New York City and State Tax Expenditures for Defined Contribution Plans

Lauren Schmitz and Teresa Ghilarducci

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Executive Summary

As traditional pensions, or defined benefit (DB) plans, are replaced by defined contribution plans (DC), workers in New York City and in the nation have less retirement security. Coverage rates for employer plans are falling. Most DC retirement accounts are in the form of 401(k)-type plans - voluntary, individual, self-directed financial accounts that enjoy tax-favored status under federal, state, and city tax rules.

Because contributions and investment earnings accumulate tax-free under these plans, the increasing use of DC retirement accounts represents a significant loss of tax revenue for federal, state, and local government budgets. At the federal level, public data reveal that these tax breaks will cost taxpayers a staggering $540.6 billion from 2012 – 2016.¹

Because most state and local tax codes allow the same deductions as federal tax law, cash-strapped state and local government budgets suffer a substantial revenue loss from these tax expenditures. Surprisingly, states and municipal tax authorities – including New York - do not publish tax expenditures for 401(k) plans, making it difficult to determine the exact amount of their considerable fiscal impact.

We estimate the cost of New York City and State tax expenditures for all individual retirement savings plans, including 401(k) plans, Individual Retirement Accounts (IRAs), and Keogh accounts (for the self-employed), to be approximately $1.79 billion annually. The cost includes over $390 million for the city and $1.39 billion for the state. To put these numbers in perspective, $390 million is more than the $290 million the city spent on its parks. In New York State, $1.39 billion would cover approximately 90.5% of proposed funding cuts to school aid or 93% of the cuts to both Medicaid and funding for human services in the 2011-2012 fiscal year.²

Unfortunately, these tax expenditures fall far short of fulfilling the intended goal of increasing retirement security for most working families. Because this subsidy is in the form of a tax deduction rather than a credit, these expenditures are highly regressive. Taxpayers in the highest tax brackets, who are likely to save without government incentives, receive the largest tax break. Taxpayers with the lowest incomes receive relatively miniscule assistance. In New York City, low-income earners receive an estimated $16 per year, while those in the top brackets receive 28 times more, or over $448 per year.


¹

²
Rearranging these tax subsidies from a tax deduction to a flat tax credit would provide workers with annual accumulations (indexed for inflation) to supplement Social Security and provide an adequate standard of living in retirement. In New York City, this switch would provide each worker with $110 to invest in a retirement account at no extra cost. Switching to a state credit would give each worker an extra $158, and a new federal credit would provide $600.

These accumulations could then be invested in a “Guaranteed Retirement Account,” a vehicle that allows workers and employers to contribute to a safely and efficiently administered pension account. This change would be revenue neutral for the city, while increasing retirement security for workers at small- and medium-sized businesses without imposing additional cost on their employers.
New York City Tax Expenditures for Defined Contribution Plans

At the federal level, tax breaks for retirement savings accounts are the second-largest tax expenditure in the United States. The estimated cost to the federal government in 2011 is approximately $111.69 billion in foregone tax revenue.\(^5\) Tax expenditures for defined benefit employer plans—401(k), IRA, and Keogh plans—are larger than deductions for capital gains taxes and mortgage interest deductions.\(^6\) In 2010, tax expenditures for 401(k) plans alone amounted to $53 billion, making them the third largest category of foregone revenues for the federal government.\(^7\)

As the largest city in the nation, New York City tax expenditure estimates for retirement accounts have a substantial fiscal impact on city revenues. However, to date, official estimates on annual tax expenditures for individual retirement plans have not been published. The city is not unique here; few states publish tax expenditures for 401(k) plans.

We estimate that New York City is losing over $390 million in foregone revenues to tax deferrals for 401(k), IRA, and Keogh retirement plans. Because participation in DC plans increases considerably for workers in the top 50% of the income distribution, a breakdown of average contributions to retirement accounts by quintile is essential for an accurate estimation of expenditures.

First, we estimate what households in each quintile are contributing to their retirement accounts. At the bottom, we estimate an annual contribution of $535. The second quintile is $1,694. The middle quintile most likely contributes an average of $3,037 per year. The fourth quintile contributes $5,189. Those at the top are estimated to contribute over $12,000 per year. Contributions are higher at higher incomes, as those with more discretionary income and in higher tax brackets find the tax deduction is worth more on a dollar for dollar basis. (Please see Table 1 below, which shows the most likely contributions made by New York City workers who have a DC plan.)
Table 1

Estimated Total Contribution per Family to a Defined Contribution Plan in New York City by Income Quintile, 2009

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Average NYC family income, 2009</th>
<th>Estimated employee contribution</th>
<th>Estimated employer contribution</th>
<th>Estimated total contribution per worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom fifth</td>
<td>$6,605</td>
<td>6%</td>
<td>2.1%</td>
<td>$535</td>
</tr>
<tr>
<td>Next-to-bottom fifth</td>
<td>$20,916</td>
<td>6%</td>
<td>2.1%</td>
<td>$1,694</td>
</tr>
<tr>
<td>Middle fifth</td>
<td>$37,495</td>
<td>6%</td>
<td>2.1%</td>
<td>$3,037</td>
</tr>
<tr>
<td>Next-to-top fifth</td>
<td>$64,065</td>
<td>6%</td>
<td>2.1%</td>
<td>$5,189</td>
</tr>
<tr>
<td>Top fifth</td>
<td>$158,299</td>
<td>6%</td>
<td>2.1%</td>
<td>$12,822</td>
</tr>
</tbody>
</table>

Notes: Average employee contribution obtained from Munnell and Sundén (2004). Employer contributions obtained from Wray (2010). Average pre-tax New York City family incomes by quintile are calculated from 2009 Current Population Survey (CPS) data. Family income units include all single person or family (two or more persons) tax reporting households, or a total of 3,293,881 families. Multiplying average income per quintile by the average estimated employee and employer contribution rates to DC plans yields the estimated total contribution per worker in the family (not contributor).

Next, we estimate the amount of tax breaks each household receives for retirement savings, taking into account that participation in these voluntary plans is not 100 percent. Taxpayers with the lowest incomes receive very little in city assistance because they have lower participation rates in 401(k) plans and low levels of contributions. We estimate families in the lowest tax brackets receive a miniscule $16 from New York City to help with their retirement savings. New York City taxpayers in the second quintile receive $53; the middle quintile receives just $99; those in the fourth quintile receive $178, and those at the top receive 28 times what the lowest income earners receive, over $448 per year. Because of the form of the tax break, the highest earners receive the largest subsidies from the city. Table 2 displays the estimated tax expenditure per person in each income quintile and the total tax expenditures for members of that income quintile.
Table 2

Estimated Total New York City Tax Expenditures by Average Family Income Quintile, 2009

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Estimated total contribution per family</th>
<th>2010 NYC tax rates</th>
<th>Estimated tax expenditure per worker</th>
<th>Total workers</th>
<th>Estimated Participation rate</th>
<th>Estimated total NYC tax expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom fifth</td>
<td>$535</td>
<td>2.91%</td>
<td>$16</td>
<td>709,360</td>
<td>28.20%</td>
<td>$3,200,632</td>
</tr>
<tr>
<td>Next-to-bottom fifth</td>
<td>$1,694</td>
<td>3.14%</td>
<td>$53</td>
<td>709,360</td>
<td>48.55%</td>
<td>$18,252,897</td>
</tr>
<tr>
<td>Middle fifth</td>
<td>$3,037</td>
<td>3.27%</td>
<td>$99</td>
<td>709,360</td>
<td>60.45%</td>
<td>$42,452,004</td>
</tr>
<tr>
<td>Next-to-top fifth</td>
<td>$5,189</td>
<td>3.43%</td>
<td>$178</td>
<td>709,360</td>
<td>68.90%</td>
<td>$86,997,329</td>
</tr>
<tr>
<td>Top fifth</td>
<td>$12,822</td>
<td>3.49%</td>
<td>$448</td>
<td>709,360</td>
<td>75.45%</td>
<td>$239,775,030</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$390,677,892</td>
</tr>
</tbody>
</table>

Notes: Data on average income quintiles per household in New York City are calculated from 2009 Current Population Survey (CPS) data. New York City tax rates obtained from the New York State Department of Taxation and Finance. Employment data are first quarter 2010 estimates from the Bureau of Labor Statistics’ report on employment and wages in New York City. Participation rates per quartile are taken from Purcell (2009) and recalculated by income quintile. Total contributions per worker are multiplied by 2010 New York City tax rates to simulate tax deferrals per worker. According to the Bureau of Labor Statistics, 2010 first quarter covered employment in New York City (including Bronx, Kings, New York, Queens, and Richmond counties) was at 3,546,800 or 709,360 per quintile. Quartile participation rates are from Purcell (2009) and include participation in DB and DC plans. We adopt this figure since the majority of workers who participate in a DB plan are also participants in a DC plan. Participation rates per quintile are estimated using a best-fit equation derived from quartile rates. Tax deferrals are multiplied by total workers and their participation rates to approximate total tax expenditures for NYC in 2009.

The bottom line is that the majority of tax expenditures for individual retirement plans benefit the wealthiest New York City residents. Families in the top fifth of the income distribution earning an average annual salary of $158,299 garner 61%, or $239.7 million, of total tax expenditures for retirement accounts. The fourth quintile, the next-to-top fifth of New York City families with $64,065 in average earnings claim 22% of all tax...
expenditures, or over $86.9 million. The top 40% receive 83% of all the tax breaks. The middle quintile, or those earning $37,495 per year, claim only 11% of expenditures, or $42.4 million. The bottom two fifths, or low-income families earning an average of $20,916 and $6,605, respectively, claim only $21.4 million in tax deferrals for individual retirement accounts. This top-heavy distribution is displayed graphically in the pie chart in Figure 1.

Figure 1

Distribution of New York City Retirement Account Tax Expenditure Estimates by Quintile

Top-Heavy Tax Expenditures Do Not Promote Retirement Security for Most Workers

State budgets bear the significant cost of tax expenditures – in the form of foregone tax revenue – to encourage activities that meet social goals. Earnings and contributions to retirement accounts are tax-deferred—the employee is not immediately taxed on the contributions the employer and employee makes to the plan and neither are the earnings on plan assets. Allowing workers to shelter their savings tax-free gives those who contribute a considerable advantage, as marginal tax rates decline significantly in retirement when the funds are accessed.

However, as shown by our New York City estimates, a central problem with tax exemptions for 401(k) and IRA plans is that the majority of tax breaks go to the richest taxpayers, those who can most afford to save for retirement. In a similar fashion, nationally, the top 20% of income earners claim 79.6% of the total benefits of entitlement programs for retirement accounts.16
Government aid can be better spent to help American workers save for retirement. Retirement income\textsuperscript{17} for those with annual incomes less than $60,000 are not keeping pace with increased expenditures in retirement.\textsuperscript{18} Lower future replacement rates mean that some workers have to delay their retirement or accept a lower standard of living when they retire. According to the National Retirement Risk Index, published by the Center for Retirement Research, 51% of households are "at risk" of not having enough savings to maintain their current standard of living in retirement.\textsuperscript{19} In short, most Americans will not have adequate income to retire at age 65 if they do not work.

Receiving a tax credit is not a magic bullet that will singularly help working families accumulate retirement assets in a safe and secure way. Working families need a retirement savings vehicle that allows them and their employers to accumulate assets at a safe rate of return with guarantees of benefits being paid at retirement. There are various ideas for these types of vehicles, including Guaranteed Retirement Accounts.

**Guaranteed Retirement Accounts: A Policy Proposal to Enhance the Retirement Security of All Working Americans**

A revenue-neutral tax credit at the federal, state, and local level would partially offset the increased savings workers currently need to make to finance a reasonable standard of living in retirement. At the federal level, these tax credits would amount to roughly $600 per worker, and would cover a 2.5% contribution rate to a retirement account for workers earning $24,000 or less. An additional credit at the state and city level, as calculated in this note, could amount to as much as $268 in the case of New York. We have estimated the credit for New York City workers and others in selected states in the region (see Table 3).

**Table 3.**

<table>
<thead>
<tr>
<th>State</th>
<th>Total tax expenditure estimates</th>
<th>Total workers</th>
<th>City/State tax credit</th>
<th>Federal tax credit</th>
<th>Percent of recommended contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>$390,677,892</td>
<td>3,546,800</td>
<td>$110</td>
<td>$600</td>
<td>101%</td>
</tr>
<tr>
<td>New York</td>
<td>$1,390,000,000</td>
<td>8,781,860</td>
<td>$158</td>
<td>$600</td>
<td>108%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$91,946,128</td>
<td>1,724,421</td>
<td>$53</td>
<td>$600</td>
<td>93%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$234,818,556</td>
<td>4,075,296</td>
<td>$58</td>
<td>$600</td>
<td>94%</td>
</tr>
</tbody>
</table>

*Notes:* Percent of recommended contribution is the annual recommended amount a worker should contribute to their individual retirement account in order to maintain a similar standard of living in retirement, taking into account Social Security benefits. It is based on a worker with an annual
To put this contribution into perspective, a recent study finds that taking into account future Social Security benefits, a 25 year old male worker who makes $20,000 per year needs to contribute at least 3.5% of their annual pay to their retirement savings account to achieve the recommended replacement rate needed for a similar standard of living in retirement, or $700 per year (see Table 3). Receiving a joint tax credit at the federal and state level would cover over 100% of this worker’s contribution to their retirement account in almost every state highlighted in this brief. For a 25-year-old male worker earning $60,000 per year with a recommended replacement rate of 4.5% or $2,700 per year, a joint federal, New York State, and New York City subsidy would cover one-third of their yearly savings for retirement.

To streamline and simplify the retirement saving process, workers could have the funds automatically deposited in their retirement savings account. If workers are not already enrolled in a retirement plan, states or municipalities could offer a universal and portable low-fee option that would guarantee a reliable and safe rate of return. A voluntary “Guaranteed Retirement Account” would allow workers and employers (if they choose) to contribute in a safely and efficiently administered account, perhaps as part of the New York City or State pension fund for public employees at no additional costs.

**Conclusion**

New York City and State are losing over $1.5 billion in revenues because of top-heavy tax breaks for 401(k), Individual Retirement Account (IRA), and Keogh plans. In New York City, the top 20% of income earners claim 61% of the over $390 million in tax expenditures estimated in this note. This is a significant amount of foregone taxpayer revenue that is doing little to enhance the retirement security of all New Yorkers.

The current structure of tax favoritism for retirement accounts could be restructured so that instead of a tax deduction, every taxpayer was allowed a tax credit. This would significantly lessen private sector workers’ burden of saving for retirement, a burden they increasingly shoulder themselves. Taking into account Social Security benefits, a 25-year-old male worker earning $20,000 in New York could receive a city, state and federal credit that would cover over 100% of the recommended contribution needed to have a similar standard of living in retirement.

Additionally, for small and medium business employers, a tax credit of this nature would increase the retirement security of their workers without any added administrative or financial burden on their part.

While tax credits to promote retirement security would ideally be implemented at the federal and state levels, our New York State and City findings suggest that a smaller
initiative at the state or local level could be beneficial to employers and employees alike. The continuation of top-heavy tax breaks that disproportionately benefit high-income earners who already save a significant portion of their income for retirement is inefficient and costly. Most importantly, it does little to combat the sharp decline in living standards that threaten the majority of the next generation of New York and American retirees.
Appendix:

State-Level Tax Expenditures for Selected States

Like cities, the majority of states do not report lost revenue from favoring certain activities in the tax code. In order to compare and contrast what is happening in New York City and State we report on calculated tax expenditures for individual retirement accounts for a selected group of states that are currently experiencing major changes to their state pension systems. We estimate the tax expenditures for Connecticut and New Jersey because they are in the region. We include California because it is large and Illinois because it is facing huge deficits in its state and local pension plans and has received a lot of attention. See Figure 2.

Figure 2.

Nationwide Comparison of Tax Expenditure Estimates for Retirement Accounts (in millions of USD)

Notes: *New York estimates obtained from New York State’s 2010 Annual Report on New York State Tax Expenditures. **California estimates obtained from the 2010 California Income Tax Expenditures Compendium of Individual Provisions. For both states, 50% of their reported contributions to employee pensions are assumed to be for defined contribution or 401(k) plans. IRA and Keogh estimates are published separately.
Perversely future tax hikes in states with projected budget gaps will increase revenue losses (!). Tax expenditures for retirement accounts, especially for income earners in the highest tax brackets, will increase. This will occur when taxpayers will pay higher tax rates. For example, in 2011, Illinois’ flat state income tax will increase from 3% to 5%, raising the state’s tax expenditures on retirement accounts from $169 million to nearly $283 million, or by 67% according to the calculations in Table 6.

To estimate the average contribution that a typical worker would make to their 401(k), IRA, or Keogh plan we first estimate the average salary per state. Since contributions to these plans increase considerably for workers in the top 50% of the income distribution, we assume that the average worker who contributes to their retirement account has a salary at 120% of the state average, or between $47,064 and $61,140 for all four states. If typical contribution rates for employees are approximately 6% of their salary, and the average employer contributes around 2.1%, then average contributions to these accounts are projected to range from $3,812 to $4,952 per worker.

### Table 4

**Estimated Average Contribution per Worker to an Individual Retirement Account in 2009**

<table>
<thead>
<tr>
<th>State</th>
<th>Estimated average salary</th>
<th>Estimated Employee contribution</th>
<th>Estimated Employer contribution</th>
<th>Estimated total contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>$61,140</td>
<td>6%</td>
<td>2.1%</td>
<td>$4,952</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$60,012</td>
<td>6%</td>
<td>2.1%</td>
<td>$4,861</td>
</tr>
<tr>
<td>Illinois</td>
<td>$55,332</td>
<td>6%</td>
<td>2.1%</td>
<td>$4,482</td>
</tr>
</tbody>
</table>

*Notes:* Average salary is estimated at 120% of the mean annual salary to account for the considerable increase in contributions to retirement accounts for workers in the top 50% of the income distribution. Average salary is taken from the Bureau of Labor Statistics (BLS) for all occupations in 2009 and is based on a full-time year-around figure of 2,080 hours. Average employee contribution obtained from Munnell and Sundén (2004). Employer contributions obtained from Wray (2010). Estimated total contributions are multiplied by the effective tax rate, or the amount of actual income tax paid divided by net taxable income before taxes, to derive the estimated tax deferral received by the average worker (see Table 5 below). Tax deferrals range from $134 in New Jersey to $67 in Illinois.
Table 5

Per Worker Tax Expenditure Estimates for Retirement Account Contributions in 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Estimated total contribution per worker</th>
<th>Estimated 2010 effective tax rate</th>
<th>Estimated tax deferral per worker (not contributor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>$4,952</td>
<td>2.5%</td>
<td>$124</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$4,861</td>
<td>2.75%</td>
<td>$134</td>
</tr>
<tr>
<td>Illinois</td>
<td>$4,482</td>
<td>1.5%</td>
<td>$67</td>
</tr>
</tbody>
</table>

Notes: The effective tax rate is assumed to be 50% of the 2010 statutory tax rate. 2010 statutory tax rates are obtained from the Tax Foundation.32

Total retirement account tax expenditures per contributor are approximated by multiplying the average tax credit by the total percentage of the labor force33 that contributed to a retirement plan in 2008.34 Connecticut and New Jersey are estimated to forgo revenues from favoring defined contribution plans of $91.9 and $234.8 million, respectively. Illinois comes in at $169.0. Note that since we do not have detailed income distribution data at the state level, these estimates assume a uniform contributor whose salary is at 120% of the average. As such, our estimates are conservative in that they do not take into account higher participation and contribution rates that occur in top income tax brackets, which would increase expenditure estimates considerably – probably by about 25%.

Table 6

Total Retirement Account Tax Expenditure Estimates for 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Estimated tax deferral per worker</th>
<th>Total workers</th>
<th>Participation rate in a retirement plan</th>
<th>Total state tax expenditure estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>$124</td>
<td>1,724,421</td>
<td>43%</td>
<td>$91,946,128</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$134</td>
<td>4,075,296</td>
<td>43%</td>
<td>$234,818,556</td>
</tr>
<tr>
<td>Illinois</td>
<td>$67</td>
<td>5,866,041</td>
<td>43%</td>
<td>$169,000,641</td>
</tr>
</tbody>
</table>

Notes: Total workers are the total people from the civilian noninstitutional population employed in December 2009 as reported by the Bureau of Labor Statistics. Employee participation in a retirement plan is taken from Purcell (2009) and based on Current Population Survey (CPS) data.35 It includes all workers offered a DB or DC retirement plan. We adopt this figure since the majority of workers who participate in a DB plan are also participants in a DC plan.
End Notes

1 See the White House’s Office of Management and Budget’s *Analytical Perspectives* report for fiscal year 2012. [http://www.whitehouse.gov/omb/budget/Analytical_Perspectives](http://www.whitehouse.gov/omb/budget/Analytical_Perspectives)

2 See the New York State 2011-2012 Executive Budget Briefing Book. Proposed changes to funding include a $1.535 billion reduction in funding for school aid ([http://publications.budget.state.ny.us/eBudget1112/fy1112littlebook/Education.pdf](http://publications.budget.state.ny.us/eBudget1112/fy1112littlebook/Education.pdf)), a $982 million reduction in total spending on Medicaid ([http://publications.budget.state.ny.us/eBudget1112/fy1112littlebook/Healthcare.pdf](http://publications.budget.state.ny.us/eBudget1112/fy1112littlebook/Healthcare.pdf)), and a $315 million reduction in spending on Human Services: ([http://publications.budget.state.ny.us/eBudget1112/fy1112littlebook/HumanServices.pdf](http://publications.budget.state.ny.us/eBudget1112/fy1112littlebook/HumanServices.pdf))


10 Based on 2009 Current Population Survey (CPS) data we find that the total population of families in NYC with two or more persons is 2,005,289. We use both single member and multiple member family households when calculating NYC income quintiles, or a total of 3,293,881 families. The sample is weighted by family unit, or the given household weights in the CPS are divided by the number of families in each household to generate a family weight for accurate representation of sample numbers.


Participation in retirement plans by average earnings taken from Patrick Purcell, “Pension Sponsorship and Participation: Summary of Recent Trends”, 2009. [http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1659&context=key_workplace](http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1659&context=key_workplace)


Participation in retirement plans by full-time employment taken from Patrick Purcell, “Pension Sponsorship and Participation: Summary of Recent Trends”, 2009. Rates are based on Current Population Survey (CPS) data and include participation in DB and DC plans. Since the majority of workers who contribute to a DB plan also participate in a DC plan, we use this rate for the purposes of this study. [http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1659&context=key_workplace](http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1659&context=key_workplace)


A replacement rate is a person’s gross income after retirement divided by his or her gross income before retirement. A worker generally needs less income after retirement due to lower income taxes, the elimination of FICA (Social Security and Medicare) taxes, partially or fully tax-free Social Security benefits, and because savings for retirement is no longer necessary.


Ibid.

24 See the White House’s Office of Management and Budget’s *Analytical Perspectives* report for fiscal year 2012. [http://www.whitehouse.gov/omb/budget/Analytical_Perspectives](http://www.whitehouse.gov/omb/budget/Analytical_Perspectives)


32 2010 state tax rates are obtained from the Tax Foundation and can be found at: [http://www.taxfoundation.org/taxdata/show/228.html](http://www.taxfoundation.org/taxdata/show/228.html)

Participation in retirement plans by full-time employment taken from Patrick Purcell, “Pension Sponsorship and Participation: Summary of Recent Trends”, 2009. Rates are based on Current Population Survey (CPS) data and include participation in DB and DC plans. Since the majority of workers who contribute to a DB plan also participate in a DC plan, we use this rate for the purposes of this study.
http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1659&context=key_workplace

Ibid.