

## FN281 Individual Assignment

### 1) Discuss one Insurance product and comment on its benefits



Muang Thai Super Good 12/5 is an insurance product from Muang Thai Assurance. Customer has to pay the premium at the beginning of first 5 years of the plan. Customer also receives an annual payment starting from end of the year 1 to the end of the plan. During first 5 years, customer will receive 2% of sum insured, the next 5 years, customer will receive 3%, at year 11, receive 10% and at the end of the plan (end of the year 12) receives 120% of sum insured. The plan will protect against death by paying 100% of sum insured during first 4 year and the rest will be protected at 120%.

**The comment:** The pro of this plan is that the insurance pays back every year starting from the end of first year. The payment period is relatively short. This insurance plan is also appropriate for saving and tax deduction because it does not require a very long period (in this case, compare with 20 or 30 years) to get money back. The con is that this plan only offers a specific period coverage, any incidences occur outside the coverage will be a risk to customer. And as this plan only covers for 12 years, if want to continue, the customer has to renew the plan and pays a significantly higher premium since as age goes up, the risk of death gets bigger.

### 2) Which mortgage would result in higher total payments?

Mortgage A: \$970 a month for 30 years

Mortgage B: \$760 a month for 5 years and \$1005 for 25 years

If we calculate without taking time value of money into account we have;

Mortgage A =  $\$970 \times 12 \text{ Months} \times 30 \text{ Years} = \$349,200$

Mortgage B =  $(\$760 \times 12 \text{ Months} \times 5 \text{ years}) + (\$1005 \times 12 \text{ Months} \times 25 \text{ years}) = \$347,100$

**Mortgage A has a higher total payments**, now, if we take time value of money into account, say, we discount the future payments at some interest rate, we can conclude right away that mortgage A also has a higher total payments. Since, the amount \$1005 is paid starting in the future which means when we discount them back, it will have a lower value, moreover, we pay less at the starting point (\$760) which has a higher value when consider time value of money. As calculated, PV of total payments A is \$110,532.30 compared to B \$104,442.01. (Assume annual rate is 10%)

### 3) What are the two main types of consumer credit?

There are 2 main types of consumer credit;

First is **installment credit** or **closed-end credit**. This type of credit requires consumer to pay a fixed equal amount every period. The product that customer asked for a credit will belong to the lender until the customer completes his/her payments. There will be no flexibility in payments. The examples of this type of consumer credit are automobiles and some expensive appliances.

Second is **non-installment credit** or **open-end credit** or **revolving credit**. This type of credit is everything that is not included in installment credit. Consumer will usually pay in a lump-sum flexible amount. Usually, this type of credit will not cover a long period for example credit card payment. Once customer repays the debt, the credit will be renew.

### 4) What are the general rules of measuring credit capacity?

In measuring credit capacity, we will need to consider the number of the two ratios. First is **Debt Payments to Income Ratio** calculated by using monthly debt payments divided by monthly income. This ratio should not be exceed 20%. The second is **Debt-to-Equity Ratio** calculated by using liability divided by net worth and this ratio should not be exceed 50%. The family or individual budget will need to be prepared in order to obtain the ratios stated above. The limit of ratio stated above is the capacity that one may be able to bare a debt.

### 5) A few years ago, Michael Tucker purchased a home for \$100,000. Today, the home is worth \$150,000. His remaining mortgage balance is \$50,000. Assuming that Michael can borrow up to 80 percent of the market value, what is the maximum amount he can borrow?

His credit capacity is the current market value of his asset times by percentage that he is allowed to borrower minus by the value of debt that he already has.

In number, the maximum amount he can borrow is  $(\$150,000 \times 80\%) - \$50,000 = \mathbf{\$70,000}$