




Time & Money (part 1)


Spring Weekend Bible School
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Introduction

- Stewardship is linked to time and money
 - Stewards manage money (and possessions) for a given period of time
 - The amount of time has a direct impact on the potential and the priority
- Time and money are finite
 - We have limited amounts
 - We must use what we have wisely
- God expects us to be wise stewards




Time & Money Impact Us

- Debt
 - Debts cost money
 - Debts take time to repay
- Saving
 - Savings make money – money works for you
 - Saving takes time
- Spending
 - Spending money may cost you more than you realize




Time Value of Money (TVM)

- Basic definition:
 - \$1,000 is not the same today as it is at some point in the future
 - The value of money changes with time
- **Proverbs 21:5 (NASB)** *The plans of the diligent lead surely to advantage, But everyone who is hasty comes surely to poverty.*




Impact of Time Value of Money

- It is important for youth
 - Impacts how much to spend for a vehicle
 - Impacts how much you save and give
 - Impacts spending habits
- It is important for adults
 - Impact the lifestyle we choose to embrace
 - Impacts level of debt
 - Impacts level of saving and investing
 - Impacts retirement savings




Time Changes Value of Money

- Someone leaves you a gift of \$10,000
 - \$10,000 cash today
 - \$10,000 cash three years from now
- What if the options were...
 - \$10,000 cash today
 - \$12,500 cash three years from now
 - \$20,000 cash ten years from now
- The decision is not nearly as easy because of the Time Value of Money



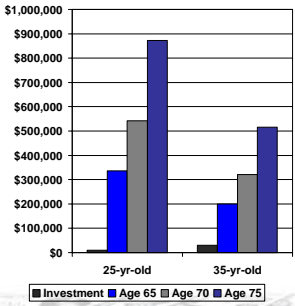
Law of Compounding Interest

- \$1,000 is not \$1,000 in one year from now
 - At 5% interest, in one year it is \$1,050
- Compounding interest
 - over time you earn interest on all your money (initial investment + previous interest earnings)
- Using a \$1,000 investment at 5%
 - 1 year = \$1,050.00 – 5% increase
 - 5 years = \$1,276.28 – 27.6% increase
 - 10 years = \$1,628.90 – 62.9% increase
 - 15 years = \$2,078.93 – 107.9% increase




Retirement Example

- 25-year-old invests \$1,000 / year at 10% for ten years
 - \$10,000 investment
- 35-year-old invests \$1,000 / year at 10% for thirty years
 - \$30,000 investment




Age Group	Investment	Age 65	Age 70	Age 75
25-yr-old	\$10,000	~\$350,000	~\$550,000	~\$850,000
35-yr-old	\$30,000	~\$200,000	~\$300,000	~\$500,000



Would you rather have...


1	\$0.01
2	\$0.02
3	\$0.04
4	\$0.08
31	\$10,737,418.24
32	\$21,474,836.48
33	\$42,949,672.96
34	\$85,899,345.92
35	\$172,798,691.84

\$35,000,000
or
one penny doubled
35 times?




Law of Compounding Interest

- Compounding interest is a powerful law...
 - Wonderful ... when saving money
 - Depressing ... when borrowing money
- The Law of Compounding Interest is at work all the time with no discrimination
 - The challenge is to get it working for you and not against you




Double Your Money

- The Rule of 72
 - Simple rule that tells you how long it takes to double your money
 - Divide 72 by the interest rate to calculate the number of years to double your money
- What if you invest \$10,000 at 12% interest?
 - $72 / 12$ (interest rate) = 6 years to double
- What if you invest \$10,000 at 8% interest?
 - $72 / 8$ (interest rate) = 9 years to double





Rule of 72 and Credit Cards

- Most credit card companies charge 18-21% interest for using their line of credit (money)
 - I purchase an item costing \$6,000 at a 40% discount with my American Express card knowing that it will take several years to pay off
 - American Express charges 18% interest
 - If it takes four years to pay off this item, I will have actually paid \$12,000
 - The 40% discount has turned into a 20% surcharge





Rule of 72 and Mortgages

- \$100,000 mortgage at 9% for 30 years
 - $[9 \text{ (interest rate)} \times 30 \text{ (years)}] / 72 = 3.75$
 - At the end of this mortgage, you will have paid a total of \$475,000 to use that \$100,000 today
 - \$375,000 in interest
- \$100,000 mortgage at 6% for 30 years
 - $[6 \text{ (interest rate)} \times 30 \text{ (years)}] / 72 = 2.5$
 - At the end of this mortgage, you will have paid a total of \$350,000 to use that \$100,000 today
 - \$250,000 in interest



Consider this...

- At times we will purchase something we really want because we have the money
 - We have the cash saved to make the purchase, but it actually costs more than we often realize
- Suppose you buy...
 - A \$20,000 luxury car instead of a \$10,000 one
 - A \$1,000 widget that you have really wanted
 - What is the true cost of the car upgrade and the widget??



Opportunity Cost

- What is “opportunity cost?”
 - It is the cost of something in terms of an opportunity forgone (and the associated benefits of that opportunity)
- The true cost of purchases is usually greater than the actual cost of the items themselves
 - What could have been done with that money if I had not spent it?



Opportunity Cost Scenarios

- The \$10,000 vehicle upgrade...
 - You are no longer earning interest on \$10,000
 - This \$10,000 had the potential of turning into \$36,000 if it was invested for ten years at 10%
 - If invested in a retirement plan for forty (40) years at 10%, it would have grown to \$450,000
- The decision to “invest” the additional \$10,000 costs much increased when other potential opportunities are also considered

Opportunity Cost Scenarios

- The \$1,000 widget purchase...
 - While not the same magnitude as the car, we are commanded to be faithful in the little things
 - This \$1,000 spent by a 20-year-old had the potential of earning \$72,000 if it had been invested in a retirement plan until age 65 at 10%
 - Is the widget worth \$1,000? What about \$72,000?
- Spending eliminates all other potential opportunities to use this money in other ways

Review and Conclusion

- Time and money are closely linked
- Time Value of Money
 - Law of Compounding Interest
 - Rule of 72
 - Opportunity Cost
- Understanding the Time Value of Money concepts are critical to comprehend the importance of wise saving and spending decisions

