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Strengthening the U.S. Retirement Savings System

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Abstract

The U.S. private retirement savings system has matured successfully over the past four decades. Asset growth has been significant, fostered by innovative products, features and services that have further incentivized retirement savings. Adapting to higher job mobility in the labor market and the desire for greater flexibility and customization, defined contribution plans have become increasingly dominant relative to defined benefit plans. In addition, the number of IRA accounts and the assets invested therein have increased substantially since their inception in the mid-1970s. The financial services industry, backed by supportive government policies, has introduced a number of products and services to further grow retirement savings. Plan sponsors and financial advisors have helped individuals become more familiar and comfortable with retirement savings products and investment strategies. As a result, more than two-thirds of American households have accumulated $19.2 trillion in retirement assets, investing across equities and fixed income securities in the U.S. capital markets. With higher life expectancy and an increasing standard of living in the U.S, sufficient replacement rates are needed during retirement years. Thus, policies that further incentivize retirement savings for all economic and demographic groups and ensure small businesses to be able to offer plans are needed. Furthermore, contribution limits should be increased and auto-enrollment and auto-escalation features should become more universal. Importantly, policymakers must be careful not to implement measures to achieve short-term fiscal goals at the expense of longer-term retirement security and economic growth. Since the U.S. retirement savings system is proven to work, policymakers, plan sponsors, and service providers should work together to implement additional measures to strengthen our retirement savings system.

Key Highlights of the Report

The retirement savings system in the U.S. has proven to be highly successful, with participation and retirement assets both rising steadily over time. The introduction of new products, the increase in contribution limits, the improvement in financial literacy, and the introduction of automatic enrollment and automatic escalation features have all contributed to this success. These features of our retirement system must be reinforced rather than reformed, with a goal of increasing access to savings plans, raising participation rates, and ultimately continuing to build the retirement savings base to ensure adequate replacement rates of income for retirees.

Three main highlights of the report are:

- **The retirement savings system in the U.S. has shifted from traditional employer-sponsored defined benefit (DB) plans to portable and flexible defined contribution (DC) plans and individual retirement accounts (IRAs) that are more suitable for a dynamic American labor force.**
  - Retirement assets of employees in both the public and private sectors in 2012 stood at $19.2 trillion, of which 54.7% of total assets are in DC plans (26.5%) and IRAs (28.2%), 38.2% in DB plans, and 7.1% in annuities.
  - DC plans have gained in popularity, accumulating nearly $5.1 trillion in assets in 2012, more than doubling in the last ten years. Annual contributions to DC plans have increased by a factor of six in the past 25 years to an estimate of more than $314 billion, accounting for 70.6% of total employer-sponsored plan contributions.
  - IRAs have accumulated $5.4 trillion in assets (as of 2012) from direct contributions and rollovers. Over 40% of households currently have some type of IRA, 8% of households have only IRAs, and 16% of households make annual contributions to IRAs.
  - In an international comparison, private retirement savings (70% of GDP) and annual tax deferrals for private retirement plans (0.8% of GDP) in the U.S. lag behind several countries but are above the OECD averages (33.9% and 0.6%, respectively).

- **The success of the U.S. retirement system can be attributed to a combination of supportive government policies, an innovative financial services industry, and an increasingly better informed American population.**
  - Government policies: Congress has enacted supportive retirement, revenue, and tax reforms to incentivize savers by adjusting contribution limits, withdrawal rules, and tax deferrals, as well as allowing for new product features such as automatic enrollment and automatic escalation.
  - Plan Sponsors and Financial services industry: Financial services companies and advisors offer innovative retirement savings products and services that are beneficial to both employers and employees. Investment education and customized retirement plans have become more readily available. Surveys show more than half of IRA-owning households consulted with an advisor for asset allocation, investment strategy, and withdrawals.

- American workers: Employees have become more willing to save and are overall better informed through education provided by their employers. Workers have become more aware of the need and opportunities to save for retirement, as reflected through higher participation and take up rates and their typical choice not to opt-out of DC plans with auto-enrollment features.

- **Policies to incentivize greater retirement savings across all employee groups (full-time, part-time, different income levels, ages, and company sizes) are needed.**
    - Policies should focus on long-run economic benefits rather than targeting short-term fiscal goals. Incentivizing retirement savings not only reduces the risk of insufficient retirement income for a large part of the U.S. population and therefore reduces their dependence on government programs; it also supports long-term economic growth through greater investment in U.S. capital markets, given the increasing role of retirement assets.
    - Policies should broaden employees' access to retirement savings plans, and continue to support ways to increase take-up rates across all income and demographic groups in the private sector. In 2013, only 28% of the lowest wage earning quartile, 37% of part-timers, and 45% of workers in small businesses (1-49 employees) in the private sector have access to employer-sponsored retirement savings plans.
    - Policies should promote education and support programs to inform American workers of the benefits of retirement savings and the products that are available.

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Strengthening the U.S. Retirement Savings System

Nam D. Pham, Ph.D. and Alexander J. Triantis, Ph.D.[1]

Summary of the Report

Participation in employer-sponsored defined contribution (DC) plans and in Individual Retirement Accounts (IRAs) has grown dramatically over the past several decades. For defined contribution plans, participation has increased from an average of 25.3% in the 1980s to 42.9% at the present time. The assets invested in DC plans have increased from $287 billion in 1984 to $5.1 trillion in 2012. Assets in IRAs have increased more than 100 fold since their early inception years to more than $5.4 trillion in 2012 contributed by over 40% of US households. DC plans and IRAs have become essential elements of the U.S. retirement system, complementing other vehicles for retirement savings, including defined benefit (DB) plans, Social Security, and personal investments in housing, businesses and financial assets held in non-tax-deferred accounts.

Employers have gradually shifted from sponsoring traditional defined benefit plans to offering more flexible and portable defined contribution plans. Given the rapid growth over the past thirty years, defined contribution plans in the private sector now make up 61.6% of total private sector employer-sponsored plans from an asset size perspective. This transformation has been driven by employers looking to decrease volatility in financial performance and to lower the cost of plan sponsorship, and also by employees looking for greater portability to match their mobile labor patterns, as well as the ability to directly control their investment portfolios.

Access to employer-sponsored plans and participation in these plans varies substantially across different segments of the labor force, with part-time workers, lower-income employees, and those working for small companies having the lowest access and participation rates. According to the U.S. Bureau of Labor Statistics's 2013 National Compensation Survey, the current access rate of all workers in 2013 is 64%, ranging from 28% in the lowest decile income group, and 37% among part-timers, to as high as 87% for those workers in large companies with more than 500 workers. The Survey also shows the participation rate for private sector workers averages 49%, ranging from 10% in the lowest decile income group, and 20% among part-timers, to 76% in large companies. As a result, the take up rate averages 77% for all workers, ranging from 36% in the lowest decile income group, and 54% in the part-time group, to 87% in

[1] We would like to thank The Anthony T. Cluff Fund of the Financial Services Roundtable for their financial support to conduct this study. We would like to thank Justin Badlam, Patrick Higgins, and Anil Sarda for their assistance in the completion of this report. The opinions and views expressed in this report are solely those of the authors.

large companies. Since there is a wide range of access, participation, and therefore take up rates, a large potential upside to promote greater retirement savings could come both from motivating more employers to sponsor plans, and from encouraging employees to enroll in these plans.

A recent innovative design feature of defined contribution plans is auto-enrollment, where enrollment in the plan is the default option, and employees must actively choose to opt-out. This feature has been shown to be very effective in nudging employees to save for retirement. Increasing the default contribution amount (for instance, from 3% of income to 6% of income) is a very effective mechanism to increase employees' retirement savings, and to reduce the risk of low income replacement during retirement. Furthermore, auto-escalation provides an opportunity to encourage savers to overcome their natural tendency for immediate spending by imposing a default increase in contribution amount every year.

In general, the "choice architecture" of a defined contribution plan, a term referring to how defaults are set to encourage savings behavior, which include automatic features and contribution levels, can have a profound effect on actual savings behavior and the probability of achieving a sufficient replacement rate of income during retirement. In addition, employers have been providing educational information to employees to help them understand the importance of retirement savings and the types of products that are available. For IRAs, financial advisors also play an important role in ensuring higher retirement preparedness, and increasing the confidence levels of investors. These advisors are subject to strict regulations that prevent conflicts of interest and ensure that investors receive informed and unbiased advice.

Over half of U.S. households are estimated to be unable to maintain their standard of living in retirement. This retirement risk level is even higher for lower-income individuals and those nearer to retirement following the recent the financial crisis. The U.S. currently lags many OECD countries in terms of level of savings in private retirement savings plans (adjusted by country GDP). It is critical that U.S. policy continues to support retirement savings by allowing for tax-deferred savings with higher limits (even higher than 10% of income) and greater flexibility in product design such as auto enrollment and auto escalation features to encourage retirement savings. In addition, policies that promote higher access and participation rates are clearly preferred to proposals that would scale back retirement savings merely for the myopic purpose of increasing short-term tax revenue. Since tax-deferred retirement savings are not tax-exempt, higher retirement savings today yield higher government tax revenues at the time of fund withdrawals. Furthermore, given that retirement savings in DC and IRA plans alone account for over $10.5 trillion and continue to grow, the impact of slowing down the growth of assets invested across all U.S. securities could well have a significant adverse effect of choking the financial markets and limiting economic growth at a time of a fragile economic recovery.

Structure of the U.S. Retirement Savings System

There are three key savings mechanisms in the U.S. that are specifically designed to support individuals during their retirement years. The first of these three pillars is the Social Security System, which covers all households across all levels of earnings, and provides for the largest portion of retirement spending for lower-income households. The second is employer-sponsored retirement plans, which includes defined

benefit and defined contribution plans. Defined benefit (DB) retirement plans provide employees with guaranteed retirement benefits based on the participant's retirement age, length of service, and preretirement earnings. Defined contribution (DC) plans, such as 401(k), 403(b), and 457 plans, are tax-deferred accounts that do not provide guaranteed payments, but rather accumulate funds over time based on each employee's investment decisions, which are then drawn down during retirement. The third pillar is individual retirement accounts (IRAs), which are tax-deferred accounts set up by individuals to accumulate investment funds for retirement. These include traditional, Roth, SEP, SAR-SEP, and SIMPLE IRAs.

In addition, individuals may use the capital accumulated in their homes to produce funds for retirement spending, since most homeowners have no or low mortgage debt by the time they reach retirement age.[2] Many individuals also accumulate other assets, including financial assets outside of retirement accounts, business equity, nonresidential property, second homes, vehicles, and consumer durables, all of which can support these individuals during retirement.[3] According to the 2010 Survey of Consumer Finances, financial assets accounted for approximately 37.9% of total assets of all households in the United States.[4] The Investment Company Institute (ICI) estimates that employer-sponsored retirement plans and IRAs account for approximately 80% of the retirement savings of households near retirement age.

This report thus focuses on the second and third retirement pillars, providing an overview of their development over time, and discussing ways to strengthen them further to positively impact the savings rate in the U.S. and the associated growth in our economy.

Evolution of the Private Retirement Savings System in the United States

The first private pension plan in the U.S. was established in 1875 by the American Express Company. At the turn of the 20th century, more than 75% of all males over age 65 were working as long as they could, and life expectancy was 49 years at birth and 72 for those who reached the age of 60. Life expectancy lengthened significantly during the 20th century, and more women entered the labor force. Over time, pension plans grew in popularity as corporations used them to attract workers, reduce labor turnover, and even as a mechanism to replace older and less productive employees.[5] The tax deferral of pension income became more attractive to the general population, and corporations, who were allowed to account pension costs as an ordinary business expense, offered more generous pensions to attract talented workers. By 1974, over 45% of all private-sector workers were covered by a pension plan. To protect the retirement assets of these millions of American employees, the Employee Retirement Income Security Act (ERISA) was enacted in 1974.

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[2] The U.S. Census surveys that 81.1% of households of 65 years and over owns a home, compared to 74.4% in 1982. See U.S. Census. Housing Vacancies and Homeownership. Annual Statistics: 2012. http://www.census.gov/housing/hvs/data/ann12ind.html

[3] The Investment Company Institute (ICI) employs a five-layer retirement savings pyramid framework, as described in Brady, Peter, Kimberly Burham, and Sarah Holden. 2012. *The Success of the U.S. Retirement System* (December). Washington, DC.

[4] Federal Reserve System. 2013. *Survey of Consumer Finances*. Research Resources. http://www.federalreserve.gov/econresdata/scf/scfindex.htm

[5] Workplace Flexibility 2010. *A Timeline of the Evolution of Retirement in the United States*. Georgetown University Law Center.

Traditional employer-sponsored pension plans were defined benefit (DB) plans, where workers accrue a regular monthly payment from the date of their retirement until their death or the death of their spouse. The formulaic structure of the benefit, based typically on the employee's retirement age, pre-retirement salary, and years of employment at the sponsoring firm, is generally designed with the goal of replacing a specific percentage of an employee's terminal salary, often referred to as a "replacement rate." Employers are legally obligated to make the promised payments once funds have accrued and have been vested.[6] Furthermore, the Pension Benefit Guaranty Corporation (PBGC), created in 1974 by ERISA, provides limited backing for defined benefit pensions in the event of a sponsor default.

While defined contribution plans have existed in different forms for quite some time, the Revenue Act of 1978 established qualified deferred compensation plans which allow for pre-tax employee contributions to retirement plans that are established by the employer, but directed by the employee. Corporate 401(k) plans include traditional 401(k) including multiple employer plans, safe harbor 401(k), and SIMPLE 401(k). Employees contribute a portion of their pre-tax income into their account (subject to a prescribed limit), and this amount may be fully or partially matched by an employer contribution. The accumulated fund level at retirement depends on the contributions over the years as well as the performance of the investments selected by the employee. ERISA sets minimum standards for eligibility, contribution limits, benefit accrual, withdrawals, information distribution, and accountability of plan fiduciaries. Employees are permitted to withdraw their contributions after age 59 ½ or upon separation from service, or because of hardship or disability.

Employees of public education organizations and certain non-profits may contribute to 403(b) retirement plans, which are similar to 401(k) plans, particularly with regards to the tax-deferred nature of contributions and investment returns until withdrawals. Similarly, 457 plans are available for governmental (and certain non-governmental) employers, whereby employees defer their compensation into the plan on a pre-tax basis. Congress has enacted several retirement, revenue, and tax reforms over time to adjust the contribution limits, age for fund withdrawals, tax implications, and other features such as automatic enrollment and automatic escalation for these plans.[7]

ERISA also created the Individual Retirement Account (IRA) system with two objectives. The first objective is to provide a tax-deferred retirement savings vehicle for workers who may not be covered by retirement plans at work. The second objective is to provide a vehicle for individuals who are leaving jobs to preserve employer-sponsored retirement plan assets by allowing them to rollover the assets into an IRA. Since their inception, Congress has made various changes to the eligibility, tax implications, and contribution rules for IRAs. IRAs have emerged subject to different rules, including SEP IRAs (1978), SAR-SEP IRAs (1986), SIMPLE IRAs (1996), and Roth IRAs (1997). The combined assets of IRA accounts held at custodian institutions currently constitute the largest component of the U.S. retirement market.

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[6] Broadbent, John, Michael Palumbo, and Elizabeth Woodman. 2006. "The Shift from Defined Benefit to Defined Contribution Pension Plans – Implications for Asset Allocation and Risk Management." Working Paper Prepared for a Working Group on Institutional Investors, Global Savings and Asset Allocation established by the Committee on the Global Financial System.

[7] Workplace Flexibility 2010. *A Timeline of the Evolution of Retirement in the United States*. Georgetown University Law Center.

Comparing Defined Benefit, Defined Contribution, and IRA Retirement Plans

The key differences between defined benefit, defined contribution and IRA plans relate to characteristics of the contributions, such as their source, annual limits, and tax deductibility, as well as the nature of the benefits, principally in terms of risk-reward profile and access prior to retirement or certain age thresholds. These differences are laid out at a high level in Table 1 below. Defined benefit plans involve contributions only from the employer, who bears the risk of making defined payments to retirees, which are only (fully) available upon retirement. With defined contribution plans, the employee bears the risk but has the potential for higher distributions in retirement and greater access to funds under special circumstances prior to retirement. Funds in defined contribution plans are portable when employees change jobs. IRAs are similar in these characteristics to DC plans, but with lower contributions, and the Traditional vs. Roth options provide alternative profiles with regard to the impact of taxes, and have income restrictions that impact eligibility and/or tax deductibility of contributions.

Table 1. Characteristics of Employer-Sponsored Plans and IRAs[8]

	Defined Benefit Plans	Defined Contribution Plans	Individual Retirement Accounts
Contributors	Employers	Employees, with possible match by employers	Employees
Contribution Limits	Contributions by employers are based on actuarial assumptions and computations to provide definitely determinable benefits to plan participants after retirement.	For 401(k), 403(b) and most 457 plans: $17,500 maximum elective deferral by employee; $5,500 catch-up contribution for age 50+; $51,000 defined contribution maximum deferral (employer/employee combined).	$5,500 max combined, or $6,500 max for 50+ yrs old Contributions into Traditional only until age 70 ½; no age limit for Roth contributions. Eligibility for Roth depends on income level. Limits do not apply to rollover contributions from DC plans.
Tax Deductibility	For employers who contribute (treated as a corporate expense).	For both employees and employers who contribute.	From full to none, depending on marital status, income level, and access to an employer retirement plan. Traditional: pre-tax contributions, taxable withdrawals Roth: after-tax contributions, qualified withdrawals tax-free.
Benefits	Depends on age, job tenure, and salary. Cannot exceed 100% of the participant's average compensation of the highest 3 consecutive calendar years or $205,000 (in 2013 dollars).	Vested account balance accrues to retiree or beneficiary; can be larger than from DB plans, but no guarantee.	Vested account balance accrues to retiree or beneficiary.

[8] Internal Revenue Service (various reports, based on 2013 rules); U.S. Department of Labor.

Mandatory distributions	At age 70 ½.	At age 70 ½.	Traditional: At age 70 ½. Roth: Not required for original owner.
Access to Funds	No access until retirement.	Often have limited access before retirement (under specific circumstances, or in the form of loans from plan). Funds are portable to new jobs.	Before age 59 ½, there is no penalty if for education, first home ($10,000), or hardship. After 59 ½, no restriction.
Withdrawals	Typically monthly payments based on DB formula.	Choose between lump-sum distributions, annuity, or rolling distribution into IRA.	Taxable withdrawals for Traditional IRA, and 10% penalty for early withdrawals before age 59 ½ for non-qualified distributions.
Investment Risks	Employers assume all investment risks and rewards; can be very costly if plan is underfunded.	Employees assume all investment risks and rewards.	Employees assume all investment risks and rewards.

Participation and Yearly Contributions to Employer-Sponsored Retirement Savings Plans

Congress has authorized over the years a variety of tax incentives to encourage employers and employees to save for retirement. As a result, the contributions invested each year in retirement plans have grown significantly. This is particularly the case for defined contribution plans, in large part due to the increasing popularity of these plans relative to defined benefit plans, discussed in greater detail later in this report. Table 2 shows the number of defined benefit and defined contribution plans in the private sector over a thirty-year period.[9]

Table 2. Number of Active Plans and Yearly Contributions, 1975-2010[10]

	Number of Active Plans (in thousands)			Pension Plan Contributions (in $ millions)		
	Total Plans	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1975	38,431	27,214	11,217	$37,061	$24,242	$12,819
1980	48,986	30,100	18,886	66,157	42,626	23,531
1985	62,064	28,895	33,168	95,188	41,996	53,192
1990	61,545	26,205	35,340	98,792	23,026	75,766
1995	65,599	23,395	42,203	158,832	41,423	117,409
2000	73,092	22,218	50,874	231,907	33,369	198,538
2005	82,665	20,310	62,355	341,449	92,662	248,788
2010	90,601	17,172	73,429	445,325	131,055	314,270

[9] A participant may have more than one plan.
[10] Employee Benefit Research Institute. http://www.ebri.org/publications/benfaq/index.cfm?fa=retfaqt14fig1

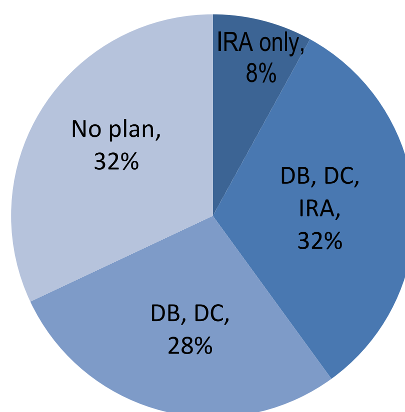
Table 3 explores further the trends in participation in these plans, showing clearly that few private sector employees participate solely in defined benefit plans any more, while an increasing number participate only in defined contribution plans. The percentage of employees participating in either of the two types of plans has increased only slightly from 46.0% to 47.5% over the past three decades, suggesting greater efforts are needed to move the needle on overall participation rates. During the same period, the participation rate of those in only a defined benefit plan declined from 20.7% to 4.6%, while the participation rate for those only in defined contribution plans increased from 11.7% to 30.7%. The participation rates of defined benefit (either only or with DC) dropped from 34.3% to 16.8%, while defined contribution (either only or with DB) increased from 25.3% to 42.9% during the same period.

Table 3. Participation Rates in Employer-sponsored Retirement Plans, 1979-2011[11]

	Defined Benefit Only	Defined Contribution Only	Both DB & DC	Defined Benefit Total	Defined Contribution Total	Either DB or DC Total
1979-1989	20.7	11.7	13.5	34.3	25.3	46.0
1990-1999	9.6	22.3	14.5	24.1	36.8	46.4
2000-2011	4.6	30.7	12.3	16.8	42.9	47.5

Most recently, the ICI reports in its 2013 Fact Book (Figure 1) that approximately 82 million of the 121.1 million U.S. households (68%) have employer-sponsored retirement plans, IRAs, or both (some households may have more than one individual with a retirement savings plan). Nearly 9.7 million U.S. households (8%) have only IRAs, while approximately 34 million U.S. households (28%) have only employer-sponsored DB or DC retirement plans. The 32% of households that have no tax-advantaged retirement savings present an important challenge to address.

Figure 1. Percentage of Households with Tax-Advantaged Retirement Savings, 2012[12]



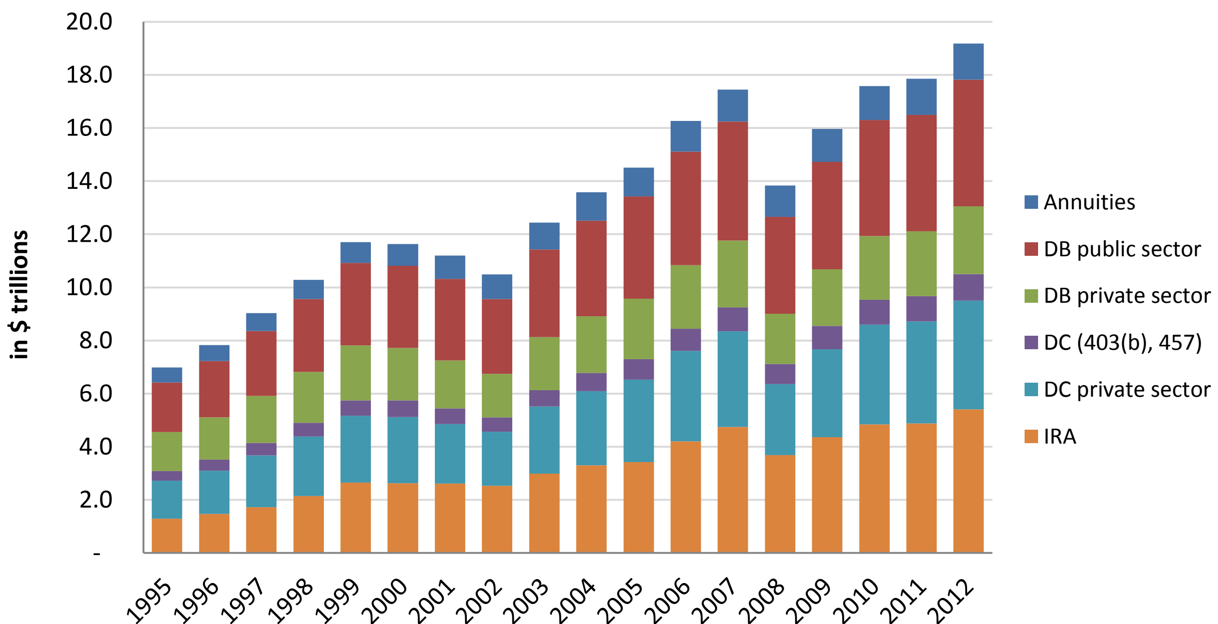
[11] Employee Benefit Research Institute. http://www.ebri.org/publications/benfaq/index.cfm?fa=retfaqt14fig1

[12] Investment Company Institute. 2013. 2013 Investment Company Fact Book: A Review of Trends and Activities in the U.S. Investment Company Industry. 53rd edition.

Retirement Assets and the Breakdown across Types of Plans

The assets that have accumulated in the U.S. across various retirement vehicles have grown from $7 trillion in 1995 to $19.2 trillion in 2012, an increase of 175% over this period (Figure 2). Total assets of private and public defined benefit plans became smaller than total assets of private and public defined contribution plans combined with IRAs. During this period, assets invested in IRAs grew 320% from less than $1.3 trillion to over $5.4 trillion, while defined contribution plan assets grew by 184%, from nearly $1.8 trillion to nearly $5.1 trillion. The combined assets of defined contribution plans and IRAs grew 241 percent from less than $3.1 trillion in 1995 to over $10.5 trillion in 2012.

Figure 2. Retirement Assets by Type of Plan, 1995-2012[13]

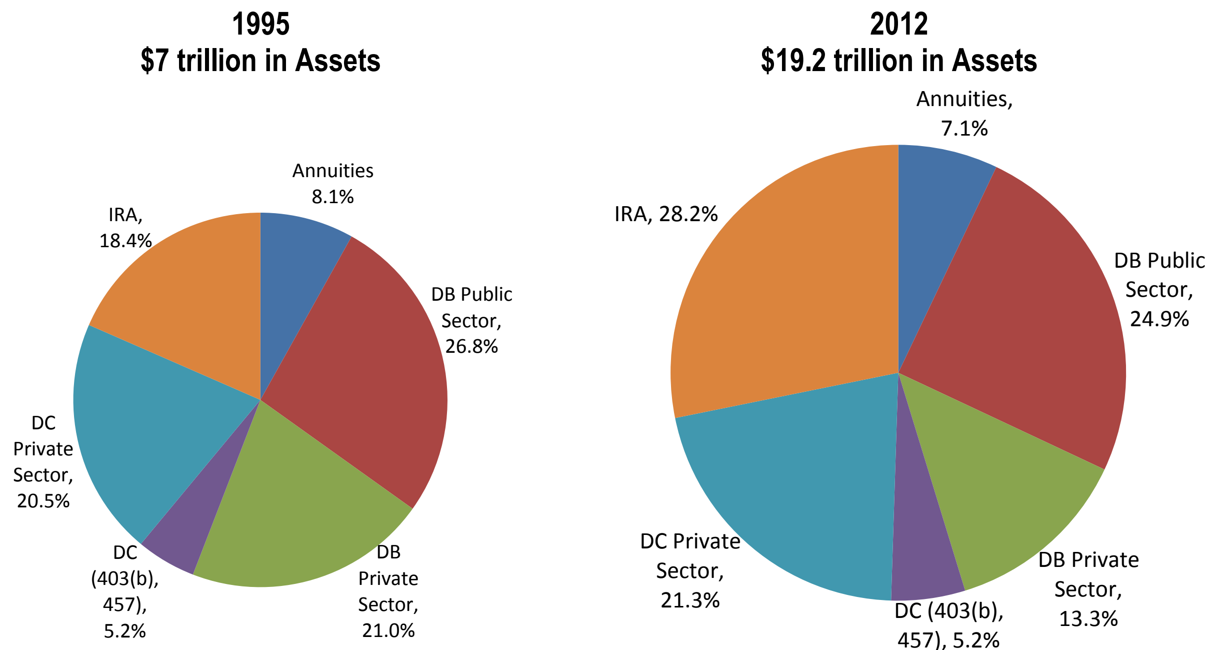


The composition of retirement assets has changed in some significant ways over the past two decades, shifting from DBs to DCs and IRAs. In 1995, nearly half of total retirement assets were in defined benefit plans, with 26.8% in public sector DB plans and 21.0% in private sector DB plans. Defined contribution plans represented about one-quarter of the retirement assets, with 20.5% in the private corporate sector and 5.2% in the public and non-profit sectors (403(b) and 457 plans). IRAs accounted for 18.4% of total assets. In 2012, assets in defined benefit plans dropped to 38.2% of total retirement assets (24.9% in public sector plans and 13.3% in private sector plans). The share of defined contribution plans increased to 26.5% of total retirement assets (21.3% in private sector plans and 5.2% in public and non-profit sector

[13] Board of Governors of the Federal Reserve System. 2013. Flow of Funds; Investment Company Institute. 2013. *2013 Investment Company Fact Book: A Review of Trends and Activities in the U.S. Investment Company Industry*. 53rd edition; authors' estimates.

403(b) and 457 plans). The share of IRA assets however increased from 18.4% to 28.2% of retirement assets (Figure 3).

Figure 3: Composition of Retirement Assets in 1995 and 2012[14]



The Shift from Defined Benefit Plans to Defined Contribution Plans

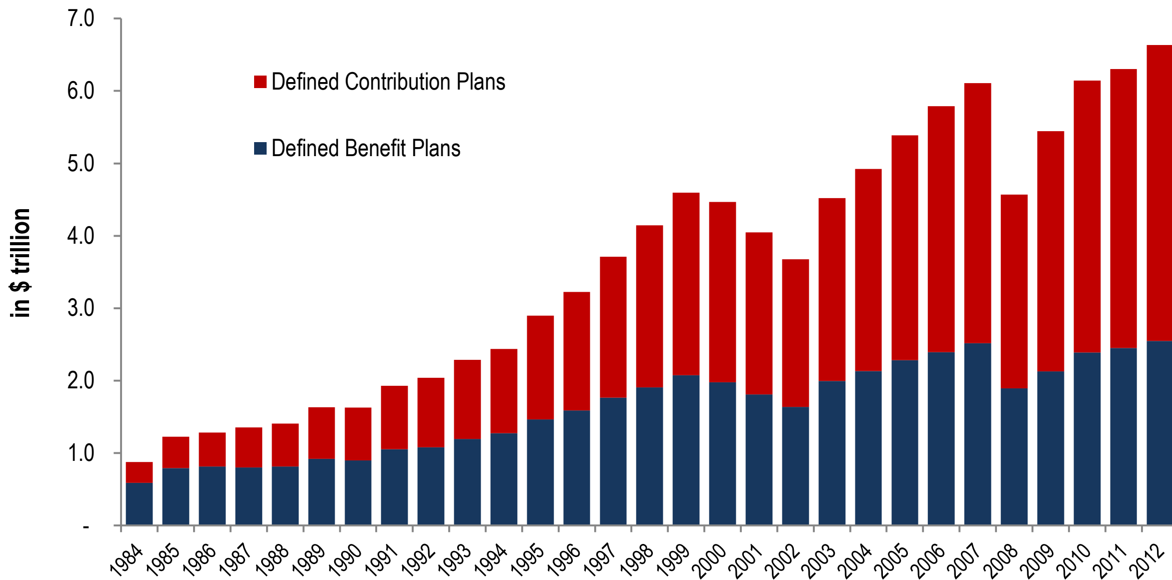
The most dramatic change in employer-sponsored retirement savings plans over the past several decades has certainly been the increasing tendency for employers to sponsor defined contribution plans rather than defined benefit plans. Total assets in private sector employer-sponsored plans were $876 billion in 1984, with $589 billion in defined benefit plans and $287 billion in defined contribution plans. By the end of 2012, total assets in these plans were $6.6 trillion, with $2.5 trillion in defined benefit plans and $4.1 trillion in defined contribution plans. During the 1984 and 2012 period, private defined contribution plans rose 14.2 times while defined benefit plans rose only 4.3 times (Figure 4, Panel A).

In 1984, assets of private defined contribution plans accounted for less than one-third of total assets of private employer-sponsored retirement plans. By the mid-1990s, assets of private employer-sponsored retirement plans were divided equally between DB and DC plans. By the end of 2012, assets of private

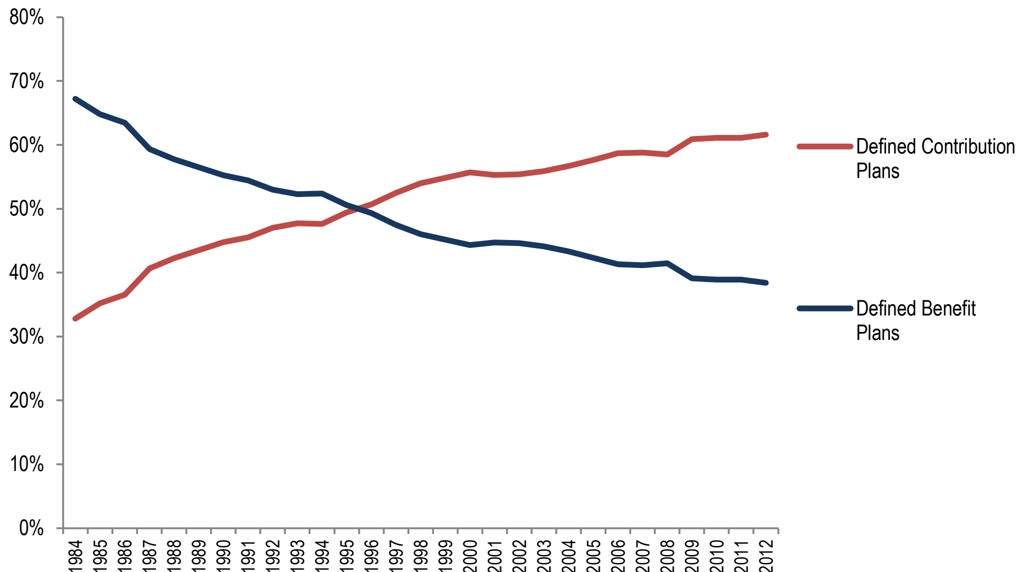
[14] Board of Governors of the Federal Reserve System. 2013. Flow of Funds; Investment Company Institute. 2013. *2013 Investment Company Fact Book: A Review of Trends and Activities in the U.S. Investment Company Industry*. 53rd edition; authors' estimates.

defined contribution plans accounted for 61.6% of total private employer-sponsored retirement plans (Figure 4, Panel B).

Figure 4. Private Employer-sponsored Retirement Plans[15]
Panel A: Total Assets (in trillions of US$)



Panel B: As Percentage of Total Assets



[15] Ibid.

Factors Contributing to the Shift from Defined Benefit to Defined Contribution Plans

The gradual transition from employer-sponsored defined benefit plans to defined contribution plans reflects both employer and employee preferences. From the employer's perspective, defined benefit plans impose risk to the balance sheet if the plan becomes underfunded, and may also produce undesirable fluctuations in profitability due to pension accounting rules. For example, the recent financial crisis produced a dramatic reduction in the value of the assets in many employers' pension funds, and the sharp reduction in interest rates greatly increased the present value of future pension liability streams. The combined effects have caused many defined benefit plans to be significantly underfunded, resulting in the need for cash infusions into the plans, or other more severe remedies.

Defined contribution plans are also less costly for employers than defined benefit plans, when measured on a per-participating-employee-hour basis. The BLS 2012 Employer Costs for Employee Compensation data (ECEC) provides the average employer cost per employee hour worked in private sector industries. The cost is 43 cents in defined benefit plans, compared to 60 cents in defined contribution plans. However, the participation rate for defined benefit plans is only 17% compared to 41% in defined contribution plans. Therefore, the employer costs per-participating employee hour is $2.53 ($0.43/0.17) in defined benefit plans compared to only $1.46 ($0.60/0.41) per-participant in defined contribution plans. The BLS data also shows a similar pattern across management, sales, service, construction, and production workers, as well as across small and large firms (Table 4).

Table 4. Employer Retirement Benefit Costs per Employee Hour Worked, 2012[16]

	Employer costs per employee hour worked		Participation (%)		Worker participation cost	
	Defined benefit	Defined contribution	Defined benefit	Defined contribution	Defined benefit	Defined contribution
All workers	$0.43	$0.60	17	41	$2.53	$1.46
Management and professional	$0.72	$1.35	24	61	$3.00	$2.21
Sales and office	$0.22	$0.43	14	45	$1.57	$0.96
Service	$0.09	$0.13	6	16	$1.50	$0.81
Construction and maintenance	$1.10	$0.56	23	42	$4.78	$1.33
Production and transportation	$0.44	$0.37	21	38	$2.10	$0.97
Company Size						
1-99 workers	$0.23	$0.39	7	31	$3.29	$1.26
100-499 workers	$0.42	$0.65	18	49	$2.33	$1.33
500+ workers	$0.99	$1.10	42	61	$2.36	$1.80

Defined benefit plans were traditionally adopted by employers to attract and retain talented employees. The reward to an employee of being in a defined benefit plan depends on the employee's tenure in the company. Employees who do not intend to remain with a company for a long period of time prefer defined contribution retirement plans that are more easily portable. The BLS National Longitudinal Survey of Youth

[16] U.S. Bureau of Labor Statistics, National Compensation Survey.

shows the average person born in the latter years of the baby boom (1957-1964) held 11.3 jobs from age 18 to age 46 during the 1978 and 2010 period. The survey results also show 69% of employees between 18 and 24 years old ended their jobs in less than one year and 92.9% ended their jobs in less than five years. Presumably, many job changes also entailed moving from one institution to another, making portability an important factor. The patterns of high turnover rates and short employment duration are similar across gender and race (Table 5).[17]

Table 5. Number of Jobs and Duration of Employment by Sex, Race, and Age[18]
Panel A. Average Number of Jobs for Persons Ages 18 to 46 in 1978-2010

	Total	18-24	25-29	30-34	35-39	40-46
Total	11.3	5.5	3.0	2.4	2.1	2.1
Men	11.5	5.7	3.1	2.6	2.1	2.1
Women	11.1	5.3	2.8	2.3	2.0	2.1
Race						
White non-Hispanic	11.4	5.7	3.0	2.4	2.1	2.1
Black non-Hispanic	10.9	4.6	2.9	2.5	2.1	2.2
Hispanic or Latino	11.2	4.9	2.8	2.3	2.1	2.2

Panel B. Cumulative Percentage Distribution Of Duration

	18-24	25-29	30-34	35-39	40-46
Less than 1 year	69.1	56.2	47.8	37.6	32.8
Less than 2 years	82.9	73.1	64.7	55.4	50.8
Less than 5 year	92.9	87.0	82.8	76.3	69.0
Less than 10 years	96.4	93.0	90.9	86.0	--
Less than 15 years	97.5	95.1	93.5	--	--

While the evolution towards DC pension plans can be beneficial for both employees and employers, it nevertheless reallocates risk within the financial system. In DB pension plans, responsibility for funding and investment management rests with the firm sponsoring the plan. In DC plans, these tasks and the associated risks are assumed by employees. Individuals must understand risk-return tradeoffs associated with different investment strategies. They also need to be aware of products that can enable them to manage risk upon distribution of their funds from plans, such as using annuity products offered by insurance companies to provide guaranteed cash flows for the rest of their lifetime.

This underscores the importance for employees to be well informed for how to manage the risk in their DC retirement portfolios, as well as how to ensure that they are saving sufficiently over time to adequately replace their income during their retirement years. Employers are increasingly providing financial education as well as on-line calculators and other tools to help employees understand the need to save, calculate

[17] U.S. Bureau of Labor Statistics. 2012. "Number of Jobs Held, Labor Market Activity, and Earning Growth Among the Youngest Baby Boomers: Results from a Longitudinal Survey." July.
[18] U.S. Bureau of Labor Statistics. 2012. "Number of Jobs Held, Labor Market Activity, and Earning Growth Among the Youngest Baby Boomers: Results from a Longitudinal Survey." July.

how much they should save, and consider the relative benefits of different retirement products. For IRA participants, financial advisors have designed a range of different levels of educational programs to support beginners as well as sophisticated individuals with their retirement planning. Financial advisors are available to help IRA holders gain knowledge about available products, eligibility, risks and returns, and tax consequences.

Access to Employer-Sponsored Retirement Plans and Take-up Rates

Participation rates in employer-sponsored retirement plans are driven by two main factors: whether individuals have access to a retirement savings plan, and whether they choose to participate in the plan. Regarding the first factor, 64% of the private sector workforce and 89% of state and local public sector workers have access to either DB or DC retirement savings plans in 2013 (Table 6). According to the Bureau of Labor Statistics (BLS) 2013 National Compensation Survey, approximately 49% of private sector workers and 85% of public sector workers have retirement savings through an employer-sponsored plan. The take-up rate, which measures participation in a plan as a percentage of access to a plan, shows 77% of the private sector workforce and 96% of public sector employees chose to participate in savings plans sponsored by their employers in 2013.

The BLS Survey also shows full-time workers are different than part-time workers in terms of both their opportunities to save for retirement through employer-sponsored plans and their responses to these opportunities. As shown in Table 6, full-time workers in both private and public sectors in the U.S. currently have both higher access to DB and DC retirement plans and higher participation rates in these plans. In 2013, 74% of private sector full-time workers have access to retirement savings plans and 59% participate. Consequently, the take-up rate for full-time private sector workers is 80%. In contrast, only 37% of part-time workers in the private sector have access to, and only 20% participate, in these retirement plans, yielding a 54% take-up rate. This discrepancy between full-time and part-time worker participation also exists in the public sector, due principally to access to plans, with 99% of full-time workers having such access versus only 39% for part-time workers (Table 6).

Table 6. Retirement Savings: Access, Participation, and Take-up Rates, 2013[19]

	Private Sector			State and Local		
	Access	Participation	Take-up Rate	Access	Participation	Take-up Rate
All workers	64	49	77	89	85	96
Full-time	74	59	80	99	94	95
Part-time	37	20	54	39	35	90
Wage earning groups						
Lowest 10%	28	10	36	58	55	95
Lowest 25%	38	18	47	73	69	95
Second 25%	65	47	72	93	88	95
Third 25%	75	62	83	95	90	95
Top 25%	85	75	88	98	93	95
Top 10%	87	78	90	98	92	94
Company Size						
1-49 workers	45	32	71	69	66	96
50-99 workers	63	43	68	89	86	97
100-499 workers	79	58	73	87	84	97
500+ workers	87	76	87	92	87	95

Table 6 also shows that the access, participation, and take-up rates are widely different among wage-earning groups. The BLS Survey shows only 10% of the lowest income decile working in the private sector participates in retirement savings plans compared to 78% of the top income decile. This large disparity becomes somewhat narrower after adjusting for access to these plans. Only 28% of the lowest earner decile in the private sector had access to retirement plans, compared to 87% of the top decile. As a result, the take-up rate for the lowest decile is 36% compared to 90% of the highest decile wage earners. Overall, these statistics suggest the need for both greater access to retirement savings plans for low-income workers, as well as tools to encourage higher participation in these plans. While overall access and take-up rates are higher for low income workers in the public sector, a large gap exists for this population as well.

It is also important to note in Table 6 that employees working for smaller companies tend to participate in retirement savings plans at a much lower rate. The 2013 BLS National Compensation Survey finds that about 32% of workers in the smallest companies (1-49 workers) participated in plans compared to 76% in the largest companies (500+ workers). The gap becomes significantly smaller when looking at take-up rates that adjust for access to plans: the take-up rate is 71% for the smallest companies, compared to 87% for the largest companies, and company size is in general not consistently related to take-up rate. Thus, workers appear to have similar propensity to save for retirement regardless of the size of their company. However, the data suggests workers in smaller companies do not have the same access to retirement savings plans as their counterparts working for larger companies. Therefore, policies that encourage smaller companies to make retirement plans available to their employees are needed.

[19] U.S. Bureau of Labor Statistics. 2013. National Compensation Survey, March.

Auto-Enrollment and Auto-Escalation

The take-up rates in employer-sponsored plans shown in Table 6 indicate that many individuals are not actively engaged in saving for their retirement, particularly a large number of part-time and low wage earners in the private sector. Academic research in the area of behavioral economics has confirmed that individuals are predisposed towards spending in the short-run rather than saving for retirement. However, many exhibit a form of inertia that can be positively exploited to counter their myopic spending behavior. Specifically, many more employees will accept the default option of enrolling into a retirement savings plan even when given the ability to opt-out of the plan, as compared to proactively making the decision to enroll when there is an opt-in option.[20]

This "auto-enrollment" feature has now become increasingly commonplace since the passage of the Pension Protection Act of 2006. A default investment allocation option is specified which the employee may change if desired, though here too employees display inertia in sticking with the initial allocation choice. Another important innovation for defined contribution plans is the "auto-escalation" feature that increases the default amount that an employee puts into his/her DC plan each year (subject to an opt-out clause).

In a 2013 survey conducted by Putnam Investments of over 4,000 American workers who are eligible to participate in a 401(k) plan, 67% reported that they chose to stay in the auto-enroll plan. The study finds that auto-enrolled 401(k) participants exhibited a significantly higher Lifetime Income Score, which captures investor confidence for retirement income security, than those who need to opt-in. In addition, the survey shows the average plan deferral rates for auto-enrolled workers were higher than deferral rates for workers who opted in. The survey finds a similarly positive finding with regards to the effect of auto escalation on retirement preparedness. Individuals who enrolled in a plan with auto escalation had a higher Lifetime Income Score compared to those individuals who did not enroll in such a program across all income groups. Similar to the auto enrollment feature, average deferral rates for workers in plans with an auto escalation feature were higher than rates for individuals in plans that did not have such a feature.[21]

Findings of this recent Putnam survey confirm previous findings in a 2010 Charles Schwab analysis of an attitudinal survey of more than 1,000 401(k) plan participants nationwide. The 2010 study shows that employer matching contributions were the biggest motivating factor for individuals to participate in their 401(k) plans, employer-sponsored plans with an auto enrollment feature had a 15% higher participation rate than those plans without an auto enrollment feature, and 83% of individuals who enrolled in auto escalation programs remained at the increased contribution rate after a year of enrollment.[22]

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[20] B.C. Madrian and D. F. Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," Quarterly Journal of Economics (2001, Vol. 116, No. 4, 1149-1187. See also S. Benartzi and R. Thaler, "Heuristics and Biases in Retirement Savings Behavior," Journal of Economic Perspectives, Vol. 21, No. 3 (Summer 2007).

[21] Putnam Investments, "Lifetime Income Scores III: Our latest assessment of retirement preparedness in the United States," April 2013.

[22] Charles Schwab. 2010. "The New Rules of Engagement for 401(k) Plans." November.

A 2010 study from the Defined Contribution Institutional Investment Association (DCIIA) found that higher auto enrollment levels and higher automatic escalation rates are critical to increasing the chance of reaching at least an 80% replacement income level (including Social Security).[23] They find that while the average initial default rates for auto enrollment is currently only 3%, increasing this rate to 6% would not have a significant effect on the opt-out rate. Since over two-thirds of participants simply remain at the initial default contribution rate, setting this at a higher level would have a large impact on lifetime savings. Research from the Employee Benefit Research Institute (EBRI) further supports these findings. For instance, their simulations show that if all 401(k) plan sponsors were to adopt automatic enrollment using a 6% default contribution rate, the median replacement rate for the lowest-income quartile would increase from 23% to 52%.[24]

In a 2013 J.P. Morgan survey of 1,009 401(k) participants and plan sponsors, auto enrollment is offered in 43% of plans, and auto escalation is featured in 21% of DC plans. Larger plans (greater than $250 million in assets) were more likely to have higher auto enrollment (62% of plans) and higher auto escalation (42% of plans).[25] A parallel participant survey finds that 62% of respondents were either neutral or in favor of the auto features. Thus, it appears that many plans are not providing features that would be desirable (or at worse neutral) to participants. The JP Morgan survey also supports the need for auto enrollment minimums to be increased to at least 6%, and auto-escalation caps to be raised to at least a 10% recommended savings level.

In general, the choice architecture of a defined contribution plan, namely whether there are automatic features and how the defaults are set (while allowing opt-out choices for participants), can have a profound effect on actual savings behavior and the probability of achieving a sufficient replacement rate of income during retirement.

Individual Retirement Accounts (IRAs)

Since many individuals are not covered by retirement plans at work, the 1974 ERISA Act introduced opportunities for these individuals to have tax-deferred retirement accounts in the form of traditional IRAs. Traditional IRAs also give both retirees and active employees the opportunity to keep the tax-advantage status of employer-sponsored retirement plan accumulations by allowing transfers or rollovers of plan balances to IRAs. Congress subsequently created additional employer-sponsored IRAs (SEP-IRA in 1978, SAR-SEP IRA in 1986, and SIMPLE IRA in 1996) to allow small employers to offer their employees retirement savings plans. In 1997, Roth IRAs were created, and made available to all but those in higher-income groups. Roth IRA contributions are made on an after-tax basis, but the investment earnings accumulate tax free, and all withdrawals are also tax exempt. While Roth IRAs are popular, traditional IRAs account for approximately 90% of total IRA assets.

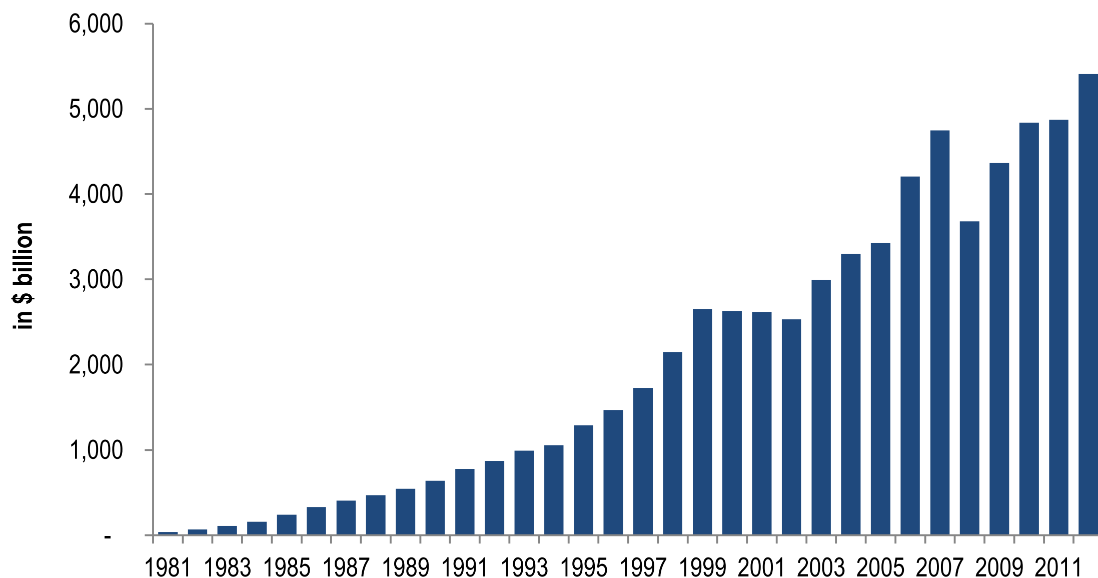
[23] Defined Contribution Institutional Investment Association (DCIIA), “Raising the Bar: Pumping Up Retirement Savings.”

[24] Employee Benefit Research Institute (EBRI), “The Expected Impact of Automatic Escalation of 401(k) Contributions on Retirement Income, Sept. 2007.

[25] J.P. Morgan Asset Management 2013 Plan Participant Survey Findings, “Searching for direction on the journey to retirement.”

Assets in IRAs, including direct contributions and rollovers, increased from $38 billion in 1981 to more than $5.4 trillion in 2012 (Figure 5). Approximately 55% of IRA-owning households (27 million households) are between 35 and 64 years old, with the median of 52 years old. About 73% of IRA-owning households are married or living with a partner, and 67% of IRA-owners are employed. Over 72% of IRA-owning households have income above the U.S. median household income. The median IRA-owning household had $75,000 income and $200,000 of financial assets in 2012.

Figure 5. IRA Assets (in $ billions), 1981-2012[26]



By the end of 2012, approximately 40.4% of U.S. households (49 million households) held some type of IRA and 32.5% (39.4 million) held traditional IRAs. About 51% of traditional IRA account holders (20.1 million households) had rollovers from their previous employer-sponsored defined contribution plans and the other half (19.3 million households) did not have rollovers into their IRA accounts. About 16.8% of households (20.3 million) held Roth IRAs and 7.6% of households (9.2 million) held employer-sponsored IRAs. Over 80% of IRA participants also own another type of employer-sponsored retirement plan; 73% also hold DC retirement accounts, while 46% also own DB plans. Less than 8% of U.S. households (9.7 million) only hold IRAs without any other retirement account (Table 7).

[26] Board of Governors of the Federal Reserve System. 2013. Flow of Funds.

Table 7. Households Owned IRAs, as of End-2012[27]

	# of Households	% of Total U.S. Households
Traditional IRA	39.4 million	32.5%
Includes rollover	20.1 million	16.6%
Have made contribution at some point after rollover	11.3 million	9.3%
Have never made contribution since rollover	8.8 million	7.3%
Does not include rollover	19.3 million	16.0%
Roth IRA	20.3 million	16.8%
Employer-sponsored IRA (SEP, SAR-SEP, and SIMPLE)	9.2 million	7.6%
Any IRA	48.9 million	40.4%

During the 2011 tax year, approximately 16% of U.S. households (48.9 million) made a contribution to their IRA, with a median contribution of $5,000 per household. About 9.1% of total U.S. households (39.4 million) made contributions to a traditional IRA, with a median contribution per household of $4,000. For the more restrictive Roth IRA accounts, 6.2% of U.S. households (20.3 million) contributed in 2011, with a median of $3,000 per household. Lastly, 4.2% of households (9.2 million) contributed to other employer-sponsored IRA accounts (SEP, SAR-SEP, and SIMPLE), with a median of $4,300 per household (Table 8).

Table 8. Contribution Activity to IRAs in Tax Year 2011, by Type[28]

	Median contribution per household ($)	Households Made IRA Contribution		
		# of households (million)	% of households owning each type	% of Total U.S. Households
Traditional IRA	$4,000	39.4	28.0%	9.1%
Roth IRA	$3,000	20.3	37.0%	6.2%
Employer-sponsored IRA (SEP, SAR-SEP, and SIMPLE)	$4,300	9.2	55.0%	4.2%
All IRA	$5,000	48.9	39.0%	15.7%

Role of Financial Advisors

Given the lack of sound financial knowledge among a broad subset of the U.S. population, the role of financial advisors in promoting and guiding retirement savings for IRAs is critical. Financial advisors assist in setting up IRAs, recommending a retirement strategy including contribution amounts and asset allocation, and providing guidance on the size and timing of withdrawals.

According to ICI's recent IRA Owners Survey, more than half of traditional IRA-owning households used a professional financial advisor to select the asset allocation of rollover assets; 61% of these households consulted with an advisor to create an investment strategy and allocate assets in their IRAs; and 58% of

[27] Investment Company Institute. 2012. "The Role of IRAs in U.S. Households' Saving for Retirement, 2012." ICI Research Perspective; and authors' estimates.
[28] Ibid.

households that made withdrawals in the 2011 tax year consulted with an advisor, compared to 16% that did not consult with any source.[29]

There is increasing evidence that IRA holders who use financial advisors save more, have better diversification strategies, and are less likely to experience income shortfalls during retirement. In a 2013 Putman study, survey data show that those who use an advisor exhibited a much higher Lifetime Income Score (24 points higher, 80% vs 56%), a measure of replacement of income during retirement, than those not using an advisor.[30] Of those who were likely to produce 100% of their current income in retirement, 39% reported using an advisor. Those respondents who have an advisor also have higher confidence levels with respect to their asset allocation choice, a decision that many individuals find challenging to determine on their own.

Strategic Business Insight's CFD group conducted an analysis of households with at least $100,000 in investable assets, and found that over a 12-year period, investors who always obtained investment advice before making major financial decisions ended up with a much larger increase in assets ($84,000) as compared to those who sometimes ($23,000) or never (-$57,000) obtained advice.[31] A study from Charles Schwab based on a client survey finds that 401(k) account holders who work with an advisor increase their average monthly deferral percentage, and that savings rates for these individuals double from 5% to 10% as a result of implementing the advice they received.[32] Also, these account holders were better diversified across asset classes (eight asset classes on average, as compared to fewer than four classes for those choosing their own investments). Furthermore, during the turbulent July 2008 to February 2009 period, a very high proportion of those working with advisors stayed the course in their 401(k) portfolios, which likely provided significantly higher returns over the longer run than those who did not.

An ING study of over 14,000 investors also found that those individuals spending one-on-one time with a financial advisor have saved, on average, more than twice the amount for retirement than those who did not consult with an advisor, and that their investment knowledge and confidence for retirement readiness have also increased.[33] A study of 401(k) participants across different age groups conducted by Financial Engines and AON Hewitt find that the median portfolio returns over a five year period (2006-2010) were consistently higher for those receiving help from a financial advisor across all age groups, varying from 2.53% to 3.40% higher (net of fees) depending on the group.[34] In addition, those seeking help had a significantly lower median portfolio risk than those investing without the benefit of any advice, and this makes the higher returns of those being advised even more impressive. The study also finds that those

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[29] Investment Company Institute. 2012. "The Role of IRAs in U.S. Households' Saving for Retirement, 2012." ICI Research Perspective.
[30] Putnam Investments. 2013. "Lifetime Income Scores III: Our latest assessment of retirement preparedness in the United States." April.
[31] Strategic Business Insights. 2009. "The Financial-Advisor Advantage." MacroMonitor Marketing Report, May.
[32] Charles Schwab. 2010. "The New Rules of Engagement for 401(k) Plans." November.
[33] ING Retirement Research Institute. 2011. "Help Wanted." December.
[34] Financial Engines and AON Hewitt. 2011. "Help in Defined Contribution Plans: 2006 Through 2010." September.

seeking help have more appropriate "glide paths" that help savers reduce their level of portfolio risk as they approach retirement age.

Distribution of Assets in Defined Contribution Plans and IRAs

As shown earlier in Figure 1, 32.0% of U.S. households have no retirement savings plan (outside of Social Security). Table 9 below shows that almost half of U.S. households do not hold a defined contribution or IRA plan. Regrettably, even for those households who do hold a DC or IRA account, slightly more than half of those have less than $50,000 in those accounts. Only 4% of households have at least $500,000 in their DC and IRA accounts. Given that many individuals in these households are already retired, or may be close to retirement age, this suggests that a large majority of individuals will struggle to adequately replace their income during retirement. Table 9 also shows only slightly better results for those households with the head or spouse in the labor force.

Table 9. Distribution of Retirement Assets among Households in 2010[35]

	All Households (100%)		Households in which the Head or Spouse is in the Labor Force	
	# of households	% of all households	# of working households	% of working households
$0	58,363,198	49.6	39,849,170	43.8
$1 ~ $50,000	31,527,732	26.8	27,810,222	30.6
$50,001 ~ $100.000	8,325,406	7.1	7,023,745	7.7
$100,001 ~ $500,000	14,690,016	12.5	12,322,614	13.5
$500,001 ~ $1,000,000	2,919,566	2.5	2,516,501	2.8
$1,000,001 ~ $2,000,000	1,273,997	1.1	1,047,414	1.2
$2,000,001 ~ $3,000,000	335,415	0.3	283,192	0.3
>$3,000,000	173,886	0.1	129,983	0.1
Total	117,609,216	100.0	90,982,841	100.0

Saving for Retirement – International Comparisons

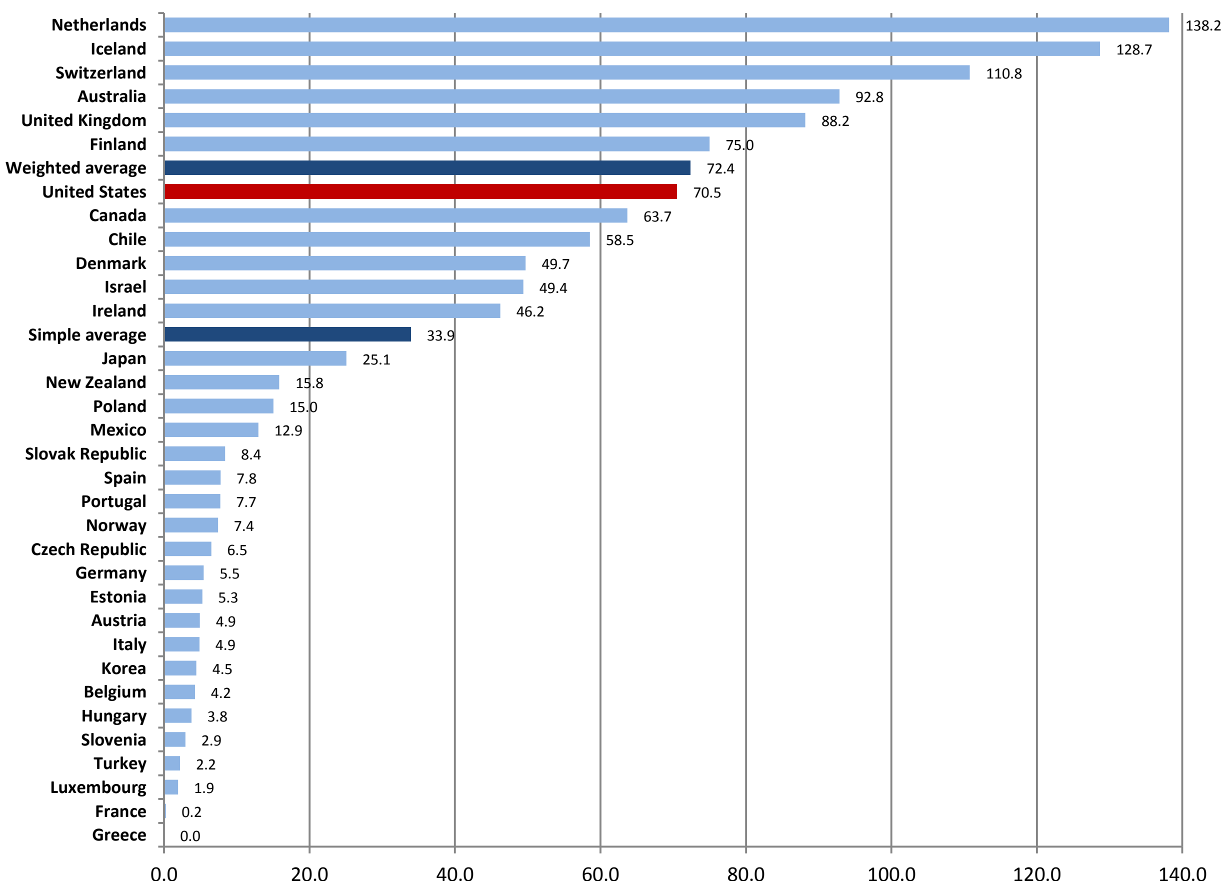
Many policy makers have expressed concern that the U.S. savings rate is too low to ensure that future retirees will have a sufficient replacement rate of income during their retirement years. The National Retirement Risk Index (NRRI), as calculated by Boston College's Center for Retirement Research in 2010 (based on the Survey of Consumer Finances data from the U.S. Board of Governors of the Federal Reserve System), indicates that over half (53%) of U.S. households may be unable to maintain their standard of living in retirement.[36] Between 2007 and 2010, the NRRI increased by 9 percentage points due to the severe drop in housing prices, rapidly falling interest rates, the rise in Social Security's Full

[35] Topoleski, John J. 2013. "U.S. Household Savings for Retirement in 2010." CRS Report for Congress.
[36] Munnell, A. H., A. Webb and F.N. Golub-Sass, "The National Retirement Risk Index: An Update," Center for Retirement Research at Boston College, Report # 12-20, October 2012.

Retirement Age, and the stagnant stock prices during that period. Unfortunately, the households that were most impacted were those nearing retirement. The NRRI for low-income households was 61% in 2010, a full 8 percentage points higher than for all households, indicating the large risk of this income group suffering a low replacement rate during retirement years.

With regards to savings through just the private retirement system discussed above, the U.S. does lag behind several OECD countries. The assets of private retirement savings as a percentage of GDP in the U.S. are approximately 70.5% in 2011, which is below that of countries such as Australia (92.8%) and the United Kingdom (88.2%), and slightly below a *weighted* average of 34 OECD countries (72.4%). Nevertheless, total assets of private retirement as a percentage of GDP of the U.S. is more than double the *simple* average of 34 OECD countries (33.9%), reflecting low private retirement saving rates in many OECD countries such as France (0.2%), Italy (4.9%), Germany (5.5%), and Japan (25.1%) (Figure 6).[37]

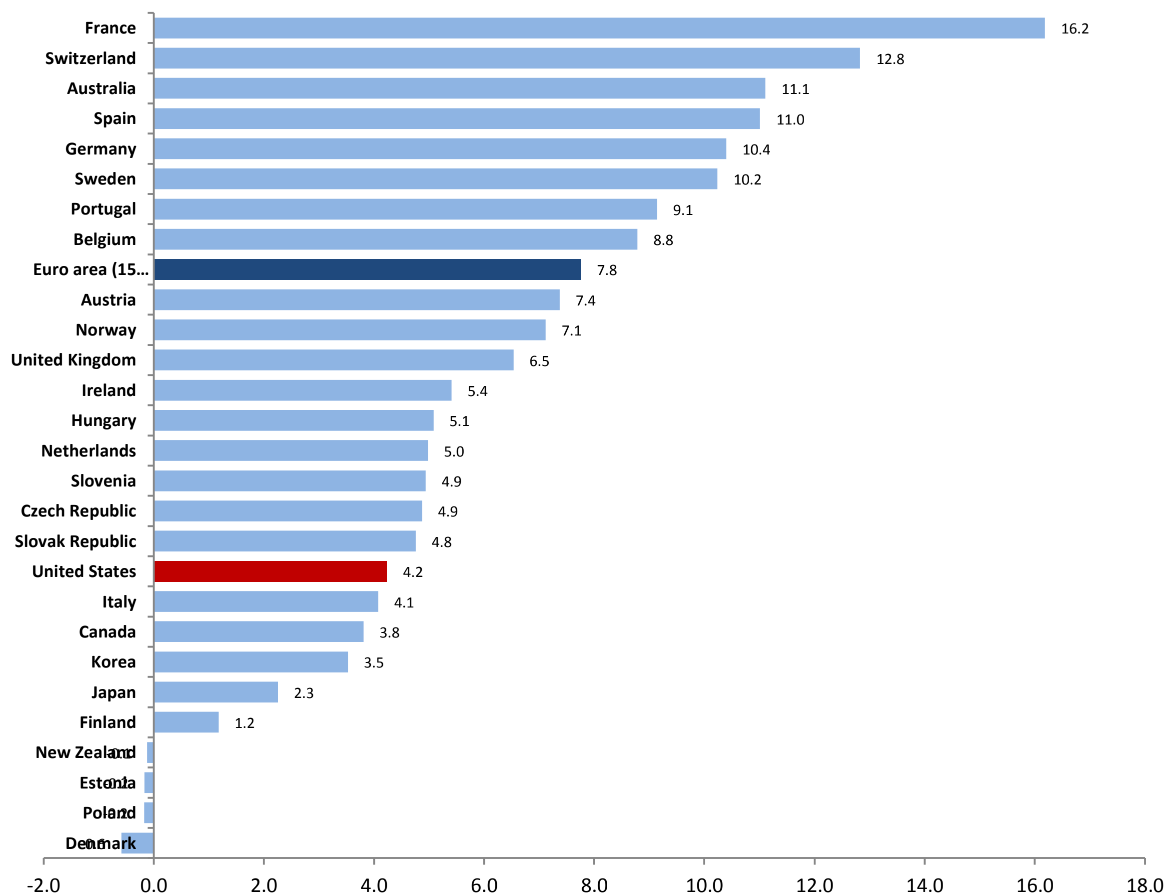
Figure 6. Private Retirement Savings in Selected OECD Countries, 2011(as percentage of GDP)[38]



[37] There are differences between the calculations of private retirement savings as a percentage of GDP determined by the OECD and the Federal Reserve System; however, the discrepancies are negligible and therefore we include both sources in this report.
[38] OECD Global Pension Statistics.

The household savings rate (defined as household disposable income less consumption plus the change in net equity of households in pension funds) in the U.S. was 4.2% in 2011, compared to 7.8% average in the Euro area and above 10% in several European countries (Figure 7).

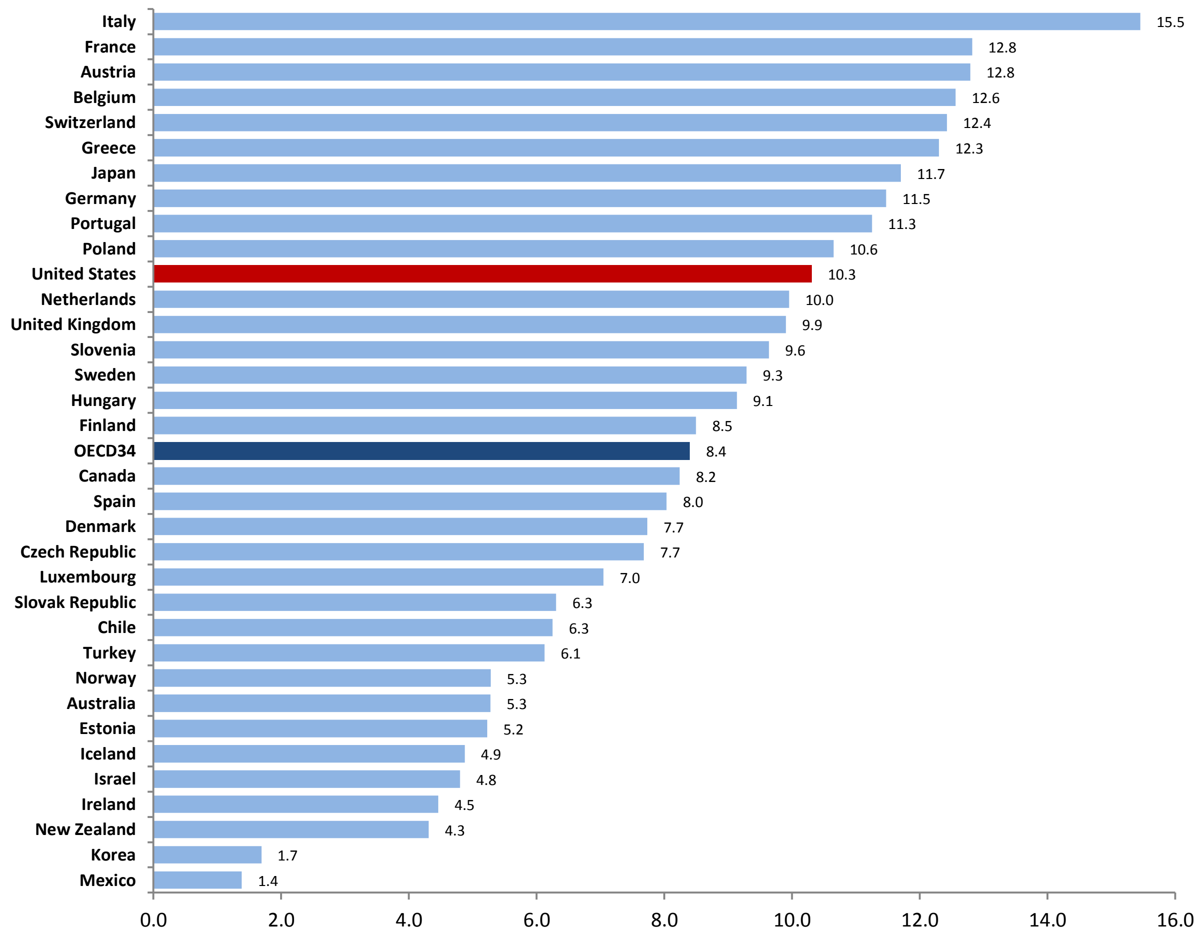
Figure 7. Household Savings Rates in Selected OECD Countries, 2011 (percentage of disposable household income)[39]



It is also useful to compare the pension systems in different countries from the perspective of the size of benefit payments made from both public and private pension funds. The average benefit expenditure across OECD countries was 8.4% of GDP in 2007. Approximately one-third of the countries (that have data available) spent more than 10% of GDP on public and private pension benefits. In 2007, the OECD reported that the U.S. spent 10.3% of GDP on public and private pension benefits, compared to 15.5% in Italy (the highest), 12.8% in France, 11.5% in Germany, and 11.7% in Japan (Figure 8). The U.S. thus lags behind many of the largest OECD countries in terms of pension benefit expenditures.

[39] OECD Economic Outlook No. 93, June 2013. Web.

Figure 8. Public and Private Pension Benefit Expenditures in Selected OECD Countries, 2007 (as percentage of GDP) [40]



The tax-deferred defined contribution and IRA plans provided in the U.S. appear to be effective in promoting retirement savings, based on the strong growth in assets in these plans over the past three decades. Most OECD countries encourage private retirement savings by using tax incentives for tax deferral fully or partially their private contributions and investment gains from income that is subject to taxation. Among 21 OECD countries that have available data for tax incentives for private retirement savings, 11 countries have less than or equal to 0.2% of GDP, 5 countries have more than 0.2% but lower than 1.0% of GDP, and 5 countries have more than 1.0% of GDP. The tax incentives for private retirement savings in the U.S. accounted for 0.8% of GDP, compared to the 0.6% OECD average (Figure 9).

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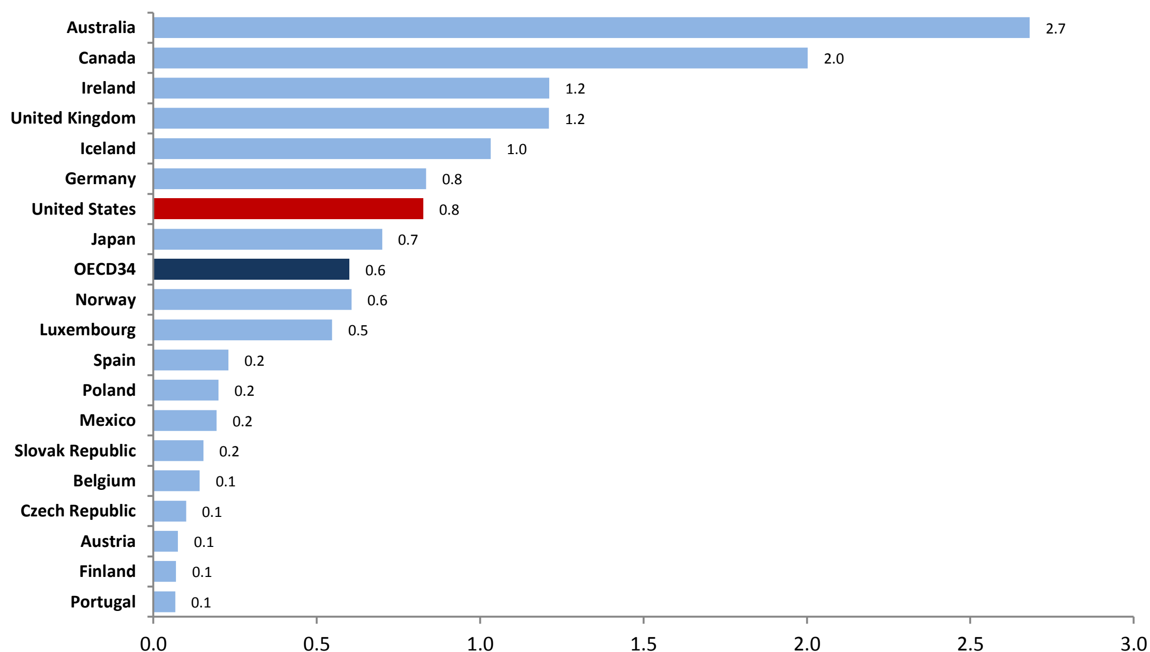
[40] OECD. 2011. *Pensions at a Glance 2011: Retirement-Income Systems in OECD and G20 Countries*.

It is important to note that tax incentives through tax *deferrals* are not the same as tax deductions or tax exemptions. As the term indicates, tax deferrals just allow individuals to defer tax payments to later dates. Depending on many factors (including income tax rates at the times of contribution and distribution the return on assets, and the length of the deferral period), it is quite typical that total taxes paid after the deferral period are higher than the amount of tax that would be paid at the time of the retirement plan contribution, and possibly substantially higher.[41]

Figure 9. Tax Incentives for Private Retirement Plans in Selected OECD Countries, 2007[42]
(as percentage of GDP)



Impact of Retirement Savings on Capital Markets

Assets accumulated in the private retirement system support investments in equity and debt markets, as well as other market sectors such as real estate, which in turn lead to economic growth and job creation. Numerous empirical studies have shown the positive impacts of retirement savings and pension reform on the development of capital markets, economic growth, and poverty reduction in both developed and developing countries.[43]

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[41] Yoo, Kwang-Yeal and Alain de Serres. 2004. "Tax Treatment of Private Pension Savings in OECD Countries." OECD Economic Studies No. 39; Brady, Peter. 2012. *The Tax Benefits and Revenue Costs of Tax Deferral*. Investment Company Institute.
[42] OECD. 2011. *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*.
[43] For example, Cihak, Martin, Asli Demirguc-Kunt, Erik Feyen, and Ross Levine. 2012. "Benchmarking Financial Systems around the World." Policy Research Working Paper 6175, World Bank; Niggemann, Taro and Jorg Rocholl. 2010. "Pension

Retirement savings in defined contribution and IRA plans in the U.S. rose from 11% of GDP in 1985 to 64.7% of GDP in 2012. Including assets invested in defined benefit plans, total retirement savings in the U.S. grew from 37.5% of GDP in 1985 to 118.1% of GDP in 2012 (Table 10).

Table 10. Retirement Assets as Percentage of GDP, Selected Years, 1985-2012[44]

	1985	1990	1995	2000	2005	2010	2012
DB, DC, IRA	37.5	62.3	91.1	113.1	110.8	117.5	118.1
DC, IRA	11.0	22.8	40.2	55.8	55.7	63.8	64.7

Holders of traditional IRAs (which account for over 90% of total IRA assets) who are in their twenties invested more than 51.5% of their assets directly in equities and equity funds, and 6.9% of their assets directly in bonds and bond funds. In addition, more than 23.4% of the assets in these IRAs were in target date funds and non-target date hybrid funds that invest in both equities and fixed-income securities. Altogether, these IRA investors held 81.8% of their assets in equities and fixed-income securities. The remaining 18.2% of their assets were held in money funds and other assets. Similarly, 401(k) accounts, the largest class of defined contribution plans, held 39.2% of their assets directly in equities and equity funds, and 42.5% in target-date funds and non-target-date balanced funds in 2011. Overall, 401(k) accounts were 89.1% invested in equities and fixed-income securities. The remaining 11% of assets were held in money market funds and other assets.[45]

Conclusions

The private retirement savings system in the U.S. continues to evolve in many positive directions. The size of retirement savings has increased substantially in the past several decades. Innovative product features such as auto-enrollment and auto-escalation have helped to encourage greater savings for many individuals. Employees' needs for portability and flexibility have been addressed by financial institutions and supported by legislation. Increased financial education available to DC plan participants, and greater access to financial advisors assisting IRA holders, have helped individuals gain greater confidence in their plans for saving for retirement.

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[44] Board of Governors of the Federal Reserve System. 2013. Flow of Funds; Investment Company Institute. 2013. *2013 Investment Company Fact Book: A Review of Trends and Activities in the U.S. Investment Company Industry*. 53rd edition; authors' estimates.

[45] Investment Company Institute. 2013. *2013 Investment Company Fact Book: A Review of Trends and Activities in the U.S. Investment Company Industry*. 53rd edition; asset allocation of IRAs and 401(k) accounts are based on participants in their twenties.

However, there is still much to be achieved in terms of increasing both participation rates and contribution amounts to ensure that individuals can achieve their retirement goals, including reducing the risk of retiring without sufficient funds to replace their income at a reasonable rate. The U.S. is lagging in retirement savings when compared against many other OECD countries. Saving more for retirement improves the lives of future retirees in the country. It also puts fewer burdens on other citizens. Beyond the direct impact on individuals, retirement savings promote economic growth through a larger domestic asset base that is invested in productive activities in the economy. With an already low household savings rate in the U.S., a reduction in private retirement savings would only further exacerbate this situation. All of these critical goals underscore the importance of continuing to reinforce all the improvements that have been made to the private retirement system.

Assets in retirement savings accounts can be further enhanced by increasing limits on tax-deferred contributions. Since the ability of individuals to save may not be smooth over time, the ability to contribute more at some points in time provides valuable flexibility. In general, higher limits also support greater levels of retirement savings, thus reducing the number of individuals who may be at risk of having too low replacement rates during retirement. Proposals to tighten limits on tax-deferred contributions seek to increase tax revenue in the short run while ignoring the decreased tax revenue in the longer run that would come from taxable withdrawals from defined contribution and traditional IRA accounts. The tax incentives associated with retirement savings are merely tax deferrals, not tax deductions or exemptions. Myopic proposals that focus on increasing tax revenue in the short run ignore the general economic benefits of encouraging a secure retirement for a large number of citizens, and improving the growth of the overall economy.

Retirement savings should also be encouraged by expanding the scope of auto-enrollment and auto-escalation features. These features help to counteract a natural behavioral tendency for individuals to delay saving for retirement, even when it is clearly in their best interest to do so. Starting auto-enrollment at a significantly higher percentage level of income, and auto-escalating at a faster pace and to a higher cap will all help to achieve appropriate income replacement levels in retirement. While financial literacy programs can help to inform employees to plan their retirement savings more carefully, default enrollments clearly serve a more direct role in encouraging savings, while providing flexibility to individuals with opt-out features. Increasing guidance to savers in the form of financial literacy and advisory services is also very valuable. Imposing additional restrictions on the ability of investment advisors to assist individuals merely limits the benefits that are frequently ascribed to these advisory services.

Public policies related to retirement savings must continue to focus on increasing access to tax-advantaged retirement vehicles, encouraging employees to participate in these plans, and educating, incentivizing and nudging them to meaningfully contribute to those plans. Particular focus should be on segments of the populations that don’t have access or have low participation rates in retirement plans, including part-time workers, those working for smaller companies, and lower-income earners. Protecting and expanding the retirement security of all individuals is paramount from both societal and economic perspectives.

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