**Executive Summary: Factors Affecting Rent Prices for HDB Flats in Singapore**

The key factors influencing **HDB rent prices in Singapore** are **year** (economic conditions and recovery trends), **flat type** (size of the unit) and **region** (location).

**1. Impact of the Year and Economic Recovery: Greatest spike in rental prices in 2022**

* The most significant factor affecting HDB rental prices is the **year-on-year trend**, with the price increase in 2022 being especially pronounced as driven by the **post-COVID recovery**. As cross-border activities resumed and the local economy rebounded, demand for housing surged, particularly in the rental market. This contributed to a **50% spike in rent prices** for HDB flats in 2022, marking a significant shift from the pandemic's downward pressure on rent.

**2. Size of the Flat: Smaller Flats Command Higher Rent Increases**

* The **size of the flat** also plays a critical role in determining rent. Smaller flat types, such as **1- and 2-room units**, have seen a **larger increase in rent** compared to larger flat types (such as 4- and 5-room units). This trend suggests that smaller flats are in higher demand, possibly due to factors like **changing demographics**, **increased urbanization**, or **more flexible living arrangements** post-pandemic.
* The **machine learning analysis** indicated that **flat type** is the second most significant factor influencing rental prices, with smaller units being more responsive to market demand.

**3. Regional Differences in Rent: Flats in Central Region command the highest rent**

* While not as significant as the above factors in influencing HDB rent prices, location remains an important factor in impacting the rent prices.
* **Central Region**: HDB flats located in the **Central region** of Singapore continue to command the highest rents. Rental prices here are consistently **7% higher** than those in other regions, with flats in this area averaging **S$200 more per month** than similar flats in the North, East, and West regions. This price premium is likely driven by the Central region’s proximity to the business district, transport hubs, and amenities.
* **North Region**: Conversely, rental prices in the **North region** are **7% lower**, with an average rent discount of **S$200 per month** compared to the other regions. This is likely due to the region’s greater distance from the central business and commercial areas, which impacts the demand for rental properties.

**4. Machine Learning Insights: Year and Flat Type as Key Drivers**

* In addition, the use of **Machine Learning Techniques** such as **Random Forest Regressor** and **Correlation** **Matrix**, further confirmed these findings, with both **year** and **flat type** emerging as the most important variables in determining rental prices.
* **Year** captures the broader economic and market trends, including the post-pandemic recovery, while **flat type** reflects the demand dynamics based on the size and layout of the units.