



Planning For Your Retirement

The Traditional “Three-Legged Stool” for Funding Retirement Security is Facing Several Challenges. The savings rate in the U.S. has plummeted to an historic low, and has actually gone negative. Individuals and families are having a harder time than ever trying to save part of their income.

Social Security

“Reforms” and taxation of benefits threaten retirement income.

Employer-Provided Pension

“Defined Benefit” plans such as CPF provide monthly retirement benefits for life, and monthly survivor benefits. A defined benefit pension is a predictable, secure pension for life.

However, many employers are replacing these plans with individual “Defined Contribution” 401(k) savings plans, which are appropriate as supplements to, but not replacements for, a defined benefit plan.

Risks of Relying on DC plan as Primary Pension

Risks inherent in relying on DC plan as primary retirement vehicle

- 1) Savings Risk
- 2) Investment Risk
- 3) Leakage Risk
- 4) Longevity Risk

Three Critical 401(k) Considerations

- ◆ Life Expectancy
- ◆ Investment Costs
- ◆ The “4% Payout Rule”

Current U.S. Life Expectancies

- ◆ Men: At age 65, men have a 50% chance of living beyond age 85 --- and a 25% chance of living beyond 92
- ◆ Women: At age 65, women have a 50% chance of living beyond age 88 --- and a 25% chance of living beyond age 94
- ◆ Couples: At age 65, couples have a 50% chance that one will live beyond age 92 and a 25% chance that one will live beyond age 97

Source: Society of Actuaries

The “4% Payout Rule”

- ◆ Experts agree that in retirement, 401(k) participants should pay themselves no more than 4% of their account balance each year
- ◆ For example, if the participant’s 401(k) account balance at retirement equals \$500,000, then an annual 4% payout equals \$20,000 a year, or \$1,667 per month
- ◆ This payout rate produces a 90% chance of the benefit lasting 30 years

Comparison of CPF to a 401(k)

Now let's compare CPF to a 401(k) using...

- ◆ Assumed Annual contributions of \$8,000 (2000 hours at \$4 per hour)
- ◆ Actual stock and bond index returns
- ◆ A 1.24% average annual investment cost for 401(k) plans
- ◆ A 4% payout of the 401(k) account balance

25 Year Benefit Comparison

1989 - 2013

(If CPF Accrual had been 1% for All Years)



Central Pension Fund

401(k)

Year	Annual Contribution	Annual Balance	Annual Contribution	S&P 500 Index*	Annual Balance
1989	\$8,000	\$8,000	\$8,000	30.45%	\$10,436
1990	\$8,000	\$16,000	\$8,000	-4.34%	\$17,636
1991	\$8,000	\$24,000	\$8,000	29.23%	\$33,130
1992	\$8,000	\$32,000	\$8,000	6.38%	\$43,756
1993	\$8,000	\$40,000	\$8,000	8.84%	\$56,333
1994	\$8,000	\$48,000	\$8,000	0.09%	\$64,388
1995	\$8,000	\$56,000	\$8,000	36.34%	\$98,695
1996	\$8,000	\$64,000	\$8,000	21.73%	\$129,875
1997	\$8,000	\$72,000	\$8,000	32.13%	\$182,172
1998	\$8,000	\$80,000	\$8,000	27.34%	\$242,172
1999	\$8,000	\$88,000	\$8,000	19.81%	\$299,722
2000	\$8,000	\$96,000	\$8,000	-10.34%	\$275,906
2001	\$8,000	\$104,000	\$8,000	-13.12%	\$246,655
2002	\$8,000	\$112,000	\$8,000	-23.34%	\$195,230
2003	\$8,000	\$120,000	\$8,000	27.45%	\$259,016
2004	\$8,000	\$128,000	\$8,000	9.65%	\$292,775
2005	\$8,000	\$136,000	\$8,000	3.68%	\$311,835
2006	\$8,000	\$144,000	\$8,000	14.56%	\$366,400
2007	\$8,000	\$152,000	\$8,000	4.26%	\$390,346
2008	\$8,000	\$160,000	\$8,000	-38.23%	\$246,047
2009	\$8,000	\$168,000	\$8,000	25.23%	\$318,142
2010	\$8,000	\$176,000	\$8,000	13.83%	\$371,242
2011	\$8,000	\$184,000	\$8,000	0.88%	\$382,566
2012	\$8,000	\$192,000	\$8,000	14.77%	\$448,247
2013	\$8,000	\$200,000	\$8,000	31.16%	\$598,391

Monthly Benefit ** \$2,000

Monthly Benefit * \$1,995**

* S&P 500 Index reduced by average annual 401(k) fee of 1.24% (Source 401k Averages Book, Avg of Large and Small Plan 2013)

** CPF benefit based on 1% benefit accrual rate for all contributions

*** 401(k) benefit based on annual payout rate of 4% of fixed account balance

25 Year Benefit Comparison

1989 - 2013

(If CPF Accrual had been 1% for All Years)



Central Pension Fund			401(k)		
Year	Annual Contribution	Annual Balance	Annual Contribution	BC Aggregate Index*	Annual Balance
1989	\$8,000	\$8,000	\$8,000	13.29%	\$9,064
1990	\$8,000	\$16,000	\$8,000	7.71%	\$18,379
1991	\$8,000	\$24,000	\$8,000	14.74%	\$30,268
1992	\$8,000	\$32,000	\$8,000	6.17%	\$40,629
1993	\$8,000	\$40,000	\$8,000	8.52%	\$52,770
1994	\$8,000	\$48,000	\$8,000	-4.15%	\$58,246
1995	\$8,000	\$56,000	\$8,000	17.24%	\$77,668
1996	\$8,000	\$64,000	\$8,000	2.38%	\$87,706
1997	\$8,000	\$72,000	\$8,000	8.45%	\$103,793
1998	\$8,000	\$80,000	\$8,000	7.44%	\$120,109
1999	\$8,000	\$88,000	\$8,000	-2.07%	\$125,463
2000	\$8,000	\$96,000	\$8,000	10.40%	\$147,337
2001	\$8,000	\$104,000	\$8,000	7.19%	\$166,507
2002	\$8,000	\$112,000	\$8,000	9.03%	\$190,273
2003	\$8,000	\$120,000	\$8,000	2.87%	\$203,968
2004	\$8,000	\$128,000	\$8,000	3.10%	\$218,547
2005	\$8,000	\$136,000	\$8,000	1.20%	\$229,258
2006	\$8,000	\$144,000	\$8,000	3.10%	\$244,621
2007	\$8,000	\$152,000	\$8,000	5.73%	\$267,100
2008	\$8,000	\$160,000	\$8,000	4.01%	\$286,119
2009	\$8,000	\$168,000	\$8,000	4.70%	\$307,929
2010	\$8,000	\$176,000	\$8,000	5.31%	\$332,695
2011	\$8,000	\$184,000	\$8,000	6.61%	\$363,204
2012	\$8,000	\$192,000	\$8,000	2.98%	\$382,247
2013	\$8,000	\$200,000	\$8,000	-3.26%	\$377,545

Monthly Benefit ** \$2,000

Monthly Benefit * \$1,258**

* BC Aggregate Index reduced by average annual 401(k) fee of 1.24% (Source 401k Averages Book, Avg of Large and Small Plan 2013)

** CPF benefit based on 1% benefit accrual rate for all contributions

*** 401(k) benefit based on annual payout rate of 4% of fixed account balance

25 Year Benefit Comparison

1989 - 2013

(If CPF Accrual had been 1% for All Years)



Central Pension Fund			401(k)		
Year	Annual Contribution	Annual Balance	Annual Contribution	50% Stock-50% Bond Blend*	Annual Balance
1989	\$8,000	\$8,000	\$8,000	21.87%	\$9,750
1990	\$8,000	\$16,000	\$8,000	1.69%	\$18,049
1991	\$8,000	\$24,000	\$8,000	21.99%	\$31,776
1992	\$8,000	\$32,000	\$8,000	6.28%	\$42,273
1993	\$8,000	\$40,000	\$8,000	8.68%	\$54,637
1994	\$8,000	\$48,000	\$8,000	-2.03%	\$61,362
1995	\$8,000	\$56,000	\$8,000	26.79%	\$87,946
1996	\$8,000	\$64,000	\$8,000	12.05%	\$107,510
1997	\$8,000	\$72,000	\$8,000	20.29%	\$138,945
1998	\$8,000	\$80,000	\$8,000	17.39%	\$172,501
1999	\$8,000	\$88,000	\$8,000	8.87%	\$196,512
2000	\$8,000	\$96,000	\$8,000	0.03%	\$204,570
2001	\$8,000	\$104,000	\$8,000	-2.97%	\$206,267
2002	\$8,000	\$112,000	\$8,000	-7.15%	\$198,946
2003	\$8,000	\$120,000	\$8,000	15.16%	\$238,321
2004	\$8,000	\$128,000	\$8,000	6.38%	\$262,025
2005	\$8,000	\$136,000	\$8,000	2.44%	\$276,605
2006	\$8,000	\$144,000	\$8,000	8.83%	\$309,740
2007	\$8,000	\$152,000	\$8,000	5.00%	\$333,611
2008	\$8,000	\$160,000	\$8,000	-17.11%	\$283,149
2009	\$8,000	\$168,000	\$8,000	14.96%	\$334,712
2010	\$8,000	\$176,000	\$8,000	9.57%	\$375,501
2011	\$8,000	\$184,000	\$8,000	3.74%	\$397,851
2012	\$8,000	\$192,000	\$8,000	8.87%	\$441,857
2013	\$8,000	\$200,000	\$8,000	13.95%	\$512,612

Monthly Benefit ** \$2,000

Monthly Benefit * \$1,709**

* 50 - 50 Mix of Stocks and Bonds reduced by average annual 401(k) fee of 1.24%

(Source 401k Averages Book, Avg of Large and Small Plan 2013)

** CPF benefit based on 1% benefit accrual rate for all contributions

*** 401(k) benefit based on annual payout rate of 4% of fixed account balance

CPF vs 401(k) Monthly Benefit (Large Plan)
1989 - 2013
(At Actual CPF Accrual Rates)

