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Teresa Ghilarducci and
Ismael Cid-Martinez

Schwartz Center for Economic Policy Analysis
Department of Economics
The New School for Social Research
6 East 16th Street, New York, NY 10003
www.economicpolicyresearch.org

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Transforming Federal and State Retirement Tax Deductions to Refundable Tax Credits

By Teresa Ghilarducci¹ and Ismael Cid-Martinez²

¹ TERESA GHILARDUCCI is the Bernard Schwartz Professor of Economics at The New School for Social Research.

² ISMAEL CID-MARTINEZ is a Ph.D. Student in the Department of Economics at The New School for Social Research.

Summary

Despite over \$140 billion in federal and state taxpayer subsidies for retirement savings projected to be spent each year for the next ten years¹; the nation faces a retirement income crisis. Though the base layer of households' retirement income -- Social Security -- is solid, the targets of federal and state retirement account tax subsidies -- voluntary workplace retirement plans such as defined benefit (DB) and defined contribution plans (DC) are insufficient and eroding. In the 40 years since they were first established, 401(k) plans have virtually replaced DB plans in the private sector. The system of voluntary, tax-favored retirement accounts has failed to produce adequate account balances for the workers who have accounts, and has failed to extend coverage to over half of the workforce who don't have accounts.²

A household's retirement savings comes from three places: the worker, the employer, and the government. The federal government and, increasingly, state governments subsidize retirement savings in the form of tax deductions and deferrals – not refundable tax credits. As this report shows, over 80% of the tax subsidies for retirement accounts come from the federal government; yet, the share of state indirect spending on retirement plans is significant and not well appreciated and known.³ The Joint Economic Committee (JCT) and Office of Management and Budget (OMB) use different methodologies (see appendix) to calculate the size of the tax

¹ Office of Management & Budget, *Analytical Perspectives, Budget of the United States Government, FY 2016* (2015) [hereinafter *Office of Management & Budget*], available at <https://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/spec.pdf>

² Teresa Ghilarducci & Joelle Saad-Lessler, *Explaining the Decline in the Offer Rate of Employer Retirement Plans Between 2003 and 2012*, ILR Review 0019793915586383, first published on May 20, 2015 [hereinafter *Ghilarducci & Saad-Lessler*]

³ We estimate that states spent over \$20 billion in 2014 on tax subsidies for retirement accounts. If we add this figure to the federal retirement tax expenditure estimate of 94.6 billion for the same year, we arrive at total retirement tax expenditure of \$114 billion in 2014—with federal tax subsidies for retirement accounts making up more than 80% of the total.

expenditures. The JCT estimates a federal retirement tax expenditure of \$94.6 billion in 2014 and \$805.1 billion for the next five years, 2014-2018.⁴ The OMB estimates are \$146.4 billion for 2014 and \$828.5 billion for 2014-2018.⁵ We use the more conservative JCT method to value state retirement tax subsidies in order to not bias our estimates upwards, not because one methodology is superior to the other.

Using the conservative method we find that the size of the states subsidies to the voluntary retirement account system is substantial, more than \$20 billion in 2014. Despite their size, state retirement account subsidies are rarely discussed. This study is the first to measure the tax expenditures for retirement accounts at the state level. One of the reasons why state tax expenditures for retirement accounts have not been analyzed is because the state reports are inconsistent, at best, and mostly nonexistent. Our reported total is derived mainly through estimations. Four states do not report their tax expenditures and only 18 itemize the retirement tax expenditures.⁶

The study concludes that without any extra money spent from federal or state treasuries each year, all working Americans could have a retirement account if the preferential treatment was a refundable tax credit and not a deduction. In 2015, more than 80 million more workers would have a retirement account and the refundable tax credit would have been about \$800 to each taxpayer. If the tax deduction had been a refundable tax credit, protected from early withdrawal, the distribution of the subsidy would be have been progressive and the coverage

⁴ Congress of the United States, Joint Committee on Taxation, *Estimates Of Federal Tax Expenditures For Fiscal Years 2014- 2018*, committee print, 113th Cong., August 8, 2014, JCX-97-14 [hereinafter *Joint Committee on Taxation*], available at <https://www.jct.gov/publications.html?func=startdown&id=4663>

⁵ See Office of Management & Budget, *supra* note 1.

⁶ These states are listed in the appendix.

universal. As a result, the median retirement account balance in this country would be over \$40,000, instead of zero.⁷

Tax Expenditures for Retirement Savings

The federal and state governments have played a major role in the funding and distributional equity of the nation's retirement system for over 100 years. At the early part of the 20th century, three trends shaped U.S. retirement policy: First, federal, state and municipal public sector retirement plans were expanded alongside the railroad retirement system; second, Social Security was established for almost all workers; and lastly, the income tax code became an important tool for the government to incent public and private employers and workers to save for retirement.

The use of the tax code to promote prefunded retirement plans dates back over 90 years,⁸ dating from the 1921 Revenue Act⁹ that eliminated current taxation of employer stock bonuses and profit sharing plans, and eventually to pension trusts. The 1942 Revenue Act¹⁰ dramatically increased corporate income tax rates in the World War II period; at the same time, corporations could be exempted from the taxes if they engaged in activities that met a social purpose. Paying

⁷ We assume each worker would receive a combined credit of \$804, which would be deposited directly into a retirement savings account. If we fast-forward this process of reinvestment for 35 years of employment and assume an annualized rate of return of 2%, the average worker in the U.S. who lacks access to a retirement plan at work will have saved approximately \$41,803. Households near retirement (ages 55-64) and without an employer-sponsored retirement plan had a median balance of zero in retirement savings as of 2012. See Joelle Saad-Lessler, Teresa Ghilarducci, & Kate Bahn, Schwartz Center for Economic Policy Analysis, *Are U.S. Workers Ready for Retirement? Trends in Plan Sponsorship, Participation, and Preparedness* (2015) [hereinafter *Saad-Lessler, Ghilarducci, & Bahn*], available at http://www.economicpolicyresearch.org/images/docs/research/retirement_security/Are_US_Workers_Ready_for_Retirement.pdf

⁸ Gordon Goodfellow & Sylvester J. Schieber, *Death and Taxes: Can We Fund For Retirement Between Them?* in *The Future of Pensions in the United States*, 126-186 (Ray Schmitt ed., 1993).

⁹ Revenue Act of 1921, Pub. L. 67-98, Ch. 136, 42 Stat. 227 (1921)

¹⁰ Revenue Act of 1942, Pub. L. 77-753, Ch. 619, 56 Stat. 798 (1942)

in the form of deferred compensation or paying in the form of employee benefits served a social purpose. These forms of compensation were exempted or deferred from tax, which helped curb inflation and provide social insurance on the job through health insurance, vacation funds, disability insurance pools, and retirement plans. The 1942 Revenue Act raised revenue to be sure, but it also began the modern era of the government in the U.S. to use the income tax system as a tool to induce more retirement savings by workers and employers. Therefore, the federal government and states have long been committed to retirement income security because, under our welfare state system of providing universal social insurance through private markets, providing tax incentives to employers and workers to set up voluntary retirement savings vehicles was the most important tool to achieve that goal.

In 1974, Congress decided to keep track of how much the federal government was spending indirectly to provide public goods. Congress required calculation of tax expenditures in the Congressional Budget and Impoundment Control Act of 1974.¹¹ That federal law requires that a list of tax expenditures be included in the federal budget. So far, many states have not been so fastidious in their reporting or assessment.¹²

These special tax exclusions and deferrals for retirement savings accounts are referred to as tax expenditures because the revenue losses to the federal or state treasury are analogous to

¹¹ Congressional Budget and Impoundment Control Act of 1974, Pub. L. 93-344, 88 Stat. 297, (1974)

¹² Michael Leachman et al., Center On Budget & Policy Priorities, *Promoting State Budget Accountability Through Tax Expenditure Reporting* (2011) [hereinafter *Leachman et al.*], available at <http://www.cbpp.org/files/5-11-11sfp.pdf>

direct spending programs. Almost all the tax expenditures are aimed at promoting a social goal in order to obtain a positive externality,¹³ such as more retirement savings.¹⁴

Income tax rules without special preferences for retirement savings would mean that employer and employee contributions to qualified retirement and pension plans, such as defined benefit plans, 401(k), 403(b), Individual Retirement Accounts (IRAs), and Keogh retirement plans, and the income earned on retirement assets, would all be taxed as ordinary income. The net exclusion of pension contributions and earnings allow taxpayers to exclude employer or individual retirement contributions from their gross income, and defer taxes on the

¹³ Lily L. Batchelder, Fred T. Goldberg, Jr. & Peter R. Orszag, *Efficiency and Tax Incentives: The Case for Refundable Tax Credits*, 59 STAN. L. REV. 23 (2006) [hereinafter *Batchelder, Goldberg, and Orszag*]

¹⁴ The Congressional Budget and Impoundment Control Act of 1974 defined tax expenditures as “revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.” Tax expenditures take many forms. Some result from tax provisions that reduce the present value of taxable income through deferral allowances, or special exclusion, exemptions, or deductions from gross income. Others affect a household’s after-tax income more directly through tax credits or preferential rates for specific activities. Tax expenditures cost the federal government more than \$1.2 trillion today. To put this number in context, this amounts to approximately one third of total government spending and nearly 7% of total GDP in 2014. As a share of total GDP, tax expenditures have increased by more than 20% since 1993, when they made up 5.9% of GDP. *See* Allison Rogers & Eric Toder, Tax Policy Center, *Trends in Tax Expenditures, 1985-2016* (2011) [hereinafter *Rogers & Toder*], available at <http://www.taxpolicycenter.org/UploadedPDF/412404-Tax-Expenditure-Trends.pdf>. The composition of tax expenditures has also changed since 1986. Individual tax expenditures have increased relative to corporate tax expenditures, and credits and exclusions have increased relative to deductions and deferrals. *See* Rogers & Toder, *supra*. These changes are important because exclusions, deferrals, exemptions, and deductions all reduce the present value of income subject to tax, and thus all provide larger tax reductions to taxpayers in high marginal rate brackets than to taxpayers in low marginal rate brackets. *See* William G Gale et al., *Distributional Effects of Defined Contribution Plans and Individual Retirement Arrangements* (2004). National Tax Journal, Vol. 57, No. 3, 2004 [hereinafter *Gale et al.*], available at <http://ssrn.com/abstract=1754638>.

contributions and the investment-income earned on these savings until the money is withdrawn.¹⁵

The Joint Committee on Taxation (JCT) report¹⁶ starts with the baseline that all compensation to employees is subject to ordinary income tax. The revenue that would have been collected if the tax code did not specifically exclude the income is the tax expenditure. Specific exclusions for employer-provided benefits include: coverage under disability and health insurance and group-term life insurance and many more. Each of these exclusions is classified as a tax expenditure in the annual reports. But treatment of employer contributions to pension plans, income earned on pension assets, and worker contributions to DC accounts and IRAs are deferred. The federal, and some states', tax codes allow employer contributions to qualified pension plans and employee contributions not to be taxed until distributed to the employee either at retirement or before. The tax expenditure for "net exclusion of pension contributions and earnings" is computed as the income taxes forgone on current tax-excluded pension contributions and earnings minus the income taxes paid on current pension distributions (including the 10-percent additional tax paid on early withdrawals from pension plans).¹⁷

The size of the tax expenditures for defined benefit and defined contribution plans exploded at the same time that Social Security was retrenched in 1983, when Congress and

¹⁵ Section 415 of the Internal Revenue Code provides for dollar limitations on benefits and contributions under qualified retirement plans. For example, the defined contribution plans limit, including both employee and employer contributions, was \$52,000 in 2014. *See* Internal Revenue Service, *IRS Announces 2014 Pension Plan Limitations; Taxpayers May Contribute up to \$17,500 to their 401(k) plans in 2014* (Oct. 31, 2013), [http://www.irs.gov/uac/IRS-Announces-2014-Pension-Plan-Limitations;-Taxpayers-May-Contribute-up-to-\\$17,500-to-their-401\(k\)-plans-in-2014](http://www.irs.gov/uac/IRS-Announces-2014-Pension-Plan-Limitations;-Taxpayers-May-Contribute-up-to-$17,500-to-their-401(k)-plans-in-2014).

¹⁶ Joint Committee on Taxation, *supra* note 4.

¹⁷ The JCT does not take into account any behavioral changes or other tax consequences that might happen if the special tax treatment did not exist. *See* Joint Committee on Taxation, *supra* note 4.

President Reagan raised the FICA tax and cut future Social Security benefits.¹⁸ The expansion of exclusions goes against well-established public finance principles that, all things being equal, an efficient tax code strives to make the tax base large and tax rates low, because high tax rates produce distortions in prices and behavior.¹⁹ Exclusions and deductions end up narrowing the tax base, and thus requiring higher rates.²⁰

One unfortunate consequence of the tool of using tax deductions to incent behavior that advances the goals of social policy is that the progressive income tax system produces an upside down distribution of subsidies. The higher a taxpayer's marginal tax rate the greater the subsidy to the household. And if households with higher marginal tax rates are also those households that can afford to defer more consumption until their retirement years then taxpayers in the higher brackets receive more of the subsidies. The more one saves and the higher the tax bracket under which one falls, the greater the subsidy from a federal and state deferral of taxes on retirement plan contributions—and the greater the buildup in those funds. Note everyone agrees. Experts at the Employee Benefit Research institute (EBRI) argue that while those who pay taxes at higher rates are seen as receiving a greater benefit from the deferral of those taxes, actual 401(k) account balances are found to be mostly proportionate with compensation levels.²¹

¹⁸ John A. Svahn & Mary Ross, *Social Security Amendments of 1983: Legislative History and Summary of Provisions* (1983), available at

<http://socialsecurity.gov/policy/docs/ssb/v46n7/v46n7p3.pdf>

¹⁹ Richard A. Musgrave & Peggy B. Musgrave, *Public Finance in Theory and Practice* (5th ed. 1989); Batchelder, Goldberg, and Orszag, *supra* note 9.

²⁰ See Andrew Chamberlain & Patrick Fleenor, Tax Foundation, *America's Shrinking Income Tax Base Requires Higher Rates for Everyone* (Sept. 21, 2005), <http://taxfoundation.org/article/americas-shrinking-income-tax-base-requires-higher-rates-everyone>

²¹ See Employee Benefit Research Institute, *Are 401(k) Tax Preferences Upside Down?* (Aug. 29, 2013), <http://www.ebri.org/pdf/FF.244.Up-Down.29Aug131.pdf>

Here is a simplified example of how the subsidy works. A worker who earns \$2000 per month with a marginal tax rate of 10%, pays a \$200 tax bill and is left with \$1800 of after-tax income. But if this worker contributes \$200 to a 401(k), her taxable income is \$1800. This means that only \$180 is due in tax. She will have less after-tax income, \$1720 versus \$1800, but she now has \$200 in a retirement account and saved \$20 on a tax bill. The investment gains in the account won't be taxed during accrual. When she takes the money out for retirement in the future, the amounts will be taxed at her current, and presumably lower tax rate. Since most retirees earn less income and face a lower tax rate than they did during their working years, our hypothetical worker's tax liability would be lower upon withdrawal. If we assume no growth over time and a tax rate drop to 5% at retirement, our worker's initial \$200 contribution would pay a \$10 tax. This leaves our hypothetical worker with a higher net worth (\$910) than not having contributed to a retirement plan at all (\$900).

Size of Federal Retirement Tax Expenditures

Retirement tax expenditures are among the three largest federal tax expenditures. Total federal retirement plan tax expenditures were \$94.6 billion in 2014, with spending on defined contribution plans, like 401(k) plans, making up the largest share.²² The costs of these tax subsidies are also projected to increase so that between 2014 and 2018, the federal cost of retirement tax expenditures is projected to be \$805.1 billion (See Figure 1).²³

[figure [1] belongs about here]

²²In 2014, defined contribution plans accounted for 47% of the total cost of all tax expenditures; define benefit plans 28%, traditional IRAs 13%, Keogh plans 6%, Roth IRAs 5%, and special credits 1%. See Joint Committee on Taxation, *supra* note 4.

²³ We are reporting low estimates of the tax expenditure. Please see the appendix for a discussion of the range of estimates based on different methodologies and assumptions.

The use of the tax code to indirectly achieve social goals has been criticized because the revenue losses are now larger than the discretionary budget, and because there is a built-in tendency for these subsidies to grow without scrutiny and evaluation. As part of the annual budgeting cycle in Congress, the Appropriations Committees consider funding for all types of discretionary spending; but tax expenditures, mandatory spending, and net interest payments are not reviewed during the annual budget process.²⁴ In this sense, tax expenditures are entitlements because they don't end automatically, and it is the number and intensity of tax units who participate in the preferred activity what ultimately determines the amount of spending, such as in Social Security and Medicare.²⁵

The role of the government in aiding savings is starkly appreciated when comparing the size of the expenditure to actual savings. The size of the federal tax expenditures for pensions as a share of personal savings has risen sharply since 1974, remaining in the 16% to 20% range for the last 50 years. The ratio of the retirement tax expenditure to personal savings was 5% in 1974, 21% in 1984, 16% in 1994, 20% in 2004, and 16% in 2011 (See Figure 2). When we add state tax expenditures for retirement savings (\$20 billion) to federal tax expenditures for the same purpose (\$94.6 billion), the total amount of tax expenditures in 2014 (\$114 billion) amount to more than one-sixth of total savings – which reached \$633 billion in 2014.²⁶ Yet the savings rate, which is the ratio of savings to personal income, has not been enhanced by the growing size of

²⁴ See Sima J. Gandhi, Center for American Progress, *Audit The Tax Code: Doing What Works for Tax Expenditures* (2010) [hereinafter *Gandhi*], available at https://cdn.americanprogress.org/wp-content/uploads/issues/2010/04/pdf/dww_tax_framing.pdf.

²⁵ Because tax expenditures resemble mandatory spending in this sense, they have often being called “the hidden entitlements.” See Robert S. McIntyre, Citizens for Tax Justice, *Tax Expenditures—The Hidden Entitlements* (1996), available at <http://www.ctj.org/pdf/hident.pdf>

²⁶ See US. Bureau of Economic Analysis, Personal saving [A071RC1A027NBEA], retrieved from FRED, Federal Reserve Bank of St. Louis (Jun. 9, 2015), available at <https://research.stlouisfed.org/fred2/series/A071RC1A027NBEA>

tax expenditures. In 1974 the savings rate was 12.9%; in 1994, it was 6.3%; and in 2014, it was 4.9%.²⁷

[figure [2] belongs about here]

State Retirement Tax Expenditures

Since the cost of the tax expenditures are most often opaque, we doubt many governors, treasurers, and legislators realize the extent of the losses to the states' treasury by adopting the federal tax provisions. State tax expenditures resulting from conformity with federal tax law are called "implicit tax expenditures."²⁸ States often piggyback on federal tax provisions for administrative simplicity and thus, for retirement preferential tax treatment alone, forgo over \$20 billion of revenue each year.

The average cost of retirement tax expenditures in all 44 states that collect an income tax was \$197 per worker in 2014 (see Figure 3).²⁹

[figure [3] belongs about here]

Retirement Tax Expenditures are Ineffective in Raising Retirement Savings and Highly Regressive

Tax subsidies for retirement accounts are intended to cajole individuals to save for retirement tomorrow rather than consume today. But experts conclude deductions for retirement plans are not effective in encouraging workers or households to save more.³⁰ Retirement tax

²⁷ See U.S. Bureau of Economic Analysis, Personal Saving Rate [PSAVERT], retrieved from FRED, Federal Reserve Bank of St. Louis (Jun. 9, 2015), available at <https://research.stlouisfed.org/fred2/series/PSAVERT>.

²⁸ Leachman et al., *supra* note 12.

²⁹ States without an income tax are Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming. The appendix describes the calculation methodology. The District of Columbia is included as a state.

³⁰ Raj Chetty et al., *Active vs. Passive Decisions and Crowdout in Retirement Savings Accounts: Evidence from Denmark* (2012), Working Paper 18565. National Bureau of Economic Research

expenditures are regressive and largely ineffective because access is skewed towards those at the higher income brackets. Almost half (47 percent) of workers in the U.S. between the ages of 25 and 64 are not offered a retirement plan at work, and access to an employer-sponsored retirement plan varies considerably by income and industry – with the higher rates of access in high-income occupations, such as finance, insurance, and real estate.³¹

There is evidence that higher income families respond to the preferential tax treatment by shifting assets from taxable accounts to non-taxable retirement accounts to lower their taxes.³² Their savings levels are not affected. Low and middle-income families, least prepared for retirement, have tax rates that are too low to effectively induce them to save more. This reality is compounded by the fact that retirement tax expenditures are highly regressive;³³ \$100 deduction typically saves \$39.6 for someone in the top income-tax bracket, which is 39.6 percent, but only \$10 for a low-income worker in the 10-percent bracket. The bottom 40% of the income distribution receives only 3% of the tax benefits for employer-sponsored retirement plans.³⁴ In similar fashion, 60 percent of tax subsidies for employer-based retirement savings and IRAs go to the top 20 percent of taxpayers.³⁵

[hereinafter *Chetty et al.*]; Orazio P. Attanasio & Thomas DeLeire, *The Effect of Individual Retirement Accounts on Household Consumption and National Saving* (2002), *Economic Journal* 112: 504–38; William G. Gale & John Karl Scholz, *IRAs and Household Saving* (1994), *American Economic Review* 84 (5): 1233–60.

³¹ Ghilarducci & Saad-Lessler, *supra* note 2, find that the declining bargaining power of workers, along with a decrease in firm size, serve as the largest predictors of the drop in sponsorship rates from 61 percent in 1999 to 53 percent in 2011.

³² Chetty et al., *supra* note 30.

³³ Gale et al., *supra* note 14.

³⁴ Batchelder, Goldberg, and Orszag, *supra* note 13.

³⁵ See C. Eugene Steuerle et al., Urban Institute, *Who Benefits from Asset-Building Tax Subsidies?* (2014), available at <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/413241-Who-Benefits-from-Asset-Building-Tax-Subsidies-.PDF>; Congress of the United States, Congressional Budget Office, *Tax Distribution of Major Tax Expenditures in the*

The regressivity also compounds each year. All individuals benefit from tax-free accrual, but the higher-tax-bracket worker generates investment earnings on a larger initial contribution, as we observed in the example above. And if the tax savings are plowed back into the account, higher-income workers benefit from even larger tax subsidies.³⁶

For these and other reasons, experts and the Government Accountability Office (GAO) have called for regular and systematic evaluations of tax expenditures to inform policy decisions about their efficiency, effectiveness, and equity.³⁷

Convert Retirement Deductions and Deferrals to Credits that can be Directly Deposited in Guaranteed Retirement Accounts

If the 2014 retirement tax deferrals were converted to refundable tax credits in a revenue-neutral way, all workers would get a \$800 deposit into a retirement account from the federal government and their state – if the state has an income tax.³⁸ This automatic deposit through a refundable tax credit would have a larger and more significant impact on total savings than policies that rely upon individuals to take specific steps to increase retirement savings.³⁹ A

Individual Income Tax System (2013), available at

http://www.cbo.gov/sites/default/files/43768_DistributionTaxExpenditures.pdf

³⁶ See Teresa Ghilarducci & Adam Hayes, Schwartz Center for Economic Policy Analysis, *401(k) Tax Policy Creates Inequality* (2015), available at

http://www.economicpolicyresearch.org/images/docs/research/retirement_security/Hayes_Ghilarducci_Policy_Note_1.9.15_FINAL.pdf

³⁷ See Government Accountability Office, *Government Performance and Accountability: Tax Expenditures Represent a Substantial Federal Commitment and Need to Be Reexamined* (2005), available at <http://www.gao.gov/assets/250/247901.pdf>. Some states, like California, have begun to provide information on the purpose and cost of some tax expenditures but the scope of these reports remain limited and very few states are following suit. See Leachman et al., *supra* note 12; Gandhi, *supra* note 24.

³⁸ The sum of the federal tax expenditure per worker (\$607) and the state tax expenditure per worker (\$197). Workers in states that do not collect an income tax would only be eligible for a credit from the federal level, while those from states with an income tax would receive the sum of the federal and state tax expenditure as a credit.

³⁹ Chetty et al., *supra* note 30.

refund is more progressive than a deduction because refundable credits do not increase with a taxpayer's marginal tax rate.⁴⁰

Transforming the deduction to a refundable tax credit would provide 87.7 million workers nationwide who don't participate in a retirement plan at work with a credit of \$607. Approximately 70 million of these workers are in states with an income tax and their federal credit would be supplemented with an average state credit of \$197, which workers would have deposited into their retirement savings accounts (see Figure 4 for the number of workers in each of the states with a state income tax who would benefit from a retirement tax credit.)

[figure [4] belongs about here]

Here is an example of how the refundable tax credits will help workers save in a state with high income taxes. In New York, the combined refundable tax credit at the state and federal level will amount to \$902. Each worker in New York would have this credit directly deposited into his or her retirement savings accounts each year. If we fast-forward this process of reinvestment for 35 years of employment and assume an annualized rate of return of 2%, the average worker in New York who lacks access to a retirement plan at work will have saved approximately \$46,899 by 2050. This figure is higher than the median account balance of a near retiree today with access to an IRA or 401(k) plan at work.⁴¹

In a another example, a California worker would have a combined refundable tax credit of \$884. And if we fast-forward the same annual reinvestment process as above for 35 years and with a more optimistic annual return of 5%, the average worker in the state who starts with zero

⁴⁰ See Eric Toder & Daniel Baneman, Urban Institute, *Distributional Effects of Individual Income Tax Expenditures: An Update* (2012), available at <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412495-Distributional-Effects-of-Individual-Income-Tax-Expenditures-An-Update.PDF>

⁴¹ See Saad-Lessler, Ghilarducci, & Bahn, *supra* note 7.

savings will have saved approximately \$84,719 by 2050. This exercise can be done for each of the 44 states (including the District of Columbia) with an income tax.

We recommend a uniform refundable tax credit as part of a comprehensive retirement savings reform. All workers should be able to accumulate retirement assets in a low cost, safe account that pays an annuity at retirement. Guaranteed Retirement Accounts (GRAs) would be a good fit. GRAs are individual cash-balance accounts where benefits at retirement are based solely on contributions and returns. As savings vehicles, GRAs would guarantee a rate of return above inflation to protect workers from the volatility of the stock market and all individual account assets would be invested together in one large pool, with an emphasis on low-risk, long-term gains. Workers and the government could fund GRAs through retirement tax credits automatically deposited into workers retirement savings accounts.⁴² These changes would be revenue neutral for states and the federal government, while increasing retirement security for all workers at no extra cost to employers.

Conclusion

Tax breaks for retirement savings accounts made up the third-largest federal tax expenditure in 2014. These tax breaks also cause substantial, but opaque, losses to state treasuries. This is the first study to estimate and assemble the costs of retirement tax expenditures at the state level. The loss is over \$20 billion per year.

Transforming retirement tax expenditures into refundable tax credits at the federal and state level would lead to more equitable and expanded retirement security for working and

⁴² Teresa Ghilarducci, Robert Hilstonsmith, & Lauren Schmitz, Demos & Schwartz Center for Economic Policy Analysis, *State Guaranteed retirement accounts: A Low-Cost, Secure Solution to America's Retirement Crisis* (2012), available at <http://www.demos.org/sites/default/files/publications/StateGRARepor-1.pdf>

middle-class families. These tax credits would be automatically deposited into workers' retirement savings GRA accounts. If the deductions were credits today, more than 80 million workers with no retirement account would have more than \$800 deposited in a retirement savings account. Over 35 years, and assuming an annualized return of 2%, these accounts would yield over \$40,000. The transition from tax deductions to refundable tax credits would be revenue neutral for federal and state governments and would not affect employers, but would increase retirement security for all workers.

Appendix

This brief uses the federal tax expenditure report⁴³ (FY 2014-2018) prepared by the Staff of the Joint Committee on Taxation (JCT) as a baseline for categorizing and calculating state tax expenditures on retirement. The JCT report relies on provisions in Federal Tax law enacted through June 30, 2014. In that report, a tax expenditure is measured by the difference between tax liability under present law and the tax liability that would result if the tax expenditure provision were repealed and taxpayers were allowed to take advantage of any of the remaining tax expenditure provisions that apply to the income or the expenses associated with the repealed tax expenditure.

The Treasury's Office of Management of the Budget (OMB) also releases tax expenditure estimates⁴⁴ each year. Due to disparate assumptions and methodology, OMB estimates are larger than those released by the JCT (\$146.4 billion versus \$94.6 billion), which we use in this report. The difference between retirement tax expenditure estimates released by the Department of the Treasury's Office of Management of the Budget (OMB) and the Joint Committee on Taxation is discussed in previous work⁴⁵, and in part I of the JCT report under the heading "Comparisons with Treasury."

⁴³ Joint Committee on Taxation, *supra* note 4.

⁴⁴ Office of Management & Budget, *supra* note 1.

⁴⁵ Teresa Ghilarducci, Schwartz Center for Economic Policy Analysis, *Calculating Retirement Tax Expenditures: 2010* (2011), available at http://www.economicpolicyresearch.org/images/docs/retirement_security_background/Calculating_Retirement_Tax_Expenditures.pdf

The OMB report also publishes discounted present value estimates they argue accurately reflects the true economic cost of tax provisions. The total present-value estimate for retirement tax expenditures in the OMB report is \$101.3 billion. This figure represents the revenue effects, net of future tax payments that follow from activities undertaken during calendar year 2014 which cause the deferrals. For example, a pension contribution in 2014 would cause a deferral of tax payments on wages in 2014 and on pension fund earnings on this contribution in later years. But in some future year, the 2014 pension contribution and accrued earnings will be paid out and taxes will be due. These receipts are included in the \$101.3 billion estimate.

We use the lower number so as to not exaggerate the revenue losses. This report uses the \$94.6 billion estimate released by the JCT given that the individual state tax expenditure reports we examine provide cash-based, not present-value, estimates. Because this figure is lower than both OMB estimates (the cash-based and the present-value), our report may underestimate the true cost of retirement tax expenditures in calendar year 2014.

Retirement tax expenditures in the JCT report fall under three main categories:

1. Net exclusion of pension contributions and earnings
 - a. Plans covering partners and sole proprietors (e.g., Keogh plans)
 - b. Defined benefit plans
 - c. Defined contribution plans
2. Individual retirement arrangements
 - a. Traditional IRAs
 - b. Roth IRAs
3. Credit for certain individuals for elective deferrals and IRA contributions (we describe this category as “Special Credits” in the brief).

A. Deriving estimates for states that publish tax expenditure reports

The estimates of retirement tax expenditures per state are derived from individual state tax expenditure reports. Only 43 states and DC collect an income tax. The 7 states that do not collect an income tax are in terms of size very large states: Texas and Florida; medium size state, Washington; and very small states in terms of population, Nevada, Wyoming, South Dakota, Alaska.

Of the 44 states that collect an income tax, 40 states (including the District of Columbia) publish a tax expenditure report. Of these 40 states, only 18 estimate the cost of the tax preference for tax-qualified retirement accounts. There are no obvious differences --- in terms of size, region, politically Democratic or Republican, etc. -- between these three groups of states: the 4 states that collect an income tax and presumably allow for deductions and exclusions but don't report their value; the 22 states that account for the cost of total tax expenditures but not details on retirement account expenditures, and the 18 states that publish the cost of retirement account preferential treatments. Further study would have to determine if, perhaps, the 18 states that publish reports of cost estimates are more sophisticated, careful, transparent, and exhibit other characteristics of good government⁴⁶.

We make the distinction here only to identify the states we estimated tax expenditures for from those we report their estimates. (The 18 states that publish a tax expenditure reports for retirement account include: California, District of Columbia, Georgia Montana, Nebraska, Iowa, Kansas, Pennsylvania, Kentucky, Rhode Island, Maine, Massachusetts, Michigan, Minnesota, Mississippi, New York, North Carolina, Oregon, Wisconsin). Of the 18 states that report

⁴⁶ See National Conference of State Legislatures, *Full- and Part-Time Legislatures* (2014), available at <http://www.ncsl.org/research/about-state-legislatures/full-and-part-time-legislatures.aspx>

retirement tax expenditures, we estimate values for Kansas, Mississippi, and Rhode Island. Kansas, for example, does not publish estimates for net exclusions of private pension contributions and earnings. Mississippi does not provide estimates for contributions to employee pension plans. And Rhode Island does not specify whether or not it includes deferred earnings from retirement plans and contributions to public pensions or private defined benefit plans. The final 15 states we find with reliable tax expenditure estimates are: California, New York, Georgia, Iowa, North Carolina, Kentucky, Oregon, Maine, Pennsylvania, Massachusetts, Wisconsin, Michigan, Montana, Minnesota, and the District of Columbia.

Not all of the 15 states (including the District of Columbia) provide complete estimates of retirement tax expenditures in their reports. Each state provides distinct categories that are not comparable. Pennsylvania, for example, only provides estimates for retirement contributions by employers. And Massachusetts provides estimates for deductions of Employee Contributions to Public Pension Plans but as part of the total listed under the category of “Deduction for Employee Social Security and Railroad Retirement Payments.” A combined estimate would overstate the total retirement tax expenditure for the state. The bottom line is that where we have had to make a judgment we erred on the side of underreporting.

B. Deriving retirement tax expenditure per worker for states that publish tax expenditure estimates

To derive the national tax expenditure per worker, we divide total retirement tax expenditures within the three main categories above by the annual average U.S. labor force in 2014 (see formula below).

$$\text{National Pension Tax Expenditures per Worker 2014} = \frac{\text{Total Retirement Tax Expenditures (2014)}}{\text{Annual Labor Force (2014)}}$$

$$\$607 = \frac{\$94,600,000,000}{155,936,545}$$

We use this same formula to estimate the retirement tax expenditure per worker in each state.

Figure 5 below illustrates the latest year for which we have data available.

[figure [5] belongs about here]

B. Estimating retirement tax expenditure per worker for states that do not publish estimates

The majority of states do not report lost revenue from favoring activities in the tax code.

In this section, we provides estimates of the remaining 29 states that collect an income tax, but do not publish reliable estimates.⁴⁷

We start by estimating the average contribution that a typical worker would make to their 401(k), IRA, or Keogh plan (See Figure 6 below). We assume that the average employee contributes 6% of their salary⁴⁸ and the average employer contributes 2.1%⁴⁹.

[figure [6] belongs about here]

In Figure 7 below, estimated average contributions are multiplied by the 2014 median statutory tax rate for each state to estimate tax expenditure per worker.

[figure [7] belongs about here]

Given that contributions to retirement plans increase considerably for workers in the top income-tax brackets, our estimates generally underestimate the retirement tax expenditure per

⁴⁷ We follow the methodology used by Lauren Schmitz & Teresa Ghilarducci, Schwartz Center for Economic Analysis, *New York City and State Tax Expenditures for Defined Contributions Plans* (2012), available at http://www.economicpolicyresearch.org/images/docs/research/retirement_security/WP%202012-2%20Lauren%20Schmitz.pdf

⁴⁸ Based on Alicia H. Munnell & A. Sundén, *Coming up Short: The Challenge of 401 (k) Plans* (2004)

⁴⁹ Based on David Wray, 401(k) Sponsors Increase Focus On Plan Investments (Sept. 6, 2010), <http://www.psc.org/401-k-sponsors-increase-focus-on-plan-investments>

worker in most states with the use of the median tax rate. This is confirmed by the fact that only five states in our calculation yield estimates higher than what we find in their tax expenditure reports.⁵⁰

In Figure 8 below, total retirement tax expenditures per state are approximated by multiplying the retirement tax expenditure per worker in each state by the fraction of workers in the state who participate in an employer sponsored retirement plan, and the total number of workers in 2014.

[figure [8] belongs about here]

C. Estimating the number of workers who stand to benefit from refundable tax credits

To estimate the number of workers in each state who would benefit from converting retirement tax expenditures into refundable tax credits, we first calculate the fraction of workers who do not participate in a retirement plan at work or through their union in each state.⁵¹ We then multiply this fraction by the 2013 annual average employment level for each state to arrive at the number of workers who are not participating in a retirement plan at work in each state, and are therefore not benefiting from the current retirement tax incentive.⁵² In other words, these are the workers who stand to benefit from converting retirement tax expenditures into refundable tax credits. See Figure 9 below.

[figure [9] belongs about here]

⁵⁰ This brief ultimately gives priority to estimates derived from tax expenditure reports in the states that publish them.

⁵¹ Participation in a retirement plan at work requires the employer to offer a retirement plan to their workers and for workers to be eligible and to choose to participate in such a plan.

⁵² This is the latest year for which we have participation data available. We expect no significant changes in a single year.