Building Emergency Savings Through Employer-Sponsored Rainy Day Savings Accounts

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Abstract

Many Americans live paycheck to paycheck, carry revolving credit balances, and have little liquidity with which to absorb financial shocks. Lacking short-term savings and tight on credit, many of these individuals instead tap into retirement savings accounts during their working years when shocks arise. For every $1 that flows into 401(k)s and similar accounts, between 30¢ and 40¢ leaks out before retirement. We explore the practical considerations and challenges associated with helping households accumulate liquid savings that can be deployed when urgent pre-retirement needs arise. We propose that this can be achieved cost effectively by automatically enrolling workers into an employer-sponsored payroll deduction "rainy day" or "emergency" savings account and explore three specific implementation options. Having both a rainy day and a retirement savings account can facilitate greater saving for both short- and longer-term needs by helping to create effective psychological separation (mental accounting) between these two motives to save so that short-term needs no longer become a reason to tap into an individual's retirement savings.

We describe three specific implementation models: (a) after-tax employee 401(k) accounts; (b) deemed Roth IRA under 401(k) plans; and (c) depository institution accounts. We then evaluate the pros and cons of each model, given existing regulatory regimes, relative to a set of criteria that should be considered when establishing these accounts. These criteria include: the ability to automatically enroll employees into the rainy day account; the targeted size of the rainy day account; the investment allocation used for the rainy day savings account; the fees and expenses associated with setting up and administering the rainy day accounts; employers' ability to match employee contributions to the rainy day account and the destination of those matching contributions; the ability of the rainy day account to provide liquidity when the funds are needed; the tax treatment of contributions to, earnings in, and withdrawals from the rainy day account; the portability of account balances when employees separate from a sponsoring employer; and compliance and potential interactions with the nondiscrimination rules that apply to tax-qualified employer-sponsored plans.

At this early stage, each approach merits further exploration, including through workplace pilot projects and experimentation. Conceivably, the market will take up more than one approach, including, for example, 401(k)-based rainy day accounts for employees of companies that already offer a 401(k) retirement savings plan, and rainy day savings at depository institutions for employees of companies that do not offer a retirement plan (e.g., employers with many contingent workers). Over time, rainy day saving for employees and others might become an established feature of the employee benefits landscape.

Introduction

Many Americans live paycheck to paycheck, carry revolving credit balances, and have little liquidity with which to absorb financial shocks (Angeletos et al. 2001; Kaplan and Violante 2014). Forty-six percent of U.S. adults report that they either could not come up with $400 to cover an emergency expense, or would have to borrow or sell something to do so (Board of Governors of the Federal Reserve System 2016). In the 2013 Survey of Consumer Finances, liquid net worth for the median household with a head aged 41-51 is only $813, while at the 25th percentile it is -$1,885 (Beshears, Choi, Laibson and Madrian 2018).[1] The picture is only slightly better for households nearing or entering retirement (after a lifetime of saving). Among households whose head is age 61-70, median liquid net worth is $6,213, while at the 25th percentile it is $1.

With limited liquidity, many working-age households spend savings intended to finance old-age consumption well before reaching retirement. Using Internal Revenue Service (IRS) tax return data, Argento, Bryant, and Sabelhaus (2015) find that for individuals under age 55, the annual distributions *out* of defined contribution retirement plans (i.e. 401(k) plans, IRAs, etc.) equals 30 to 40 percent of the flows into those plans.[2] This leakage does not include loans that are repaid, another significant source of liquidity out of 401(k) and other similar savings plans (Beshears et al. 2012).

These patterns of behavior can be explained by several behavioral biases, including present bias—the propensity to overweight the present relative to the future. Individuals with present bias tend to act impatiently in the present while *wanting* to act patiently in the future (Laibson, 1997). They will overspend today while simultaneously enrolling in a 401(k) plan that reflects their preference to save in the future. In the long run, they accumulate significant stocks of illiquid assets (e.g., home equity) and essentially no liquid wealth (Angeletos et al. 2001; Beshears, Choi, Laibson, and Madrian 2018); the liquid wealth is spent on instant gratification, whereas the illiquid wealth is protected from such splurges. Relative to normative benchmarks, households with present bias hold too little liquid wealth and will deplete their partially liquid retirement savings (e.g., through 401(k) loans or pre-retirement distributions) when adverse shocks arise. Present bias combines with other behavioral biases such as limited foresight,

[1] Liquid net worth includes all assets and debt except pension wealth, retirement savings accounts (e.g., 401(k) accounts and IRAs), student loans, durable assets, homes, and collateralized debts (e.g., mortgages and car loans).
[2] These distributions do not include IRA rollovers or Roth conversions.

myopia, and over-optimism to contribute to households' propensity to accumulate and hold sub-optimally low levels of liquid wealth.

This paper explores the practical considerations and challenges associated with helping households accumulate liquid savings that can be deployed when urgent pre-retirement expenditure needs arise. We believe that this can be achieved cost effectively by automatically enrolling workers into an employer-sponsored "rainy day" or "emergency" savings account—terms that we use interchangeably in this paper—funded by payroll deduction.

Employer-sponsored retirement plans play an important role in facilitating financial preparedness for retirement. The Employee Benefit Research Institute's Retirement Confidence Survey (2017) finds that 71 percent of households with an employer-sponsored retirement plan report being somewhat or very confident that they will have enough money to live comfortably in retirement, a sentiment expressed by only 33 percent of households who do not have an employer-sponsored retirement plan. Using payroll deduction to fund 401(k) and similar retirement savings vehicles is a familiar and widely accepted practice in the U.S. (Orszag, Iwry, and Gale 2006). Using payroll deduction for non-retirement savings also has precedent. During World War II and for decades thereafter, payroll deduction was used to allow employees to purchase U.S. Savings Bonds. Payroll deduction is also commonly used in employer-sponsored health plans, cafeteria plans, and other employee benefit arrangements.[3]

The power of payroll deduction to improve retirement savings outcomes is enhanced dramatically when combined with automatic enrollment, which results in high savings plan participation rates for employees of all ages, incomes, genders, and races/ethnicities (Madrian and Shea 2001; Choi et al. 2002, 2004; Beshears et al. 2008; Gale et al. 2009; Vanguard 2018). Over the past two decades since the U.S. Treasury Department and the IRS issued their landmark rulings defining, approving, and setting the basic terms for permissible automatic enrollment into 401(k) plans,[4] the fraction of plans using automatic enrollment has increased substantially. The majority of medium and large 401(k) plans now automatically enroll employees unless they opt out (Plan Sponsor Council of America 2018; Vanguard 2018). Moreover, 97 percent of surveyed employees whose companies use automatic enrollment report being glad their employer does so,

[3] For an introduction to cafeteria plans, see https://www.irs.gov/government-entities/federal-state-local-governments/faqs-for-government-entities-regarding-cafeteria-plans

[4] Revenue Ruling 1998-30, Revenue Ruling 2000-8.

and this support is remarkably high among all demographic sub-groups, including those who opt out of participation (Harris Interactive 2007). We believe that worker participation in and support of automatic enrollment into employer-sponsored rainy day savings accounts would also be high, though it is not known whether it would be as high as it is for 401(k) auto-enrollment.

In this paper we lay out a set of potential design options for employer-sponsored rainy day savings accounts in the U.S. We start in Section I by discussing the motivation for wanting individuals to have both retirement and rainy day savings accounts, and the reasons for and against having these two types of accounts formally linked. We then briefly sketch in Section II three potential ways in which employer sponsored rainy day savings accounts could be structured. In Section III we outline the conceptual issues that should be considered when establishing such accounts. Then, in Sections IV, V and VI, we examine in greater detail the three specific models for implementing such accounts in light of the conceptual issues highlighted in Section III and the existing regulatory regimes. We conclude in Section VII.

I. The Case for Parallel Retirement and Rainy Day Savings Accounts

Given the fact that many Americans already have 401(k) or similar savings accounts and that, as noted above, these accounts are already being used by many to meet financial shocks well before retirement, one could question whether households in fact have a need for separate rainy day savings accounts. There are several reasons why having more than one savings account, each designated for a different purpose, may be preferable to having a single savings account serving both short-term liquidity and longer-term retirement consumption needs. The primary rationale lies in the concept of mental accounting, the "set of cognitive operations used by individuals and households to organize, evaluate, and keep track of financial activities" (Thaler 1999). Having separate short- and long-term savings accounts may facilitate better financial decision-making on the part of households through better mental accounting (Zhang and Sussman, forthcoming).

First, having separate accounts enforces discipline in recognizing what households can and cannot do with their savings. With a single savings account serving multiple purposes, it is easy to engage a sort of self-deception, believing that a dollar saved that could be used to cover either a short-term financial shock or to provide retirement consumption is in fact available to finance both. The act of designating where the savings goes forces a recognition that a dollar can

only be spent one way. In this way, having multiple accounts may increase savings flows. There is some limited evidence to support this conjecture in the literature. Beshears et al. (2017a) find using a survey experiment that subjects recommend higher total 401(k) contribution rates when they have to separately recommend both a before-tax and a Roth contribution rate, rather than first recommending a total contribution rate that they *later* split between a before-tax and a Roth account. If having two separate 401(k) accounts increases the total amount that individuals contribute to their combined retirement accounts, it may also be likely that having separate retirement and non-retirement savings accounts would increase total savings overall.

Second, the amount in a savings account may influence how much individuals spend from that account when financial shocks arise. By their nature, retirement savings accounts are designed with the intent of helping households accumulate large sums of money in order to finance years and potentially decades of post-retirement consumption. If the only savings account individuals have is a retirement savings account, there may be a strong temptation to withdraw more than necessary in the face of a short-term need simply because the money is available. This supposition is corroborated in a field experiment among construction workers in rural India. Soman and Cheema (2011) find that partitioning a fixed savings amount across multiple accounts increases asset accumulation by reducing savings account withdrawals. Having multiple accounts has no impact on the likelihood that individuals tap into their savings, but it dramatically reduces the amount that individuals withdraw when needs arise. With only one account, households consume everything in their single account in the face of a financial shock. In contrast, when individuals have multiple accounts, each with a smaller amount, many individuals are able to address short-term needs by tapping into only one (smaller) account while leaving the other untouched.

Third, having multiple labelled accounts may create a psychological barrier to spending money in a way other than the purpose for which it was designated despite the fact that money is ultimately fungible. With only one account, a retirement account, even if designated as such, becomes a de facto "everything" account. With multiple accounts, it becomes easier to psychologically segregate the purpose of each account: retirement vs. rainy day savings. This psychological segregation imposes a mental cost on consumers if they use the retirement account for purposes other than retirement, even in the absence of any explicit prohibition against doing so. Zhang and Sussman (forthcoming) survey the literature on mental accounting and cite several

papers that show strong congruence between consumers' spending behavior how either the sources or uses of funds are labelled.

II. Options for Structuring Employer-Sponsored Rainy Day Savings Accounts

Mental accounting provides a strong rationale for having separate retirement and rainy day savings accounts, and the power of payroll deduction coupled with automatic enrollment provides a strong rationale for doing so through the employment relationship. In this section, we briefly sketch three different approaches employers could use to structure rainy day savings accounts for their employees.

One possibility that arises if an employer sponsors both a retirement and a rainy day savings account is the option to link these two accounts in some sort of way. The simplest form of linkage would be to have a common administrator for both types of accounts. For employers, this could afford potential economies of scale in plan administration, and for employees, the cognitive burden of managing different accounts could be reduced if both were accessible through a single on-line login and tracked through a single combined statement.

More sophisticated linkages that could help facilitate both short- and long-term savings goals are also possible. For example, with linked accounts an employer could direct a match on employee contributions to the rainy-day account into the retirement savings account, facilitating both types of asset accumulation.

An employer could also set up a mechanism to dynamically adjust the flow of contributions across the two accounts depending on the balance in the rainy day account. For example, an employee could elect a fixed combined contribution rate to the two accounts with the split across the rainy day and retirement savings accounts adjusting automatically as the balance in the rainy day account increases with the accrual of new contributions or is depleted in the face of a financial shocks; a higher fraction of savings flows would be allocated to the rainy day account when balances in that account are low, and a lower fraction as balances approach some threshold amount (which could be set by either the employee or the employer). This approach gives employees a predictable deduction from their paycheck, funds the rainy day and retirement savings accounts simultaneously, reduces the cognitive burden on employees of managing the savings flows to both accounts, and limits the temptation to spend out of the rainy day account when shocks arise by shifting savings to the retirement account when the amount in

the rainy day account is deemed "high enough." For employees with unpredictable income streams who are likely to make more regular use of a rainy day savings account, the combined contribution rate to the two accounts could dynamically adjust as well, so that the total combined contribution rate is lower in periods when income is low, and higher in periods when income is high.

The value in being able to link retirement and rainy day savings accounts as described above motivates the first two of the three potential ways of structuring an employer-sponsored rainy day savings account that we consider, which both put the rainy day account under the umbrella of an existing 401(k) retirement savings plan. But there are also costs associated with setting up a rainy day account within a 401(k) plan. Indeed, each of the three different approaches to structuring an employer-sponsored rainy day savings account that we describe below has advantages and disadvantages. None clearly dominates the others, which is why we consider multiple alternatives.

There are two alternatives that fall under the 401(k) umbrella that we *do not* consider: using either a supplementary pre-tax or a supplementary Roth account as a rainy day savings vehicle. Both pre-tax and Roth 401(k) accounts are ill-suited for the purposes of rainy day savings because they are subject to withdrawal restrictions while the account holder is employed. This subverts the purpose of a rainy day account, namely, to provide liquidity in the face of immediate financial hardship.

Approach 1: After-Tax Employee Contribution Account within the 401(k) Plan

In addition to the familiar opportunity to make pre-tax or Roth 401(k) contributions, many 401(k) plans also permit so-called "after-tax employee contributions." As their name suggests, these contributions are made with after-tax dollars (in contrast to pre-tax employee contributions which are exempt from current taxable income). Note that these *are not the same as* Roth 401(k) contributions. Although both "after-tax employee contributions" and Roth 401(k) contributions are made with after-tax dollars, the tax treatment of the earnings in the two types of accounts are different. Earnings on after-tax employee contributions are tax-deferred: they are taxed upon withdrawal. Earnings on the Roth 401(k) (or Roth IRA) contributions are not only tax-deferred but also become tax-free if not withdrawn until at least five years after the year

of the participant's first Roth contribution and after the participant has reached age 59 ½ (or has died or become disabled).

Voluntary after-tax employee contributions were common in the employer-sponsored thrift savings plans that existed before the advent of the 401(k). Because pre-tax and Roth contributions are afforded more preferential tax treatment than after-tax contributions, relatively few 401(k) participants make voluntary after-tax employee contributions. Nonetheless, some plans include after-tax employee contribution accounts for special purposes.[5] A 401(k) plan could repurpose an existing after-tax employee contributions account as a rainy day savings account, or could add a new after-tax account for this purpose.

Approach 2: Deemed Roth IRA within the 401(k) Plan

One of the main drawbacks of using an after-tax employee contribution account as a rainy day savings vehicle is that the *earnings* portion of withdrawals from such accounts are taxed (and potentially subject to an early withdrawal penalty described later). Another way to facilitate rainy day savings under the 401(k) plan umbrella is through a deemed Roth IRA. Qualified plans are permitted to let employees make voluntary contributions to an account under the plan that can be treated in the same way as an IRA if it satisfies certain requirements. This type of account, when associated with an employer plan, is called a "deemed IRA,"[6,7] and is for the most part subject to the same rules governing regular IRAs. Although a deemed IRA can be either traditional (pre-tax) or Roth, the tax treatment of a deemed Roth IRA makes it better-suited as a rainy day savings vehicle than is a pre-tax deemed IRA. Accordingly, a rainy day savings account could be incorporated into a 401(k) or other qualified plan by establishing a deemed Roth IRA.

Approach 3: Depository Institution Account Outside the 401(k) Plan

An alternative to housing rainy day accounts within a 401(k) plan is to locate the accounts at a bank or credit union. There are several major advantages to using a depository

[5] These include providing for the possibility of recharacterizing pre-tax salary reduction contributions as after-tax contributions to avert a violation of the 401(k) nondiscrimination rules or limits on pre-tax contributions, or to set up an eventual conversion to a Roth IRA.
[6] This type of account is also sometimes referred to in the qualified plan context as a "sidecar IRA."
[7] Treas. Regs. section 1.408(q)-1(a).

institution as the provider of rainy day accounts. First, rather than repurposing a savings vehicle designed to hold and invest long-term savings (i.e., the 401(k) plan), the accounts are managed by entities whose primary business is to deal with short-term savings and near-instant liquidity. Second, providing rainy day accounts through banks and credit unions avoids the need to comply with retirement plan qualification rules and other ERISA regulations. Third, depository institution accounts could facilitate rainy day saving by the millions of workers employed at firms that do not offer a retirement plan, who are often lower paid and have at least as much need (if not more) for emergency savings as those whose employers do offer a retirement savings plan. And fourth, depository institution-based rainy day accounts come with the security of federal deposit insurance. IRAs and 401(k) plans can offer comparable security only for rainy day savings balances invested in bank deposits, which are not an option in many such accounts.

The primary disadvantages of using a depository institution account as the rainy day savings vehicle is that linking such accounts with a retirement savings accounts is more complicated than would be the case with both accounts managed by a single administrator under the umbrella of the 401(k) or other retirement savings plan.

If a depository institution is used for rainy day accounts, we envision that contributions would go into a savings account rather than a transaction (i.e., checking) account. Alternatively, depending on the population being served, stored value cards could be used instead of a savings account, or could be used to provide access funds in those accounts. Certain segments of the workforce, particularly the 27 percent who are unbanked or underbanked, could benefit from rainy day savings deposited on a payroll card (Federal Deposit Insurance Corporation 2016). A payroll card is a general purpose stored value card on which an employer directly deposits all or part of an employee's wages instead of paying wages by paycheck or by direct deposit to an employee's personal bank account. An employee can use a payroll card to obtain cash at an ATM or, like a typical debit card, to pay bills and conduct everyday transactions. (Unlike most debit cards, however, a prepaid payroll card is often not directly associated with a bank account.) Most importantly for the purposes of this paper, stored value cards can accommodate subaccounts (sometimes referred to as "set-aside" accounts) that reserve funds for particular purposes, such as an emergency savings account separate from a general transaction account. Municipalities, industries, and even the federal government are turning to electronic payment methods like payroll cards to reduce payroll processing costs and deliver pay and benefits in a

timely and secure manner that does not require employees to incur check cashing fees or to visit a bank.

III. Considerations in Choosing Among Potential Employer-Sponsored Rainy Day Savings Account Structures

This section outlines the conceptual issues that are relevant in evaluating the merits of the potential rainy day savings account options proposed above. Our intent is not to provide a comprehensive analysis of the possible alternatives,, and many of the relevant considerations involve legal issues that have yet to be resolved. Rather, our intent is to briefly outline the salient issues relevant to the three proposed potential approaches, including their most significant advantages and disadvantages, and focus on the more significant design and implementation issues.

A well-designed employer-sponsored rainy day or emergency savings arrangement needs to be easy for savers to participate in and to use, and easy for employers and payroll or financial providers to establish and manage. It should also minimize unintended adverse consequences. In designing such an arrangement, the following are key features and concerns that should be taken into account:

- Ability to automatically enroll employees into rainy day savings accounts
- The targeted size of the rainy day account balance, if any, and what happens to further contributions once the targeted balance is reached
- The investment allocation of rainy day savings account balances
- The fees and expenses associated with setting up and administering rainy day savings accounts
- The ability of employers to match employees' rainy day savings account contributions and the destination of those matching contributions (e.g., into the rainy day account, or into a retirement account)
- Reasonable liquidity when rainy day funds are needed
- Tax treatment of contributions to, earnings in, and withdrawals from the rainy day savings account
- Portability of rainy day savings when an employee separates from a sponsoring employer

- Compliance and potential interactions with the nondiscrimination rules that apply to tax-qualified employer-sponsored savings plans