Conventional wisdom says that housing loans should be paid off as soon as possible. Is this always the case?

It is indeed true that if you take more time to pay off a housing loan, a higher percentage of repayment goes towards servicing the interest. For example, for a 20-year loan of $100,000 at 3% interest, the total repayment over the lifespan of the loan is about $133,000. If the same loan has its tenure increased to 30 years, the amount to be repaid is about $152,000.

Yet, if you find yourself in the situation where you have surplus funds (cash or CPF), should you use it to reduce the outstanding amount of your housing loan?

At first glance, the answer seems to be yes. In reality, more often than not, such a move may be unwise.

Scenarios

Consider the following scenarios.

Scenario A:

- You have an outstanding HDB loan of S$100,000, for which you have been paying the regular installments from your CPF Ordinary Account (CPF OA)
- The remaining term of the loan is 20 years
- Due to salary increments in the past year, you have successfully built a balance of S$10,000 in your CPF OA, even after deducting installments for your housing loan

Question: Should you use the S$10,000 in your CPF to make a one-time repayment on your housing loan, thereby shortening the remaining loan tenure?

Scenario B:

- You have an outstanding HDB loan of S$100,000, for which you have been paying the regular installments from your CPF OA
- The remaining term of the loan is 20 years
- You manage to land an unexpected windfall of $10,000 in cash (e.g. from an inheritance)

Question: Should you use the S$10,000 cash in hand to make a one-time repayment on your housing loan, thereby shortening the remaining loan tenure?

Assumptions{loadposition advert1}

Currently, the first S$20,000 in each CPF OA enjoys an interest of 3.5%, while the excess above S$20,000 receives the base rate of 2.5%. The HDB interest rate is 2.6% (pegged at 0.1% above the CPF base rate). Excess CPF savings can be invested in ETFs (giving a 3% yield) or Reits (which can yield in excess of 5%). In Scenario B, it is assumed that a 5% investment return on cash balances is achievable.

To keep the illustration simple, it is also assumed that there are no cash or CPF inflows for the duration of the loan. Monthly repayments are also assumed fixed, such that partial early repayment of a housing loan reduces the loan tenure.

Housing Loan Early Repayment Calculator

The results of the above scenarios are illustrated in the following table:

Clearly, judging from the amount of cash and CPF on hand at the end of the period under consideration, when the loans under all scenarios have been paid up, it is better to refrain from paying down the housing loan in Year 0.

In particular, since the interest return from the first $20,000 of your CPF OA exceeds the HDB loan rate, maintaining a $20,000 CPF OA balance before repaying the HDB loan is an almost risk-free way to lower the effective interest rate on your loan. Based on Scenario A, by maintaining that initial $10,000 in your CPF account, you would decrease the effective interest rate on the housing loan from 2.6% to 2.3%.

Effective interest can be viewed as the net interest rate paid, taking into account returns from your excess funds that would otherwise have been used to offset your loan. The higher the returns you can generate from your cash or CPF on hand, the lower would be the effective interest rate on the housing loan.

Although the scenarios pertain to a HDB loan, the concept also applies to housing loan taken from banks.

Causes of Misconception

The common perception that it is better to settle a loan as soon as possible arises because the ability of idle CPF or cash funds to generate returns is often neglected. In addition, most people tend to focus on the amount of nominal interest (dollar amount) that they pay, rather than the effective interest rate.

Nominal interest should never be used as a basis to compare loans. To use a simple example, suppose you are given a choice between paying $20,000 upfront interest on a $100,000 loan, repayable at the end of 10-years, versus paying $24,000 interest at the end of the same loan. In this case, it can be shown that it is always better to defer the interest even though the nominal interest amount is higher (because effective interest is 2.26% per annum in the upfront interest case versus 2.17% in the deferred interest case).

Exceptions & Risks

Of course, the above examples make several important assumptions, which make early repayment unattractive. There are several factors which may tilt the decision towards early repayment of the loan.

- If the interest rate for the CPF OA decreases or if the preferential rate on the first $20,000 of CPF OA balances is removed
- If the cost of the housing loan rises above the CPF OA preferential interest rate

In Scenario B above, it should also be noted that a 5% return on cash investments involves a small amount of risk (e.g. a Reit may collapse or suddenly reduce its cash distribution).

If you are unable to tolerate any form of risk in exchange for an investment return above 2.6%, then you are better off using your cash on hand to pay down the loan.

Conclusion

Early repayment of home loans is prudent, but it is by no means always recommended.

If your idle funds can earn a return higher than the interest rate on the loan, it may be preferable to put your funds to work and take your time to repay that housing loan.

If you have other loans (such as vehicle loans) outstanding, you would also be better off using your cash on hand to settle these loans which probably charge a higher interest rate than your housing loan.