

PRUDiscovery

Calculation Assumptions



INTRODUCTION

Hi, thanks for trying out our **PRU**Discovery tool, a financial calculator that provides an estimate of your financial gaps so you can plan for a future you desire. Do note that our tool is for information purposes only and does not constitute financial advice, so if you are looking for comprehensive financial advice, please speak with one of our Financial Consultants for assistance.

To arrive at an estimate of your financial gap, we have made some assumptions around costs of certain life events and rates. In this document, you will find more details about these assumptions, along with definitions of some of the financial terms used in **PRU**Discovery.

SAVINGS GAP

The Savings Gap estimates the amount of shortfall you have, against all your savings goals (excluding Retirement goal which is captured under the Retirement Gap section).

- It is calculated as the difference between the future value of your existing savings balance (resources available) and the future value of all your goals (resources required).
- If you have more than one goal, we assume that your savings balance will be used to pay for the goals in a chronological order from the shortest to the longest duration taken to achieve the goals.
- Based on each savings shortfall, a monthly savings required to achieve your individual savings goal at your desired timeline is also calculated, taking into consideration the Inflation Adjusted Return.

For Example

If you have 3 goals including (i) Buying a house with \$300,000 in **5** years; (ii) Buying a vehicle with \$150,000 in **3** years; and (iii) Starting a business with \$50,000 in **10** years, your savings will be used to pay for your goals in this order:

- Buying a vehicle of \$150,000 in 3 years
- Buying a house of \$300,000 in 5 years
- Starting a business of \$50,000 in 10 years

Rate Assumptions

You can increase or decrease these rates at the bottom of each page.

- **ROI on existing savings:** this rate of return (default value: 1%) is used to calculate the future value of your existing savings balance based on your nearest savings goal.
- **Expected annual inflation:** this rate (default value: 2%) is used to calculate the future value of your savings goals at your desired timeline. It is also used to derive the monthly savings required to achieve the savings shortfall.
- **Expected annual return on investment:** the annual return (default value: 3%) that you expect your monthly savings to grow in order to achieve the calculated / derived savings gap before considering inflation rate. It may be the same, higher or lower than ROI on your existing savings balance.

CHILDREN'S EDUCATION GAP

The Children's Education Gap estimates the amount of shortfall you have, against the education needs of all your children.

- It is calculated as the difference between the future value of your existing education fund (resources available) and the future value of the education expenses (resources required) for all your children.
- The future value of education expenses (resource required) is the lump sum amount needed to fund your child education at the time he / she enters university. It is derived from the Education Fee today after taking into consideration the years of study and the Inflation Adjusted Return.
- If you have more than one child, we assume that your education fund will be used to pay for the education expenses in a chronological order from the shortest to the longest duration taken for each child to go to tertiary education.
- Based on each child's education shortfall, a monthly savings required to achieve each education goal at your desired timeline is also calculated, taking into consideration the Inflation Adjusted Return.

For Example

If you have 2 children where Child 1 is 10 years old now and is entering tertiary at 21 while Child 2 is 8 years old now and entering tertiary at 18, your education fund will be used to pay for your children's education in this order:

- Child 2: 18 minus 8 = **10** years from now
- Child 1: 21 minus 10 = **11** years from now

i.e. you will be paying for Child 2's education first even though Child 2 is younger than Child 1.

Education Fee Assumptions

- Based on the location of study, we calculated the Education fee (per annum) by taking an average of fees for an education in the Bachelor of Business (Undergraduate), quoted on each university's website for the Academic Year 2021. The tuition fees are payable based on the normal candidature period, **excluding** any other fees and charges relating to but not limited to student service or recreational, equipment or material, and special term or additional modules. The fees also **exclude** any accommodation and living expenses. The default values only serve to provide a starting point guidance and we recommend that you adjust the values according to other expenses you are likely to incur.
- For Singapore, the education fees listed are **after** deduction of the Ministry of Education (MOE) Tuition Grant¹ while the fees quoted for the other locations are based on fees for foreign students.

¹ For more information, you may refer to MOE Tuition Grant Subsidy website – <https://tgonline.moe.gov.sg/tgis/normal/studentViewTuitionGrantSubsidyInfo.action>

Information accurate as of 11 Dec 2020			
Country	University	Annual fee	References
SG	National University of Singapore	9,600	http://www.nus.edu.sg/registrar/docs/info/administrative-policies-procedures/ugtuitioncurrent.pdf
SG	Nanyang Technological University	9,400	https://www.ntu.edu.sg/NSS/NSSFinance/FeesTuitionGrant/Pages/tf_20.aspx
SG	Singapore Management University	11,450	https://www.smu.edu.sg/campus-life/financial-matters/tuition-fees
		10,150	
SGD/SGD	1.00000	10,200	<i>Rounded off to the nearest hundred</i>
AUS	University of Melbourne	44,512	https://study.unimelb.edu.au/__data/assets/pdf_file/0014/175001/2021-tuition-fee-tables-for-international-students.pdf
AUS	Monash University	45,000	https://www.monash.edu/study/courses/find-a-course?student=0
AUS	RMIT University	32,640	https://www.international.rmit.edu.au/info/programfees.asp
AUS	University of South Australia	34,300	https://international.unisa.edu.au/SysSiteAssets/documents/unisa_internationalstudenthandbook_web.pdf
		39,113	
AUD/SGD	1.00754	39,400	<i>Rounded off to the nearest hundred</i>
US	University of Pennsylvania	60,042	https://srfs.upenn.edu/costs-budgeting/undergraduate-tuition-and-fees
US	Yale College	57,700	https://student-accounts.yale.edu/tuition-and-fees
US	Cornell University	58,586	https://www.dfa.cornell.edu/bursar/students-parents/tuition-rates-fees
		58,776	
USD/SGD	1.33598	78,500	<i>Rounded off to the nearest hundred</i>
UK	King's College London	20,790	https://www.kcl.ac.uk/study/Search-results?CourseKeywords=&CourseLevel=UG
UK	University of Oxford	31,230	https://www.ox.ac.uk/admissions/undergraduate/courses-listing/economics-and-management
UK	University College London	31,200	http://www.mgmt.ucl.ac.uk/imb
UK	University of Warwick	27,060	https://www.wbs.ac.uk/courses/undergraduate/international-business/fees/
UK	University of Bath	21,000	https://www.bath.ac.uk/corporate-information/tuition-fees-for-undergraduate-courses-starting-in-2021/
UK	University of St Andrews	25,100	https://www.st-andrews.ac.uk/study/fees-and-funding/undergraduate/world/
		26,063	
GBP/SGD	1.76777	46,100	<i>Rounded off to the nearest hundred</i>

Rate Assumptions

You can increase or decrease these rates at the bottom of each page.

- **Expected annual inflation based on country:** this rate (default values: 3% (Singapore), 5% (Australia), 10% (United Kingdom), 4% (United States), and 2% (Other Country)) is used to calculate the future value of your children's education fees at your desired timeline. This rate is also used to derive the monthly savings required to achieve the education gap.
- **Return on education fund:** this rate of return (default value: 1%) is used to calculate the future value of your existing education at your nearest education goals.
- **Expected annual return on investment:** the annual return (default value: 3%) that you expect your monthly savings to grow to achieve the calculated / derived education shortfall before considering inflation rate. It may be the same, higher or lower than your current Return on your existing education fund.

RETIREMENT GAP

The Retirement Gap estimates the amount of shortfall you have, against your retirement goal.

- It is calculated as the difference between the future value of your existing retirement fund and the monthly contributions you make (together, they represent the resources available), and the future value of your retirement expenses (resources required).
- This excludes CPF LIFE payouts², which provides Singapore citizens and Permanent Residents with a monthly payout for as long as they live.
- Based on the calculated retirement shortfall, a monthly savings required to achieve your retirement goal at your intended timeline is also calculated, taking into consideration the Inflation Adjusted Return.

Rate Assumptions

You can increase or decrease these rates at the bottom of each page.

- **Expected annual return on retirement fund:** this rate of return (default value: 1%) is used to calculate the future value of your existing retirement fund as well as the total monthly contribution you are making to your retirement fund accumulated at your desired timeline.
- **Expected annual inflation:** this rate (default value: 2%) is used to calculate the future value of your retirement goals at your desired timeline. This rate is also used to derive the monthly savings required to achieve the retirement gap.
- **Expected annual return on investment:** the annual return (default value: 3%) that you expect your monthly savings to grow to achieve the calculated / derived retirement shortfall before considering inflation rate (default value = 3%). It may be the same, higher or lower than your current Return on your existing retirement fund.

² For more information on CPF LIFE Scheme, you may refer to CPF Board website – <https://www.cpf.gov.sg/members/schemes/schemes/retirement/cpf-life>

PROTECTION GAP

The Protection Gap estimates the lump sum amount you will need to continue providing financial support to your loved ones as well as meeting your financial obligations in the event of premature demise / loss of life.

- Outstanding liabilities (e.g. mortgage loan, vehicle loan, etc.) and funeral expenses will be considered as your financial obligations in the event of loss of life.
- While your existing assets such as Life Insurance coverage (Critical Illness & Medical Coverage are excluded), savings balance, and retirement fund will be used to offset your financial obligations, and to provide financial support for your loved ones in the event of loss of life.

Expected Funeral Expenses Assumptions

- The default value of \$6,000 is the average cost for a basic 3-day package (excluding other costs such as mausoleum, columbarium, etc.) based on information extracted from Casket Fairprice as at 11 Dec 2020 (see table below). For more details, please check with funeral services websites.

Location	Freethinker	Buddhist	Christian	Catholic	Taoist	Soka
HDB void deck	\$4,880	\$5,880	\$4,880	\$4,880	\$7,980	\$4,880
Funeral Parlour	\$5,180	\$6,280	\$5,180	\$5,180	\$8,480	\$5,180

Average cost	\$5,738
--------------	---------

Rate Assumptions

You can increase or decrease these rates at the bottom of each page.

- **Expected annual inflation & Expected annual return on investment:** these two rates (default values: 2% (inflation) and 3% (return on investment)) are used to derive the Inflation Adjusted Return, which is subsequently used to derive the lump sum amount required today to provide continuous financial support to your loved ones based on the required monthly expenses and years to provide, as well as to pay off your financial obligations in the event of loss of life.

Disclaimer

The information generated on this website and/or by PRUDiscovery (including calculation of financial gaps and assumptions) is for general informational purposes only. It does not analyse an individual's financial needs, nor does it take into account an individual's detailed investment objectives, financial situation or specific needs. Any information generated by PRUDiscovery should not be relied on for accuracy and/or as a substitute for actual financial planning advice. Consequently, Prudential Assurance Singapore (Private) limited disclaims all liability arising from the use of information generated on this website and/or by PRUDiscovery.

For an accurate assessment, please speak with a Prudential Financial Consultant.

Terms of Use

<https://www.prudential.com.sg/disclaimer-and-intellectual-rights>