



CPF VS. 401(K): A 25-YEAR COMPARISON

IT'S NO CONTEST

CPF vs. 401(k)

THREE CRITICAL 401(K) CONSIDERATIONS:

- I. Life Expectancy
- II. Investment Costs
- III. The 4% Rule

CPF vs. 401(k)

I. CURRENT U.S. LIFE EXPECTANCIES:

- Men: At age 65 have 50% chance of living beyond age 85 --- and 25% chance of living beyond 90.
- Women: At age 65 have 50% chance of living beyond age 87 --- and 25% chance of living beyond age 92.
- Couples: At age 65 have 50% chance that one will live beyond age 90 and 25% chance that one will live beyond age 94.

CPF vs. 401(k)

II. INVESTMENT COSTS:

- Average Investment Costs in 401(k) Plans: 1.125%

CPF vs. 401(k)

III. THE “4% PAYOUT RULE”

- Experts Agree That in Retirement 401(k) Participants Should Pay Themselves No More than 4% Each Year
- Example: If 401(k) Balance at Retirement = \$500,000 Annual 4% Payout = \$20,000 a Year (\$1,667/month).
- This Payout Produces a 90% Chance of the Benefit Lasting 30 Years.

CPF vs. 401(k)

1991 - 2016

COMPARE CPF TO A 401(K) USING THE FOLLOWING ASSUMPTIONS:

- CPF's benefit accrual rate had been 1.25% for all years
 - Annual contributions to CPF and 401(k) of \$8,000 (2,000 hours @ \$4/hour) for all years.
 - 401(k) invested in a portfolio of 50% stocks and 50% bonds for all years.
 - A 1.125% average annual 401(k) investment cost for all years.
 - A 4% payout of the 401(k) benefit.
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25 Year Benefit Comparison

1991 - 2016



| Central Pension Fund | | | 401(k) | | |
|----------------------|---------------------|----------------|---------------------|---------------------------|----------------|
| Year | Annual Contribution | Annual Balance | Annual Contribution | 50% Stock-50% Bond Blend* | Annual Balance |
| 1991 | \$8,000 | \$8,000 | \$8,000 | 22.10% | \$9,768 |
| 1992 | \$8,000 | \$16,000 | \$8,000 | 6.39% | \$18,903 |
| 1993 | \$8,000 | \$24,000 | \$8,000 | 8.79% | \$29,267 |
| 1994 | \$8,000 | \$32,000 | \$8,000 | -1.92% | \$36,550 |
| 1995 | \$8,000 | \$40,000 | \$8,000 | 26.90% | \$56,535 |
| 1996 | \$8,000 | \$48,000 | \$8,000 | 12.16% | \$72,384 |
| 1997 | \$8,000 | \$56,000 | \$8,000 | 20.40% | \$96,781 |
| 1998 | \$8,000 | \$64,000 | \$8,000 | 17.50% | \$123,119 |
| 1999 | \$8,000 | \$72,000 | \$8,000 | 8.98% | \$142,895 |
| 2000 | \$8,000 | \$80,000 | \$8,000 | 0.14% | \$151,103 |
| 2001 | \$8,000 | \$88,000 | \$8,000 | -2.86% | \$154,561 |
| 2002 | \$8,000 | \$96,000 | \$8,000 | -7.04% | \$151,116 |
| 2003 | \$8,000 | \$104,000 | \$8,000 | 15.27% | \$183,414 |
| 2004 | \$8,000 | \$112,000 | \$8,000 | 6.49% | \$203,828 |
| 2005 | \$8,000 | \$120,000 | \$8,000 | 2.55% | \$217,223 |
| 2006 | \$8,000 | \$128,000 | \$8,000 | 8.94% | \$245,361 |
| 2007 | \$8,000 | \$136,000 | \$8,000 | 5.11% | \$266,296 |
| 2008 | \$8,000 | \$144,000 | \$8,000 | -17.00% | \$227,655 |
| 2009 | \$8,000 | \$152,000 | \$8,000 | 15.07% | \$271,174 |
| 2010 | \$8,000 | \$160,000 | \$8,000 | 9.68% | \$306,192 |
| 2011 | \$8,000 | \$168,000 | \$8,000 | 3.85% | \$326,293 |
| 2012 | \$8,000 | \$176,000 | \$8,000 | 8.98% | \$364,319 |
| 2013 | \$8,000 | \$184,000 | \$8,000 | 14.06% | \$424,667 |
| 2014 | \$8,000 | \$192,000 | \$8,000 | 8.71% | \$470,331 |
| 2015 | \$8,000 | \$200,000 | \$8,000 | -0.16% | \$477,574 |

Monthly Benefit \$2,500**

Monthly Benefit * \$1,592**

* Stock returns from S&P 500 Index; Bond returns from Barclays Aggregate Bond Index
 Both reduced by average annual 401(k) fee of 1.13% (Source 401k Averages Book, Avg of Large and Small Plan 2015)
 ** CPF Benefit Accrual Rate @ 1.25% For All Years
 ** 401 (k) Benefit Paid @ 4% of Account Balance Annually

CONCLUSION

Using the last 25 years of market returns, CPF at a 1.25% accrual rate would have produced a benefit 57% higher than a 401(K) account.

\$2,500 versus \$1,592 a month --- **IT'S NO CONTEST.**