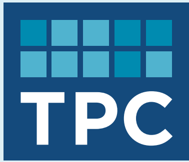

TAX POLICY CENTER
URBAN INSTITUTE & BROOKINGS INSTITUTION

Tax-Favored Retirement Plans

Steve Rosenthal
April 20, 2017

There are several types of tax-favored retirement plans. They differ mainly on the type of sponsor and the tax treatment of contributions and distributions. Almost all workers are eligible to participate in these plans, but only half actually do. High-income taxpayers participate much more than low-income taxpayers.

This year, Congress will consider what may be the biggest tax bill in decades. This is one of a series of briefs the Tax Policy Center has prepared to help people follow the debate. Each focuses on a key tax policy issue that Congress and the Trump administration may address.

EMPLOYER SPONSORED PLANS (DEFINED BENEFIT AND DEFINED CONTRIBUTION)

Employees often receive retirement benefits from their employers, though participation varies. In 2015, about two-thirds of workers at medium-size and large firms participated in a retirement plan, while only about one-third of workers at small firms enrolled. Most private-employer plans are defined contribution, although some are defined benefit. Almost 90 percent of government employees participated in some form of retirement plan. Most of these are defined benefit plans.

In general, defined benefit and defined contribution plans are tax-deferred, meaning that neither the employer nor the employee pays tax on the initial contributions or the accumulations. However, employees generally pay

tax when they withdraw funds. (The major exception is Roth-type defined-contribution plans, where employees are taxed when they contribute to their accounts rather than when they withdraw funds after retirement. See further discussion below, which compares Roth plans to traditional).

Defined benefit plans

Some employers, most frequently public ones, offer "defined-benefit" (DB) plans, which provide retired employees annuity payments, which are typically based on their years of work and earnings.

The employer bears the risk of making the annuity payments for the retiree's lifetime. If retired employees live longer than anticipated, or if the investments financing the employees' pensions fail to meet expectations, the employer must increase its contributions to make good on the promised benefits. Defined-benefit plans are thus more likely to be offered by large employers, which are better suited to bear these risks and can spread administrative costs across large numbers of participants.

However, the government and the employees themselves also may bear some risk. Defined-benefit plans are insured by the Pension Benefit Guarantee Corporation ("PBGC"), a federal entity which ensures that retired employees receive at least some benefits if their former employers fail to pay the promised sums in full. However, the PBGC's financial condition is uncertain and it may not be able to meet its obligations to retirees whose employers do not pay full promised benefits.

Over the past few decades, many private employers have moved away from defined-benefit plans. From 1991 to 2015 the share of full-time employees at medium-size and large establishments with such plans fell from 59 percent to just 25 percent. Defined-benefit plans, however, still remain the most common type of plan for government employees.

Defined contribution plans

Today, many employers offer defined-contribution (DC) plans, which base distributions on the size of combined employee and employer contributions and on the investment returns accumulated on those contributions. These plans include 401(k) plans, 403(b) plans for nonprofit employees, and 457 plans, mostly for state and local government workers. Self-employed workers can create Keoghs, which generally are DC plans (although they can be DB).

Unlike DB plans, the owners of defined-contribution plans bear the risk if account assets underperform or if the owners outlive the income their accounts generate. Employees can manage this risk by using plan assets to purchase annuities at retirement.

The share of employees with defined-contribution plans has slowly increased over the past 25 years. From 1991 to 2015, participation of full-time employees at medium-size and large enterprises rose from 48 percent to 56 percent. About half of all workers have defined-contribution accounts.

INDIVIDUAL RETIREMENT ACCOUNTS ("IRAS")

Broadly speaking, there are two types of tax-favored individual retirement accounts: traditional IRAs, which are "front-loaded," and Roth IRAs, which are "back-loaded." With front-loaded accounts, contributions are tax-deductible but withdrawals are taxed. In back-loaded accounts, contributions are not tax-deductible but accruals and withdrawals are tax-exempt. In both versions, investment returns on account assets (accruals) are untaxed.

Which is a better deal? That mainly depends on the difference between individuals' tax rates during their working years and during retirement. Individuals who pay higher tax rates while they are working than during retirement benefit more from front-loaded accounts, since the original contributions are deducted against

TABLE 1

Front- and Back-Loaded Savings Accounts with Constant Tax Rate

Plan overview		
Tax rate: 0.25		
Interest: 0.05		
Time (years): 10		
	Front loaded	**Back loaded**
Before-tax income	$2,000	$2,000
Taxes paid (25%)	$0	$500
Contribution	$2,000	$1,500
Accumulated balance in account	$2,358	$2,443
Taxes paid on withdrawal (25%)	$814	$0
After-tax proceeds	$2,443	$2,443

higher rates and withdrawals are taxed at lower rates. By contrast, someone who expects to be in a higher tax bracket in retirement would benefit more from a back-loaded account.

However, if tax rates during working years and retirement are the same, front- and back-loaded accounts generate the same after-tax return.

Take, for example, an individual who faces a 25 percent tax rate when making both contributions and withdrawals, makes a before-tax contribution of $2,000, earns 5 percent per year, and withdraws all funds after 10 years.

In a front-loaded account, she would contribute the full $2,000. The account would accumulate interest, and after 10 years the balance would be $3,258. Upon withdrawal, she would pay $814 in taxes, leaving net retirement assets of $2,443. With a back-loaded Roth-type account, she'd pay a 25 percent tax on $2,000 in income, leaving just $1,500 to contribute to her account. With the same 5 percent return, her balance would grow to $2,443. But since she'd owe no taxes on withdrawal, her after-tax proceeds would be the same $2,443.

Table 2 shows what would happen to the same account if the tax rate decreases from 25 percent during working years to 20 percent during retirement. In that case, the front-loaded account would accrue $163 more than the back-loaded version, since lower taxes would be imposed upon withdrawal. Of course, the reverse occurs if the tax rate is higher during retirement than during working years.

WHO USES TAX-FAVORED RETIREMENT ACCOUNTS?

Participation in tax-favored retirement savings accounts varies dramatically with age and income (Table 3). In recent years, about one-third of workers under age 30 participated, compared with almost two-thirds of workers ages 45 to 59. Participation also varies by income. About four in five high-income workers participate, but slightly less than one in five low-income workers participate.

401(k) participation

In recent years, higher-income workers have been more than twice as likely as lower-income workers to participate in 401(k) type plans. And contributions were

TABLE 2

Front- and Back-Loaded Accounts with Lower Tax Rate at Retirement

Plan overview		
Tax rate T0: 0.25		
Tax rate T10: 0.20		
Interest: 0.05		
Time (years): 10		
	Front loaded	**Back loaded**
Before-tax income	$2,000	$2,000
Taxes paid (25%)	$0	$500
Contribution	$2,000	$1,500
Accumulated balance in account	$3,258	$2,443
Taxes paid on withdrawal (20%)	$652	$0
After-tax proceeds	$2,606	$2,443
Tax savings from front-loaded account: $163		

highly related to income. The average contribution in 2006 was $4,352. But workers earning over $160,000 contributed more than twice the mean ($11,004) while those earning $20,000 to $40,000 put aside just $1,288 on average.

IRA participation

Participation rates in traditional IRAs also increase with income. However, the relationship between participation and income is less straightforward for Roth IRAs, which limit eligibility to those with adjusted gross incomes under $193,000 (for married workers in 2015).

In addition, because IRA contribution limits are more restrictive than for 401(k)s, average contributions vary less. In 2014, the average contribution to an IRA was $4,885. Those making $20,000 to $25,000 contributed an average of $2,770, while those earning more than $200,000 put away an average of $5,180. As workers approach retirement, there is an extra allowance for catch-up contributions—and their average contribution increases.

Among those with traditional IRAs, 45 percent maxed out their contributions in 2014, with a significantly higher proportion of high-income taxpayers hitting the limit. Among those with Roth IRAs, 34 percent contributed the maximum amount—with higher-income taxpayers doing so more frequently. This pattern illustrates one reason why proposals to increase the maximum tax-favored IRA contribution would disproportionately benefit the affluent. By contrast, to shift greater incentives to low- and middle-income households, proposals could expand access to savings vehicles and scale back deductions.

Distribution of tax benefit

In aggregate, the tax benefits for retirement savings are large. For 2017, the Tax Policy Center estimates the net present value of retirement savings tax benefits as $187 billion. Retirement tax benefits are among the largest tax expenditures (generally ranked after employer-provided health care benefits).

Retirement benefits are skewed to the upper end of the income distribution, as reflected in Table 4. In particular, while only 4.3 percent of the $187 billion in benefits goes

to those in the bottom 40 percent, 84.8 percent goes to taxpayers in the top 40 percent. A mere 0.5 percent of the benefit goes to those in the bottom 20 percent.

TABLE 3

Participation in Tax-Favored Retirement Plans

Percentage of eligible workers participating by type of plan, 2006

	Any plan	Individual Retirement Accounts	401(k)-type plans	Noncontributionary plans
Age				
Under 30	33	4	16	15
30–44	57	7	34	20
45–59	64	10	39	19
60 and over	45	9	23	15
All ages	52	7	29	18
Income ($2006 in thousands)				
Under 20	17	2	5	11
20–40	47	5	23	21
40–80	65	9	38	22
80–120	77	12	50	21
120–160	81	15	58	17
160 and over	81	11	56	14
All incomes	52	7	29	18
Marital status of earner				
Unmarried	41	5	22	16
Married[1]				
Sole	52	8	30	17
Primary	74	10	48	20
Secondary	57	10	31	20
All earners	52	7	29	18

Source: Congressional Budget Office, “Use of Tax Incentives for Retirement Saving in 2006,” publication 4167 (Washington, DC: Congressional Budget Office, 2011);CBO Background Paper (Washington, October 2011).

(1) Sole refers to the sole earner in a single-income, married household, primary refers to the primary earmer in a two-income, married household, and secondary refers to the secondary earner in a two-income, married household.

TABLE 4

Tax Benefit of Retirement Savings and Incentives

Expanded cash income percentile	Total tax benefits (millions of $)	Percent of tax units with benefit	Average benefit ($)	Share of total tax benefit (%)
Lowest quintile	970	4.7	20	0.5
Second quintle	7,320	27.4	190	3.8
Middle quintile	20,410	48.4	600	10.9
Fourth quintile	42,990	66.5	1,500	22.9
Top quintile	115,820	81.0	4,800	61.9
All	187,240	38.8	1,070	100.0
Addendum				
80–90	37,020	79.0	2,990	19.8
90–95	30,970	84.6	5,170	16.5
95–99	36,300	82.2	7,840	19.4
Top 1 percent	11,540	78.3	10,120	6.2
Top 0.1 percent	1,100	70.3	9,190	0.6

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).

Notes: Table shows the tax benefit under current law of current year contributions to IRAs, Keogh plans, and both defined-contribution and defined-benefit retirement plans. Tax benefits are calculated using a net present value approach. Under this approach, current and future taxes paid for current-year contributions to tax-favored retirement accounts are compared with the current and future taxes that would have been paid on an equivalent investment in a taxable account. For additional information about this table, see

http://www.taxpolicycenter.org/model-estimates/individual-income-tax-expenditures-april-2017/t17-0130-tax-benefit-certain.

The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $24,900; 40% $48,300; 60% $85,600; 80% $149,600; 90% $217,200; 95% $309,900; 99% $726,100; 99.9% $3,073,400.