

Just Keep My Money! Part I

The Potential for a Refund-Driven Savings Bond Program*

Peter Tufano

Sylvan C. Coleman Professor of Financial Management, Harvard Business School
Founder and Chair, Doorways to Dream Fund

Rev: April 19, 2007

* This work was done in close collaboration with Daniel Schneider (Princeton), formerly a Research Associate at Harvard Business School, and with executives from H&R Block Corporation, especially Mark Lung, Andy Olson, John Thompson, Bernie Wilson, Jeanne' Wright and the Block tax professionals in the Schaumburg, Illinois region. I would like to thank Emily McClintock Ekins and Nick Maynard (D2D Fund) for their research assistance and Tim Flacke, Andy Olson, Daniel Schneider, Anne Stuhldreher, John Thompson and staff at the Treasury Department for their comments. The opinions expressed in this document do not reflect those of Harvard Business School, Doorways to Dream Fund, the Department of the Treasury, or H&R Block. This research was funded by the Division of Research of the Harvard Business School.

Just Keep My Money! Part I The Potential for a Refund-Driven Savings Bond Program

Peter Tufano*

Sylvan C. Coleman Professor of Financial Management, Harvard Business School
Founder and Chair, Doorways to Dream Fund

In a related piece**, we argue that the savings bond program can be revitalized to help families—especially low to moderate income households—save. Savings bonds are attractive savings vehicles with widespread consumer awareness. One specific suggestion is to allow recipients of federal tax refunds to easily direct some of their refunds to the purchase of savings bonds; in effect to ask the Treasury to “just keep some of my money.” In March and April 2006, in conjunction with H&R Block, we conducted a “dry run” of this type of refund-based savings program. First, while the results are very preliminary, untapped demand for bonds might be strong. Given that capturing 1% of tax refunds would increase gross bond sales by over 25%, even a small level of refunds can materially boost bond sales, and more importantly, support family savings. Second, without a change in practices of either the IRS and/or the BPD that create impediments for bond-buyers, a refund-based bond program will likely fail. However, a few changes in government practices could simplify this process considerably. While policymakers must be mindful of the costs of administering any program, a refund-based savings bond program might enjoy certain attractive marketing and administrative economies.

* Contact Information: Harvard Business School, Baker Library 359, Soldiers Field, Boston, Massachusetts 02163; ptufano@hbs.edu; (617) 495-6855

** Peter Tufano and Daniel Schneider, Reinventing Savings Bonds, *Tax Notes* (October 31, 2005).

1. Introduction

In a related piece (Tufano and Schneider, October 2005), we argue that the savings bond program can be re-invented as a tool to help Americans save. While the private sector is anxious to gather assets from wealthier Americans, it has less interest in—and at times chooses to ignore—the savings needs of less affluent families. One of our proposals was to permit recipients of federal tax refunds to invest a portion of their refunds in U.S. savings bonds in a simple manner. We argued why facilitating this transfer might be received well by consumers, especially in the wake of the IRS split refund rule change embodied in Form 8888. Starting in January 2007, federal tax refund recipients can direct portions of their refunds to multiple destinations, and perhaps savings bonds might be one attractive refund destination. With over \$220 billion in federal refunds distributed each year, at tax time, families might have the willingness and capacity to save—if it were made easy enough.

In March-April 2006, we worked with H&R Block, the nation's largest private tax preparer, to conduct a “dry run” (Part I) of a refund-driven savings bond research program. U.S. Savings bonds were offered for approximately three weeks to tax filers in fifteen H&R Block offices in Schaumburg, Illinois, a suburb of Chicago. Refund recipients could direct a portion of their refunds to buy bonds, with the entire transaction conducted during the tax prep process. The purpose of this pilot was not to generate extensive data about consumer response *per se*, but to collect impressions by customers and tax preparers about a tax-based bond sales program. In addition, constructing the system for executing the sales illuminated the mechanics of the bond-buying process and informed a more formal experiment scheduled for early 2007 (Part II). This update

reports on some of our preliminary findings and reflections, which may be of interest to policy-makers, tax preparation firms, and financial institutions.

In brief, we found that the current structure of savings bond sales practices or “plumbing” hinders the investment by refund recipients in savings bonds. The current set of procedures makes it difficult for a refund recipient, tax preparer, or financial institution to execute a purchase of savings bonds from refunds simply. This is especially unfortunate because our preliminary indications show latent demand for bonds that could be satisfied with relatively simple changes in procedures. However, better understanding of latent demand will not be uncovered until our 2007 experiment, which is being carried out for the full tax season in both Schaumburg, Illinois and in Boston, Massachusetts.

In Section 2, I review the rationale for a refund-based savings program. In Section 3, I discuss the tax preparer and consumer response to our “dry run.” In section 4, I review the mechanics of the tax refund and savings bond sales processes, focusing on how existing processes impede, but could be modified to meet, consumer demand for savings bonds. In Section 5, I conclude with an outline for future research, both on consumer demand and on modifying the processes within Treasury.

2. Recap: The Rationale for a Refund Based Savings Bond Program

In our related piece (Tufano and Schneider 2005), we argue why a refund-based savings bond campaign might be attractive to families, tax preparers and officials in the Bureau of Public Debt. To summarize our arguments, a refund-based savings bond campaign might simultaneously provide various tangible benefits.

- Enabling filers to purchase savings bonds at the time of filing will allow them to precommit to savings at that time, rather than requiring them to

receive the funds and then subsequently execute the savings bond purchase, as would be required under the present system. Just as we encourage workers to “pay themselves first” through automatic payroll deduction savings programs, we could create a simple refund driven savings program.

□ Savings bonds themselves are good savings vehicles for many families. Many attractive features, including small denominations, no fees, lack of principal risk, portability, limited liquidity, choice of fixed nominal or inflation indexed forms, and brand name, make savings bonds competitive with many alternatives. In addition, savings bonds may be particularly attractive to certain families who have found that financial institutions discourage small savers through large minimum levels of investment, use of risk management tools like eFund’s ChexSystems products, or fees. In particular, in other work, we find that bank and credit union practices may deny savings accounts to persons who had previously had checking account closures for non-sufficient funds.¹ Bonds also can be purchased easily for others, such as children or grandchildren, which is considerably simpler than setting up an account for someone else.

□ A refund-based savings bond program might be attractive to the Treasury Department. In Tax Year 2004, the Federal government distributed refunds of \$221.4 billion to individual filers, of which \$83.4 billion went to filers with adjusted gross incomes under \$30,000. In that same year, total gross savings bond sales were \$8.7 billion, but redemptions far outstripped sales, so net sales were negative \$6.2 billion; at year’s end, the amount of outstanding bonds had fallen to \$204.7 billion. Were 1% of refunds to be directed to bond sales, this \$2.2 billion in new bonds sales would represent a 25.5% increase in net bond sales and a 1.1% increase in total bonds outstanding.

□ Furthermore, a streamlined refund-based system—which we describe below—could create an efficient mechanism to collect savings bond assets, addressing the legitimate concern over the high cost of the administration of the bond program. From a system-level perspective, a “one-step” program should reduce marketing costs and eliminate the cost of first distributing refunds, and then separately processing requests for savings bonds. A refund driven savings program could introduce millions of Americans to the Treasury Direct system.

In short, we hypothesize that a refund-driven savings program might be attractive to both families attempting to save and a Treasury seeking to raise funds and support family savings. Furthermore, it could stimulate even greater activity by the private sector to help Americans save, if they could see this demand in the form of savings bonds.

¹ Sondra Beverly, Daniel Schneider and Peter Tufano, “Splitting Refunds and Building Savings: An Empirical Test” *Tax Policy and the Economy* 20 (2006).

3. Potential Demand for a Refund-Driven Bond Program: The 2006 Dry Run.

Any calls for a refund-based bond program presume some consumer demand for the product. A rigorous test of this proposition would require offering a sizeable number of refund recipients the opportunity to buy bonds easily, especially during the peak of tax refund season, which occurs roughly in February and early March. Ideally, the experiment would be constructed so that one could observe the sales of bonds as well as the investment in other refund savings options. For Tax Year 2006, we hope to carry out this type of experiment.

However, to prepare for it, we conducted a “dry run” for three weeks from March 23 through April 15, 2006 in 15 H&R Block offices in Schaumburg, Illinois. We sought to collect impressions from customers and tax professionals about the wisdom of offering savings bonds and to test out a research methodology that would be used in a subsequent tax season. While we collected some empirical data, it is imprudent to extrapolate from this small sample. This progress report is written not to prove or disprove whether there is demand for savings bonds, but rather to inform policymakers of the current knowledge.

Figure 1 provides various statistics on Schaumburg, Illinois, comparing it against the U.S. data from the 2000 Census. The families in Schaumburg are slightly more affluent than the population, with a median income of \$60,941 versus the U.S. median of \$41,994. It contains more Asians and fewer African Americans than the U.S. population. Its residents are better educated than the U.S. population with over 68% having some college or better vs. 51% for the US. However, these numbers reflect the 2000 Census, not the less affluent population we met in Block offices in 2006. For example, among

our population of refund recipients, the average adjusted gross income was \$50,149, far below the median for the community some six years earlier. (In 2007, we seek to use offices that serve less affluent customers.)

In the experiment, clients progressed through the tax preparation interview following the standard sequence. In Block offices, customers are routinely asked whether they wanted to open various savings and investment accounts. We modified the standard Block procedures in that after the amount of the expected federal tax refund or payments were calculated, clients entitled to refunds had the option to purchase Series EE and Series I U.S. Savings Bonds with a portion of their tax refund; the remainder of the refund was available for direct deposit into an existing account, IRA investment, opening a savings account, or receiving as a paper check.² A customer could only buy a bond if (a) it was offered by the tax pro; and (b) if the customer had a refund of at least \$100, as the minimum bond purchase was \$100 due to restrictions arising from the method that Block implemented to purchase the bonds.

Marketing material was confined to small placards placed at each tax professional's computer terminal, and tax professionals were asked to describe the bond offering and answer any client question. Clients opting to purchase savings bonds were asked to complete two legal forms, one related to refund processing the other authorizing H&R Block to share purchase request information with the Treasury. At the close of the tax preparation interview, all clients were asked to complete a short computer-based survey which generally took three to five minutes. The survey included questions on household debts and assets, experience with U.S. Savings bonds, planned refund use, and measures of savings behavior. Survey takers also gave us permission to access their tax

data (after removing all identifiers such as names, addresses and social security numbers.)

The 121 tax professionals in these offices went through training on March 22-24, 2006. Training lasted approximately one hour, during which they learned of the reason for the experiment, received a brief primer on savings bonds, and spent the bulk of the time working through the mechanics of executing the purchase. For example, the training emphasized which screens to fill out, what entries to put in which locations on these screens, what paperwork the client would receive, etc. Tax professionals were compensated \$1 for each completed survey and received the same compensation for selling a savings bond as for any other savings vehicle. We subsequently conducted two focus groups a few weeks after the end of the tax season with tax professionals from Schaumburg to collect their impressions of the program. It is useful to organize our observations around the response by tax pros (reflected in the rate at which they offered the product) and the response by consumers actually offered the product.

Product Offer. In the three weeks during which the program was in place, returns for approximately 3924 tax filers with refunds were processed by the 15 offices. From our discussions with tax pros, we know that not all tax professionals offered the bonds to customers, despite the training provided. One measure of the “offer rate” is the number of surveys completed, assuming some relationship between offering the survey and offering the bond.³ During the study period, tax pros filled out 826 surveys of refund recipients. If survey completion is a proxy for offering a bond, then the offer rate was approximately 21%. Among refund recipients with refunds over \$100 this fraction was 31%.

² In this experiment market, clients were not offered the option of getting Refund Anticipation Loans.

The low offer rate by tax pros was explained in our focus groups with tax pros. It was clear that they were frustrated that we tried to launch this new product far too late in a very busy part of the tax season:

It hit at a time when we were starting to just get insanely busy, so it was hard to think about savings bonds. You were just trying to think about the next client sitting in the waiting room.

We got a room full of people—we don't have time for that.

I'd be done and I'd be like, "Oh man, I forgot to mention savings bonds. Oh, too bad. I don't have time and I've got somebody waiting."

In addition, tax pros felt that they needed a specific prompt to sell bonds (a “trigger”), a simpler set of screens to effect the bond purchase, and more training. One message from these tax pros was that they wanted to know a lot about a product and the process for selling it before they would offer it:

It's easier to skip them (the selling screens) than to look like a bozo.

I feel like an idiot if I don't know exactly what I'm talking about.

Our own experimental protocol, that involved the completion of a short survey, was also resented by tax pros and customers. Tax pros were reluctant to administer a survey that asked clients for personal information about savings and debt levels, despite the fact that they asked for other private information in the tax prep process.

These three concerns (timing, prompts and a simpler survey) will be addressed in the TY2006 experiment. However, some tax pros did—or did not offer the bonds—based on their personal beliefs about the investment. Some felt they were inappropriate investments and did not offer them, while others felt they were good or even superior investments.

³ While we can confirm that every bond buyer completed a survey, we cannot be sure that (a) every survey

Savings bonds are not something you get a deduction for.

I would personally rather sell bonds than Express Savings accounts

Me too.

Savings bonds are not the ideal investment for some clients, and tax pros are correct in making this assessment. However in TY 2006, we intend to improve training for tax pros to give them a better sense of the pros and cons of bonds, so that they can be more informed in offering them. We strongly suspect that bond-take up will likely be higher if it is presented as a “normal” option. In the extreme, were the 1040 form to include a prompt to ask “How much of your refund would you like in savings bonds?” this would obligate paid preparers and self-preparers to consider this option.

Consumer Response. It is appropriate to calculate the take-up rate relative to the bond offers. Appropriate denominators for this calculation may be the 2599 persons with refunds over \$100 (the minimum bond purchase amount) whose returns were processed in these 15 offices, the 826 refund recipients who completed surveys and presumably were offered bonds, or the 798 surveyed customers with refunds greater than \$100. Using the first number assumes that everyone eligible was offered bonds, using the second assumes that all surveyed refund recipients (even those with less than \$100) were offered bonds, and using the third assumes that only surveyed recipients with refunds over \$100 were offered bonds. While there is some complication about the denominator, the numerator is fairly clear—24 taxpayers purchased bonds, representing 0.9% of the potentially eligible customers, 2.9% of all of those who completed surveys; and 3.0% of

taker was offered bonds, nor that (b) only survey takers were offered bonds.

those with refunds equal to or greater than the minimum bond purchase.⁴ We believe that the latter figures are probably more representative.

While we typically calculate take-up rates at the level of the individual, it is instructive to also calculate them at the level of the tax professional and the office. Only eight tax pros in six offices sold at least one bond. This means that bonds were only sold by 6.6% of all tax pros and in 40% of the Block offices that participated in this study. In those offices which sold at least one bond, the mean and median take-up were 5.1% and 3.5% respectively (against the surveyed refund recipients). Among tax pros that sold at least one bond, the mean and median take-up rates were 17.0% and 13.7%, calculated on the same basis. Unfortunately, we did not have information on the tax pro characteristics (tenure with Block, age, gender, etc) for this particular experiment.

It is useful to put this performance in context by comparing it to another Block savings product. ExpressIRA (XIRA) is an established H&R Block Individual Retirement Account (IRA) product. Tax clients can set up a new XIRA at the tax site or they can re contribute to an existing XIRA. These products have certain tax benefits, augmented by the federal Savers Credit, which provides some matching in the form of tax credits for contributions to tax-advantaged accounts. Of the 826 refund recipients in our sample, 31 purchased XIRAs or re contributed to an existing XIRA (14 new XIRAs, 12 re contributions to XIRAs, and 5 clients did both.) The 24 savings bond purchasers are quite comparable in number to these 31 XIRA customers. Given that Block expended material marketing effort to promote XIRAs—but none to promote savings bonds, the take-up of the savings bonds is fairly good.

⁴ We know that one of these bonds was bought by a Block tax professional, but because we do not have information to identify purchaser this was, it is treated as a customer purchase. Excluding this one

The Type and Amount of Bonds Purchased. Of the 24 purchasers, 17 purchased series EE bonds and 7 purchased series I bonds. This result was rather unexpected. The series I bonds offer inflation protection and the EE bonds do not. Furthermore, at the time of the offer, the series I bonds were offering a nominal yield of 6.73% (which would adjust every six months) versus the EE bonds, which were offering a fixed 3.2% yield. We had expected series I bonds to sell better than the EE series. We suspect that both tax pros and customers had more familiarity with the EE product—and with fixed rate products, explaining its relative popularity. Our sense of tax pros is that they would prefer that we only offer one of the two series, to simplify the process. We are intending to offer the series I bonds in 2007, as it is a unique product that cannot easily be replicated in the private sector.

From 1962 to 1969, federal tax refund recipients could instruct the IRS to direct 100% of the refunds to the purchase of savings bonds. **Figure 2** shows an example from the 1962 tax form 1040A. Notice the box to the lower right hand side of the form which says “Check here if you want your refund applied to U.S. Savings Bonds.” The demand for this option was quite low, with less than 1% of all refunds applied to bond purchases (Internal Revenue Service (1962-1968)). Even our small dry run shows why the 1960’s all-or-nothing savings bond experiment was unsuccessful. Among bond purchasers, the mean (median) bond purchase was \$231 (\$100), an amount equal to 14% (8%) of the refund. While there may be demand for bonds, not a single individual chose to put their *entire* refund into savings bonds, as required under the 1960s policy. However, recent changes to IRS rules, embodied in Form 8888, which allows refund recipients to direct their refunds to multiple destinations would address this issue.

purchase would lead to a 2.8% take up rate.

We saw evidence of the importance of setting defaults in our offering of bonds. Because of some technical aspects of Block's delivery of bonds, the minimum savings bond purchase was \$100. Of the 24 purchasers, 14 of them bought exactly \$100 in bonds.⁵ In a future experiment, it would be interesting to know if higher minimums lead to lower take up or whether the take up is unchanged, but the amounts are simply higher.

In contrast, the average and median figures for XIRA initial contribution were \$1778 and \$1000, respectively. Expressed as a percentage of the tax refund amount, these means and medians are 121% and 48%, respectively. These numbers are not strictly comparable to the savings bond numbers as funding an IRA can affect a person's tax liability. However, the absolute dollars invested by new XIRA participants are substantially more than for savings bonds.

Characteristics of buyers and non-buyers. **Figure 3** reports selected characteristics of survey respondents who did and did not buy bonds. A few facts emerge about our small Schaumburg sample:

- Compared to others, bond buyers tended to have higher adjusted gross incomes \$57,028 vs. \$49,943, and correspondingly larger refunds (\$2904 vs. \$1868). They were more likely to be homeowners. However, they are about the same age as non-bond buyers (44 vs. 41), with a similar distribution of dependents and a similar breakdown by filing status.
- By definition, all the bond buyers planned to save part of their refund; only 58% of the non-bond buyers planned to save part of their refund.
- Bond buyers were also significantly more likely to be small savers, with

⁵ One can see the same default behavior with XIRAs, where approximately a quarter of new XIRAs were equal to the minimum default level.

32% having savings and financial assets between \$1 to \$5,000, whereas 21% of non-Bond buyers had this range of financial assets. On the other hand, 44% of non-Bond buyers had savings and financial assets over \$40,000 and while 28% of Bond buyers were in this range.

- The bond buyers planned to hold onto their refund longer. 34% of the non-bond buyers expected to have spent all of their refunds within a month; the corresponding figure for bond buyers was 5%.⁶
- Bond buyers were more likely to have existing savings: 86% versus 77%. However, another way to look at this fact is that 14% of the bond buyers report no prior savings.
- Bond buyers were more likely than non-buyers to open new XIRAs in the same year; 17% versus 2%. Our bond buyers may be motivated savers.
- Bond buyers were no more likely to have been prior or current owners of bonds (52% versus 53%), but were more likely to have heard about bonds in the past (100% versus 90%).
- Bond buyers were more risk taking than non-buyers. Among non-buyers, 33% said that they were not willing to take any financial risks in their investments; among bond buyers this figure was 9%.
- In terms of self control, the bond buyers described themselves in less extreme terms. In particular, they were less likely to either agree or disagree with the statement that "I often find that I regret spending money. I wish that when I had cash, I was better disciplined and saved it rather

⁶ This is logically inconsistent, because the bonds have a one year holding period requirement, which was explained. They could have interpreted the bond purchase as "no longer having the money."

than spent it."

While this test was partially predicated on the belief that savings bonds might be most interesting to people who were unbanked, the percentage of the unbanked was low for both groups, and roughly the same (4% versus 5%). This reflects the fact that Schaumburg was a less-than-ideal location to reach lower income consumers. However, it suggests that savings bonds might be more generally attractive, even those with other savings options. One might imagine that the I-bonds, which produce a payoff that cannot easily be replicated through private investments, might be especially interesting even to existing savers. In our 2007 experiment, we hope to include a slightly less affluent study group, and are quite curious to see whether bonds appeal especially to those who are outside the mainstream of the financial system, or those who seem more within this mainstream.

Bonds and Saving Behavior. From a public policy perspective, the sale of savings bonds at tax time would be most interesting if they increased family savings, versus merely substituted for other savings. A narrower version of this question might be to ask whether savings bonds were related to the same, lower or higher tax time savings, as measured by savings executed at the tax site.

Our dry run did not include an appropriate control group or randomized process that would enable us to look at the relative savings (at least tax time savings) of persons offered and not offered savings bonds. Of the saving bond purchasers, 14% professed to have no prior savings. (In comparison, only 5% of people who purchased new XIRAs had no prior savings.) If bond buyers are drawn more heavily from non-savers, bonds might prove to be effective in stimulating new savings.

If we look at total tax-time savings (new XIRAs plus recontributions plus bonds), bond buyers saved an average of \$658. Of course, this represents only savings executed at the tax site. This figure is far higher than the average tax-time savings of non-buyers (\$50), but considerably less than XIRA investors (who did not buy bonds), who invested an average of \$1747.

Ideas for Increasing Consumer Response. In focus groups, tax pros reported that demand could have been higher if we had modified the program slightly. In the experiment, the bonds could only be issued in the name of the tax filer. Tax pros report turning away demand by customers who sought to buy bonds in the names of their children or grandchildren:

It'd be great if they could put it in a grandchild's name, or a child's name, somebody else's instead of themselves, because I could've sold two or three at the end if they could've bought them for their grandkids.

They wanted it for grandkids and we couldn't (accommodate them)

A few people did mention something about grandkids or whatever, so I think if they're going to offer it, you probably should have a setup where you can put it in your kid's name.

While our focus groups did not focus on savings bond policy, one tax pro reported a conversation with a tax client which led them both to wonder whether the federal government should make bonds tax preferred not only for education, but for first time home ownership.

Tax pros' abilities to sell savings bonds at all reflected the generally high level of knowledge of bonds by filers prior to the tax prep session. We asked survey respondents to indicate their experience with savings bonds prior to the tax prep session. Among the population of refund recipients, 21.2% were current savings bond owners; 32.0% had

previously owned savings bonds; another 37.2% had never owned savings bonds, but knew about them; and only 9.7% had not heard of savings bonds prior to the session. At least in Schaumburg, Illinois, bonds had a 90% awareness level.

We asked tax pros to speculate what might increase sales of bonds. They volunteered that bonds were no longer advertised or marketed—just out of sight and out of mind.

Well there's no advertisement, that's one thing

I think if the government advertised them more, and ... (if) once in a while people would see a PSA (public service announcement) with government bonds. Or even if it was a post office—you don't even see them in the post office anymore. It's just, it's out of sight, out of mind.

You don't see ads anymore for savings bonds, unless you're up at 3 in the morning watching public service TV or something

Interestingly, the tax pros reported some “urban myths” about savings bonds that might prevent them from being purchased. One tax pro reported that consumers encountered banks which would not redeem a valid bond:

I've had people say, I wanted to buy a bond but they (a bank) told me they wouldn't redeem it for me.⁷

The most pernicious myth was that the bond program simply did not exist any more:

I had people say “Are those things (savings bonds) still around?”

It appears that the Treasury's decision to eliminate advertising and close the 41 regional marketing offices for the bond program had the expected impact.⁸ However, if consumers are asked whether they want to buy bonds from their refunds, and if this process is made simple, there may be consumer demand. The challenge is to design a system that can accommodate this demand, while being operationally feasible and cost efficient.

⁷ Banks selling bonds (issuing agents) are not required to redeem them (paying agents), although most do. See <http://www.frbservices.org/Treasury/pdf/SavingsBondBrochure.pdf> (visited 10/24/2006)

⁸ Source: http://www.usatoday.com/money/perfi/bonds/2003-09-08-bonds-cover_x.htm

4. Existing Hurdles for Savings Bond Investing by Refund Recipients

While there may be latent tax-time demand for bonds, the current system not only fails to support, but hinders, tax time saving directed to savings bonds. To conduct the dry run, Block had to work around a number of these impediments, in a way that would not be sustainable in scale. To understand why the status quo hinders tax time bond sales and how it might be changed to accommodate demand, it is useful to understand the “plumbing” of tax refunds and savings bond purchases.

Bond Purchase Mechanics. There are three ways to purchase bonds: from a financial institution, directly from the Treasury through the Treasury Direct system, or from an employer. Treasury Direct (TD) is a web-based system administered by the Federal government to sell treasury securities and savings bonds. Because tax preparation rarely takes place at the workplace, we focus on the first two methods to purchase bonds.

The fundamental operating rule for bond purchases through financial institutions seems to be that the transmission of the bond order and the movement of funds to purchase the bond take place at the same time. As an example, consider the process whereby a would-be investor would purchase a bond through a financial institution (FI). This analysis is from the perspective of the consumer, not the operations group at the Bureau of Public Debt. For the FI-intermediated purchase, the consumer would obtain a copy of form PDF 5263 (for Series EE) or PDF 5374 (for Series I bonds) (See **Figure 4**) from the FI, complete it, and simultaneously give the FI the funds necessary to execute the purchase. The FI then transmits the funds and order request to the Treasury, more or less simultaneously. (Since the funds and order information are two separate data

streams, this process may be not precisely simultaneous.)

The TD process is more flexible in many respects than the FI-intermediated sales process. To purchase a savings bond through TD, the investor would already have had to open a TD account, providing the information shown in **Figure 5**. Note that the would-be TD account holder needs a social security number, bank account, email address, and a driver's license to set up the account. Various studies document the fraction of the adult U.S. population without this information. For example a 2005 Pew Internet and American Life study found that about a third of American adults did not go online or use email, although this fraction varied widely among various segments.⁹ The Department of Transport Federal Highway Administration's Highway Statistics reports that in 2004, 13% of the driving age population did not have licenses.¹⁰ According to the 2004 Survey of Consumer Finances, 8.6% of Americans do not have either a checking or savings account at a depository institution, although other samples suggest higher fractions, especially among certain populations.¹¹ It is hard to determine what fraction of Americans would fail to have one or more of these pieces of required information to open a TD account, but surely the system, while very convenient for many, would be inaccessible to some. In their October 21, 2005 E-Government Act Report, the Treasury reported that it had opened up 400,000 TD accounts in FY 2005, a substantial number but still quite small relative to the more than 200 million adults in the U.S.

⁹ Susannah Fox, Digital Divisions, Pew Internet and American Life Project Report (October 5, 2005).

Available at http://www.pewinternet.org/pdfs/PIP_Digital_Divisions_Oct_5_2005.pdf.

¹⁰ <http://www.fhwa.dot.gov/policy/ohim/hs04/dl.htm> (accessed 10/15/2006). On some consumer sites, it reports that one can set up an account by typing "none" as the drivers' license number. If so, this constraint would not be binding.

¹¹ For example a MetroEdge survey of urban residents showed that 22% were unbanked. See "To Bank Or Not To Bank? A Survey Of Low-Income Households" by Christopher Berry in *Building Assets, Building Credit Creating Wealth in Low-Income Communities*, Nicolas P. Retsinas and Eric S. Belsky, eds.,

Once the TD account is opened and linked to the investor's FI account, then she could complete the screen shown in **Figure 6** to execute the purchase. In effect, our investor provides the order request to the BPD, and instructs them to pull funds from the specified account to fund the purchase. The menu permits the user to specify a future date for this funding to occur. The pull of funds (executed through an Automated Clearing House or ACH request) occurs very soon after the date scheduled on the form in Figure 3.

Alternatively, as discussed below, it appears that the consumer can direct monies to TD to be held in Zero Percent Certificates of Indebtedness (CofI), and separately instruct TD to purchase securities at a predetermined later date. This would suggest that TD can support the "pull" of funds through ACH or the "push" of funds into CofI, however in either case, the savings bond purchase transaction must be scheduled for a fixed date.

Tax Refund Mechanics. The fundamental operating rule in the tax system is that the receipt of refunds happens in a window from one to eight weeks after the filing of the tax form. The IRS itself does not readily provide statistics on the time from filing to refund receipt, but various private entities provide rough estimates. For instance, H&R Block's web site reports that the normal length of time from tax preparation to the receipt of refunds from the IRS depends on the method of filing (e-filing or paper filing) and the method of refund payment (check or direct deposit). Mailed returns with paper checks might take six to eight weeks; mailed returns with direct deposits five to seven weeks; e-filed returns with paper checks three weeks; and e-filed returns with direct deposit

(Brookings Institution Press and the Joint Center for Housing Studies, Harvard University 2005).

usually take eight to fifteen days. The time delay between tax filing and the availability of funds to the taxpayer is dependent on the speed of IRS processing as well as the method chosen by the consumer to receive payment (direct deposit or paper check.) This delay has given rise to commercial products and services that effectively “speed up” the payment of refunds, such as refund anticipation loans (RALs).

In a refund-based bond-sales program, a citizen would simultaneously file taxes and buy bonds. In effect, she would instruct the Treasury, which oversees both the IRS and the BPD, to “just keep some of my money.” Already, citizens can ask the Treasury to hold onto their refund to pay for future estimated taxes; here instead the instruction is to hold onto the refund to purchase government bonds. There is evidence that tax refunds may be “savable” if one can help the filer make the savings decision before receiving the funds; if the process is simple; and if account opening (or bond buying) can be effected at the time of tax filing.¹²

Reconciling Bond and Refund Systems. However, the discrepancy between tax refund and bond purchasing operations makes the refund-based purchase of bonds problematic. As illustrated in **Figure 7**, if you want to encourage consumers to make the bond decision at the time of tax filing, the *bond execution must be delayed* until the refunds are received or *monies must be advanced* at the time of the tax filing to pay for the bonds. Either of these two alternatives creates hurdles for consumers, tax preparers and financial institutions—in effect discouraging them from selling and buying bonds.

Three parties could intentionally “hold up” the bond order: the consumer, the FI or the Treasury. Furthermore, the process would vary depending on whether or not it involved Treasury Direct. Without Treasury Direct, asking the consumer to wait to

submit the order until her refunds were received would rely on her best intentions to purchase bonds at some future time. This would subject her to two separate processes—tax filing and bond purchase. At tax time, the consumer could be given the appropriate forms—perhaps even filled out with prepaid envelopes—and told to send them in, with the appropriate funds, once the refund had been received. This would still require the would-be investor contact or visit her FI to file the form and pay for the bonds, using either cash, money from an existing account, or other suitable payment.

Rather than asking the consumer to wait to submit the bond order, the tax preparer and/or financial institution could play this role. Either one could obtain instructions from the tax filer to execute the bond purchase once the refund had been received. In essence the consumer would engage the tax preparer or financial institution as an agent, authorized to consummate the purchase of the bonds once the refund arrived and was available for withdrawal. This practice would be possible only if the consumer had the refund directly deposited into a known account. If this were a general purpose account, then the tax preparer or financial institution would have to know when the refund was actually received. To complicate matters, if this account were under the taxpayer's control, then she might withdraw funds before the savings bond were purchased, thereby creating additional problems for the FI or tax preparer. Alternatively, the FI could set up a dedicated account from which to fund the savings bond purchase and from which the consumer could not withdraw funds. The FI or Tax Preparation Firm would presumably have information about when the refund was received and could execute the bond purchase as soon as the monies were received.

An alternative to delaying the bond sale would be to advance monies to the refund

¹² Beverly, Schneider and Tufano, *ibid.*

recipient to fund the bond purchase. In theory, a refund anticipation loan (RAL) product could be used to execute a savings bond purchase. However, for a variety of reasons, this would seem to be counterproductive. First, it seems logically inconsistent to ask someone to borrow to fund savings. Second, ignoring fees, the interest rate on the RALs would surely exceed the interest paid on the savings bonds. For example, the rate on EE bonds in October 2006 is 3.7%; while the rates charged for RALs vary across firms, in most cases the annual rate more than ten times as large. It would seem strange to induce expensive borrowing to fund low rate investing, an anomaly noticed in certain consumer transactions.¹³ Furthermore, it is unlikely that self-preparers or those using free-tax prep sites would have access to refund-loan products that could advanced monies to purchase the bonds.

The Dry Run Process. In our 2006 dry run, H&R Block used the “hold up” and “dedicated account” methods to conduct our experiment. If a client wished to buy a savings bond, Block opened dedicated accounts for each bond purchaser, directed a portion of the refund equal to the bond purchase equal to this amount into this account (in the form of a debit card product), submitted the bond order and monies to the BPD, and then closed the account with a zero balance. **Figure 9** is a process flow diagram that illustrates the complexity of the process. Each arrow, representing an activity, flow of information, or flow of funds is the potential source of operational risk for Block as well as a cost element.

While a private firm might be willing to offer bonds as an experiment in this convoluted fashion, they would unlikely offer them on an ongoing basis. Against these

¹³ See D. Gross and N. Souleles, "Do Liquidity Constraints and Interest Rates Matter for Consumer Behavior? Evidence from Credit Card Data." *Quarterly Journal of Economics* (2002) or Jonathan Zinmann,

costs of processing a new bond application, and the potential liability of acting as an agent for the tax filer, a financial institution would receive only \$0.50 to \$0.85 from the federal government to process bonds; Regulations prohibit agents from charging fees to consumers to purchase or redeem bonds.¹⁴ While Block has not conducted an activity-based cost analysis of this process, they guess that the cost of execution for the dry run was in excess of \$11 per bond. While this high number reflects the extraordinarily small scale of the experiment and the need to conduct the processing in the context of existing Block practices, even in scale it is likely that the cost to operate this system would be well in excess of \$0.50 to \$0.85 per transaction. In light of the limited revenue potential, the cost and risk involved, we do not expect many FIs nor tax preparers to voluntarily offer bonds at tax time. We are not optimistic that the private sector will facilitate this circular flow of money from and to the U.S. Treasury.

Building Blocks of a More Scalable Solution: Form 8888 and Treasury Direct.

However, split refunds and TD provide much, but not all of the functionality, to permit consumers to create a simple process for a refund-based savings bond program. Starting in January 2007, refund recipients will be able to split their refund to as many as three direct deposit destinations using a new form 8888. Form 8888 will direct monies to accounts with valid ABA routing numbers and account numbers. TD is a legitimate deposit destination with a valid ABA routing number. Furthermore, the TD system will allow consumers to specify a future date for the purchase of savings bonds, and appears to allow consumers an option for holding funds in Coffi until that date, as described

“Borrowing High and Lending Low Under No Arbitrage” (unpublished manuscript, 2006).

¹⁴ <http://www.savingsbonds.gov/instit/savbond/otc/otc.htm> (visited 10/24/06) provides information on fees; <http://www.frb services.org/Treasury/pdf/SavingsBondBrochure.pdf> (visited 10/24/2006) clarifies the prohibition on charging fees for purchases or redemptions of bonds.

below. Nevertheless the link between the tax prep process and the TD process will not likely facilitate substantial refund-based bond purchases in the short run. To understand why, it is useful to go through the process flow involved, both for an existing TD account holder and for a non-TD account holder.

For an existing TD account holder wanting to buy bonds, the process would be as follows. In general, either the process would involve two steps (including returning to the TD site after the refund was received), inconvenience to the tax preparer, loss of interest to the would-be bond buyer, or potential exception reporting by the Treasury,

1. Most consumers will learn the size of their refund during the tax prep process. When the tax prep process is nearly complete, the taxpayer could complete Form 8888, directing a portion of her refund to the Treasury Direct account using the routing number and her TD account number. These monies would be invested in a Zero Percent Certificate of Indebtedness (C of I). This is an interest-free instrument used to buy other Treasury Direct Obligations. From the time the refund was received bonds are bought, the CofI earns no interest.

2. Even once the refund is deposited into TD, the person needs to tell TD to buy the savings bonds.

- a. One alternative would be to wait until the rest of the refund were received. At that point, she could log onto TD and use the monies in CofI to buy the bonds.¹⁵ While this is relatively simple, this two step process requires more work by the filer. A filer might forget to go onto TD, and would then be penalized by holding a zero-interest instrument.
- b. It would be far simpler for the taxpayer, if the bond purchase could be done at the same time as tax preparation. For this to work, the client would need to go onto TD and specify not only the amount but also a date for the bond purchase. This date must be after the refund will be received by the TD system. Realizing that this date is uncertain, the taxpayer would need to estimate the refund arrival date, and would likely select a date well after the actual refund receipt. If the account failed to have the appropriate amount of CofI to purchase the bonds (either because the refund had not yet been received or the refund was smaller than anticipated, perhaps because of a lien that reduced the

¹⁵ At this point, the individual could buy other marketable securities as well, including bills, bonds, notes and Treasury Inflation Protected Securities. These alternatives have minimum initial investments of \$1000 and can be purchased through TD when the Treasury has periodic auctions.

refund), it is not clear how the TD system would process this failure. The current TD system does not allow a user to set a conditional default that says “When I get more than \$XX, sweep the proceeds into a savings bond of this type.”

3. It is unlikely that tax preparers would or could interrupt the tax prep process to enable the consumer to log onto TD at that time to set up the bond purchase instructions. Some tax preparers may not have live internet access, as even some Electronic Return Originators use a batch system to send returns to the IRS and do not have continuous Internet access. If the tax preparer cannot or will not permit the consumer to access TD, the consumer would need to do this at a later point in time, presumably when they returned from the tax preparation site. Block has apparently had some experience with interrupting the tax process to access the internet either to download W2/1099/1098 data and pay balances due with credit cards. They report that these interruptions do not work well unless they are “baked into the process” in a way that they are fully integrated.

For someone without a TD account, two additional complications are critical.

Both involve practical timing issues: (a) the ability and time to open a TD account in the midst of the tax prep process; and (b) the timing of the receipt of the TD account number.

1. At some time during the tax prep process, but before the time when the refund destination must be specified, the consumer would need access to the internet at the tax prep site to complete the TD account process, partly shown in Figure 2. This assumes that the consumer has all of the required information (email account, drivers license and bank information) and brings it to the tax prep site; that the tax site has Internet access; and the tax site will permit the consumer to interrupt the process to complete the TD application.

2. However, even if all of the factors in step (1) are satisfied, the TD system must email the account number to the new TD user. While in our experience this email occurs quite rapidly, for this to work in a refund-based program, the tax preparer would need to permit the tax filer to access her email during the tax prep process, and any delays from TD or the person’s email system would prevent the savings bond purchases. Furthermore, the account opening is not instantaneous. As an experiment, one of our team recently applied for a TD account. After nearly a month, the account is still “on hold.”¹⁶

¹⁶ The would-be TD customer has been told; “The form needs to be certified by a banking institution indicating the information and the signature on the form is yours. Notary Public certification is not acceptable. We will accept the Medallion Signature Guarantee stamp, a Signature Guarantee stamp for the financial institution, the financial institution's Corporate Seal, or the paying agent's stamp that the financial institution was issued to pay savings bonds with their paying agents number. We were unable to verify your identity with the information you provided when you opened your account. Therefore, your account

While at first glance, a consumer with a TD account can theoretically use the system to drive a refund-based bond sale, the practical impediments described above are at best inconvenient. They are even more severe for consumers without TD accounts.

Indeed, the far simpler solution would be to have the refund recipient specify on the tax forms her desire to purchase bonds, in essence telling the Treasury to “just keep my money.” This is not a novel concept. Employer-based savings bond programs work this way, with employees telling employers to “keep my paycheck” and remit part of it to the Treasury for the purchase of savings bonds. Taxpayers can ask the Treasury to hold onto a refund to pay for the following year’s estimated taxes, why not for the purchase of a bond? As I discussed earlier, this choice was afforded to refund recipients from 1962 through 1969. All a refund recipient had to do was to check a box to give the Treasury authorization to buy bonds. **Figure 2** shows the 1962 tax form 1040A. By simply checking a box, a refund recipient could buy bonds. However, making this process simpler for savers will likely make it more complicated for others.

5. Next Steps: Establishing Demand and Engineering an Efficient Process

The 2006 dry run of a refund-driven savings bond program was instructive. On the positive side we were pleasantly surprised by the awareness of savings bonds by consumers and tax professionals. We are cautiously optimistic by the consumer response, compared with established tax-time savings products. We learned about the difficulties that face any tax preparer who seeks to facilitate bond sales at refund time

is in a "T08 Hold - Awaiting Verification" status.” While this is only a single case, it reflects the type of factor that would inhibit on-site TD account opening.

under existing rules. We learned that we need to offer bonds the early part of the tax season and to work to encourage the tax pros to make the offer. We learned that the more seamless the process is, the more likely that tax professionals will be to sell—and consumers to buy—bonds. Finally, we learned that the simplest sale might be to offer filers the ability to name children as beneficiaries of the bonds.

Probing Demand More Carefully. In TY 2006 (Winter 2007), we will hopefully be carrying out a larger and more formal experiment to offer bonds in more locations over essentially the entire tax season. We will likely use a shorter survey to address the dissatisfaction of tax professionals. We will be offering participants the ability to purchase bonds in the names of other beneficiaries. We are hoping to incorporate controls (either comparison offices or randomization) to test whether tax time savings is affected by the simultaneous offering of bonds. At the core, this slightly larger experiment will seek to better address two sets of questions: (1) What is the demand for bonds? By whom? For what purposes? (2) Does the presence of bonds increase or decrease total tax time savings?

In addition, D2D Fund, in conjunction with a set of partners, is hoping to facilitate the offering of bonds to users of Volunteer Income Tax Assistance (VITA) sites around the country, with software that would facilitate the purchase of savings bonds in a number of sites. We have interviewed leading volunteer tax sites about the pros and cons of offering savings bonds to their clients. Positive comments include the following:

- Encourages people to save without endorsing any bank
- Another tool in the savings toolbox
- Marketing bonds as purchases for children or grand-children
- Relatively competitive return
- Low minimum to open and no fees or cost to cash it in
- Does not require a banking relationship

However, these volunteer tax sites have raised concerns, which include whether clients would accept a government savings product, whether buying bonds might threaten clients' eligibility for public assistance, whether they will be able to deal with the required one year holding period, and whether clients might lose paper bonds or be willing to accept only electronic bonds. Hopefully in 2007, we will be able to report on the results of these experiments, which will shed additional light on the demand for a refund-based bond program.

Engineering an Efficient Process. While on-the-ground testing may establish demand, applied policy work needs to be done to understand the feasibility of offering bonds simply. While we have not done the full analysis required to harmonize the refund and bond purchase systems, a few modifications of the two systems might help create a seamless link between them. For example:

Prompt Bond Sales on the Tax Form. Even tax preparation professionals, trained to sell bonds, asked that we put a simpler prompt into their process to ensure that they offered bonds. For consumers, simple prompts are likely even more important. The first item to consider is whether the tax form could explicitly prompt consumers by asking them, "How much of your refund would you like in savings bonds?"

Investigate a Two-Step TD opening. The current TD system requires that all information be submitted in one batch on line. It might be possible to consider a two-step TD account opening process. The first step would be a light account opening process that simply permitted the purchase of bonds through the tax prep process. In the second step, the user could submit additional information to TD before seeking to redeem the bonds.

In the first step, the information that is collected for tax preparation goes a long

way to providing the BPD with the information to set up a Treasury Direct account and use it fund savings bond purchases. **Figure 9** is a data matrix that maps information required in the paper bond opening and the TD processes against information that is on the 1040 forms or the information collected by two large tax preparation firms.

For refund recipients who directly deposit part of their refund into a bank account, even the bank information is provided through the tax prep process. However, more generally, since the bond purchase is funded by the tax refund, it would not be necessary to have bank information to purchase bonds. In addition, while the current TD system requires a driver's license or state ID number, this might be waived for an IRS filer.

This first step could be facilitated through modest changes in tax forms, and would simply give the light TD holder the right to buy bonds through the tax refund process. The critical process step would be to collect the information (email and account ID) needed gain access to the TD site to complete the second step of registration.

The second step would be required to redeem bonds or use other TD functions, and would require the user to provide (or update) banking information. In fact, we believe that current policy effectively uses a form of a two step process. Realistically, one would expect that banking information would need to be updated in the years or decades between the purchase and redemption of savings bonds in the current system.

If all tax-time bond buyers automatically set up "light" TD accounts, then in one step not only would the government make bond buying easier, but also it might dramatically increase the number of users of TD. By forcing new bond purchasers to come back to the TD site to complete the registration process, the government could make other information and government securities available to them.

Of course, any change to the TD system must acknowledge a number of practical legal and operational issues. Representatives from the Bureau of Public Debt have identified some of these to us in discussions, examples of which include the following:

- The possibility that someone might open two TD accounts inadvertently.
- The possibility that someone might not complete the second step (which is the same as someone not redeeming a bond.)
- The complexities of mapping between joint returns and individual TD accounts
- Reconciling the tax form which allows post office (PO) boxes and the TD which requires a physical address.
- Whether TD will accept a Taxpayer Identification Number from the IRS.

We accept all of these as impediments to establishing a refund-based savings program. It may be that refund-based bond buyers have less functionality than would “regular” TD users, or it may be that there will be need to change TD, which would obviously cost money and take time. These costs must be carefully considered in the context of the additional family savings that can be stimulated by making savings simpler.

Add “Sweep” Functions to TD. The current TD system permits the bond buyer to select a series of future dates at which bonds will be bought. It could add a “sweep” option that allowed the user to specify that monies would be swept into bond purchases when they got to a certain level. This would allow a consumer to direct monies to TD and purchase bonds without having to guess when the tax refunds might be received.

Consider a Paper-Bond Refund Option. While the BPD might prefer that paper bonds not be used for cost reasons, the tax prep process provides virtually all of the information required by forms PDF 5263 and 5274 that would permit purchase of paper bonds. (In our experiments, participants will receive paper bonds given that (a) virtually none have TD accounts; and (b) without changes in TD, real time bond purchases using this mechanism are virtually impossible.) The information to complete a paper bond

purchase could be provided by the IRS to the BPD via some type of batch system. This would require mailing out paper bonds, but the Treasury already mails out paper checks to some consumers under the current system.

Don't forget Taxpayers. While the emphasis in this paper has been on a refund-driven bond program, more generally, there is no reason why even tax *payers* could not use their 1040 forms to purchase government securities, simply by writing a larger check and asking that the proceeds go to the purchase of bonds. In our trainings for tax preparers, it was thought that taxpayers might have no less demand for bonds than would tax refund recipients. Unfortunately, our experiments are focused only on tax refund recipients.

While it is naïve to think that changes to systems as complex as the processes used by the IRS, the BPD or TD would be costless or easy, we are hopeful that it might be possible to make relatively low-cost changes in these programs with relatively large payoffs in terms of helping families save. We hope that policy makers seriously consider the option of letting citizens tell the government “Just Keep My Money.” This voluntary act of civic investing may not only support fiscal policy, but also may support families’ efforts to build savings for their futures.

Figure 1
Demographic Characteristics of Schaumburg, Illinois Population
versus US Population, 2000 Census

	USA	Schaumburg
HOUSEHOLD INCOME DISTRIBUTION (%)		
Less than \$10,000	9.5	3.2
\$10,000 to \$14,999	6.3	2.4
\$15,000 to \$24,999	12.8	7.2
\$25,000 to \$34,999	12.8	8.4
\$35,000 to \$49,999	16.5	16.4
\$50,000 to \$74,999	19.5	26.2
\$75,000 to \$99,999	10.2	16.2
\$100,000 to \$149,999	7.7	13.9
\$150,000 to \$199,999	2.2	3.6
\$200,000 or more	2.4	2.5
Median household income (dollars)	\$ 41,994	\$ 60,941
EDUCATIONAL ATTAINMENT (Of Population 25 or older)		
Less than 9th grade	7.5	2.6
9th to 12th grade, no diploma	12.1	5.5
High school graduate (includes equivalency)	28.6	23.1
Some college, no degree	21	22.3
Associate degree	6.3	7.5
Bachelor's degree	15.5	26.6
Graduate or professional degree	8.9	12.3
MARITAL STATUS (Of Population 15 or older)		
Never married	27.1	29.5
Now married, except separated	54.4	54
Separated	2.2	0.9
Widowed	6.6	6
Divorced	9.7	9.6
RACE		
One race	97.6	98.2
White	75.1	78.8
Black or African American	12.3	3.4
American Indian and Alaska Native	0.9	0.1
Asian	3.6	14.2
Native Hawaiian and Other Pacific Islander	0.1	0.1
Some other race	5.5	1.7
Two or more races	2.4	1.8

Source: <http://factfinder.census.gov/>; comparison of U.S. national data with Schaumburg Village, Illinois.

Figure 2
1962 Form 1040A

Form 1040A		U. S. INDIVIDUAL INCOME TAX RETURN (Less than \$10,000 total income)		1962
Please print →	1. Name (If a joint return of husband and wife, use first names and middle initials of both)		2. Your Social Security Number	3. Wife's Social Security Number
	Home address (Number and street or rural route)			
	City, town, or post office		Zone	State
4. Check one:				
<input type="checkbox"/> Single; <input type="checkbox"/> Married filing joint return (even if only one had income);				
<input type="checkbox"/> Married filing separate return—If wife or husband also filing separately, give name _____				
5. WAGES SHOWN ON FORMS W-2 AND OTHER INCOME		FEDERAL INCOME TAX WITHHELD	EMPLOYER'S NAME. Where employed. Write (W) before name of each of wife's employers	
If item 9 is \$10,000 or more, or if item 6 is over \$200, use Form 1040.				
6. INTEREST, DIVIDENDS, AND OTHER WAGES	Yours	7. Total Federal income tax withheld	8. If you had an expense allowance or charged expenses to your employer, see instruction 8 and check here <input type="checkbox"/> if appropriate.	
	Wife's			
9. TOTAL INCOME →			Enclose Forms W-2, Copy B. If your income was \$5,000 or more, you must compute your tax. However, if your income was less than \$5,000, you may have the Internal Revenue Service compute your tax by omitting items 10, 11, and 12. If you compute your own tax, ← pay balance (item 11) in full with return to your District Director.	
10. Enter tax from Tax Table or from tax computation schedule →			● Check here <input type="checkbox"/> if you want refund applied to U.S. Savings Bonds.	
11. If item 10 is larger than item 7, enter balance due →				
12. If item 7 is larger than item 10, enter refund →				
U.S. TREASURY DEPARTMENT • INTERNAL REVENUE SERVICE		(OVER)	LIST YOUR EXEMPTIONS AND SIGN ON OTHER SIDE.	

Source: Internal Revenue Service. The savings bond option is on the lower right hand side of the form.

Figure 3

Comparison of Bond Buyers and Decliners, Schaumburg, Illinois

This table reports selected characteristics of the 24 purchasers of bonds in the Schaumburg trial and the characteristics of the other refund recipients in the study period who choose not to purchase bonds. The third column reports the statistical significance of the differences (and the test used), although this sample is sufficiently small and not necessarily representative to make extrapolations of these results highly speculative.

		Did Buy Savings Bonds	Did Not Buy Savings Bonds	p-value or equivalent
Number of filers		24	802	
Average Tax Refund Value**	Average	\$2,904	\$1,868	0.01
Adjusted Gross Income	Average	\$57,028	\$49,943	0.37
Age	Average (in years)	44	41	0.24
Filing Status	Single	54%	60%	
	Married-Joint	33	31	
	Married-Separate	0	1	
	Head of Household	13	8	0.83
Number of Dependents	0	67%	75%	
	1	13	13	
	2	13	11	
	3	8	2	0.35
Experience with Savings	Never heard of before	0%	10%	
	Heard of, but never owned any	48	37	
	Don't own now, but in past	35	32	
	Currently own	17	21	0.38
Financial Assets/Savings**	\$0	1.50%	4%	
	\$1 to \$2,000	17	14	
	\$2001 to \$5,000	15	7	
	\$5001 to \$10,000	14	9	
	\$10,001 to \$20,000	11	8	
	\$20,001 to \$40,000	14	13	
	Above \$40,000	28	44	0.00
Purchased XIRA (new) **	Bought XIRA	17%	2%	0.00
Amount Contributed to XIRA **	Average XIRA Contribution (if made)	\$1,600	\$1,665	0.96
Recontributed to XIRA	Made XIRA Recontribution	29%	1%	
Amount Contributed to XIRA	Average XIRA Recontribution (if made)	\$779	\$567	0.41
Average Total Tax Time Savings (New XIRA + XIRA Recontribution + Bond)	(on SB buyers)	\$658	\$50	
	(Non SB, XIRA buyers)		\$1,747	
Plant to save refund**	Plan to Save Refund	100%	58%	
	No Plan to Save refund	0%	42%	0.01
Plan to have X% of refund after one month	0%	5%	34%	
	25%	19	14	
	50%	29	19	
	75%	24	12	
	100%	24	22	0.06
Experience with Savings or Checking?	Never had a checking or savings account	4%	2%	
	Don't have one either now, but have had one in the past	0	3	
	Currently have a checking but no savings account	17	27	
	Currently have a savings but no checking account	4	3	
	Currently have both a savings and checking account	74	65	0.56
Has a Mortgage?	Yes	52%	42%	
	No	48	58	0.35
Has any debt?	Yes	52%	55%	
	No	48	45	0.79
Financial Risk "Which of the statements below comes closest to describing the amount of financial risk that you [and your spouse] are willing to take when you save or make investments?"	Take substantial risks expecting to earn substantial returns	9%	6%	
	Take above average financial risks expecting to earn above	39	18	
	Take average financial risk expecting to earn average returns	43	44	
	Not willing to take any financial risks	9	33	0.12
Self Discipline "I often find that I regret spending money. I wish that when I had cash, I was better disciplined and saved it rather than spent it." **	Strongly Agree	13%	14%	
	Agree	9	24	
	No Feelings	57	26	
	Disagree	13	24	
	Strongly Disagree	9	11	0.04

Source: Researchers' analysis.

Figure 4
Form PD F 5263/ PD F 5274 Order to Purchase Series EE/I Savings Bonds

PD F 5374 Department of the Treasury Bureau of the Public Debt (Revised April 2001)	<h2 style="margin:0;">SERIES I</h2> <h1 style="margin:0;">ORDER FOR U.S. SAVINGS BONDS</h1>	OMB No. 1535-0084 Previous Editions Usable			
PLEASE FOLLOW THE INSTRUCTIONS ON THE BACK. PRINT IN CAPITAL LETTERS. SCANNABLE FORM — DO NOT WRITE OUTSIDE BOXES.					
1. FULL NAME OF OWNER OR FIRST-NAMED COOWNER					
Name <input style="width:90%;" type="text"/>					
Social Security Number <input style="width:30%;" type="text"/> - <input style="width:30%;" type="text"/> - <input style="width:30%;" type="text"/>					
2. NAME OF PERSON TO RECEIVE BONDS IF OTHER THAN THE OWNER OR FIRST-NAMED COOWNER ABOVE					
Mail to: <input style="width:90%;" type="text"/>					
3. ADDRESS WHERE BONDS ARE TO BE MAILED					
<input style="width:90%;" type="text"/> <small>(NUMBER AND STREET, RURAL ROUTE, OR POST OFFICE BOX)</small>					
<input style="width:30%;" type="text"/> <input style="width:30%;" type="text"/> <input style="width:30%;" type="text"/>					
<small>(CITY OR TOWN) (STATE) (ZIP CODE)</small>					
4. COOWNER OR BENEFICIARY (Optional): The following person is to be named as <input type="checkbox"/> coowner <input type="checkbox"/> beneficiary:					
Name <input style="width:90%;" type="text"/>					
<small>(Coownership will be assumed if neither or both blocks are checked.)</small>					
5. BONDS ORDERED					
Denom.	Quantity	Issue Price	Total Issue Price	FOR AGENT USE ONLY	
\$ 50		X \$ 50.00 = \$		AFFIXED AGENT STAMP CERTIFIES THAT TOTAL AMOUNT OF PURCHASE IS CORRECT	
\$ 75		X \$ 75.00 = \$			
\$ 100		X \$ 100.00 = \$			
\$ 200		X \$ 200.00 = \$			
\$ 500		X \$ 500.00 = \$			
\$ 1,000		X \$ 1,000.00 = \$			
\$ 5,000		X \$ 5,000.00 = \$			
\$ 10,000		X \$ 10,000.00 = \$			
TOTAL ISSUE PRICE OF PURCHASE			\$		
6. DATE PURCHASE ORDER AND PAYMENT PRESENTED TO AGENT			<input style="width:20%;" type="text"/>	<input style="width:20%;" type="text"/>	<input style="width:20%;" type="text"/>
			<small>(MO.)</small>	<small>(DAY)</small>	<small>(YR.)</small>
7. SIGNATURE			IF YOU NEED A GIFT CERTIFICATE, PLEASE ASK THE PERSON ACCEPTING THIS FORM TO PROVIDE ONE TO YOU.		
PURCHASER'S SIGNATURE <input style="width:80%;" type="text"/>					
PURCHASER'S NAME, IF OTHER THAN OWNER OR FIRST-NAMED COOWNER (Please print)			<input style="width:20%;" type="text"/>	DAYTIME TELEPHONE NUMBER	
STREET ADDRESS (If not shown above)			<input style="width:20%;" type="text"/>	<input style="width:20%;" type="text"/>	<input style="width:20%;" type="text"/>
			<small>CITY</small>	<small>STATE</small>	<small>ZIP CODE</small>
5374 03 99			SEE INSTRUCTIONS FOR PRIVACY ACT AND PAPERWORK REDUCTION ACT NOTICE		
			FRB COPY		

ORDER FOR SERIES EE U.S. SAVINGS BONDS

PLEASE FOLLOW THE INSTRUCTIONS ON THE BACK. PRINT IN CAPITAL LETTERS. SCANNABLE FORM — DO NOT WRITE OUTSIDE BOXES.

1. FULL NAME OF OWNER OR FIRST-NAMED COOWNER

Name

Social Security Number

2. NAME OF PERSON TO RECEIVE BONDS IF OTHER THAN THE OWNER OR FIRST-NAMED COOWNER ABOVE

Mail to:

3. ADDRESS WHERE BONDS ARE TO BE MAILED

(NUMBER AND STREET, RURAL ROUTE, OR POST OFFICE BOX)

(CITY OR TOWN)

(STATE)

(ZIP CODE)

4. COOWNER OR BENEFICIARY (Optional) The following person is to be named as coowner beneficiary:

Name

(Coownership will be assumed if neither or both blocks are checked.)

5. BONDS ORDERED

Denom.	Quantity	Issue Price	Total Issue Price	FOR AGENT USE ONLY
\$ 50		X \$ 25.00 = \$. 0 0	AFFIXED AGENT STAMP CERTIFIES THAT TOTAL AMOUNT OF PURCHASE IS CORRECT
\$ 75		X \$ 37.50 = \$. 0 0	
\$ 100		X \$ 50.00 = \$. 0 0	
\$ 200		X \$ 100.00 = \$. 0 0	
\$ 500		X \$ 250.00 = \$. 0 0	
\$ 1,000		X \$ 500.00 = \$. 0 0	
\$ 5,000		X \$ 2,500.00 = \$. 0 0	
\$ 10,000		X \$ 5,000.00 = \$. 0 0	
TOTAL ISSUE PRICE OF PURCHASE \$				

6. DATE PURCHASE ORDER AND PAYMENT PRESENTED TO AGENT

(MO.) (DAY) (YR.)

7. SIGNATURE

PURCHASER'S SIGNATURE

IF YOU NEED A GIFT CERTIFICATE, PLEASE
 ASK THE PERSON ACCEPTING THIS FORM TO
 PROVIDE ONE TO YOU.

PURCHASER'S NAME, IF OTHER THAN OWNER OR FIRST-NAMED COOWNER (Please print)

DAYTIME TELEPHONE NUMBER

STREET ADDRESS (If not shown above)

CITY

STATE

ZIP CODE

5263 03 99

SEE INSTRUCTIONS FOR PRIVACY ACT AND PAPERWORK REDUCTION ACT NOTICE

FRB COPY

Source: Bureau of Public Debt.

Figure 5
Information required to Establish Treasury Direct Account

[Help](#)



[TreasuryDirect Home](#) | [Public Debt Home](#) | [Site Map](#) | [Contact Us](#)

Intro
Online Application

Open An Account » **Online Application** STEP 1 2 3

Account Owner Information

First Name:

Middle Name or Initial:

Last Name:

Suffix:

Personalized Account Name:
(Example: Mike's Account)
 NOTE: If this field is left blank, it will default to an abbreviated account name.

Social Security Number: - -

Date of Birth: - - (MM-DD-YYYY)

Street Address:

City:

State:

Zip Code: - (Plus Four - Optional)

Home Phone: () - (No Cell Phones)

Work Phone: () - Ext:

Cell Phone: () -

E-mail Address:

Retype E-mail Address:

Driver's License/State ID Number:

Issuing State:

Expiration Date: - - (MM-DD-YYYY)

Bank Information

Bank Name:

Routing Number:

Account Number:

Name(s) on the Account:

Account Type: Checking Savings

Submission

Taxpayer Identification Number Certification

By checking this box I certify, under penalty of perjury, that:

1. The number shown on this form is my correct taxpayer identification number.
2. I **am not** subject to backup withholding because: (a) I am exempt from backup withholding, (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of failure to report all interest and dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding.
3. I am a U.S. person.

By clicking the SUBMIT button below:

1. I understand that I am submitting an application for the establishment of an account in TreasuryDirect.
2. I acknowledge and accept the terms and conditions as specified in the regulations for TreasuryDirect accounts.
3. I agree to accept Form 1099-INT electronically instead of on paper for every year a statement is furnished.
4. I certify that all other information on this form, including information about my account at a financial institution, is true, correct, and complete.

After you submit your application, the approval process may take up to 60 seconds.

Submit
Cancel

[Freedom of Information Act](#) | [Law & Guidance](#) | [Privacy & Legal Notices](#) | [Website Terms & Conditions](#) | [Accessibility](#) | [Data Quality](#)
 U.S. Department of the Treasury, Bureau of the Public Debt

Source: <https://www.treasurydirect.gov/RS/RSGatewayRW> (accessed 10/14/2006)

Figure 6
Information required to Purchase Savings Bonds under Treasury Direct

TreasuryDirect [Help](#) [Logoff](#)

[What's New](#) [Contact Us](#)

[My Account](#) [Buy Direct](#) [Current Holdings](#) [Manage Direct](#) [Account Info](#) [History](#) [Investor InBox](#) [Gift Box](#)

Buy Direct » Savings Bonds **Peter:**

Purchase Series EE or I Savings Bonds.

Registration Information

Your preferred registration appears below. To use a different registration, choose one from the drop-down list or add another by clicking the Add New Registration button.

Peter [Add New Registration](#)

Purchase Information

Product Type: Series I Savings Bond

Purchase Amount: \$

Select a source of funds: Bank - ***** [Add New Bank](#)

[Learn more about C of I.](#)

[Learn more about Purchase Limitations.](#)

Purchase Frequency

Schedule single purchase for: - - (MM-DD-YYYY)

Schedule repeat purchases.

How often: Weekly

Purchase Start Date: - - (MM-DD-YYYY)

Purchase End Date: - - (MM-DD-YYYY)

Schedule purchases by selecting your own dates.

Purchase Date: - - (MM-DD-YYYY)

[Schedule More](#)

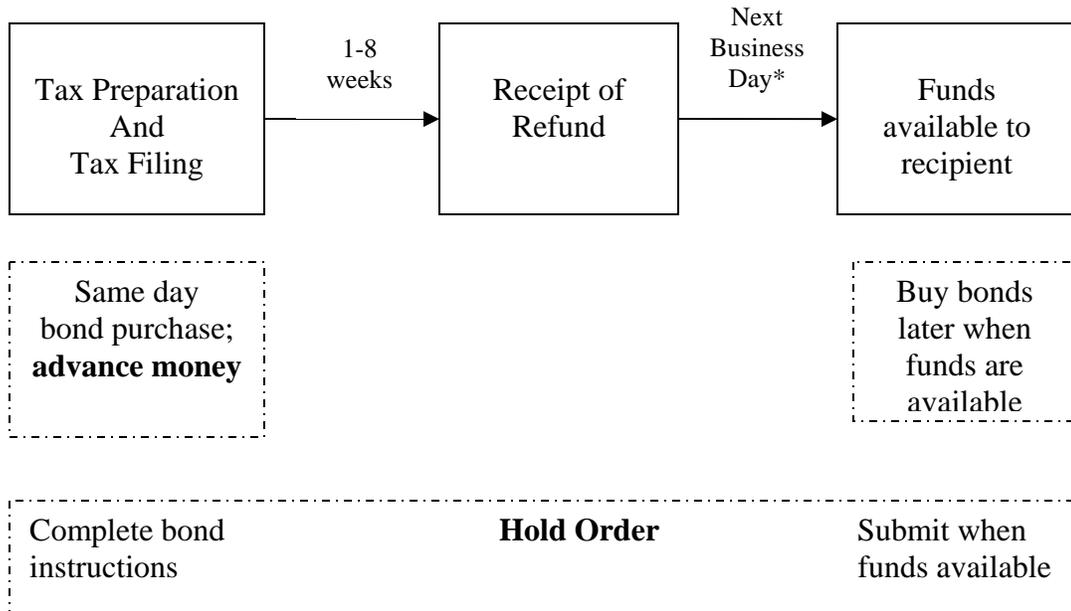
[Select](#) [Cancel](#)

[Freedom of Information Act](#) | [Law & Guidance](#) | [Privacy & Legal Notices](#) | [Website Terms & Conditions](#) | [Accessibility](#) | [Data Quality](#)

[U.S. Department of the Treasury, Bureau of the Public Debt](#)

Source: <https://www.treasurydirect.gov>

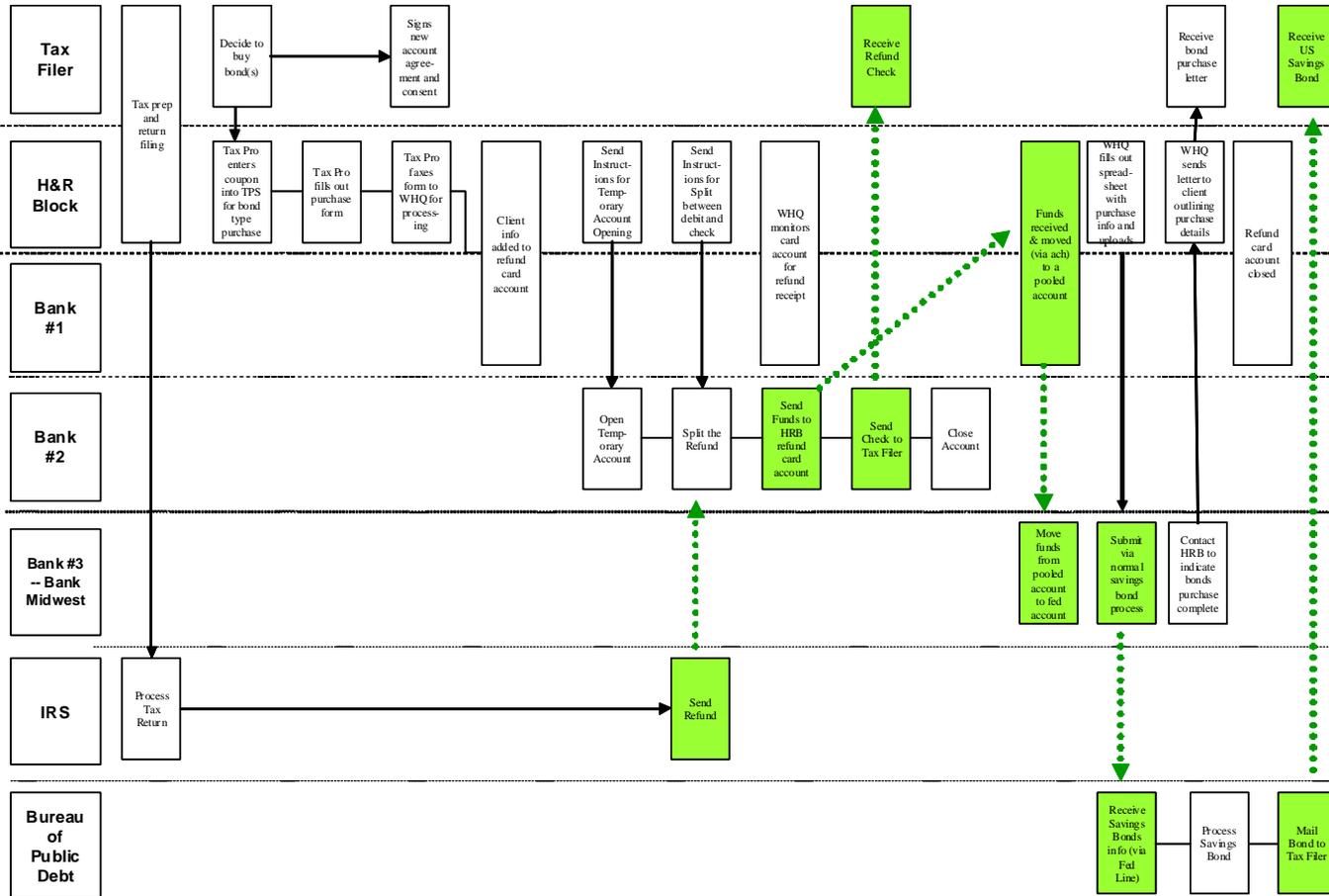
Figure 7
Schematic Representation: Tax filing and Bond Purchase Processes



* Federal Reserve Regulation CC requires banks make certain deposits available on the next business day; these include direct electronic deposits and payments from the U.S. Treasury. See <http://www.federalreserve.gov/Pubs/regcc/regcc.htm> (accessed 10/15/2006).

Figure 8
Schematic of Process used by Block in 2006 Dry Run

Tax Season 2006, US Savings Bond Process Flow



Source: H&R Block

Figure 9
Comparison of data requirements by Treasury Direct, 1040, H&R Block Tax Preparation Process and TurboTax Software

	Required by Treasury Direct Process	Required by paper form	On 1040/A/EZ	Collected in H&R Block Process	Collected by TurboTax Software
Account Data Fields					
First Name	Y	Y	Y	Y	Y
Middle Name or Initial		Y	Y	Y	Y
Last Name	Y	Y	Y	Y	Y
Suffix			Y	Y	Y
Personalized Account Name	Y				
SSN	Y	Y	Y	Y	Y
DOB	Y		Y	Y	Y
Street Address	Y	Y	Y	Y	Y
City	Y	Y	Y	Y	Y
State	Y	Y	Y	Y	Y
ZIP	Y	Y	Y	Y	Y
Home Phone		Y	Y	Y	Y
Work Phone				Y	Y
Cell Phone				Y	Y
E-Mail Address	Y			Y	Y
Driver's License/State ID Number	Y			Y	
Issuing State	Y			Y	
Expiration Date	Y			Y	
Bank Name	Y		Replaced by IRS as source of funds		
Routing Number	Y		Replaced by IRS as source of funds		
Account Number	Y		Replaced by IRS as source of funds		
Name on Account	Y		Replaced by IRS as source of funds		
Account Type	Y		Replaced by IRS as source of funds		
Certification					
Correct SSN and DL	Y		Already part of IRS filing process		
Not Subject to IRS Withholding	Y		Verified as IRS accepts the return (debt indicator)		
Am a 'U.S. Person'	Y		Already part of IRS filing process		
Agree to Receive 1099-INT by E-Mail	Y				
Information on Form is Correct	Y	Y	Already part of IRS filing process		
Acceptance T&C's of TD Account	Y				
Purchase Elections					
Product Type	Y	Y	Y	Y	Y
Purchase Amount	Y	Y	Y (Form 8888)	Y (Form 8888)	Y (Form 8888)
Source of Funds	Y		Replaced by IRS as source of funds		
Date of Single Purchase	Y - Defaults to Current Date	Y	Replaces as 'Date of IRS Deposit' (whenever that occurs)		

Source: H&R Block analysis.