

# Drawdown from financial accounts in retirement

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- Conventional wisdom would suggest that investors save during their accumulation years and then spend from their savings during retirement. Prior research, though, has shown a lack of spending from financial accounts among retirees, possibly due to the availability of other income sources such as defined benefit pension plans. With the decline of such plans, we expect an increasing use of financial accounts to generate retirement income.
- To assess this, we analyze the withdrawal patterns of over two million Vanguard retail households at or near retirement age during the three-year period covering 2018 through 2020. We examine withdrawal incidence, rates, and frequency according to factors such as age and account type.
- We find that only 52% of households at or near retirement age took at least one withdrawal during the study period. If withdrawals from financial accounts are supposed to primarily serve as income, then our observed withdrawal incidence is lower than expected. Among households that withdrew, about half took withdrawals at rates that we expect to be sustainable, and just over half withdrew in all three years—characteristics of what we refer to as income-taking.
- The results suggest that some investors may have other income sources we do not observe, are uncomfortable drawing from their accounts, or have various other goals. Goal setting and planning, potentially with the help of a financial advisor, are powerful tools to help investors maximize the benefit they receive from their lifetime of saving.

As investors approach retirement, they face the important task of translating their financial assets into income. Earlier studies, however, have shown a lack of spend-down from financial accounts, including individual retirement accounts (IRAs), and in fact have shown increasing wealth in retirement.<sup>1</sup>

Part of the reason may be investors' access to other forms of income such as Social Security benefits and defined benefit pensions. With the decline in defined benefit pensions, more individual investors will be responsible for funding and creating their own retirement paycheck. To do so, investors may now be drawing more from retirement accounts or other financial savings for spending in retirement.<sup>2</sup> If households are, as expected, using their financial accounts to generate income, then the incidence of withdrawals from these accounts is one indicator of this behavior.

Another major consideration when crafting a retirement income stream is the withdrawal rate, which determines the sustainability of income withdrawals given one's level of financial assets. Although these savings are intended to be consumed eventually, withdrawing too much early in retirement can lead to a shortfall later. Several spending strategies, such as the "4% rule" for yearly withdrawals and dynamic spending rules, have been proposed to help investors maximize their chances of achieving their retirement goals.<sup>3</sup>

In the absence of direct knowledge of what motivates withdrawals, their frequency could help identify the motivation. For example, withdrawals taken on a regular schedule may suggest that they're used for income-taking,

or they may be a result of policy-mandated distributions. Irregular withdrawals may indicate ad hoc spending, or additional discretionary spending on top of regular income-taking.

Investors' characteristics, such as their age and account type, can help describe withdrawal behavior.<sup>4</sup> For example, fewer withdrawals for income are expected among people in younger households, as many are still working. However, withdrawals are expected to progressively increase with age.

The type of financial account an investor holds has implications for withdrawal strategies. IRA investors enjoy tax incentives, such as tax deferrals until withdrawal for traditional IRAs and tax-free withdrawals for Roth IRAs. But IRAs also come with restrictions. Withdrawals are generally not allowed without a penalty until an investor reaches a certain age, currently 59½.

Another way that tax policy could influence investor withdrawal behavior is through required minimum distributions (RMDs). People with traditional IRAs must begin withdrawing from these tax-advantaged accounts once they reach a certain age. In 2018 and 2019, the RMD age was 70½. The 2019 SECURE Act changed the age to 72 for distributions required after December 31, 2019.<sup>5</sup> And in March 2020, under the CARES Act enacted in response to the COVID-19 pandemic, RMDs were suspended for 2020.<sup>6</sup> Prior research showed that a similar RMD suspension during the global financial crisis affected the retirement plan distributions of those investors subject to RMDs.<sup>7</sup>

### *Notes on risk*

*All investments are subject to risk, including the possible loss of the money you invest. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account. When taking withdrawals from an IRA before age 59½, you may have to pay ordinary income tax plus a 10% federal penalty tax.*

1 See, for example, Poterba, Venti, and Wise (2011); Love, Palumbo, and Smith (2008); and Hurd and Rohwedder (2015).

2 See Jaconetti et al. (2021) for Vanguard's view on retirement planning, including a discussion of the various resources available for funding retirement.

3 See Khang and Clarke (2020), Jaconetti et al. (2020), and Bengen (1994).

4 See Madamba and Utkus (2019).

5 See Vanguard (2020b).

6 See Vanguard (2020a).

7 See Brown, Poterba, and Richardson (2017).

This study focuses on investors who are at or near retirement age, namely 55 and older. Specifically, we seek to learn whether and how these investor households are using their accounts to generate income. We use administrative data to identify withdrawal patterns characteristic of income-taking, and in the process we unearth other kinds of withdrawals from financial accounts.

To assess income-taking, we formulate three hypotheses:

- **Incidence.** Withdrawals from financial accounts, motivated by the need for income, are common among investors of retirement age.
- **Rates.** Investors who desire sustainable income will have lower withdrawal rates.
- **Frequency.** Withdrawals will be frequent and regular, generating an income stream throughout retirement.

### Sample and methodology

Recognizing that the household is the primary economic unit, we focus this analysis on the household level. Vanguard's clients include more than five million retail investor households, but our study analyzes a subset of just over two million.<sup>8</sup> To arrive at our sample, we consider only households that had at least one member 55 or older in 2018, so we can specifically look at withdrawal trends of investors at or near retirement age. Moreover, we examine only those households that continuously held funded accounts from 2018 through 2020.<sup>9</sup> The investors we examine may be self-directed or else may be enrolled in Vanguard's Personal Advisor Services® (PAS). The Appendix on page 14 shows the characteristics of retail households covered in this report.

The data we provide here, though rich in detail, have several limitations.

The first important limitation is that we observe only client assets held in Vanguard retail accounts. We are not able to see how moneys withdrawn from Vanguard are used. In addition, the portfolio we see may not constitute a household's entire financial account wealth. Households may also have financial advisors outside Vanguard, but for this report, only households enrolled in PAS are considered to be advised.

A second limitation is that we rely solely on internal client data, which do not include important characteristics such as the investor's investment objectives, time horizon, or level of risk tolerance.

Ideally, we'd be able to examine how investors spend from their financial accounts, but those data are not available. Instead, we look at withdrawals as our best proxy. A withdrawal is defined as money leaving Vanguard. (Transfers between Vanguard accounts are not considered withdrawals, since these moneys are not being spent.) Because we cannot observe the disposition of assets once they leave Vanguard, it is possible that the investor will reinvest them elsewhere or hold them in a bank account, so although such a transaction is technically a withdrawal, it may not be spent.

Withdrawal activity is aggregated monthly, and to ensure that the activity is meaningful, our analysis considers only monthly withdrawals totaling at least \$100. We examine various withdrawal patterns seen among households on both an annual basis and across the entire three-year period. A household needs only one monthly withdrawal during the study period to be considered a withdrawing household for that period.

<sup>8</sup> See De Luca, Madamba, and Zilbering (2020) for an in-depth look at Vanguard's retail client base.

<sup>9</sup> A funded account contains at least one holding valued at \$1 or more.

### Withdrawal status and household characteristics

Withdrawals from financial accounts are expected to increase as investors approach retirement age and access their accounts for retirement income. Previous research has shown that factors such as age, account type, and tax policy can affect the incidence of withdrawals among this group of investors.

**Figure 1** compares the profile of withdrawing and nonwithdrawing households. Overall, 52% of households took at least one withdrawal at any time between January 1, 2018, and December 31, 2020. Withdrawing households are older than nonwithdrawing ones, though both groups are long-tenured Vanguard clients. Withdrawing households also have lower equity allocations and are more likely to be advised than nonwithdrawing households.

Withdrawing households have significantly higher median account balances. This may indicate that wealthier households are more likely to spend from their accounts, or it may also be that the withdrawing households simply

have a larger share of their wealth at Vanguard. As a result, we are more likely to see any withdrawal activity because our view of their overall financial picture is wider.

### Withdrawal incidence

Given the different rules surrounding withdrawals from IRAs and taxable accounts, we presume that the type of account used to build wealth will be an important determinant of how and when that wealth is accessed. Throughout this paper, where significant behavioral differences are noted, we separately analyze households using taxable accounts and those using IRAs.<sup>10</sup>

**Figure 2** examines withdrawal incidence by age and account type, revealing certain trends.<sup>11</sup> Overall withdrawal incidence is similar across households with taxable accounts and those with IRAs, but wide differences emerge when considering investor age. For households with taxable accounts, withdrawal incidence slightly increases with age. For IRA holders, withdrawals increase substantially once RMD age is reached.

**Figure 1. Just over half of households took a withdrawal in the 2018–2020 period**

Household characteristics by withdrawal status, 2018–2020

|                           |                                     | Nonwithdrawing households | Withdrawing households |
|---------------------------|-------------------------------------|---------------------------|------------------------|
| <b>Proportion</b>         |                                     | 48%                       | 52%                    |
| <b>Median values</b>      | Account owner age                   | 65                        | 72                     |
|                           | Length of account ownership (years) | 20                        | 22                     |
|                           | Account balance                     | \$108,300                 | \$351,600              |
|                           | Equity allocation                   | 68%                       | 61%                    |
| <b>Proportion advised</b> |                                     | 3%                        | 7%                     |
| <b>Account type</b>       | Taxable account(s) only             | 27%                       | 14%                    |
|                           | IRA(s) only                         | 49%                       | 35%                    |
|                           | Taxable and IRA accounts            | 24%                       | 51%                    |

**Notes:** Data are as of December 31, 2020, and cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020.

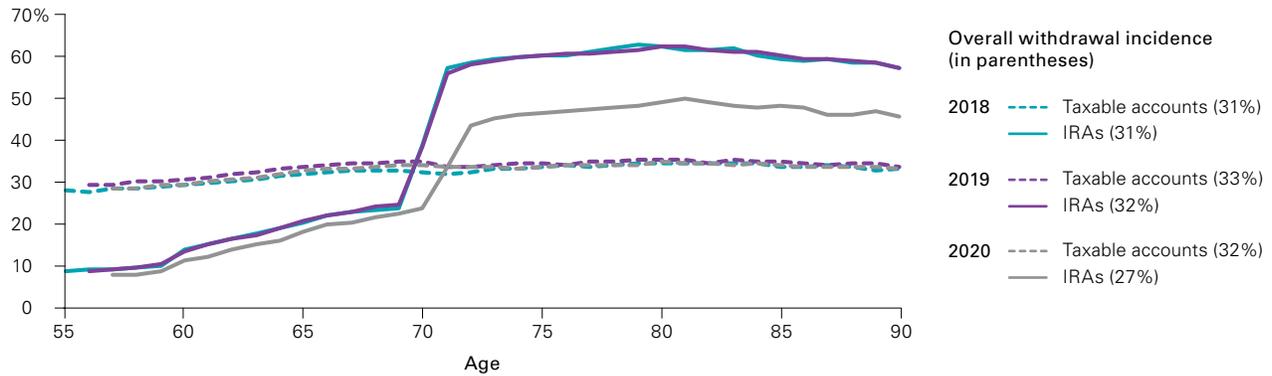
**Source:** Vanguard.

<sup>10</sup> A household is eligible for inclusion in both groups if it has both account types, but only the activity in—and characteristics of—the relevant account type is considered. For example, a household with both account types that took a taxable withdrawal but not an IRA withdrawal would be considered a withdrawing household in the taxable analysis but a nonwithdrawing household in the IRA analysis.

<sup>11</sup> When viewed separately, annual withdrawal incidence from taxable accounts or IRAs is lower than the overall annual withdrawal incidence shown in the Appendix. This is because of households that hold both account types but withdraw from only one type.

**Figure 2. Changes to RMD rules appear to have heavily affected IRA withdrawal incidence in 2020**

Withdrawal incidence from taxable accounts and IRAs by age, 2018–2020



**Note:** Data cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020.  
**Source:** Vanguard.

Withdrawal incidence from taxable accounts by age is comparable year over year. In contrast, 2020 withdrawals from IRAs show a notable shift in the age of apparently RMD-driven withdrawals to 72, consistent with the change made by the SECURE Act. In addition, the proportion of RMD-age households withdrawing declined in 2020, suggesting that at least some households skipped their 2020 RMD as allowed by the CARES Act.

Although we hypothesized that many households would be taking income, overall withdrawal incidence was lower than expected. For younger households, this may simply indicate that many are still working and may draw income later. For investors over age 70, we do see an increase in withdrawal incidence consistent with our hypothesis, though it appears to be a result of RMDs. This does not preclude income-taking, as some investors may have incorporated RMDs into their spending plan. Still, investors who do not need their RMDs may simply reinvest the money. A deeper look into withdrawals and RMDs will be the subject of future research.

### Withdrawal rates

One key consideration in accessing wealth for retirement is sustainability—being able to support and maintain a lifetime income stream from the available financial assets. The optimal withdrawal rate is widely debated and certainly not one-size-fits-all. Various rules, such as dollar plus inflation (more commonly known as the 4% rule) and dynamic spending have been proposed to guide investors.<sup>12</sup>

Although the recommended withdrawal rates may vary somewhat, we expect that investors who desire sustainable income will have low withdrawal rates.<sup>13</sup> For this analysis, we categorize investors based on withdrawal rates.<sup>14</sup> We consider withdrawal rates of 5% or below to meet our sustainable income criteria, though each investor’s situation is unique. For example, for investors with shorter time horizons, or those with non-Vanguard assets we cannot see, a higher withdrawal rate may be sustainable.<sup>15</sup> Income, therefore, is likely a goal of many of the investors who withdraw 6% to 9% of assets. On the other hand, lower withdrawal rates may be necessary for an early and long retirement.<sup>16</sup>

<sup>12</sup> See Jaconetti et al. (2020) and Bengen (1994).

<sup>13</sup> We calculate withdrawal rates for each household by adding the total amount withdrawn throughout the year and dividing it by the beginning-of-year balance.

<sup>14</sup> For categorization purposes, withdrawal rates cited throughout this paper are rounded to the nearest integer.

<sup>15</sup> See Jaconetti et al. (2021).

<sup>16</sup> See Costa, Pakula, and Clarke (2021).

**Figure 3** shows the distribution of observed withdrawal rates across withdrawing households. Conditional on a withdrawal occurring, we find that rates for a given account type remained mostly stable throughout the study period. In each year, just over half of withdrawing households took out 5% or less of their assets. At the same time, about three in 10 households took out 10% or more.

We find large differences across taxable accounts and IRAs in the distribution of withdrawal rates. Among households with IRAs, the rates are generally lower than for households overall. Nearly six in 10 IRA withdrawing households took 5% or less in each year of the study period, potentially indicating a sustainable withdrawal rate. And 19% of households withdrew 6% to 9% of assets. Although this suggests that the accounts are being used for income, for many households it may reflect RMD-taking. Notably, nearly a quarter of IRA withdrawing households took 10% or more from their retirement accounts in each year.

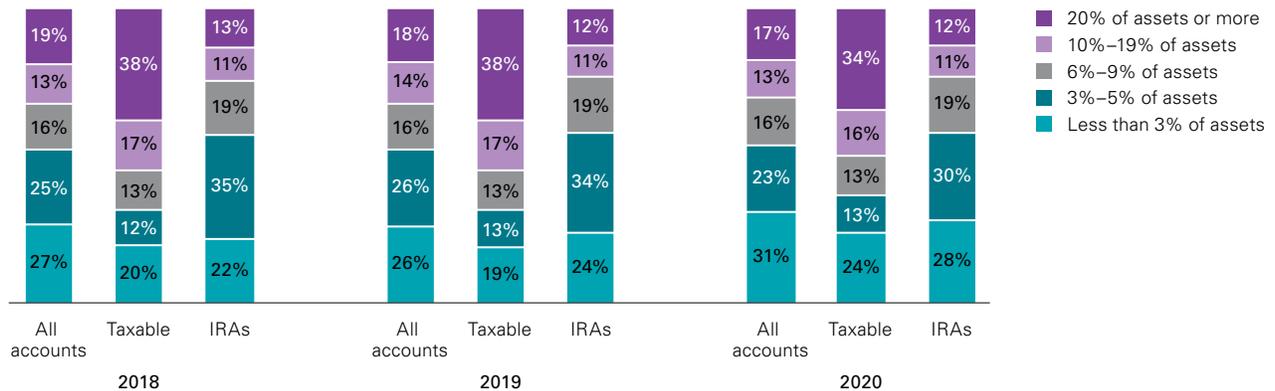
Withdrawal rates from taxable accounts, on the other hand, are more likely to be higher than those from IRAs and for households overall. More than half of households that took withdrawals from taxable accounts took at least 10%, with many taking 20% or more. While these rates are clearly not sustainable year over year, they may indicate the need for ad hoc spending rather than regular income. They can also indicate that a household is able to deplete the account because it has assets elsewhere.

Although annual measures provide valuable insight, retirement income must be sustained over much longer periods. To measure withdrawal rates across our entire study period, we average each household’s rate across all years in which it took a withdrawal. For a household that withdrew in only one year, the average withdrawal rate would equal that year’s rate.

**Figure 4** compares the profile of households with different average withdrawal rates. Using this measure, we find that almost half of households have an average

**Figure 3. Withdrawal rates from IRAs are generally lower than those from taxable accounts**

Withdrawal rate trend, 2018–2020



**Notes:** Data cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020 and a withdrawal in the specified year. For each household, the withdrawal rate is calculated as the total withdrawal amount divided by the beginning-of-year balance.

**Source:** Vanguard.

**Figure 4. Nearly half of households have annual withdrawal rates of 5% or less**

Demographic characteristics by average annual withdrawal rate

|                           |                                     | Less than 3% of assets | 3%–5% of assets | 6%–9% of assets | 10%–19% of assets | 20% of assets or more |
|---------------------------|-------------------------------------|------------------------|-----------------|-----------------|-------------------|-----------------------|
| <b>Proportion</b>         |                                     | 23%                    | 23%             | 16%             | 15%               | 23%                   |
| <b>Median values</b>      | Account owner age                   | 72                     | 74              | 74              | 70                | 67                    |
|                           | Length of account ownership (years) | 24                     | 22              | 22              | 21                | 19                    |
|                           | Account balance                     | \$923,800              | \$450,200       | \$369,800       | \$422,800         | \$65,500              |
|                           | Equity allocation                   | 63%                    | 60%             | 61%             | 62%               | 59%                   |
| <b>Proportion advised</b> |                                     | 10%                    | 8%              | 8%              | 6%                | 4%                    |
| <b>Account type</b>       | Taxable account(s) only             | 8%                     | 6%              | 10%             | 17%               | 30%                   |
|                           | IRA(s) only                         | 17%                    | 45%             | 42%             | 36%               | 38%                   |
|                           | Taxable and IRA accounts            | 75%                    | 49%             | 48%             | 47%               | 32%                   |

**Notes:** Data are as of December 31, 2020, and cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020 and a withdrawal within that period. For each household, the annual withdrawal rate is calculated as total withdrawals divided by the beginning-of-year balance, and the average is taken across all years with a withdrawal.

**Source:** Vanguard.

withdrawal rate of 5% or less, providing evidence of sustainability.<sup>17</sup> Households taking smaller withdrawals have larger balances and are also more likely to hold both taxable accounts and IRAs.

On the other end of the spectrum, households taking 20% of assets or more are younger and have significantly smaller balances. They are also the most likely to have only taxable accounts. These investors may not have income-taking motivations or, if they do, may have other retirement income sources they could tap once their account is depleted.

**Figure 5** (on page 8) shows how withdrawal rates vary by age. Significantly more heterogeneity is seen in the rates for the younger households in our study. For households that took a withdrawal, the typical withdrawal rate declines with age through 70 and then begins to increase.

For younger households, the heterogeneity is likely due to motivations other than income, since many may still be working. For households in their 70s and older, retirement is a more likely rationale, and the observed withdrawal rates are consistent with our hypothesis.

Another likely factor is RMDs. Although the range of withdrawal rates for taxable accounts narrows with age, the tightening of that range is smooth. Among IRAs, however, the range of withdrawal rates narrows significantly after age 70. And the median withdrawal rate from IRAs rises after 70, as does the RMD (as a percentage of assets) mandated by the IRS.<sup>18</sup> For taxable accounts, the median withdrawal rate simply declines with age.

Overall, for many withdrawing households, the observed rates are low, consistent with our hypothesis. Many of these households are likely taking income, but some have other motivations.

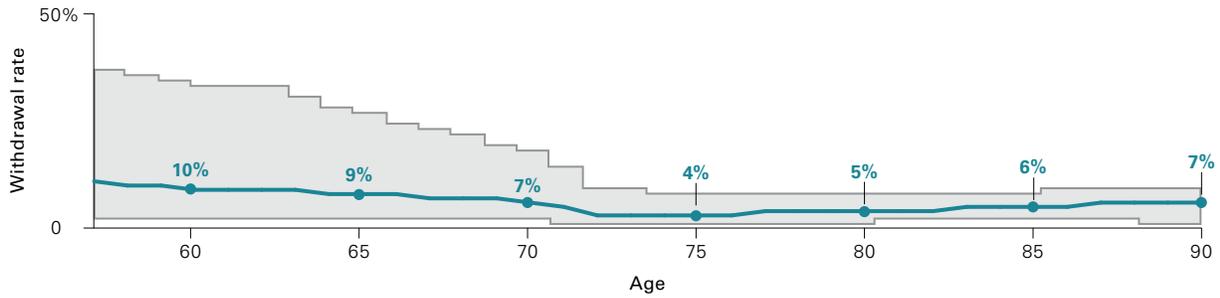
<sup>17</sup> The sustainability interpretation would hold only if the trends observed during the three-year study period suggest longer-term behavior.

<sup>18</sup> See Internal Revenue Service (2021).

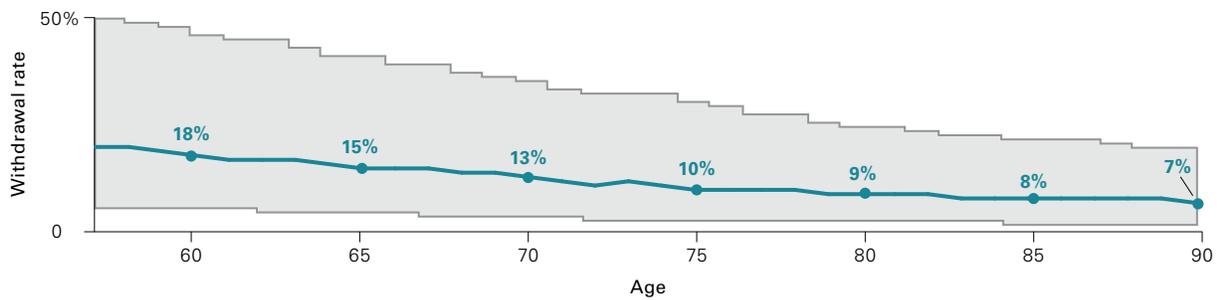
**Figure 5. The range of annual withdrawal rates narrows as investors age**

Range of annual withdrawal rates by age and account types

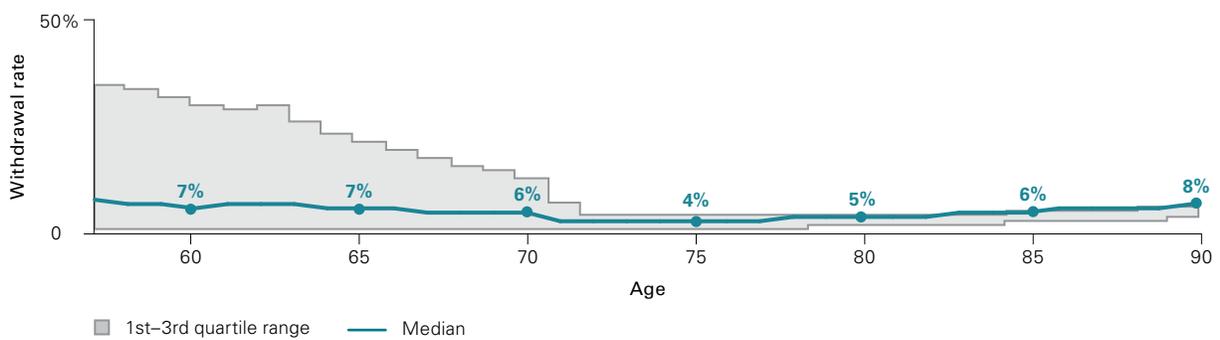
a. All withdrawals (overall median 6%)



b. Taxable account withdrawals (overall median 12%)



c. IRA withdrawals (overall median 5%)



**Notes:** Data cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020 and at least one withdrawal within that period. For each household, the annual withdrawal rate is calculated as the total withdrawal amount divided by the beginning-of-year balance, and the average is taken across all years with a withdrawal. The 1st-3rd quartile range reflects the behavior of the middle half of investors.

**Source:** Vanguard.

## Withdrawal frequency

Absent insight into the motivation for an observed withdrawal, we use withdrawal frequency as another indicator of income-taking. Because income is needed throughout retirement, we expect retirement withdrawals to be frequent. Different investors may define frequent differently, but we assume that withdrawals for retirement income would be taken at least once a year. Withdrawals that appear to be regular (monthly, quarterly, or semiannual) also are more likely

to indicate income-taking. An investor who is not focused on taking regular income, on the other hand, may be more apt to take an ad hoc withdrawal.

**Figure 6** compares household profiles based on withdrawal frequency during our study period. From 2018 through 2020, just over half of withdrawing households took a withdrawal in all three years. These households are older, have larger balances, and are more likely to have multiple account types. Households that withdraw in only one year are younger and have a higher median withdrawal rate.

**Figure 6. Over half of households that withdraw do so at least annually**

Household characteristics by withdrawal frequency

|   |                                     | One<br>withdrawal<br>year | Two<br>withdrawal<br>years | Three<br>withdrawal<br>years |
|---|-------------------------------------|---------------------------|----------------------------|------------------------------|
| <b>Proportion of withdrawing households</b> |                                     | <b>24%</b>                | <b>24%</b>                 | <b>52%</b>                   |
| <b>Median values</b>                        | Account owner age                   | 67                        | 71                         | 74                           |
|   | Length of account ownership (years) | 21                        | 21                         | 22                           |
|   | Account balance                     | \$229,400                 | \$300,200                  | \$458,100                    |
|   | Equity allocation                   | 64%                       | 62%                        | 60%                          |
| <b>Proportion advised</b>                   |                                     | <b>6%</b>                 | <b>7%</b>                  | <b>8%</b>                    |
| <b>Median annual withdrawal rate</b>        |                                     | <b>9%</b>                 | <b>6%</b>                  | <b>6%</b>                    |
| <b>Account type</b>                         | Taxable account(s) only             | 23%                       | 15%                        | 10%                          |
|   | IRA(s) only                         | 34%                       | 37%                        | 35%                          |
|   | Taxable and IRA accounts            | 43%                       | 48%                        | 55%                          |

**Notes:** Data are as of December 31, 2020, and cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020 and a withdrawal within that period. For each household, the annual withdrawal rate is calculated as the total withdrawal amount divided by the beginning-of-year balance, and the average is taken across all years with a withdrawal any time within that period.

**Source:** Vanguard.

**Figure 7** further explores the relationship between withdrawal frequency and rates. That relationship seems to be U-shaped. The households on the tails of our distribution—those with the highest and lowest withdrawal rates—are more likely than the other groups to withdraw in a single year. These households’ withdrawal frequencies indicate that funding regular spending in retirement may be less of a motivation.

On the other hand, more than six in 10 households that withdraw 3% to 5% of their assets also withdraw every year. These households have both sustainable withdrawal rates and frequent withdrawals and are most likely to be income-takers. Households taking 6% to 9% of assets are also likely to withdraw each year. Although these withdrawal rates are higher than 5%, it’s likely that some of these households are also taking income.

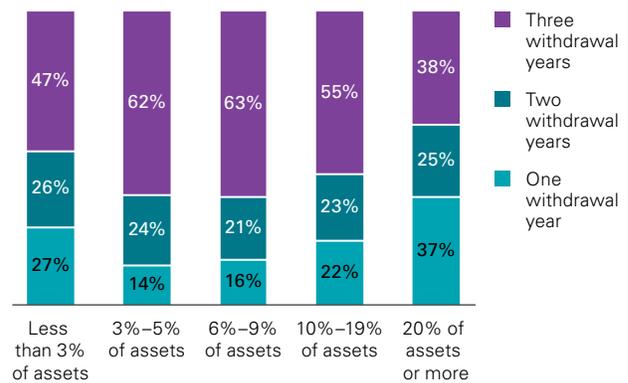
**Figure 8** looks deeper into households that withdrew in all three years. About one in five took a single withdrawal each year, while one in 10 took withdrawals on a monthly, quarterly, or semiannual schedule. The rest took multiple annual withdrawals on a seemingly irregular schedule.

Households taking withdrawals on a regular schedule are significantly more likely to be advised than those taking one withdrawal each year, though both groups are more likely to have low withdrawal rates consistent with income-taking than households taking irregular withdrawals. This may indicate that advised investors who seek income are more likely to withdraw on a regular schedule, or perhaps that many of these once-a-year withdrawals are for RMDs.

Households taking withdrawals at least annually, but on an irregular schedule, have more heterogeneous withdrawal rates. Although this may suggest a wider variety of goals among this group, income generation remains a likely consideration—though maybe not the only reason—for many of them. For example, an investor may wish to draw income from an IRA while taking ad hoc withdrawals from a taxable account.

**Figure 7. Households with sustainable withdrawal rates are more likely to withdraw every year**

Relationship between withdrawal rates and frequency



**Notes:** Data cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020 and a withdrawal at any time within that period. For each household, the annual withdrawal rate is calculated as the total withdrawal amount divided by the beginning-of-year balance, and the average is taken across all years with a withdrawal.

**Source:** Vanguard.

**Figure 9** offers a final comparison of withdrawals from taxable accounts and IRAs and illustrates the different ways the accounts are used. Although taxable accounts can be used for retirement income, we would expect to see income streams being taken from IRAs at proportionally greater rates than from taxable accounts. Based on our assumptions about income-taking, this is exactly what we find.

Overall withdrawal incidence during our study period was lower for IRAs than for taxable accounts, but IRA holders who withdrew were more likely to do so every year. Furthermore, taxable account holders who withdrew all three years were much more likely to do so on an irregular schedule than IRA investors who did the same. Finally, withdrawal rates for IRA holders are lower and therefore more likely to be sustainable. All these IRA behaviors indicate income-taking, but further study is required to quantify the impact of RMDs on retirement spending.

**Figure 8. The majority of households withdrawing annually do so on an irregular schedule**

Characteristics of households that withdrew in each year, 2018–2020

|  | One withdrawal each year            | Regular withdrawals each year* | Irregular withdrawals each year |
|--|-------------------------------------|--------------------------------|---------------------------------|
| <b>Proportion of households withdrawing annually</b> | 19%                                 | 10%                            | 71%                             |
| <b>Median values</b>                                 | Account owner age                   | 76                             | 73                              |
|  | Length of account ownership (years) | 21                             | 23                              |
|  | Account balance                     | \$144,100                      | \$591,900                       |
|  | Equity allocation                   | 63%                            | 60%                             |
| <b>Proportion advised</b>                            | 3%                                  | 13%                            | 9%                              |
| <b>Median annual withdrawal rate</b>                 | 4%                                  | 6%                             | 7%                              |
| <b>Average annual withdrawal rate</b>                | Less than 3% of assets              | 27%                            | 20%                             |
|  | 3%–5% of assets                     | 42%                            | 22%                             |
|  | 6%–9% of assets                     | 20%                            | 19%                             |
|  | 10%–19% of assets                   | 6%                             | 18%                             |
|  | 20% of assets or more               | 5%                             | 21%                             |
| <b>Account type</b>                                  | Taxable account(s) only             | 3%                             | 12%                             |
|  | IRA(s) only                         | 65%                            | 26%                             |
|  | Taxable and IRA accounts            | 32%                            | 62%                             |

\*Regular withdrawals are those taken monthly, quarterly, or semiannually.

**Note:** Data are as of December 31, 2020, and cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020 and at least one withdrawal in each of those years. For each household, the annual withdrawal rate is calculated as total withdrawals divided by the beginning-of-year balance, and the average is taken across all years with a withdrawal.

Source: Vanguard.

**Figure 9. IRAs and taxable accounts show key differences in withdrawal behavior**

Summary of taxable accounts and IRAs, 2018–2020

|   | Taxable accounts                | IRAs |
|---|---------------------------------|------|
| <b>Proportion withdrawing</b>                                   | 47%                             | 41%  |
| <b>Average withdrawal rate (withdrawing accounts)</b>           | Less than 3% of assets          | 27%  |
|   | 3%–5% of assets                 | 29%  |
|   | 6%–9% of assets                 | 17%  |
|   | 10%–19% of assets               | 12%  |
|   | 20% of assets or more           | 15%  |
| <b>Withdrawal frequency (withdrawing accounts)</b>              | One withdrawal year             | 25%  |
|   | Two withdrawal years            | 29%  |
|   | Three withdrawal years          | 46%  |
| <b>Withdrawal frequency (accounts withdrawing in all years)</b> | One withdrawal each year        | 34%  |
|   | Regular withdrawals each year   | 9%   |
|   | Irregular withdrawals each year | 57%  |

**Notes:** Data cover Vanguard retail households of investors 55 years and older with continuous accounts from 2018 through 2020. For each household, the annual withdrawal rate is calculated as the total withdrawal amount divided by the beginning-of-year balance, and the average is taken across all years with a withdrawal. Regular withdrawals are those taken monthly, quarterly, or semiannually.

Source: Vanguard.

## Implications

**Goals and motivations.** Identifying goals for the assets is an important step in financial planning, as different assets may be earmarked for different goals. Although income generation appears to be a primary goal for about half of withdrawing households in our study, the heterogeneity in overall withdrawal rates suggests a wide variety of investor objectives. Other investors, moreover, may opt to continue building wealth into their retirement years, perhaps for bequest or health care motives. Given the variety of objectives, having a spending plan that features a goals-based strategy could help maximize the chance of achieving financial goals in retirement.

**Withdrawal rates.** The topic of retirement spending inevitably focuses on sustainable withdrawal rates from financial accounts. Our results show that withdrawals appear sustainable, particularly from IRAs, where income-taking seems more apparent. Over half of IRA investors have an average withdrawal rate of 5% or less. Still, a sizable minority of IRA investors are withdrawing at rates of 10% or more. Assuming we are observing their whole portfolio, this would risk an income shortfall if the withdrawals were to continue at that pace. That said, other research suggests that because some withdrawals tend to be reinvested, assessing the sustainability of savings should instead consider the spending rate, data that we do not have.<sup>19</sup>

**Withdrawal frequency.** For income takers, developing a regular withdrawal schedule requires careful planning and may act as a guardrail against overspending. With such a plan, withdrawals are determined ahead of time based on rational factors—not determined in the moment and possibly driven by emotion. Our research shows that about half of withdrawing households take a withdrawal at least annually, with a notable subset doing so more frequently. But a significant portion take irregular withdrawals, even from IRAs. This could indicate income-taking plus some ad hoc spending, suggesting that allowances for ad hoc spending should be considered in any withdrawal plan.

**Tax policy.** The incidence of withdrawals from taxable accounts varies little with age, but IRA investors of RMD age are significantly more likely to withdraw than younger IRA investors. In addition, the changes to RMD rules under the SECURE and CARES Acts appear to have heavily affected the incidence of withdrawals from IRAs in 2020. These findings highlight the potential impact of policy on an investor's planning and need for advice. For example, would investors taking RMDs that they don't need to spend require help in deciding how to reinvest the assets? Or do they need coaching about whether and where they could spend them?

**Role of advice.** As investors transition from saving to spending in retirement, they face complex decisions such as creating a retirement paycheck, making assets last a lifetime, and paying for potentially significant health care costs. Financial advisors could help prepare investors by developing a retirement income strategy and spending plan. On the other hand, some investors may be underspending, reluctant to spend their nest egg even at the expense of enjoying retirement. Advisors could draw up scenarios and provide reassurance that it is acceptable to spend.

## Conclusion

Using a sample of two million retail households at or near retirement age, we compare observed withdrawal trends to a set of expectations for sustainable income-taking. Withdrawals overall are not as prevalent among retirement-age Vanguard households as one might expect if they were withdrawing for income. Only 52% percent of households took a withdrawal from their financial accounts at Vanguard during our study period.

Households with a withdrawal display wide heterogeneity in how they access the assets in their Vanguard accounts. IRA investors are more likely to have regular withdrawals and low withdrawal rates, characteristic of income-taking; this can also be a result of tax policy, specifically RMDs. On the other hand, taxable withdrawals tend to be irregular and to be made at higher withdrawal rates.

## References

- Bengen, William P., 1994. Determining Withdrawal Rates Using Historical Data. *Journal of Financial Planning* 7(4): 171–180.
- Brown, Jeffrey R., James Poterba, and David P. Richardson, 2017. Do Required Minimum Distribution Rules Matter? The Effect of the 2009 Holiday on Retirement Plan Distributions. *Journal of Public Economics* 151(July): 96–109.
- Costa, Paulo, David Pakula, and Andrew S. Clarke, 2021. *Fuel for the F.I.R.E.: Updating the 4% Rule for Early Retirees*. Valley Forge, Pa.: The Vanguard Group.
- De Luca, Thomas J., Anna Madamba, and Yan Zilbering, 2020. *How America Invests*. Valley Forge, Pa.: The Vanguard Group.
- Hurd, Michael D., and Susann Rohwedder, 2015. *Measuring Economic Preparation for Retirement: Income Versus Consumption*. Working Paper WP 2015-332. Ann Arbor, Mich.: Michigan Retirement Research Center, University of Michigan; available at [papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2712684](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2712684).
- Internal Revenue Service, 2021. *Retirement Plan and IRA Required Minimum Distributions FAQs*; available at [www.irs.gov/retirement-plans/retirement-plans-faqs-regarding-required-minimum-distributions](https://www.irs.gov/retirement-plans/retirement-plans-faqs-regarding-required-minimum-distributions).
- Jaconetti, Colleen M., Jonathan Kahler, Kelly McShane, and Nathan Zahm, 2021. *Vanguard's Roadmap to Financial Security: A Framework for Decision-Making in Retirement*. Valley Forge, Pa.: The Vanguard Group.
- Jaconetti, Colleen M., Michael A. DiJoseph, Francis M. Kinniry Jr., David Pakula, and Hank Lobel, 2020. *From Assets to Income: A Goals-Based Approach to Retirement Spending*. Valley Forge, Pa.: The Vanguard Group.
- Khang, Kevin I., and Andrew S. Clarke, 2020. *Safeguarding Retirement in a Bear Market*. Valley Forge, Pa.: The Vanguard Group.
- Madamba, Anna, and Stephen P. Utkus, 2019. *Withdrawals From Financial Accounts in Retirement*. Valley Forge, Pa.: The Vanguard Group.
- Love, David A., Michael G. Palumbo, and Paul A. Smith, 2008. The Trajectory of Wealth in Retirement. *Journal of Public Economics* 93(1–2): 191–208.
- Poterba, James, Steven Venti, and David Wise, 2011. The Composition and Drawdown of Wealth in Retirement. *Journal of Economic Perspectives* 25(4): 95–118.
- Vanguard, 2020a. *CARES Act Lets You Skip Your 2020 Distribution*. Valley Forge, Pa.: The Vanguard Group.
- Vanguard, 2020b. *Key Provisions of the SECURE Act*. Valley Forge, Pa.: The Vanguard Group.

**Appendix. Household characteristics**

Figure A-1 describes the characteristics of all households included in our sample. As of December 31, 2020, the typical household in our sample constituted investors

who were 68 years old, who had been Vanguard clients for 21 years, and who held nearly \$200,000 across all Vanguard accounts.

Figure A-1. About four in 10 households 55 or older took a withdrawal in each year of the study period

|  | 2018                                | 2019       | 2020       |           |
|--|-------------------------------------|------------|------------|-----------|
| <b>Number of households 55 and older</b>     | 2 million                           | 2 million  | 2 million  |           |
| <b>Proportion withdrawing at least \$100</b> | <b>40%</b>                          | <b>42%</b> | <b>38%</b> |           |
| <b>Median values</b>                         | Account owner age                   | 66         | 67         | 68        |
|  | Length of account ownership (years) | 19         | 20         | 21        |
|  | Account balance                     | \$145,400  | \$175,200  | \$197,800 |
|  | Equity allocation                   | 64%        | 65%        | 64%       |
| <b>Proportion advised</b>                    | 4%                                  | 5%         | 5%         |           |
| <b>Account type</b>                          | Taxable account(s) only             | 20%        | 20%        | 20%       |
|  | IRA(s) only                         | 43%        | 42%        | 42%       |
|  | Taxable and IRA accounts            | 37%        | 38%        | 38%       |

Note: Data are as of December 31, 2020, and cover Vanguard retail households of investors 55 and older with continuous accounts from 2018 through 2020.  
Source: Vanguard.

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