

# Task D

Bryan Lim Jing Xiang (A0233605M)

## 1 Dataset

### 1.1 Overview

This dataset consists of the population breakdown of Singapore from 2000 to 2020. The data fields that are of interest here are:

Field	Description	Data Type
Year	Year	Integer
Group	Denoting the residents that are included in the group	String
Age Group	Age group	String
Value	Number of residents belonging to the particular group	Integer

### 1.2 Data origin

<https://docs.google.com/spreadsheets/d/1a2uZKydzbp-vTdrXrdcGmfxTFnZSXdDS65X0pjWY0SE/edit#gid=1367742117>

### 1.3 Github Repository

<https://github.com/bryanljx/visualisation>

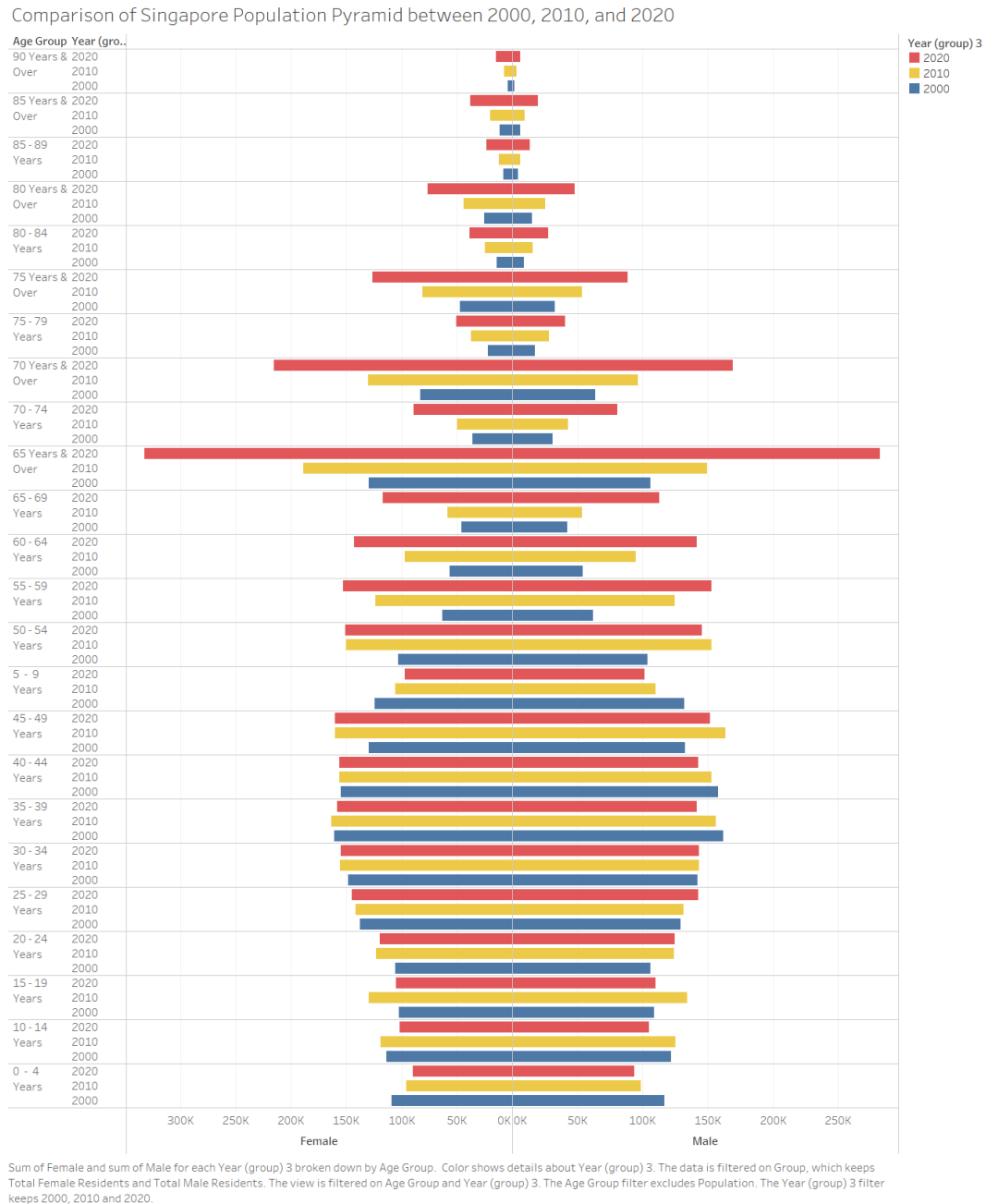
## 2 Purpose of Visualisation

For this dataset, the query of interest is: “How fast is Singapore’s population ageing? Is ageing population really a huge issue?”

Here, we are trying to confirm and raise awareness into how severe the situation is for Singapore’s ageing population.

### 3 Visualisation

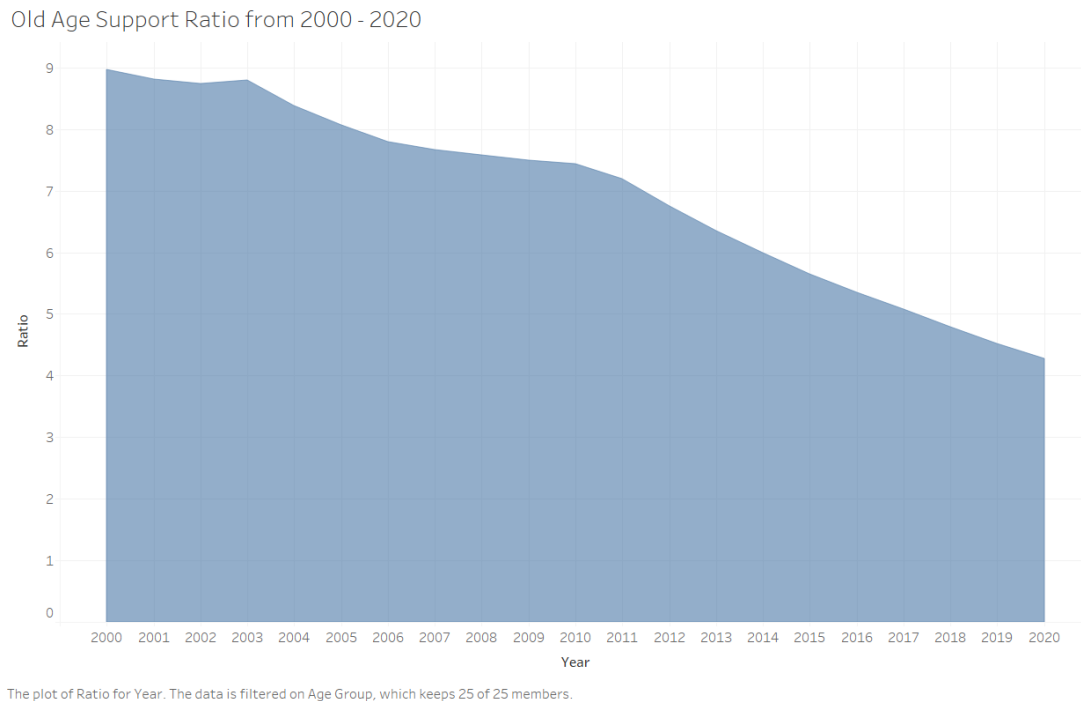
#### 3.1 Comparison of Population Pyramid across 2000, 2010, and 2020



- Visual encoding here includes:
  - Length - Denoting the amount of residents (male/female) for each age group
  - Color - Differentiating the year - 2000/2010/2020
  - Position - Denoting the age group
- Insights

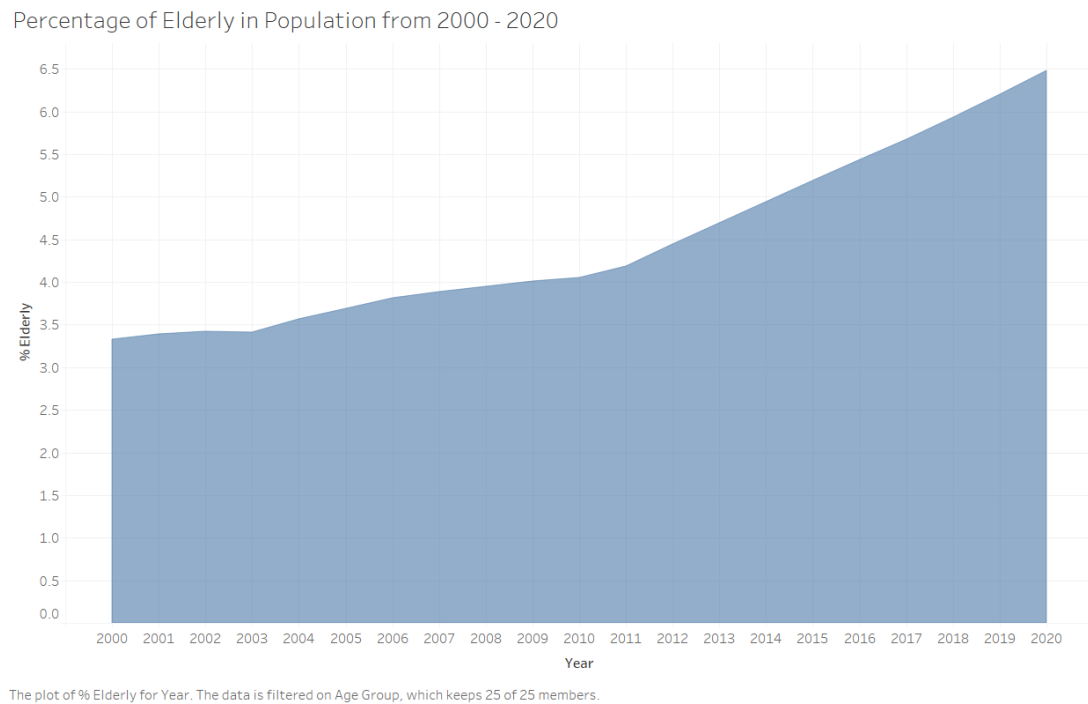
- Clearly, the number of elderly are increasing rather substantially across the decades whereas the converse is not true for young adults

### 3.2 Old Age Support Ratio



- As the name implies, old age support ratio is the ratio of working adults to elderly
- An area chart was chosen to emphasise the decreasing pattern across time.
- Visual encoding here includes:
  - Position - Denoting the ratio
- Insights
  - From the chart, it is evident how this is decreasing over time at a very steady pace, which does confirm forecasts that by 2030 this ratio will drop below 4, and eventually as time goes on below 2.

### 3.3 Percentage of elderly amongst the population across time



- An area chart was chosen to emphasise the increasing percentage across time.
- Visual encoding here includes:
  - Position - Denoting the percentage of elderly amongst the population
- Insights
  - The rate of increase is starting to increase even more rapidly in recent years, which is a worrying sign