## **Problem Statement**

What are the factors affecting rent prices for HDB flats in Singapore?

## **Datasets**

The datasets that we will be using to address this problem statement are

- RentingOutofFlats2024CSV
- CurrentBanksInterestRatesEndOfPeriodMonthly
- TaxableIndividualsbyAssessedIncomeGroup
- StockofForeignWorkforcebyPassType
- OverallUnemploymentRateQuarterly
- ResaleflatpricesbasedonregistrationdatefromJan2017onwards

## **Findings**

Based on the dataset provided, 'RentingOutofFlats2024', there are 3 main factors that we can consider when we are exploring what affects rent prices of HDB flats. These 3 factors are 'town', 'flat type' and 'year'. It is common perception that different towns in Singapore and different room types command different rent prices, and rent prices are also increasing through the passage of time. After doing some in-depth exploration of this dataset, we are able to see that different towns have indeed different rent prices for the various room types in the same year. For example, in 2021, Executive flats in Punggol has an average rent price of \$2.2k a month but Queenstown has an average rent price of \$3.1k a month. That is a 41% difference between both towns. When we compare the average rent prices for the different towns throughout the years, we also find that the rent prices are increasing from 2021 to 2024; more specifically rent prices are increasing at roughly 18-20% per year from 2021 to 2023 and 6% from 2023 to 2024 throughout almost all towns. These percentage increases also applies to the different flat types as well, which means there are no flat types with surprising increment or decrement in rent prices throughout the years.

With this trend of increasing rent prices in Singapore, lets find out what external factors may have caused this increase. Firstly, based on the 'CurrentBanksInterestRatesEndOfPeriodMonthly' dataset, we can see that the SORA shows a steady increase from 2021 to 2023 and a slight dip in 2024. This increasing interest rates in the past years could have affected the affordability or pricing of housing in Singapore. People who are targeting to purchase private properties may choose to rent a place for the short term, driving up the demand of HDB rental units and hence driving up the rent prices as well. Furthermore, with the rise in income levels in Singapore, as seen in the 'TaxableIndividualsbyAssessedIncomeGroup' dataset, this will also contribute more to the phenomenon mentioned above on people targeting to purchase private property and hence driving up rental prices in the past few years. There is an increasing trend of Millennials or Gen-Zs opting to move out of their parent's place and with rising income levels, this will be possible for a larger number of people. Rent prices on an upwards trend can also be caused by an increasing number of foreigners in Singapore's workforce. Instead of purchasing a private property which is a big commitment, foreigners will likely choose to rent. This will further contribute to the demand of rental units. Unemployment rate has been falling since 2021 which means more residents have the luxury of choice to choose to rent, be it renting a unit near their workplace or renting a unit while waiting for the completion of their BTO flats. Lastly, the average resale price of flats is also increasing from 2021 to 2024. This can drive people to apply for BTOs instead, and they may choose to rent before their BTO flats are completed, or it may push people who cannot afford resale flats or unable to secure a BTO to take up rental units for the short term.

## **Final Thoughts**

There are many factors affecting the rent prices in Singapore and as long as the economy continues to improve, rent prices for all room types and all locations in Singapore will continue to rise.