

Forum on CPF and Retirement Adequacy

Tuesday, 22 July 2014
Shangri-La Hotel

Improving the CPF System

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AFGHANISTAN ALAND ISLANDS AMERICAN SAMOA ANDORRA ANGOLA ANGUILLA ANTARCTICA ANTIGUA AND BARBUDA ARGENTINA ARMENIA ARUBA
ASHMORE AND CARTER ISLANDS AUSTRALIA AUSTRIA AZERBAIJAN BAHAMAS BAHRAIN BAKER ISLAND BANGLADESH BARBADOS BELARUS BELGIUM BELIZE
BERMUDA BERMUDA ISLANDS BERMUDA TERRITORY BERMUDA TERRITORY BOSNIA AND HERZEGOVINA BOTSWANA BOUVET ISLAND BRAZIL BRITISH INDIAN OCEAN TERRITORY BRITISH VIRGIN ISLANDS
BULGARIA BURUNDI CAMBODIA CAMEROON CANADA CAPE VERDE CAYMAN ISLANDS CENTRAL AFRICAN REPUBLIC CHAD CHILE CHINA
CHRISTMAS ISLAND CLIPPERTON ISLAND COCOS (KEELING) ISLANDS COLOMBIA COMOROS CONGO: DEMOCRATIC REPUBLIC OF THE CONGO CONGO: REPUBLIC OF THE CONGO
COOK ISLANDS CORAL SEA ISLANDS COSTA RICA COTE D'IVOIRE CROATIA CUBA CYPRUS CZECH REPUBLIC DENMARK DJIBOUTI DOMINICA
DOMINICAN REPUBLIC EAST TIMOR ECUADOR EGYPT EL SALVADOR EQUATORIAL GUINEA ERITREA ESTONIA EUROPEAN UNION EUROPEAN ISLAND FALKLAND ISLANDS
FAROE ISLANDS FIJI FINLAND FRANCE FRENCH GUIANA FRENCH POLYNESIA FRENCH SOUTHERN AND ANTARCTIC TERRITORIES GABON GAMBIA GAZA STRIP
GERMANY GHANA GIBRALTAR GLORIOSO ISLANDS GREECE GREENLAND GRENADA GUADELOUPE GUAM GUATEMALA GUERNSEY GUINEA GUINEA-BISSAU
GUYANA HAITI HEARD ISLAND AND MCDONALD ISLANDS HONDURAS HONG KONG HOWLAND ISLAND HUNGARY ICELAND INDIA INDONESIA IRAN
IRELAND: REPUBLIC OF IRELAND ISLE OF MAN ISRAEL ITALY JAMAICA JAN MAYEN JAPAN JARVIS ISLAND JERSEY JOHNSTON ATOLL JORDAN JUAN DE NOVA ISLAND
KAZAKHSTAN KENYA KINGMAN REEF KIRIBATI KOREA: NORTH KOREA KOREA: SOUTH KOREA KUWAIT KYRGYZSTAN LAOS LATVIA LEBANON LESOTHO
LIBYA LIECHTENSTEIN LITHUANIA LUXEMBOURG MACAU MACEDONIA (REPUBLIC) MADAGASCAR MALAWI MALAYSIA MALDIVES MALI MALTA MARSHALL ISLANDS
MARTINIQUE MAURITANIA MAURITIUS MAYOTTE MEXICO MICRONESIA: FEDERATED STATES OF MICRONESIA MIDWAY ISLANDS MOLDOVA MONACO MONTENEGRO
MONTserrat MOROCCO MOZAMBIQUE MYANMAR NAMIBIA NARIU NAVASSA ISLAND NEPAL NETHERLANDS NETHERLANDS ANTILLES NETHERLANDS CAROLINA
CALEDONIA NEW ZEALAND NICARAGUA NIGER NIGERIA NIUE NORFOLK ISLAND NORTHERN MARIANA ISLANDS NORWAY OMAN PAKISTAN PALAU PALAU TERRITORIES
PALMYRA ATOLL PANAMA PAPUA NEW GUINEA PARACEL ISLANDS PARAGUAY PERU PHILIPPINES PITCAIRN ISLANDS POLAND PORTUGAL PORTUGAL TERRITORIES
PUERTO RICO QATAR REUNION ROMANIA RUSSIA RWANDA SAINT HELENA (ISLAND) SAINT KITTS AND NEVIS SAINT LUCIA SAINT PIERRE AND MIQUELON SAINT VINCENT AND THE GRENADINES
SAMOA SAN MARINO SAO TOME AND PRINCIPE SAUDI ARABIA SERBIA SEYCHELLES SIERRA LEONE SINGAPORE SLOVAKIA SLOVAKIA SLOVENIA SOLOMON ISLANDS SOMALIA SOUTH AFRICA
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS SPAIN SPRATLY ISLANDS SRI LANKA SUDAN SURINAM

The Minimum Sum Scheme

- Unhappiness due to persistent gap between official and effective withdrawal age
- Aversion to raising official withdrawal age despite life expectancy increasing 3-4 years per decade
- Maintain trust in policies and institutions by removing perceived time-inconsistent behaviour
- Implement progressive rise in official withdrawal age for successive cohorts
- Demonstrate benefits of longer life expectancy and working life of successive generations

How to Achieve Minimum Sum at Age 55

Starting Wage	Real Wage Growth p.a.	Annuity from age 65 if retire at 55 (in 2013 \$)	Annuity from age 65 if retire at 65 (in 2013 \$)	Percentage Increase
\$700	3%	\$1390	\$1740	25%
\$830	2%	\$1380	\$1660	20%
\$980	1%	\$1380	\$1590	15%
\$1150	0%	\$1380	\$1530	11%

Achieving Retirement Adequacy With CPF

- How much will be saved through CPF?
- How adequate are CPF savings for retirement needs of various income groups?
- Can a median income earner expect to draw an adequate retirement income?
- What is the track record of CPF returns?
- What must be done to improve CPF system to achieve retirement adequacy?

Assumptions on Real Wage Growth

	Constant Growth Path	Optimistic Growth Path				
Starting Salary	Age 22+	Age 22 -28	Age 29 - 35	Age 36 -45	Age 46 - 55	Age 55+
A: \$1200 (10 th percentile)	1.8%	7.6%	1.3%	0.9%	-0.2%	0.0%
B: \$1900 (30 th percentile)	2.5%	12.1%	1.0%	0.4%	0.4%	0.4%
C: \$3000 (50 th percentile)	3.6%	8.2%	5.2%	3.3%	0.9%	0.9%

Retirement Income From Total CPF Savings

Starting Salary	Constant Growth Path Annuity (in 2013 \$) from Age 65		Optimistic Growth Path Annuity (in 2013 \$) from Age 65	
	Retire at 55	Retire at 65	Retire at 55	Retire at 65
A: \$1200	\$2060	\$2410	\$2420	\$2680
B: \$1900	\$3950	\$4610	\$4710	\$5110
C: \$3000	\$6100	\$6550	\$6450	\$6870

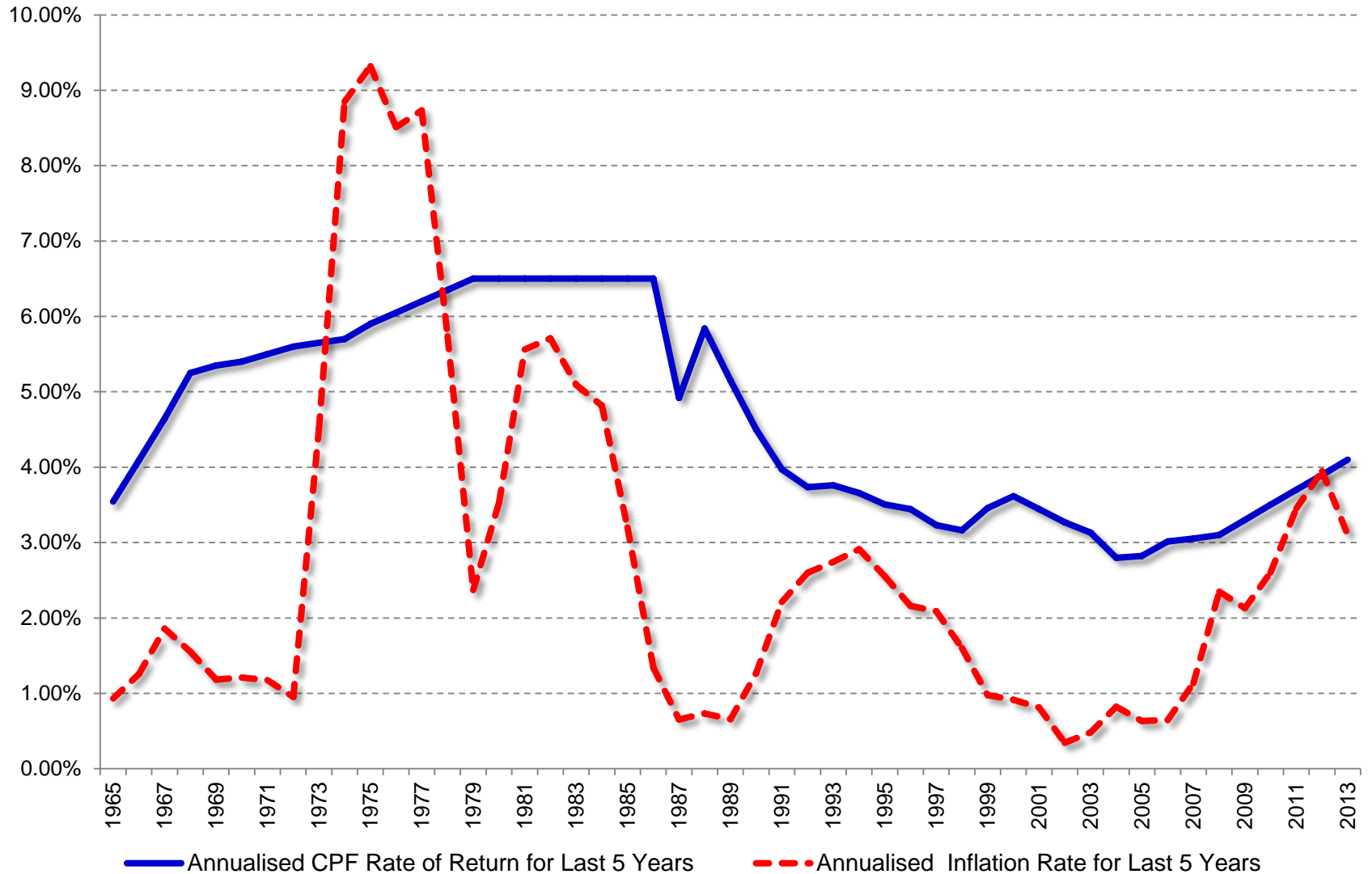
Income Replacement Rate From Total CPF Savings

Starting Salary	Constant Growth Path		Optimistic Growth Path	
	Retire at 55	Retire at 65	Retire at 55	Retire at 65
A: \$1200	72%	79%	89%	109%
B: \$1900	70%	72%	92%	107%
C: \$3000	49%	41%	49%	53%

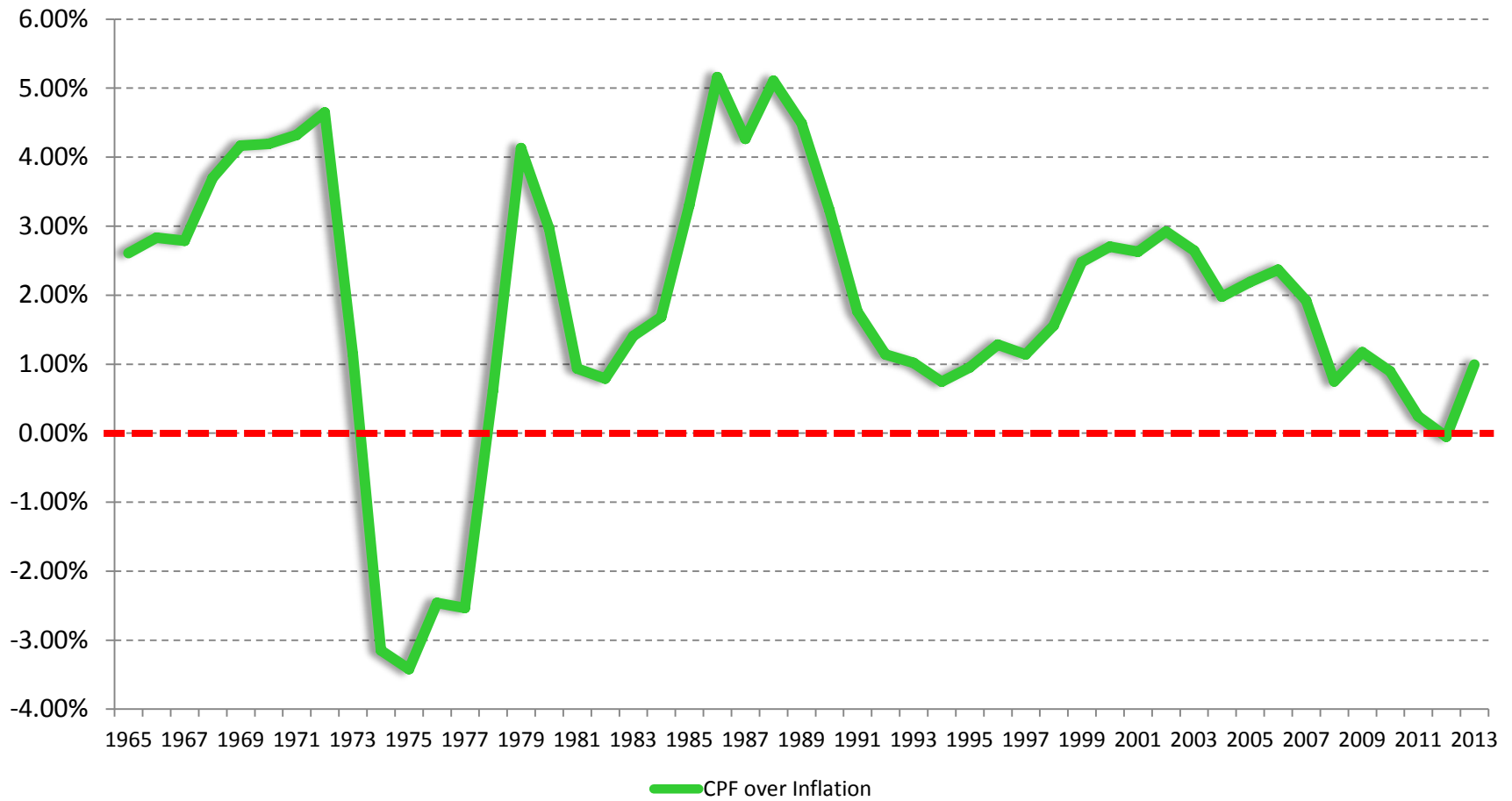
Impact of Property Purchase on Retirement Adequacy

Starting Salary	Constant Growth Path		Optimistic Growth Path	
	Joint housing loan taken at age 30 (2014\$)	IRR at 65	Joint housing loan taken at age 30 (2014\$)	IRR at 65
A: \$1200	\$194,000	57%	\$251,000	74%
B: \$1900	\$324,000	54 %	\$477,000	72%
C: \$3000	\$558,000	28%	\$688,000	33%

Track Record of CPF Rate of Return



Real Rate of Return on CPF Savings



Impact on IRR of 1% Across-the-Board Increase in CPF Return

Starting Salary	Constant Growth Path			Optimistic Growth Path		
	IRR at 65	IRR with 1% increase	Improve by	IRR at 65	IRR with 1% increase	Improve by
A: \$1200	57%	74%	17%	74%	93%	19%
B: \$1900	54%	65%	11%	72%	89%	17%
C: \$3000	28%	35%	7%	33%	41%	8%

Impact on IRR of Higher Income Ceiling for Employee CPF Contribution

Starting Salary: \$3000	Constant Growth Path		Optimistic Growth Path	
	Increase in Income Ceiling	IRR at 65	Improve by	IRR at 65
20%	38%	3%	47%	6%
30%	40%	5%	50%	8%
40%	42%	7%	53%	12%
50%	44%	9%	56%	15%
100%	52%	17%	69%	28%

Concluding Remarks

- CPF - a good system that can be made better
- Credibility issue caused by gap between official and effective withdrawal age should be removed
- Retirement adequacy of large majority of middle income residents needs to be addressed
- MOM's IRRs underestimate income growth and housing aspirations – misleading
- Improvements needed to provide and meet not just basic but adequate retirement needs:
 - Higher returns to CPF savings
 - Raise income ceiling for employee CPF
 - Allow option to place more than MS in CPF LIFE?