Fund Variables		
Military team share	Share of military-experienced managers in a fund management team.	MS, BL, MQ, FW, LI, SEC, GI, LN, NP, AE, MC
Returns (raw)	A fund's monthly raw net return.	CRSP
Performance rank	Performance rank based on a fund's monthly return relative to all other funds in the same market segment (based on the Morningstar style boxes) in a given month normalized to be between 0 and 1.	CRSP, AE
Performance $rank^2$	Squared value of performance rank.	CRSP, AE
Three-months returns	A fund's net return over the past three months.	CRSP, AE
One-year returns	A fund's net return over the past 12 months.	CRSP, AE
Five-year returns	A fund's net return over the past 60 months.	CRSP, AE
Fund risk	Time series standard deviation of a fund's returns using the rolling twelve-months window of past returns.	CRSP, AE
Fund age	Logarithm of a fund's age in full years from the date the fund was first offered, as defined in CRSP.	CRSP, AE
Fund size	Logarithm of a fund's total net assets in million USD.	CRSP, AE
Turnover ratio	A fund's turnover ratio.	CRSP
Expense ratio	A fund's expense ratio in %.	CRSP
Marketing expenses	Share of a fund's marketing expenses in its total expenses.	SEC, AE, MC
Family flow	Average of fund flows over all funds belonging to the same fund family as a given fund in a given month, net of flows in a fund itself.	CRSP, AE
No load fund	Dummy variable equal to 1 if a fund does not charge a front-end load fee in a given month and 0 otherwise.	CRSP
Retail fund	Dummy variable equal to 1 if a fund is a retail fund in a given month and 0 otherwise.	CRSP
Institutional fund	Dummy variable equal to 1 if a fund is an institutional fund in a given month and 0 otherwise.	CRSP
Defense holdings	Share of defense stocks in total fund's portfolio in a given month.	TR
Lagged fund flow	One month lagged flows of a given fund.	CRSP, AE

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Table AI - continued from previous page.

Variables	Description	Source
Investment media	Dummy variable equal to 1 for funds that disclose information on manager's prior military experience through investment media sources and 0 otherwise.	MC, MS, BL
Personal disclosures	Dummy variable equal to 1 if information on manager's prior military experience is not available in investment outlets, but on fund company websites or professional networks and 0 otherwise.	MC, FW, LI
Other sources	Dummy variable equal to 1 if military background information is only disclosed via major or regional newspapers or other alternative media outlets and 0 otherwise.	MC, NP
Post-mortem disclosure	Dummy variable equal to 1 if military background information is only disclosed in obituary notices after manager passing, but not prior to that. Based on additionally collected data.	MC, LEG
Panel D: Manager-Specific	and Other Variables	
Age	Biological age of a manager in years in a given month.	MS, BL, INT, FW, NP, MC
Married (Marital status)	Dummy variable equal to 1 if a fund manager is married in a given month and 0 otherwise.	MS, INT, FW, NP, MC
Fund tenure	Tenure of a manager in years in a given month, computed as difference between a current date and the date when the manager has started managing the fund.	MS, FINRA, AE
Industry tenure	Tenure of a manager in years in a given month, computed as difference between a current date and the date when the manager joined the fund management industry.	MS, FINRA, AE
Bachelors only	Dummy variable equal to 1 if a manager has a bachelor's degree as the highest degree earned and 0 otherwise.	MS, BL, LI, MQ, MC
MBA and above	Dummy variable equal to 1 if a manager has a MBA/PhD/JD/MD degree as the highest degree earned and 0 otherwise.	MS, BL, LI, MQ, MC
Ivy league	Dummy variable equal to 1 if a manager has any degree from an Ivy league school and 0 otherwise.	MS, BL, LI, MQ, MC

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Table  ${\bf AI}$  – continued from previous page.

Variables	Description	Source
Foreign name	Dummy variable equal to 1 if a manager's name is perceived as non-English sounding (but rather as Muslim, Hispanic, African, Asian, etc.), and 0 otherwise. Estimations based on Ye et al. (2017) machine-learning algorithm.	AE
Non-financial industry experience	Dummy variable equal to 1 if a manager has prior non-financial industry experience and 0 otherwise.	MS, BL, LI, MC
Media coverage	Number of articles about a manager in the whole LexisNexis "U.S. newspapers" universe in a given month.	LN, MC
Father manager	Dummy variable equal to 1 if a manager's father has worked in the asset management industry and 0 otherwise.	MS, MQ, ANC, LEG, NP, MC
Confidence in the military index	Normalized confidence in the military index in a given year, computed as ratio of "great deal confidence" to "very little/none confidence" respondents in a given year. Survey data (every year) is based on a random sample of more 1,000 adults, aged 18 and older, from all 50 U.S. states.	Gallup, AE
Satisfaction in the military	Normalized satisfaction in the nation's military strength and preparedness index in a given year.	Gallup, AE
Firearm checks (NICS)	The percentage change in the number of background checks on purchases of firearms conducted through the National Instant Criminal Background Check System.	FBI, AE
Tailhook scandal	Dummy variable equal to 1 for three months following September 1991 and 0 otherwise.	MC
Naval Academy's cheating scandal	Dummy variable equal to 1 for three months following January 1994 and 0 otherwise.	MC
Abu Ghraib scandal	Dummy variable equal to 1 for three months following April 2004 (the outburst of the scandal) and 0 otherwise.	MC
Lackland AFB sex scandal	Dummy variable equal to 1 for three months following February 2013 and 0 otherwise.	MC
Operation Red Dawn	Dummy variable equal to 1 for three months following December 2003 (capture of Saddam Hussein) and 0 otherwise.	MC
Operation Neptune Spear	Dummy variable equal to 1 for three months following May 2011 (death of Osama bin Laden) and 0 otherwise.	MC

# Appendix B. Military Background Information

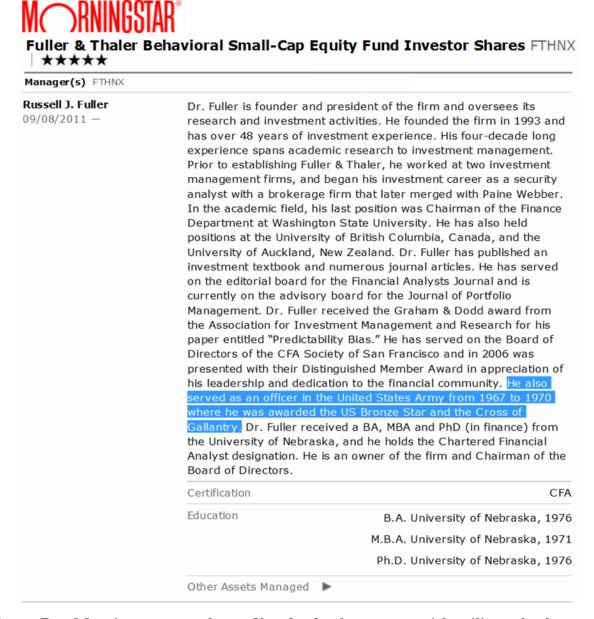


Figure B1. Morningstar sample profile of a fund manager with military background. This figure shows an exemplary manager profile retrieved from Morningstar Direct. The information regarding the manager's military background is highlighted in blue.

# **Bloomberg**

**Executive Profile** 

#### **Anthony Eugene Sutton**

Portfolio Manager & Analyst, Redwood Investments, LLC

Total Calculated Compensation

This person is connected to **0** Board Member in **0** organization across **3** different industries.

#### Background

Mr. Anthony Eugene Sutton, also known as Tony, is a Portfolio Manager and Analyst since 2012 at Redwood Investments, LLC. Mr. Sutton joined the firm in 2010 and serves as Portfolio Manager for SMID growth and Analyst for the large cap core and large cap growth strategies. His primary research coverage includes biotechnology, medical equipment, software, and services. Prior to joining this, Mr. Sutton was a Managing Director and Portfolio Manager at Putnam Investment Management, LLC. He joined the firm in 2001. Prior to this, he was a Specialty Growth Analyst at Putnam Investment Management covering health care, biotechnology, defense, and technology. Mr. Sutton was an Associate Analyst at Fidelity Management and Research from 1989 to 1993 and Portfolio Manager at Cabot Money Management from 1995 to 1998. He also served as the Chief Investment Officer at McDonald-Sutton Asset Management, LLC from 1998 to 2001. Mr. Sutton is a combat-decorated former US Marine, specializing in intelligence with extended tours served in the Middle East and Central America from 1982 to 1988. He began his investment career at Fidelity Investments and following graduate school, he managed growth portfolios for private clients. Mr. Sutton received M.B.A from MIT Sloan School of Management in 1993 and B.A. from Monmouth University in 1989.

Figure B2. Bloomberg sample profile of a fund manager with military background. This figure shows an exemplary manager profile retrieved from Bloomberg Executive Profiles. The information regarding the manager's military background is highlighted in blue.

# Princeton Global Asset Management LLC

# **Investment Professionals**

RONALD K. STRIBLEY, Managing Director, has implemented an investment philosophy focused on the "Value Style" for over 30 years. During this period he developed and refined a systematic and disciplined investment process that seeks to find equities which have low Price to Earnings Ratios with tangible evidence of improving corporate fundamentals. He is the founder of Stribley Capital Management. Ron was a partner in The Ayco Company L.P., a wholly owned subsidiary of Goldman Sachs, where he created, implemented, and managed a Value Style Portfolio. Prior to joining Ayco, Ron was First Vice President for The Glenmede Trust Company, where he managed in excess of \$2.5 Billion including the large capitalization US equity Pew Charitable Trust portfolio. Ron is a CFA® Charterholder since 1975 and has passed the NASD Series 7 and 66 examinations. He received his BSBA degrees from Babson College and then served a tour of duty in Viet Nam with the 11th Armored Calvary Regiment and was awarded the Bronze Star. Following his honorable discharge as a 1st Lieutenant, he completed his Masters at Babson College.

Figure B3. A fund firm's sample profile of a fund manager with military background. This figure shows an exemplary manager profile retrieved from a fund firm's advertising materials. The information regarding the manager's military background is highlighted in blue.

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## Table I. Fund and Manager Characteristics

This table reports fund and manager characteristics for our sample of funds managed by individuals with prior military experience and for the peer managers who do not have such experience. Both groups of funds include fund managers who single-managed U.S. domestic equity funds at some point between 1991 and 2017. The differences between the group means and the corresponding t-statistics, clustered by fund for fund attributes and clustered by manager for manager attributes, are reported in columns (3) and (4), respectively. Panel A reports fund characteristics. Fund flows are the net percentage flows of the fund in a given month (annualized), as specified in the equation (1). Other fund characteristics include: Raw returns (annualized); Performance rank of the fund in a given month relative to all other funds in the same market segment; Fund risk (time series standard deviation of the fund returns using the rolling past twelve month return observations); Fund age measured as the natural logarithm of fund age in years in a given month: Fund size as natural logarithm of the fund's size in million USD; Turnover ratio; Expense ratio; marketing expenses as the share of marketing expenses (NSAR-B filings) in total expenses; Morningstar rating; Family flows as the monthly growth rate of fund's family; Defense holdings as the share of defense stocks in total fund's portfolio in a given month; and indicator variables for No load, Retail, and Institutional funds. Panel B reports specific manager characteristics, including biological age, fund and industry tenure, and share of managers with foreign name. The panel also reports the fractions of managers by their top degree and Ivy league school attainment. Manager's media coverage is the number of times a fund manager is mentioned in a given month in all U.S. newspapers.

Panel A: Fund Characteristics						
Variable	Military managers	Other managers	Difference	t-statistic		
	(1)	(2)	(3)	(4)		
Fund flows	0.224	0.118	0.106	5.06		
Returns (raw)	0.096	0.091	0.005	0.79		
Performance rank	0.556	0.552	0.004	1.13		
Performance rank <sup>2</sup>	0.394	0.390	0.004	0.95		
Fund risk	0.045	0.047	-0.001	-1.27		
Fund age	1.882	2.056	-0.174	-1.38		
Fund size	4.887	5.078	-0.190	-0.94		
Turnover	0.863	0.827	0.036	0.31		
Morningstar rating	3.175	3.098	0.077	0.62		
Expense ratio	0.012	0.012	-0.001	-1.47		
Marketing expenses	0.341	0.332	0.009	0.35		
Family flows	0.010	0.006	0.007	1.65		
No load fund	0.219	0.197	0.022	0.49		
Retail fund	0.719	0.873	-0.154	-0.88		
Institutional fund	0.489	0.476	0.012	0.27		
Defense holdings	1.379	1.485	-0.106	-0.78		
Panel B: Manager Cha	racteristics					
Age	53.003	46.773	6.230	3.96		
Married	0.851	0.856	-0.005	-1.17		
Fund tenure	8.038	6.513	1.524	1.19		
Industry tenure	11.144	9.155	1.989	1.80		
Bachelors only	0.237	0.288	-0.051	-0.80		
MBA top	0.682	0.587	0.095	1.22		
PhD/JD/MD top	0.054	0.059	-0.004	-0.11		
Ivy league bachelors	0.215	0.149	0.066	0.87		
Ivy league MBA	0.230	0.227	0.003	0.04		
Ivy league	0.406	0.305	0.101	1.04		
Foreign name	0.229	0.298	-0.069	-0.87		
Media coverage	2.405	2.192	0.214	0.56		

Table II. Military Background of Mutual Fund Managers and Fund Flows

This table relates manager's military background to fund flows. The dependent variable is monthly net percentage fund flows. The main independent variable is the military dummy that equals one if a fund is single-managed by an individual with military background in a given month and zero if the active manager does not have a military background. The set of control variables is comprised of variables described in Table 1 and in the Appendix A. All control variables, except family flows, are lagged by one month. Segment is defined by the Morningstar fund style indicator. Specification (1) reports results of percentage fund flow regression without fixed effects. Regression specifications (2) to (6) include period, segment, family, fund, and/or interaction fixed effects. Period FE stands for month-year fixed effects. Standard errors are double-clustered by fund and month-year. The corresponding t-statistics are reported in parentheses.

		De	pendent Vari	able: Fund F	lows	
	$\overline{}(1)$	(2)	(3)	(4)	(5)	(6)
Military	0.005	0.005	0.003	0.003	0.003	0.005
	(3.80)	(3.42)	(3.20)	(3.27)	(2.16)	(1.93)
Fund returns	0.071	0.168				
	(9.37)	(9.74)				
Performance rank			0.012	0.013	0.008	0.011
			(15.78)	(16.38)	(11.55)	(14.43)
Lagged fund flow			0.415	0.412	0.268	0.340
			(43.48)	(43.54)	(28.26)	(35.04)
Fund risk	-0.181	-0.291	-0.143	-0.302	-0.083	-0.116
	(-11.68)	(-12.23)	(-9.33)	(-9.88)	(-5.90)	(-6.94)
Fund size	-0.002	-0.002	-0.001	-0.001	-0.001	-0.006
	(-9.97)	(-8.28)	(-10.43)	(-10.46)	(-7.92)	(-15.49)
Fund age	-0.007	-0.007	-0.004	-0.004	-0.003	-0.000
	(-16.75)	(-16.53)	(-15.61)	(-15.60)	(-10.68)	(-0.10)
Turnover	-0.000	-0.000	-0.000	-0.000	-0.001	-0.001
	(-1.00)	(-0.76)	(-0.91)	(-0.90)	(-2.49)	(-1.79)
Expense ratio	0.079	0.096	0.041	0.043	0.181	0.032
	(2.92)	(3.23)	(2.00)	(2.05)	(2.94)	(0.82)
Family flows	0.462	0.397	0.278	0.274	0.360	0.257
	(24.01)	(19.85)	(19.07)	(18.95)	(34.29)	(16.25)
Industry tenure	-0.000	0.000	0.000	0.000	0.000	-0.000
	(-0.23)	(1.42)	(1.34)	(1.31)	(0.22)	(-1.72)
Fund tenure	-0.000	-0.000	-0.000	-0.000	0.000	-0.000
	(-2.79)	(-3.36)	(-2.85)	(-2.76)	(0.75)	(-0.14)
Segment FE	No	Yes	Yes	No	No	No
Period FE	No	Yes	Yes	No	No	Yes
Segment $\times$ Period FE	No	No	No	Yes	No	No
Family $\times$ Period FE	No	No	No	No	Yes	No
Fund FE	No	No	No	No	No	Yes
Adj. R-squared	0.087	0.099	0.266	0.270	0.610	0.300
N of funds	$2,\!412$	2,412	$2,\!412$	$2,\!412$	2,064	2,380
Observations	$170,\!371$	$170,\!371$	170,371	$170,\!371$	136,799	170,338

#### Table III. Alternative Explanations and Robustness of the Results

This table reports results of robustness tests. Specifically, this table shows the estimates of net percentage fund flows regressed on the military dummy, but, depending on the robustness test, flow regressions include additional control variables or are estimated with an adjusted sample of funds. Additional control variables for managerial attributes include manager's gender, biological age, marital status, education, prior experience, foreignness of a name, father background, and media coverage. Additional control variables for fund attributes include long-term performance; retail, institutional and no load fund indicators; the share of defense stocks in the fund portfolio; and the share of fund marketing expenses in a given month. All of the variables are described in the Appendix A. The setup also includes the standard set of control variables and is otherwise identical to the specification (3) of Table 2. Standard errors are double-clustered by fund and month-year.

Alte	rnative explanations	Dependent Variable: Fund Flows			
		Coefficient	t-statistic	No of funds	Observations
(1)	Return 3-months control	0.002	2.97	2,403	168,901
(2)	Return 1-year control	0.002	2.20	$2,\!297$	$155,\!467$
(3)	Return 5-year control	0.002	2.18	1,612	96,689
(4)	Defense holdings share control	0.002	2.22	2,167	76,967
(5)	Coefficient estimates (military) when	controlling f	or demograp	hics	
	Gender	0.003	3.16	2,412	$170,\!371$
	Gender and age	0.003	3.93	2,399	169,123
	Gender, age and marital status	0.004	4.05	2,242	$153,\!147$
(6)	Coefficient estimates (military) when	controlling f	or degree		
	Bachelors only	0.003	3.13	2,406	169,843
	MBA and above	0.003	3.25		
(7)	Controlling for the level of recognitio	n of education	n		
	Military	0.003	3.11	2,402	$169,\!556$
	Ivy league	0.001	3.45		
(8)	Non-Financial Industry experience				
	Military	0.003	3.17	2,406	$169,\!887$
	Non-financial industry experience	0.000	0.21		
(9)	Foreign name				
	Military	0.003	3.32	2,412	170,371
	Foreign name	-0.001	-2.79		
(10)	Manager's family background				
	Military	0.004	2.98	1,014	$56,\!656$
	Father fund manager	0.002	1.41		
(11)	Marketing expenses				
	Military	0.004	3.18	1,665	$101,\!465$
	Marketing expenses	0.000	3.98		
(12)	Coefficient estimates (military) by di	stribution ch	annels		
	Retail fund	0.003	3.24	2,404	$170,\!264$
	Institutional fund	0.003	3.09	2,404	$170,\!264$
	No Load Fund	0.003	3.21	2,412	$170,\!371$
(13)	Manager's media coverage control				
	Military	0.002	2.38	1,391	$134,\!293$
	Media coverage	0.000	0.14		
(14)	Excluding index funds	0.005	2.83	$2,\!154$	153,447
(15)	Placebo: Subsample of index funds	0.002	0.45	258	16,899

#### Table IV. Fund Flows and the Degree of Military Involvement

This table relates percentage fund flows to the manager's degree of involvement in the military. Panel A presents results of a univariate sorting by the Conflict/Medal dummy and the Military training indicator variable. The Conflict/Medal dummy equals one if a fund is managed by an individual who served a tour of duty in a conflict zone and zero otherwise. The Military training dummy covers another extreme of military involvement and takes the value of one if a manager has never served in the military but has graduated from any of the U.S. military schools and academies or participated in any type of military training and zero otherwise. The Conflict/Medal indicator variable represents a subset of military managers, while the Military training dummy covers additionally collected data on managers who have only undergone military training. Panel B shows the estimates of net percentage fund flows regressed on the aforementioned variables and the interaction term with the military dummy. The setup of the regressions includes the standard set of control variables and is otherwise identical to the baseline specification (3) of Table 2. Standard errors are double-clustered by fund and month-year and t-statistics are reported in parentheses.

Panel A: Univariate sorting	Fund Flows				
	Military managers	Other managers	Difference	t-statistic	
Conflict/Medal	0.029	0.010	0.018	3.39	
Military training	0.010	0.010	-0.001	-0.16	
Panel B: Regression analysis	De	ependent Variable: F	und flows		
	(1)	(2)	(3)	(4)	
Military	0.002	0.002			
	(2.70)	(2.55)			
$Military \times Conflict/Medal$	0.005	0.006	0.007		
	(2.06)	(2.15)	(2.70)		
Military training	-0.003			-0.001	
	(-1.42)			(-0.66)	
Controls	Yes	Yes	Yes	Yes	
Segment FE	Yes	Yes	Yes	Yes	
Period FE	Yes	Yes	Yes	Yes	
Adj. R-squared	0.266	0.266	0.266	0.266	
N of funds	2,412	2,412	2,412	2,412	
Observations	170,371	170,371	$170,\!371$	$170,\!371$	

#### Table V. Information Distribution Channels and Fund Flows

This table presents mean fund flows estimates from univariate sorting (Panel A) and coefficient estimates of net percentage fund flows from the regressions (Panel B) by four distinct distribution channels for military background information disclosure. The Investment media indicator variable equals one for funds that disclose information on manager's prior military experience through investment media sources, namely, Morningstar and Bloomberg, and zero otherwise. The Personal disclosures dummy is coded as one if this information is not available in investment outlets, but on fund company websites or professional networks, and zero otherwise. The Other sources variable takes the value of one if military background information is only disclosed via major or regional newspapers or other alternative media outlets, and zero otherwise. The Post-mortem disclosure variable is one for cases in which military affiliation is disclosed in obituary notices after manager passing, but not prior to that. The first three variables represent subsets of military managers, while the Post-mortem disclosure dummy covers additionally collected data. Panel B shows the estimates of net percentage fund flows regressed on the aforementioned variables. We use the same regression setup, including the standard set of control variables, as in the baseline specification (3) of Table 2. Standard errors are double-clustered by fund and month-year and t-statistics are reported in parentheses.

Panel A: Univariate sorting	Fund flows			
	Military managers	Other managers	Difference	t-statistic
Investment media	0.025	0.010	0.014	3.52
Personal disclosures	0.028	0.010	0.018	6.27
Other sources	0.011	0.010	0.000	0.11
Post-mortem disclosure	0.011	0.010	0.000	0.11
Panel B: Regression analysis	De	ependent Variable: F	und flows	
	(1)	(2)	(3)	(4)
Investment media	0.006			
	(3.14)			
Personal disclosures		0.007		
		(4.39)		
Other sources			-0.001	
			(-1.00)	
Post-mortem disclosure				-0.002
				(-1.39)
Controls	Yes	Yes	Yes	Yes
Segment FE	Yes	Yes	Yes	Yes
Period FE	Yes	Yes	Yes	Yes
Adj. R-squared	0.266	0.267	0.266	0.266
N of funds	2,412	$2,\!412$	$2,\!412$	$2,\!412$
Observations	170,371	170,371	170,371	170,371

Table VI. Managers' Military Background and Fund Flows: Team-Managed Funds

This table reports the estimates of the regressions with monthly net percentage fund flows as the dependent variable and military team indicator as the explanatory variable. The military team dummy takes the value of one if a fund management team includes a manager with prior military background in a given month and equals zero if there are no military-experienced individuals in a team that manages a fund. The setup of the regressions includes the standard set of control variables (apart from manager-specific industry experience and fund tenure controls) and is otherwise identical to regression specifications of Table 2. Specifications (3) and (4) additionally include interaction terms with the share of military-experienced managers in a team and with three distinct information distribution channels (specified in Table 5), respectively. Standard errors are double-clustered by fund and month-year and t-statistics are reported in parentheses.

	Dependent Variable: Fund Flows				
	(1)	(2)	(3)	(4)	
Military team	0.000	0.000	-0.001	0.001	
	(0.11)	(0.15)	(-0.39)	(0.25)	
Military team share			0.003		
			(0.43)		
Military team×Investment media				0.001	
				(0.35)	
Military team×Personal disclosures				-0.001	
				(-0.55)	
Military team×Other sources				-0.001	
				(-0.20)	
Lagged fund flow		0.397	0.397	0.397	
		(34.68)	(34.68)	(34.69)	
Performance rank	0.012	0.009	0.009	0.009	
	(12.91)	(14.34)	(14.33)	(14.33)	
Fund risk	-0.284	-0.159	-0.159	-0.159	
	(-10.63)	(-8.73)	(-8.73)	(-8.74)	
Fund size	-0.000	-0.000	-0.000	-0.000	
	(-1.03)	(-0.17)	(-0.16)	(-0.11)	
Fund age	-0.008	-0.004	-0.004	-0.004	
	(-18.63)	(-17.53)	(-17.52)	(-17.49)	
Turnover ratio	0.001	0.001	0.001	0.001	
	(3.48)	(3.29)	(3.28)	(2.28)	
Expense ratio	0.048	0.022	0.022	0.019	
	(0.63)	(0.47)	(0.47)	(0.40)	
Family flow	0.294	0.211	0.211	0.211	
	(15.76)	(14.66)	(14.67)	(14.64)	
Segment FE	Yes	Yes	Yes	Yes	
Period FE	Yes	Yes	Yes	Yes	
Adj. R-squared	0.080	0.232	0.232	0.232	
N of funds	2,019	$2,\!019$	2,019	$2,\!019$	
Observations	184,183	184,183	184,183	184,183	

#### Table VII. Fund Flows, Confidence in the Military, and Natural Experiments

This table relates fund flows to the nationwide confidence in the military and perceived insecurity. Panel A first reports estimates of the regressions of monthly net fund flows on military indicator for periods of high and low levels of confidence in the military, as classified based on the median level of the Gallup Poll's normalized confidence in the military index. Second, it shows the estimates of monthly net percentage fund flows regressed on the military dummy interacted with lagged Firearm checks (NICS) variable. Panel B reports results for the flow regressions augmented with interaction terms of the military variable with indicators for three months following the Tailhook scandal, the Naval Academy's cheating scandal, the Abu Ghraib scandal, the Lackland AFB sex scandal, the success of the Operation Red Dawn, and the success of the Operation Neptune Spear (see Appendix A). The setup of the regressions is otherwise identical to the baseline specification (3) of Table 2. Standard errors are double-clustered by fund and month-year. t-statistics are in parentheses.

Panel A: Confidence index and NICS firearms checks

	Dependent variable: Fund flows				
		fidence in tary index	NICS FBI Checks		
	Periods (years) of low confidence	Periods (years) of high confidence	NICS FBI checks on purchases (1998/12- Periods of 2017/12) NICS FBI checks on purchases: Periods of pos. change neg. change		
	(1)	(2)	$(3) \qquad (4) \qquad (5)$		
Military	0.002	0.003	0.003 0.002 0.004		
	(1.83)	(3.07)	(3.16)  (2.45)  (3.29)		
Military					
$\times$ NICS checks			-0.003		
			(-2.70)		
NICS checks			-0.006		
			(-1.26)		
Controls	Yes	Yes	Yes Yes Yes		
Segment FE	Yes	Yes	Yes Yes Yes		
Period FE	Yes	Yes	Yes Yes Yes		
Adj. R-squared	0.272	0.262	$0.246 \qquad 0.243 \qquad 0.248$		
N of funds	2,104	2,059	2,267 $2,252$ $2,206$		
Observations	89,966	79,0746	136,025 81,432 53,826		

Panel B: Natural experiments

		Depe	endent vari	able: Fund flo	ows
	Tailhook	Naval Academy	Abu	Lackland	
	$\operatorname{scandal}$	scandal	Ghraib	$\operatorname{scandal}$	I
[ilitary	0.002	0.002	0.002	0.002	- (

	scandal	$\operatorname{scandal}$	$\operatorname{Ghraib}$	$\operatorname{scandal}$	Dawn	$\operatorname{Spear}$
Military	0.003	0.003	0.003	0.003	0.003	0.003
	(3.08)	(3.25)	(3.26)	(3.08)	(3.08)	(3.15)
$Military \times event$	-0.004	-0.006	-0.006	-0.010	0.009	0.014
	(-4.51)	(-2.52)	(-2.31)	(-2.40)	(1.97)	(2.58)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Segment FE	Yes	Yes	Yes	Yes	Yes	Yes
Period FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R-squared	0.266	0.266	0.266	0.266	0.266	0.266
N of funds	$2,\!412$	2,412	2,412	$2,\!412$	2,412	2,412
Observations	$170,\!371$	$170,\!371$	$170,\!371$	$170,\!371$	$170,\!371$	170,371

Neptune

Red

#### Table VIII. Fund Flows and Managerial Changes

This table presents evidence on ordinary least squares estimates of the difference-in-differences design of equation (2). The dependent variable is monthly net fund inflows. The sample is restricted to funds with only one episode of change to single management over the period between 1991 and 2017. Treat is an indicator for funds that were ever managed by individuals with military background. Post indicator takes the value of one if a fund is solo-managed and zero if a fund is team-managed in a given month. Columns (3) to (5) present evidence on the timing of the effects of the managerial turnover on the fund flows outcome by presenting estimates of a modified version of equation (2). Pre1 and Pre2 are indicator variables for observations that fall during one and two months prior to management change, respectively. Post1 through Post3 indicate observations from one through three months after the managerial turnover occurred. Post0 is an indicator variable for observations that occur during the months of managerial change. Controls include: performance rank; fund size; fund risk; fund age; turnover ratio; expense ratio; and family flows. All control variables, except family flows, are lagged by one month and have been defined in Table 1 and in the Appendix A. Segment is defined by the Morningstar fund style indicator. Period FE stands for month-year fixed effects. Standard errors are double-clustered by fund and month-year and t-statistics are reported in parentheses.

		Dependent Variable: Fund Flows					
	$\overline{}(1)$	(2)	(3)	(4)	(5)		
$\mathrm{Treat}_i$	0.001	0.002	• •	• •			
	(0.76)	(1.24)					
$\text{Treat}_i \times \text{Post}_t$	0.006	0.002					
	(7.24)	(2.48)					
$\text{Treat}_i \times \text{Pre}2$			0.004		0.004		
			(0.34)		(0.34)		
$\text{Treat}_i \times \text{Pre1}$			0.005		0.005		
			(0.33)		(0.33)		
$\text{Treat}_i \times \text{Post}0$			0.057		0.057		
			(3.66)		(3.66)		
$\text{Treat}_i \times \text{Post}1$				0.034	0.046		
				(3.16)	(3.16)		
$\text{Treat}_i \times \text{Post}_2$				0.029	0.029		
				(2.89)	(2.90)		
$\text{Treat}_i \times \text{Post3}$				0.027	0.027		
				(2.18)	(2.18)		
Controls	No	Yes	Yes	Yes	Yes		
Segment FE	Yes	Yes	Yes	Yes	Yes		
Period FE	Yes	Yes	Yes	Yes	Yes		
Adj. R-squared	0.033	0.088	0.078	0.078	0.078		
N of funds	1,684	1,619	1,619	1,619	1,619		
Observations	210,749	$197,\!484$	$197,\!484$	197,484	197,484		

#### Table IX. Flow-Performance Relationship

The dependent variable is monthly net percentage fund flows. The independent variables include the military dummy and its interaction terms with lagged performance variables. The setup of the regressions is otherwise identical to the baseline specification (3) of Table 2 and includes the standard set of control variables. Standard errors are double-clustered by fund and month-year. t-statistics are reported in parentheses.

	Dependent Variable: Fund Flows				
	$\overline{}(1)$	(2)	(3)	(4)	
Military	0.004	0.010	0.012	0.011	
	(3.44)	(2.30)	(2.75)	(2.48)	
$Military \times Performance rank$	0.010	-0.024	-0.031	-0.025	
	(6.10)	(-1.94)	(-2.50)	(-2.05)	
Military×Performance rank <sup>2</sup>		0.016	0.020	0.016	
		(2.04)	(2.57)	(2.10)	
Performance rank <sup>2</sup>		0.011	0.010	0.012	
		(5.34)	(4.98)	(5.66)	
Performance rank	0.012	-0.005	-0.004	-0.006	
	(15.68)	(-1.62)	(-1.36)	(-1.84)	
Controls	Yes	Yes	Yes	Yes	
Period FE	Yes	Yes	Yes	No	
Segment FE	Yes	Yes	Yes	No	
Family FE	No	No	Yes	No	
Segment×Period FE	No	No	No	Yes	
Adj. R-squared	0.266	0.267	0.276	0.271	
N of funds	2,412	2,412	2,406	2,064	
Observations	170,371	170,371	170,363	169,857	

## Table X. Microlevel Evidence From an Online Experiment

This table presents results of the Amazon Mechanical Turk online investment experiment. Panel A shows the fraction of money invested in fund A if it is managed by a military-experienced manager or by a manager without such experience, the difference between the amounts invested, and the respective t-statistic. All of the participants are U.S. mutual fund investors. Panel B shows the estimates of money invested in fund A regressed on a Military fund dummy variable and participant demographic characteristics. The Military fund indicator takes the value of one for funds which are randomly assigned to be military-managed and zero otherwise. Controls include a gender dummy and a dummy for old investors (above median biological age). Columns (1) and (4) present results for the full sample of subjects. Columns (2) and (3) present results for the two subsamples by self-reported participant party affiliation, namely Democrats and Republicans. t-statistics are reported in parentheses.

Panel A. Average distributions (Rounds including military managers)						
	military manager	nonmilitary manager	(mil nonmil.)	t-statistic		
Round 2	63.04	59.50	3.54	1.96		
Round 4	13.36	10.18	3.17	5.55		
Round $2 + Round 4$	38.20	34.84	3.36	2.20		

	All subjects	Democrats	Republicans	Interactions
-	(1)	(2)	(3)	(4)
Military fund	3.36	4.32	4.53	0.68
	(2.20)	(1.72)	(1.89)	(0.27)
Female×Military fund				0.08
				(0.98)
Old×Military fund				5.42
				(1.77)
Controls	Yes	Yes	Yes	Yes
Adj. R-squared	0.01	0.01	0.01	0.01
Observations	1,608	610	658	1,608

#### Table XI. Ex-Military Managers and Window Dressing

This table relates manager's military background to window dressing activities. The dependent variable is either Rank Gap or Backward Holding Return Gap (BHRG). The main independent variable is the military dummy that equals one if a fund is single-managed by an individual with military background in a given month and zero if an active manager does not have a military background. Rank Gap is the difference between a fund's performance rank and the two ranks based on winner and loser stocks proportions in the reported holdings. BHRG is calculated by taking the difference between the net return of a hypothetical portfolio that is based on the last quarter fund's holdings and the fund's actual return. The set of control variables is comprised of variables described in Table 1 and in the Appendix A. All of the regression specifications include period and segment fixed effects. Period FE stands for quarter-year time fixed effects. Standard errors are based on clustering at the fund level. The corresponding t-statistics are reported in parentheses.

	Full Sample		Bottom 20% perf.		Top 20% perf.	
	Rank Gap	BHRG	Rank Gap	BHRG	Rank Gap	BHRG
Military	-0.024	-0.006	-0.018	-0.009	-0.020	-0.010
	(-2.96)	(-1.68)	(-1.82)	(-2.63)	(-1.83)	(-2.90)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Segment FE	Yes	Yes	Yes	Yes	Yes	Yes
Period FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.198	0.059	0.216	0.088	0.191	0.119
N of funds	924	924	695	695	678	678
Observations	10,388	10,388	2,134	2,134	2,319	2,319

#### Table XII. Matching Funds

This table reports results of the matched sample analysis. In specification (1), we report the baseline regression results. In the following specifications, we keep the regression setup, but estimate regressions on various samples of matched funds. To identify a match for a military-managed fund, we find a nonmilitary-managed counterpart fund based on the similarities of the set of matching criteria in a given month. We use the following matching criteria: manager's gender, foreignness of a name, biological age, industry experience, and fund's segment, family, size, age, performance, expense ratio, turnover, and the share of marketing expenses (NSAR-B filings) in total expenses. The first matching procedure identifies nonmilitary fund as a match if values of the non-categorical variables are in the range of five percent from military-managed counterpart fund values in a given month. In these regressions the set of control variables is identical to the baseline specification and standard errors are double-clustered by fund and month-year. Table also reports the estimates of the propensity score nearest neighbourhood matching (the second matching procedure) on the set of fund characteristics and t-statistics based on the bootstraped standard errors.

		Dep. Variable: Fund Flows		d Flows		
		Coefficient	t-stat.	Obs.		
(1)	No Matching (Table 2, Specification 3)	0.003	3.20	170,371		
Matc	hing fund and manager characteristics:					
(2)	Time and gender	0.003	3.20	155,767		
(3)	Time, gender, and foreign name	0.002	2.63	110,348		
(4)	Time, gender, and segment	0.003	3.21	$155,\!109$		
(5)	Time, gender, segment, and fund family	0.004	2.73	$25,\!612$		
(6)	Time, gender, segment, and fund size	0.004	3.12	$140,\!866$		
(7)	Time, gender, segment, and fund age	0.003	3.25	$143,\!179$		
(8)	Time, gender, segment, and manager age	0.003	3.62	$135,\!813$		
(9)	Time, gender, segment, and manager tenure	0.002	2.81	139,729		
(10)	Time, gender, segment, and performance	0.003	2.26	20,934		
(11)	Time, gender, segment, and marketing exp.	0.004	3.22	83,833		
Prop	Propensity score matching on the following fund characteristics:					
(12)	Perf., and size	0.007	9.78	$47,\!225$		
(13)	Perf., size, and expense ratio	0.006	6.85	$26,\!103$		
(14)	Perf., size, expense ratio, and turnover	0.006	7.15	26,030		
(15)	Perf., size, expense ratio, turnover, and age	0.005	6.49	$25,\!962$		
(16)	Perf., size, expense ratio, turnover, age, and lagged flows	0.003	3.13	25,891		

## Table XIII. Alternative Dependent Variable Definition

This table reports results for the alternative measures of fund flows as dependent variables. We use absolute dollar flows and the change of a fund's market share as in Spiegel and Zhang (2013) instead of relative flows as dependent variable. Specifications (1) and (2) report the regression estimates of monthly absolute dollar flows on the military dummy. These specifications differ in fixed effects applied, but the regression setup is otherwise identical to the baseline specification of Table 2 and includes the standard set of control variables. Specifications (3) reports the regression estimates of the change of a fund's market (more precisely, segment) share on the military dummy. We use quantile regression to estimate the coefficient and also include the standard set of controls and fixed effects. For presentation purposes, we report the coefficient of change of a fund's market share as multiplied by 100. Standard errors are double-clustered by fund and month-year and t-statistics are reported in parentheses.

		Modified Dependent Variable			
	Absolute fund flows		Change in fund's market share		
	(1)	(2)	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$		
Military	3.294	3.472	0.003		
	(1.88)	(2.02)	(5.15)		
Controls	Yes	Yes	Yes		
Segment FE	Yes	No	Yes		
Period FE	Yes	No	Yes		
Segment×Period FE	No	Yes	Yes		
R-squared (Pseudo R <sup>2</sup> )	0.067	0.070	0.200		
N of funds	2,412	2,412	2,412		
Observations	170,371	170,371	170,371		

#### Table XIV. Fund Performance and Persistence

 $Persistence^{gross}$ 

This table shows additional results for fund performance and performance persistence of military managers vs. nonmilitary managers. Panel A reports results from a regression with the equal-weighted return of a difference portfolio that is long in all funds that are single-managed by an individual with military background and short in all funds with nonmilitary managers as the dependent variable. Portfolio is rebalanced on a monthly basis. Estimates of fund performance are measured using the capital asset pricing model (column (1)), the Fama and French (1993) three-factor model (column (2)) and the four-factor model of Carhart (1997) in column (3). Results for both net and gross (before expenses) performance are reported. Panel B shows results for the average time-series standard deviation of monthly performance ranks of military and nonmilitary managers along with the differences between the group means. The corresponding t-statistics are in parentheses and are based on robust standard errors.

Panel A: Fund Pe	erformance: M	ilitary – Nonmilitary		
		$CAPM_t^{m-n}$	Three-Factor $_t^{m-n}$	Four-Factor $_t^{m-n}$
		(1)	(2)	(3)
Net performance				
	$Alpha_t$	0.000	0.000	0.000
		(0.38)	(1.50)	(1.49)
	R-squared	0.012	0.202	0.202
Gross performance	ee			
	$Alpha_t$	0.001	0.001	0.001
		(1.03)	(1.24)	(1.22)
	R-squared	0.009	0.208	0.208
Panel B: Perform	ance Persisten	ce		
		Military managers	Nonmilitary managers	Difference
Persistence <sup><math>net</math></sup>		0.279	0.281	-0.002

0.275

-0.006

0.269

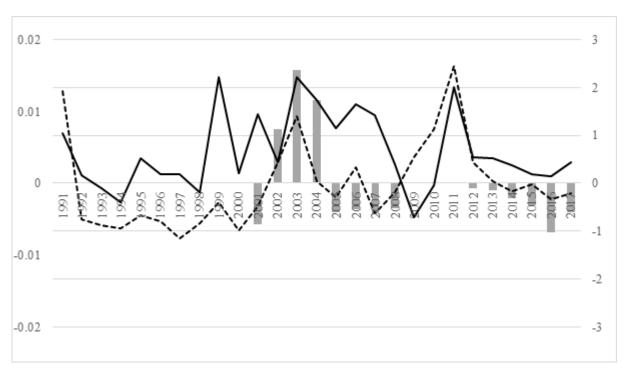


Figure 1. Difference in fund flows and confidence in military. Graph plots the time series of difference in fund flows between the funds that are single-managed by military managers and nonmilitary managers (solid line) and the dynamic of Gallup Poll's normalized confidence in the military index by (dashed line). Bars indicate the values of normalized satisfaction in nation's military strength and preparedness (Gallup Poll).

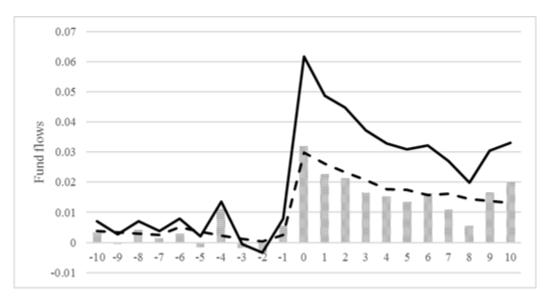


Figure 2. Dynamics of average monthly net inflows into military-managed funds vs. nonmilitary-managed funds. Graph plots the dynamics of net fund flows of the funds that become single-managed by military managers (solid line) and the dynamic of net fund flows of the funds that shift to single-management by nonmilitary managers (dashed line). Bars indicate the difference in net inflows between the two groups. Date zero is the month of manager change.

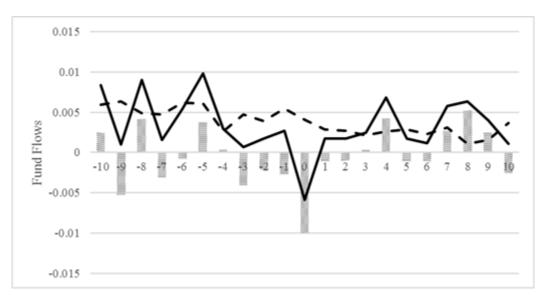


Figure 3. Dynamics of average monthly net inflows into military-managed funds vs. nonmilitary-managed funds around the dates of management change. Graph plots the dynamics of net fund flows of the funds with leaving military managers (solid line) and nonmilitary managers (dashed line). Bars indicate the difference in net inflows between the two groups. Date zero is the month of manager change.

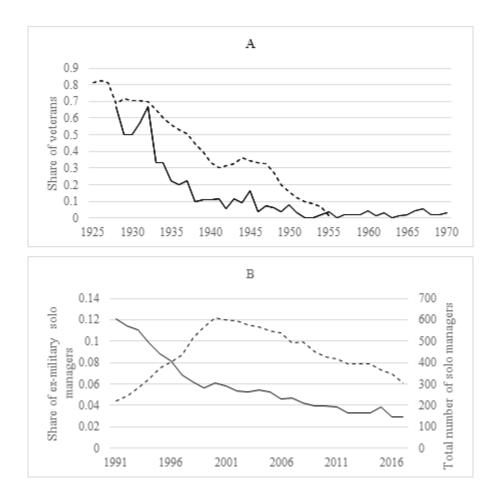


Figure 4. Share of veterans. A, among fund managers by birth cohort, 1925-1970. B, among fund managers by year, 1991 – 2017. Graph A depicts the share of veterans among all of the solo mutual fund managers in our sample by birth cohort (solid line) and the share of educational attainment (college level) of veteran population using data from 3% of the 1980 decennial census, restricted to white males. Graph B plots the share of military managers who single-managed at least one U.S. equity mutual fund for at least one full month (solid line) in a given year and the total number of solo managers (dashed line) by year.