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Savings waterfall: Supercharge your savings

Blog

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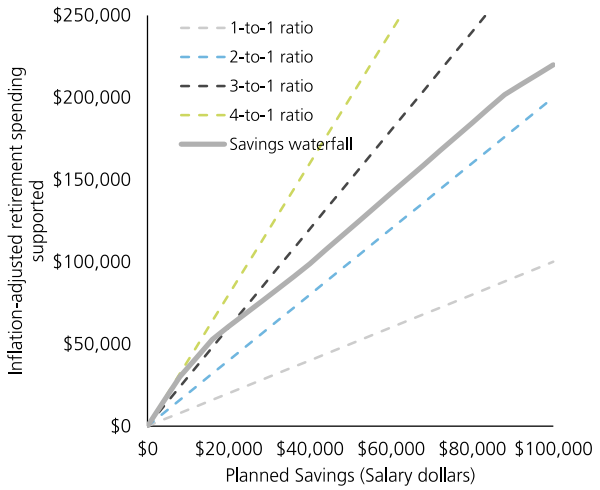
- Each year, we publish a "Savings waterfall" worksheet to help families streamline their savings choices, prioritizing account types based on their potential to create after-tax growth. Click here to download the 2024 edition.
- In this report, we evaluate the Savings waterfall's potential to boost your after-tax growth, comparing the results against other saving strategies.



Saving and investing in the right accounts can help you to get more out of your family's hard-earned savings. As you can see in Figure 1, the Savings waterfall can help you to turn $1 of hard-earned savings into $2 or $3 of inflation-adjusted spending in 30 years by harnessing tax-advantaged growth, compound interest, and (when available) your company's willingness to match your contributions.

Figure 1 - $1 of savings can support multiple dollars of retirement spending



Source: UBS. For illustration purposes. Assumes a 24% tax rate on earned income and retirement account distributions, 6% annual growth of retirement accounts, and 5% annual growth of taxable accounts.

How far will my savings go in retirement? A case study

To help demonstrate how your savings today can fuel your spending in retirement, let's consider the finances of John and Carol Davidson, a married couple in their 30s with no children. John and Carol each earn $150,000 in a state with no income tax. Carol's company offers a 401(k), with a match of up to $8,000 per year. John's company does not offer a 401(k).

About $22,950 of the Davidsons' $300,000 gross household income will need to go toward FICA taxes, which leaves them with $277,050. They plan to spend about $150,000 per year, which leaves $127,050 for income taxes and savings.

As we will detail in the four scenarios below, the Davidsons may be able to reduce their expected income tax bill—and boost the amount of funds that they can direct towards savings—by directing their savings toward account types that allow pre-tax contributions. Figures 2 and 3 summarize the results of these scenarios. Figure 2 illustrates the Davidsons' total 2024 savings, and how these savings are distributed across account types. Figure 3 shows the inflation-adjusted retirement spending that this year's savings will support in 30 years, broken down by the tax treatment of the accrued assets.

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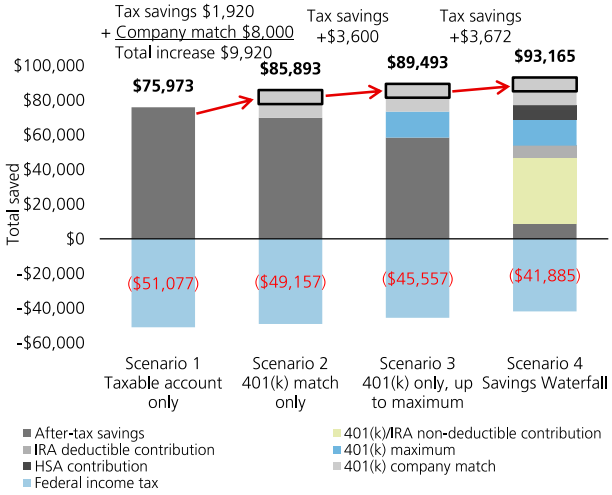
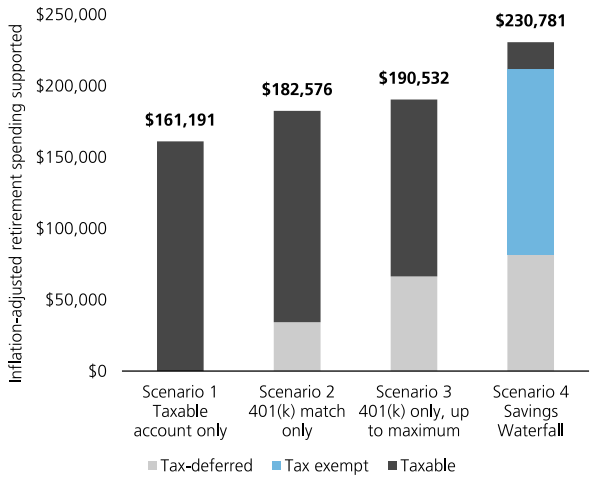
Figure 2 - How much can the Davidsons save?



Source: UBS. For illustration purposes.

Figure 3 - How far will the savings go?



Source: UBS. For illustration purposes.

Scenario 1: Taxable account only

The Davidsons choose to not make any retirement account contributions. They pay $51,077 in income tax, and invest the remaining $75,973 in a taxable account with an expected after-tax return of 5% p.a.

After 30 years of after-tax growth, the Davidsons' taxable account is worth $328,351, which is enough to support **$161,191** of inflation-adjusted spending (assuming 2.4% p.a. inflation).

If the Davidsons had decided to spend instead of save, their after-tax spending power in 2024 would have been about $75,973. Instead, they will have about $2.1 of retirement spending for every $1 of foregone spending in 2024. In other words, this saving strategy gives a retirement spending-to-foregone spending ratio of about **2.1x**, simply through compounding growth.

Scenario 2: Add 401(k) company match

The Davidsons choose to make an $8,000 pre-tax contribution into Carol's 401(k), which is enough to get a 100% match from her company. This $16,000 is invested in a balanced portfolio with a 6% expected return. After paying $49,157 in income tax (saving 24% x $8,000 = $1,920 due to their pre-tax contribution), the Davidsons invest the remaining $69,893 in a taxable account with an expected after-tax return of 5% p.a.

After 30 years of growth, the Davidsons' savings are worth $393,969:

- $91,896 in the 401(k)
- $302,074 in the taxable account

After paying a 24% tax on the 401(k) distribution, this leaves $371,914, which is enough to support **$182,576** of inflation-adjusted spending. This works out to a retirement spending-to-foregone spending ratio of about **2.4x**.

Scenario 3: Max out 401(k) contribution

The Davidsons decide to make a $23,000 pre-tax contribution to Carol's 401(k), which is the 2024 annual elective deferral limit. The Davidsons invest their $31,000 401(k) balance (their contribution plus the $8,000 company match) in a balanced portfolio with a 6% expected return. After paying $45,557 in income tax (saving an additional 24% x $15,000 = $3,600 compared to Scenario 2 due to the increased pre-tax contribution), the Davidsons invest the remaining $58,493 in a taxable account with an expected after-tax return of 5% p.a.

After 30 years of growth, the Davidsons' savings are worth $430,852:

- $178,048 in the 401(k)
- $252,804 in the taxable account

After paying a 24% tax on the 401(k) distribution, this leaves $388,120, which is enough to support **$190,532** of inflation-adjusted spending, and a **2.5x** retirement spending-to-foregone spending ratio.

Scenario 4: Full savings waterfall

In addition to maxing out their 401(k), the Davidsons decide to maximize their Health Savings Account pre-tax contribution ($8,300), contribute $7,000 of pre-tax dollars to an IRA for John, and make a $38,000 non-deductible 401(k) contribution (which is immediately converted to a

Roth 401(k) using an in-plan conversion), all of which are invested in a balanced portfolio with a 6% expected return.

After paying $41,885 in income tax (saving an additional 24% x $15,300 = $3,672 compared to Scenario 3 due to their increased pre-tax contributions), the Davidsons invest the remaining $8,865 in a taxable account with an expected after-tax return of 5% p.a.

After 30 years of growth, the Davidsons' savings are worth $522,490:

- $218,253 in their tax-deferred accounts (pre-tax 401(k), IRA account balances)
- $265,924 in their tax-exempt accounts (Health Savings Account, Roth 401(k) account balances)
- $38,314 in their taxable account.

After paying a 24% tax on the 401(k) and IRA distributions, this leaves $470,110, which is enough to support **$230,781** of inflation-adjusted spending. That is a **3.0x** multiple of the $75,973 that the Davidsons could have spent in 2024 if they had decided not to save for retirement.

Next steps

We recommend that you revisit the Savings waterfall each year, using it to set up direct deposits and payroll deduction elections that will automate your saving and investing implementation while leaving you with enough cash flow to fund your lifestyle. You should also revisit your savings strategy when you receive an unexpected bonus, or need to temporarily adjust your savings plan to account for short-term spending needs.

The sooner you start saving, the sooner you will reach financial freedom. Not only will you have more years of compounding growth, but you will be able to devote a greater share of your savings to the most effective parts of the Savings waterfall. As you grow older and your income rises faster than your spending, you will be able to save more, but you will start to exceed the cap on contributions for the account types that offer the highest level of after-tax growth potential.

The Savings waterfall is designed to help you direct your hard-earned savings, but it is not a comprehensive assessment of all investment and account types. You should ask your financial advisor to teach you about other strategies to enhance your after-tax growth potential. For example, taxable account strategies that employ tax-loss harvesting, tax-deferred accounts such as annuities and life insurance policies, and real estate investments that may allow you to defer capital gains.

Appendix

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