Research Dialogue | Issue no. 164
May 2020

TIAA Institute

Defined contribution plan retirement and estate planning in a SECURE environment

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Abstract

The SECURE Act represents the most significant changes to retirement planning policy since the Pension Protection Act of 2006. In broad terms, SECURE shifts the goal of retirement plans toward a participant's income needs in retirement and away from multigenerational wealth accumulation. The SECURE Act thus provides an opportunity to re-examine defined contribution plan-based retirement and estate planning strategies. Using life-cycle theory and the fundamental concepts of stock and flow in a household setting, the article develops several SECURE-inspired implications worthy of additional theoretical and empirical research. These include the impact of SECURE on: (1) lifetime income provisioning and bequest motives, (2) asset location diversification, and (3) choice of defined contribution plan asset transfer mechanisms.

Introduction

What is the purpose of a retirement plan? Based on the life-cycle theory of Ando and Modigliani (1963), retirement planning encompasses both an accumulation of assets and an eventual conversion of those assets into lifetime income. Since life expectancy is uncertain, pioneering research by Yaari (1965) illustrates that, in the absence of a bequest motive, fully annuitizing the accumulated retirement asset balance is rational. Yet, a large amount of research shows that individuals are reluctant to annuitize even a portion of their retirement asset accumulation (e.g., Brown, 2004). The resulting "annuity puzzle" remains a policy challenge given increasing life expectancies contingent upon reaching a normal retirement age.

With the decline of defined benefit plans and the rise of the 401(k) plan and individual retirement account (IRA) as the primary retirement savings vehicles for U.S. households, there has been a growing tension between the goals of asset accumulation and income provision that encompass the life cycle. Perhaps best illustrated by the "stretch IRA" concept, defined contribution plans can become a mechanism to accumulate wealth over multiple generations. Stretch IRA planning takes advantage of the rules permitting minimum required distributions to occur over the life expectancy of a beneficiary. Young beneficiaries have long life expectancies and thus low minimum required distributions. Thus, for a young child who becomes a beneficiary of "Grandad's IRA," the ability to grow assets deferred from tax could last for many decades due to the low required minimum distributions relative to the long-run return expectations for the assets remaining in the account.

With the recent signing of the SECURE Act into law comes a tightening of the distribution window for non-spouse beneficiaries. Under the new law, non-spouse beneficiaries must generally exhaust the account in 10 years or less. There are some exceptions, including minor beneficiaries, whose 10-year clock does not start until the age of majority. Along with other changes, such as safe-harbor provisions for including lifetime income options inside plans, SECURE tips the DC plan policy arc toward emphasizing longevity-protected retirement income provision and away from multigenerational wealth accumulation.

The SECURE Act changes are a shock to defined contribution plan retirement and estate planning strategies, especially as they relate to the use of retirement accounts for longevity-protected income provisioning and bequests. Such a shock provides an opportunity to return to foundational theory and principles of household economics to inform how the SECURE environment will impact retirement plan decision making. This article thus begins by developing implications from life-cycle theory based on the concepts of stock and flow in the household context. The creation of a household balance sheet, and income and expenditure statement, form the basis for quantifying the life-cycle model's conversion of income to assets and then vice versa.

The article then examines the impacts of the SECURE Act on three key defined contribution retirement and estate planning issues. The first is how SECURE impacts the trade-off between lifetime income provisioning and bequest motives. The second is how SECURE affects asset location diversification practices both inside and outside retirement plans. The third is how SECURE impacts the choice and operation of defined contribution plan asset transfer mechanisms.

Stock and flow in a household context

The household balance sheet

Stock and flow as the components of value are fundamental concepts in corporate finance. In household finance, however, they have had much less application. One reason for the paucity of application was the historical simplicity of the household balance sheet. In the defined benefit era, a household balance sheet would typically reflect no retirement assets. Retirement income in that era came from Social Security and private pensions, both of which are "off balance sheet" items. Social Security and private pensions are not easily convertible to an asset value for several reasons, including the challenge of valuing future income streams and an extreme lack of liquidity. In contrast, each day a defined contribution (DC) plan participant can easily obtain the value of her account (most DC plan assets are held in open-end mutual funds that provide a daily net asset value). Similarly, the recent rise of individual accounts for retirement (e.g., IRAs, SEPs, etc.), health care expenditures (e.g., health savings accounts (HSAs)), and education (e.g., 529 plans) has fueled the need to construct a household balance sheet.

The "stock" of value comes from the building of a balance sheet with assets, liabilities, and the difference, the equity (or stock of) value. For a household, two conventions simplify the construction of the balance sheet and improve its utility. First, position on the balance sheet is a function of liquidity, with more liquid assets near the top and less liquid near the bottom. Second, fair market values of assets (as opposed to historical cost) are the appropriate values to use on the household balance sheet.

Moving down the left-hand (asset) side is thus a progression from more to less liquid assets. Liquidity means that a household asset is both: (1) readily converted to cash and (2) with little to no diminishment in value. In general, financial assets have more liquidity than real or personal assets due to deeper markets and lower transactions costs. Within the class of financial assets, however, it is also important to recognize that tax-deferred assets generally have less liquidity than assets in ordinary accounts.

Among the types of tax-deferred asset accounts are employer plans (such as a 401(k) or 403(b)), individual retirement accounts (such as an IRA, Roth IRA, SEP, SIMPLE, and Keogh), health savings accounts (such as an HSA), and education accounts (such as a 529 plan). Tax-deferred accounts are less liquid than ordinary accounts for two basic reasons. First, they may have severe tax penalties for liquidating (such as a 10% penalty for early withdrawals from an employer retirement plan or an IRA). Second, they have use restrictions with associated tax penalties. For example, tax law limits the use of HSA proceeds to out-of-pocket health care expenditures. Using HSA proceeds for any other reason triggers a 20% tax penalty.

Recognizing the differences between *classes* of assets, such as those in ordinary accounts and those in tax-deferred accounts, is an exercise in determining *asset location*. The number of asset locations has increased markedly since the beginning of the "defined contribution age." Thus, over the past few decades, the recognition of asset location is becoming more critical for both retirement planning as well as for estate planning.

Within the class of tax-deferred asset locations, the ordering of accounts from most to least liquid requires a few considerations. For example, accounts like an HSA or 529 plan have greater liquidity than retirement accounts if the horizon to penalty-free withdrawals in the retirement accounts is long. Similarly, one might consider Roth IRAs to have greater liquidity than traditional IRAs since the basis (contribution) withdrawal is free from tax or penalty.

The building of a household balance sheet that recognizes specific asset locations serves the very useful purpose of providing an organized inventory of accounts. Over the life cycle, the number of financial accounts often grows as individuals change jobs and get new 401(k) plans, for example. Construction and update of a balance sheet highlights the number of accounts by asset location, and may point to needed activities such as "rolling over" small balance employer retirement plans to an IRA.

Similarly, the household balance sheet can help manage the growth in the number of credit accounts. Over time, consumers can open credit cards or lines of credit for a variety of reasons, including attractive teaser rates or purchase discounts. Having an organized balance sheet allows the household to both understand their credit capacity, sources of exposure to credit fraud, and the need to close credit accounts.

Regarding personal property, the construction of a balance sheet also serves a valuable inventory purpose. Valuable personal items, such as jewelry, electronics, silverware and various collectibles, can have fair market value well in excess of the item limits on renters or homeowners insurance. While the aggregate coverage limits for personal property may be quite adequate, individual item limits can be quite low. This exposes valuable personal items to risks such as fire or theft. With the exercise of estimating a fair market value for these items, a balance sheet brings these exposures to light.

Figure 1 illustrates a household balance sheet. As in any financial statement, notes can be helpful to understand details. Of particular importance are notes indicating the source for the value of real and personal property. For example, a note on the balance sheet might indicate that Zillow was the source of a residence value. For personal property, a note could indicate that the value came from an appraisal and the location of the appraisal document.

Income and expenditure statement

The financial statement forming the basis for the flow component of household value is the income and expenditures statement. Similar in theme to a budget, this statement aims to estimate *ex ante* the inflows and outflows of cash over a particular period (e.g., a year). Inflows come from two main sources: earned and unearned income. Parsing these two sources is important as the former (earned income) links to current employment (either as a W-2 employee, an independent contractor, or as a business owner (Schedule C)). The latter (unearned income) links to flows from social or private pensions, as well as flows from financial asset locations (either ordinary, after tax, or retirement accounts). These could be from dividends, interest, and proceeds from sales. Flows may also come from other assets, such as rent from real property.

The construction of the income and expenditures statement requires both estimates of inflows (earned and unearned) over the pro-forma period (e.g., year) along with the estimate of current expenditures. If the former exceeds (is less than) the latter, there is an expected surplus (deficit). Ameriks et al. (2003) show that having a good understanding of current-period expenditures is a critical factor in financial planning success. The intuition is that without understanding current-period expenditures, the expected surplus (deficit) will be uncertain (even in a world where inflows are certain and known in advance). Uncertainty in surplus or deficit leads to balance sheet uncertainty when the realized surplus or deficit closes to the balance sheet as either an increase or decrease to various asset locations or to liabilities. The resulting uncertainty about the value of assets in certain locations (e.g., retirement plans) undermines clarity about being on target for goals associated with that particular asset location.

Figure 2 shows a representative household income and expenditures statement. Distinguishing tax-deferred from after-tax surplus is important as the closure of these to the balance sheet will go to different asset locations. This is a common occurrence when an employee has a DC plan with an employer match. Figure 2 shows the separation of a DC plan contribution (and any associated match) into a DC plan surplus. This surplus flow is different from an after-tax flow that is not directed into any type of restricted account. An “ordinary” surplus is effectively “unrestricted” and can be used to add to the balance of ordinary accounts or reduction of liabilities (e.g., paying down the balance of a credit card, loan, or mortgage).

The life cycle model and moving between the two statements

In the classic Ando and Modigliani (1963) life-cycle model, a DC plan participant would grow assets during the accumulation phase, then begin to “decumulate” assets during a disbursal phase. The mechanics of the model are the conversion of earned income into assets during accumulation, followed by the conversion of assets into unearned income in disbursal. Net worth remaining at death is the estate (or bequest) from the DC plan.

The DC plan era is one where the household balance sheet becomes more important as the recognition of asset locations is relevant to both accumulation and decumulation strategies. Closing the income and expenditures statement to the household balance sheet moves the various types of surplus to their respective asset locations. For example, consider the impact of closing of the monthly 401(k) employee contribution and employer match to the 401(k) asset location on the balance sheet.

With the rise in the number of asset locations, retirement planning becomes an exercise in allocating the proper amount of surplus to the proper asset location. Tax-deferred accounts have both advantages and disadvantages relative to ordinary accounts. Tax savings is an advantage, and it can substantial. For example, contributing to a 401(k) account and saving 40% of that amount in tax paid in that year, and then taking withdrawals from that account after years of deferral at a 20% marginal tax rate results in a tax-driven increase in household value. In the case of an HSA, a similar effect comes from making pretax contributions and saving 40% of the amount in tax paid that year, then using the amount in a later year for an out-of-pocket health care expense and paying zero tax.

Tax penalties and use restrictions are the downside of tax-deferred accounts. Prior to age 59.5, withdrawals from a 401(k) account typically result not only in tax due on the amount of the withdrawal but also a 10% penalty. Since future tax rates are unknown, tax savings in percentage terms from making a 401(k) contribution may be less than the tax paid in percentage terms from a withdrawal. In the case of an HSA, using contributions for something other than out-of-pocket health care expenditures results in the amount spent being taxable income and a penalty tax of 20%.

With the growth of asset locations, households have to decide not only how much to save for future goals, such as retirement, but also where to save. Consider the example of a couple (age 30) who each have employer-sponsored 401(k) plans with generous employer matches. Both are contributing the maximum to their 401(k) plan, well beyond where their contributions are matched. The couple is not saving materially outside of their 401(k) accounts. Suppose that one of the spouses wants to leave his/her corporate job at age 40 to start a business, which will require significant capital as well as an income bridge while the business is in start-up mode. Upon consideration of asset locations, the couple may discover that they are saving the right amount but targeting the wrong asset location with some of the surplus. An ordinary account location would much better serve the goal of significant capital and income for this goal.

Saving is fundamentally deferred consumption. If a household has clarity about its future goals, that household can more accurately direct surplus to the appropriate asset location.

In the case of retirement, income needs are a key input to the issue of how much surplus to direct toward the retirement goal. Empirical research shows that roughly 80% of pre-retirement income is necessary to keep the retiree in the same standard of living post retirement.[1] When building a pro-forma income and expenditures statement for the decumulation phase of the life cycle, the household can begin by taking account of any social or private pensions as sources of unearned income. To supplement pension sources, a household can target DC retirement asset locations as sources of income to meet the difference between income needs and pension sources. Sources of income in retirement can also come from other asset locations other than DC plans, such as ordinary accounts or real estate. These locations will offer more flexibility in that they will not be subject to minimum required distributions. They may also offer differing tax treatment than the ordinary income from pretax retirement account distributions.

Understanding asset location sources allows for not only improved estimation of income in retirement but also a consideration of optimizing from where to draw income in a given tax year. In years when total taxable income is relatively low, for example, drawing from pretax retirement asset locations would be preferred, and vice versa.

In sum, building a balance sheet with asset locations is helpful as it targets specific assets to specific future income needs. In the defined contribution era,

[1] See https://www.aon.com/about-aon/intellectual-capital/attachments/human-capital-consulting/RRStudy070308.pdf.

investment assets are not fungible due to various tax-related use and timing restrictions. The life-cycle model provides a conceptual framework. The accumulation phase is moving surplus from the income and expenditure statement to various asset locations on the balance sheet. The decumulation phase is liquidating assets from various retirement asset locations on the balance sheet and returning them to the income and expenditure statement.

How will SECURE affect lifetime income and bequests?

This section examines how the policy changes in the SECURE Act impact the goals of retirement income and bequests. A key provision in the SECURE Act relevant to this section is the providing of safe harbors to allow for more lifetime income options in employer DC plans. Annuities permit the transfer of longevity risk, and in the case of fixed annuities, investment risk. Annuitizing DC plan assets also removes the annuitized balance from the DC plan asset location on the balance sheet and places the associated income into the unearned income component of cash inflows. Conceptually, the annuitized proceeds become akin to social and private pensions in terms of their financial statement character. They act to increase the income sources that act to offset income needs, resulting in a reduced need to further liquidate assets from the balance sheet.

SECURE also provides a nudge to DC plan participants by requiring at least an annual projection of the lifetime income that would be available from annuitizing the accumulated balance. In so doing, SECURE may provide needed clarity to those concerned about whether they are able to retire, given their concern for running out of assets before they pass away (Yakoboski, 2011; Ciccotello, Pollock, and Yakoboski, 2011).

If SECURE results in more lifetime income options in employer-sponsored DC plans, and more annuitization by participants, then the aggregate need for funding the remaining income gap should close. With the increased clarity about income provision in retirement, SECURE could also have a positive impact on bequest motives. The logic is that the smaller income needed to fund, and the increased laying off of investment and longevity risk, should make the ability to foresee the ability to make a bequest more clearly.

A bequest is a result of a positive stock of value at death. If a higher proportion of DC plan proceeds are annuitized as a joint and surviving spouse lifetime income stream, less of the DC proceeds will be left to a non-spouse beneficiary. SECURE thus likely pushes bequests away from tax-deferred accounts and toward ordinary accounts. SECURE acts to clarify the retirement asset location for retirement income, and less for multigenerational wealth accumulation. As a result, bequests from ordinary accounts or life insurance should grow.

Another provision relevant to the trade-off in lifetime income and bequest motive is the elimination of the "stretch" distributions for most non-spouse beneficiaries. The impact on bequests from this change is arguably negative, at least in the short run, as less money will be left to non-spouse beneficiaries in tax-deferred retirement accounts since the ability for these beneficiaries to defer tax has been severely curtailed. The effect is amplified for larger DC plan or IRA balances, where the 10-year payout requirement has the potential to push beneficiaries into higher tax brackets and undo the benefits of tax deferral.

Over time, however, the asset location clarification provided by SECURE should result in less "overfunding" of the retirement account asset locations and, if coupled with increased annuitizing of retirement account proceeds, should have a net positive impact on bequests. In so doing, SECURE returns the goals of the DC plan to the foundational theory of "complete annuitization" (given uncertain lifetimes) developed by Yaari (1965).

In an overlapping generation life-cycle model, transfers at death of the remaining balances in retirement accounts to non-spouse beneficiaries (such as children or grandchildren) will still upwardly shock the net worth of those succeeding generations. SECURE's tighter income disbursement provisions, however, will require succeeding generations to consider whether retirement plan locations are appropriate for wealth accumulation beyond that needed to fund lifetime retirement income.

How will SECURE affect asset location diversification?

This section focuses on how SECURE impacts asset location diversification. For purposes of analysis, the first type of asset location diversification is *within* retirement asset locations, as contributions can be either pretax or post tax (Roth). The second type of asset location diversification is between retirement asset locations and ordinary (after-tax) accounts.

Pretax contributions to retirement plans are accretive when the contributor's tax rate is higher when making the contribution than when the proceeds are liquidated for income in retirement. But since the current tax rate is known and the future tax rate (upon liquidation) is unknown, there is tax risk involved with making pretax contributions. Post-tax (Roth) contributions forego a current deduction achieved by a pretax contribution but also lay off the risk of changes in future tax rates. Ordinary account contributions also forego the current deduction, and the tax treatment upon liquidation is unknown. Unlike retirement plan withdrawals, however, liquidating a current account balance might be at a long-term capital gains tax rate which is lower than the ordinary tax rates currently applied to taxable retirement plan withdrawals. Moreover, there are no minimum required distributions from ordinary accounts, meaning that the balance in that account need not be drawn down as the owner ages. If the owner dies owning the asset in an ordinary account, that asset will pass to an heir having been "stepped up" for income tax purposes to its fair value at the owner's date of death.

Brown et al. (2017) show the appeal to diversifying between pre- and post-tax retirement contributions. They provide a heuristic indicating than 100% of a retirement plan contribution should be made to a post-tax (Roth) account when a participant is in the 15% or lower marginal income tax bracket. Participants above that bracket should allocate their age plus 20% to a pretax contribution and the balance to Roth.

In a SECURE environment, the value of Roth contributions becomes even greater. Since beneficiaries must generally liquidate proceeds over 10 years as opposed to their lifetimes, the risks that those liquidations (if pretax) push these beneficiaries into higher income tax brackets is greater. Thus, SECURE will increase the benefits of diversifying contributions to retirement plan asset locations between pre- and post-tax accounts.

SECURE's promotion of annuitization options also favors diversification into post-tax retirement locations. Annuitizing a Roth contribution will result in both the layoff of longevity and tax risk. In the case of a fixed annuity, this type of annuitization also lays off investment risk.

A related policy implication of SECURE is that employer-sponsored plans should offer Roth contribution options. Utkus and Young (2015) observe that only 44% of employer-sponsored defined contribution plans through Vanguard have a Roth option. Simon (2017) shows that Roth availability increases as the size of the company sponsor increases, with about 60% of large firms offering Roth options in their defined contribution plan.

SECURE should also increase the benefits from diversifying across retirement and ordinary accounts. This is again due to the tightened window for deferring taxable distributions. If, as argued in the prior section, SECURE results in enhanced bequests, these bequests can be strongly tax advantaged through location in ordinary accounts. This is due to the step up in value to the owner's date of death as the assets pass through the estate. On the margin, leaving assets in an ordinary account will also reduce the tax risks to beneficiaries facing a SECURE-driven compressed withdrawal challenge on retirement plan assets. Those receiving bequests held in ordinary accounts face no forced distribution timetable.

With growing benefits to diversification across retirement and ordinary accounts, the choice of investments across locations will also take on additional importance. To the extent that asset allocation and investment strategy are appropriate for the goals for each account, tax-efficient investments (passive strategies and equities) should be favored in ordinary accounts while less tax-efficient strategies should be preferred in tax-deferred retirement accounts (active strategies and bonds).

How will SECURE affect the use of asset transfer mechanisms?

This section builds on Ciccotello (2020) by discussing if and how SECURE will impact the use of asset transfer mechanisms in retirement plan asset locations as well as in ordinary accounts.

SECURE does not change any of the principles of asset transfer discussed by Ciccotello (2020). Thus, with regard to retirement plan asset locations, proper beneficiary designations remain important. However, to the extent that SECURE results in shifts away from multigenerational wealth accumulation strategies in retirement plans, it does have implications for asset transfer mechanism selection.

Retirement plan trusts have grown rapidly as a vehicle to both control asset management and preserve tax-advantaged distributions for beneficiaries via "look through" provisions in the trust. Under SECURE, retirement trusts become less valuable as tax-deferral strategies since "stretch" provisions are limited. Not only are beneficiary distributions required to be made in 10 years, but SECURE does not specify an annual required minimum distribution within the 10-year period. The trust must now consider disbursement strategy since it is not specified via a minimum annual required distribution table. A retirement plan trust could specify that all distributions be made in year 10, for example, but that also could result in distributions pushing beneficiaries into higher tax brackets. So, SECURE reduces the tax benefits of retirement trusts and also adds to their complexity. However, retirement trusts do remain a very useful tool for *control* issues.

If SECURE results in less assets being invested in employer retirement accounts and more assets being invested in ordinary accounts, then beneficiary designations become more important as spouses will not have default protection under the law. Ordinary after-tax accounts do not have the spousal protection of employer-sponsored retirement accounts. So extra care will be needed to be sure that these accounts have the proper beneficiary or joint owner named.

Interestingly, SECURE reduces the income tax-related penalties associated with failing to name beneficiaries or create a valid retirement trust. In the event that an unmarried DC plan participant fails to name a beneficiary or form a valid retirement plan trust, the retirement plan assets will pass through probate, where they must be distributed within five years (Ciccotello, 2020). Since SECURE requires a 10-year distribution period in most cases, the difference is far less than when the stretch IRA was available.

However, regardless of tax issues, the other downsides of probate remain. As Ciccotello (2020) argues, probate is a public process done through a state court, and can be very slow and costly. Disposition of DC plan assets moving through probate can take over a year and consume 5% or more of the probate estate. Probate can also be very contentious if the deceased has not been clear about his or her wishes, or if the process triggers disputed claims from creditors of the deceased.

To the extent that SECURE promotes annuitizing assets in DC retirement plans, it simplifies estate planning as the balance remaining upon the death of the annuitant and survivor is zero (assuming one or both survive the guarantee period). Similarly, if SECURE promotes a greater clarity about the use of retirement plans for income provision in retirement and other accounts for bequests, it should promote a more active approach to proper estate planning for the assets outside the retirement plan.

Summary

The SECURE Act represents the most significant changes to retirement plan policy since the Pension Protection Act of 2006. In broad terms, SECURE shifts the goal of DC retirement plans toward a participant's income needs in retirement and away from multigenerational wealth accumulation. The SECURE Act thus provides an opportunity to re-examine defined contribution plan-based retirement and estate planning strategies. Using life-cycle theory and the fundamental concepts of stock and flow in a household setting, the article develops several SECURE-inspired implications worthy of additional theoretical and empirical research.

SECURE promotes asset location clarification by promoting annuitization and discouraging multigenerational wealth accumulation. In so doing, SECURE places more focus on longevity-protected retirement income provision for the participant/spouse. SECURE thus supports the policy of making the defined contribution plan more like a private defined benefit plan. If that focus allows for more clarity about the level of assets not needed for lifetime income, SECURE may also enhance bequests.

SECURE also promotes the benefits of retirement asset location tax diversification by adding risk to overfilling the “pretax” DC plan asset location. Gone are the “stretch” strategies where non-spouse beneficiaries could take distributions over their life expectancy. Now facing 10-year distribution windows, non-spouse beneficiaries may find themselves having taxable retirement plan distributions push them into higher tax brackets. On the margin, SECURE thus promotes the use of Roth contributions to manage disbursement risk. With income rates at secular lows and federal budget deficits at secular highs, the tax diversification of retirement plan assets also seems prudent. One policy implication that spills over from this analysis is that sponsors should offer Roth options. SECURE also may enhance the benefits of asset location diversification between retirement plans and ordinary accounts, with the latter growing in favor for bequests.

By clamping down on the ability to grow and distribute defined contribution retirement plan wealth over multiple generations, SECURE reduces the attractiveness of retirement plan trusts on the margin. While these trusts now have lower tax efficacy, they may still be necessary with regard to control. Since SECURE promotes annuitization and less “overfilling” of the DC retirement plan bucket, it may simplify estate planning generally. A joint and survivor annuity, once initiated, becomes similar to a private (or social) pension once the payout exceeds any required minimum period. In this case, the value is zero at the death of the survivor. SECURE does not reduce the need, however, for the careful choice and prompt updating of beneficiary designations. To the extent that SECURE results in the movement of assets to accounts that do not protect spousal interests as employer-sponsored plans do (e.g., ordinary accounts), extra care will be necessary to be sure that beneficiary designations are appropriate and updated.

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Figure 1. Household balance sheet

Assets	Liabilities
Cash	Credit Card Balance
Short-Term Assets	Car Loan Balance
Checking Accounts	
Savings Accounts	
Investments	
Ordinary Accounts	Other Loan Balance(s)
Brokerage	Mortgage Balance
Tax-Deferred Accounts	**Stock of Value (Net Worth): A - L**
Health Savings Account	
529 Plan	
Roth IRA	
Cash Value - Insurance	
Traditional IRA	
401(k)/403(b)	
Real (e.g., residence)	
Use (e.g., personal property)	
Autos	
Furnishings	
Jewelry	
Electronics	
Art	
Collectibles	

Figure 2. Pro forma income and expenditure statement for the year (20xx)

Cash Inflows	
Earned (W2; 1099; business profits)	
Unearned (e.g., Social Security/private pensions, dividends, interest, rents)	
Cash Outflows	
Property Tax	Food/Personal
Mortgage	Autos
Other Loans	Insurance(s)
Utilities	Clothes
Home Maint./Furn.	Credit Card
Recreation/Travel	Other
Total Expected Surplus: total inflows – total outflows	
Comprises:	
DC Retirement Plan Surplus	
Other Tax-Deferred Account Surplus	
Unrestricted Surplus	

About the author

Conrad Ciccotello is the Director/Professor of the Reiman School of Finance at the University of Denver. His primary research interests are in law and finance, financial intermediation, and financial services. He has over 60 publications, including articles in the *Journal of Financial Economics*, *Management Science*, the *Journal of Financial and Quantitative Analysis*, and the *Journal of Law and Economics*.

Ciccotello has received research grants from TIAA Institute, Kauffman Foundation, Financial Planning Foundation, and the William Davidson Institute. He is the author of the first two chapters in *Mutual Funds: The Blackwell Series in Finance*. Ciccotello's research on the financial advisory profession is cited in the Federal Register and his paper on market timing of mutual funds is entered into the Congressional Record as Senate Banking Committee testimony.

He has been quoted in numerous media outlets including the Wall Street Journal, New York Times, and Washington Post. Ciccotello has also provided expert testimony on financial matters and retirement planning in Federal Court, United States Tax Court, State Court, and in arbitration.