ebri.org
Employee Benefit
Research Institute

January 2013 • Vol. 34, No. 1

Notes

Tax Preferences and Mandates: Is the Danish Savings Experience Applicable to the United States? p. 2

AT A GLANCE

Tax Preferences and Mandates: Is the Danish Savings Experience Applicable to the United States? *by Sudipto Banerjee, Ph.D., and Nevin Adams, J.D., EBRI*

- In an environment where lawmakers are struggling to raise tax revenue, public-policy tax "expenditures" have come under heavy scrutiny—in particular, tax preferences to boost retirement savings in employer- provided retirement plans.
- A recent study based on data from Denmark has called into question the usefulness of such retirement tax expenditures in boosting real savings.
- The study of Danish workers explored only the impact that changes in tax incentives for work place retirement plans might have on worker savings behaviors; of critical importance, it did not explore how employers might respond to changes in retirement savings tax incentives. Evidence suggests U.S. employers would react negatively to a loss of tax incentives by reducing or ending their retirement plans.
- While the study of Danish savings behaviors presented the impact of tax-incentives and the "nudges" of automatic mandatory savings as an "either/or" solution, the optimal solution—certainly for a voluntary system such as the one currently in place in the U.S.—may well be a combination of the two.

Tax Preferences and Mandates: Is the Danish Savings Experience Applicable to America?

By Sudipto Banerjee, Ph.D., and Nevin Adams, J.D., Employee Benefit Research Institute

Introduction

As the nation continues to grapple with fiscal challenges, the subject of so-called "tax expenditures,"[1] the amount of tax breaks accorded various programs, has attracted a great deal of attention. Each year the federal government registers large "tax expenditures" to provide tax-preferences to a number of items as a matter of public-policy, including employer-provided health insurance, work place retirement plans, home-mortgage interest deductions, charitable deductions, etc.[2] Among these, the preferences accorded retirement plans are notable in that these represent a deferral of taxes, rather than a permanent exemption (Lurie and Ramnath 2011)[3]—meaning that the tax revenue on these funds is not lost but deferred.

Critics of the current tax preferences structure for work place retirement plans have questioned the efficacy of those preferences relative to the savings produced. In that vein, a recent study by Chetty et al. (2012) examined the experience of the Danish pension system to consider the relative impact of government retirement-savings tax preferences, automatic deferrals on savings and savings behaviors. The study, based on a robust set of information from Danish income tax records, considered whether retirement savings policies—specifically tax subsidies for employer-provided pension plans increased total savings for retirement or simply induced "shifting across accounts." The authors of the study concluded that tax subsidies, "which rely upon individuals to take an action to raise savings," had "small impacts on total wealth." They also concluded that subsidies only affected the behavior of "active savers," which they estimated constituted just 15 percent of the population.

The Study of Danish Workers

The study first analyzed the impact of defaults in employer-provided pensions and government mandates on Danish savings patterns, doing so by looking at workers who changed jobs. It found that most individuals did not change the amount of their voluntary contributions or savings in taxable accounts, but that an individual's total savings immediately increased by 90 cents for every $1 increase in employer-provided pension contributions. The study also examined the effect of a mandatory savings plan (MSP) that required all Danish citizens to contribute 1 percent of their earnings to a retirement savings account from 1998 until 2003. During this period, the study found sharp increases in savings in 1998 (when the mandate took hold) and sharp decreases in total savings in 2004 (when the mandate lapsed). It estimated that a $1 contribution to the MSP increased savings by roughly $1—in other words, Danish workers saved what they were required to save, and no more.

Secondly, the study estimated the effect of government incentives on total savings by looking at the response to a 1999 reduction by the Danish government of the tax incentive for contributing to a capital pension account (which yielded a lump-sum payout and was taxed at a flat rate) by 14 cents per Danish krone (DKK) (6 DKK approximately equal $1 in 2012) for individuals in the top tax bracket (i.e., income above 250,000 DKK or about $44,600 at January 2013 exchange rates). Individuals in lower tax brackets were not affected by this change. The study found that contributions fell sharply for the top tax bracket (those affected by the change in savings incentives) but remained virtually unchanged for those just below that bracket (whose incentives were not affected by the change). More significantly, just 17 percent of prior contributors accounted for the entire drop in capital pension account contributions in 1999.The study also found that among this 17 percent, those who responded to the change in Danish tax incentives did so primarily by shifting assets across accounts. Estimates showed that 60 cents of roughly every $1 withdrawn from the capital pension accounts was shifted to annuity pension accounts, and 99 cents of every $1 withdrawn from all pension accounts was shifted to taxable savings accounts. This implies that tax incentives had little or no effect on ***total*** savings of Danish workers, though it did result in a shift in how those impacted by the changes in tax incentives chose to save.

Finally, the study of Danish savers found that the 1999 incentive reduction had a much larger impact on those starting a new pension that year compared with those who were already making contributions and that the reduction in incentives also had a larger effect on Danish workers who made frequent changes to their pension contributions. In essence, Danish savers who were actively making decisions about their pension contributions were more likely to respond to the change in incentives than other individuals. The study's authors classified this group as "active savers," who as it turns out, also had significantly higher wealth/income ratios and were more likely to be older than other Danish workers in the study.

Combining all these results, the authors arrived at two top-line conclusions about the savings behavior of Danish workers:

- First, as noted above, only 15 percent of those individuals were "active" savers, and only those active savers responded to the tax-incentive changes and then largely only by reallocating savings between their tax-deferred pension accounts and taxable savings accounts.

- Secondly, for these active savers, a $1 tax expenditure by the government on subsidies for retirement savings raised total savings by only about 1 cent, on average.

Not surprisingly, these conclusions have since been widely touted by those who question the efficacy of the current retirement savings tax incentives in the United States.

While this is a very important study of the Danish retirement savings system, using rich data and robust statistical methods, some important distinctions need to be considered before concluding that changes to tax-expenditure incentives for work place retirement accounts in the United States would have similar effects.

Access vs. Contribution

In explaining their rationale for drawing on the Danish pension experience, the study's authors described Denmark's pension system as "broadly similar in structure"(pg. 1) to that in the United States and other developed countries, in that it has individual accounts, employer-provided pensions, and a government-supported defined benefit (DB) plan. However, while the components are similar, the Danish retirement system functions differently in several critical aspects.

First, and most importantly, in Denmark, the availability of employment-based, tax-deferred retirement plans was not tied to the tax-deferred status of the accounts, whereas in the United States, the availability of work place retirement plans is very much linked with their tax-deferred status. As the authors mentioned in the study, for most workers in Denmark, access to a pension savings plan is negotiated through collective bargaining between the workers' union and employer associations. However, in the United States, only 12 percent of workers (Bureau of Labor Statistics 2012) are employed in unionized sectors, though many American workers are offered such plans. One important factor behind this is the rules established by the Employee Retirement Income Security Act of 1974 (ERISA), and subsequent legislation. Employers want to retain their most talented employees by offering them competitive compensation and attractive benefits, which include access to retirement savings plans.

ERISA—the federal law that established minimum standards for pension plans in private industry in the United States—as well as federal tax rules regarding employee benefit plans, also codified certain "nondiscrimination" standards that plans must meet in order to obtain preferential tax treatment. The resulting tax incentives, combined with ERISA's nondiscrimination tests, have been designed and refined over time to encourage not only the participation in *but the sponsorship of* these voluntary savings programs in the U.S. These nondiscrimination tests, applied to the distribution of contributions among employees, must be fulfilled in order for the contributions and investment earnings of an employer-sponsored pension plan to receive favorable tax treatment, and are, in fact, designed to ensure that a disproportionate share of the benefits do not accrue to the more highly paid members of the plan. Additionally, the greater propensity of higher-income workers to participate in and make contributions to these plans has led to the use of employer-provided matching contributions to encourage broader and more effective participation by non-highly compensated workers. Via those mechanisms, bounded by a series of rules and regulations implemented under ERISA, the U.S. system has consistently managed to achieve participation rates in the neighborhood of 70 percent (PLANSPONSOR November 2012) among employers that sponsor a retirement plan.

However, if the tax-deferred status of those workplace retirement savings accounts were altered, these ties would almost certainly be weakened, if not broken. In recent surveys (VanDerhei March 2012), many plan sponsors have expressed a desire to offer no plans at all in the absence of tax incentives for employees.

If the employers choose to end work place retirement plans for all income levels, then low-wage workers, who are generally less prepared for retirement, would suffer on several counts.

- Research has shown that eligibility for a work place retirement savings plan is an important factor for being adequately prepared for retirement (VanDerhei November 2012).
- Loss of access to a work place retirement savings plan would also mean that workers would lose the employer match. One might argue that the matching funds would simply shift to direct (and taxable) compensation, but recent research (Smith and Toder 2011) has shown that, under certain theoretical constructs, additional employer contributions to 401(k) plans reduce wages much less for low-income than for high-income workers. So, the increase in wages may not be enough to compensate for the loss in match dollars for low-wage workers if they no longer participate in a work place retirement savings plan. All this could further jeopardize the retirement security of the low-income, working population.

A survey conducted on behalf of The Principal Financial Group (2011) determined that if workers' ability to deduct any amount of the 401(k) contribution from taxable income was eliminated, 65 percent of the plan sponsors responding to the survey would have less desire to continue offering their 401(k) plan. Additionally, a separate survey of plan sponsors by AllianceBernstein found that small plan sponsors were more likely than larger employers to respond negatively to a proposed change in the deductibility of contributions by employees.

A 2012 EBRI analysis (VanDerhei, March 2012) based on an AllianceBernstein survey[1] responses found that if the federal tax treatment of employer and worker contributions for 401(k) plans were ended in exchange for an 18 per-cent match from the federal government, small-sized plan sponsors and low-income workers would be significantly and negatively affected. Specifically, under that proposal, EBRI examined the average percentage reductions in 401(k) account balances at Social Security normal retirement age due to expected modifications in response to the proposal by plan size and age-specific salary quartiles for workers currently ages 26–35. EBRI found that, for all four income quartiles, the average percentage reductions for plan sponsors in the two smallest plan-size categories (less than $1 million and $1–$10 million in assets) were more than 1.5 times the value of the average percentage reductions for plans sponsors in any of the larger-size categories. EBRI baseline analysis indicated that those modifications by plan-sponsors, combined with individual-participant reactions, would result in an average percentage reduction in 401(k) balances of between 6–22 percent at Social Security normal retirement age (for workers currently ages 26–35). Moreover, 401(k) plans with less than $10 million in assets would experience an average reduction in participant balances at retirement age of between 36–40 percent for workers in that age cohort.

Significantly, the study of Danish workers by Chetty et al. assumed that changes in the tax treatment of retirement accounts did not affect access to work place retirement accounts, so the effect was limited to individual contribution behavior. But the way the U.S. retirement plan incentives are currently configured, eliminating or reducing the tax-preferred status of work place retirement plans could have a significant effect on access to those plans, as well as utilization by participants, which was the focus of the Danish study. While the Danish study assumed no reaction by retirement-plan sponsors to the loss of tax preferences, strong evidence suggests a dramatic reaction by American plan sponsors, with a resulting impact on retirement savings, as well as savings behaviors.

Difference in Savings Incentives and Patterns

As mentioned previously, one of the top-line findings of the Danish study was that 15 percent of Danish workers were active savers and 85 percent were passive savers. However, one must look at more direct evidence before generalizing this result in the U.S. context. It has been well-documented that savings rates differ greatly across countries. For example, according to 2012 estimates from the Organization for Economic Cooperation and Development (OECD) , Danish household savings rates between 2007 and 2012, as measured as a percentage of disposable household income, were -4.0, -3.7, 0.2, -1.0, -0.6 and -0.6 percent respectively. In contrast, during the same years, the same savings rates for U.S. households were 2.4, 5.4, 4.7, 5.1, 4.2 and 3.7 percent. Not only were the savings patterns quite different between the two countries, but the United States has had significantly higher savings rates in recent years. Several factors, including the generosity of social-insurance programs, political stability, borrowing constraints, etc., can also affect the rate of private savings.

Additionally, the MSP outlined in the recent study of Dutch workers was just that: a retirement savings pillar to which contributions by workers were mandatory, without option. In contrast, the vast majority of American workers participate voluntarily in the comparable savings programs here.

The United States and Denmark are also very different in some other aspects, for example, social insurance. Denmark provides tax-funded, universal health care to all its citizens so that retirees don't have to incur any out-of-pocket health care costs. But health care expenditures are a significant part of spending for retirees in the United States (Banerjee 2012), hence they could be a strong motivator for Americans to save for retirement. Even with the presence of Medicare, U.S. retirees have to worry about their Medicare insurance premiums, prescription-drug costs, and in some cases, highly expensive, long-term care. There are other differences in the social-insurance structure of the two countries as well. If these factors have any role in shaping savings behavior (Edwards 1996), then it is possible that the division of active and passive savers is different—perhaps significantly different—between the two countries.

Another Concern

In the paper, the Danish study authors said that "the structure of the DB pension system (in Denmark) did not change in a way that affects our analysis of DC [defined contribution] accounts over the period we study" (page 11). However, there was a major change in the National Old Age Pension program (OAP, equivalent to Social Security in the United States) in Denmark in 1999. The OAP normal retirement age was lowered from 67 to 65 effective July 1, 2004, for people reaching age 60 after July 1, 1999. In practice, the lowering of OAP retirement age was fully implemented by mid-2006 so that only people born after July 1, 1939, were able to take advantage of the lowered OAP retirement age of 65.

This raises concern about the analysis for a number of reasons. First, this change immediately created two groups: individuals whose expected OAP wealth changed based on whether they were born before or after July 1, 1939. For those born before July 1, 1939, expected lifetime OAP benefits were unchanged. For those born after, they increased. Attanasio and Brugiavini (2003) used a similar reform in Italy and a life-cycle model to show that the change in Social

Security wealth had a negative and statistically significant effect on private savings. Also, the effect of the OAP retirement-age change could vary by income. In Denmark, eligibility for OAP benefits does not depend on past labor force attachment (as in the United States). However, the actual benefit amount paid depends on income. So, lowering the OAP retirement age changed the present discounted value (PDV) of the expected, lifetime OAP benefits differently for different income groups.

To the extent the changes in PDV of expected, lifetime OAP retirement-income benefits had any effect on savings (either in tax-deferred pension plans or taxable savings accounts), the estimates in the paper might have been confounded. For example, if private pensions and public pensions were substitutes for each other, the drop in contribution to a private pension account might have been the result of a substitution due to the increase in expected value of a public pension. Because the change in Denmark's private-pension plan happened in the same year (1999) that the change in public pension was announced, the possibility of a confounding substitution factor cannot be ruled out.

Also, because the change in the OAP retirement age was much more universal than the change in subsidy for private-pension-plan contributions in the top-income tax bracket, it seems more likely that the retirement-age change attracted more media attention and discussion in public debates than the tax change for high-income earners. If that was the case and people were more aware of the OAP retirement-age change than the change in tax treatment, then the possibility of a confounding effect mentioned above is even higher.

Conclusion

In an environment where lawmakers are struggling to raise tax revenue, public-policy tax "expenditures" have come under heavy scrutiny. In particular, tax preferences to boost retirement savings in employer-provided retirement plans has been at the center of such discussions. A recent study by Chetty et al., based on data from Denmark, has called into question the usefulness of such retirement tax expenditures in boosting savings. Using quasi-experiments, rich data, and robust statistical methods the authors of the Danish study offered evidence that changes in the tax preferences for the Danish work place retirement savings plans had virtually no effect on total savings. This has prompted discussions in the United States about the possible modification of tax preferences for employment-based retirement savings plans in this country.

While the study of Danish savings behaviors presented the impact of tax-incentives and the "nudges" of automatic mandatory savings as an "either/or" solution, the optimal solution—certainly for a voluntary system such as the one currently in place in the U.S.—may well be a combination of the two.

The study of Danish workers explored only the impact that changes in tax incentives for work place retirement plans might have on worker savings behaviors; of critical importance, it did not explore how employers might react to changes in retirement savings tax incentives. But unless the behavior of *both* employers and workers are considered, the likely effects of any change in tax preference for retirement plans are speculative, at best. Finally, the study of Danish savings behaviors presented these approaches (tax-incentives and the "nudges" of mandatory savings) as an "either/or" solution—but in the United States, the optimal solution, certainly for a voluntary system such as the one currently in place, may well be a combination of the two.

References

AllianceBerstein. "Inside the Minds of Plan Sponsors" Research. 2011. See VanDerhei (March 2012).

Attanasio, Orazio P., and Agar Brugiavini (2003), "Social Security and Household Saving," *Quarterly Journal of Economics*, 188 (3): 1075-1120.

Banerjee, Sudipto, "Expenditure Patterns of Older Americans, 2001-2009," *EBRI Issue Brief*, no. 368 (Employee Benefit Research Institute, February 2012).

Bureau of Labor Statistics, U.S. Department of Labor, News Release: USDL-12-0094, January 27, 2012.

Chetty, Raj, John N. Friedman, Soren Leth-Petersen, Torben Heien Nielsen, and Tore Olsen, "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts: Evidence from Denmark," *NBER Working Paper # 18565*, November 2012. www.nber.org/programs/ag/rrc/rrc2012/summaries/2.2%20Chetty,%20Friedman%20et%20al.pdf

Edwards, Sebastian, "Why Are Latin America's Savings Rates So Low? An International Comparative Analysis", *Journal of Development Economics*, Vol. 51, no. 1(October 1996): 5-44.

Employee Benefit Research Institute. "Pension Tax Expenditures: Are They Worth The Cost?" *EBRI Issue Brief,* no. 134 (Employee Benefit Research Institute, February 1993).

Lurie, Ithai Z. and Shanthi Ramnath, "Long-Run Changes in the 401(k) Type Plans Tax-Expenditure." *National Tax Journal* (64-December 2011): 1025-38.

OECD (2012), "Household Saving Rates – Forecasts," *Economics: Key Tables from OECD*, No. 7.www.oecd-ilibrary.org/economics/household-saving-rates-forecasts-2012-2_hssv-gr-table-2012-2-en

PLANSPONSOR Magazine, "2012 Defined Contribution Survey," November 2012, www.plansponsor.com/2012_Defined_Contribution_Survey.aspx?type=industry

The Principal Financial Group.® "The Principal Financial Group® Retirement Readiness Survey 2011." www.principal.com/about/news/documents/2011retirement-readiness-summary.pdf

Smith, Karen E., and Eric Toder, "Do Low-Income Workers Benefit from 401(k) Plans?" *Center for Retirement Research (Boston College) Working Paper* # 2011-14, September 2011.

VanDerhei, Jack, "Modifying the Federal Tax Treatment of 401(k) Plan Contributions: Projected Impact on Participant Account Balances," *EBRI Notes,* No. 3, (Employee Benefit Research Institute March 2012).

_____. "All or Nothing? An Expanded Perspective on Retirement Readiness," *EBRI Notes*, no. 11 (Employee Benefit Research Institute, November 2012).

Endnotes

[1] For a full discussion of retirement "tax expenditures" see VanDerhei (1993).

[2] For more on tax expenditures, see Executive Office of the President, "Fiscal Year 2012 Analytical Perspectives, Budget of the U.S. Government," starting on pg. 239, *Tax Expenditures*: www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/spec.pdf

[3] For more on this topic, see "After" Math: The Impact and Influence of Incentives on Benefit Policy, *EBRI Issue Brief,* no. 374, online at www.ebri.org/pdf/briefspdf/EBRI_IB_08-2012_No374_PolForum.pdf

[4] AllianceBerstein. "Inside the Minds of Plan Sponsors" Research. 2011. See VanDerhei (March 2012).

ebri.org Employee Benefit Research Institute

Notes

EBRI Employee Benefit Research Institute Notes (ISSN 1085–4452) is published monthly by the Employee Benefit Research Institute, 1100 13th St. NW, Suite 878, Washington, DC 20005-4051, at $300 per year or is included as part of a membership subscription. Periodicals postage rate paid in Washington, DC, and additional mailing offices. POSTMASTER: Send address changes to: *EBRI Notes*, 1100 13th St. NW, Suite 878, Washington, DC 20005-4051. Copyright 2013 by Employee Benefit Research Institute. All rights reserved, Vol. 34, no. 1.

Who we are

The Employee Benefit Research Institute (EBRI) was founded in 1978. Its mission is to contribute to, to encourage, and to enhance the development of sound employee benefit programs and sound public policy through objective research and education. EBRI is the only private, nonprofit, nonpartisan, Washington, DC-based organization committed exclusively to public policy research and education on economic security and employee benefit issues. EBRI's membership includes a cross-section of pension funds; businesses; trade associations; labor unions; health care providers and insurers; government organizations; and service firms.

What we do

EBRI's work advances knowledge and understanding of employee benefits and their importance to the nation's economy among policymakers, the news media, and the public. It does this by conducting and publishing policy research, analysis, and special reports on employee benefits issues; holding educational briefings for EBRI members, congressional and federal agency staff, and the news media; and sponsoring public opinion surveys on employee benefit issues. **EBRI's Education and Research Fund** (EBRI-ERF) performs the charitable, educational, and scientific functions of the Institute. EBRI-ERF is a tax-exempt organization supported by contributions and grants.

Our publications

EBRI Issue Briefs are periodicals providing expert evaluations of employee benefit issues and trends, as well as critical analyses of employee benefit policies and proposals. ***EBRI Notes*** is a monthly periodical providing current information on a variety of employee benefit topics. ***EBRIef*** is a weekly roundup of EBRI research and insights, as well as updates on surveys, studies, litigation, legislation and regulation affecting employee benefit plans, while ***EBRI's Blog*** supplements our regular publications, offering commentary on questions received from news reporters, policymakers, and others. EBRI's ***Fundamentals of Employee Benefit Programs*** offers a straightforward, basic explanation of employee benefit programs in the private and public sectors. The ***EBRI Databook on Employee Benefits*** is a statistical reference work on employee benefit programs and work force-related issues.

Orders/ Subscriptions

Contact EBRI Publications, (202) 659-0670; fax publication orders to (202) 775-6312. Subscriptions to *EBRI Issue Briefs* are included as part of EBRI membership, or as part of a $199 annual subscription to *EBRI Notes* and *EBRI Issue Briefs*. ***Change of Address:*** EBRI, 1100 13th St. NW, Suite 878, Washington, DC, 20005-4051, (202) 659-0670; fax number, (202) 775-6312; e-mail: subscriptions@ebri.org ***Membership Information:*** Inquiries regarding EBRI membership and/or contributions to EBRI-ERF should be directed to EBRI President Dallas Salisbury at the above address, (202) 659-0670; e-mail: salisbury@ebri.org

EBRI Notes is registered in the U.S. Patent and Trademark Office. ISSN: 1085–4452 1085–4452/90 $ .50+.50