

Group Assignment 1

Persons	Amount needed/purchase	Reason for borrowing	Reasons against borrowing	Recommend form of credit
David*	\$60,000.00	Expand business: Given their current business generate income of \$30,000 a year (15% ROA). They know that this amount of income cannot satisfy their future needs of fund. Given the same ratio of ROA, they will generate approximately \$9,000 more, reaching ~\$40,000 a year. In another word, they should borrow and expand their business as long as the extra return generate from the expansion is greater than the cost of borrowing	No one can foresee the future, so we do not know the improvement will generate greater income or it cause a negative consequence. They could end up bear the cost of debt repayment without any extra income. Moreover, they have to bear this risk from their investment, since the failure does not only lead to the loss of income, but also a loss of a collateral(their house).They could be in trouble if the expanded business could not generate more income as expected.	They should get a home equity loan to finance their business expansion. Their house valued at \$650,000 and owing \$220,000 on it (\$650,000 - \$220,000 = \$430,000). Thus, they can do home-equity loan (close end) to finance their business expansion and having their home as a collateral. In term of cost, it should be reasonable since the it has a fixed interest rate. In addition, the interest payment can be use to deduct personal income tax. The risk of having this type of loan is quite low because the monthly payment can be very low as shown below in the Note section. Hence, if their business is not in a very bad position(that is very unlikely to happen), they should be able to repay the loan.
Elizabeth*				
Jim	\$10,000.00*	Holiday with family: To enjoy their holiday oversea. Last trip with parents before Jim gets too old. For the smart phone, it a necessity stuff nowadays, it is reasonable to get a smartphone that is not too expensive.	It is a pure expense. Spending money on holiday gives them no return, instead, they will have to cover the cost of the holiday later. For the smartphone, if he currently own one, we suggest that he should not buy a new one this year to helps his family keep their spending as low as possible.	They should pay for the holiday accommodation by credit card. Paying by credit card can give them up to 45 days of float. So they can defer the payment. In addition, using credit card is safer than pocketing large sum of money. However, he has to recognise the ability to pay back the money or the limitation of spending. When it is time to repay this credit, they should use the money from home equity loan as well. The reason is similar to the one above. Their actual home equity is quite high(\$430,000) so they should not have a problem get a loan for this. In fact, we do not recommend Jim to go on a holiday during this period as his family have a huge amount of spending. For the smart phone, he should use open-end credit because it is just a small purchase.

Jason	\$25,000.00*	Car and first year college fee. Traveling to university can be very hard depending on the distance to the university. Getting a car can solve this problem. the cost of leasing a car can be regard as the business expense, thus it will helps lower the income tax Brown have to pay. Moreover, the additional interest on line of credit can also be use to further deduct personal income tax. For the college fee, this is important and it is something that Jason must do for his future career.	Getting a car is an expense, weather buying or leasing. It generate no return. Hence, Jason should find another available alternative to travel to the university such as a public transport or share a ride with friends. Or stay at the university's dorm instead. Moreover, his family have planned to modernise the business which contribute high expenditure, so he should try hard to save money and control their spending.	This part should come from home equity line of credit as well. It is possible to do so because if they get additional \$25,000 of home equity loan to finance this, they well have to get a total of \$95,000 (\$60,000+\$10,000+\$25,000), which is much less than then actual home equity value(\$430,000). This way it will be cheaper than buying a car and get a regular car instalment loan which has a very high real interest rate. On top of that, we highly suggest that Jason should not get a loan for the car as the cost of having a car is actually higher than the benefit from the car he will likely get.
Tarini	\$150,000.00*	Tarini graduated last year and just recently got a job with an income of \$40,000(lower than the 2013 US average of new graduate earning of \$44,455)* as an asset which the value increases over time unlike renting which is an expense. Thus borrowing to buy a small house is reasonable.	As Tarini is a new graduate. The job security can not be guarantee. If he got fired, renting a house(not borrowing) would be a more preferred method. Hence, it maybe too risky to have a huge amount of debt while the income cannot be guarantee.	Tarini should get his own mortgage as he got his own job already. It is possible to buy a \$150,000 house with that amount of salary. If the interest is 7% per year, getting a \$150,000 over a 30 year period would require a monthly payment of ~ \$1,000* ⁵ is acceptable given his salary. All in all, we do advice Tarini to rent a small room to stay during her early working life. Until he has a higher job security, then he should thinking about getting his own house.

* = Given they barely have no cash on-hand available.

*¹ = This is the travel accommodation for three of them to Hawaii and a cost of the smart phone of \$500

*² = This is the assumed cost of leasing the Car for Jason of \$15,000(four year contract) and \$10,000 University tuition fee (first year)

*³ = This is the assumed cost of Tarini's first home

*⁴ = <http://www.shrm.org/hrdisciplines/compensation/articles/pages/2012-graduate-salaries.aspx>

*⁵ = Actual value is \$997.95 per month

Types of credits to be consider: store credit, bankcards, credit cards, personal loan, finance company, line of credit, bank overdraft and mortgage. They also need to take into account the issue of cost, term, credit rating, risk, security, credit limit, deposit and the contract.

Note

Debt to equity ratio = liability/net worth. Their liability is equal to \$220,000(Home mortgage) + \$95,000(home equity line of credit for business, accommodation, car and tuition fee) + \$150,000(Tarini's home) = \$465,000. Their net worth is equal to \$650,000(home) + \$260,000(business after expansion) + \$150,000(Tarini's home) = \$1,060,000. Debt to equity ratio is equal to $\$465,000/\$1,060,000 = 43.87\%$ This is almost reach 50% which is the amount that they should not exceed.

Debt payment to income ratio = debt payment/income. This should not exceed 20%. Given their income is \$40,000 per year after the business expansion. They can repay the home equity line of credit of up to \$8,000 per year (\$667 monthly). The total home equity line of credit they borrow is \$95,000. If the interest rate (plus margin) stay the same throughout out the period at 7%, it will take them 306months or 25.5 years to finish this mortgage.

If Brown family sum up all their income, their income is \$80,000 per year. Tarini has to pay his mortgage of \$12,000 per year, left with \$68,000 to calculate. Given the same 20% debt payment ratio and interest rate, now they can repay up to \$13,600 per year (\$1,134 monthly). In this case, it will take them 116months or 9 years and 8 months to finish this mortgage. Note that all of the calculations above does not take into account the inflation.

- **Given the Brown family will need to get credit for this holiday, investigate the issue of credit rating for them. Outline the factors that affect the personal credit rating.**

There are five factors that affect Brown family's issue of credit

1.Character – all assumed

From the historical record, this family always pays the bills on time. They live in this city for almost 30 years and have no tendency to change their location. Moreover, this family also risk averse, they do not want to have risk. So, they can be considered good loaner. For this part, issue of credit will be A.

2.Capacity

As main income of this family come from their own business, this income cannot be guaranteed. If the condition for their business changes, they might face the decrease in income or even lost. Moreover, this family does not have other income except this unexpectable income. So, for the capacity part, issue of credit will be around C+

3.Capital

To show the level of capital that they have, we use present three financial ratios, assumed that they have only monthly payment on house's debt.

$$\text{Debt Payment to Income ratio} = 12,000/80,000 = .15 = 15\%$$

$$\text{Monthly debt payment} = 0/80,000 = 0\%$$

$$\text{Debt to Equity ratio} = 220,000/850,000 = .2588 = 25.88\%$$

From three financial ratios, it implies that financial health of this family is good. Their debt payment to income is just 15%. In other word, they can consume 85% of their income. If their income decreases by 50%, they still are able to pay the monthly payment normally. Next, their monthly debt payment is zero. This means other from the house payment, they do not have to any other monthly debt payment. Lastly, their debt to equity ratio is .2588. Normally, this ration should not exceed .5 or 50%. So, Brown Family performs well. They have high potential that they can afford to pay the loan easily. So, for this part the issue of credit should be around A.

4.Collateral

Although Brown Family has a house that worth 650,000, we do not advise them to use it as collateral. This is because the amounts of loan for their holiday will not be that high.

5.Conditions

This family have two young, one already graduated, one in the first years. So, we can expect that their family income would increase when the younger graduated. Except from this, there are no changes in other conditions soon.

Conclusion

In conclusion, As we analyzed from five C, there is no the part that can be considered as bad part. Overall, this family has healthy financial condition. Moreover, from the past, they have not pay any bill late, and there is no tendency of the trend to change. So, we graded this family as rather high potential loaner. The issue of credit of this family should be around B

- **Compare the costs of prepaid phone cards as against signing a mobile phone contract.**

DTAC	Monthly Payment	299 Baht for first 450 minutes. If exceed 450 minutes, 1.5 baht per minute.
	Prepaid	0.99Baht per minute
AIS	Monthly Payment	350 Baht for first 360 minutes. If exceed 360 minutes, 2.5 baht per minute
	Prepaid	0.99 Baht per minute

Information above based on the two biggest mobile phones network operators, DTAC and AIS. We tried to compare two similar promotions from both suppliers by selected the similar term and regulations of services for the accurate comparison.

Comparing the fees between prepaid and monthly payment from DTAC network, it is noticeable that monthly payment is a better choice to choose. As a result that they offer 450minutes plan in the 299baht budget or only 0.66 baht per minute. While those prepaid cost 0.99Baht per minute or 50% higher than those monthly payment. If considering only DTAC, it might not have enough evidence to claim that the evaluation is accurate. Another company, AIS, will be analyzed.

For AIS, the monthly payment cost 350Baht and can be used for 360 minutes or 0.97 baht per minute. Although the average price per minute is not much different from prepaid, yet still lower. The price and usage data from both companies can be concluded that monthly payment is a better choice to choose when we use the telephone call within the given minute usage.

However, if the phone call is going to be exceeding the given capacity, the monthly payment will be dramatically increased. For DTAC, price will increase from 0.66 to 1.5 baht per minute while for AIS, price will increase from 0.97 baht to 2.5 baht which is more than double price for both network. When computed the break-even usage of both companies. DTAC's break-even point is 737.25 or 737 minutes and AIS's break-even point is 354 minutes. This mean; For DTAC, if the usage rise more than 737.25 minutes, it is better to use monthly system but if use less than 737.25, it's better to use prepaid system. For AIS, if the usage rise more than 354 minutes, it is better to use monthly system but if use less than 354 minute, it is better to use prepaid system.

Both systems have their own benefit and loss. For prepaid, it has the expired date of the refilled fee so if user cannot finished all the current money within the given time period, the rest that is unused will be worthless. For the monthly payment, it has limited time and fixed cost, if user does not use the call in monthly bill, it will be worthless as well. The time period for monthly payment can be considered as shorter period compare to prepaid system. So the decision making depends on the preference, lifestyle and the frequency usage of the user.

In conclusion, monthly payment is a better choice if the user knew for certain that how much minute call they need per month and will never used to the over than break-even point. However, if they cannot estimate the minute using per month, prepaid system seems to be a better choice. In this case, DTAC is a better choice since it required lower both fixed and variable cost.

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