

## Abstract

The Department of Defense's transition to the Blended Retirement System (BRS) in 2018 marked a significant shift in military retirement planning, allowing service members for the first time to receive matching contributions to their Thrift Savings Plan (TSP). This thesis delves into the financial implications of default settings within the BRS, focusing on outcomes for three distinct groups: opt-in members, automatic 3% enrollees, and automatic 5% enrollees. Developing a conceptual framework to construct various financial models this thesis examines the differences in TSP portfolio earnings based on default settings and assesses the appropriateness of Roth and traditional TSP account options for enlisted personnel and officers. This thesis illustrates differences in service member contributions, government matching contributions, TSP portfolio balances at the end of different service lengths, and the projected TSP account balances at age 60 given an annual 8% rate of return. Current data shows that not all BRS members are actively contributing to the TSP or receiving the full government match. This highlights a missed opportunity for current active-duty service members. Moreover, the complexity of TSP account selection is underscored, emphasizing the importance of informed decision-making. Leadership intervention and enhanced financial education are needed to correct these issues and raise awareness of retirement entitlements among all BRS participants.

## BRS Demographics

### 1. BRS Opt-In Members

Dec 31, 2005 – Dec 31, 2017

### 2. BRS Members (Automatic 3% Enrollment)

Jan 1, 2018 – Sep 30, 2020

### 3. BRS Members (Automatic 5% Enrollment)

Oct 1, 2020 – Present

## Methods

### Future Value Equation

$$FV = PV * (1 + r)^t$$

- FV = future value
- PV = present value
- r = interest rate per time period
- t = number of time periods

## Results & Their Impact

Enlisted BRS Demographics	TSP Balance (EAS)	TSP Balance (Age 60)
1. BRS Opt-In Member	\$ 1,440.06	\$ 26,821.92
2. BRS Member (Auto 3% Enrollment)	\$ 8,100.59	\$ 150,875.75
3. BRS Member (Auto 5% Enrollment)	\$ 11,760.83	\$ 219,048.88

Officer BRS Demographics	TSP Balance (EAS)	TSP Balance (Age 60)
1. BRS Opt-In Member	\$ 2,677.86	\$ 36,660.32
2. BRS Member (Auto 3% Enrollment)	\$ 15,404.96	\$ 210,895.97
3. BRS Member (Auto 5% Enrollment)	\$ 22,325.18	\$ 305,634.74

Military retirement plans have changed over time. The rollout of the BRS placed more onus on the individual service member to be actively involved in their own retirement planning and saving. The aim of this thesis was to bring awareness to BRS policy changes to current senior levels of leadership, so they can help guide those they lead to make informed financial decisions. It also aimed to provide support to current BRS service members to better understand the specifics of the BRS and make informed decisions for themselves.

Four Year Enlistment	Roth TSP	Traditional TSP
<b>Number of Cash Flows</b>	<b>4</b>	<b>4</b>
<b>Portfolio Value at age 60</b>	<b>\$219,048.88</b>	<b>\$219,048.88</b>
Government Contributions & Earnings	\$84,939.30	\$84,939.30
Member Contributions & Earnings	\$134,109.58	\$134,109.58
Contribution Tax Rate (Lifetime)	12%	0%
Roth Tax (TVM) at 8% Returns	\$16,093.15	-
<b>Post Tax Portfolio Value</b>		
12% Withdrawal Tax Rate	\$208,856.16	\$208,856.16
22% Withdrawal Tax Rate	\$200,362.23	\$186,951.28
24% Withdrawal Tax Rate	\$198,663.45	\$182,570.30

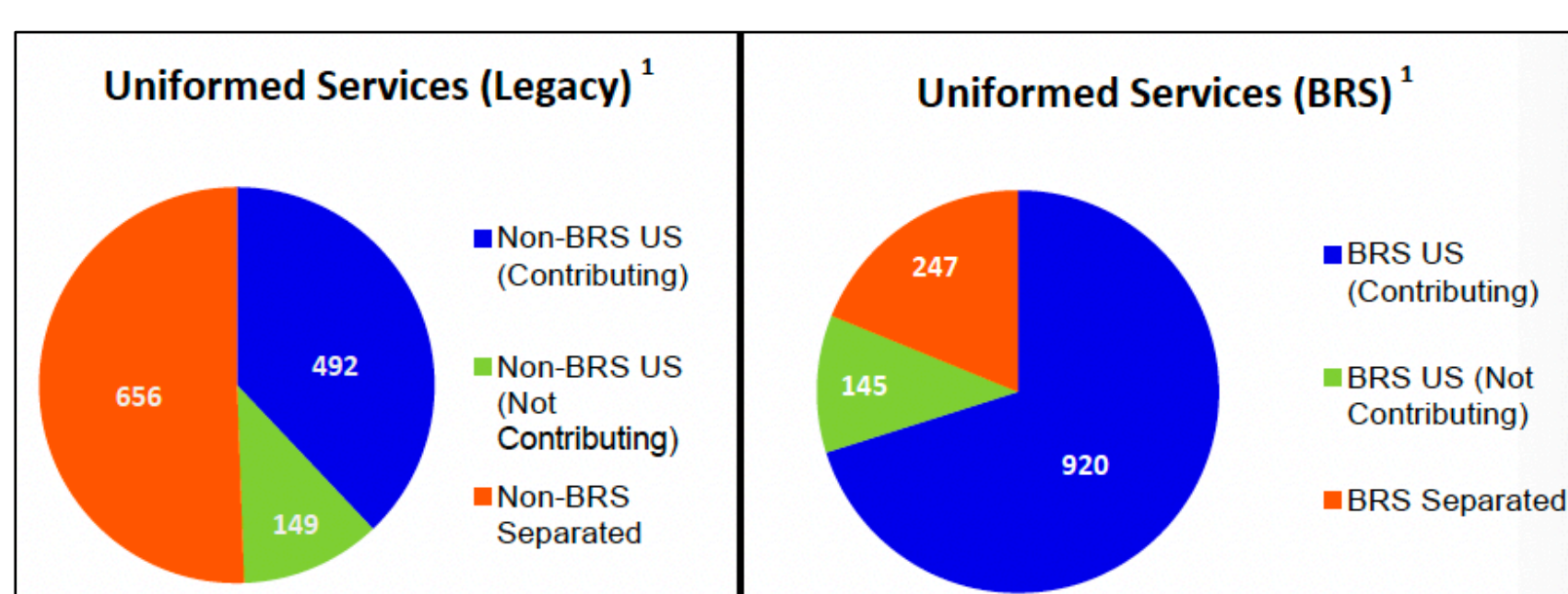
  

Eight Year Enlistment	Roth TSP	Traditional TSP
<b>Number of Cash Flows</b>	<b>8</b>	<b>8</b>
<b>Portfolio Value at age 60</b>	<b>\$530,750.96</b>	<b>\$530,750.96</b>
Government Contributions & Earnings	\$240,790.34	\$240,790.34
Member Contributions & Earnings	\$289,960.62	\$289,960.62
Contribution Tax Rate (Lifetime)	14.5%	0%
Roth Tax (TVM) at 8% Returns	\$42,845.50	-
<b>Post Tax Portfolio Value</b>		
12% Withdrawal Tax Rate	\$501,856.12	\$509,906.34
22% Withdrawal Tax Rate	\$477,777.09	\$456,831.25
24% Withdrawal Tax Rate	\$472,961.28	\$446,216.23

20-Year Career	Roth TSP	Traditional TSP
<b>Number of Cash Flows</b>	<b>20</b>	<b>20</b>
<b>Portfolio Value at age 60</b>	<b>\$1,505,240.73</b>	<b>\$1,505,240.73</b>
Government Contributions & Earnings	\$728,035.22	\$728,035.22
Member Contributions & Earnings	\$777,205.51	\$777,205.51
Contribution Tax Rate (Lifetime)	19.4%	0%
Roth Tax (TVM) at 8% Returns	\$153,224.04	-
<b>Post Tax Portfolio Value</b>		
12% Withdrawal Tax Rate	\$1,417,876.50	\$1,477,835.88
22% Withdrawal Tax Rate	\$1,345,072.98	\$1,327,311.81
24% Withdrawal Tax Rate	\$1,330,512.28	\$1,297,206.99

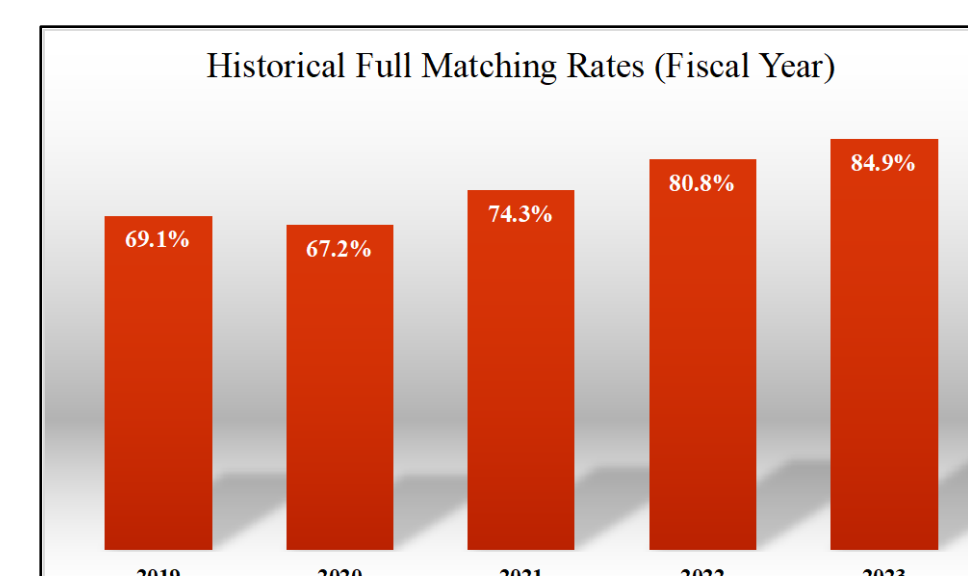
### Enlisted Sensitivity Analysis



TSP Participation (Sep 2023)

Service Branch	Number	Percentage
Marine Corps	84,324	59.4%
Navy	77,351	32.6%
Army	66,301	29.1%
Air Force	89,729	25.5%
Coast Guard	5,115	21.0%

BRS Opt-In Rates



BRS Active-Duty Full Matching Rates (by FY)