Appendix C

IMPORTANT FINANCIAL RATIOS

1. **Liquidity Ratio = Cash (or Cash Equivalents)/ Monthly Committed Expenses**

   This ratio is used for analyzing existing emergency funds. Cash or cash equivalents applies to anything that can be liquidated immediately. It is prescribed that everyone maintain 3-6 months of expenses for an emergency. The ideal levels of liquidity ratio range between 3 and 6.

2. **Current Ratio = Cash (or Cash Equivalents) / Short Term Liabilities**

   This ratio represents the ability of a person to service short-term liabilities in case of any financial emergency. Cash or cash equivalents applies to anything that can be liquidated immediately. Short-term liabilities for this ratio include all debt repayments that are to be made in the current year.

3. **Asset to Debt Ratio = Total Assets / Total Liabilities**

   This ratio compares the assets accumulated by an individual against the existing liabilities. Total assets includes both liquid and non-liquid assets. Total liabilities includes all forms of debt repayment including mortgage, credit cards, car loans, etc.

4. **Debt Service Ratio = Short Term Liabilities / Total Income**

   This ratio determines how capable a person is in making the monthly interest + principal payments on their loans. This ratio indicates how much of the income being accounted for goes to debt repayment and how much is left over for mandatory household expenses and savings. The lower the ratio, the better an individual's debt management situation.

5. **Saving Ratio = Monthly Surplus / Monthly Income**

   This ratio indicates how much money is left over for saving each month after the bills are paid. It is a good indicator of one's ability to achieve his/her future goals.

6. **Solvency Ratio = Net Worth / Total Assets**

This ratio indicates how much of your total assets are actually paid for and indicates the ability of an individual to repay all of his/her existing debts using existing assets in case of unforeseen events.

7. **Investment Assets to Total Assets = Liquid Assets / Total Assets**

This ratio compares liquid assets being held by an individual against total assets accumulated. Liquid assets are assets that can be converted to cash easily. Total assets includes liquid assets, as well as real estate or other assets that may take more time to convert to cash. At least 20% of total assets should be in liquid assets for easy access if an emergency arises.

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On the following pages are a few examples of how some of the ratios are commonly reviewed by lenders. Using these formats might help you calculate your ability to borrow money in the future.

EXAMPLE #1:

Debt-to-Asset Ratio

When dealing with financial matters, *ratios* are often used to determine how much leverage you possess to make deals. One such ratio is set out below:

Debt-to-Asset Ratio
=
Short-Term Debts + Long-Term Debts
÷
Total Assets

The total debt-to-assets ratio is an indicator of financial leverage. It tells you the percentage of total assets that were financed by creditors, liabilities, and other forms of debt.

All your debts (liabilities) are divided by all your assets to calculate the total debt-to-asset ratio. This is important because banks often use this number to help them determine your financial ability to borrow for a house loan, a car loan, a personal loan, or whatever.

When your Debts reach 50% of your Assets, bank tend to get a little nervous.

Of course, the lower your debt-to-asset ratio, the better for your financial stability and probably your peace of mind.

So, complete the calculation below and see how you can reduce the percentage and improve your money situation.

A. What are you short term debts? (Debts that can be repaid within 12 months.)

   Example: Let's assume your short term debts are $5,000.

B. What are you long term debts? (Debts that are arranged to be paid in more than one year.)

   Example: Assume your long term debts are $150,000.

C. What is the total value of all your assets (whether paid off or not)?

   Example: Assume the total value of all your assets (cars, home, personal belongings, etc.) equals $220,000.

D. Now add A and B, and divide the total by C to get your total Debt-to-Asset Ratio.

   Example: $5,000 + $150,000 /$220,000

   = 70%

As I mentioned earlier, banks look at you more favorably is number is below 50%. Paying down your bills is the fastest way to get there.

EXAMPLE #2:

Debt-to-Income Ratio

This ratio tells the bank about your ability to repay a loan. First total your monthly debt. This will include minimum credit card payments, auto and student loans, consumer loans, utilities and other financial obligations including child support and alimony. Do not include your current housing payment, unless you own your home outright and will keep that property.

Scenario 1: Let's assume that you have:

- a monthly mortgage payment $1,200
- monthly real estate taxes 250
- monthly home insurance 140
- monthly Home Owner's association dues 25

Your total monthly housing expense is $1,615

If your total monthly debt is $3,500, your debt without your current housing expense is **$1,885** ($3,500 - $1,615).

Now we add in your estimated *future* housing expense. Let's assume:

Scenario 2: New housing expenses

- a monthly mortgage payment $1,500
- monthly real estate taxes 300
- monthly home insurance 185
- monthly Home Owner's association dues -0-

Total monthly housing expense $1,985

Now for the debt-to-income calculation: Divide the sum of the above two paragraphs by your total gross monthly salary (before taxes), plus overtime and bonuses, and any alimony or child support. Let's assume your total monthly salary before taxes is $6,000.

$1,885 + $1,985 = $3,870 total future monthly expense

$3,870/$6,000 = .645

.645 x 100 = **64.5%** = your debt-to-income ratio

(Hopefully this ratio is at or below 36 percent.)

Is your ratio above 36 percent?

If your debt-to-income ratio is above 36%, the bank will probably determine (1) that your expenses are too high for them to believe that you can afford to repay their loan or (2) that your income isn't sufficient to cover all your bills. Either scenario means the bank will see you as a high risk borrower and deny your application.

There are some loan programs that allow for higher debt-to-income ratios, frequently with a higher interest rate to cover the fact that they see you as a greater risk. Or you might try to reduce your total existing monthly debt by paying off one or more obligations. Maybe you can consolidate outstanding loans at a lower interest rate and payment to reduce your debt to income ratio. In either case, with a salary of $6,000 per month, you would need to reduce your total monthly expenses to $2,160 ($6,000 x .36) to qualify for a home loan.

EXAMPLE #3:

Housing Expense-to-Income Ratio

One of the most relevant ratios to ordinary people is the housing expense-to-income ratio. When you are applying for a mortgage on your new home, the rule of thumb is that your housing expense-to-income ratio should fall below 28 percent.

To calculate this ratio, you can use the numbers you determined in the previous example.

Step 1: Estimate your future monthly housing expense, including principal, interest, taxes, insurance, and any housing association or condominium fees.

In the above example, this amounted to $1,985.

Step 2: Divide that amount by your gross monthly salary (before taxes) plus overtime and bonuses, and any alimony or child support.

$1,985/ $6,000 = .3308

Step 3: Multiply the result by 100 for your housing expense-to-income ratio.

.3308 x 100 = 33.1% (rounded)

Is your ratio above 28 percent?

If your ratio is at or below 28 percent, hurray! You have just improved your chances of qualifying for a home loan.

If your ratio is above 28 percent, you might get a loan with a higher interest rate, increase your down payment to reduce your monthly mortgage payment, look for a less expensive home, or consider an area with lower property taxes.