



Spending and saving in retirement

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- The retirement income profile of wealthier retirees is varied and complex. The relative importance of guaranteed income, withdrawals from financial accounts, wages, and other income varies markedly by retirement income profile. We provide a view of this complexity for the first time by creating retirement income schematics for different groups of investors.
- The shift from guaranteed income to withdrawals from financial accounts is evident in the four largest retirement income profiles. Two Traditional Retirement segments derive more than half of income from guaranteed sources, versus about 20% of income from financial accounts. By comparison, the two largest New Retirement profiles derive one-quarter of income from guaranteed sources, but more than 40% of total income from financial accounts.
- Among our affluent sample, saving continues into retirement. On average, 31% of income is saved, suggesting a strong precautionary saving motive in the early years of retirement. This is consistent with research on the effect of later-in-life health expenses and bequests on retirement income and saving decisions.
- Traditional Retirement investors spend about 75% of their income, while New Retirement investors spend around two-thirds. This implies that those with more guaranteed income tend to spend more than those relying primarily on financial account assets, perhaps due to the greater certainty of income.
- In almost all investor segments, most retirement income that is saved is reinvested into liquid asset accounts. These flows could be motivated by anticipation of future spending needs, risk aversion, or inertia in reinvesting saved money during retirement.
- Wages are an important income source for all of our investor segments. This is particularly true for the Retirement Investor profile where wealth is concentrated in IRAs and employer plan accounts. This finding is consistent with research suggesting that retirement accounts may extend participation in the labor market.
- These findings have several implications. Income advice for wealthier retirees will need to be tailored to the variety and complexity of income sources and wealth holdings. A growing fraction of retirees will need help with income strategies from financial accounts as the New Retirement investors continue to emerge. Attention must also be focused on how much households are saving and spending in retirement; it is not enough to plan for income generation alone. And finally, retirees may benefit from advice on how to reinvest saved income in lieu of building large balances in liquidity accounts.

Introduction

Financial accounts are expected to play a growing role in generating income in retirement, particularly as traditional pensions decline in favor of account-based, defined contribution plans. There are many models of how investors should generate income from financial accounts, including the well-known 4% spending rule and more dynamic approaches to withdrawal strategies.¹ Yet little is known about the actual flow of money from financial accounts and how these compare with other sources of income, including Social Security, pensions, and work earnings. Moreover, some of the leading public statistics on retirement income have historically excluded ad hoc or aperiodic withdrawals from financial accounts from their estimates, underestimating income for those who own such accounts.²

In this paper, we attempt to provide a comprehensive view of income and spending flows, including the role of financial accounts, among a specific group of U.S. retired households—those with at least \$100,000 in financial assets of any kind. We chose this population because financial assets were of some meaningful size, and patterns observed among this population might provide insight into the future as financial assets become more pervasive as a source of retirement income. However, the findings from this survey must be interpreted cautiously in projecting results to a broader population, given the higher income and wealth characteristics of this survey group.

We aim to answer the following questions:

- What proportion of retirement income is spent, as opposed to saved, in a year?
- How do spending and saving patterns vary depending on the income and financial account holdings in the household?
- What is the relative impact of guaranteed income sources versus financial account sources on spending and saving behavior?

In an earlier study using the survey, we identified eight different investor segments based on the types of non-housing wealth owned in retirement (**Figure 1**). Two major groups included the Traditional Retirement category, characterized by a high proportion of wealth from guaranteed income sources such as Social Security and traditional pensions, and the New Retirement category, characterized by greater wealth in financial accounts. A third group, the Specialty Retirement category, consisted of those with a high proportion of non-housing wealth from business sources or real estate.

This study examines the flow of income, spending, and saving for the four largest segments: Social Security recipients and Pensioners from the Traditional Retirement category and Retirement investors and Taxable investors from the New Retirement category. All together, these four segments make up 85% of our sample of wealthier retirees.

¹ See Bengen, 1994, for discussion of 4% spending rule. Also see Jaconetti et al., 2016, on one approach to a dynamic spending approach.

² Painting a picture of comprehensive retirement spending and saving behavior is challenging. Several studies look at consumption and saving separately (Ameriks et. al., 2007, 2011, 2015; Banerjee, 2012; Hurst, 2008). Others provide a partial view of retirement income due to incomplete income sources. For example, measures of income typically do not include non-systematic withdrawals from financial accounts. Research has shown that including these sources would increase the median reported income by 18% (Iams and Purcell, 2013).

Figure 1. Eight investor groups

Investor groups	Percentage of sample*	Median income	Median financial account wealth	Median total non-housing wealth	Mean proportion of Social Security and pension wealth (% of total non-housing wealth)	Dominant retirement holding (% of total non-housing wealth)
Traditional Retirement						
Social Security recipients	26%	\$54,200	\$181,000	\$745,849	70%	Social Security (58%)
Pensioners	24%	\$87,000	\$315,000	\$1,408,758	70%	Private or public sector pensions (53%)
New Retirement						
Retirement investors	18%	\$71,000	\$749,050	\$1,144,312	26%	Employer DC plans and IRAs (56%)
Taxable investors	17%	\$75,000	\$934,000	\$1,582,398	25%	Taxable brokerage and mutual fund accounts (45%)
Liquidity investors	4%	\$41,000	\$358,000	\$672,884	26%	Bank deposit and money market funds (48%)
Annuity investors	5%	\$57,900	\$398,000	\$848,063	32%	Insurance and annuity contracts (45%)
Specialty Retirement						
Real estate investors	3%	\$83,280	\$328,500	\$1,420,253	22%	Income from real estate investments (43%)
Business investors	2%	\$102,000	\$290,000	\$1,791,351	18%	Business and self-employment (59%)
All investors	100%	\$69,500	\$395,000	\$1,135,754	48%	

Note: Non-housing wealth includes present value of Social Security, pension benefits and trust income, capitalized real estate and business income, actual value of inheritance or one-time gift income, plus financial assets, excluding housing.

* May not add up due to rounding.

Source: Vanguard, 2015.

Methodology

The data for this study is from a proprietary survey of more than 2,600 U.S. households with household heads age 60–79 and at least one household member partially or completely retired. Households were also required to have a minimum of \$100,000 in financial assets of any kind. Data collection was conducted in the spring of 2012.

Our survey gathered pertinent household financial information, including all types of financial accounts and all sources of income. (See Figure 2 for a glossary of terms.) The survey used an innovative, granular approach to gathering data on financial assets and income sources. Rather than asking respondents for total assets in individual retirement accounts (IRAs) or for total income from pensions, respondents identified individual accounts (Bob’s IRA at Bank ABC, Bob’s IRA at fund company XYZ, Anne’s 401(k) at Acme Manufacturing). The same was true of income sources.

Once detailed account or income sources had been documented, retirees were asked what proportion of the income source or the withdrawal from the financial account was spent or saved. For the amount spent, they were asked what it was spent on, and for the amount saved, where it was saved.

Note that spending and saving are terms referring to the flow of money in the household, not the stock of assets held. For example, if a household has \$100,000 in a brokerage account and receives income (either dividend or income or a withdrawal of capital) of \$5,000, the \$5,000 is the total income from this account. It might be further characterized as \$4,000 in spending, which may have been spent on routine living expenses and a big-ticket item, along with \$1,000 in saving, which may have been reinvested in a bank account.

Distinguishing between saving and spending is particularly important for tax-advantaged retirement accounts. Under federal tax law, account owners must generally begin withdrawals from tax-advantaged retirement accounts, whether held in an employer plan or in an IRA, beginning after age 70½. These required minimum distribution (RMD) withdrawals will appear as income. And it is ultimately an empirical question whether this money actually results in retirement spending, saving, or some combination of the two.

Figure 2. Glossary of terms

Terms	Definition
Account types	
Cornerstone accounts	Individual retirement accounts (IRAs), employer-sponsored retirement accounts, mutual fund accounts, brokerage accounts
Liquid accounts	Certificates of deposit (CDs), bank savings and checking accounts, money market accounts
Specialty accounts	Pension accounts with a balance, other types of tax-deferred accounts, annuities with a balance, life insurance with cash value
Income sources	
Guaranteed income	Income primarily from Social Security payments and defined benefit pensions; also includes annuity payments
Withdrawals from financial accounts	Interest or dividend or other income plus withdrawals of capital from any type of financial account
Wage income	Wages or salary from part-time or full-time work
Other income	Variety of income sources including: business, real estate, or trust income; government assistance besides Social Security; private or public disability income; financial support from family, inheritance and other one-time gifts; and sale of personal property, reverse mortgage income, and others
Expenses	
Routine expenses	Mortgage expense; routine home, household, transportation, and medical expenses; taxes
Discretionary expenses	Major home expenses, major medical expenses, vehicle purchases, other big-ticket items, travel and entertainment, charity, and other credit card expenses

Source: Vanguard, 2015.

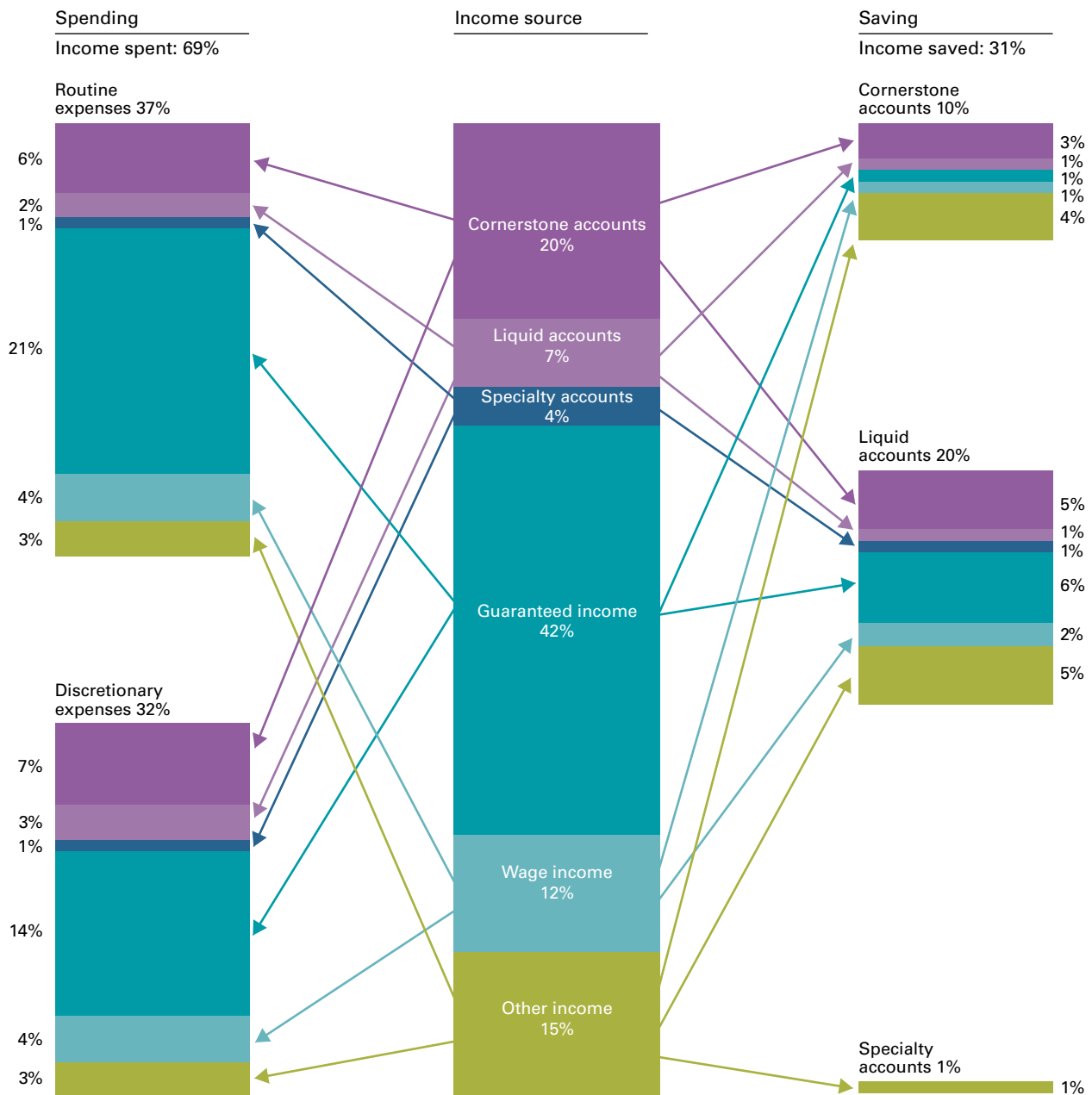
Aggregate view of income flows

We have developed a schematic of income, spending, and saving to summarize our most important findings. Our first schematic begins with the entire survey sample of wealthier retirees (Figure 3). The middle of the schematic—income source—includes three types of financial accounts, guaranteed income sources, wage earnings, and a final category of other income. Arrows flowing to the left represent spending on either routine or discretionary expenses. Arrows flowing to the right represent saving and the accounts in which the saved

income is reinvested. The arrow destinations are scaled to the fraction of total income, whether spent or saved. For example, a 4% label on an arrow destination means that 4% of total income moved in the direction of that arrow.

This aggregate view highlights several distinct characteristics of our affluent retiree sample. First, 42% of total income is derived from guaranteed sources (Social Security and private or public pensions). Of that amount, about 17% (7% out of 42%) is saved, while the majority is spent, with more going to routine living expenses.

Figure 3. Aggregate retirement income flows for all investors



Note: Figures may not add up due to rounding.
Source: Vanguard, 2015.

Second, withdrawals from cornerstone accounts (brokerage, mutual fund, IRA, and employer plan accounts) represent 20% of total income. Some 40% of these withdrawals are reinvested (8% out of 20%), while 60% of withdrawals are spent, with spending balanced between routine and discretionary expenses.

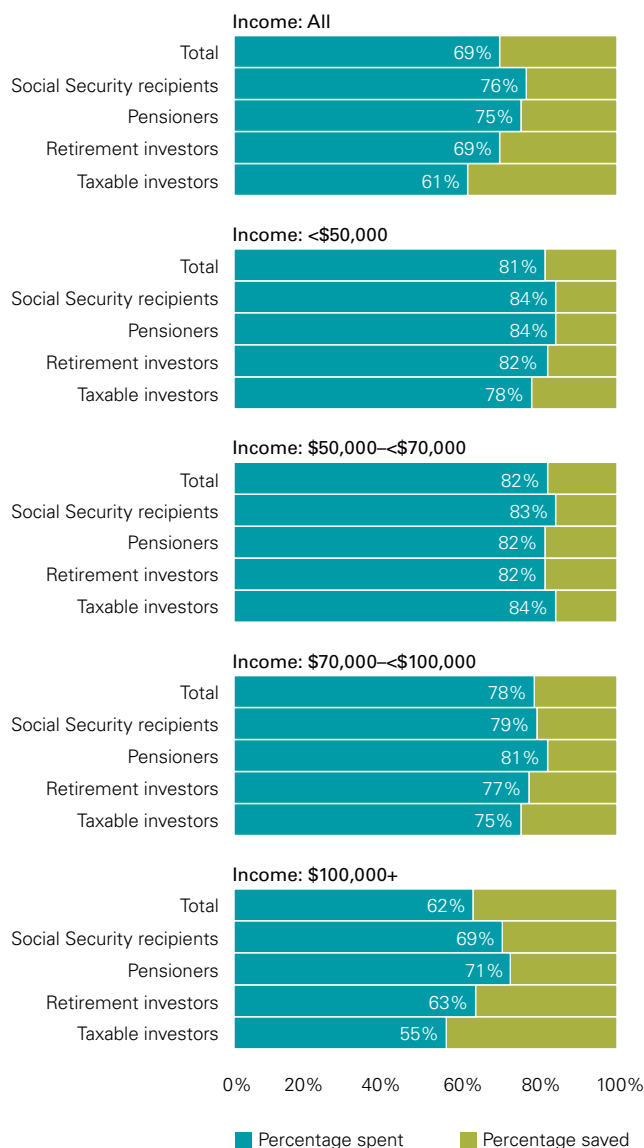
Another notable feature is that 12% of income—around one in eight dollars of income—comes from work earnings. It is worth noting again that the head of household for our survey respondents ranged from age 60–79, and survey criteria required only one household member to be partially or fully retired. As a result, work earnings may result from at least one partner in the household not having exited the workforce at all, or one or more of the members of a two-person household continuing some part-time participation in the workforce.

In total, the majority (69%) of income is spent, more for routine than discretionary expenses, and a minority (31%) of total income is saved. Among the retirement income that is saved, about two-thirds of all savings goes into liquid accounts. This shift of money from cornerstone accounts with longer-term investments into liquid accounts may be motivated by several factors: households anticipating upcoming spending needs, risk aversion (meaning a desire to keep assets in safer investments), or inertia in reinvesting withdrawals from long-term accounts. For example, a household required to make RMD withdrawals from IRAs or employer plan accounts may move the funds into a liquid account and plan to reinvest the money, but may fail to do so.

How does the tendency to save income in retirement vary across our survey population? We examined the fraction of total income spent versus saved at different income levels; we further classified them by investor profile (Figure 4). As expected, higher-income households save a larger fraction of income than lower-income households. Also, among all households, the two traditional retirement profiles save only one-quarter of income, while the two profiles with higher levels of financial account assets save one-third of income. In other words, those with more guaranteed income may face less risk in spending because they have an assured income source; therefore, they tend to spend more.

The same phenomenon is also observed at the account level. For example, among households with IRAs, Traditional Retirement households with more guaranteed income are more likely to spend required minimum distributions (RMDs) than New Retirement households relying on financial accounts.³

Figure 4. Aggregate spending and saving by investor group and income



Source: Vanguard, 2015.

³ When comparing the spending and saving of IRA withdrawals in households of pre- and post-RMD age, the latter have higher median savings. Furthermore, within post RMD-age households, Traditional Retirement groups save a lower proportion of their IRA withdrawals, at the median, compared with the New Retirement group (31% and 49%, respectively).

Traditional Retirement view

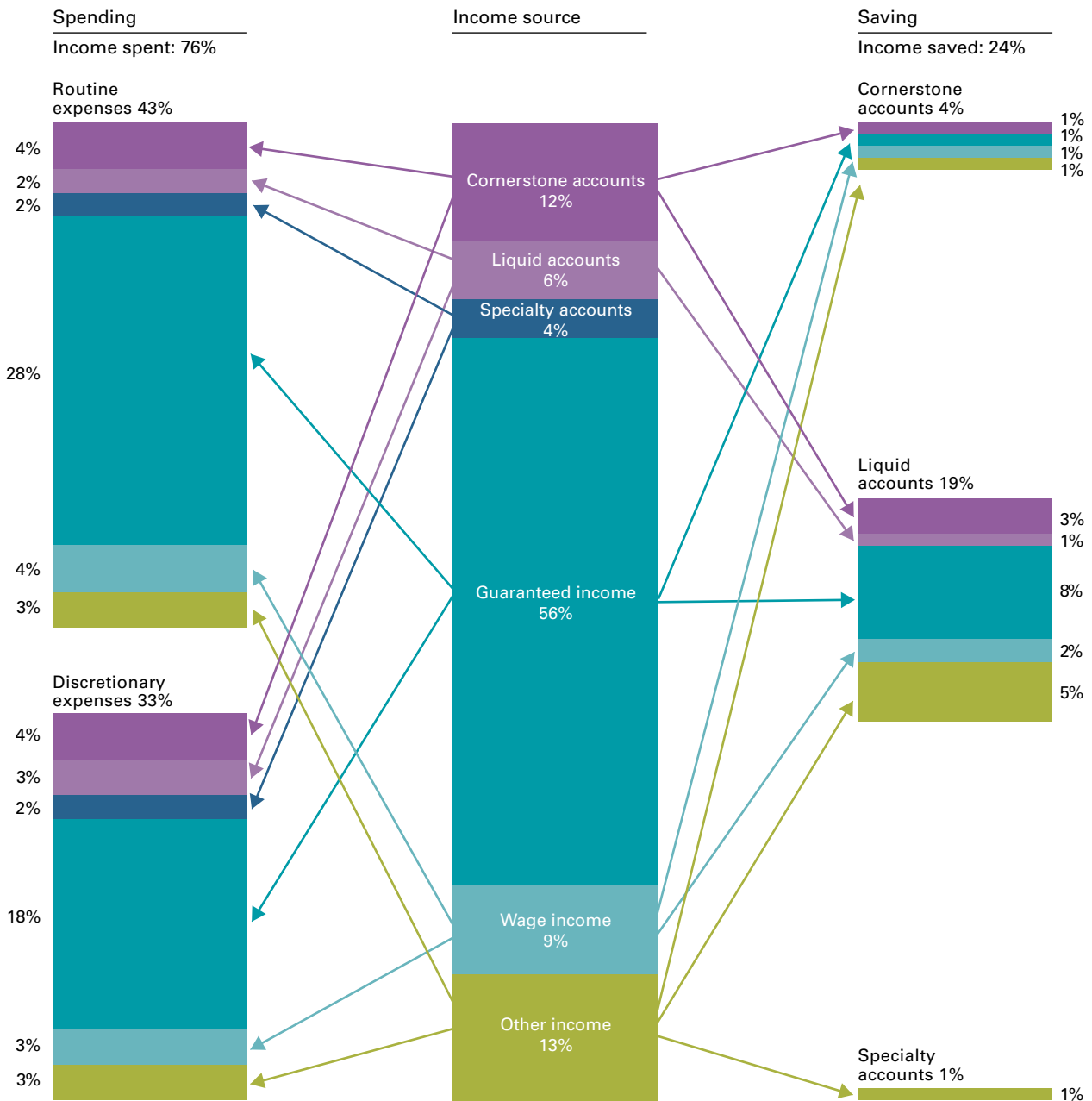
In this and the next section, we compare the spending and saving patterns of the four biggest segments in our study: Social Security recipients and Pensioners in the Traditional Retirement group and Retirement investors and Taxable investors in the New Retirement group.

In the case of both Social Security recipients (Figure 5) and Pensioners (Figure 6, page 8), retirement income flows are dominated by guaranteed income—56% for Social Security recipients, and 65% for Pensioners.

Cornerstone accounts are a relatively modest fraction of total income at 12% and 11%, respectively, and serve a supplemental role. Wages are about 10% of income for both groups.

Both Social Security recipients and Pensioners spend about three-quarters of their total income, with the remaining one-quarter being saved. Even among households with large sources of guaranteed income, saving is a notable characteristic.

Figure 5. Aggregate retirement income flows: Social Security Recipients



Note: Figures may not add up due to rounding.
Source: Vanguard, 2015.

Seventy-six percent of Social Security recipients' retirement income is spent. Spending is a third more likely to be used on routine expenses than discretionary, reflecting the generally lower income characteristics of this group. For Pensioners, routine expenses are only about 14% larger than discretionary expenses.

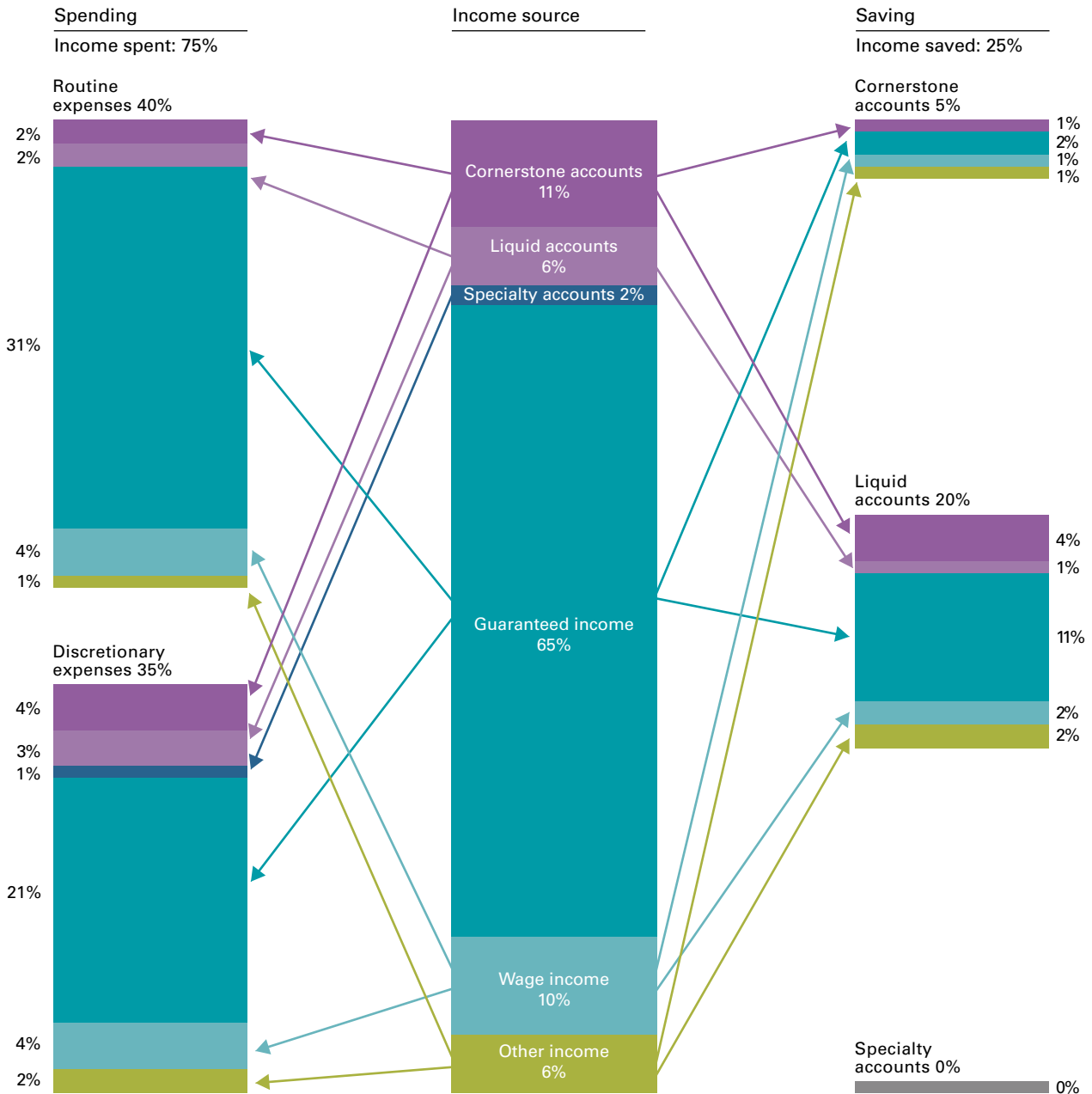
For both of these groups, income that is saved is overwhelmingly directed to liquid accounts. A total of 80% of total savings goes into liquid assets.

New Retirement view

For the two New Retirement investor categories, Retirement Investors (Figure 7) and Taxable Investors (Figure 8, page 10), there are some striking differences worth noting compared with the Traditional Retirement segments:

- Guaranteed income sources represent only about one-quarter of total income, less than half of Traditional Retirement segments.

Figure 6. Aggregate retirement income flows: Pensioners

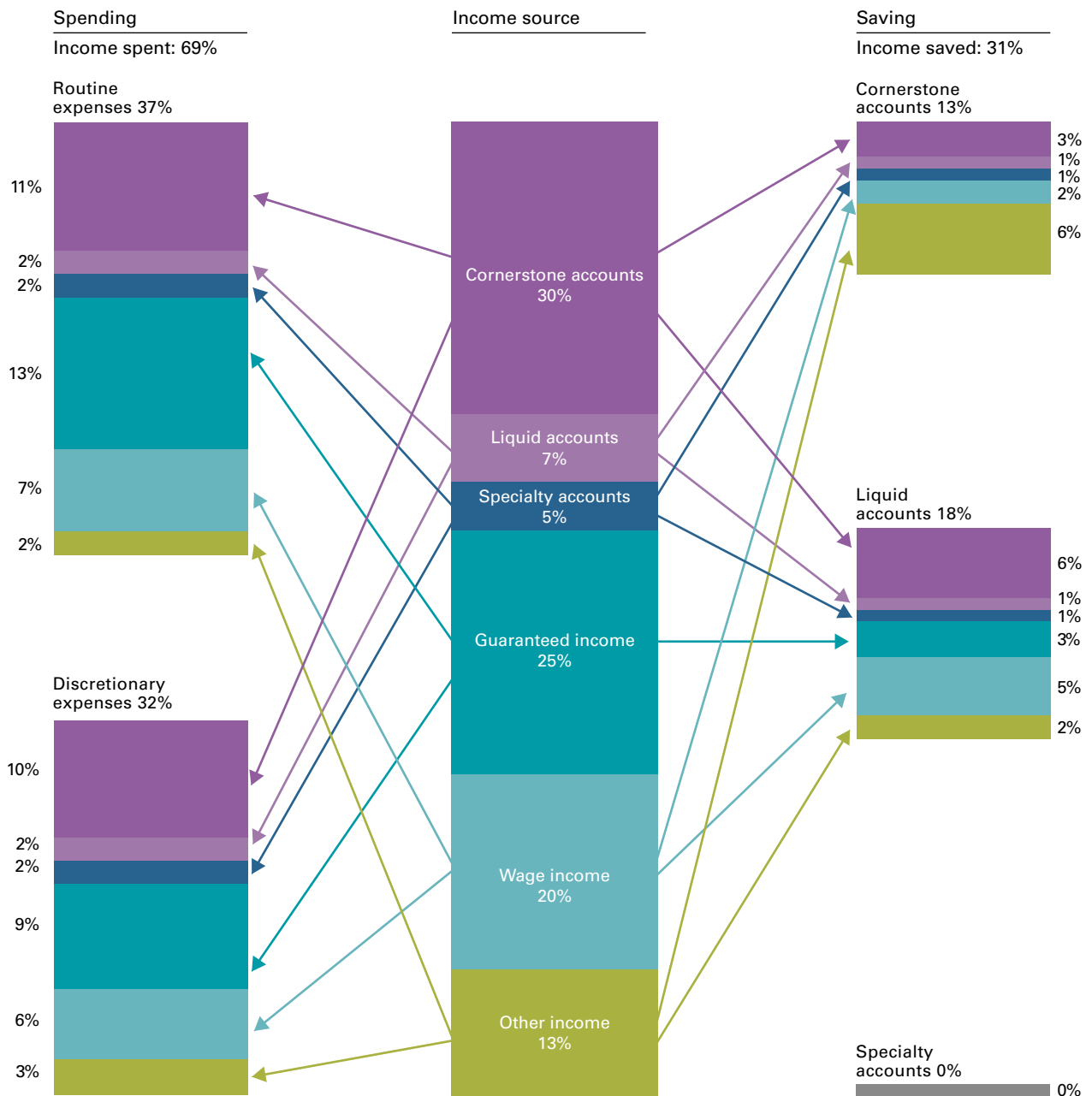


Note: Figures may not add up due to rounding.
Source: Vanguard, 2015.

- Cornerstone accounts are a prominent source of income—30% of total income for Retirement Investors and 38% for Taxable Investors.
- Particularly for Retirement Investors, wage earnings are important, representing 20% of total income. This result seems related to the finding that defined contribution plans, unlike traditional pensions, reduce or eliminate incentives that encourage exit from the labor force.⁴
- Liquidity and specialty financial accounts, when added together, account for around 12% of total income.

Retirement Investors spent 69% of their income, compared with about 75% of income for the two Traditional Retirement groups. For Taxable Investors, the figure was even lower at 61%. Some of this difference reflects relative levels of wealth among the various categories of investors. But another likely explanation is that households with less certain sources of income are more likely to save rather than spend that income.

Figure 7. Aggregate retirement income flows: Retirement Investors



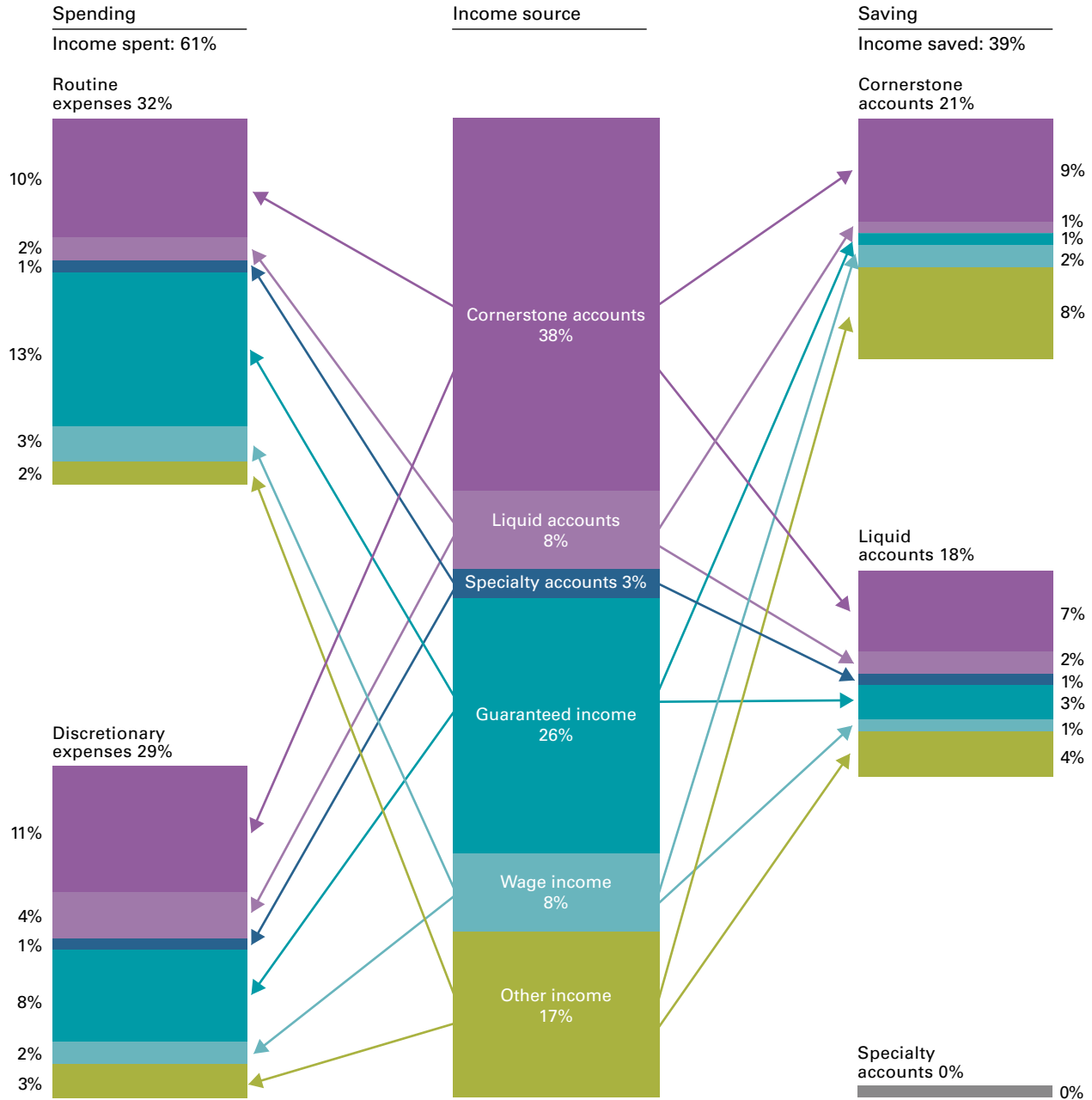
Note: Figures may not add up due to rounding.
Source: Vanguard, 2015.

4 See Friedberg and Webb, 2005.

In terms of saving, these two investor profiles are unique in that they rely on more than liquid accounts for reinvesting income. Among Retirement Investors, 58% of savings goes to liquid accounts, less than the 80% for the Traditional Retirement groups. Among Taxable Investors, unlike any of the other profiles, the

largest saving flows are to cornerstone accounts. These differences with Traditional Retirement investors may reflect the greater experience of these investor segments with cornerstone accounts and familiarity with their generally long-term investment strategies. Among Taxable Investors, it could also reflect their higher wealth.

Figure 8. Aggregate retirement income flows: Taxable investors



Note: Figures may not add up due to rounding.
Source: Vanguard, 2015.

Summary and implications

Patterns of household spending and saving in retirement reflect a high degree of diversity in income sources and financial holdings across retiree households. The variety and complexity in retiree holdings require that income advice needs to be tailored to the specific mix of income and wealth holdings in these households, as well as to their varying goals and risk preferences.

Withdrawals from financial accounts are expected to grow as an income source in retirement because of the expansion of defined contribution plans. Our study points to several likely developments. First, the relative importance of saving in retirement is likely to grow, even if by relatively small amounts. All things being equal, it seems that households relying on financial accounts tend to save more relative to those relying on guaranteed income sources. Second, retirement advice will need to focus not only on generating income flows from such accounts, but also on the ultimate use of that income in terms of spending or saving of income. It is important to note that even in retirement, income does not always equate to spending. That is clearly not the case in our survey population, a sample with meaningful holdings of financial assets.

Liquid accounts are a key component of wealthier retirees' financial holdings, particularly as destination accounts for reinvestment of retirement income. While the motivation for using liquid accounts could vary from building short-term cash reserves to risk aversion to inertia in reinvesting savings, retiree households may benefit from advice on reinvesting retirement income for both short-term and long-term objectives.

Finally, wages play an important role as a transitional income source in the different investor segments, but particularly for Retirement investors. Whether it is by delaying retirement, downshifting from full-time work to part-time work, or returning to work after retirement, investors are relying on work to supplement other income sources. While wages could be an important component of retirement income, health issues and the demand for labor may prevent it from being an option for everyone who hopes to work in retirement.

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