

# min(sum(4u))

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#### Introduction

- Ageing population in Singapore
  - -47% aged > 65 by 2030 <sup>1</sup>
- Millennials are not literate in financial planning <sup>2</sup>
  - Lead to insufficient funds for retirement

<sup>1</sup>Evelyn Eng: Millennials need wise financial planning in gig economy - <a href="https://www.todayonline.com/voices/millennials-need-wise-financial-planning-gig-economy">https://www.todayonline.com/voices/millennials-need-wise-financial-planning-gig-economy</a>
<sup>2</sup>Siau Ming En: Elderly to make up almost half of S'pore population by 2050: United Nations - <a href="https://www.todayonline.com/singapore/elderly-make-almost-half-spore-population-2050-united-nations">https://www.todayonline.com/singapore/elderly-make-almost-half-spore-population-2050-united-nations</a>



#### **Problem Identification**

CPF Retirement Sum Scheme indicates that it is the sum that is required to support a basic standard of living upon retirement.

What used to be called the "CPF Minimum Sum" confused everyone when it kept increasing. In 2003, it was \$80,000. In 2015? It's \$161,000. People heard the phrase "Minimum Sum" and thought — die liao, if I don't have that amount in my CPF, I'll never see my money again. But here's the good news — if you actually think this is true, you've got it all wrong.



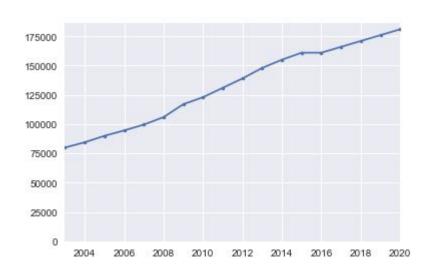
The CPF minimum sum was first introduced in the mid 1980s and was set at \$35,000 (if I remember correctly). It was welcomed by the members, as it allowed them to withdraw the excess over the minimum sum at 55.

Over the years, the minimum sum had been increased regularly, and will soon be \$155,000 in July 2014. Many people find this to be too high, as it left them with nothing to withdraw at age 55.



## **Minimum Sum**

55th birthday on or after	Full Retirement Sum
1 July 2003	\$80,000
1 July 2004	\$84,500
1 July 2005	\$90,000
1 July 2006	\$94,600
1 July 2007	\$99,600
1 July 2008	\$106,000
1 July 2009	\$117,000
1 July 2010	\$123,000
1 July 2011	\$131,000
1 July 2012	\$139,000
1 July 2013	\$148,000
1 July 2014	\$155,000
1 July 2015	\$161,000
1 January 2017	\$166,000
1 January 2018	\$171,000
1 January 2019	\$176,000
1 January 2020	\$181,000





# **Factors Affecting Analysis**

- Static Analysis: Linear CPF growth (baseline, assuming status quo)
- Dynamic Analysis: Different predicted values when housing and insurance factors are included



#### **APIs Used**

v1.3

- 1. CPF Calculator
- 2. NTUC Income

v2.1

1. Mortgage Calculator







# Packages/Frameworks Used

# django









#### Conclusion

- Seek to educate our youth on retirement planning
- Start young and plan ahead





# **END OF PRESENTATION**

Any questions?



# **Appendix: CPF Retirement Sum Scheme**

## Withdrawal at 55

Higher of \$5,000 or savings above Full Retirement Sum

Need to set aside:

CPF Minimum Sum - \$155,000

Medisave Minimum Sum - \$43,500



# **Appendix: CPF Retirement Sum Scheme**

3 Options:

Basic Retirement Sum (BRS)

Full Retirement Sum (FRS)

Enhanced Retirement Sum (ERS)

