Bellwork 5-11-15

Budget: a mathematical confirmation of your suspicions.
A.A. Latimer

1. What types of modifications might a person make to his/her lifestyle based upon a budget?
   
   change clothing, more restrictions, go out less

2. How do you plan for your monthly expenses?
   
   needs vs. wants
   Save more
Key Terms

- net worth
  - the difference between a person's assets and that person's liabilities

- assets
  - a person's property or what is owned

- liabilities
  - a person's debts or amount that is owed
EXAMPLE 5

Liam Brown is single, in his mid-twenties, and owns a condo in a big city. He has calculated the following assets and liabilities.

**Assets**
- Current value of condo: $580,000
- Current value of car (as listed in Kelley Blue Book): $17,000
- Balance in checking account: $980
- Combined balance in all savings accounts: $22,500
- Current balance in retirement account: $24,800
- Current value of computer: $2,900
- Current value of collector bass guitar: $6,700
- Current value of stocks/bonds: $18,300

**Liabilities**
- Remaining balance owed on home mortgage: $380,000
- Remaining balance owed on student loans: $51,000
- Combined credit card debt: $1,600

Calculate Liam’s net worth. Last year at this time, he calculated his net worth as $205,780. Compare both values. What do the changes mean?

\[
\text{Assets} = 673,180 \
\text{Liabilities} = 432,600
\]

\[
673,180 - 432,600 = 240,580 \text{ net worth}
\]

\[
\text{Worth 34,800 more than last year.}
\]
CHECK YOUR UNDERSTANDING
What can Liam do to continue his improving net worth trend?

pay off

student loans
home loan
credit cards
Key Terms

- debt reduction plan
  - a plan to improve debt-to-income ratio

- debt-to-income ratio

\[
\text{Debt-to-income ratio} = \frac{\text{Debt}}{\text{Pre-tax income}}
\]

less than 15%.

greater than 20%: you need a plan.
EXAMPLE 6

Tome’s monthly liabilities and assets are shown in the table. Find Tome’s debt to income ratio. Express the ratio as a percent.

<table>
<thead>
<tr>
<th>Monthly Liabilities (Debt)</th>
<th>Monthly Pre-Tax Assets (Income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage Payment</td>
<td>$2,300</td>
</tr>
<tr>
<td>Student Loan Payment</td>
<td>$750</td>
</tr>
<tr>
<td>Minimum Credit Card Payment</td>
<td>$200</td>
</tr>
<tr>
<td>Car Loan Payment</td>
<td>$150</td>
</tr>
<tr>
<td></td>
<td>Gross Salary</td>
</tr>
<tr>
<td></td>
<td>$7,800</td>
</tr>
<tr>
<td></td>
<td>Stock Dividends</td>
</tr>
<tr>
<td></td>
<td>$380</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
</tr>
<tr>
<td></td>
<td>$120</td>
</tr>
</tbody>
</table>

\[
\frac{3400}{8300} \approx .41 = 41.1\%.
\]

Very high!
CHECK YOUR UNDERSTANDING
Tome anticipates that next year, his car and student loans will have been paid off and he will have received a 10% salary increase. If everything else remains the same, calculate that debt-to-income ratio.

<table>
<thead>
<tr>
<th>Monthly Liabilities (Debt)</th>
<th>Monthly Pre-Tax Assets (Income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage Payment</td>
<td>$2,300</td>
</tr>
<tr>
<td>Student Loan Payment</td>
<td>$750</td>
</tr>
<tr>
<td>Minimum Credit Card Payment</td>
<td>$200</td>
</tr>
<tr>
<td>Car Loan Payment</td>
<td>$150</td>
</tr>
<tr>
<td>Gross Salary</td>
<td>$7,000</td>
</tr>
<tr>
<td>Stock Dividends</td>
<td>$380</td>
</tr>
<tr>
<td>Interest</td>
<td>$120</td>
</tr>
</tbody>
</table>

\[
\frac{2500}{9080} \approx 0.28 = 28\%.
\]
Homework: Page 518, #'s 1-2, 4-6