Retirement Choice: 2013

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ANALYSIS & SOLUTIONS

Photo credit line: MGySgt Lorenzo Jones, Sr., the communications chief with 2nd Marine Regiment, 2nd Marine Division, retired and relinquished responsibilities as communications chief Jul. 13, 2012. Jones received an American flag a part of his retirement ceremony. (Official U.S. Marine Corps photo by LCpl Phillip R. Clark)

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Introduction

Military personnel who entered service after July 31, 1986, and who are eligible and intend to serve for 20 years must choose between two retirement plans at their 15th year of service.[1] Once the final selection is made, the choice is irrevocable. The two options are:

1. *High-3 retirement plan:* Retirement pay is based on the highest average basic pay for 36 months of a servicemember's career. These are usually the last 3 years.
2. *REDUX retirement plan plus a $30,000 bonus paid at the 15th year of service:* In return for accepting the bonus, REDUX provides smaller retirement checks.

How should Marines, Sailors, Airmen, and Soldiers decide which option to take? The Department of Defense (DOD) has a website that provides information and examples to help servicemembers.[2] We have used a different approach that many have found useful in evaluating these retirement choices.[3] Here, we update that work for those making the retirement choice in 2013.

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1. Selection of the retirement plan begins at about 14.5 years of service.
2. The DOD website is *http://militarypay.defense.gov/tools.*
3. The original paper was by Aline O. Quester and Lewis G. Lee, *The Retirement Choice: FY 2006*, CNA Research Memorandum D0003713.A6/4REV, Oct. 2005. It benefited from review by several CNA colleagues—Gerald Cox, Donald Cymrot, Michael Hansen, and Ann Parcell—and from critical insights provided by Kathleen Utgoff (former Director of the Pension Benefit Guarantee Corporation), John Warner (Clemson University), Susan Woodward (former Chief Economist at the Security and Exchange Commission), Steve Cylke (Bureau of Naval Personnel), and Neil Singer (former Senior Defense Analyst at the Congressional Budget Office).

We start by describing the $30,000 bonus as an early, partial cash-out of a servicemember's retirement pension. This $30,000 cash-out will be "paid back" later in the form of reduced retirement checks. By providing information on how much this cash-out will cost in terms of lower future retirement income, we hope that we can help servicemembers make more informed choices about which plan to select.

First, though, we briefly look at the general provisions of military retirement and then focus more specifically on the two plans. Both pension choices have the following features:

- Both provide retirement income as a percentage of the average of the highest 36 months of basic pay. There is no risk; the retirement payments are specified by law and are guaranteed by the full faith and credit of the U.S. government.
- Both offer deferred compensation for which no taxes are paid until the retirement pay is received.[4] Such plans are called tax-sheltered retirement plans.
- Both are protected against inflation. The High-3 has full inflation protection because it changes yearly with the Consumer Price Index (CPI), whereas REDUX/bonus has less protection (CPI minus 1 percentage point). The value of inflation protection for retirement pay cannot be overemphasized. Most military members will be retired in about 40 years. In 40 years, one can expect prices to increase at least four times, meaning that what costs $1 at military retirement will end up costing $4.[5]

To summarize, military pensions are risk-free, tax-sheltered, inflation-adjusted annuities with options for spousal benefits (such as the Survivor Benefit Plan) on the death of the member. Such private pension provisions are very expensive, and only a few companies offer them.

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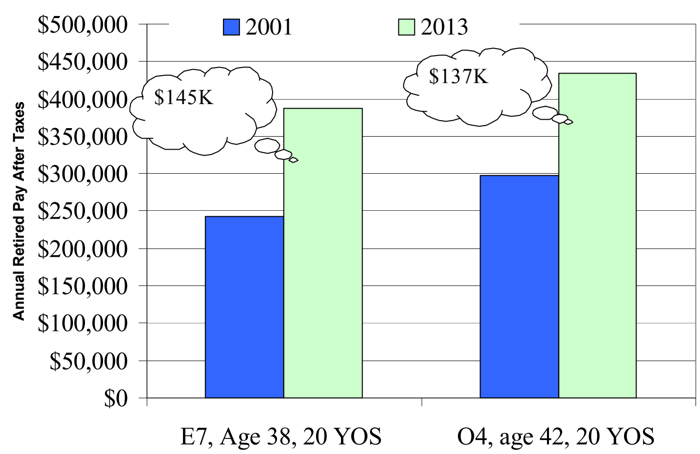
4. The services pay into the retirement fund each year, and the fund grows while the member is in the service. The servicemember has no tax liability for the service's contributions to the retirement fund.

5. The CPI in 2012 was nearly 8 times the level it was in 1960. This period includes the sharp inflation in 1974 (12.3 percent), 1979 (13.3 percent), and 1980 (12.5 percent). The commonly assumed 3.5-percent inflation rate leads to a fourfold increase in prices over a 40-year period.

How much is retirement income reduced under REDUX/bonus?

We now turn to the retirement choice in the 15th year of service. Choosing REDUX/bonus reduces retirement income. The higher the grade and the lower the years of service at retirement, the greater the reduction. Fast-trackers who retire very early are penalized most severely. For *all* military personnel, however, retirement income is *substantially lower* under REDUX than under High-3.[6] Moreover, the difference between REDUX and High-3 retirement income increases each year. The *additional* reduction in retirement income under REDUX/bonus for those making the choice in 2013 (compared with 2001) is well over **$**100,000 for virtually all retirees![7] (See figure 1.)

Figure 1. REDUX/bonus choice gets worse each year: Differences since 2001 are over $100K!



6. Later in this paper, we discuss the Thrift Savings Plan (TSP) and other bonus investment options. The examples that follow assume that the servicemember pays taxes on, and spends, the bonus.

7. This assumes that the servicemember lives to age 79. The differences are larger if the servicemember lives longer.

Some will find it easier to understand how the two plans differ by comparing plan descriptions (table 1), whereas others will prefer to look at the figures that follow, which show the difference in retirement payments under the two plans.

Table 1. Retirement choices for those who entered the service after July 31,1986—based on highest average monthly basic pay over 36 months

	Retirement plan	
	High-3	REDUX + $30,000 bonus
Percentage of basic pay at 20 years of service	50.0%	40.0%
Increase for each year of service past 20	2.5%	3.5%
At 30 years of service	75.0%	75.0%
Yearly cost-of-living adjustments (COLA)	Full CPI[a]	CPI minus 1 percentage point
Age 62	Retirement payments set equal to each other at age 62 (see figures 2 through 5)	
Age 63 onward	Full CPI adjustments	CPI minus 1 percentage point

a. Consumer Price Index for urban wage earners and clerical workers.

First, we present some examples. To calculate the two retirement pay streams for someone making the decision at 15 years of service in 2013, we need to make some assumptions. We assume the following:

- Military pay will grow at 3.5 percent per year until the servicemember retires.
- The CPI will grow at 3.5 percent per year.
- The servicemember will live to age 79.[8]
- Tax bracket[9]
  - — Enlisted: 15 percent; $25,500 after-tax bonus
  - — Warrant officers: 25 percent; $22,500 after-tax bonus
  - — Commissioned officers: 28 percent; $21,600 after-tax bonus

8. The National Vital Statistics Reports show an additional 40.1 years for someone age 40, so we err on the side of caution and use an overall life expectancy of 79 years for military retirees. In a later section, we explore what happens if the servicemember lives past 79 years. See http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_03.pdf.

9. Later, we discuss what happens if the $30,000 bonus is tax-free.

Figure 2 shows the two after-tax retirement pay streams, REDUX and High-3, from the first retirement year until age 79 for an E-7 who expects to retire at age 38 with 20 years of service. We see a sharp reduction in retirement pay under REDUX until age 62, then a re-indexing that equates the two retirement pays, followed by a gradual erosion in REDUX retirement pay after age 62 when compared with High-3. For this servicemember, total retirement pay is reduced by $387,714 if he or she selects REDUX/bonus.

Figure 2. E-7 retiring at 38 with 20 years of service, 15% tax bracket

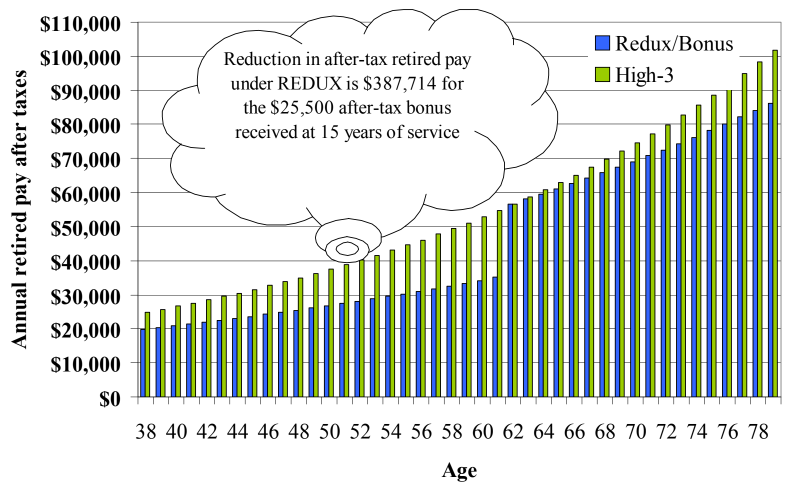


Figure 3 shows the difference in payments for a servicemember who expects to retire as an E-8 at age 42 with 24 years of service. Here the reduction in retired pay ($382,329) is just a little less than that for the E-7 who retires at 38 with 20 years of service (figure 2).

Figure 4 shows the situation for a CWO-3 who expects to retire at age 38 with 20 years of service. Here, the reduction in retirement pay is $446,840 under REDUX/bonus.

Figure 5 shows the situation for an O-6 who expects to retire at age 50 with 26 years of service. Here the officer's retired after-tax pay is $382,450 less under REDUX/bonus. (Appendix A illustrates these three situations in a different format.)

Figure 3. E-8 retiring at 42 with 24 years of service, 15% tax bracket

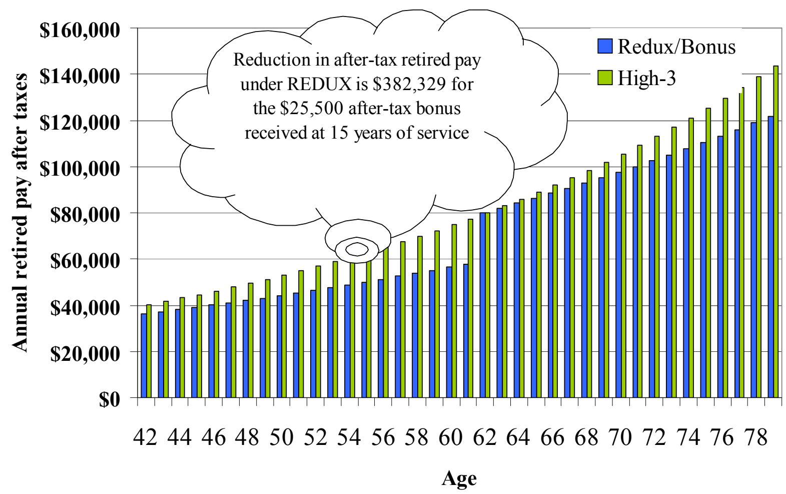
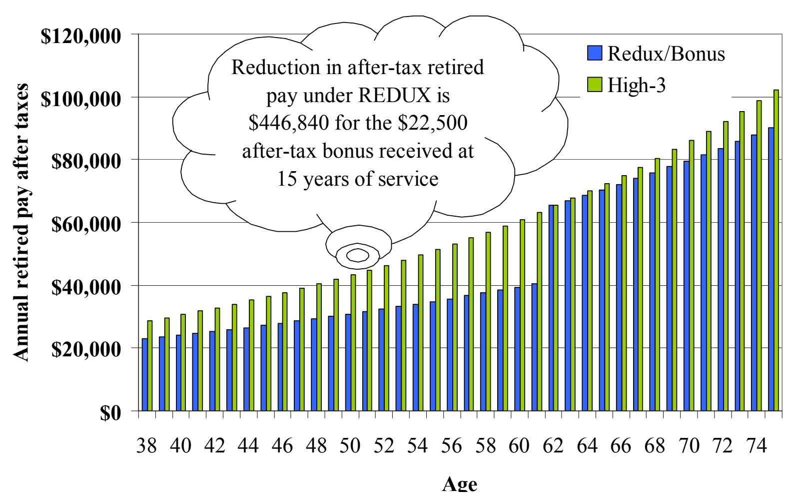
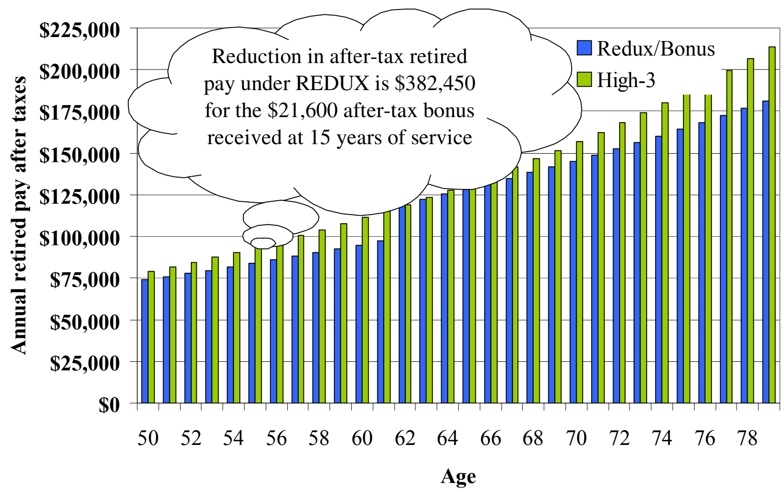


Figure 4. CWO-3 retiring at 38 with 20 years of service, 25% tax bracket



In the next subsection, we turn to the way in which we propose that servicemembers evaluate the lower retirement pay that they will receive if they select REDUX and the $30,000 bonus.

Figure 5. O-6 retiring at 50 with 26 years of service, 28% tax bracket



Get paid now or get paid later?

Bonus-takers will get some of their retirement income early, at the 15-year-of-service point. The best way to think about this is to consider REDUX's $30,000 bonus as an early cash-out of part of a servicemember's retirement pension. We can calculate how much this cash-out costs the member by thinking of it as a "loan" to be paid back later in the form of lower retirement checks.

This so-called loan, given at 15 years of service, is paid back over the servicemember's entire retired lifetime. Most people are familiar with car loans, mortgages, and credit card debt. Car loans and mortgages have fixed loan periods, often 5 years for cars and 30 years for mortgages. Credit card debt is a little different, requiring only a minimum payment per month. We characterize all these loans by the interest rates and interest payments attached to them.

The $30,000 bonus has a rather peculiar payback scheme. The servicemember pays nothing until retirement, pays quite a bit from the beginning of retirement until age 62, and then continues to pay back smaller amounts over the rest of his or her life. The "payments" are the differences in the height of the High-3 and REDUX/bonus bars in figures 2 through 5. Although this payment scheme is peculiar, we can calculate the implied interest rate, or annual percentage rate (APR). We do this for a variety of situations and show the results in table 2 for enlisted personnel. Results for chief warrant officers and commissioned officers are in appendix B.

Looking at table 2, if an E-6 expects to retire at age 38 with 20 years of service and lives to age 79, our calculations show that, by selecting REDUX/bonus at 15 years of service, the servicemember:

- Pays an implicit interest rate of 13.7 percent for the cash-out (this is after tax)
- Loses $332,201 in after-tax retirement income
- Would be required to earn at least 16.1 percent before tax *each year* until age 79 on the invested bonus to make up the difference between the REDUX pension and the High-3 pension.

Table 2. REDUX/bonus choice for enlisted personnel (15% tax rate)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
		E-6 at 20 years of service		
Age 38	13.7%	16.1%	$332,201	$306,701
Age 40	13.4%	15.8%	$292,422	$266,922
Age 42	13.2%	15.5%	$256,374	$230,874
		E-7 at 20 years of service		
Age 38	14.9%	17.5%	$387,714	$362,214
Age 40	14.7%	17.3%	$341,288	$315,788
Age 42	14.4%	17.0%	$299,216	$273,716
		E-7 at 22 years of service		
Age 40	12.5%	14.8%	$362,094	$336,594
Age 42	12.3%	14.4%	$317,068	$291,568
Age 44	11.9%	14.0%	$276,581	$251,081
		E-8 at 20 years of service		
Age 38	15.6%	18.4%	$424,092	$398,592
Age 40	15.4%	18.1%	$373,310	$347,810
Age 42	15.2%	17.8%	$327,291	$301,791
		E-8 at 22 years of service		
Age 40	13.3%	15.6%	$403,533	$378,033
Age 42	13.0%	15.3%	$353,354	$327,854
Age 44	12.7%	14.9%	$308,233	$282,733

Table 2. REDUX/bonus choice for enlisted personnel (15% tax rate) (continued)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
		E-8 at 24 years of service		
Age 42	11.4%	13.4%	$382,329	$356,829
Age 44	11.1%	13.0%	$333,319	$305,819
Age 46	10.7%	12.6%	$289,662	$264,162
		E-8 at 26 years of service		
Age 44	9.8%	11.5%	$357,084	$331,584
Age 46	9.4%	11.1%	$310,451	$284,951
Age 48	9.0%	10.6%	$269,406	$243,906
		E-9 at 20 years of service		
Age 38	16.7%	19.7%	$484,922	$459,422
Age 40	16.6%	19.5%	$426,856	$401,356
Age 42	16.3%	19.2%	$374,236	$348,736
		E-9 at 22 years of service		
Age 40	14.2%	16.7%	$464,567	$439,067
Age 42	14.0%	16.4%	$406,799	$381,299
Age 44	13.6%	16.0%	$354,853	$329,353
		E-9 at 26 years of service		
Age 44	10.5%	12.4%	$415,923	$390,423
Age 46	10.1%	11.9%	$361,607	$336,107
Age 48	9.7%	11.4%	$313,798	$288,298
		E-9 at 30 years of service		
Age 48	7.8%	9.1%	$364,314	$338,814
Age 50	7.4%	8.7%	$318,240	$292,740
Age 52	7.1%	8.4%	$279,196	$253,696

a. This is the rate of return for investing the bonus that the servicemember would need to obtain to break even between REDUX/bonus and High-3. This rate of return would provide after-tax amounts that exactly equal the differences in pension payments between High-3 and REDUX.

b. Reduction in retirement pay after excluding the after-tax bonus of $25,500.

Breaking even: What return would you need for your investment?

The breakeven interest rate is the before-tax interest rate that the servicemember would have to earn to equalize compensation under the High-3 vice REDUX/bonus retirement packages. For example, if the servicemember put the after-tax bonus into an investment account, that investment account would have to earn the breakeven interest rate *every* year to generate an income equal to the yearly difference in retirement pensions. And, at age 79, the account would be exhausted. If, for only one year, the member earned less than the breakeven interest rate, the account would be exhausted before the member's death.[10] The breakeven interest rates are high enough that it will be virtually impossible for anyone to break even.

How much retirement income is forgone?

For the 38-year-old E-6 with 20 years of service, table 2 shows an "interest" payment of $306,701—the difference between the total after-tax reduction in retired pay ($332,201) and the after-tax amount of the loan ($25,500). Although all the interest rates are high, it is probably the cumulative amount of forgone retirement income that is most surprising. How do these amounts compare with those for a 30-year home mortgage? Table 3 shows this information.

Table 3. Payments on a 30-year $30,000 mortgage[a]

Interest rate	Total amount paid	Total interest payments
4.0%	$51,561	$21,561
5.0%	$57,977	$27,977
6.0%	$64,751	$34,751
7.0%	$71,853	$41,853
8.0%	$79,247	$49,247
9.0%	$86,899	$56,899
10.0%	$94,778	$64,778

a. Information is from *http://www.calculator.net/loan-calculator.html.*

Even for a 9.0-percent 30-year home mortgage loan—a *very high* interest rate by current standards—one pays back a little under 3 times the amount borrowed. For today's 4.0-percent mortgage rates,

10. The breakeven interest rate is higher than the after-tax interest rate because taxes must be paid on investment income. The breakeven interest rate times the tax rate is equal to the after-tax implicit interest rate.

one pays back less than 2 times the loan amount. In contrast, for the after-tax portion of the $30,000 bonus, table 2 shows that the servicemember is paying back from 10 to 19 times the bonus (i.e., the amount "borrowed")![11] **Why are the repayment amounts so large for this $30,000 "loan"?**

Consider someone who dies very early in retirement. Indeed, if the servicemember dies at the retirement point, there is no repayment. The servicemember got the $30,000 at the 15-year point but died before collecting any retirement monies.[12] So, one reason why repayment amounts are so large is that the average life expectancy is 79 years. The terms of this financial arrangement are *reduced retirement checks over the entire lifetime.*

The second reason the repayment amounts are so large is that one cannot pay off this "loan" early. If the servicemember chooses REDUX/bonus, the servicemember who lives the normal lifespan loses tremendous amounts of retirement income. The servicemember who lives *longer* than the normal lifespan loses even more.

What if you live past age 79?

The longer the servicemember lives, the greater the loss in retirement income for those who chose the REDUX retirement and the $30,000 bonus. Table 4 shows some examples for enlisted and officers if the servicemember lives until 85, rather than 79.

The E-7 who retires at age 38 with 20 years of service will pay back $512,694 in reduced retirement income for the $30,000 bonus received at 15 years of service if he or she lives to 85. Living to 90 (not shown), the servicemember who took the bonus will lose $667,889 in retirement income.

11. All calculations are after taxes. An E-6 with 20 years of service who retires at age 42 pays back $256,374 for the $25,500 ($256,374/$25,500) = 10.1; an E-9 who retires with 20 years of service at age 38 pays back 19.0 times the amount borrowed ($484,922/$25,500).

12. We have not addressed survivor benefits in this analysis, but we are concerned that the reduced retirement income will make the Survivor Benefit Plan (SBP) unaffordable for some REDUX retirees.

Table 4. Examples of reduction in retirement pay if REDUX/bonus is chosen: by length of life

Status at retirement			Reduction in retirement pay by length of life		
Grade	Age	Years of service	Age 79	Age 85	Difference ($)
E-6	38	20	$332,201	$439,286	$107,085
E-7	38	20	$387,714	$512,694	$124,980
CWO-3	38	20	$446,840	$590,879	$144,039
O-4	44	20	$378,601	$526,000	$147,399
O-5	44	22	$449,084	$646,891	$197,807

What if the $30,000 bonus is tax-free?

If the servicemember chooses REDUX/bonus while in a combat zone, the $30,000 bonus is tax-free. Should this make a difference in the decision? We believe it should not. Consider the E-7 who retires at 38 with 20 years of service or the O-5 who retires at 44 with 22 years of service. If the bonus is tax-free, the E-7 will get the full $30,000 (rather than the $25,500 we assumed when the bonus was taxed) and the O-5 will get the full $30,000 (rather than the $21,600 we assumed when the bonus was taxed). Both, though, will still pay back (through reduced retirement income) the full amounts in the age 79 column of table 4: $387,714 for the E-7 and $449,084 for the O-5. And, that's only the reduction in retirement pay if they live to age 79. As shown in the age 85 column of table 4, if they live longer, the reductions will be larger.

Why would anyone choose REDUX/bonus?

Why would anyone reject the more generous High-3 retirement plan and select the bonus and associated reduced retirement payments under REDUX? There are two main reasons:

1. Servicemembers want or need the money now.
2. Servicemembers think that they can do better by investing the $30,000. In the past, many believed that the federal government Thrift Savings Plan (TSP) might provide such an investment opportunity.

Neither of these reasons should justify the REDUX/bonus choice. Servicemembers who want or need the money now should look into other ways to obtain the required funds. Are there alternatives for borrowing $30,000 that do not involve several hundred thousand dollars of interest payments? Second, returns from TSP accounts have not approached the returns required to make a REDUX selection worthwhile.

There also are some misconceptions about the TSP. Many private-sector employees, as well as civilian federal government employees, have long had the option of putting some of their pre-tax earnings into various types of savings plans designed for retirement. TSPs either supplement or, more likely, replace private-sector pensions. Retirees then supplement their Social Security in their retirement years by drawing down their TSPs.

Servicemembers now can contribute pre-tax dollars to a TSP. By contributing to the TSP, uniformed personnel can save additional monies for the years in which they are truly retired. Because TSPs were designed to provide savings for the older years, however, there are tax penalties for withdrawals made before age 59.5.[13] In short, servicemembers should not put savings in TSPs that they anticipate needing before they are in their sixties.

Retirement savings plans such as the TSP share one feature with conventional military retirement plans—namely, the tax sheltering of pre-retirement income. Many servicemembers, in fact, do not seem to realize that military pensions are tax-sheltered. Retirement tax sheltering means that *no taxes are paid until the money is received in retirement.* With military pensions, the member pays no taxes on the accrued benefits until the pensions are paid in retirement. With TSPs, the contributions are pre-tax, and taxes are not paid until the money is withdrawn. TSPs, however, *lack* the two other important features of the High-3 retirement plan:

- Risk-free, guaranteed payments or returns
- Full inflation protection.

13. Under exceptional circumstances, the tax penalties for withdrawals before age 59.5 can be waived.

The TSP offered to military members allows the member to choose the fund, or funds, in which to invest the savings. These funds differ by the level of risk or variability of the investment returns. Funds that have higher risk will have higher average returns for long-term investors, but those returns will be more variable. *None* of the funds, however, have *inflation protection* or *guaranteed returns*.

Are the TSP and the $30,000 bonus related?

It is merely a coincidence that the introduction of both the TSP and the choice between REDUX/bonus and High-3 occurred at the same time. Because of the timing, however, many commentators at the time linked the two ideas, suggesting that servicemembers might elect REDUX/bonus and put the maximum amount of the bonus that can be tax-sheltered in a TSP account.

We find the linkage in the press between the TSP and the $30,000 partial cash-out of the High-3 pension to be puzzling. Why would servicemembers want to give up the inflation protection provided by military retirement and invest that money in non-inflation-protected TSPs? Why would they even consider a cash-out of part of their pensions when the implicit interest rates they will pay for this are greater than the long-run returns in the stock market? Why give up a riskless investment for a risky one if you can expect to earn a lower return on the risky investment? Although we see the TSP as an opportunity for servicemembers to put additional money away for their old age, we cannot understand why members would want to *cash out* some of their tax-sheltered, inflation-protected, guaranteed military retirement income for a TSP.[14]

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14. Saving money in a TSP is an excellent idea as long as one does not have to reduce future retirement income in order to do so. For example, saving some reenlistment bonus money or special pay in a TSP is an excellent way to ensure greater income in one's older years. The maximum amount that can be tax-sheltered in a TSP is $17,500 in 2013.

Take-rates for the REDUX/bonus option

Despite the significant downsides of the REDUX/bonus choice, many servicemembers still choose this option every year. As of September 2011, more than 23,000 Marines had made their choices. Of those who had decided:

- 33 percent of enlisted Marines chose the $30,000 bonus and the reduced REDUX retirement
- 26 of percent warrant officers chose the $30,000 bonus and the reduced REDUX retirement
- 7 percent of officers chose the $30,000 bonus and the reduced REDUX retirement. Of those:
  - Officers who were in grades O1E through O3E were much more likely to select the bonus than were other commissioned officers.

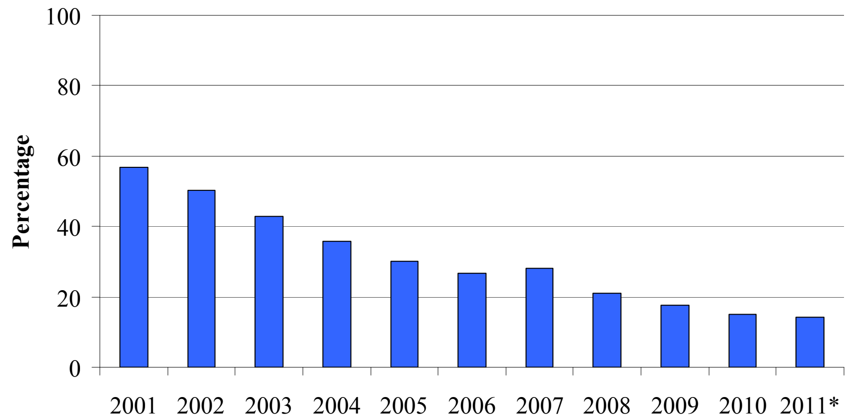
Although these take-rates seem high, they have fallen sharply over time. Overall, the percentage of Marines selecting the bonus declined from 57 percent in 2001 to 14 percent (see figure 6). Thus, by 2011, fully 86 percent of Marines selected High-3 as their retirement plan.

In 2011 (through September), the take-rates were:

- 18 percent for enlisted Marines (26 percent for staff sergeants)
- 2 percent for commissioned officers (6 percent for those who held O1E–O3E grades at 15 years of service)
- 11 percent for warrant officers

Gunnery sergeants make up the largest group to face the retirement choice; their take-rate for REDUX/bonus dropped from 54 to 16 percent in the period.

Figure 6. Marine Corps take-rates for REDUX/bonus: 2001 to 2011[a]



a. *Through September 2011.

CNA has been conducting an extensive education campaign about retirement choice since 2002. Each year, in addition to this paper, we provide CDs with a retirement choice calculator to Marines attending the General Officer Symposium, the Executive Offsite, the Commander's Course, the Sergeant Major of the Marine Corps' Symposium, and various senior enlisted symposiums and conferences. The retirement choice calculator also is available on CNA's website (go to www.cna.org and search for "retirement choice").

In an attempt to further educate, the Marine Corps has issued MARADMINs annually since 2007,[15] which reinforce the Commander's responsibility to:

- Ensure that all affected Marines receive appropriate counseling about this choice
- Certify that Marines electing REDUX/bonus are recommended and qualified to continue to 20 years of service
- Verify that a CO, XO, or sergeant major witnessed the election in block 13 of the DD form 2839.

15. The latest one to date is MARADMIN 427–11.

We believe that these efforts, combined with those of the manpower management, separations, and retirement branch (MMSR) have been important in ensuring that Marines understand this choice and make decisions that reflect that understanding. We attribute the decline over time in the REDUX/bonus take rate to CNA's education campaign. The sharp drop between 2007 and 2008 (from 27 percent to 21 percent) can be attributed to the first MARADMIN in 2007 that energized Marine Corps leaders.

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Conclusions

We find that, for almost all servicemembers, the REDUX retirement plan plus a $30,000 bonus paid at the 15th year of service is a bad choice that significantly reduces their retirement income. The higher the grade, the lower the years of service at retirement, and the longer the servicemember lives, the greater the reduction. Moreover, as each year passes, the difference between REDUX and High-3 retirement income increases.

Thinking of the $30,000 bonus as a "loan," this is a loan that is paid back (through lower retirement income) at extremely high interest rates. Even if servicemembers invest the bonus, the required interest rates make it virtually impossible for them to break even.

Despite the significant downsides of the REDUX/bonus choice, some servicemembers still choose this option every year. Although the share taking REDUX/bonus has fallen over time, a significant percentage of eligible Marines are still choosing this option. We continue to work with the Marine Corps leadership to help inform Marines about the consequences of this choice.

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Appendix A: Another way of looking at figures 2 through 5

In this appendix, we show the information in figures 2 through 5 somewhat differently. Instead of looking at the retirement pay streams directly, we look at the differences in retirement pay for the two plans. Specifically, we look at the payments under REDUX/bonus minus the payments under High-3. Figures 7 through 10 show the amount of the bonus payment and the subsequent yearly reduction in retired pay (shown as negative amounts) to the servicemember from the point at which the member retires (for figure 7, this is age 38). Because REDUX/bonus is set equal to High-3 at age 62, the difference between the two playments is zero at that point. The reductions in retired pay from age 63 to age 79 reflect the less than full indexing for inflation under REDUX/bonus.

Figure 7. Differences in after-tax retirement payments if REDUX/bonus is selected: E-7 retiring at 38 with 20 years of service, 15% tax bracket

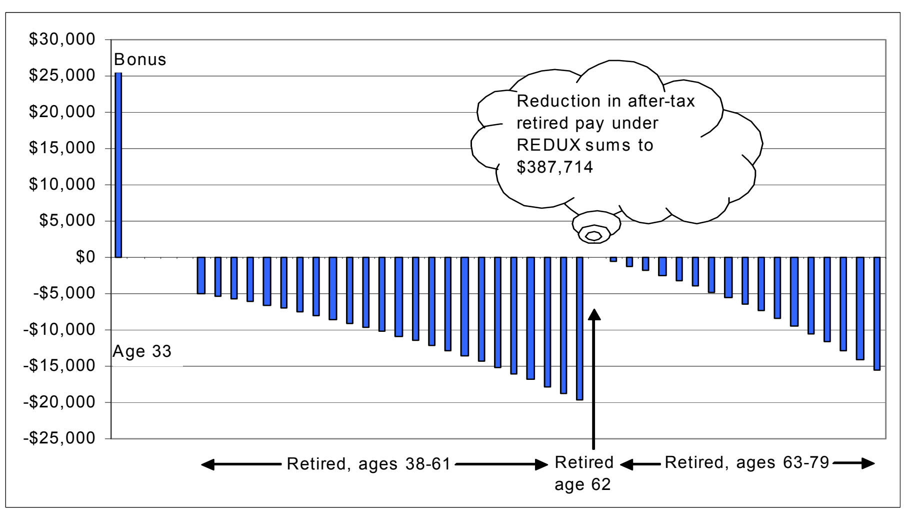


Figure 8. Differences in after-tax retirement payments if REDUX/bonus is selected: E-8 retiring at 42 with 24 years of service, 15% tax bracket

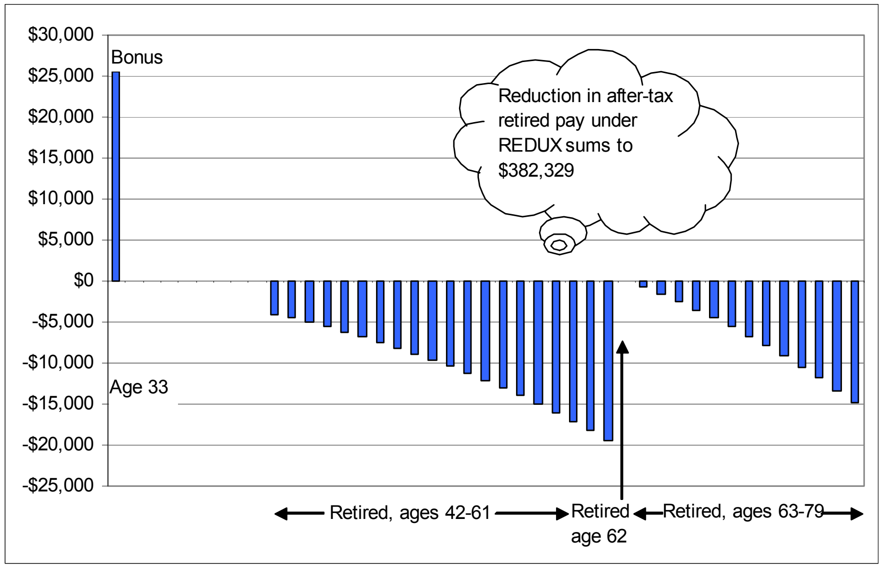


Figure 9. Differences in after-tax retirement payments if REDUX/bonus is selected: CWO-3 retiring at 38 with 20 years of service, 5% tax bracket

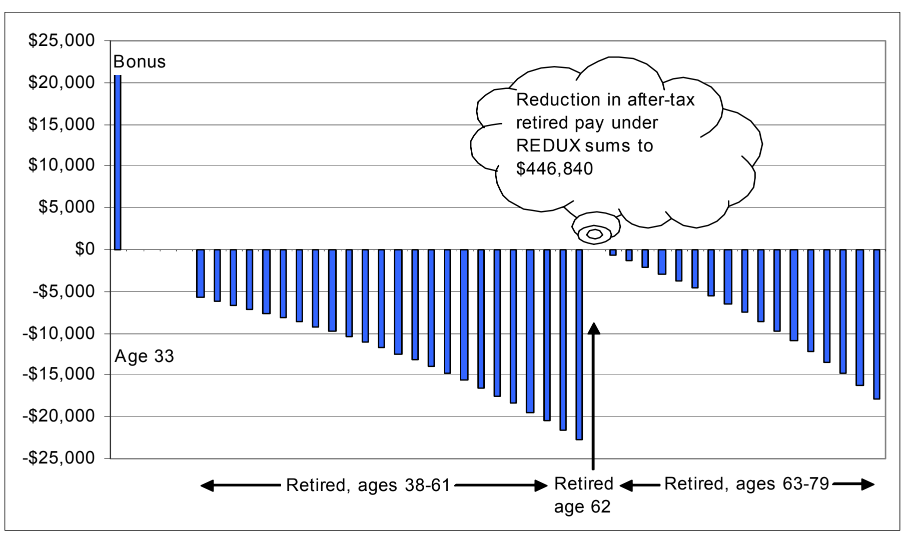
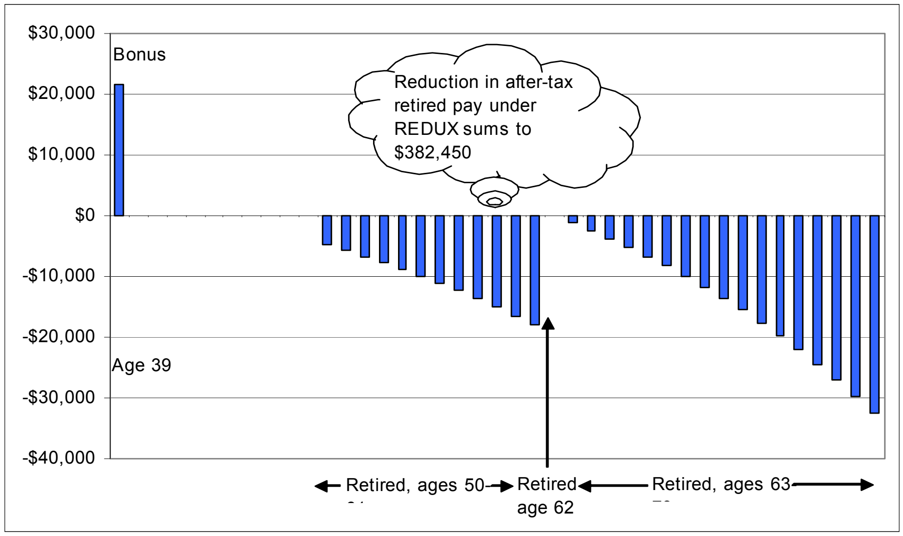


Figure 10. Differences in after-tax retirement payments if REDUX/bonus is selected: O-6 at 50 retiring with 26 years of service, 28% tax bracket



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Appendix B: Officers

Table 5. REDUX/bonus choice for chief warrant officers (25% tax rate)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
CWO-2 at 20 years of service				
Age 38	16.1%	21.5%	$398,983	$376,483
Age 40	16.0%	21.3%	$351,207	$328,707
Age 42	15.7%	21.0%	$307,913	$285,413
CWO-3 at 20 years of service				
Age 38	17.1%	22.8%	$446,840	$424,340
Age 40	16.9%	22.6%	$393,334	$370,834
Age 42	16.7%	22.3%	$344,846	$322,346
CWO-3 at 22 years of service				
Age 40	14.5%	19.4%	$429,743	$407,243
Age 42	14.3%	19.0%	$376,305	$353,805
Age 44	14.0%	18.6%	$328,253	$305,753
CWO-4 at 24 years of service				
Age 42	13.0%	17.3%	$445,949	$423,449
Age 44	12.7%	16.9%	$388,783	$366,283
Age 46	12.3%	16.4%	$337,861	$315,361
CWO-4 at 26 years of service				
Age 44	11.2%	14.9%	$420,699	$398,199
Age 46	10.8%	14.4%	$365,759	$343,259
Age 48	10.4%	13.9%	$317,401	$294,901
CWO-5 at 30 years of service				
Age 48	8.5%	11.3%	$398,720	$376,220
Age 50	8.2%	10.9%	$348,295	$325,795
Age 52	7.8%	10.5%	$305,564	$283,064

a. This is the rate of return for investing the bonus that the servicemember would need to obtain to break even between REDUX/bonus and High-3. This rate of return would provide after-tax amounts that exactly equal the differences in pension payments between High-3 and REDUX.
b. Reduction in retirement pay after excluding the after-tax bonus of $22,500.

Table 6. REDUX/bonus choice for commissioned officers (28% tax rate)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
O-4 at 20 years of service				
Age 42	19.2%	26.7%	$433,790	$413,190
Age 44	19.0%	26.4%	$378,601	$357,001
Age 46	18.7%	25.9%	$328,747	$307,147
O-5 at 20 years of service				
Age 42	20.3%	28.1%	$480,798	$459,198
Age 44	20.0%	27.8%	$419,629	$398,029
Age 46	19.7%	27.4%	$364,372	$342,772
O-5 at 22 years of service				
Age 44	16.6%	23.1%	$449,084	$427,484
Age 46	16.3%	22.6%	$390,102	$368,502
Age 48	15.8%	22.0%	$337,313	$315,713
O-5 at 24 years of service				
Age 46	13.9%	19.3%	$417,995	$396,395
Age 48	13.4%	18.7%	$362,063	$340,463
Age 50	12.9%	17.9%	$312,588	$290,988
O-5 at 26 years of service				
Age 48	11.5%	16.0%	$380,912	$359,312
Age 50	11.1%	15.4%	$330,082	$308,482
Age 52	10.6%	14.7%	$285,816	$264,216
O-6 at 24 years of service				
Age 46	14.7%	20.4%	$476,491	$454,891
Age 48	14.3%	19.8%	$412,731	$391,131
Age 50	13.8%	19.1%	$356,333	$334,733
O-6 at 26 years of service				
Age 48	12.3%	17.1%	$441,344	$419,744
Age 50	11.8%	16.5%	$382,450	$360,850
Age 52	11.3%	15.7%	$331,161	$309,561
O-6 at 28 years of service				
Age 50	10.4%	14.5%	$416,513	$394,913
Age 52	10.0%	13.9%	$362,976	$341,376
Age 54	9.6%	13.3%	$317,367	$295,767
O-6 at 30 years of service				
Age 52	8.8%	12.3%	$387,613	$366,013
Age 54	8.6%	11.9%	$342,252	$320,652
Age 56	8.4%	11.6%	$304,896	$283,296

a. This is the rate of return for investing the bonus that the servicemember would need to obtain to break even between REDUX/bonus and High-3. This rate of return would provide after-tax amounts that exactly equal the differences in pension payments between High-3 and REDUX.

b. Reduction in retirement pay after excluding the after-tax bonus of $21,600.

List of figures

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