



CPF vs. 401(k) Benefits

**A 25-Year Comparison:
1987 – 2011**

CPF vs. 401(k) 1987 - 2011

THREE CRITICAL 401(K) CONSIDERATIONS:

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

CPF vs. 401(k) 1987 - 2011

I. CURRENT U.S. LIFE EXPECTANCIES:

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

Source: Society of Actuaries

CPF vs. 401(k) 1987 - 2011

II. INVESTMENT COSTS:

- Average Investment Costs in Large 401(k) Plans: 1.05%
- Average Investment Costs in Small 401(k) Plans: 1.24%

Source: 401k Averages Book, 12th Edition, January 2012.

CPF vs. 401(k) 1987 - 2011

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) 1987 - 2011

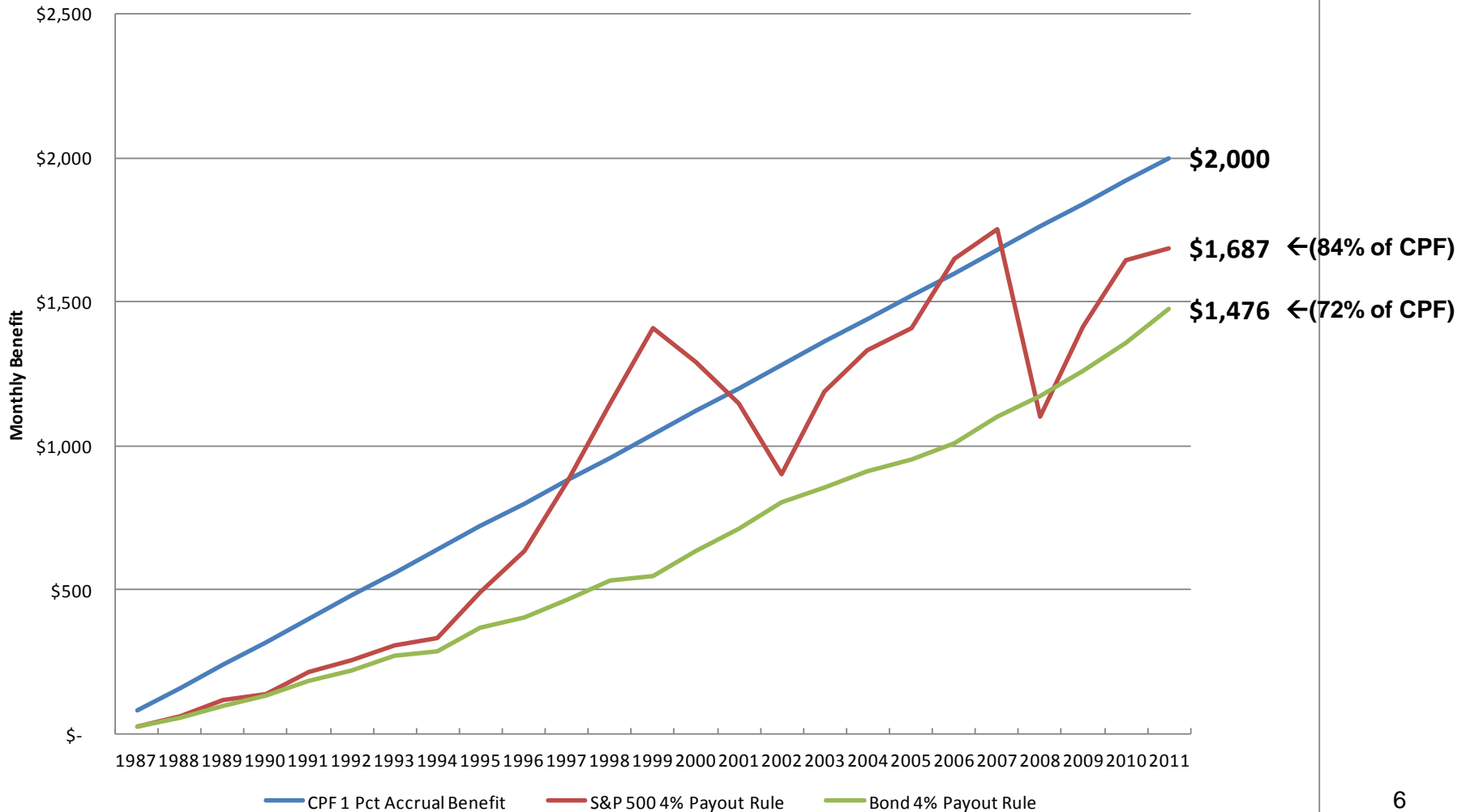
COMPARE CPF TO A 401(K) USING THE FOLLOWING ASSUMPTIONS:

- Annual Contributions of \$8,000 (2,000 hours @ \$4/hour)
- Actual Stock and Bond Market Returns each year
- A 1.05% Average Annual 401(k) Investment Cost
- A 4% Payout of the 401(k) Benefit

Comparison at 1% CPF Accrual Rate



**CPF vs. 401(k) Monthly Benefit
1987-2011
(If CPF Accrual Had Been 1% for All Years)**



25 Year Benefit Comparison

1987 - 2011

(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
1987	\$8,000	\$8,000	\$8,000	4.20%	\$8,336
1988	\$8,000	\$16,000	\$8,000	15.56%	\$18,878
1989	\$8,000	\$24,000	\$8,000	30.64%	\$35,112
1990	\$8,000	\$32,000	\$8,000	-4.15%	\$41,321
1991	\$8,000	\$40,000	\$8,000	29.42%	\$63,829
1992	\$8,000	\$48,000	\$8,000	6.57%	\$76,548
1993	\$8,000	\$56,000	\$8,000	9.03%	\$92,181
1994	\$8,000	\$64,000	\$8,000	0.27%	\$100,452
1995	\$8,000	\$72,000	\$8,000	36.53%	\$148,067
1996	\$8,000	\$80,000	\$8,000	21.91%	\$190,262
1997	\$8,000	\$88,000	\$8,000	32.31%	\$262,327
1998	\$8,000	\$96,000	\$8,000	27.53%	\$344,744
1999	\$8,000	\$104,000	\$8,000	19.99%	\$423,263
2000	\$8,000	\$112,000	\$8,000	-10.15%	\$387,472
2001	\$8,000	\$120,000	\$8,000	-12.94%	\$344,314
2002	\$8,000	\$128,000	\$8,000	-23.15%	\$270,752
2003	\$8,000	\$136,000	\$8,000	27.63%	\$355,783
2004	\$8,000	\$144,000	\$8,000	9.83%	\$399,551
2005	\$8,000	\$152,000	\$8,000	3.86%	\$423,290
2006	\$8,000	\$160,000	\$8,000	14.74%	\$494,881
2007	\$8,000	\$168,000	\$8,000	4.44%	\$525,229
2008	\$8,000	\$176,000	\$8,000	-38.05%	\$330,346
2009	\$8,000	\$184,000	\$8,000	25.41%	\$424,336
2010	\$8,000	\$192,000	\$8,000	14.01%	\$492,921
2011	\$8,000	\$200,000	\$8,000	1.06%	\$506,239

Monthly Benefit ** \$2,000

Monthly Benefit * \$1,687**

* S&P 500 Index reduced by average annual 401(k) fee of 1.05% (Source 401k Averages Book, 2012)

** 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

1987 - 2011

(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
1987	\$8,000	\$8,000	\$8,000	1.71%	\$8,137
1988	\$8,000	\$16,000	\$8,000	6.84%	\$17,240
1989	\$8,000	\$24,000	\$8,000	13.48%	\$28,642
1990	\$8,000	\$32,000	\$8,000	7.90%	\$39,535
1991	\$8,000	\$40,000	\$8,000	14.93%	\$54,631
1992	\$8,000	\$48,000	\$8,000	6.35%	\$66,611
1993	\$8,000	\$56,000	\$8,000	8.70%	\$81,103
1994	\$8,000	\$64,000	\$8,000	-3.97%	\$85,567
1995	\$8,000	\$72,000	\$8,000	17.43%	\$109,872
1996	\$8,000	\$80,000	\$8,000	2.56%	\$120,895
1997	\$8,000	\$88,000	\$8,000	8.63%	\$140,024
1998	\$8,000	\$96,000	\$8,000	7.62%	\$159,309
1999	\$8,000	\$104,000	\$8,000	-1.88%	\$164,163
2000	\$8,000	\$112,000	\$8,000	10.58%	\$190,379
2001	\$8,000	\$120,000	\$8,000	7.38%	\$213,011
2002	\$8,000	\$128,000	\$8,000	9.22%	\$241,386
2003	\$8,000	\$136,000	\$8,000	3.06%	\$257,012
2004	\$8,000	\$144,000	\$8,000	3.29%	\$273,727
2005	\$8,000	\$152,000	\$8,000	1.38%	\$285,619
2006	\$8,000	\$160,000	\$8,000	3.29%	\$303,275
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2011	\$8,000	\$200,000	\$8,000	6.79%	\$442,726

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Monthly Benefit * \$1,476**

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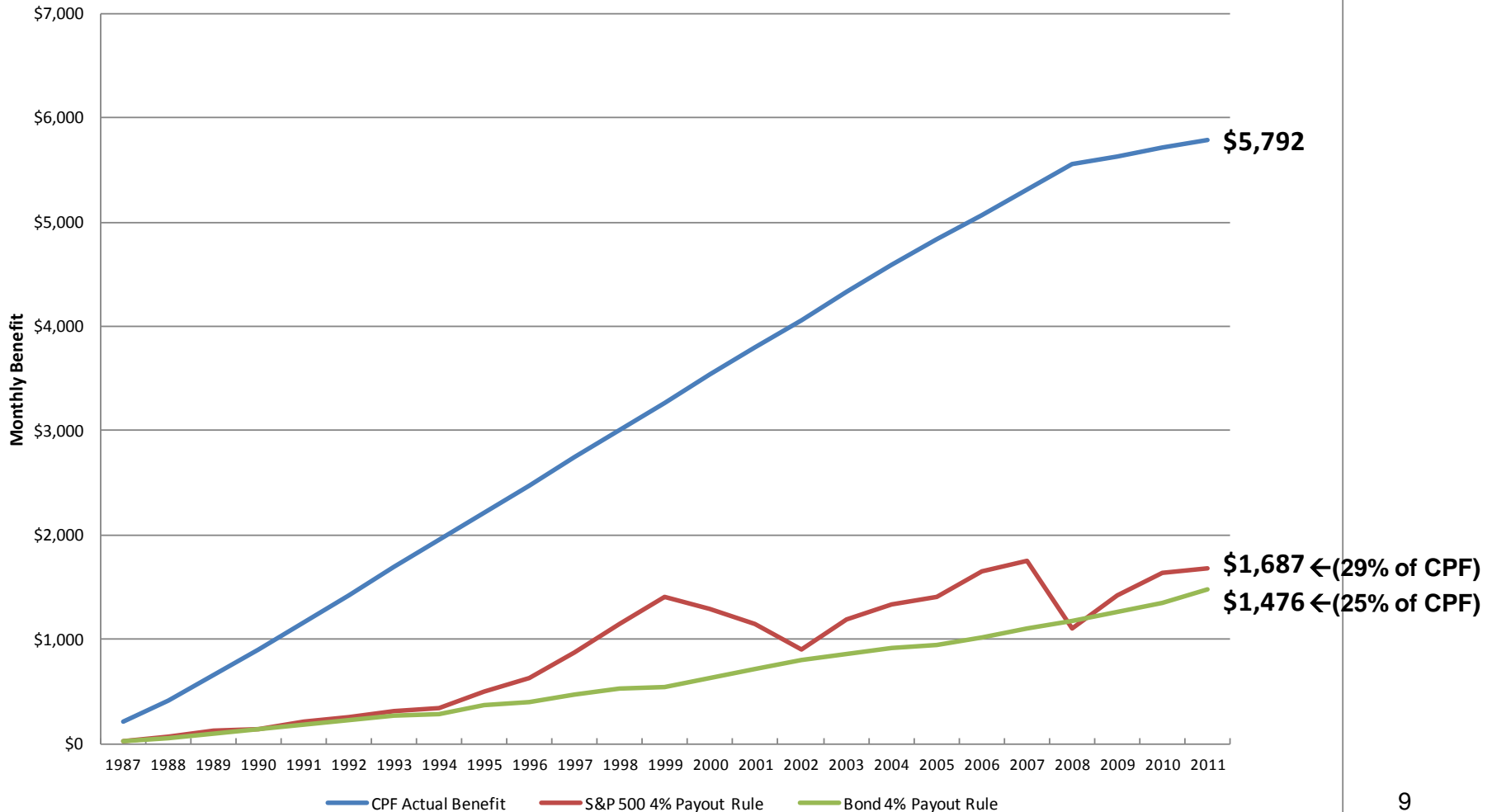
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Comparison at Actual CPF Accrual Rates



**CPF vs. 401(k) Monthly Benefit
1987-2011
(At Actual CPF Accrual Rates)**



25 Year Benefit Comparison

1987 - 2011

(At Actual CPF Accrual Rate for All Years)



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Conclusion

CPF'S BENEFITS ARE DEMONSTRABLY SUPERIOR TO ANY THAT CAN BE PROVIDED BY A 401(K).