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A New Mortgage Loan: BingeTheHouse

Abstract :

BingeTheHouse (BTH) is a mortgage loan that provides customers lease option to choose to exercise or exit from the option before or on the exercise date. The duration of loan can be chosen by user as long as it is below 40 years. Users are also provided option to put portion of monthly instalment into investment. Monthly deposits amount are also adjustable by customers as long as it meets requirements. Return on investment will help users to repay the loan faster. So far, we developed the model and it had shown that this model can profit more than standard mortgage loan. The model will use certain tests to identify whether the user is eligible to borrow the loan or not. Different scenario will help customers illustrate different investment return to let the customers know the risk they are bearing.

Objective:

- To let more people to be able to purchase their dream house.
- To make sure that the new mortgage loan is more profitable than standard mortgage loan.

Methodology :

Data analysis and projection on property price, gross income and investment return.

BingeTheHouse model and standard mortgage loan building

Test the affordability of the model through scenario testing.

Illustrate the performance of the loan in different scenarios and compare it with the standard mortgage loan.

Results and Discussion

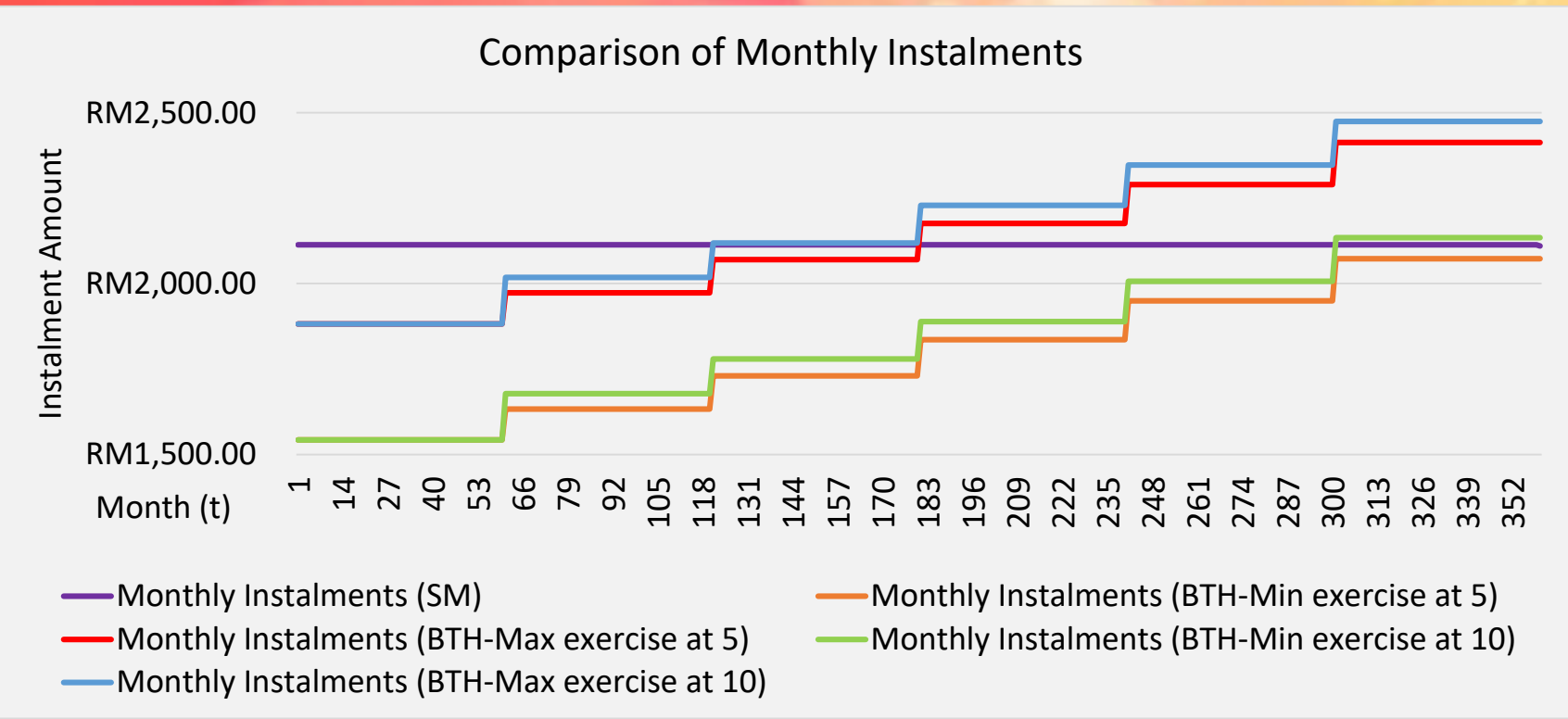


Figure 1: Monthly Instalment Comparisons between two models

Figure 2 and Figure 3 shows comparison of deposit's future value in different scenarios with optimum monthly deposit amount and higher monthly deposit amount respectively. Optimum monthly deposit is the amount that allows the user to repay the loan with the investment and the net accumulated value of the deposit will be zero after the settlement of the loan. According these two figures, in all scenario, both monthly deposit amount can both repay the loan. The better the market, the more the excess will be held by the user after the settlement of the loan. Hence, BTH can actually help users to earn some profit while they can purchase their dream house at the same time. It is like killing two birds with one stone.

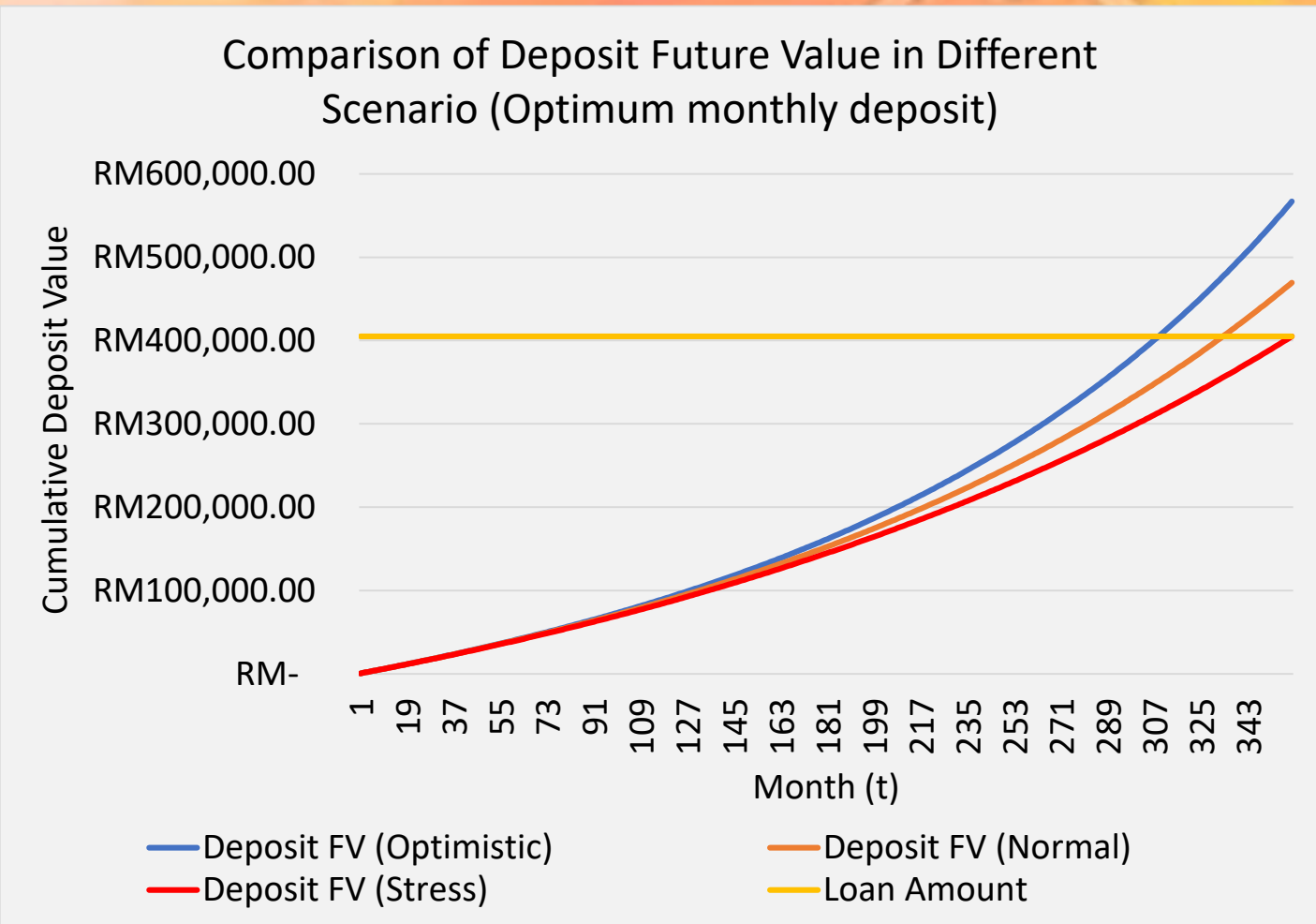


Figure 2: Comparison of different scenarios' deposit future value (Optimum monthly deposit amount)

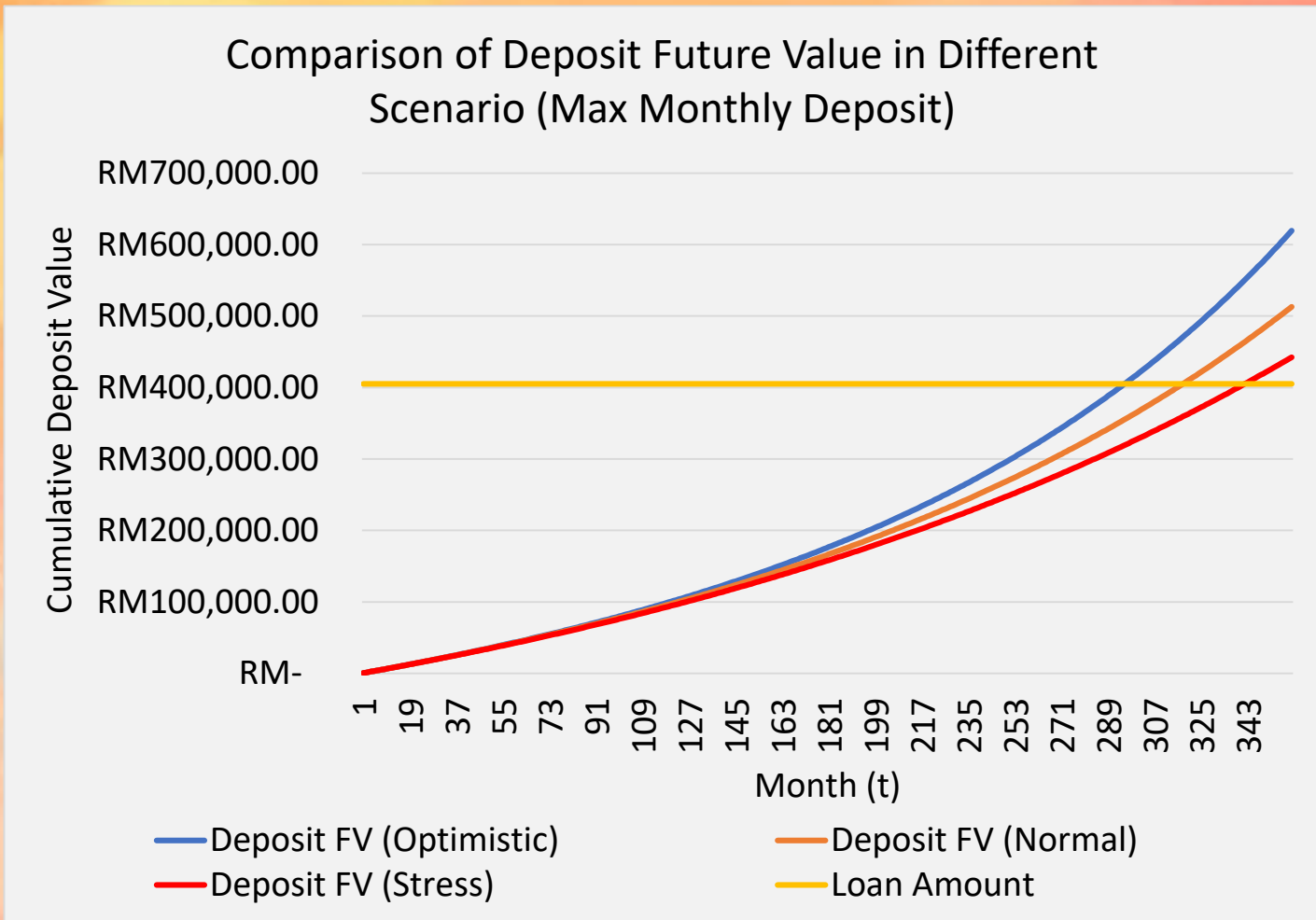


Figure 3: Comparison of different scenarios' deposit future value (Max monthly deposit amount)

| Loan Type | SM | BingeTheHouse (Max Deposit) | BingeTheHouse (Max deposit no investment) | BingeTheHouse (Optimum deposit) |
|----------------------------------------------|---------------|-----------------------------|-------------------------------------------|---------------------------------|
| Loan Amount | RM 405,000.00 | RM 405,000.00 | RM 405,000.00 | RM 405,000.00 |
| Investment Proportion from Deposit Amount | - | 25.00% | 0.00% | 25.00% |
| PV of Profit | RM 245,190.57 | RM 253,564.41 | RM 241,848.17 | RM 262,707.54 |
| Profit Margin | 60.54% | 62.61% | 59.72% | 64.87% |
| Monthly Instalment | RM 2,052.08 | RM 1,825.62 | RM 1,859.37 | RM 1,725.63 |
| Monthly Deposit Amount | - | RM 695.00 | RM 695.00 | RM 595.00 |
| Excess/Deficit after Settlement (Optimistic) | - | RM 257,167.14 | - | RM 161,894.28 |
| Excess/Deficit after Settlement (Normal) | - | RM 143,484.37 | - | RM 64,568.23 |
| Excess/Deficit after Settlement (Stress) | - | RM 68,070.74 | - | RM 5.14 |

Figure 4: Comparison of loan products

Figure 4 shows the comparison between standard mortgage loan and BTH product with different settings. When investment proportion is 0 %, the profit margin of the product will be lower than the product with investment proportion. Also, the total payments that needed to pay by the user will be higher than the products with investment proportion as there will be lease rate rebates if users choose to take proportion of the deposit amount to invest. The higher the investment proportion, the higher the lease rate rebate. When users choose to pay maximum monthly deposit amount, the total payments needed to pay might be higher than standard mortgage loan. However, the investment will have large amount of excess after the settlement of the loan. Even if users choose to pay deposit amount lesser than maximum deposit amount, they can still repay the loan amount if they choose to pay with the optimum monthly deposit amount of their loan under stress scenario. If the market perform well, they may even get excess from their investment after they repay their loan's principal amount while paying a lesser total payment. Hence, BTH is actually a more profitable product for the bank while, at the same time, users can purchase their dream house and earn profit from it as well.