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Feasibility of Thrift Savings Plan Contributions by Military Spouses

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Abstract

This report meets a requirement of the 2021 National Defense Authorization Act by evaluating the feasibility and advisability of allowing military spouses to contribute to Servicemembers' Thrift Savings Plan (TSP) retirement accounts. We begin by discussing employment challenges facing military spouses, which provided much of the motivation for considering spousal TSP eligibility. To evaluate feasibility, we examine the TSP's legal underpinnings and barriers to expansion, along with several policy concerns that might persist even if legal barriers were addressed. To evaluate advisability, we considered alternative savings vehicles that already might be available to spouses, along with barriers that might prevent TSP eligibility from resulting in contributions. We estimate costs associated with two implementation scenarios to illustrate how costs would depend on matching spouses' contributions. Although TSP eligibility can be expanded to spouses, doing so would impose a heavy administrative burden on the Services for an uncertain and likely small benefit.

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Executive Summary

Civilians married to servicemembers face employment challenges tied to their spouses' service that are unlike those faced by civilians married to other civilians. Many such challenges arise from servicemembers' constant moves, which can interrupt employment, discourage job seeking, and preclude effective saving, putting stress on military families' finances in both the short and long term.

To address this issue, the 2021 National Defense Authorization Act directed the Secretary of Defense to conduct a study on the effects of allowing military spouses to contribute to the Thrift Savings Plan (TSP) accounts of the servicemembers to whom they are married. That is, would allowing military spouses to contribute to servicemembers' retirement plans be both feasible and advisable? The Deputy Assistant Secretary of Defense, Military Personnel Policy asked CNA to conduct a study to examine legislative or policy requirements and beneficial or harmful implications of enacting such a policy.

Approach

To determine the feasibility and advisability of allowing military spouses to contribute to servicemembers' TSP accounts, our analysis addresses the following research questions:

- What employment challenges do military spouses face?
- What laws currently prevent the implementation of spousal TSP eligibility, and what policy issues might remain even if these laws are modified?
- How does the TSP differ from other retirement savings vehicles, and what access do military spouses have to alternative savings vehicles?
- What factors are associated with higher (civilian) retirement savings, and what are some common obstacles to higher retirement savings?
- What are the potential direct and indirect costs to the Department of Defense (DOD) and the government of allowing spousal TSP contributions?

To answer these questions, we reviewed the scholarly literature on employment challenges facing military spouses, determinants of retirement savings rates, and challenges facing wouldbe savers. We also reviewed the laws governing retirement savings vehicles, including the TSP. To expand on our own review efforts, we discussed each of these issues with both civilian and military policy experts. Finally, we estimated two sets of potential annual costs to the government if spousal TSP contributions are implemented.

Feasibility and implications

Spousal TSP contributions are not currently feasible under US law. Amending the law alone would not be sufficient to permit such contributions; policies would need to be rewritten and administrative systems overhauled. However, permitting spousal TSP contributions would not necessarily lead to an increase in military families' retirement savings—many military spouses would be unable to contribute, and few others would have exhausted all other savings opportunities already available to them. Other strategies likely would improve military families' financial stability more effectively and efficiently.

We identified the following legal obstacles to implementation of spousal TSP eligibility:

- The US legal code prohibits individuals other than "employees" or "members" of the federal government from contributing to the TSP. Congress would need to either expand the definition of "employees" or "members" to include spouses or define spouses as a separate eligible category of contributors.
- TSP accounts must be held in one person's name and cannot be jointly owned. Congress would need to either define a new class of retirement account that can be jointly owned or trust that policy-makers can adequately address any risks associated with incentivizing one spouse to put their assets in the other's name.
- Congress would need to either appropriate additional funds for matches based on spousal contributions or state that such contributions are not eligible for matching. The amount appropriated would depend on how spousal matches are implemented; annual estimates range from less than \$25 million to more than \$1 billion.

If these legislative issues were addressed, several policy challenges would remain:

- Although divorce law is handled at the state level, military spouses who contribute to
 a servicemember's TSP account would need some form of protection in the event of
 divorce to avoid losing their assets.
- TSP eligibility for servicemembers' spouses could set precedent for similar eligibility for others, including foreign service officers' spouses.
- Military administrative systems would have to be modified to allow either irregular voluntary contributions or regular paycheck deductions from civilians and to allow military spouses to access servicemembers' TSP accounts.

Assuming these policy issues were addressed, several factors might prevent spousal TSP eligibility from translating into an increase in TSP contributions:

- Spouses who are unemployed or otherwise financially constrained will not be able to contribute their own income to servicemember TSP accounts.
- Military spouses have access to other retirement savings vehicles that do not require legal or policy changes. If a military spouse has no active or passive income, the servicemember may contribute a portion of their income to an individual retirement account (IRA) in the spouse's name, provided they file a joint tax return. If a military spouse is employed, retirement plans may be available through their employer. If military spouses have any form of income, they can set up IRAs in their own names.
- Military spouses with any form of income already can "implicitly" contribute to servicemember TSP accounts by having day-to-day expenses come from their income and retirement savings come from the servicemember's income.

Ultimately, spousal TSP eligibility would require legislative action, would place an administrative burden on DOD, and, unless matching contributions were provided, would be unlikely to concretely improve military families' short- or long-term financial stability. If spousal TSP eligibility were instituted with no further legal or policy changes, most families would be unable to take advantage of this eligibility or would find that its benefits merely reproduce savings opportunities elsewhere. If military spouses were to have their own contribution limit but not receive matching funds, the main beneficiaries of spousal TSP eligibility would be families who already have contributed the maximum amount to all other eligible retirement vehicles, rather than those who currently are saving too little; the former group is both much smaller and far more financially stable than the latter, making it a poor target for policy.

Although we do not believe that spousal TSP eligibility would be beneficial enough to military families to offset the challenges associated with its implementation, other efforts might prove more effective. DOD is working with state legislatures and state licensing boards to reduce the barriers to transferring spouses' occupational licenses across state lines; doing so may prevent or limit transitory spells of unemployment associated with moves and make it easier for licensed spouses to remain in the workforce. In addition, the expansion of remote work in the wake of COVID-19 may present opportunities to help spouses find jobs that are location independent and therefore unaffected by moving; for example, targeting military spouses for the approximately 900,000 telework-eligible federal government jobs could help them to access the TSP through their own employment. Spouses whose work cannot be done remotely may forgo employer matches if they have not stayed long enough at their previous employer for these matches to vest, and even guaranteeing seamless employment transitions would not fix this issue. One way to address this issue might be for Congress to make immediate vesting mandatory for military spouses.

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Introduction

Civilians married to servicemembers (military spouses) face employment challenges unlike those faced by civilians married to other civilians. Many such challenges arise from servicemembers' frequent moves, which can interrupt employment, discourage job seeking, and preclude effective saving, putting additional short- and long-term stress on military families' finances.

To address this issue, the 2021 National Defense Authorization Act directed the Secretary of Defense to conduct a study on the effects of allowing military spouses to contribute to the Thrift Savings Plan (TSP) accounts of the servicemembers to whom they are married. That is, would allowing military spouses to contribute to servicemembers' retirement plans be both feasible and advisable? The Deputy Assistant Secretary of Defense, Military Personnel Policy asked CNA to conduct a study on this issue. The proposed study included an examination of law, policy, and research surrounding both military and civilian retirement savings, discussions with subject matter experts (SMEs) to determine the implications of policy implementation, and estimation of the policy's cost.

Our report begins by surveying the employment challenges facing military spouses because these are identified as the reason for needing increased saving. Then, we discuss the legal and regulatory framework for the TSP, along with the spousal protections it offers, and compare it with other employer retirement plans and individual retirement accounts (IRAs).

Next, we identify legal and policy challenges that would need to be addressed before spousal TSP eligibility could be implemented. However, even if these were addressed, a variety of factors might still prevent spousal eligibility from translating into higher contribution rates. Some of these factors are related to predictions from classical and behavioral economics, whereas others are more practical. In particular, few military families earn enough to contribute to a retirement plan *and* to have exhausted all existing retirement savings opportunities. Our conclusion is that establishing spousal TSP eligibility would require an administrative burden but have little practical effect.

In the interest of expediency in complying with a House Armed Services Committee requirement, the sponsor did not ask us to access individual-level data for this study, which prevented us from computing a true cost estimate. However, we computed approximate costs associated with two possible scenarios:

- Spousal TSP eligibility leads all servicemembers with civilian spouses to jointly contribute an additional 1 percentage point of the servicemember's base pay. This contribution counts toward the servicemember's match; spouses do not receive an independent TSP match.¹
- Military spouses receive a TSP match mirroring that of servicemembers and using percentages of servicemembers' pay rather than of their pay; both receive the maximum possible match.

Although these scenarios do not represent firm lower and upper bounds on the cost of spousal TSP eligibility, they nevertheless illustrate the extent to which the direct annual cost of spousal TSP eligibility (and therefore its effectiveness in improving military families' financial stability) would depend on whether and how spousal matches are written into law. We believe that the challenges in implementing a spousal match make the former scenario more likely; however, this scenario would result in a large administrative burden of implementation without producing large material gains for military families.

Although spousal TSP eligibility is unlikely to improve most military families' short- or long-term financial stability, we agree that poor employment outcomes (and therefore lowered retirement savings) for military spouses deserve policy attention. We therefore identify several possible courses of action (COAs) that policy-makers might take to improve military families' long-term financial stability. Evaluating these COAs in depth is beyond the scope of this study, but they may be worth additional analysis to determine how they might benefit military families and at what cost.

The next section contains our summary of challenges facing military spouses. Section 3 contains an overview of the legal and regulatory foundations of the TSP, and section 4 describes its supports for spouses. Section 5 compares the TSP with other employer-provided retirement plans and IRAs. Section 6 identifies the legal obstacles to establishing spousal TSP eligibility, and section 7 addresses several potential policy-related obstacles that would remain even if legislation were drafted to permit spousal TSP eligibility. Section 8 discusses factors that might prevent spousal TSP eligibility from translating into an increase in TSP contributions, and section 9 identifies possible annual DOD match costs associated with two spousal TSP implementation scenarios. Section 10 presents three possible COAs and concludes.

¹ "Matching contributions" are contributions that an employer makes to an employee's retirement account in response to employee contributions. These are usually quoted as percentage matching up to a certain threshold (e.g., an employer may match 100 percent of employee contributions up to a limit of 5 percent of the employee's pretax income).

Background on Military Spouses

Before we can address the feasibility and advisability of allowing military spouses to contribute to servicemembers' TSP accounts, we must describe the problem that these contributions would be intended to solve. This section reviews the challenges facing military spouses, along with some of the common drivers of these challenges and their practical effects on military families in both the short and long term.

Degree to which military spouses are unemployed and underemployed

Across several measurable dimensions, military spouses have worse labor market outcomes than demographically similar civilian spouses. They are more likely to be out of the labor force, unemployed, or underemployed, as shown in Table 1.

Table 1. Adjusted labor market outcomes for military spouses and civilian spouse comparison groups as of 2006

Labor Category	Military Spouses	Civilian Spouses
Out of the labor force (not seeking work)	43%	26%
Unemployed (seeking but cannot find work)	12%	8%
Underemployed – overeducated	38%	6%
Underemployed – involuntarily part time	9%	2%
Low wage	Earn 30% less than o	civilian "look-alikes"

Source: [1].

Specifically, two of five military spouses are not in the labor force, compared with one of four demographically similar civilian spouses [1]. This is an enormous disparity—over one and a half times the rate—in the share of spouses who are not seeking work. Many who are out of the labor force originally sought work but became discouraged and stopped seeking it [1]. In addition, 12 percent of military spouses are seeking work but cannot find it compared with 8 percent of similar civilian spouses, a 50 percent difference [1].

Many military spouses face underemployment, defined as working fewer hours than they would like, working in jobs for which they are overeducated, or working in jobs that do not provide opportunities to use their skills and acquired experiences [2]. Specifically, 38 percent of military spouses are underemployed per their educational level compared with 6 percent of civilian spouses, and 9 percent of military spouses are involuntarily part time compared with 2 percent of civilian spouses [1]. In addition, across all educational attainment categories, military spouses earn 30 to 47 percent less than their civilian counterparts [3]. Increasing education levels are associated with a reduced rate of unemployment but an increased rate of underemployment.

Drivers of military spouse unemployment and underemployment

Many researchers have sought to explain these differences but lack empirical data to do so. As a result, after controlling for observable differences in military and civilian spouses, a large unexplained difference remains [4]. Yet qualitatively we can explain the differences in the two groups through broad contextual factors.

Military spouses differ from civilian spouses chiefly in their employment constraints. Unlike civilian spouses, military spouses have the following employment constraints:

Relocation. On average, military families move every two to three years [5]. They are twice as likely to move in any given year as a civilian family [6]. This frequent relocation makes career progression difficult for military spouses, who typically relocate when the servicemember does. Unless their job can be performed remotely or employment can be secured ahead of time, the military spouse will face transitory unemployment. The servicemember can "geobachelor"—move solo so that the military spouse's job (and schooling for any children) can stay constant—but although doing so prevents transitory unemployment for the military spouse, it imposes social, emotional, logistical, and other costs by geographically separating the servicemember from their spouse and any children. Even "seamless" moves (without a spell of transitory unemployment) restart the timeline for retirement plan vesting and can disrupt wage and skill growth. These disruptions in employment negatively affect the earnings potential of military spouses [7]. In dual-income households, trailing spouses (military spouses, in this context) have a harder time finding employment and are more likely to be underemployed or unemployed [8]. In the short term, frequent relocation can result in unemployment if the spouse's job cannot be performed remotely. In the long term, it can result in lost earnings potential because of the interruption to job experience and tenure.

- **Location**. Military relocations can entail moves to areas characterized by poor employment opportunities and low wages [9]. In the short term, this lack of job availability can result in unemployment if the spouse is unable to find a job that matches their skill and education level. In the long term, it can result in underemployment if they must trade job fit for employment.
- **Need for job flexibility.** If military families have dependent children, military spouses may require jobs that are flexible enough to allow them to solo parent while the servicemember is on deployment or working on an irregular schedule. In addition, military families are more likely to experience geographic separations than civilian families to minimize disruptions to education and employment for military spouses [10]. The frequent separations required by military service can make it difficult for spouses to work because their schedules are unpredictable. Consequently, military spouses may be more likely to accept lower paying jobs that offer greater flexibility in work hours [11]. In the short term, requiring job flexibility can result in unemployment if the spouse is unable to find a job that can accommodate the servicemember's schedule. In the long term, it can result in underemployment if the spouse must trade job fit, hours, or pay for a flexible schedule.

Much of this research has focused on military wives—although military husbands may experience similar outcomes, a 2019 survey indicated that nearly 90 percent of military spouses (defined to include dual-military couples) were women [12],² and Military OneSource indicates that "the spouse support system is still primarily geared toward women" [13]. Data show that military wives and civilian wives differ in several additional observable ways. For example, compared to civilian wives, military wives are (on average) more educated and more likely to live in metropolitan areas [4]. These two factors protect them from unemployment but put them at risk for underemployment in their local labor markets. Military wives also have several factors that put them at higher risk than civilian wives for unemployment and underemployment. Compared to civilian wives, they tend to be younger, more likely to have young children,³ more racially and ethnically diverse, and more likely to move frequently [4].

Given that military spouses on balance have worse employment outcomes than their civilian counterparts, we know that their risk factors for unemployment and underemployment are more determinative than their protective factors. The empirical analysis in this literature controls for education, age, dependents, and race/ethnicity; however, after adjusting for these

² This survey did not indicate the number of civilian husbands; we are unaware of any research on this population. A 2006 study on military wives specifically excluded military husbands "because there were too few of them in the dataset" [1].

³ Parenting young children may require them to be involuntarily part time, working fewer hours than desired.

factors, a large military-civilian employment and wage gap remains unexplained [11, 14]. That gap might be explained by the contextual differences in military and civilian spouses' employment constraints. In summary, military spouse unemployment and underemployment are tied to relocation, location, and the need for job flexibility.

Effect of military spouse unemployment and underemployment on family earnings

Military spouse unemployment and underemployment due to relocation, location, and the need for job flexibility have major effects on family earnings:

- Unemployment due to relocation can cost up to a year of a spouse's earnings. The average relocation cost to military spouses forced to leave their jobs based on permanent change of station orders is equal to one year of the displaced spouse's salary. For this reason, relocation has a negative effect on household income, savings, debt, savings habits, and perceived financial well-being [15].
- Even a "seamless" transition can cost 14 percent of a spouse's annual earnings. The average move that military spouses experience is associated with a loss of 14 percent of their annual earnings, even if they move from one job to the next with no period of unemployment. This loss occurs because of labor market frictions, such as accepting a job with lower pay, hours, or match quality (not matching skill or education level) to prevent an employment gap [14].
- Families that are geographically separated still may need to manage multiple residences and navigate family issues such as higher household expenses and a **greater need for flexibility.** Geographic separations can have a significant effect on the income and financial well-being of servicemembers and their families. Among junior enlisted personnel, "any type of geographic separation increased the likelihood of having financial problems by 7 to 12 percentage points compared with comparable members living with the family members" [10-11, 16].
- Wage penalties equal 22 percent of total legacy retirement payments. Forgone spousal earnings because of military service can reach one-third of the expected present value of officer military retirement pay at 20 years of service. For enlisted personnel, this burden can represent 22 percent of military retirement earnings. Under the legacy DOD pension system, this wage penalty would be repaid only if the servicemember earned a pension by completing at least 20 years of service; however, under the new Blended Retirement System (BRS), some of this penalty can be recouped through government-funded matching of TSP contributions. In this way, the

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military retirement system can now be seen as deferred compensation not only for military members but also for military households [9].

In summary, military spouses are more likely to be out of the labor force, unemployed, or underemployed than a civilian spouse comparison group. This labor market outcome differential cannot be explained by differences in education, age, dependents, or race/ethnicity. Military spouse unemployment and underemployment likely is driven by relocation, location, and the need for job flexibility. Such military-induced unemployment and underemployment have major effects on family earnings: for each relocation, relocation-based unemployment costs military spouses up to a year of their earnings; relocation-based job changes without intervening unemployment gaps still cost 14 percent of their annual earnings; lost spousal earnings for enlisted servicemembers equate to a wage penalty equal to 22 percent of total pre-BRS retirement payments; and families that are geographically separated may have higher household expenses and a greater need for flexibility if they are managing multiple residences and family issues.

Legal and Regulatory TSP Foundation

General rules for participation, contributions, matching, beneficiaries, and vesting for TSP accounts are prescribed by law. However, the law grants specific agencies and positions discretionary power to determine some rules and amount thresholds for TSP accounts. Thus, specific rules are generally found in regulations or other policy doctrine rather than the law.

Administration and oversight

The TSP is established under the Federal Employees' Retirement System Act (FERSA) of 1986 and is codified primarily under Chapter 84 of Title 5, US Code. Congress amended FERSA in 2001 to allow servicemembers to contribute to the TSP [17]. The TSP is a retirement savings and investment plan for federal employees and members of the uniformed services that is very similar to 401(k) plans offered to private sector employees. By law, the assets in the TSP are held in trust for each participant.

The Federal Retirement Thrift Investment Board (FRTIB) is an independent government agency that administers the TSP. The FRTIB is managed by a presidentially appointed five-member board and an executive director chosen by the board to manage the day-to-day operations of the agency [18].

By law, the FRTIB board members and executive director serve as fiduciaries obligated to act "solely in the interest of the [TSP] participants and beneficiaries" [19] and for the "exclusive purpose of providing benefits to participants and their beneficiaries" [20]. The law requires the FRTIB to develop policies that provide for "prudent investments suitable for accumulating funds for payment of retirement income" [21]. The FRTIB receives no congressional appropriations. As such, all TSP expenses are paid by participants. The fiduciaries are charged by law to administer the TSP at low costs.

The FRTIB must honor a valid court order that awards all or part of a TSP account to a current or former spouse (including a separated spouse) or that enforces obligations to pay child support or alimony or to satisfy judgments for child abuse [22].

Participation

Participation in the TSP is limited to federal government employees or members. All current federal government employees covered under the Federal Employees' Retirement System

(FERS) or the Civil Service Retirement System and members of the uniformed services who are covered under the BRS are eligible to participate in the TSP immediately upon hire [23]. Members of the uniformed services who first entered the uniformed services on or after January 1, 2018 are automatically enrolled in the BRS, whereas those hired before this date were initially enrolled in the legacy uniformed services retirement system. During calendar year 2018, servicemembers covered under the legacy retirement system who had served in the uniformed services for fewer than 12 years were eligible to elect coverage under the BRS instead; those who reached 12 years of service in 2018 or who did not opt into the BRS in 2018 remain permanently in the legacy retirement system [24].

Contributions

Every individual eligible to participate in the TSP can open and contribute to a TSP account. Since 2006, employees and members can contribute up to 100 percent of their salaries as long as their total contributions do not exceed the annual elective deferral limit [25]. The elective deferral limit changes yearly and is not legally prescribed. Instead, the TSP follows the limits established by the Internal Revenue Service (IRS) for private sector retirement vehicles [26]. The contribution limits for TSP accounts in calendar years 2020 and 2021 remained the same at \$19,500 [27]. For 2022, the elective deferral contribution limit is increasing to \$20,500 [28].

In addition to making elective deferral contributions, eligible TSP participants over the age of 50 can make "catch-up" contributions above the elective deferral limit to increase their retirement savings. Eligible TSP participants can make catch-up contributions even if they are not behind on retirement savings. The "catch-up" contribution limit for 2021 is \$6,500, and this value will remain unchanged for 2022 [28].

In 2020, the automatic enrollment program regulation increased the default amount that new federal employees contribute to their TSP from 3 percent to 5 percent. All newly hired civilian employees and uniformed servicemembers who began their service on or after January 1, 2018, "who are eligible to participate in the TSP will automatically have 5 percent of their base pay contributed to the employee's traditional TSP balance (default employee contribution)." To contribute less or to make no contributions, participants must elect another option [29]. The change to the automatic enrollment program regulation helps ensure that more TSP participants are taking advantage of the maximum government match available.

Matching

The TSP participant's government employer is legally required to match the participant's contribution up to a specified percentage (except for uniformed servicemembers not participating in the BRS). The law prescribes that "the employing agency of an employee or Member who contributes to the Thrift Savings Fund under subsection (a) for any pay period shall make a contribution to the Thrift Savings Fund for the benefit of such employee or Member" [30]. The agency must match the employee's or member's contribution up to 3 percent. The agency must also match one half of the contribution amount up to 5 percent of an employee's or member's base pay. The employing agency cannot match any contributions that exceed 5 percent of an employee's or member's base pay [31].

Beneficiaries

TSP participants may elect "any individual, firm, corporation, or legal entity, including the U.S. government" as their beneficiary [32]. TSP participants do not need to designate their spouses as the beneficiary of their TSP accounts. TSP participants are not required to inform their spouses or obtain spousal consent before designating non-spouses as beneficiaries to their accounts. Moreover, TSP participants are not limited to one beneficiary and can designate multiple beneficiaries of their account [32].

If a TSP participant does not designate a beneficiary, the spouse is the default beneficiary in the order of precedence. The standard order of precedence is as follows:

- The TSP participant's spouse
- The TSP participant's children
- The TSP participant's parents or the surviving of them in equal shares
- The executor or administrator of the TSP participant's estate

Thus, if a TSP participant takes no action to designate a beneficiary and the TSP participant has a spouse, the spouse is automatically considered the beneficiary of the account [33].

Spousal Protections Under the TSP

Spousal joint and survivor annuity for postemployment withdrawals

TSP participants can withdraw money from their account through installment payments (monthly, quarterly, or annual payments of a fixed dollar amount or based on life expectancy); single withdrawals; or annuity purchases. These withdrawal options can be combined. Married participants must get spousal consent for any of these options. If the spouse does not consent, the only withdrawal option available to a participant is to purchase an annuity providing a 50 percent survivor benefit, level payments for life, and no cash refund [34]. The two exceptions to the spousal consent rule are if the whereabouts of the participant's spouse are unknown and if there are exceptional circumstances in which acquiring spousal consent would be inappropriate [35].

Special rules for spouses as beneficiaries

The law provides that spouses are the default beneficiary in the order of precedence. Thus, if a TSP participant chooses not to designate someone else as a beneficiary, the spouse becomes the beneficiary of the account. The TSP participant does not need to take any action to designate a spouse as a beneficiary [33]. Moreover, special benefits apply only to spousal beneficiaries. Only a spousal beneficiary can choose to maintain the funds in the TSP. If the spouse is a federal employee, they can move the TSP account into their own TSP account after the death of the TSP participant. If the spouse is not a federal employee, they will be given a "beneficiary participant account" and can hold the funds in that account [36]. Non-spousal beneficiaries must remove the funds from the TSP, either by having the funds paid out directly to them or by transferring them into an inherited IRA.

However, spouses are not guaranteed to be the beneficiaries of their spouse's TSP accounts. If a TSP participant has a spouse and wishes to designate a non-spouse beneficiary, the TSP participant may do so without the spouse's knowledge or consent, limiting the protections of spousal interests in the TSP account [32].

Spouse's entitlement in a divorce or other legal separation

Current or former spouses or dependents can be awarded a portion of a TSP participant's account if a valid retirement benefits court order (RBCO) to divide the account is issued [37]. The RBCO can be issued at any time in divorce, annulment, or separation proceedings [38]. As soon as the FRTIB receives a court order, the TSP account is frozen. The freeze is removed when payments have been made or the RBCO receives an order to remove the freeze [39].

The RBCO must award a lump sum; the TSP will not make installment payments to a spouse or dependent. Retirement assets, including TSP holdings, earned during the duration of a marriage are generally considered marital property and are jointly owned, although state courts determine what portion of the TSP account a spouse is entitled to.

Furthermore, under the Uniformed Services Former Spouse Protection Act (USFSPA), if a servicemember was married to their spouse for at least 10 years, states may divide military disposable retired pay as marital property upon divorce [40]. Disposable retired pay is the entire monthly retirement pay that a servicemember is entitled to receive with a few limitations [41]. However, under USFSPA, the spouse may not be awarded more than 50 percent of the servicemember's disposable retirement pay unless there are also alimony or child support orders, in which case the award maximum increases to 65 percent [42].

Protections for former spouses

Former spouses of TSP participants are afforded some protections. A former spouse may receive spousal annuity from the participant's TSP account [35]. The court decides whether the former spouse will get a portion of funds from the TSP account at time of divorce or maintain entitlement to a spousal annuity, which they may remain entitled to if the participant remarries. If a participant remarries, both spouses may be entitled to the annuity [43].

However, if a TSP participant designates someone other than their former spouse as the beneficiary, the former spouse is not considered the beneficiary of the retirement account. Under the order of precedence, if a TSP participant is married at the time of death, the widow or widower of the TSP participant is still considered the beneficiary if the TSP participant does not designate a different beneficiary. Conversely, once a TSP participant is divorced, their former spouse no longer qualifies under this order of precedence. Thus, as soon as a TSP participant designates a beneficiary that is not their former spouse, the spouse loses entitlement to the retirement account [33].

Comparing Retirement Savings Vehicles

The TSP is designed similarly to other employer-sponsored defined contribution plans and follows much of the guidance established by the IRS for private sector retirement accounts, such as the 401(k), 403(b), and most 457 plans. IRAs significantly differ from both TSP and private sector retirement accounts. Table 2 details the specific rules governing TSP accounts and illustrates the similarities and differences between TSP accounts, other defined contribution accounts, and IRAs. The following are key takeaways:

- Participation in the TSP and defined contribution plans is limited to employees because for contributions to be tax deferred, the individual making the contribution must be an employee of the employer sponsoring the plan. Any individual can contribute to an IRA, subject to income restrictions.
- Employing agencies or services must make automatic 1 percent contributions to FERS
 or BRS participants, regardless of whether the participant contributes to the TSP.
 Private sector employers have discretion to offer a retirement savings plan.
- For both TSP accounts and other defined contribution accounts, spouses are first in the order of precedence of beneficiaries. If a TSP or other defined contribution plan participant does not designate a beneficiary, the spouse will be considered the default beneficiary. Spouses are not default beneficiaries for IRAs.
- TSP participants and IRA holders can designate anyone as their beneficiaries without spousal consent. For other defined contribution plans, spouses must consent to relinquish their rights as beneficiaries.
- Individuals can contribute significantly more to a TSP account or other defined contribution account than to an IRA.
- IRAs are always 100 percent vested, whereas TSP accounts vest after three years for civilian federal government employees or civilian members and two years for automatically enrolled servicemembers (accounts were immediately vested for those who opted in). Vesting requirements for other defined contribution plans are determined by the employers, but the plan must vest for employees within three years. IRAs are the only retirement accounts in which one spouse can contribute to the other's account; however, the IRA does not become jointly owned and is still held in one spouse's name.

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Table 2. Comparison of TSP, 401(k), and IRA

	Eligibility	Contribution Limit (2021)	Matching	Beneficiaries	Vesting Requirements
TSP	Federal government employees or members, including servicemembers	\$19,500 Participants over age 50 can contribute an additional \$6,500	 Agency automatic contribution of 1% 100% match for first 3% of base salary 50% match between 3% and 5% No match past 5% 	Can designate anyone; spouse is default but can be changed without consent or knowledge	Default: 3 years Servicemembers and non-career employees: 2 years if automatically enrolled, always fully vested if opted in from high-3 pension system
Other defined contribution plans (e.g., 401(k))	Employees if offered by employer (mainly private sector)	\$19,500 Participants over age 50 can contribute an additional \$6,500	Employer discretion (most only up to 3%)	Spouse is default and must consent to any changes	Must vest fully within 3 years of employment (or gradually within 6 years)
IRAs	Any individual for their "own exclusive benefit" Spouses filing jointly can contribute to IRAs in both individuals' names	Individual IRA: Default: \$6,000 50 or older: \$7,000 Spousal IRA: Default: \$12,000 combined Both 50 or older: \$14,000 combined	None	Any individual or organization; spouses are not default	Always fully vested and non- forfeitable

Source: [25, 32, 44-51].

Legal Barriers to Spousal TSP Contributions

There are three significant legal barriers to allowing spousal contributions to the TSP.

- Spouses are not eligible to participate in the TSP.
- 2. TSP accounts are individually held and cannot be jointly owned.
- 3. The funds that the government uses to match TSP account contributions are congressionally appropriated.

Congress could, in theory, amend the laws governing TSP accounts in a way that overcomes each of these legal barriers. Once the legislation was amended, the FRTIB would also have to make changes to the existing regulations governing TSP accounts.

The following section assumes that the spouses being referred to are neither government employees nor members; otherwise, they would be able to create a TSP account through their employing agency.

Eligibility

Spouses do not meet the statutory eligibility requirements for participation in the TSP. For an individual to create and contribute to a TSP account, they must be an employee or member of the government [50], defined as an individual:

- (1) appointed in the civil service by one of the following acting in an official capacity—
 - (A) the President;
 - (B) a Member or Members of Congress, or the Congress;
 - (C) a member of a uniformed service;
 - (D) an individual who is an employee under this section;
 - (E) the head of a Government controlled corporation; or
 - (F) an adjutant general designated by the Secretary concerned under section 709(c) of title 32 [52];
- (2) engaged in the performance of a Federal function under authority of law or an Executive act: and

(3) subject to the supervision of an individual named by paragraph (1) of this subsection while engaged in the performance of the duties of his position [53].

Under the current laws, a spouse must be employed by the government to qualify for a TSP account. A spouse who is not a government employee does not meet any part of the definition of what constitutes an employee. In addition, unless the spouse is a member of Congress or a member of the uniformed services, they do not meet the requirements for being a considered a member. Thus, under current laws, if a spouse is not a government employee or member, they are unable to participate in the TSP.

This issue is not unique to the TSP. Legal requirements for workplace retirement plans, such as defined contribution plans (e.g., 401(k)s) and defined benefit plans, state that these plans are created by "an employer for the exclusive benefit of his employees or their beneficiaries" [44]. A spouse can be designated as a beneficiary for their spouse's workplace retirement plan but is not eligible to participate in any workplace plan unless they are also an employee.

For spousal contributions to be permissible, Congress would need to amend the laws governing TSP participation to broaden the eligibility threshold for participating in the TSP to include spouses. This amendment could be done by either including spouses in the definition of "member" or "employee" or adding spouses as a separate category that is eligible to participate in the TSP.

Individually owned

TSP accounts must be held in one person's name and cannot be jointly owned. Although this rule is not expressly stated in the laws governing TSP accounts, the laws regarding eligibility clearly state that TSP accounts must belong to an individual employee or member [50]. Furthermore, the law specifies that contributions to TSP accounts are made for the benefit of one individual, which implies that a TSP account can belong to only one individual [50]. Accordingly, if spousal contributions were permissible, spouses who are not government employees would still not co-own the account to which they could contribute. This lack of coownership would complicate matters should the spouses divorce or the TSP participant designate someone other than the spouse as a beneficiary.

This issue is not unique to TSP accounts. All retirement accounts in the US must be held in one individual's name and must be solely owned by one individual, even for the "spousal IRA" method in which an income-earning spouse contributes to an IRA on behalf of a spouse with no or minimal income. An IRA, whether a traditional IRA or a Roth IRA, "means a trust created or organized in the United States for the exclusive benefit of an individual or his beneficiaries."

Thus, although one spouse may contribute to another's account through a "spousal IRA," the account must still be owned by one individual [47].

Congress would therefore need to enact new legislation permitting co-ownership of TSP accounts. Enacting this legislation would be very difficult because no retirement accounts currently can be co-owned and allowing such co-ownership would create a host of considerations to be addressed. Moreover, because all retirement accounts in the US are held by only one individual, there is no precedent for any of these considerations. Examples of these considerations include the portion of funds belonging to each spouse, who can designate the beneficiary of the account, and the extent of the relationship between the government agency employing the TSP participant and the participant's spouse.

Matching and appropriated funds

Another legal obstacle to allowing spousal contributions to TSP accounts is that, under current contribution and matching laws for the TSP, the employing government agency must match contributions made by TSP participants up to 5 percent of the participant's total base pay. The funds used by employing agencies or services for automatic 1 percent contributions and employer matching contributions come from sums appropriated to those agencies and services [42, 54]. No statutory authority would allow agencies or services to use appropriated funds to match contributions from participants' spouses.

Thus, appropriated funds cannot be used to match spousal contributions because appropriated funds cannot be used to match nonemployee or nonmember contributions. At present, the government's inability to match spousal contributions would bar spousal contribution to the TSP if the TSP participant is contributing less than 5 percent of their base salary because the employing agency must match TSP contributions and part of the contribution being matched comes from the spouse and not the TSP participant. This barrier exists regardless of whether the account is individually owned or jointly owned because part of the contributions would still be originating from the spouse.

There are three ways that it would be permissible for spouses to contribute to TSP accounts despite the government's matching requirement. First, Congress could specifically bar spousal contributions from receiving matching funds—because uniformed servicemembers not participating in the BRS do not receive any match to their TSP contributions, spouses could in theory be designated as another class of unmatched contributors.

Second, Congress could propose new legislation that includes spouses as eligible recipients of appropriated funds. Doing so would make it allowable for the government to match spousal contributions, so the spouse would be able to contribute even if the total contributions made

by the TSP participant were less than 5 percent. However, using appropriated funds for nongovernment employees or members would have public policy implications, because appropriated funds are derived from taxpayer dollars.

The third option is to allow spousal contributions only if the TSP participant has contributed at least 5 percent of their base salary. In this case, the government would not be matching spousal contributions because the TSP participant has already exhausted their available match. Under this option, no new legislation would be required to change how government funds used to match contributions can be used because the spouse's contribution would not be matched.

Precedence for other government agencies

Although not a legal barrier per se, because the TSP is a government-wide program, if Congress were to propose new legislation that applied only to spouses of servicemembers, other positions that require frequent relocation or being stationed overseas—such as foreign service officers (FSOs), other types of diplomats, and employees of the US Agency for International Development—might demand similar changes.4

However, the fact that the TSP is not specific to the uniformed services does not preclude changes being made solely to the rules governing uniformed servicemembers. Sections in the US Code already pertain solely to the TSP accounts of uniformed servicemembers, and the law makes numerous distinctions between civilian participants and members of the uniformed services. Thus, Congress could expand on existing legislation that applies only to members of the uniformed services to include the spouses of these members. However, Congress might be reluctant to do so if it would set the precedent for other government agencies, especially those that require their employees to relocate frequently.

⁴ FSOs typically move to a new country every two to three years [55].

Policy Issues Preventing Spousal TSP Contributions

Thus far, we have described the fundamental legal barriers that would have to be overcome to allow spousal TSP contributions; however, it is valuable to consider the case in which those hurdles are cleared. Would other obstacles still exist to implementing the policy? To be clear, this question does not seek to understand the effectiveness of allowing spousal TSP contributions (more on that in the next section); rather, our goal in this section is to consider whether implementing spousal TSP contributions would generate any additional policy obstacles that DOD would have to address.

The short answer to this question is "yes." Even if spousal TSP contributions were made legal, SME discussions, legal analysis, and policy analysis identified several additional policy barriers that would have to be dealt with to enact the policy. In addition, allowing spousal TSP contributions almost certainly would introduce unprecedented legal issues, and it is uncertain how the judicial system would respond. The additional policy issues that could arise are difficult to predict beforehand; however, in this section we will highlight some that are especially likely or important. We identified these issues partly through our legal analysis—identifying topics on which the law is silent but that are likely to arise—and partly through discussion with Navy policy-makers. Our discussions covered both possible challenges in implementing spousal TSP access and challenges experienced in implementing the BRS, which also required major changes to administrative and pay systems.

Spousal access to the TSP

Perhaps the most fundamental issue with allowing spousal TSP contributions is that the TSP system would have to be redesigned to accept TSP contributions from nonemployees and nonmembers. At present, servicemembers and other federal employees contribute to the TSP via pretax or post-tax deductions from their paychecks, as is the case with most US employer-provided retirement plans. However, because most military spouses are not federal employees, it is unclear how they would contribute to their spouse's TSP account.⁵ In short, some method would have to be devised for allowing these contributions, and such a

⁵ For military spouses who are federal employees, the concept of spousal TSP contributions is moot because they would already have access to their own TSP account.

mechanism would likely require numerous policy changes and perhaps significant information technology or engineering investments.

Relatedly, if spousal TSP contributions were allowed, spouses would likely need an independent method for monitoring the TSP account of their servicemember spouse. After all, if an individual contributes to an investment vehicle, it is reasonable for them to know how the funds are being managed, what the return on their investment has been, and how money is flowing into (or out of) the account. Such arrangements are common in financial institutions; for example, many couples have joint checking accounts that either party can access independently. However, TSP accounts (and retirement accounts in general) currently cannot be jointly held, so the systems designed to support these accounts are generally not built to allow for a single account to be monitored by anyone but the owner.

Defining scope of eligibility

Another issue with the policy in question is that the scope of eligibility for participation could become a matter of debate. For example, would military couples in a civil union be allowed to participate? What about couples that are not in any kind of legal union but share joint legal obligations (e.g., dependent children) that make joint financial planning advantageous? Another aspect of scope relates to allowing spousal TSP contributions for all TSP account holders. After all, it might be difficult to argue that a subset of TSP account holders (servicemembers, in this case) should have exclusive access to a benefit, especially when the spouses of some federal civilian workers (e.g., FSOs) are likely to face challenges very similar to those faced by military spouses. If spousal TSP contributions were made legal, policy-makers would likely have to scope issues like those discussed above via issuing of new policy.

Complications associated with divorce

Another issue related to allowing spousal TSP contributions is that it is difficult to predict how TSP accounts would be managed in the event of divorce. Of course, the financial implications of a dissolution of marriage are determined by a combination of state and federal laws as well as the specific circumstances in question. However, allowing a spouse to make contributions to the employer-provided retirement account of their spouse is unprecedented in the US legal system, so predicting how this change would affect divorce settlements is difficult except to say that it likely will add more complexity.

Spousal training resources

One final issue is the provision of financial training resources for military spouses. Military spouses are eligible and encouraged to attend Common Military Training financial readiness classes provided to servicemembers. DOD also maintains MilSpouse Money Mission,⁶ a financial education website designed to help spouses enhance their financial knowledge and skills, and reinforces and amplifies these resources via a variety of social media platforms. Nevertheless, the participation of military spouses in structured financial readiness training is not a formal requirement. To a certain extent, this limitation is unavoidable, because the services cannot compel private citizens to attend financial literacy classes or test them on their understanding of the military retirement system. However, if spousal TSP contributions were made legal, DOD senior leaders and policy-makers would have to provide additional financial education and training resources to ensure that military spouses were making TSP contributions with full, independent access to unbiased information about the risks and benefits of these contributions.

⁶ Located at https://www.milspousemoneymission.org.

Effectiveness of Allowing Spousal Contributions

At the heart of any new legal bill or policy proposal is an argument about how it will improve life for the affected population. The argument being advanced for spousal TSP eligibility is that it will allow military families to save more, generating greater financial stability in the long run. This benefit could not only protect military families in retirement but also alleviate some of the strains associated with military life, which might incentivize servicemembers to remain in the military longer. Superficially, this sounds like a compelling case for allowing spousal TSP contributions; however, a closer examination reveals that the policy itself might have little to no effect on the savings behavior of military families, especially those who are currently under the greatest financial pressure. In this section, we will briefly discuss some of the major factors that affect savings behavior and consider several scenarios in which allowing spousal TSP contributions may not alter a military family's savings behavior.

Classical economic factors

Before addressing specific examples, we highlight several factors that tend to drive savings behavior according to classical economics (i.e., assuming that households aim to maximize their lifetime incomes). Of course, individuals' and families' savings decisions may be influenced by a range of variables, but a handful of drivers have been studied exhaustively.

One very simple determinant of savings behavior is the individual or family budget constraint. In short, any given household has a minimum level of current consumption, and to save, the household's income must exceed that level. This constraint likely will be a dominant consideration for young military families, who might be dedicating all their income to meet current consumption requirements. Furthermore, there are probably many more military families whose maximum savings amount (i.e., the amount that can be saved after minimum consumption requirements are met) is far less than the maximum amount that they can legally contribute to retirement accounts. For example, an E-7 servicemember with 15 years of service whose civilian spouse earns no income was eligible to save \$31,500 in 2021 (\$19,500 in the TSP and \$6,000 in each of two IRAs), more than half of their annual base pay of \$57,121.20.

Another factor that influences savings behavior is expected return on investment (eROI). As eROI increases, individuals and families are incentivized to reduce current consumption and

save more because those savings are expected to grow quickly (facilitating higher levels of future consumption).

Discounting is a third factor and can be thought of as a force working in the opposite direction of eROI. In short, people tend to value future consumption less than present consumption, and the extent to which they do so defines their discount rates. Higher discount rates imply a greater preference for current consumption and—all else being equal—correspondingly lower savings. Although discount rates are notoriously difficult to measure, young people tend to have high estimated discount rates. Young military families might therefore save less because they value current consumption more highly than future consumption.

Behavioral economic factors

In addition to the classical economic factors above, economists have begun studying a variety of behavioral factors that may prevent individuals and households from acting purely like income maximizers. These behavioral factors arise from the assumption that many actions (like setting up retirement savings, choosing investment strategies, or household budgeting) require a substantial degree of mental effort. To avoid the "psychic costs" of this effort, people may take actions that appear irrational or suboptimal from a financial standpoint but that function as a mental path of least resistance [56]. Three ways that path can manifest in practice are default and status quo bias, hyperbolic discounting, and peer effects.

Default bias refers to the preference for a default option when one is presented. In the context of retirement savings, a default option can refer to automatic enrollment in a plan (i.e., an employee must opt out rather than opt in), what rate enrollees in a plan are automatically assigned, or in what package of assets retirement savings are automatically invested [57]. In some cases, default options may be perceived as financially or ethically endorsed [58-59]; in other cases, enrollees may opt for default selections because doing so limits concern about making a "wrong" savings choice [60]. Similarly, status quo bias reflects a strong preference to remain in an existing arrangement rather than switch to a new plan, savings rate, or asset grouping when one is offered. Getting employees to enroll in a new savings plan may be challenging *simply because it is new*—they may view it as riskier than it is or may treat the (immediate) psychic costs of decision-making as much higher than the (deferred) financial benefits they could gain [60]. When employees are presented with a new retirement plan that they must opt in to, default bias and status quo bias may function together to keep them from doing so.

We can observe default bias in the context of military retirement savings by considering servicemembers who opted into the BRS versus those who were automatically enrolled. The

first wave of automatic enrollees—servicemembers whose date of initial entry into military service or uniformed service was January 1, 2018, or later—were given a default contribution rate of 3 percent of base pay, whereas servicemembers who opted into the BRS were not presented with a default contribution rate.⁷ As a result, a far higher percentage of automatic enrollees than opt-ins selected a contribution rate of 3 percent; for example, sailors who were automatically enrolled were more than 6 times more likely to contribute 3 percent of their salary than those who opted in [61].⁸

Hyperbolic discounting refers to strong preferences for immediate gratification and deferring costly actions [62]. It may be easier to understand hyperbolic discounting in terms of instant gratification. For example, standard economic theory says that the perceived value of \$100 will gradually fall if it is received further in the future (because of inflation, interim returns on investment, and the inherent riskiness of pushing actions off to the future), but hyperbolic discounting says that its perceived value also will fall rapidly if it is received at any time other than the present. News of a one-day delay in receiving \$100 would therefore feel negligible for someone scheduled to get it in one week or one year but catastrophic for someone scheduled to get it today. The result is a need for immediate gratification and an unwillingness to defer benefits to the future, even when doing so would be financially preferable; not all individuals feel this need, but those who do may feel it intensely. A similar framework applies for actions requiring mental effort and can be used to explain the mindset behind procrastination—today setting up retirement savings seems extremely mentally taxing, but it seems that it will be much easier tomorrow or at any later date; when tomorrow arrives, it seems that it will be much easier the day after or at any later date, and so on. According to this model, a hyperbolic discounter always will see value in delaying a costly action to some future date and therefore will never do it without a push from outside. This "push" can be accomplished either by simplifying the costly action or by setting up a mechanism to force action. For example, employees respond well to programs that automatically update their savings rates as their income grows, removing the need to revisit their savings rates over time [64].

⁷ The default rate was changed to 5 percent in 2020.

⁸ This ratio was even greater for soldiers and airmen; however, automatically enrolled soldiers and airmen may have been more directly encouraged to contribute the default rate. If so, we cannot easily differentiate how much of soldiers' and airmen's behavior was default bias versus a response to (suboptimal) advice. On the other hand, auto-enrolled sailors were far more likely than auto-enrolled soldiers or airmen to contribute either more than 3 percent or less than 3 percent of base pay. Auto-enrolled sailors were more likely than sailors who opted in to make any TSP contribution but also more likely to contribute less than 3 percent.

⁹ This framework also has been used in economic models of addiction and other contexts in which delaying gratification proves difficult—a drug addict gets a huge value from taking a drug today but perceives a much smaller value (if not a cost) at any point in the future [63].

Peer effects refer to how similar individuals may mimic each other's behavior, even when not directly targeted by a policy. For example, in universities presented with a menu of retirement saving options, savings behavior may vary across departments but align closely within a single department [65-66]. In a military setting, variation in behavior could exist geographically, within occupations, or by pay band. However, training and incentives given to a subset of a peer group can influence the entire group. For example, a field experiment indicated that when a randomized group of professors within an academic department was given incentives to attend a benefit fair, the entire department became more likely both to attend the fair and to sign up for benefits [66]. In the case of military retirement, when the US Marine Corps (USMC) implemented BRS training, TSP contributions increased not only among marines who opted in to the BRS but also among those who were not even eligible to opt in [61].

Demographic and employment factors affecting civilian retirement contributions

There is some economic literature on innate factors and job characteristics associated with civilian retirement savings. Some of these factors are shown in Table 3; however, the findings in the table are correlations and do not imply that any of these factors cause higher or lower savings rates or likelihoods of having a retirement plan. For example, although education is uniformly positively associated with retirement savings, this association could exist for a variety of reasons—workers with higher education levels could be more likely to have received personal financial training, to have families or peer groups that stress the importance of retirement saving, or to have jobs with better saving opportunities, all of which could increase savings levels and none of which are education per se. However, these factors may be useful in understanding existing savings patterns and targeting trainings. Factors that are consistently associated with higher savings rates are in green, and those associated with lower savings rates are in red.

In general, both higher income and factors typically associated with higher income (education level, homeownership, job tenure, and full-time status) tend to be associated with higher savings rates, whereas being a member of a historically underrepresented group tends to be associated with lower savings rates. Risk aversion also is associated with lower savings, likely because any savings plan will be at least marginally riskier than holding cash or investing in treasury bonds. Interestingly, employer contribution rate is neither unambiguously positive nor negative—although higher match rates may encourage more investment, they also may allow some employees to reach their target savings rate at lower contribution levels.

Table 3. Peer-reviewed literature on determinants of retirement savings

Study	Demographics									Employment Features				
	Education Level	Financial Education/Skill	Female	Single	Household Size	Homeownership	Risk Aversion	White	Black	Hispanic	Employed Full-Time	Years Employment	Income	Employer Contribution Rate
Yuh and DeVaney (1996)	+						-		-	-		+	+	+
Sunden and Surette (1998)	+		+											
DeVaney and Zhang (2001)	+		-		-(401(k)), +(IRA)	+		+			+(401(k), TSP)		+	
Jacobs-Lawson and Hershey (2005)		+					-							
Joo and Grable (2005)	+	+			-								+	
Chatterjee (2010)	+		+(DB)	-(DB, IRA)	–(DC, IRA)				-(IRA)	-(DB, IRA)			+	
Knoll et al. (2012)	+			-				+			+		+	
Yao and Micheas (2013)	+		_	+		+	-						+	-
Lusardi and Mitchell (2017)						+							+	

Source: CNA, from data found in [67-75].

Note: In studies that evaluated multiple plan types, DB, DC, IRA, and 401(k) indicate that a particular characteristic was associated with the likelihood of contributing to a defined benefit plan, defined contribution plan, individual retirement account, or 401(k), respectively, or with the amount contributed. Characteristics in green are uniformly associated with higher savings, and those in red are uniformly associated with lower savings.

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Effectiveness

Now that we have outlined some of the major factors that are likely to affect savings behavior, we will imagine a range of scenarios and examine whether allowing spousal TSP contributions would plausibly alter a military family's savings behavior. Of course, dozens of unique scenarios could be constructed; our goal is to examine a narrow set of plausible circumstances. To define these circumstances, we ask three questions for a hypothetical military family:

Does the military spouse have any income?

If the answer to this question is "yes," spousal TSP contributions are possible, and considering the idea makes sense. If the answer is "no," spousal TSP contributions are a moot point; after all, if the spouse has no income, what can they contribute to their spouse's TSP account? Note that "no" will be the answer to this question approximately half of the time because there are many single-income military families [1]. It is reasonable to assume that these families are the most financially challenged (especially if the servicemember is young), and we can confidently conclude that allowing spousal TSP contributions will not help military families of this kind. Also note that in this case military spouses can access retirement savings via the military member contributing to an IRA in the spouse's name.

2. If "yes" to question 1, does the spouse have access to an employer-provided retirement account?

This question is important because the answer will play a significant role in determining how attractive spousal TSP contributions are as a savings method. For example, if a military spouse has access to an employer-provided 401(k) with matching contributions, it generally would make sense for the spouse to exhaust those matching contributions before contributing anything to their spouse's TSP account. However, spousal TSP contributions might make sense for military spouses who work in jobs that do not offer retirement benefits (e.g., hourly work, independent contracting) or offer a retirement account without matching contributions. 10

Even if they do have access to a retirement account, spouses who are not fully and stably employed might be reluctant to contribute to an account that they do not believe will ever receive vested matching funds [4]. However, these spouses can already contribute to IRAs, so spousal TSP eligibility would not represent their sole point of access to a retirement savings

¹⁰ It is important to emphasize "might" in this context. Spouses with income may prefer to set aside retirement savings in their own name, and they always will have a way to do so. Even if their employers do not provide retirement benefits of any kind, spouses can establish IRAs (traditional or Roth) in their names and make contributions up to the annual limits prescribed by the IRS.

plan. The chief arguments in favor of contributing to a TSP account (in lieu of another account) are based on spousal contributions receiving a match (which may be politically and administratively difficult to implement) or military families believing that making spousal TSP contributions would be simpler than establishing an IRA in the spouse's name (in which case the spouse would be accepting substantial risk in case of divorce to minimize the perceived effort involved in making retirement contributions).

3. If "yes" to question 1, does the military family in question pool income and make joint financial decisions?

This final question is critical when determining whether spousal TSP contributions will affect the savings behavior of military families. A "yes" response implies that the military family is coordinating its financial decisions to optimize household consumption and savings at present and in the future. In that case, a military spouse may view their spouse's TSP account as a joint asset that will benefit both parties in retirement; consequently, contributing to that account could make sense. In contrast, a "no" response implies that a servicemember and their spouse maintain separate bank accounts and make individual financial plans. In this case, the concept of spousal TSP contributions is unlikely to be attractive to the military spouse.

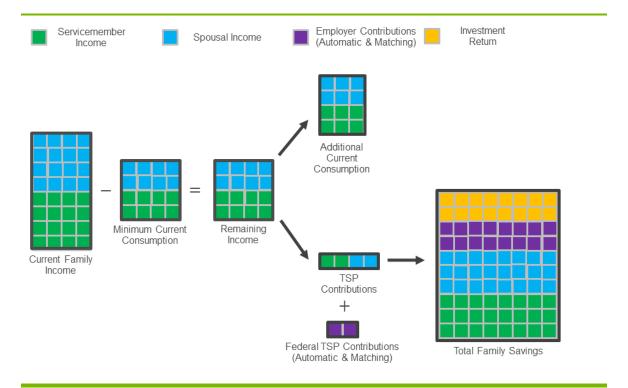
Based on these three questions, allowing spousal TSP contributions may be most beneficial in scenarios in which the military spouse consistently earns a substantial income and makes joint financial decisions with the servicemember. This is because military families meeting these conditions are more likely to have money to save, and the military spouse likely will view their spouse's TSP account as a joint asset. If we limit our attention to scenarios meeting these conditions, we can construct some simple visual representations that can help to inform the value of TSP contributions in specific cases.

Hypothetical case studies

We now present five scenarios illustrating how military families might save for retirement. As stated previously, they are an illustrative framework and therefore do not depend on specific dollar amounts or represent every possible configuration of family savings or decision-making.

Figure 1 depicts a case in which two spouses each earn substantial incomes and make financial decisions jointly. This hypothetical military family earns more than its minimum consumption level, and the military spouse contributes to the servicemember's TSP account. Furthermore, the federal government makes automatic and matching contributions to the servicemember's TSP account (as prescribed by law), and the military family's lifetime retirement savings are composed of servicemember contributions, spousal contributions, government contributions,

and investment return on contributions. In this simple case, spousal contributions appear to have increased total family savings, resulting in increased financial stability in retirement.



Basic case with spousal TSP contributions Figure 1.

Source: CNA.

On a superficial level, Figure 1 appears to make a strong case for allowing spousal TSP contributions; however, Figure 2 demonstrates that, unless the family is meeting IRS-defined annual contribution limits for the TSP, the same outcome can be achieved if the servicemember shifts more of their income to savings and the spouse compensates by subsidizing current consumption.¹¹ We call this case "implicit spousal TSP contribution" because the spouse facilitates higher servicemember TSP contributions by funding a greater share of current consumption. In short, if a military family has sufficient income, is willing to make joint financial decisions, and is seeking to make TSP contributions at or below the prescribed annual limit, allowing spousal TSP contributions is unnecessary to achieve the same savings outcome.

¹¹ For most military families, this annual limit (\$19,500 for the 2021 tax year) is well above plausible annual retirement savings.

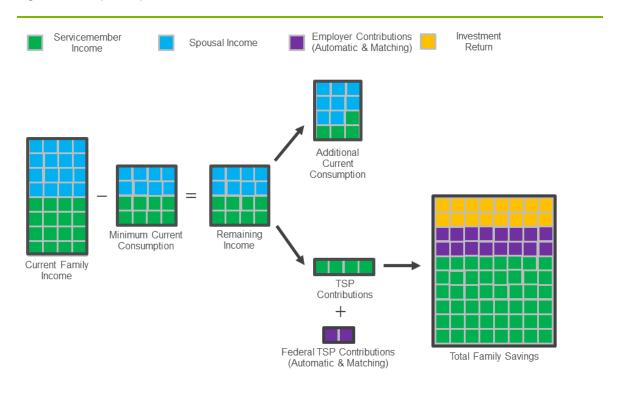


Figure 2. Implicit spousal TSP contributions

Figure 3 considers a case that is likely to apply to young military families. In this scenario, the family's joint income is just enough to meet minimum current consumption levels, leaving no money left for savings. The result is that the military family saves only via automatic TSP contributions from the federal government as well as the returns yielded by those contributions. Allowing spousal TSP contributions will have no effect on savings behavior in this case because the military family has no extra income to save.

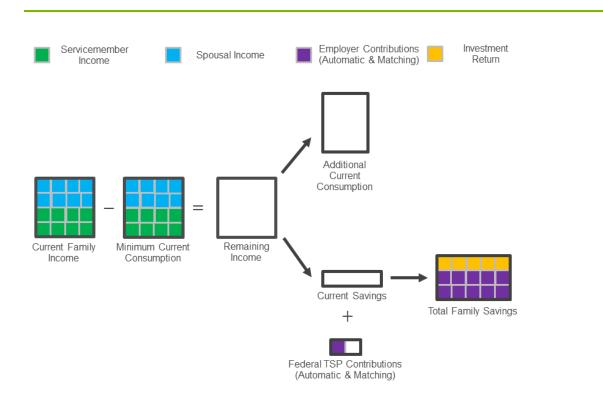


Figure 3. Budget-constrained military family (no savings)

Figure 4 describes a scenario in which the military spouse has an employer-provided retirement account that serves as an alternative vehicle for retirement savings. Contributing to this alternative account will almost certainly make sense for the family if the spouse's employer makes matching contributions and those contributions are fully vested. In this scenario, total family savings are identical to those in Figure 1 and Figure 2, and allowing spousal TSP contributions has no effect on savings behavior.

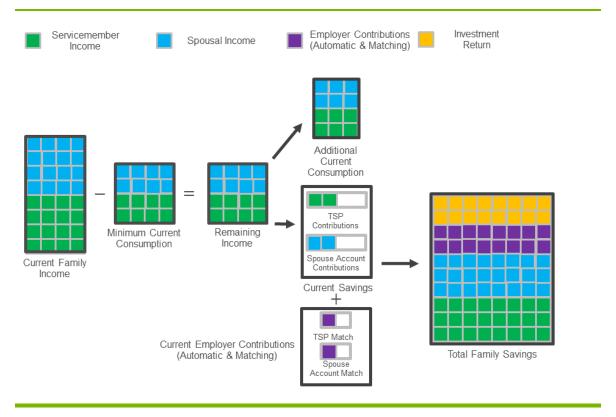


Figure 4. Alternative retirement account for military spouse

The final case we consider is a military family that heavily discounts future consumption. As depicted in Figure 5, the military family has the same income as those depicted in Figure 1, Figure 2, and Figure 4, but the family does not save because the eROI from saving is not enough to offset the family's strong preference for current consumption. As such, the family saves only via automatic TSP contributions made by the federal government as well as the returns earned on those contributions. This case is certainly extreme; however, past research shows that many young servicemembers who opted in to the BRS (and therefore were not presented with a default contribution rate) did not contribute to their TSP accounts at all [61]. Because the military cannot set default contribution rates for military spouses, it is not unreasonable to assume that military families with high discount factors would limit retirement savings to servicemember TSP contributions aligning with the default contribution rate.

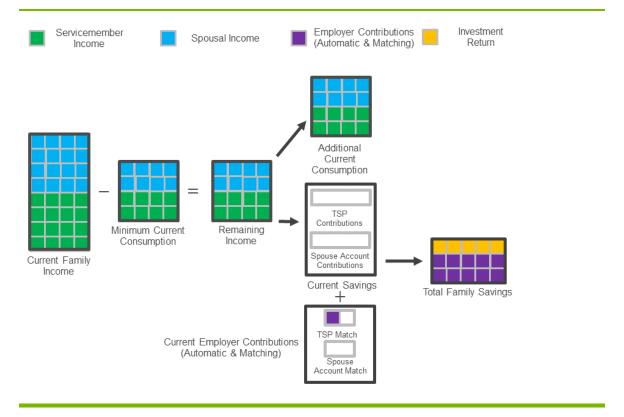


Figure 5. Military family with high discount rate (no savings)

The purpose of this section was threefold. First, we described some of the major factors that affect savings behavior. Second, we asked a series of three questions aimed at limiting our scope to scenarios in which spousal TSP contributions might be beneficial. Finally, we considered five specific scenarios within this narrow scope and discussed the effectiveness of spousal TSP contributions in each. Although this work does not represent an exhaustive analysis of the potential effectiveness of spousal TSP contributions, it suggests that allowing spousal TSP contributions probably will not affect the savings behavior of many military families. Furthermore, the poorest military families will not benefit from this policy, either because the military spouse has no income to contribute or because total family income is insufficient to increase savings.

Cost Analysis

This study's design did not permit use of individually identifiable data, partly because the timeline for presenting materials to the House Armed Services Committee was short and executing a lengthy review process for CNA's compliance with human subject research protections would have left us with little time to conduct analysis. Furthermore, although individual-level data on servicemembers' marital status and current TSP contribution rates (among other factors) are readily available, data on their spouses' demographics, incomes, and savings characteristics are not. For these reasons, we cannot directly estimate the cost of allowing spousal TSP eligibility. However, back-of-the-envelope methodology is sufficient to understand how the specifics of spousal TSP implementation could affect its annual costs.¹²

To put rough bounds on the cost of spousal TSP eligibility, we assume two scenarios. In the first, we assume that spouses' TSP contributions count toward the servicemember's DOD match, leading to an across-the-board increase of 1 percentage point in contributions (relative to the servicemember's salary) by families in which a servicemember is married to a civilian. This scenario reflects both the administrative challenges in implementing spousal TSP matching based on spouses' wages and the lack of available data on spousal earnings. In the second scenario, we assume that military spouses are granted their own full match based on servicemembers' salaries (essentially doubling the amount of matching funds available for households in which a servicemember is married to a civilian) and contribute enough to receive a full match. These scenarios do not represent firm lower and upper bounds on the cost of spousal TSP eligibility—for example, poor rollout could lead the first scenario to overestimate additional contributions and expansion of TSP eligibility to spouses of FSOs could lead the second scenario to underestimate them—but they illustrate how heavily costs depend on matching provisions.

For each scenario, we estimate the proportion of servicemembers at each paygrade who are married to civilians and multiply by a percentage of base salary (because we cannot directly compute these numbers without individual-level data). Our ideal aggregated data would show the number of servicemembers in each cell of a base pay table, along with the share in each cell married to civilians and their TSP contribution rates; however, nobody to our knowledge has computed these values. Population Representation in the Military Services provides the number

¹² Computing implementation costs is beyond the scope of this report; BRS implementation is the closest analogue. This analysis examines only DOD contributions and does not consider deferred taxable earnings or other costs borne by DOD or the FRTIB.

of servicemembers at each paygrade in 2019; unfortunately, it does not have the paygrade-byyears-of-service breakdown that would be necessary to assign individuals to cells in the 2019 base pay tables [76]. It has marriage rates—DOD-wide for enlisted servicemembers and by service for officers—broken down by age, but it does not provide a direct way to map this information to paygrade or years of service and does not contain information on whether servicemembers are married to other servicemembers or to civilians. We therefore use the DOD-wide enlisted marriage rate of approximately 52.8 percent and service-level officer rates of 64.6 percent, 64.0 percent, 63.8 percent, and 68.6 percent for the Army, Navy, USMC, and US Air Force (USAF), respectively. Prior CNA studies have estimated the percentage of sailors and marines married to civilians versus to other servicemembers as 86.6 percent and 89.9 percent, respectively; for the Army and USAF, we take the average of these two rates, which is 88.2 percent [77-78]. We acknowledge that because age and marital status are correlated, this approach will overestimate the marriage rate for servicemembers at lower paygrades (because many more servicemembers are at lower paygrades than higher paygrades) and likely overstate costs. To capture long-term effects of allowing spousal TSP contributions, we treat all servicemembers as BRS eligible (i.e., we do not remove those who reached 12 years of service before 2019). In other words, we are looking at the long-term effects of the two scenarios if force composition remains the same across services after the BRS has fully phased in.

Table 4 shows monthly cost estimates for enlisted servicemembers, and Table 5 shows corresponding estimates for officers.¹³ Columns in each table correspond to paygrades, and rows one through four of each table show the number of servicemembers at each paygrade in the Army, Navy, USMC, and USAF, respectively. Rows five and six show the minimum monthly base pay in 2019 for servicemembers at that paygrade with at least two years of service (because TSP matches vest after two years) and the maximum base pay at that paygrade—we account later for the low likelihood of being in initial paygrades after two years of service. Rows 7 through 10 and 11 through 14 show the cost of an additional 1 percent match based on minimum salary and maximum salary, respectively; these values are computed as the total number of servicemembers times 1 percent of minimum or maximum salary times the DODor service-level marriage rate times the service-level percentage of civilian rather than military spouses.¹⁴ These values are added to produce a DOD-wide cost in rows 15 and 16.

¹³ We do not include warrant officers in Table 4 or Table 5; however, because the four DOD services contained 18,233 warrant officers in 2019, compared to 1,093,011 enlisted servicemembers and 214,956 officers, they are unlikely to affect the scale of our estimates.

 $^{^{14}}$ For example, for E-4 soldiers, this calculation would be 110,178*\$23.07*0.5284*0.8823 = \$1,184,961.34.

Table 4. Approximate monthly cost of giving all enlisted servicemembers married to civilians an additional 1 percent match

	E-1ª	E-2ª	E-3	E-4	E-5	E-6	E-7	E-8	E-9
Number of Enlisted Servicemembers									
Army	26,368	26,726	49,628	110,178	68,075	55,748	35,582	11,246	3,524
Navy	12,298	16,505	42,371	53,333	70,499	50,698	22,002	6,934	2,755
USMC	10,817	20,904	42,414	35,657	26,080	14,607	8,562	3,940	1,584
USAF	10,970	7,568	55,166	54,550	61,544	39,695	26,491	5,379	2,613
					Base Pay				
Minimum ^b	\$1,680.90	\$1,884.00	\$2,105.70	\$2,307.00	\$2,554.80	\$2,875.20	\$3,296.70	\$4,345.50	\$5,308.20
Maximum	\$1,680.90	\$1,884.00	\$2,233.50	\$2,664.00	\$3,396.60	\$4,046.70	\$5,429.10	\$6,197.70	\$8,241.90
			Minimun	n Additional 1	% Match (rou	nded to neare	est \$1)		
Army	\$206,624	\$234,734	\$487,175	\$1,184,961	\$810,786	\$747,238	\$546,854	\$227,824	\$87,206
Navy	\$94,540	\$142,212	\$408,041	\$562,707	\$823,718	\$666,650	\$331,727	\$137,804	\$66,882
USMC	\$86,373	\$187,085	\$424,262	\$390,769	\$316,514	\$199,507	\$134,0856	\$81,333	\$39,942
USAF	\$85,963	\$66,470	\$541,539	\$586,684	\$733,001	\$532,066	\$407,136	\$108,969	\$64,662
			Maximur	n Additional 1	% Match (rou	nded to near	est \$1)		
Army	\$206,624	\$234,734	\$516,743	\$1,368,330	\$1,077,938	\$1,051,700	\$900,575	\$324,930	\$135,402
Navy	\$94,540	\$142,212	\$432,806	\$649,784	\$1,095,131	\$938,276	\$546,297	\$196,541	\$103,845
USMC	\$86,373	\$187,085	\$450,011	\$451,240	\$420,804	\$280,796	\$220,816	\$115,999	\$62,017
USAF	\$85,963	\$66,470	\$574,406	\$677,471	\$974,522	\$748,856	\$670,483	\$155,415	\$100,399
	DOD-Wide Additional 1% Match (rounded to nearest \$1) ^c								
Minimum	\$473,499	\$630,500	\$1,861,017	\$2,725,121	\$2,684,018	\$2,145,460	\$1,419,802	\$555,930	\$258,691
Maximum	\$473,499	\$630,500	\$1,973,966	\$3,146,824	\$3,568,396	\$3,019,628	\$2,338,171	\$792,886	\$401,663

Source: CNA, from data found in [76-78].

^a Results for E-1s and E-2s are unlikely to apply in practice because enlisted servicemembers are typically promoted out of these paygrades within two years.

^b Minimum base pay values assume two years of service (i.e., that TSP matches have vested).

^c Service-level values may not perfectly sum to DOD-level values because of rounding.

Table 5. Approximate monthly cost of giving all officers married to civilians an additional 1 percent match

	O-1ª	0-2	O-3	0-4	O-5	O-6	0-7	O-8	O-9	O-10
Number of Commissioned Officers										
Army	10,230	11,039	28,501	15,506	8,819	4,023	130	118	44	13
Navy	7,198	6,846	18,742	10,520	6,694	3,127	101	63	40	8
USMC	3,087	3,642	6,015	3,905	1,909	648	37	29	16	4
USAF	8,075	7,721	20,666	14,040	9,777	3,336	144	89	42	12
			Е	ase Pay (roun	ded to neare:	st \$1)				
Minimum ^b	\$3,319	\$4,184	\$4,819	\$5,597	\$6,314	\$7,386	\$9,277	\$11,019	\$15,079	\$15,800
Maximum	\$4,012	\$5,084	\$6,917	\$8,074	\$9,521	\$11,901	\$13,245	\$15,381	\$15,800	\$15,800
	Minimum Additional 1% Match (rounded to nearest \$1)									
Army	\$193,579	\$263,323	\$783,110	\$494,850	\$317,451	\$169,406	\$6,876	\$7,413	\$3,783	\$1,171
Navy	\$132,234	\$158,543	\$499,953	\$325,942	\$233,934	\$127,837	\$5,186	\$3,842	\$3,339	\$700
USMC	\$58,722	\$87,333	\$166,141	\$125,278	\$69,079	\$27,431	\$1,967	\$1,831	\$1,383	\$362
USAF	\$162,259	\$195,576	\$602,980	\$475,800	\$373,721	\$149,173	\$8,088	\$5,937	\$3,834	\$1,148
			Maximum A	dditional 1% N	Match (rounde	ed to neares	t \$1)			
Army	\$233,999	\$319,967	\$1,123,966	\$713,791	\$478,749	\$272,981	\$9,817	\$10,348	\$3,964	\$1,171
Navy	\$159,845	\$192,648	\$717,562	\$470,151	\$352,797	\$205,997	\$7,405	\$5,364	\$3,498	\$700
USMC	\$70,983	\$106,120	\$238,456	\$180,706	\$104,178	\$44,201	\$2,809	\$2,556	\$1,449	\$362
USAF	\$196,139	\$237,648	\$865,432	\$686,312	\$563,609	\$240,376	\$11,548	\$8,288	\$4,018	\$1,148
	DOD-Wide Additional 1% Match (rounded to nearest \$1) ^c									
Minimum	\$546,793	\$704,774	\$2,052,184	\$1,421,871	\$994,185	\$473,847	\$22,118	\$19,024	\$12,338	\$3,381
Maximum	\$660,966	\$856,382	\$2,945,416	\$2,050,960	\$1,499,332	\$763,556	\$31,579	\$26,556	\$12,929	\$3,381

Source: CNA, from data found in [76-78].

^a Results for O-1s are unlikely to apply in practice because officers are typically promoted out of this paygrade within two years.

^b Minimum base pay values assume two years of service (i.e., that TSP matches have vested).

^c Service-level values may not perfectly sum to DOD-level values because of rounding.

Table 4 and Table 5 alone do not account for servicemembers who have not yet begun to receive matching payments or who are already receiving the maximum possible match. To account for the former, we remove paygrades E-1, E-2, and O-1, because most servicemembers likely have advanced beyond these paygrades before reaching two years of service (when matching payments begin).

For scenario one, we account for servicemembers who are already contributing the maximum amount using TSP contribution rates from 2018 [61]. If we apply the auto-enrollee contribution rates for September 2018 and assume that everyone contributing the default rate would continue to do so after it shifted to 5 percent of base pay (i.e., that most auto-enrollees would be ineligible for further matching), we can assume that military families contributing an additional 1 percent of base pay would yield an additional 1 percent match for servicemembers contributing 0, 1, or 2 percent of base pay and an additional 0.5 percent match for servicemembers contributing 4 percent.¹⁵ Applying these assumptions would mean that an additional across-the-board 1 percent contribution would receive a net match of 0.029 percent for soldiers, 0.242 percent for sailors, 0.031 percent for airmen, and 0.108 percent for marines. 16 For scenario two, rather than scaling our estimates down to account for families already reaching their maximum match levels, we scale them up by a factor of 5 to reflect military spouses receiving a completely new match.

The costs of each scenario are presented in Table 6. These values show how the cost of spousal TSP eligibility could vary based on matching assumptions. Column 1 shows cost estimates based solely on Table 4 and Table 5; column 2 excludes paygrades E-1, E-2, and O-1; column 3 scales column 2 down to reflect a lack of independent spousal match; and column 4 scales

¹⁵ Although it is a simplification to suggest that no servicemembers would still contribute 3 percent of base pay, it is not far off—in September 2018, 83.0 percent of auto-enrolled soldiers, 38.1 percent of auto-enrolled sailors, and 82.5 percent of auto-enrolled airmen contributed 3 percent of base pay, versus 2.9 percent, 3.9 percent, and 2.3 percent of respective opt-ins.

¹⁶ The data in [61] did not allow us to separate auto-enrolled marines contributing nothing by choice from those contributing nothing because their TSP accounts were not yet active. Our estimates for marines are therefore conditional on them making any TSP contribution. However, because marines' savings rates (and the trainings they received) were more similar to those of sailors than to those of soldiers or airmen, and because very few sailors contributed nothing, our estimates for marines conditional on them making a contribution are likely very close to the actual rates. Of course, we cannot determine here whether a higher default contribution rate would make servicemembers differently likely to contribute any particular nondefault amount (e.g., whether a servicemember presented with a default contribution rate of 3 percent would be more likely to contribute 2percent of base pay than a servicemember presented with a default rate of 5 percent). To the extent that raising the default contribution rate affects other contribution levels, though, doing so likely would increase contribution rates, bringing more servicemembers closer to the maximum match rate. As a result, even after taking the direct effect of the change in default rates into account, there may be indirect effects that further limit the amount of matching funds available under a 5 percent default contribution rate relative to a 3 percent default contribution rate. Therefore, column three of Table 6 may still overestimate the monthly cost of spousal TSP eligibility to the taxpayer.

column 2 up to reflect a full spousal match. Whether we use maximum or minimum salaries within each paygrade, the two scenarios show a roughly 50-fold increase in costs depending on how matches are implemented.

Table 6. Correcting for overestimation in monthly cost estimate

	Initial Estimate	Excluding Early Paygrades	Scenario One	Scenario Two
Enlisted minimum base pay	\$12,754,041	\$11,650,041	\$1,107,599	\$58,250,204
Officer minimum base pay	\$6,250,516	\$5,703,722	\$496,550	\$28,518,611
DOD minimum			\$1,604,149	\$86,768,815
Enlisted maximum base pay	\$16,345,535	\$15,241,535	\$1,451,991	\$76,207,674
Officer maximum base pay	\$8,851,056	\$8,190,089	\$713,189	\$40,950,447
DOD maximum			\$2,122,185	\$114,780,028

Source: CNA, from data found in [61, 76-78].

Note: All cells rounded to nearest \$1.

Because of the back-of-the-envelope nature of these calculations, these are ballpark figures rather than true estimates—and because we do not have individual-level data at our disposal, our estimates may overstate the annual costs of implementing spousal TSP contributions in each scenario. However, they illustrate the wide range of potential outcomes that will need to be considered.

Because of the administrative challenges of implementing an independent spousal match, we view scenario one as the more likely of the two. Given that estimates under scenario one are themselves based on assuming a robust behavioral response, the overall impression is that the cost to the taxpayer would be relatively low. However, although beneficial from the taxpayer's viewpoint, a low cost also indicates a relatively low value added to the servicemember—which again raises the question of whether spousal TSP eligibility would impose high direct and indirect costs on DOD while providing little benefit to servicemembers and their families. In contrast, scenario two shows that the financial incentives needed for military spouses to contribute to the TSP could eclipse \$1 billion per year.

Conclusion and Recommendations

Congress is correct to note that military spouses face employment challenges due to military life. Civilians married to servicemembers have worse employment outcomes than those married to other civilians—they are more likely to have given up on seeking a job, to be seeking a job but unable to find one, and to have found a job that does not match their qualifications or desired schedule. Over time, these short-term challenges can turn into long-term stressors on military families' financial stability.

Unfortunately, although expanding the TSP to allow military spouses to contribute to servicemembers' accounts may be feasible, its administrative costs and likely lack of effect make it inadvisable. In many cases, the short-term problem makes a long-term solution impossible—military spouses who are not employed or who are earning too little will not have income to contribute to retirement savings. Furthermore, retirement savings vehicles already exist for military spouses—those without their own income can have their spouse contribute to an IRA in their name, whereas those with their own income can save either through employer-sponsored plans or through their own IRA. Although the existence of these savings vehicles does not automatically translate to their use, spousal TSP eligibility would merely be providing a service already available through other avenues.

Although it is uncertain whether expanding TSP access to military spouses would concretely benefit military families, doing so would require legislative changes and impose administrative burdens on DOD and the services. The laws governing the TSP do not currently allow people unaffiliated with the federal government to hold TSP accounts, but amending these laws would be simple, in principle. The larger legal concern is that TSP accounts must be held by one person, and no other retirement asset provides a framework for a jointly held account. Congress would therefore need to both define a new form of retirement asset and anticipate the practical challenges in doing so, particularly in naming beneficiaries and in case of divorce.

An additional legal concern is that spousal TSP access would be effective only if a match were allocated to spousal contributions, which would require congressional appropriation. If spouses were offered a matching scheme paralleling that offered to servicemembers (but based on percentages of the servicemember's salary) and all contributed the 5 percent default rate offered to servicemembers, DOD matching contributions could eclipse \$1 billion annually (not including costs of implementation or other costs to DOD, the FRTIB, or TSP participants). If spouses are not offered a match, they might have little incentive to participate in a spousal TSP program instead of existing savings vehicles. However, military families in which a civilian spouse is unemployed or not in the labor force and families that are facing short-term instability may not be able to take advantage of spousal TSP eligibility even with a match.

Implementing spousal TSP eligibility also would be challenging. The nearest comparison likely would be the implementation of the BRS, which involved overhauling existing pay and policy systems. However, the BRS applied to servicemembers, who already had TSP accounts—establishing matching contributions, midcareer continuation payments, and lower pension multipliers likely will have been far simpler than adapting systems to allow nonemployees and nonmembers to contribute to and access employees' and members' TSP accounts.

The fact that spousal TSP eligibility likely would do little to alleviate the short- and long-term financial pressures faced by military families does not make these pressures any less real. We have identified several possible policy solutions, described below; each would require further study to evaluate its range of potential costs and benefits.

Continue to facilitate occupational license transferability across state lines

Twenty-six US states and territories offer full license reciprocity agreements for all military spouses' occupational licenses (see Appendix A). The rest have some barrier to full license transferability for military spouses seeking employment across state lines. Federal and state laws are being pursued to remove these roadblocks. A federal bill introduced in 2021, the Military Spouse Licensing Relief Act, would have provided for "the portability of professional licenses of service members and their spouses who are relocated, because of military orders, outside of the jurisdiction that issued the license" [79]. However, despite referral to the Senate Committee on Armed Services and the support of 27 state cosponsors, it has not passed the Senate or House. At the state level, 14 states have either established or revised universal licensure recognition laws since 2019 or are currently considering them, but 6 states have tried and failed to pass such laws [80]. Although workers must still apply to have their license recognized or transferred, the process for doing so in states with recognition or transferability laws will generally be cheaper, simpler, and faster than in other states. Establishing licensure transferability or recognition may impose administrative and policy burdens; however, the benefits may include substantial reduction of military spouses' unemployment or underemployment in states that are able to remove these roadblocks.

Align military spouses with telework-friendly occupations

Over the past several years, there have been separate pushes to incentivize employers to hire military spouses and to enhance telework opportunities, particularly within federal agencies. These include the 2008 establishment and 2018 enhancement of a military spouse

appointment authority (allowing federal agencies to hire military spouses through noncompetitive processes) and the Telework Enhancement Act of 2010 [81-83]. A Military Spouse Hiring Act bill that was introduced in the House in 2021 but did not pass the House or Senate would provide employers a tax break (equal to a portion of wages) for hiring military spouses [84]. Improving telework opportunities may be a necessary step in ensuring that employers hire military spouses; to the extent that employers consciously choose not to hire military spouses, this choice is likely because of concerns that a move could force these employees to leave quickly and unexpectedly rather than because of their identity as military spouses. However, military spouses hired for telework-compatible jobs may not need to change employers when they move, which reduces the risk to employers, makes hiring military spouses seem like a safer investment, and may bring military spouses' employment opportunities more in line with their skills [85]. One way to both alleviate military spouses' unemployment and help them access TSP benefits might be to explore telework-compatible federal or DOD employment; we perform an initial analysis of the number of such jobs in Appendix B.

Ensure that military spouses' retirement savings are always vested

Military spouses who are unable to maintain continuous employment at a single workplace may sacrifice a large amount of money through forgone matching funds—in theory, a military spouse could maintain near-continuous employment without remaining at any one workplace long enough for matches to vest. For example, the difference at retirement between a 5 percent match and no match for a worker who makes \$27.50 per hour in uninterrupted full-time employment from age 18 through retirement at age 65 and receives 3 percent annual interest compounded monthly would be approximately \$295,000 (keeping all values in constant-dollar terms). Ensuring that military spouses have the same employment and retirement savings opportunities as spouses of civilians would not necessarily address the gap in vested matching. However, Congress could draft legislation stating that retirement plans belonging to military spouses immediately vest. This legislation would help military families in a manner distinct from the other policies suggested; however, it would help only military spouses whose employers offer retirement savings plans. Direct costs likely would be borne by employers, but the magnitude of these costs is unclear, as are any downstream effects of this policy.

¹⁷ \$27.50 was approximately the median wage in 2020 for year-round full-time employees [86].

Appendix A: State License Reciprocity for Military Spouses

Numerous states require occupational licenses before an individual can practice in that state. Recent data have shown that more than 30 percent of workers in the US need to be licensed in a particular state to practice there [87]. Professions that require licenses to practice include teachers, doctors, therapists and psychologists, attorneys, physical therapists, dentists, veterinarians, registered nurses, dieticians, cosmetologists, barbers, emergency medical technicians, massage specialists, and real estate agents [88]. Professional licenses are state specific, and each state has its own occupational licensing requirements and policies. Occupational licensing laws prohibit people from practicing in their occupation without meeting state licensing requirements and gaining official approval to practice in a particular state [87]. Obtaining an occupational license in a state can be costly and time consuming, so some states offer license reciprocity agreements.

License reciprocity agreements allow a person who holds an active state license to apply for a license in a new state without going through the entire process. Occupational license reciprocity agreements significantly vary between states. Some states have reciprocity agreements with every US state, whereas other states have reciprocity agreements with only a few other states. Moreover, the specific reciprocity requirements for gaining an occupational license vary from state to state. Some states allow individuals to bypass requisite licensing courses, whereas others require individuals to complete many of the licensing requirements but expedite the process if they already hold an active license in another state [88].

However, many states without general occupational license reciprocity agreements have some form of reciprocity for military spouses. Table 7 depicts the Department of Labor's classification of the degrees to which states recognize military spouses' occupational licenses.

Table 7. Interstate license reciprocity for military spouses

Degree of License Reciprocity	States
Occupational licensing laws require the state to recognize all military spouses' home state licenses	AR, AZ, CO, CT, FL, IA, ID, KS, KY, LA, MD, MI, MN, MO, MS, ND, NV, OR, OH, SC, SD, UT, VT, WI, WV, WY
State must recognize military spouse's license if the home state has comparable licensing trainings	GA, HI, IL, IN, MA, MT, NC, NE, NH, NJ, NM, NY, OK, PA, RI, TX, VA, WA

Degree of License Reciprocity	States
State license reciprocity agreements apply to only a limited number of professions	AL, CA, TN
State has discretion to accept occupational licenses from other states	AK, DE, ME, PR

Source: [89].

Most states recognize all occupational licenses that a military spouse currently holds in their home state. Many states also recognize a military spouse's occupational license if the training requirements are the same in the home state as in the new state where the spouse is seeking a license. Only a few states have more restrictive occupational license reciprocity laws.

However, although the number of states that have more restrictive license reciprocity laws is small, some of those states have the most military bases and active duty military personnel stationed there. The following states had the most active duty military personnel in 2019:

- California 157,226
- Virginia 124,894
- Texas 120,924
- North Carolina 100,602
- Georgia 69,368
- Florida 60,218 [90]

Of the states with the most military personnel stationed there, only Florida recognizes all military spouses' occupational licenses. Virginia, Texas, Georgia, and North Carolina recognize only those occupational licenses that required equivalent requisite training in the spouse's home state. The occupational license reciprocity laws in California, which has the highest number of active duty military personnel stationed within the state, exclude many professions [89]. Moreover, more than 62,000 active duty military spouses reside in California, and it is estimated that 24 percent of military spouses seeking work cannot obtain work [91].

The lack of license reciprocity for military spouses in California can make it difficult for military spouses to apply for occupational licenses if they must move to that state because their spouse is stationed there. This lack of reciprocity is a roadblock for licensed spouses seeking employment, likely adding to the problem of military spouses' unemployment or underemployment in this state. However, on October 8, 2021, California passed Bill AB 107 to ease restrictions to practice certain professions or vocations for military spouses of active duty servicemembers stationed there [92]. Occupational boards that will ease license restrictions for military spouses include cosmetology, dentistry, medicine, occupational therapy, pharmacy, physical therapy, psychology, veterinary medicine, and real estate.

Appendix B: Estimating the Telework-Compatible Federal Civilian Workforce

The motivation for establishing spousal TSP eligibility centers on improving financial security for military families, especially military spouses whose economic welfare is affected by the military lifestyle. An inability to find and retain long-term employment may be the largest obstacle to financial security for military spouses because it limits not only income but also benefits commonly associated with long-term employment (e.g., employer-provided retirement benefits). Given that geographic mobility is a fact of life for most military families, access to telework-compatible jobs for military spouses could be one solution to this challenge. Of course, such jobs are available in the private sector; however, for various reasons, both the military and military families might prefer that military spouses work directly for the federal government, which employs more than two million civilian workers, including more than 700,000 in DOD. This population has workers in almost every occupation, including hundreds of thousands of jobs that can be performed remotely. In this section, we investigate the size and composition of the telework-compatible federal civilian workforce to assess the extent to which it might be leveraged to generate gainful employment for military spouses.

Data

To examine this question, we leveraged several publicly available datasets. First, we need a snapshot of the federal civilian workforce, including aggregate employment counts by occupation type. The Office of Personnel Management (OPM) maintains the FedScope database along with an online tool through which data to build aggregate extracts can be queried. At the time of this report's writing, the most recent quarter available was June 2021, and the analyses below are based on that date.

By itself, the FedScope database can tell us how many workers the federal government employed in about 650 occupations during any given quarter dating back to 2010. However, to estimate how many of these workers could perform their jobs remotely, we need a handful of other datasets. Chief among these is the Occupational Information Network (O*NET) dataset, which describes any occupation in the Standard Occupation Classification (SOC) system according to a set of common characteristics. Because of the COVID-19 pandemic, a common

¹⁸ See https://www.fedscope.opm.gov/employment.asp for more details (clicking on the desired quarter will open a tool through which selections can be filtered).

application since 2020 has been to estimate the degree to which different occupations in the SOC system are compatible with telework. One notable paper is Dingel and Neiman (2020), which uses data from O*NET survey questions to flag each SOC code as "compatible" or "not compatible" with telework [93].¹⁹ We mirror the Dingel and Neiman approach as closely as possible when estimating the telework compatibility of each federal civilian occupation.²⁰

Unfortunately, FedScope classifies occupations using OPM codes, whereas O*NET is based on the SOC system. As such, we need an occupational crosswalk to translate between these different classification systems. The Equal Employment Opportunity Commission (EEOC) maintains a crosswalk for this purpose called the Federal Sector Occupation Cross-Classification Table, last updated on January 22, 2020 [94].

Methodology

Dingel and Neiman (2020) used questions drawn from two O*NET surveys: the Work Context Questionnaire (WCQ, 57 questions) and the General Work Activities Questionnaire (GWA, eight questions) to identify whether a given SOC occupation is compatible with telework. Because we had access to only aggregate statistics for each survey question (as opposed to individual-level survey microdata), we adapted their methodology slightly. We identify an occupation as compatible with telework if *none* of the following conditions are met:²¹

- The median survey respondent reports using email less than once per month (WCQ, question 4).
- The median survey respondent reports dealing with violent or aggressive people at least once per week (WCQ, question 14).
- A majority of respondents report working outdoors every day (WCQ, questions 17 and 18).
- The median respondent reports being exposed to diseases or infections at least once per week (WCQ, question 29).

¹⁹ The Dingel and Neiman approach assigns a binary indicator (i.e., yes or no) to each SOC code to establish telework compatibility. Although not explored in this study, the telework compatibility of each occupation could be measured on a continuous scale (e.g., 0 to 100 percent compatible) for a more complex evaluation.

²⁰ An archive of O*NET releases is available at https://www.onetcenter.org/db releases.html. We use version 25.0, released in August 2020. We use this slightly dated version because the EEOC crosswalk we use to merge O*NET and FedScope data is based on 2010 SOC codes (all O*NET versions after 25.0 are based on 2018 SOC codes).

²¹ For Stata code applying to WCQ conditions, see lines 51 to 79 of e446_fed-civ-telework_dataprep_v2.do. For Stata code applying to GWA conditions, see lines 102 to 118 of the same file.

- The median respondent reports being exposed to minor burns, cuts, bites, or stings at least once a week (WCQ, question 33).
- The median respondent reports spending a majority of the time walking or running (WCQ, question 37).
- The median respondent reports spending a majority of the time wearing common or specialized protective or safety equipment (WCQ, questions 43 and 44).
- The average level of importance assigned on a one-to-five scale is less than two for any of the following general work activities:
 - o General physical activities (GWA, item 4.A.3.a.1)
 - o Handling and moving objects (GWA, item 4.A.3.a.2)
 - o Controlling machines and processes (GWA, item 4.A.3.a.3)
 - o Operating vehicles, mechanized devices, or equipment (GWA, item 4.A.3.a.4)
 - o Performing for or working directly with the public (GWA, item 4.A.4.a.8)
 - o Repairing and maintaining mechanical equipment (GWA, item 4.A.3.b.4)
 - o Repairing and maintaining electronic equipment (GWA, item 4.A.3.b.5)
 - o Inspecting equipment, structures, or material (GWA, 4.A.1.b.2)

Using O*NET version 25.0 (originally published in August 2020), we applied these rules to classify 774 six-digit SOC occupations as being compatible or incompatible with telework.²² Our findings suggest that 287 of 774 six-digit SOC occupations (37 percent) are telework compatible. To translate our telework-compatibility findings for SOC occupations into telework-compatibility estimates based on OPM codes, we used the EEOC OPM-SOC crosswalk discussed in the data section. In many cases, this process involves a simple one-to-one translation; for example, the EEOC crosswalk connects OPM code 0081 (fire protection & prevention) to a single six-digit SOC code (33-2011, firefighters). As might be expected, 33-2011 fails our test for telework compatibility, and we conclude that any federal civilian jobs with the 0081 OPM code designation are incompatible with telework.

Unfortunately, the OPM-SOC crosswalk does not always connect a given OPM code to a single SOC code; some OPM codes are connected to broader SOC occupational families. For example, OPM code 0050 (funeral directing) maps to SOC occupational group 11-9000 (other management occupations), which includes 18 occupations in the 2010 SOC structure. According to our version of the Dingel and Neiman methodology, 12 of those occupations are

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²² SOC codes may contain up to eight digits, although specific codes above the six-digit level are used only when a given detailed occupation code (i.e., a six-digit code) has one or more suboccupations that warrant a unique eight-digit subcode. In situations in which a six-digit code has more than one eight-digit subcode, we classify the six-digit code as being telework compatible if none of the listed conditions are met for any of the eight-digit subcodes.

telework compatible and the remaining 6 are not. To resolve this conflict, we interpret the average of the 18 telework-compatibility indicators (0.667) in a probabilistic sense (i.e., any position falling under the 0050 OPM code has a 66.7 percent chance of being compatible with telework). If the federal government employs 218 people in occupation code 0050 (as it did during June 2021), we estimate that 145.33 of those jobs are compatible with telework.

Findings

Because of this study's data use restrictions, we must use aggregate FedScope extracts (rather than FedScope microdata files). Gathering these tables is time consuming, so we limit our focus to the following categories of federal civilian workers:

- 1. All federal civilians
- 2. All federal civilians aged 20 to 24
- 3. All federal civilians aged 25 to 29
- 4. All DOD civilians
- 5. All DOD civilians aged 20 to 24
- 6. All DOD civilians aged 25 to 29

These categories were chosen for a variety of reasons. For example, the broadest category ("all federal civilians") was chosen to capture the overall ability of the federal civilian workforce to perform telework. Similarly, the category "all DOD civilians" reflects DOD's demand for telework-compatible labor.²³ The remaining four categories were chosen to capture the telework compatibility of jobs occupied by younger workers (i.e., those aged 20 to 29). The rationale is that military spouses are likely to be relatively young and jobs suitable for people in their 20s may be systematically more or less compatible with telework.

Table 8 provides a broad overview of our telework-compatibility estimates for the federal civilian workforce. Overall, we estimate that slightly less than 42 percent of the 2,138,504 active federal civilian workers (as of June 2021) could perform their work remotely, which is notably higher than the 37 percent estimate that Dingel and Neiman (2020) obtained for the US workforce. However, our findings for younger federal civilian workers suggest that telework opportunities are comparatively limited for this group.

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²³ DOD-specific telework-compatibility numbers are particularly important if DOD has the authority to provide military spouses additional advantages (e.g., preferential employment consideration) in its civilian workforce.

Table 8. Telework-compatibility estimates for broad categories of federal civilian workers

Category	Total	Number Compatible	Percent Compatible
All federal civilians	2,138,504	894,041	41.8%
All federal civilians aged 20–24	49,728	18,091	36.4%
All federal civilians aged 25–29	126,846	46,171	36.4%
All DOD civilians	750,882	335,911	44.7%
All DOD civilians aged 20–24	21,098	7,635	36.2%
All DOD civilians aged 25–29	47,783	18,687	39.1%

Source: CNA analysis using FedScope and O*NET data.

Broadly speaking, the telework-compatibility patterns that we observe for all federal civilian workers are mirrored when we examine DOD workers specifically, although evidence suggests that DOD jobs are slightly more likely to be compatible with telework. In fact, our estimate is about 3 percentage points higher for the overall DOD category (44.7 percent versus 41.8 percent); furthermore, we find that DOD workers aged 25 to 29 are about 2.7 percentage points more likely to have telework-compatible jobs (39.1 percent versus 36.4 percent). In contrast, telework compatibility is slightly lower for DOD workers aged 20 to 24, although the difference relative to all federal civilians in the same age bracket is negligible (36.2 percent versus 36.4 percent).

Recall that the purpose of this exercise is to determine whether the telework options in the federal civilian labor force are a viable route to alleviating underemployment and unemployment among military spouses. Our focus on telework-compatible jobs reflects the realization that geographic mobility is part of military life; consequently, telework-compatible jobs can allow military spouses to remain with their families while holding the same job over a long period of time.²⁴ The findings presented in Table 8 suggest that there is a large pool of jobs in the federal civilian workforce that military spouses might perform remotely; however, at least two more questions should be addressed before drawing any definitive conclusions.

The first of these questions relates to understanding dynamics in the federal civilian labor market. In other words, Table 8 provides information about the number of telework-compatible jobs as of June 2021, but it does not indicate the rate at which those jobs become available to prospective workers. A combination of low turnover and stagnant employment growth would suggest that relatively few telework-compatible openings will be available to

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²⁴ Extended tenure with a given employer is generally associated with greater financial security for several reasons. First, workers earn promotions and raises over time; second, those financial gains may be lost if the worker changes employers.

military spouses at any given time; in contrast, high turnover and robust job growth would indicate a large demand for new hires at any point in time. Ultimately, this is a complex question to answer because employment dynamics tend to vary widely by occupation type; however, aggregate FedScope data on annual accessions may shed some light on the topic. In fiscal year 2020, the federal civilian workforce saw 258,547 new hires (excluding federal civilian transfers), which represented about 12 percent of total federal civilian employment in June 2020 (2,159,501).

If we assume that this value is representative of new hiring flows across time and occupation type, we can complete some calculations. For example, Table 8 suggests that there were 64,262 telework-compatible jobs occupied by workers aged 20 to 29 in June 2021. If that subset of the federal workforce experiences a 12 percent rate of new hires annually,²⁵ we can conclude that about 7,711 telework-compatible jobs for workers aged 20 to 29 will be filled by new hires annually. Of course, this calculation is very rough, and we cannot pair it with information on the number of military spouses who are looking for work each year. Ultimately, more research will be needed to determine the degree to which demand for telework-compatible jobs in the federal civilian workforce is sufficient to absorb the labor supply of military spouses; however, the numbers presented here suggest that this labor market is robust enough to warrant further exploration.

The second question relates to the employment skills of military spouses and whether those skills align with the needs of federal civilian positions that are compatible with telework. In short, even if we can demonstrate that plentiful telework-compatible employment opportunities exist in the federal civilian workforce, we do not know what fraction of military spouses are qualified to fill them. Answering this question in full would require collecting data on the education and employment histories of military spouses, and at present we are unaware of any database that retains records of this kind.

In summary, in this section we estimated the degree to which the federal civilian workforce is compatible with telework. Our methodology is an adaption of that developed by Dingel and Neiman (2020), and our findings suggest that the federal civilian workforce is slightly more compatible with telework than the US workforce at large. Although telework compatibility is comparatively low for younger workers, evidence suggests that there are many federal civilian jobs that military spouses could conceivably perform remotely. Determining the extent to which this labor market can accommodate the labor supply of military spouses will require (1) an understanding of federal civilian labor market dynamics, and (2) a careful examination of military spouses' occupational skill sets and how those skill sets align with labor demand in the federal civilian workforce.

²⁵ Either to replace vacated positions or to fill newly created ones.

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Abbreviations

BRS Blended Retirement System

COA course of action

DOD Department of Defense

EEOC Equal Employment Opportunity Commission

eROI expected return on investment

FERS Federal Employees' Retirement System
FERSA Federal Employees' Retirement System Act
FRTIB Federal Retirement Thrift Investment Board

FSO foreign service officer

GWA General Work Activities Questionnaire

IRA individual retirement account IRS Internal Revenue Service

OPM Office of Personnel Management
O*NET Occupational Information Network
RBCO retirement benefits court order

SME subject matter expert

SOC Standard Occupation Classification

TSP Thrift Savings Plan

USAF US Air Force

USFSPA Uniformed Services Former Spouse Protection Act

USMC US Marine Corps

WCQ Work Context Questionnaire

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