Q. What kinds of tax-favored retirement arrangements are there?

A. Tax-favored retirement arrangements can be sliced and diced in various ways. There are three big differences, though: who sponsors them, who bears the risk, and when Uncle Sam takes his cut.

EMPLOYER-SPONSORED PLANS

There are two primary types of employer-sponsored plans. Defined-benefit plans generally distribute funds regularly during retirement according to formulas that reflect employees' years of work and earnings. In defined-contribution plans, of which the 401(k) plan is the most common, balances depend on past employee and employer contributions and on the investment returns accumulated on those contributions.

INDIVIDUAL RETIREMENT ACCOUNTS

Individuals also may establish their own individual retirement accounts (IRAs). There are two main types: traditional IRAs and Roth IRAs. Like 401(k)s, traditional IRAs allow taxpayers to deduct their contributions, up to a preset limit, from taxable income. Tax liability is only triggered when funds are distributed to the account owners. By contrast, contributions to Roth IRAs and Roth 401(k)s yield no tax breaks when they are made, but distributions to retirees, including accumulated investment income, are tax free.

PARTICIPATION

Employers are not required to offer their employees retirement benefits, and only about half of all workers are covered by an employer-sponsored plan. Coverage rates are highest for workers ages 45 to 65 and for those earning more than $100,000 (table 1).

Large companies are more likely to sponsor retirement plans than small firms. In 2015, about two-thirds of full-time workers at medium and large firms participated in employer-sponsored plans, compared with about one-third of full-time workers at small firms (EBRI 2018). In 2015, almost all full-time state and local government employees (89 percent) participated in employer-sponsored plans of one sort or another.

Participation in individual retirement accounts is less common than participation in employer-sponsored plans. About 30 percent of taxpayers owned an IRA in 2015, but only about 6 percent contributed to their plan in that year (table 2).

Key Elements of the U.S. Tax System

What kinds of tax-favored retirement arrangements are there?

TABLE 1

Participation in Employer-Sponsored Retirement Plans

Tax year 2014

	Taxpayers Covered by Employer-Sponsored Plans	Percentage of Taxpayers with Wage Income Covered
All	69,792,000	49%
Wage income		
Under $20,000	8,869,000	18%
$20,000–$50,000	28,628,000	54%
$50,000–$100,000	23,000,000	77%
$100,000–$200,000	7,162,000	84%
Above $200,000	2,133,000	86%
Age		
Under 35	19,020,000	36%
35–45	15,858,000	56%
45–55	17,694,000	60%
55–65	13,940,000	61%
Above 65	3,281,000	40%
Filer type		
Joint returns	40,467,000	60%
One wage earner	10,407,000	55%
Two wage earners	30,060,000	62%
Nonjoint returns	29,325,000	39%

Source: Internal Revenue Service, *SOI Tax Stats—Individual Information Return Form W2 Statistics*, Tables 3.A., 3.C, and 3.D.

Notes: Taxpayers are covered by an employer-sponsored retirement plan if their employer (or their spouse's employer) has a defined contribution plan (profit-sharing, 401(k), stock bonus and money purchase pension plan) and any contributions were allocated to their account; an IRA-based plan (SEP, SARSEP or SIMPLE IRA plan) and they had an amount contributed to their account; or a defined benefit plan (pension plan that pays a retirement benefit spelled out in the plan) and they are eligible to participate.

Key Elements of the U.S. Tax System

What kinds of tax-favored retirement arrangements are there?

TABLE 2

Participation in Individual Retirement Arrangements

Tax Year 2015

	Number of Taxpayers with IRAs	Share of Taxpayers with IRAs	Number of Taxpayers Contributing to IRAs	Share of Taxpayers Contributing to IRAs
All	58,425,000	29%	13,006,000	6%
Adjusted gross income				
Under $50,000	17,044,000	16%	3,143,000	3%
$50,000–$100,000	17,005,000	34%	3,911,000	8%
$100,000–$200,000	16,179,000	49%	4,156,000	12%
$200,000–$500,000	6,420,000	64%	1,367,000	14%
Above $500,000	1,777,000	73%	429,000	18%
Age				
Under 30	2,860,000	7%	1,522,000	4%
30–45	11,450,000	21%	3,805,000	7%
45–60	18,947,000	34%	4,899,000	9%
Above 60	25,141,000	50%	2,776,000	5%
Sex				
Men	28,526,000	29%	159,000	7%
Women	29,899,000	28%	98,000	6%

Source: Internal Revenue Service, *SOI Tax Stats—Accumulation and Distribution of Individual Retirement Arrangements*, Tax Year 2015, Tables 2, 4, and 7.

Data Source

Internal Revenue Service. *SOI Tax Stats—Accumulation and Distribution of Individual Retirement Arrangements*. Tax Year 2015, Tables 2, 4, and 7.

———. *SOI Tax Stats—Individual Information Return Form W2 Statistics*. Table 3.A. "Taxpayers with Wage Income, by Size of Wage Income, Presence of Retirement Plan Indicator, and Elective Retirement Contributions, Tax Year 2014"; 3.C. "Taxpayers with Wage Income, by Age of Taxpayer, Presence of Retirement Plan Indicator, and Elective Retirement Contributions, Tax Year 2014"; and 3.D. "Taxpayers with Wage Income, by Return and Earner Type, Presence of Retirement Plan Indicator, Elective Retirement Contributions, Tax Year 2014."

Further Reading

Congressional Budget Office 2011. "Use of Tax Incentives for Retirement Saving in 2006." Washington, DC: Congressional Budget Office.

EBRI (Employee Benefit Research Institute). 2018. "Chapter 5: Private- and Public-Sector Retirement Plan Trends (Updated October 2015)." In *EBRI Databook on Employee Benefits*. Washington, DC: Employee Benefit Research Institute.

Holden, Sarah, and Daniel Schrass. 2017. "The Role of IRAs in US Households' Saving for Retirement, 2017." Washington, DC: Investment Company Institute.

Key Elements of the U.S. Tax System

How large are the tax expenditures for retirement saving?

Q. How large are the tax expenditures for retirement saving?

A. The tax expenditures are very large, indeed. They reached almost $230 billion in 2017 and will likely reach nearly $1.4 trillion over the 2018–22 period.

Tax expenditures are revenue losses attributable to special exclusions, exemptions, deductions, credits, and other provisions in the tax code. The Congressional Joint Committee on Taxation calculates the tax expenditure for retirement savings as the sum of the revenue loss attributable to the tax exclusion for current-year contributions and earnings on account balances, minus the revenue from taxation of current-year pension and individual retirement account distributions (table 1).

The 2017 Tax Cuts and Jobs Act did not make significant changes to retirement saving tax expenditures. However, the new law did modestly reduce the cost of those tax expenditures by reducing individual income tax rates. Lower marginal tax rates reduce the cost of tax expenditures that take the form of exclusion and deductions because reducing taxable income provides smaller tax benefits at lower rates.

TABLE 1

Tax Expenditures for Retirement Savings

Billions of Dollars, Fiscal Years 2017–22

Plan Type	2017	2018	2018–22
Net exclusion of pension contributions and earnings	**$202.1**	**$225.1**	**$1,247.7**
Defined benefit plans	$77.4	$87.9	$518.6
Defined contribution plans	$117.0	$125.5	$648.0
Keogh plans	$7.7	$11.7	$81.1
Individual retirement accounts	**$25.5**	**$25.7**	**$139.4**
Traditional IRAs	$18.0	$17.8	$96.5
Roth IRAs	$7.5	$7.9	$42.9
Credit for elective deferrals and IRA contributions	**$1.4**	**$1.2**	**$6.0**
Total expenditures	**$229.0**	**$252.0**	**$1,393.1**

Sources: Joint Committee on Taxation (2018a, 2018b).

Key Elements of the U.S. Tax System

How large are the tax expenditures for retirement saving?

The White House Office of Management and Budget publishes tax-expenditure estimates calculated in a similar fashion as the US Department of the Treasury's Office of Tax Analysis. The White House also publishes alternative estimates that take into account the deferral of tax payments on contributions to pensions and individual retirement accounts, as well as earnings. That calculation is the sum of the immediate revenue loss attributable to retirement savings contributions, plus the "present value" of revenue loss that occurs because of the tax exemption for accrued earnings on that contribution in future years, minus the present value of the revenue due upon future withdrawals (table 2).

TABLE 2

Present Value of Tax Expenditures for Retirement Savings

Billions of dollars, activity in calendar year 2018

Plan Type	2018
Employer plans	**$136.3**
Defined benefit plans	$41.9
Defined contribution plans	$88.8
Self-employed plans	$5.6
Individual retirement accounts	**$7.1**
IRA contributions and earnings	$1.8
Roth earnings and distributions	$4.8
Nondeductible IRA earnings	$0.6

Source: US Department of the Treasury, Office of Tax Analysis, "Tax Expenditures," Table 4.

Data Source

US Department of the Treasury, Office of Tax Analysis. "Tax Expenditures." Table 4. "Present Value of Selected Tax Expenditures for Activity in Calendar Year 2018."

Further Reading

Joint Committee on Taxation. 2018a. "Estimates of Federal Tax Expenditures for Fiscal Years 2017–2021." JCX-34-18. Washington, DC: Joint Committee on Taxation.

———. 2018b. "Estimates of Federal Tax Expenditures for Fiscal Years 2018–2022." JCX-81-18. Washington, DC: Joint Committee on Taxation.

Q. What are defined benefit retirement plans?

A. Defined benefit retirement plans are lifetime annuities promised by employers and, in most cases, partially guaranteed by the federal government.

Defined benefit plans promise to pay a pre-determined benefit at retirement, usually determined by an employee's salary and years of service with the firm. Employers typically make all contributions, although some plans require employee contributions or permit voluntary ones.

RISKS

Under a defined benefit plan, an employer promises an employee an annuity at retirement. The employer, not the employee, bears the most risk in a defined benefit plan. If retired employees live longer than anticipated, or if the investments financing the employees' pensions fail to meet expectations, the employer must increase contributions to make good on the promised benefits. Defined benefit plans are thus more likely to be offered by large employers, who are better suited to bear the risk and to spread fixed administrative costs across larger numbers of participants.

However, not all the risk falls on employers. Employees bear some risk of nonpayment if the defined-benefit plan is unable to pay benefits. A portion of the non-payment risk is covered by the Pension Benefit Guaranty Corporation, a federal entity that ensures retired workers receive at least some of their benefits if their employers are unable to pay the promised sums in full.

TRENDS

Defined benefit plans have been falling in popularity (at least among employers) over the past few decades. For families with active participation in retirement plans, the share with a defined benefit plan fell from 40 percent in 1992 to 17 percent in 2016. Defined benefit plans, however, are still the most common type of plan for government employees.

Further Reading

Congressional Budget Office. 2011. "Use of Tax Incentives for Retirement Saving in 2006." Washington, DC: Congressional Budget Office.

Employee Benefit Research Institute. 2018. "Individual Account Retirement Plans: An Analysis of the 2016 Survey of Consumer Finances." Washington, DC: Employee Benefit Research Institute.

Q. What are defined contribution retirement plans?

A. Think savings accounts with tax benefits—and a lot of rules.

Tax-deferred defined contribution plans include the familiar 401(k) plans, similar 403(b) plans for nonprofit employees, 457 plans (mostly for state and local government employees), and the federal government's Thrift Savings Plan.

TABLE 1

Participation in Defined Contribution (401(k) type) Plans

Tax Year 2014

	Taxpayers with Elective Contributions	Share of Taxpayers with Wage Income Contributing
All	52,008,000	37%
Wage income		
Under $20,000	4,897,000	10%
$20,000–$50,000	20,431,000	39%
$50,000–$100,000	18,401,000	61%
$100,000–$200,000	6,324,000	74%
Above $200,000	1,954,000	79%
Age		
Under 35	13,748,000	26%
35–45	12,081,000	43%
45–55	13,475,000	46%
55–75	12,545,000	42%
Above 75	158,000	13%
Filer type		
Joint returns	30,774,000	45%
One wage earner	7,895,000	42%
Two wage earners	22,879,000	47%
Nonjoint returns	21,234,000	28%

Source: Internal Revenue Service, SOI Tax Stats—Individual Information Return Form W-2 Statistics, Tables 3.A, 3.C, and 3.D.

Note: Detail may not add up to total due to rounding.

Key Elements of the U.S. Tax System

What are defined contribution retirement plans?

PARTICIPATION

Less than 40 percent of workers contributed to a defined-contribution plan in 2014. Workers' participation in defined contribution plans generally increases with age and income. About three-quarters of workers earning $100,000 or more made contributions (table 1).

CONTRIBUTIONS AND WITHDRAWALS

Contributions to defined contribution plans are tax deferred, meaning that neither the employer nor the employee pays tax on initial contributions or accumulating plan earnings. However, employees pay tax when they withdraw funds. The major exception is Roth-type defined-contribution plans. With Roth plans, account holders pay taxes when contributions are made rather than when contributions are withdrawn.

Early withdrawals from defined-contribution plans incur penalties (in addition to the regular tax on withdrawals), except for specified purposes such as financial hardship, higher education, or the first purchase of a home.

RISKS

Defined benefit plans offer employees a contractually assured annuity at retirement. In contrast, under a defined contribution plan, an employee owns an account in which balances depend on the size of past contributions and on the investment returns those contributions accumulate. The employee bears the risk of underperforming assets and the possibility of outliving the income generated. But employees can manage these risks at retirement by using the assets in their plans to purchase annuities from insurance companies.

Data Source

Internal Revenue Service. *SOI Tax Stats—Individual Information Return Form W-2 Statistics*. Table 3.A. "Taxpayers with Wage Income, by Size of Wage Income, Presence of Retirement Plan Indicator, and Elective Retirement Contributions, Tax Year 2014"; Table 3.C. "Taxpayers with Wage Income, by Age of Taxpayer, Presence of Retirement Plan Indicator, and Elective Retirement Contributions, Tax Year 2014"; and Table 3.D. "Taxpayers with Wage Income, by Return and Earner Type, Presence of Retirement Plan Indicator, Elective Retirement Contributions, Tax Year 2014."

Further Reading

Burman, Leonard E., William G. Gale, Matthew Hall, and Peter R. Orszag. 2004. "Distributional Effects of Defined Contribution Plans and Individual Retirement Accounts." Discussion Paper 16. Washington, DC: Urban-Brookings Tax Policy Center.

Congressional Budget Office. 2007. "Utilization of Tax Incentives for Retirement Saving: Update to 2003." Washington, DC: Congressional Budget Office.

Employee Benefit Research Institute. 2015. "Chapter 5." In *EBRI Databook on Employee Benefits*. Washington, DC: Employee Benefit Research Institute.

Kawachi, Janette, Karen E. Smith, and Eric J. Toder. 2006. "Making Maximum Use of Tax-Deferred Retirement Accounts." Washington, DC: Urban Institute.

Orszag, Peter R. 2004. "Balances in Defined Contribution Plans and IRAs." *Tax Notes* 102 (5): 655.

Purcell, Patrick. 2007. "Pension Sponsorship and Participation: Summary of Recent Trends." Washington, DC: Congressional Research Service.

Q. What types of nonemployer-sponsored retirement savings accounts are available?

A. The two big types are traditional individual retirement accounts (IRAs) and Roth IRAs. The main difference: when the feds take their cut.

TRADITIONAL IRAS VERSUS ROTH IRAS

Workers and their spouses do not need their employers' help to save in tax-favored retirement accounts. They may open individual retirement accounts, which mostly come in two forms: traditional IRAs and Roth IRAs. (Other types of IRAs, such as IRA-SEPs and SIMPLE-IRAs, are only available through employers.) The primary difference is the timing of any tax on contributions or distributions.

Qualified contributions to traditional IRAs are excluded from tax and grow tax-free, but withdrawals are taxed. Contributions to Roth IRAs, conversely, are taxed in the year they are made. But account assets grow tax-free, and withdrawals after age 59½ are not taxed. Even though statutory contribution limits are the same for both traditional and Roth IRAs, the effective amount a saver can place in tax-preferred status is higher with a Roth IRA because the saver is contributing post-tax income.

As of 2017, 43.9 million households (or 34.8 percent) owned at least one IRA. Some 35.1 million households (or 27.8 percent) held traditional IRAs, while 24.9 million (or 19.7 percent) owned a Roth IRA. Some households owned both.

THE FINE PRINT

These rules are a bit confusing. Taxpayers with income over a specified level, which varies with tax-filing status, may not contribute to a Roth IRA and may not deduct contributions to a traditional IRA. Nor may taxpayers who participate (or whose spouses participate) in employer-provided pensions deduct traditional IRA contributions if their income exceeds a specified limit.

For single taxpayers without access to an employer-sponsored pension, and for married couples in which neither spouse participates in such a pension plan, there are no income restrictions on the deductibility of traditional IRA contributions. A married taxpayer who does not participate in an employer-sponsored plan, but whose spouse does, may contribute the maximum statutory amount to an IRA, provided the couple's joint income does not exceed $186,000 for 2018.

Key Elements of the U.S. Tax System

What are Roth individual retirement accounts?

Further Reading

Burman, Leonard, William Gale, and David Weiner. 2001. "The Taxation of Retirement Saving: Choosing between Front-Loaded and Back-Loaded Options." Washington, DC: Brookings Institution.

Congressional Budget Office. 2011. *Use of Tax Incentives for Retirement and Saving in 2006*. Washington, DC: Congressional Budget Office.

Holden, Sarah, and Daniel Schrass. 2017. "The Role of IRAs in US Households' Saving for Retirement, 2017." Washington, DC: Investment Company Institute.

Q. What are Roth individual retirement accounts?

A. Roth individual retirement accounts offer no up-front tax breaks. However, withdrawals of earnings and principal (with some restrictions) are not taxed.

A Roth IRA is a form of individual retirement account in which investors make contributions with after-tax earnings. Eligibility is limited by income. There's still a big tax break: contributions accrue tax-free in the account, and withdrawals are not taxed under normal circumstances. In 2017, 24.9 million people, representing 19.7 percent of all US households, owned a Roth IRA.

ELIGIBILITY AND CONTRIBUTION LIMITS

Only people with incomes under specified limits are eligible to contribute to a Roth IRA. In 2018, the contribution limit for IRAs is the lesser of $5,500 ($6,500 for individuals over age 50) or the taxpayer's taxable compensation. The contribution limit falls once household income exceeds certain thresholds, eventually reaching zero (table 1).

TABLE 1

IRA Eligibility and Contribution Limits

2018

Filing status	Modfied Adjusted Gross Income	Contribution
Single or Head of Household	Less than $120,000	$5,500 (or $6,500 if over 50)
	Between $120,000 and $135,000	A reduced amount
	$135,000 and over	Zero
Married filing jointly or qualifying widow(er)	Less than $189,000	$5,500 (or $6,500 if over 50)
	Between $189,000 and $199,000	A reduced amount
	$199,000 and over	Zero
Married filing separately	Less than $10,000	A reduced amount
	$10,000 and over	Zero

What are Roth individual retirement accounts?

WITHDRAWALS

Investors can withdraw their contributions (but not investment returns earned on those contributions) at any time without being subject to tax. However, to receive tax benefits on investment returns, withdrawals must be qualified distributions. This means that the investor withdraws funds at least five years after his or her first contribution and after reaching age 59 years and 6 months, dying, becoming disabled, or making a qualified first-time home purchase. Nonqualified distributions do not satisfy the above conditions and are therefore subject to a 10 percent penalty tax. There are several exceptions to the penalty for early withdrawal of investment earnings.

Further Reading

Holden, Sarah, and Daniel Schrass. 2017. "The Role of IRAs in US Households' Saving for Retirement, 2017." Washington, DC: Investment Company Institute.

Topoleski, John J. 2015. "Traditional and Roth Individual Retirement Accounts (IRAs): A Primer." CRS Report RL34397. Washington, DC: Congressional Research Service.

Q. Who uses individual retirement accounts?

A. Almost all taxpayers may establish IRAs, but high-income taxpayers are more likely to have an account. Taxpayers may either contribute to IRAs annually—or roll over larger balances from employer-sponsored plans.

Almost 60 million taxpayers own individual retirement accounts (IRAs), which include traditional IRAs, Roth IRAs, Simplified Employee Pensions (SEP IRAs), and Savings Incentive Match Plans for Employees (SIMPLE IRAs). The average IRA balance for taxpayers with IRAs is about $128,000. Ownership of IRAs increases with income and with age, as does the average IRA balance. Men and women are about as equally likely to own an IRA (table 1).

TABLE 1

Participation in Individual Retirement Arrangements (IRAs)

Tax year 2015

	Number of Taxpayers with IRAs	Share of Taxpayers with IRAs	Average IRA Balance[a]
All	58,425,000	29%	$128,000
Adjusted gross income			
Under $50,000	17,044,000	16%	$69,000
$50,000–$100,000	17,005,000	34%	$102,000
$100,000–$200,000	16,179,000	49%	$149,000
$200,000–$500,000	6,420,000	64%	$236,000
Above $500,000	1,777,000	73%	$362,000
Age			
Under 30	2,860,000	7%	$10,000
30–45	11,450,000	21%	$35,000
45–60	18,947,000	34%	$103,000
Above 60	25,141,000	50%	$203,000
Sex			
Men	28,526,000	29%	$159,000
Women	29,899,000	28%	$98,000

Source: Internal Revenue Service, SOI Tax Stats—Accumulation and Distribution of Individual Retirement Arrangements (IRA), Tax Year 2015, Tables 2, 4, and 7.

Note: Details may not add to total due to rounding; data combine accounts for taxpayers with multiple IRAs.

(a) Average IRA Balance = (End-of-year fair market value of IRAs by taxpayer / Total number of taxpayers with IRAs).

Key Elements of the U.S. Tax System

Who uses individual retirement accounts?

About 23 percent of taxpayers own traditional IRAs, while about 9 percent own Roth IRAs. Taxpayers can own multiple types of IRAs. Only a small percentage of taxpayers own SEP IRAs or SIMPLE IRAs. The average balance in traditional IRAs ($138,000) is larger than that in Roth IRAs ($32,000). Traditional IRA owners with adjusted gross income above $500,000 have an average balance of $345,000 (table 2).

TABLE 2

Types of Individual Retirement Arrangements

Percentage with IRAs and average balance of IRAs, tax year 2015

	Traditional IRA Plans		Roth IRA Plans		SEP Plans		SIMPLE Plans	
	Share of taxpayers	Average balance	Share of taxpayers	Average balance	Share of taxpayers	Average balance	Share of taxpayers	Average balance
All	23%	$138,000	9%	$32,000	2%	$114,000	1%	$35,000
Adjusted gross income								
Under $50,000	12%	$77,000	4%	$22,000	1%	$55,000	1%	$12,000
$50,000–$100,000	27%	$113,000	11%	$27,000	2%	$77,000	2%	$23,000
$100,000–$200,000	39%	$160,000	19%	$33,000	3%	$113,000	2%	$44,000
$200,000–$500,000	53%	$241,000	22%	$45,000	6%	$171,000	3%	$88,000
Above $500,000	61%	$345,000	20%	$134,000	9%	$230,000	3%	$124,000

Source: Internal Revenue Service, SOI Tax Stats—Accumulation and Distribution of Individual Retirement Arrangements (IRA), Tax Year 2015, Table 3.

Note: Details may not add to total due to rounding; data combine accounts for taxpayers with multiple IRAs of same type.

Taxpayers in 2018 may contribute in total the lesser of $5,500 per year ($6,500 for taxpayers age 50 or older) or the amount of their taxable compensation to traditional or Roth IRAs. They cannot make annual contributions to a traditional IRA starting once they reach 70 years and 6 months but they can still contribute to a Roth IRA.

Employees can make contributions of up to $12,500 to a SIMPLE IRA plan in 2018 and an additional $3,000 if they are 50 or older. Employers must either match employee contributions dollar for dollar up to 3 percent of compensation or make a nonelective contribution of 2 percent of compensation. SEP IRAs only allow employer contributions. For a self-employed individual, contributions are limited to 25 percent of net earnings from self-employment, up to $55,000 in 2018.

Taxpayers also may roll over their balances from employer-sponsored contribution plans to an IRA, typically after changing jobs. Rollovers are usually much larger than regular contributions. The average rollover in 2015 was almost $95,000. Taxpayers can make rollover contributions to a Roth or traditional IRA regardless of age.

Only a small percentage of taxpayers contributed to traditional or Roth IRAs in tax year 2015. The share of taxpayers who contributed increased with income, except for those owning Roth IRAs, which have income limits for eligibility. Traditional IRAs have no income limits on contributions, but income limits and other restrictions affect whether contributions are tax deductible. The average contribution to SEP IRAs was greater than for other type of IRA, reflecting the significantly higher contribution limits.

Key Elements of the U.S. Tax System

Who uses individual retirement accounts?

TABLE 3

Types of Individual Retirement Arrangements (IRAs)

Percentage contributing to IRAs and average contribution to IRAs, tax year 2015

	Traditional IRA Plans		Roth IRA Plans		SEP Plans		SIMPLE Plans	
	Share of taxpayers	Average contribution	Share of taxpayers	Average contribution	Share of taxpayers	Average contribution	Share of taxpayers	Average contribution
All	2%	$4,000	3%	$3,000	1%	$13,000	1%	$5,000
Adjusted gross income								
Under $50,000	1%	$3,000	2%	$3,000	0%	$5,000	1%	$2,000
$50,000–$100,000	2%	$4,000	4%	$3,000	0%	$7,000	1%	$4,000
$100,000–$200,000	3%	$4,000	7%	$4,000	1%	$12,000	1%	$6,000
$200,000–$500,000	8%	$5,000	2%	$4,000	3%	$20,000	2%	$12,000
Above $500,000	12%	$6,000	1%	$4,000	4%	$29,000	2%	$15,000

Source: Internal Revenue Service, SOI Tax Stats—Accumulation and Distribution of Individual Retirement Arrangements (IRA), Tax Year 2015, Table 3.

Notes: Details may not add to total due to rounding; data combine accounts for taxpayers with multiple IRAs of same type; Average Contribution = (Amount of total contributions / Total number of taxpayers making contributions to IRA type); the statistics are based on unaudited data and may contain amounts in excess of the legal maximum. For SEP and SIMPLE plans, total contributions include contributions made by the taxpayer directly as well as those made by an employer.

Data Source

Internal Revenue Service. 2018. *SOI Tax Stats—Accumulation and Distribution of Individual Retirement Arrangements*, Tax Year 2015. Table 2. "Taxpayers with IRA Plans"; Table 3. "Taxpayers with Individual Retirement Arrangement (IRA) Plans, by Type of Plan and by Size of Adjusted Gross Income"; Table 4. "Taxpayers with Individual Retirement Arrangement (IRA) Plans, by Age of Taxpayer"; and Table 7. "Taxpayers with Individual Retirement Arrangement (IRA) Plans, by Filing Status and Gender."

Further Reading

Burman, Leonard E., William G. Gale, Matthew Hall, and Peter R. Orszag. 2004. "Distributional Effects of Defined Contribution Plans and Individual Retirement Accounts." Discussion Paper 16. Washington, DC: Urban-Brookings Tax Policy Center.

Congressional Budget Office. 2011. "Use of Tax Incentives for Retirement Saving in 2006." Washington, DC: Congressional Budget Office.

Holden, Sarah, and Daniel Schrass. 2017. "The Role of IRAs in US Households' Saving for Retirement, 2017." Washington, DC: Investment Company Institute.

Q. How does the availability of tax-favored retirement saving affect national saving?

A. Incentives for retirement savings only increase *private saving* if the tax breaks encourage households to set aside additional cash rather than simply transfer it from other nest eggs. And it only increases *national saving* if the increase in private saving exceeds the revenue loss from the tax subsidy.

Tax-favored retirement savings accounts are popular: half of working adults take advantage of them. It's unclear, however, whether the accounts make much difference to overall savings and retirement preparedness. Although traditional pensions and other tax-deferred vehicles such as 401(k) plans and individual retirement accounts do make up a sizable share of households' wealth, the accounts only increase private saving if they encourage households to finance their own contributions through reduced consumption or increased earnings.

Put another way, incentives do not increase private saving if households finance their contributions by borrowing, by shifting their existing assets into tax-favored accounts, or by shifting funds they would have saved even in the absence of the incentive. Likewise, private saving does not increase if households respond to employer-provided pensions or contributions with equivalent reductions in other saving or with increased borrowing.

The earliest research on both traditional defined-benefit pensions and defined-contribution plans suggested that they had a strong impact on private wealth and saving. These studies, however, were marred by technical missteps. Later research has found a significantly smaller impact—and, in some cases, none at all. To the extent that the tax incentives do raise private saving, we can expect the impact to be greater for lower- and middle-income households than for high-income households, who tend to use the accounts to reduce present or future tax liability.

Key Elements of the U.S. Tax System

How does the availability of tax-favored retirement saving affect national saving?

Further Reading

Benjamin, Daniel J. 2003. "Does 401(k) Eligibility Increase Saving? Evidence from Propensity Score Subclassification." *Journal of Public Economics* 87 (5–6): 1259–90.

Bernheim, B. Douglas. 2003. "Taxation and Saving." In *Handbook of Public Economics*, vol. 3, edited by Alan Auerbach and Martin Feldstein, 1173–1249. Amsterdam: North-Holland.

Chetty, Raj, John Friedman, Soren Leth-Petersen, Torben Nielsen, and Tore Olsen. 2012. "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts: Evidence from Denmark." NBER working paper 18565. Cambridge, MA: National Bureau of Economic Research.

Engen, Eric M., William G. Gale, and John Karl Scholz. 1996. "The Illusory Effects of Saving Incentives on Saving." *Journal of Economic Perspectives* 10 (4).

Poterba, James M., Steven F. Venti, and David A. Wise. 1996. "How Retirement Saving Programs Increase Saving." *Journal of Economic Perspectives* 10 (4): 91–112.

Q. What's the difference between front-loaded and back-loaded retirement accounts?

A. Your choice: pay the IRS now or pay them later.

Broadly speaking, there are two types of tax-favored retirement accounts: "front-loaded" accounts, such as traditional IRAs and 401(k)s, and "back-loaded" accounts, such as Roth IRAs. With front-loaded accounts, contributions are tax deductible but withdrawals are taxed. These accounts are also called EET accounts (the contribution is *exempt* from taxation, the accrual of returns is *exempt* from taxation, and the withdrawal is *taxed*). In back-loaded accounts, contributions are not tax deductible but accruals and withdrawals are tax-free. These accounts are also called TEE accounts (contributions *taxed*, accruals *exempt*, withdrawals *exempt*). In both types of accounts, investment returns on assets kept within the account (accruals) are untaxed.

Which is a better deal? That depends on the difference between individuals' tax rates during their working years and during retirement. Individuals with high tax rates during their working years and lower rates during retirement benefit more from front-loaded accounts, because the original contributions are deducted against high tax rates and withdrawals are taxed at lower rates. Someone who expects to be in a higher bracket in retirement would benefit more from a back-loaded account.

The example in table 1 shows that if tax rates during working years and retirement are the same, front- and back-loaded accounts yield the same result.

Consider a front-loaded account first. Say an individual 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, the individual will be able to contribute the full $2,000. The account will accumulate interest, and after 10 years the balance will be $3,258. Upon withdrawal, the individual will pay $814 in taxes, leaving net retirement assets of $2,443. With a back-loaded account, an individual pays a 25 percent tax on $2,000 in income, leaving $1,500 to contribute to the account. With the same 5 percent return, the balance will grow to $2,443. Since no taxes will be paid on withdrawal, after-tax proceeds are $2,443, which is the same as in the front-loaded example.

Key Elements of the U.S. Tax System

What's the difference between front-loaded and back-loaded retirement accounts?

TABLE 1

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

$2015

Plan overview		
Tax rate: 0.25		
Interest: 0.05		
Time (years): 10		
	Front-loaded	Back-loaded
Before tax income	2,000	2,000
Less taxes paid (25%)	0	500
Contribution	2,000	1,500
Accumulated balance in account	3,258	2,443
Less taxes paid on withdrawal (25%)	814	0
After-tax proceeds	2,443	2,443

Now check out the example in table 2, in which the tax rate decreases from 25 percent during working years to 20 percent during retirement. Here, the front-loaded account will accrue $163 more than the back-loaded account, since taxes are imposed upon withdrawal, when rates are lower. Of course, the conclusion is reversed if the tax rate is higher during retirement than during working years.

TABLE 2

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

$2015

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
Less taxes paid (25%)	0	500
Contribution	2,000	1,500
Accumulated balance in account	3,258	2,443
Less taxes paid on withdrawal (20%)	652	0
After-tax proceeds	2,606	2,443
Tax savings from front-loaded account: 163		

Key Elements of the U.S. Tax System

What's the difference between front-loaded and back-loaded retirement accounts?

That's not quite the end of the story, though. If the two accounts have the same contribution limit, an individual can shelter more savings in a back-loaded account than in a front-loaded account. For example, if an individual facing a 25 percent marginal income tax rate contributes $2,000 to a front-loaded account, he or she is really contributing $1,500 and $500 of government funds because of the tax deduction. When the funds are withdrawn, the government reclaims its share of the principal contribution, plus taxes on interest earned (table 3). In a back-loaded account, however, taxes are paid on the initial contribution and interest can be withdrawn tax-free. Note the distinction here. The value of the tax shelter per dollar saved is the same with either account. However, if the nominal contribution limits are identical, a determined saver can sock away more with a back-loaded account.

TABLE 3

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

$2015

Plan overview		
Tax rate: 0.25		
Interest: 0.05		
Time (years): 10		
	Front-loaded	**Back-loaded**
Contribution	2,000	2,000
Own income	-1,500	-2,000
Government tax expenditure	-500	0
Accumulated balance in account	3,258	3,258
Taxes paid on withdrawal	814	0
After-tax proceeds	2,443	3,258
Additional savings with back-loaded account: 814		

Further Reading

Austin, Lydia. 2016. "How Economists Eliminate Taxes on Your Retirement Income." *TaxVox* (blog). June 15.

Bell, Elizabeth, Adam Carasso, and C. Eugene Steuerle. 2004. "Retirement Saving Incentives and Personal Saving." *Tax Notes*. December 20.

Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian. 2014. "Does Front-Loading Taxation Increase Savings? Evidence from Roth 401(k) Introductions." NBER working paper 20738. Cambridge, MA: National Bureau of Economic Research.

Burman, Leonard E., William G. Gale, and David Weiner. 2001. "The Taxation of Retirement Saving: Choosing between Front-Loaded and Back-Loaded Options." *National Tax Journal* 54 (3): 689–702.

Q. What is an automatic 401(k)?

A. An automatic 401(k) enrolls workers automatically, assigning them a default contribution rate and allocation of funds that they are free to change later.

An automatic 401(k) is one that automatically enrolls workers in the plan, rather than requiring them to sign up. Eligible workers are assigned a default contribution rate—often 3 percent of wages—and a default allocation of funds contributed to the retirement account. As with traditional 401(k)s, workers are still in control; they can change the default contribution rate and allocation or opt out entirely. The main difference: with an automatic 401(k), inaction on the worker's part will automatically result in the worker saving for retirement.

This difference is, as a practical matter, significant. With traditional 401(k) plans, workers must decide whether to sign up, how much to contribute, how to allocate their investment funds, how often to rebalance their portfolios, what to do with the accumulated funds when they change jobs, and when and in what form to withdraw the funds during retirement. These decisions are difficult, and many workers, daunted by the complexity, either make inappropriate choices or never sign up at all.

With an automatic 401(k), sometimes called an "opt-out plan," unless workers make the active decision not to participate, each stage of the savings and investment allocation process is automatically set at a pro-saving default. Workers can choose to override any of these choices, but the inertia that discourages so many from opting into a traditional 401(k) is now likely to keep them on the default path.

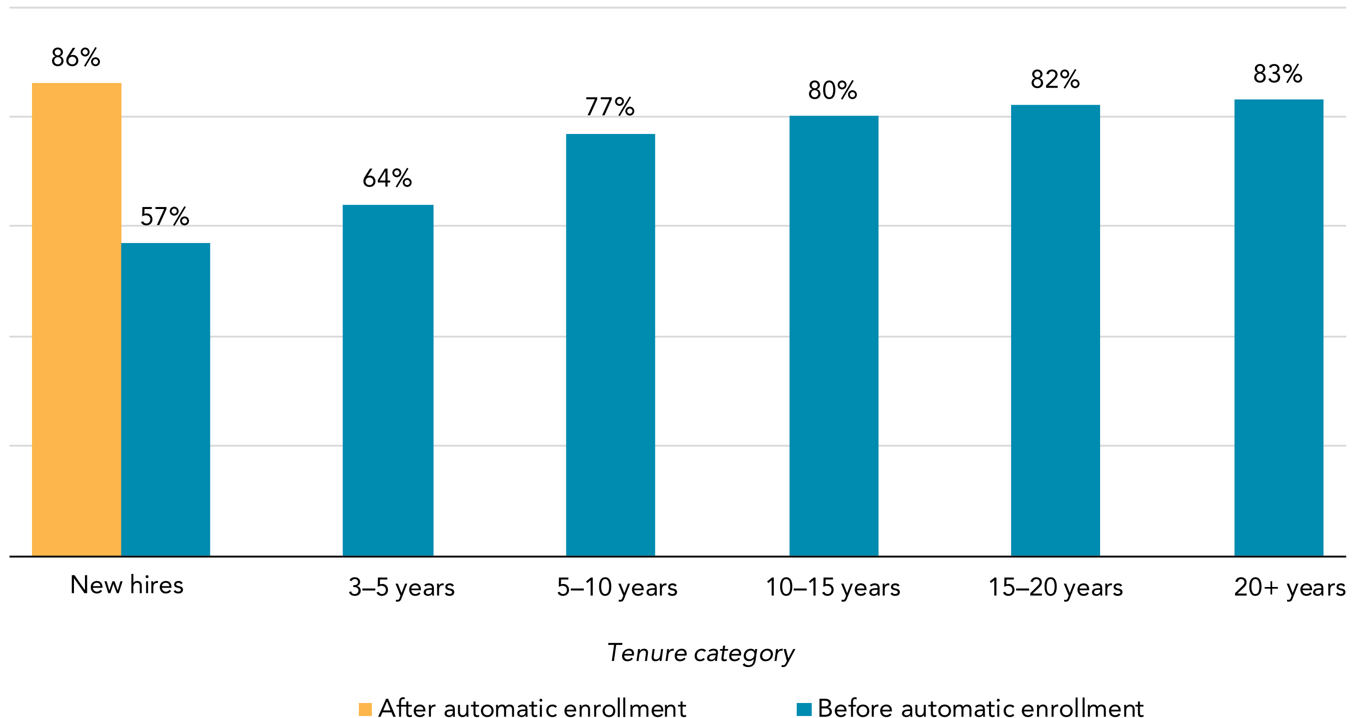
Figure 1 shows that automatic enrollment raises 401(k) participation rates among new hires. This is especially true for women, minority groups, and low earners.

The automatic escalation of default contributions over time raises overall contributions to 401(k)s relatively painlessly, as employees become accustomed to deferring receipt of a portion of their pay. The gradual escalation also helps ensure that inertia does not keep employees at a default contribution rate lower than the rate they might have chosen without the default.

What is an automatic 401(k)?

FIGURE 1

Participation Rates in 401(k) by Tenure: Pre- and Post-auto 401(k)



Source: Matrian, Bridgette C. and Dennis F. Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," Quarterly Journal of Economics 116:4 (November 2001).

Further Reading

Benartzi, Shlomo, and Richard Thaler. 2004. "Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy* 112(1): S164–S187.

Chetty, Raj, John Friedman, Soren Leth-Petersen, Torben Heien Nielsen, and Tore Olsen. 2014. "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts: Evidence from Denmark." *Quarterly Journal of Economics* 129 (3): 1141–1219.

Gale, William G., J. Mark Iwry, and Peter R. Orszag. 2005. "The Automatic 401(k): A Simple Way to Strengthen Retirement Saving." Policy brief 2005-1. Washington, DC: Retirement Security Project.

Madrian, Brigitte C., and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics* 116 (4): 1149–87.

Madrian, Brigitte, John Beshears, James Choi, and David Laibson. 2013. "Simplification and Saving." *Journal of Economic Behavior and Organization* 95: 130–45.

Key Elements of the U.S. Tax System

Q. How might low- and middle-income households be encouraged to save?

A. Expanding access to savings vehicles and scaling back deductions to provide low- and middle-income households with better incentives could make a difference.

Low- and middle-income families receive significant income support through tax breaks, notably through refundable credits such as the earned income tax credit and the child tax credit. But when it comes to building wealth—defined as what you own minus what you owe—the federal tax code offers such families far less.

Wealth is important: It keeps people afloat during financial emergencies like job loss or unexpected expenses. It provides a foundation for a secure retirement. And it opens doors to upward mobility, such as a down payment on a first home or college tuition.

The main wealth-building vehicles for most people in the United States are homeownership (through building equity and, hopefully, appreciation) and retirement savings accounts. Perversely, large tax subsidies for these assets mostly benefit the already wealthy. Most tax benefits for the mortgage interest deduction, state and local property tax deductions, and 401(k)s and similar retirement plans accrue to the highest-income taxpayers. That's because these tax subsidies are structured as deductions and exclusions, which provide households in higher tax brackets with bigger subsidies. Further, lower-income households are less likely to have enough deductions to make itemizing on their tax returns worthwhile, and itemization is required to claim major homeownership tax breaks. Lower-income workers, particularly those in part-time or temporary employment, have less access to and are less likely to participate in employer-based retirement plans.

At the same time, many low- and middle-income taxpayers simply do not participate in the regular and automatic saving vehicles through which much wealth is accumulated, such as paying off a mortgage and making regular deposits to retirement accounts.

A variety of changes would reduce the bias toward higher-income households by replacing existing subsidies with better-targeted incentives. Almost all these proposals favor some movement toward tax credits and away from deductions, and many use insights from behavioral economics to get more bang for a tax buck forgone.

How might low- and middle-income households be encouraged to save?

HOMEOWNERSHIP

Credits to encourage homeownership can take different forms. They can provide an up-front credit for first-time homebuyers of primary residences, similar to the temporary credit employed as a stimulus measure from 2008 to 2009. (An early version of this credit served as an interest-free loan to be paid back to the Internal Revenue Service.) Alternatively, homeowners could receive smaller annual credits proportional to their home equity, up to a designated maximum. Another approach is to provide a credit against property taxes to defray a significant cost of homeownership. Reforms that reward building equity instead of subsidizing mortgage interest (which a badly designed credit could also do) would encourage saving instead of acquiring debt.

RETIREMENT

A saver's credit is available to moderate-income taxpayers who contribute to qualified retirement plans. However, the credit is nonrefundable and phases out quickly at higher incomes, making few people eligible for the maximum amount. Some economists have proposed expanding the credit and making it refundable, so that workers with no net income tax liability could claim it.

More expansive proposals include reshaping the complicated pension landscape to simplify plans and increase access to employer-based retirement accounts with automatic enrollment. Contribution limits to tax-favored accounts would be lowered, and the government would instead match low- and moderate-income workers' contributions. Any credits or matching employer contributions could not be accessed until retirement. Pension antidiscrimination rules could be revised to favor plans that support more full- and part-time employees.

SAVINGS AND ACCOUNT OWNERSHIP

Many low- and middle-income workers receive large refunds from refundable tax credits. A "saver's bonus" could encourage taxpayers to save a portion of their refunds in qualified savings accounts. Taxpayers are already able to contribute to individual retirement accounts until the tax-filing deadline and apply any deductions or saver's credits against their tax year's liability. Some tax preparers and tax preparation software remind taxpayers that they can do this and make clear how much tax they would save if they do. Tax time could also be used to link taxpayers to savings vehicles, such as children's savings accounts or prepaid cards with savings features for taxpayers without bank accounts.

Key Elements of the U.S. Tax System

How might low- and middle-income households be encouraged to save?

Further Reading

Butrica, Barbara A., Benjamin H. Harris, Pamela Perun, and C. Eugene Steuerle. 2014. "Flattening Tax Incentives for Retirement Saving." Washington, DC: Urban-Brookings Tax Policy Center.

Eng, Amanda, Benjamin H. Harris, and C. Eugene Steuerle. 2013. "New Perspectives on Homeownership Tax Incentives." *Tax Notes*. December 23.

Harris, Benjamin H., C. Eugene Steuerle, Signe-Mary McKernan, Caleb Quakenbush, and Caroline Ratcliffe. 2014. "Tax Subsidies for Asset Development: An Overview and Distributional Analysis." Washington, DC: Urban-Brookings Tax Policy Center.

McKernan, Signe-Mary, Caroline Ratcliffe, C. Eugene Steuerle, Emma Kalish, and Caleb Quakenbush. "Nine Charts about Wealth Inequality in America." Updated October 5, 2017.

Perun, Pamela, and C. Eugene Steuerle. 2008. "Why Not a 'Super Simple' Saving Plan for the United States?" Washington, DC: Urban Institute.

Ratcliffe, Caroline, William J. Congdon, and Signe-Mary McKernan. 2014. "Prepaid Cards at Tax Time Could Help Those without Bank Accounts." Washington, DC: Urban Institute.

Steuerle, C. Eugene, Benjamin H. Harris, Signe-Mary McKernan, Caleb Quakenbush, and Caroline Ratcliffe. 2014, "Who Benefits from Asset-Building Tax Subsidies?" Washington, DC: Urban Institute.