

Retirement Plans for the Self-employed in the US: Recent Developments

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The US retirement security system is typically described as a three-legged stool comprised of social security – a public pension system, employment based retirement plans – a workplace retirement system, and individual saving – a household retirement system. Over the past sixty years, the US system has evolved from relying primarily on social security and private saving as mechanisms for providing retirement security, to a system that relies increasingly on employment sponsored plans. However, retirement security programmes for the self-employed (both public and private) have developed at a substantially slower rate than for other sectors of the employed labour force.

Beginning with an overview of the history of the development of public and private retirement savings opportunities for self-employed individuals, this paper looks at the reasons for their slower pace of development and examines the recent developments in retirement plans for the self-employed within the US system. While the self-employed retirement security system today provides approximately the same opportunities as the system for the employed, it is still viewed as administratively burdensome. On the other hand, the self-employed system provides a degree of flexibility and a level of retirement subsidies that are not generally available to the employed labour force.

Social Security: Demography and other Statistics

The demographic profile in the US is slowly becoming a sort of inverted pyramid, with proportionately more elderly people compared to youngsters. The total US population was 281.42 million as per the 2000 census¹. The median age was 35.3 years and 70% of the population was above 21 years and nearly 15% above 62 years. In other words there are more than 42 million Americans who are in need of retirement benefits. Comparatively, the population of 65 and older constituted 12.4% of the population in 2000, 11.3% in 1980, and 9.2% in 1960.

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The self-employed constituted around 7% of the labour force or 8.6 million as of 2000 (Exhibit 1) and 10 million in 2002.

Exhibit 1 US Labour Force	
Table 1	
Class of Worker	Percent
Private wage and salary workers	78.5
Government workers	14.6
Self-employed: own unincorporated business	6.6
Unpaid family workers	0.3
Total	100

Source : U.S Bureau of Census, Census

The Current Population Survey (CPS) of the US labour force classifies employment in three principal ways: (1) according to industry, for which a Standard Industrial Classification (SIC) system is used; (2) according to occupation for which a Standard Occupational Classification (SOC) system is used; and (3) according to class of worker.

Self-employment is identified under this third schema, in which delineations are made among wage and salary

employment, self-employment and unpaid family work. Sub-distinctions are also possible, such as private and government within wage and salary employment, and employer and own account within self-employment². In 1967, the definition of self-employed changed wherein, if the business of the self-employed person is incorporated, then the worker is classified as a 'wage and salary worker' (considered an employee of the incorporated business). In other words, since 1967, only owners who do not operate their own incorporated business were treated as self-employed. To that extent, the figure of 8.6/10 million quoted above is an underestimate since it does not include self-employed in own incorporated business.

While the share of self-employed in the US labour force is around 7%³ the share of self-employment has significantly declined in the non-agricultural industry category, from 12% in 1948 to less than 7% in 2002 (Exhibit 2). Self-employment has become a less significant part of employment in the US in the 90s compared to the 50s. The reasons are the diminished importance of agriculture, particularly small farming, in the employment scene and the marked trend towards incorporating businesses.

A survey of self-employed workers by industry groups reveals that other than agriculture, the self-employed are in significant

Exhibit 2 Self-Employment in the United States									
Annual Averages, Selected Years, 1948-2002 (thousands)									
Year	All Industries			Non-Agricultural Industries			Agriculture		
	Total Employed	Self-employed	% SE	Total Employed	Self-employed	% SE	Total Employed	Self-employed	% SE
1948	58,343	10,755	18.4%	50,714	6,110	12.0%	7,629	4,665	61.1%
1955	62,170	9,577	15.4%	55,722	5,851	10.5%	6,450	3,728	57.8%
1965	71,088	8,394	11.8%	66,726	6,097	9.1%	4,361	2,297	52.7%
1967	74,372	7,170	9.6%	70,527	5,174	7.3%	3,844	1,996	51.9%
1975	85,846	7,427	8.7%	82,438	5,705	6.9%	3,408	1,722	50.5%
1985	107,150	9,269	8.7%	103,971	7,811	7.5%	3,179	1,458	45.9%
1994	123,060	10,648	8.7%	119,651	9,003	7.5%	3,409	1,645	48.3%
1995	124,900	10,482	8.4%	121,460	8,902	7.3%	3,440	1,580	45.9%
2000	136,891	10,215	7.5%	134,427	9,205	6.8%	2,464	1,010	41.0%
2002	136,485	9,926	7.3%	134,174	8,923	6.7%	2,311	1,003	13.4%

Notes :

1. Prior to 1967, estimates of the self-employed included persons who operated their own incorporated businesses. These individuals were not identified as wage and salary workers until that year.
2. In 1994 major redesign for the CPS was done including introduction of 1990 census based population controls, adjusted for the estimated undercount. Hence it is not directly comparable with data of earlier years.

Source : Till 1994 taken from Bregger, E John, 1996, 'Measuring Self-employment in the US', *Monthly Labor Review*, Jan-Feb. and later years from the Labor Force Statistics of CPS-Department of Labor.

numbers in activities like retail trade, automobile services, and other services. They are also found in good measure in contract construction. There was an actual decline in categories like farms and retail trade over the long period from 1930 to 2001⁴.

Reflecting the declining share of self-employed groups, the national income statistics reveal that the share of proprietor's income is also declining⁵. Exhibit 3 shows the share of different groups in National Income for selected years for different forms of organisations.

within a country. There can be differences in the way the Labour Department defines the term 'self employed' as compared to the Treasury Department tax officials. Similar differences could pertain to definitions of 'the elderly', 'family', 'dependants', etc. The discussion of the definition of self-employed so far has been from the standpoint of the Labour Department (CPS) and Commerce Department (US Census).

In general, an individual in business for himself or herself is considered self-employed. Sole proprietors and partners are self-employed. Self-employment can include part-time work.

Exhibit 3 National Income by Sector: Legal Form of Organisation and Type of Income [\$ billions]								
Category	1950	1960	1970	1980	1990	1995	2000	2001
1 National Income	241	427.5	837.5	2243	4642.1	5876.7	7984.4	8122
2 Domestic Business	211.8 [88]	362.4 [85]	679.2 [81]	1824.9 [81]	3765.8 [81]	4790.2 [82]	6627.3 [83]	6688.4 [82]
3 Corporate Business	132.4 [55]	239.4 [56]	484 [58]	1334.1 [59]	2687.7 [58]	3445.6 [59]	4778.6 [60]	4762.7 [59]
4 Sole Proprietorship and Partnership	64.4 [27]	89.7 [21]	134.5 [16]	314.8 [14]	671.4 [14]	832.5 [14]	1191.7 [15]	1248.3 [15]
5 Other Private Business	12.3 [5]	27.8 [7]	47.9 [6]	140.2 [6]	333.5 [7]	423.8 [7]	552.6 [7]	567.4 [7]
6 Government Enterprises	2.7 [1]	5.5 [1]	12.8 [2]	35.8 [2]	73.2 [2]	88.4 [2]	104.6 [1]	110 [1]
7 Households and Institutions	6.5 [3]	13.9 [3]	32.4 [4]	87.1 [4]	237.9 [5]	330.3 [6]	431.1 [5]	459.6 [6]
8 General Government	21.2 [9]	48.1 [11]	119.4 [14]	295.7 [13]	609.4 [13]	735.8 [13]	902.6 [11]	952.1 [12]
9 Rest of the World	1.5[1]	3.2 [1]	6.4 [1]	35.3 [2]	29 [1]	20.3 [-]	23.4 [-]	21.9 [-]

Note : Figures in brackets are percentages to national income. Percentages computed by us from source.
 - indicates negligible

Source: Bureau of Economic Analysis: National Income Statistics - extracted from original Table 1.15

The share of national income attributable to sole proprietorships and partnerships declined from 27% in 1951 to 15% in the year 2001, indicative of the overall drop in employment in this sector, and that the self employed share in national income has fallen during the period. However, the number of persons with taxable earnings has increased in the self-employed segments from 7% to around 10% (Exhibit 4). This is in contrast to their decline in the share in employment data seen earlier. But their share in taxable earnings has shown a decline from 8% to 5% and this could be attributed to reduction in rates as well as smaller increase in the number of self-employed as seen earlier.

Differences in Self-employed Determination

The terminology pertaining to social security aspects is not common between countries and between different agencies

For our purposes, we are interested in workers who are completely self-employed. That is, they do not have any labour earnings attributable from work as an employee for another business entity.

Regulatory Environment for Self-employed Retirement Plans

The regulatory environment for self-employed retirement plans is often viewed as overly complex and technical. The regulatory structure is designed to ensure that tax subsidies are well-distributed throughout the labour force, that plans are not maintained for the exclusive benefit of a few key workers, and there is adequate reporting to ensure that plan sponsors bear sufficient fiduciary responsibility and that participants' assets are relatively safe from fraud and/or theft.

Exhibit 4 Number of Workers, Taxable Earnings and Contributions by Type of Employment

Year	Number of workers reported with taxable earnings ^a			Reported Taxable earnings ^b			OASDI contributions ^{c, d}		
	(thousands)			(\$ millions)			(\$ millions)		
	Total all workers	Wage and salary workers	Self-employed	Total	Wages	Self-employed income	Total	Wage and salary workers	Self-employed
1951	58,120	54,630 [93]	4,190 [7]	120,770	111,250 [92]	9,520 [8]	3,552	3,338 [94]	214 [6]
1960	72,530	66,980 [91]	6,870 [9]	207,000	188,580 [91]	18,420 [9]	12,144	11,315 [93]	829 [7]
1970	93,090	88,180 [93]	6,270 [7]	415,580	388,680 [94]	26,900 [6]	34,344	32,649 [95]	1,695 [5]
1980	113,000	107,200 [93]	8,200 [7]	1,180,700	1,109,000 [94]	71,700 [6]	117,729	112,674 [96]	5,055 [4]
1990	133,600	126,100 [91]	12,500 [9]	2,358,000	2,222,000 [94]	136,000 [6]	292,392	275,528 [94]	16,864 [6]
2000 ^{e, f}	153,700	144,900 [90]	14,700 [10]	3,991,100	3,780,400 [95]	210,700 [5]	494,896	468,770 [95]	26,127 [5]
2001 ^g	153,500	144,800 [90]	14,700 [10]	4,198,300	3,978,700 [95]	219,600 [5]	520,589	493,359 [95]	27,230 [5]

Source: Social Security Administration, Master Earnings File, Table 4.B11

Note:

- OASDI: Old Age, Survivors, and Disability Insurance.
- Workers with earnings in both wage and salary employment and self-employment are counted in each type of employment.
 - Based on annual maximum taxable earnings
 - Contribution rates are specified
 - Unadjusted for multi-employer tax refunds. Unadjusted for tax credits
 - Preliminary data
 - Taxable earnings are preliminary estimates based on Social Security data; employment data are preliminary estimates based on data from Bureau of Labor Statistics and the National Income and Product accounts
 - Preliminary estimates based on data from Bureau of Labor statistics and the National Income and Product accounts.
- Figures in brackets are percentages of respective totals, computed by authors from source.

The genesis of the current regulatory structure was the passage of the Employee Retirement Income Security Act of 1974 (ERISA). This law divided the main regulatory responsibilities between the Treasury Department and the Department of Labour. In addition, the Security Exchange Commission (SEC) provides oversight for securities fraud.

The Treasury Department has primary responsibility for regulating a plan's tax qualified status. If a plan meets the Treasury Department standards, then the plan receives special tax treatment as accorded under the Internal Revenue Code⁶. The treatment includes being able to deduct contributions to the plan as a normal business expense and a deferral of income tax on contributions and associated earnings.

The value of the income tax deferral is often viewed as the chief incentive of participating in a tax-qualified retirement plan. Consider a simple two-period model of consumption and saving. Assume an individual earns a fixed amount of labour income in the first period and is retired in the second period. In the absence of tax-deferral, saving is in after-tax dollars. The per period budget constraints are

$$C_1 = I(1 - \tau) - S$$

$$C_2 = S(1 + i(1 - \tau))$$

where C_t , $t = 1, 2$ is first and second period consumption, I is labour income, S is retirement saving, i is the pre-tax return on saving, and τ is the marginal tax rate. Consolidating, the lifetime budget constraint is given by

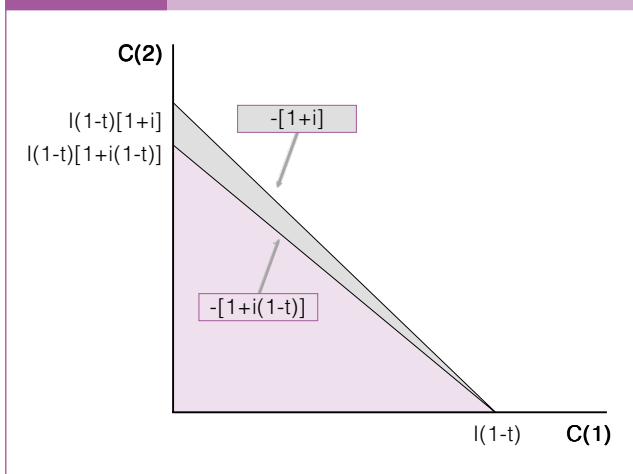
$$C_1 + \frac{C_2}{(1 + i(1 - \tau))} = I(1 - \tau) \quad (1)$$

By contrast, participation in a tax-subsidised retirement plan yields the lifetime budget constraint

$$C_1 + \frac{C_2}{(1 + i)} = I(1 - \tau) \quad (2)$$

Comparing the two budget constraints in Exhibit 5, we see that the tax-deferred account provides greater consumption possibilities than after-tax account.

Exhibit 5 Comparison of Budget Constraints: Tax-deferred vs After-tax



That is, it is always preferable to save through a tax-deferred retirement account, all else being equal, since the government subsidises the account. There are two ways to conceptualise the government subsidy. First, the government is providing an interest-free loan on the deferred taxes. Alternatively, and equivalently, the participant is receiving permanent deferral (an exclusion) on the income taxes due on the earnings in the account.

The value of the government subsidy provides a strong incentive for the self-employed to save and/or shelter income in a tax-deferred retirement account. To ensure that the government subsidy is distributed fairly throughout the labour force, there are a multitude of laws and regulations to encourage the decision-makers within a business to provide broad coverage and equitable benefits. The complexity of these rules can create substantial administrative burdens (to ensure compliance) and may discourage plan formation, particularly by self-employed individuals.

The Department of Labour shares regulatory responsibility with the Treasury Department over a variety of issues: coverage, participation, funding, and vesting requirements. In addition, the Labour Department has primary jurisdiction over two areas: disclosure (including reporting) and fiduciary responsibility. Labour regulations can discourage plan participation by the self-employed due to relatively larger cost share of plan compliance, particularly in the case of Defined Benefit type plans, since these plans require the most extensive reporting and are required to pay insurance premiums to the Pension Benefit Guaranty Corporation (PBGC).

Social Security for the Self-employed

The US Social Security system began with the Social Security Act of 1935. Initially, the system covered only employed workers of commerce and industry. Over time, coverage under the system has expanded with approximately 95% of the labour force now potentially eligible for social security benefits. However, self-employed individuals did not become eligible for coverage until 1951. One reason for initially excluding the self-employed was the perceived administrative burdens on both the government and the self-employed. Coverage under the system requires payment of social security contributions (taxes) to the Treasury, and reporting of covered labour earnings to the Social Security Administration.

Social Security Contributions

For 2003, a self-employed worker covered by the Social Security system contributes 12.4% of earned income, up to a taxable maximum of \$87,000, to the Social Security system. Of these contributions, 10.6 percentage points are paid into the Old Age and Survivor's Insurance (OASI) fund and 1.8 percentage points are paid into the Disability Income (DI) insurance fund. A worker earns one credit for each \$890, up to a maximum of four credits during the calendar year⁷. In general, a self-employed worker is fully insured by the Social Security system after earning 40 credits of coverage.

For example, consider a self-employed worker with \$50,000 in annual labour earnings. This person would contribute \$5,300 to the OASI trust fund and \$900 to the DI trust fund, with total contributions of \$6,200. The worker would earn four credits of coverage during the year.

A separate albeit important issue, is the taxability of Social Security contributions. Even after the self-employed gained coverage under the Social Security system, this segment of the population did not receive income tax parity for Social Security contributions until 1964. Parity pertains to the deductibility of contributions from taxable income. For employees' contributions, 6.2% of the contribution is deducted from an employee's pay. The other 6.2% is 'paid' by the employer. Regardless of the source of the contribution, employers have always been able to deduct the full 12.4% from their taxable income as a normal business expense. In addition, the employee does not count the employer's share of the contribution in taxable income. Prior to 1964, the self-employed could not deduct Social Security contributions from taxable income. The change in treatment now allows

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the self-employed to deduct one-half of their contributions (equivalent to the employer's share) from taxable income. As a result, the system is now neutral to the form of employment.

Social Security Benefits

The Social Security system provides benefits for covered workers, their spouses, and certain dependents⁸. Self-employed workers covered under the system enjoy the same rights and benefits as the employed labour force.

The Social Security system uses a progressive benefit formula that provides a larger labour earnings replacement ratio for a worker with lower lifetime earnings. Upon retirement, the Social Security Administration (SSA) calculates the Average Indexed Monthly Earnings (AIME) of a covered retiree⁹. SSA uses this amount to calculate the retiree's Primary Insurance Amount (PIA). For 2003, the formula for the PIA provides a 90% replacement rate for the first \$606 of AIME, 32% for AIME between \$606 and \$3,653, and 15% for AIME above \$3,653. The primary insurance amount may then be adjusted for early or delayed retirement, earned income, and/or family status. The benefit formula is progressive since, even though the level of benefit rises, the replacement ratio falls for retirees with higher lifetime income. The policy reason is that these individuals are viewed as having more opportunities to provide for their own retirement security either through a retirement plan or through private saving. (Exhibit 6 provides a demonstration of the how PIA changes with lifetime earnings.)

In the past twenty years, there have been two changes in the benefit calculation that further reduce the replacement ratio

for retirees with moderate to high lifetime earnings. In 1983, the US Congress approved means-testing of Social Security benefits, which in effect reduced a retiree's Social Security benefit if the retiree passed a threshold level of other retirement income. This programme was designed to provide some relief for the looming Social Security funding crisis. To facilitate efficient monitoring and enforcement of reported retiree income, it was decided that means-testing would be designed through the taxation of Social Security benefits. In 1993, the Congress approved an increase in benefits subject to taxation, to help resolve short-term funding crises of the Medicare system¹⁰.

The overall impact has been to greatly reduce the consumable Social Security benefit of moderate and high-income retirees. For example, consider a married retiree with a base annual Social Security of \$7,200, total taxable retirement income of \$53,600, and paying income tax at a marginal rate of 25%. In the absence of means-testing, the retiree would have consumable income of \$42,000. With means-testing, consumable income falls to \$40,470. The reason is that the Social Security benefit has fallen by $\$7,200 \times 0.85 \times 0.25 = \$1,530$, a reduction of 21.25%. The implication is that all retirees, and in particular the self-employed, must take on larger responsibilities for ensuring an adequate level of retirement income.

Self-employed Retirement Programmes

There are a number of government subsidised retirement savings programmes geared towards the self-employed. Traditional programmes include Individual Retirement Arrangements (IRAs), Simplified Employee Pensions (SEPs), and Keogh (HR 10) plans¹¹. In addition, Roth IRAs, which tax contributions but not earnings or distributions, are available for use by the self-employed. Overall, there is substantial flexibility in the design of retirement plans for the self-employed, with 100% of self-employed individuals eligible to participate in some type of programme each year.

While the current choices available to the self-employed are comparable to those offered to employees, this was not always the case. Indeed, the self-employed were not offered the same types of government subsidies for decades after these programmes became widely offered to the employed labour force. Government tax subsidies for retirement plans of corporate employees were first formulated in the 1920s. After years of deliberation, Congress passed the Self-Employed Individuals Retirement Act of 1962. This law established Keogh plans, which allowed self-employed individuals to

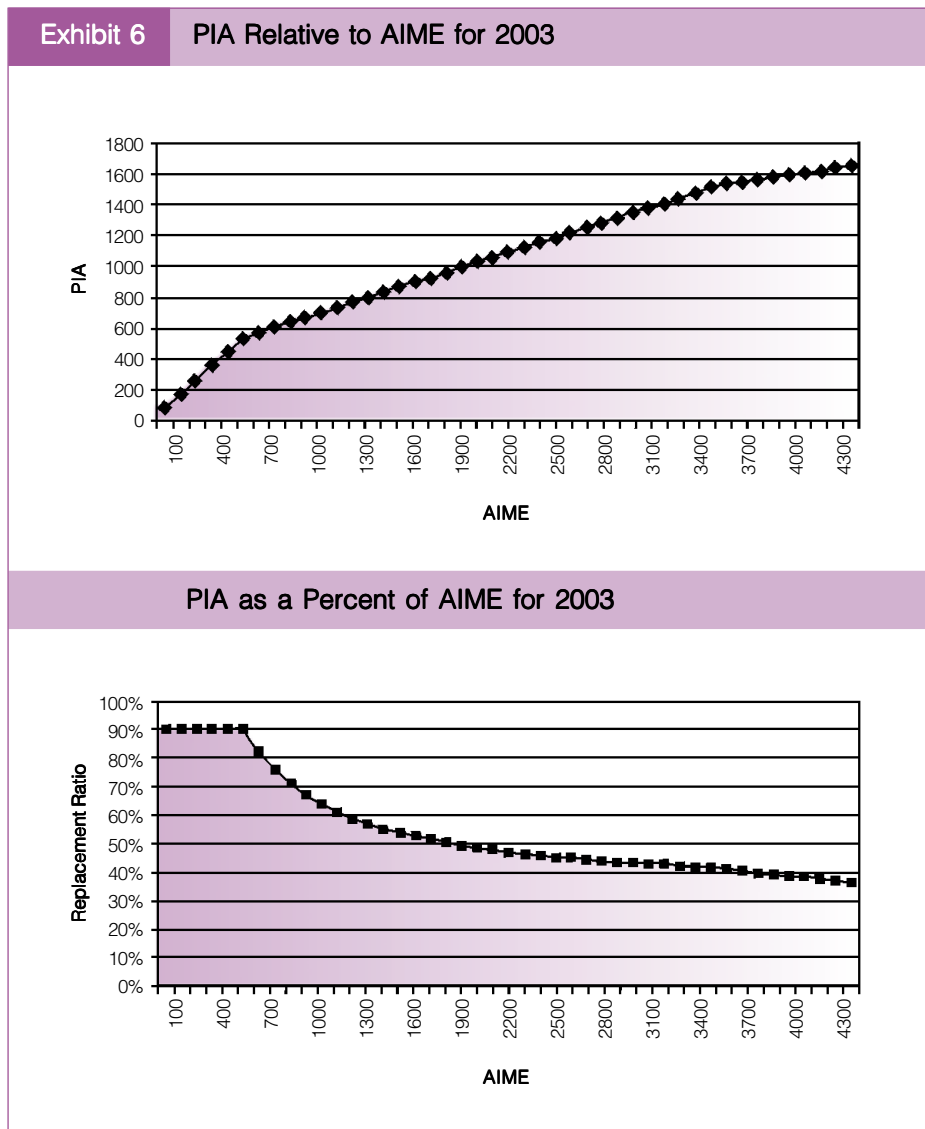
establish tax subsidised retirement pension and profit sharing plans. However, due to concerns over the ability of the self-employed to shelter excessive amounts of income from taxation, the law incorporated many restrictions and limitations when compared to the opportunities available to corporate employees¹². Over time, however, many of these restrictions have been removed.

Individual Retirement Arrangements

IRAs were included in the Employee Retirement Security Income Act of 1974 (ERISA) as a retirement savings programme that provides tax subsidies for individuals not covered by a traditional employer based plan. The rationale for the programme was that, in 1973, there were approximately 40 million workers (and most of the self-employed) who were not covered or eligible for a government

subsidised retirement programme. As such, IRAs have been viewed as ideally suited for self-employed workers. However, Congress has historically viewed IRAs as an inferior programme relative to the employer based plan. In an effort to continue to encourage the self-employed to cover any eligible employees, Congress has placed contribution restrictions on IRAs that are much less generous than other types of plans.

In general, eligibility for contributing to an IRA is conditional on coverage in an employer based plan and/or earned income. Any worker, including the self-employed, who is not covered by an employment-based plan is eligible to contribute to an IRA. In addition, certain covered workers with low to moderate earnings are eligible to contribute to an IRA. For 2003, workers participating in employer-based plans may contribute to an IRA if their taxable income is less than



A number of recent developments are geared towards providing incentives for the self-employed to adopt flexible DC based plans.

These provisions focus on reducing administrative burdens, increasing the size of the tax subsidy, and increasing the liquidity of retirement plan assets.

\$50,000 and \$70,000 for single and married workers respectively.

Keogh Plans

Keogh plans may only be established by a sole proprietor or a partnership. The plan may be set up either as a Defined Benefit (DB) or a Defined Contribution (DC) plan. If established as a DB plan, the benefit limit is the minimum of 100% of the high three average years of labour earnings or \$160,000. If structured as a DC plan, then the maximum contribution is the minimum of 100% of the participant's compensation or \$40,000. As with other plans that receive government tax subsidies, these limits are in place to encourage a more equitable distribution of the total tax subsidy¹³.

In addition to contribution and benefit constraints, there are a number of restrictions regarding eligibility, coverage, participation, and the distribution of benefits within the plan¹⁴. In general, this set of rules is considered a strong deterrent to Keogh plan formation since the rules create large administrative and regulatory burdens and Keoghs have lost out to other, less burdensome retirement savings programmes.

Simplified Employee Pensions (SEPs)

SEPs were created in an attempt to encourage participation in retirement savings programmes. These plans may be adopted by corporations or by self-employed individuals. An SEP must be established as a DC plan. As such, it can be argued that an SEP is an IRA with higher contribution limits. This view holds for self-employed individuals, since these workers control the decision on whether to participate and

the level of annual contribution. However, there are two important differences that make these plans more costly to maintain than IRAs or Savings Incentive Match Plans for Employees (SIMPLE) plans.

First, if a self-employed person wants to contribute to an SEP, then the owner-employee must make a comparable contribution for every eligible employee of the business. Thereby, for every dollar the owner-employee contributes, profits are reduced proportionately depending on the number of eligible employees. While this feature of SEPs makes contributions more costly, it also greatly reduces administrative and regulatory burdens since the owner-employee does not have to be concerned with non-discrimination testing¹⁵.

A second related factor is that employees of the self-employed owner cannot make contributions out of their own salary. These types of Salary Reduction SEPs, known as SARSEPs became prohibited with the 1996 enactment of SIMPLE plans, which take the place of SARSEPs. Again, the implication is a lack of flexibility on the part of the self-employed owner and the employees of the business.

To encourage use of SEPs and to offset the impact of the lack of flexibility, the contribution limits are very generous. For 2003, the maximum allowable contribution is the minimum of 100% of compensation or \$40,000. These limits far exceed what a self-employed individual can contribute to an IRA and provide a strong incentive for certain types of self-employed businesses to adopt SEPs.

Recent Developments

A number of recent developments have helped expand participation by the self-employed in qualified retirement savings programmes. Many of these developments are geared towards providing incentives for the self-employed to adopt flexible DC based plans. These provisions focus on reducing administrative burdens, increasing the size of the tax subsidy, and increasing the liquidity of retirement plan assets.

Savings Incentive Match Plans for Employees

SIMPLE plans were created as part of the Small Business Job Protection Act of 1996. These plans were designed to create a retirement savings programme that reduced administrative burdens and increased plan flexibility while providing greater savings opportunities than IRAs. As such, the programme is only available to small employers with fewer than 100 employees.

For 2003, the base contribution limit for a self-employed worker is \$8,000. This limit increases by \$1,000 per year through 2005 when the limit is \$10,000 (indexed for inflation afterward). Self-employed workers over the age of 50 can make special 'catch-up' contributions.

If the self-employed worker has employees, the owner-employee must cover all employees who meet the age and service requirement. However, the employer has more flexibility regarding contributions on behalf of and by employees. Employees are allowed to make elective contributions from their wages.

Initial data indicate that SIMPLE plans are an extremely popular programme for self-employed workers starting a new plan. The design of the plan greatly reduces administrative burdens, allows employers to tailor benefits to employees who value the programme, and provides expanded tax subsidies for the owner-employee. In addition, the self-employed are also eligible to receive up to \$1,500 in tax credits over three years to help defray the start-up and administrative costs of SIMPLE plans.

Plan Loans

In 2001 and earlier, self-employed owner-employees were prohibited from taking loans from a qualified retirement plan. The implication of this prohibited transaction was to reduce liquidity for the self-employed. This lack of liquidity was viewed as a contributing factor to the low participation rates by self-employed workers in retirement plans. The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) repealed this prohibition effective in 2002 in an effort to encourage the self-employed to start-up a qualified retirement plan.

Increases in Contribution and Benefit Limits

EGTRRA greatly expanded the contribution and benefit limits applicable to all qualified retirement plans. One rationale for this expansion was to restore limits that had been in place prior to the 1986 Tax Act, when tax subsidies had been scaled back to help reduce soaring budget deficits. Another reason for expanding the limits was to encourage owner-employees to adopt plans. As noted above, the value of tax subsidy for each dollar of contribution rises with increases in the marginal tax rate. By allowing key employees to receive larger subsidies, it is hoped that more businesses will adopt retirement plans and, as a result, more employees will also receive tax subsidies. Exhibit 7 provides a description of the increases in the contribution limits in self-employed retirement plans.

A major change in the structure of self-employed retirement plans was the introduction of the Roth IRA in 1998. Under a Roth IRA, contributions are made on an after-tax basis, but earnings and distributions from the account are excluded from income tax.

Roth Contributions

A major change in structure of self-employed retirement plans was the introduction of the Roth IRA in 1998. Under a Roth IRA, contributions are made on an after-tax basis, but earnings and distributions from the account are excluded from income tax. Under certain conditions a Roth IRA provides the same consumption possibilities as a traditional IRA. If an individual is in the same marginal income tax bracket when the contribution is made and when the distribution is taken, there is generally no difference in consumption possibilities between the Roth IRA and the traditional IRA¹⁶. Following our earlier example, the per period and lifetime budget constraints are

$$\begin{aligned}
 C_1 &= I(1 - \tau) - S \\
 C_2 &= S(1 + i) \\
 C_1 + \frac{C_2}{(1 + i)} &= I(1 - \tau) \quad (3)
 \end{aligned}$$

Assuming a constant marginal tax rate over time and comparing the last constraint with equation 2, we see there is no difference in the lifetime budget constraint between a traditional and Roth Instrument.

However, it is argued that Roth IRAs allow for larger contributions when measured on a pre-tax basis. For example, assume a self-employed individual is in the 25% marginal tax bracket. The Roth contribution equivalent of a \$3,000 pre-tax contribution is \$4,000. Again, this can provide a strong incentive for the self-employed to adopt Roth IRAs. This incentive is stronger for new business owners that may be in low or zero marginal tax bracket but have expectations of being in a higher tax bracket in the future. In this case, the Roth Instrument is strictly preferred to the traditional IRA.

Exhibit 7 Contribution Limits in Self-employed Retirement Plans				
Limits	Plan			
	Keogh	SEP	IRA	SIMPLE
Prior Law (2001)				
Percent of Pay	25%	25%	100%	25%
Dollar Limit	\$35,000	\$35,000	\$2,000	
Current Law				
Percent of Pay	100%	100%	100%	100%
Dollar Limit				
2003	\$41,000	\$41,000	\$3,000	\$8,000
2004	\$42,000	\$42,000	\$3,000	\$9,000
2005	\$43,000	\$43,000	4,000	\$10,000
2006	\$45,000	\$45,000	\$4,000	\$10,000
2007	\$46,000	\$46,000	\$4,000	\$10,500
2008	\$47,000	\$47,000	\$5,000	\$10,500
2009	\$49,000	\$49,000	\$5,000	\$11,000
Catch-up Limits				
2003	na	na	\$500	\$1,000
2004	na	na	\$500	\$1,500
2005	na	na	\$500	\$2,000
2006	na	na	\$1,000	\$2,500
2007	na	na	\$1,000	\$2,500
2008	na	na	\$1,000	\$2,500
2009	na	na	\$1,000	\$2,500

Source: Allen et al, 2003, Pension Planning: Pension, Profit Sharing and Other Deferred Compensation, Plans, New York: Mc Graw Hill, and authors' calculations.

Note: Assumes 3% inflation.

Conclusions

This paper has discussed the history of and recent developments in retirement programmes for the self-employed in the US. Programmes geared towards providing retirement income security initially focused on the incorporated, employed labour force. The self-employed workforce, in some instances, had to wait decades to receive equitable treatment of both public (Social Security) and private, government subsidised retirement programmes. Since the early 1990s, much attention has been focused on the lack of retirement plan participation by small business, and in particular the self-employed. As a result, the

self-employed now have retirement savings opportunities that are similar to that of the employed labour force. These opportunities have become more critical as the government's commitment to use Social Security as an income replacement tool have been brought into question.

We plan to use this paper as a framework for developing models and policy options for the self-employed in both developed and developing economies. Our future research agenda includes exploring how the US experience can help guide the development of similar programmes in Asia, and how increased retirement income security impacts traditional family structures.

An earlier version of this paper was presented at the Asia Pacific Risk and Insurance Association, 7th Annual Conference, Bangkok, July 20-23, 2003.

References and Notes

- 1 US Census Bureau—fact finder—2000
- 2 Bregger, E John, 1996, 'Measuring Self-employment in the United States', *Monthly Labor Review*, Jan-Feb.
- 3 These figures are taken from annual averages over monthly data.
- 4 Bureau of Economic Analysis, July 28, 2000.
- 5 Bureau of Economic Analysis: National Income Statistics, extracted from original table 1.15
- 6 For a complete discussion of these rules see Allen, Everett T Jr, Joseph J Melone, Jerry S Rosenbloom, and Dennis F Mahoney, 2003, *Pension Planning: Pension, Profit Sharing, and Other Deferred Compensation Plans*, McGraw-Hill, New York.
- 7 Taxable maximum earnings and earnings required for one credit are indexed to the growth in average labour earnings.
- 8 In addition, the DI portion of Social Security provides benefits for the disabled, their spouses, and certain dependents. The benefit structure of the system is similar to OASI, with the main exception being eligibility criteria for full benefits. A complete discussion of DI is beyond the scope of this paper.
- 9 The amount is an inflation indexed monthly average of the 35 highest years of earnings.
- 10 Medicare is a hospital insurance programme for covered individuals aged 65 years and older.
- 11 Self-employed individuals with employees can also set up and participate in profit-sharing plans, thrift plans, 401(k) plans, defined

benefit plans, the stock bonus plans. This paper focuses on plans generally available only to the self-employed.

- 12 These limitations provided incentives for many small businesses to incorporate in order to receive the same tax advantages of larger companies.
- 13 The distribution of the tax subsidy is skewed heavily towards the top income decile, which receives approximately 70% of the subsidy.
- 14 These restrictions are very complex. For a thorough discussion of these rules see Allen et al, *Pension Planning: Pension, Profit Sharing, and Other Deferred Compensation Plans*.
- 15 Non-discrimination testing requires that highly compensated employees and key employees cannot receive benefits disproportionately relative to non-highly compensated employees.
- 16 Burman, Gale, and Weiner argue that the Roth is always superior to a traditional IRA. 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*, Volume LIV, No 3, Sept.

Other Works

- 1 Labour Force Statistics from the Current Population Survey – US Dept of Labour
- 2 <http://data.bls.gov/servlet/SurveyOutputServlet>
- 3 <http://www.irs.gov/formspubs>
- 4 IRS-USA Publication 560, 'Retirement Plans for Small Business'.
- 5 IRS-USA-Forms and Publications
- 6 Joulfaian, David, and David P Richardson, 2001, 'Who Takes Advantage of Tax-Deferred Savings Programs? Evidence from Federal Income Tax Data', *National Tax Journal*, Volume LIV, No 3, Sept.

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