

Why numbers matter

[Science](#), [Mathematics](#)



Why Numbers Matter? Chapter to be covered: Chapter 4 - Managing Your Money Thesis Statement:

' Mathematical theories and concepts are very useful and should be applied to contemporary financial issues such as managing personal investments and savings in order to create a profitable combination.'

In today's era, economies of nations are experiencing varying trends in terms of growth and recession. To tackle this anomaly, people should have an understanding of the financial environment of the economy in which they reside. This can be made effective with the use of mathematical concepts and numbers as these have significant importance in almost all worldly issues and problems.

The principles concerned with managing money are important to be taken into account while planning to save or invest money somewhere. To discuss and understand these principles, an article from Msnbc The Bottom Line dated November 06, 2011, ' After steadying, home prices begin falling again' has been taken into account which entails the scenario of the United States' real estate industry.

The author of the article tells about the falling prices of homes in the United States which were on a steady trend in the summer of 2011. He says that due to the imbalance between demand and supply, there are numerous houses unsold in many states of the US until the end of September 2011. This price fall is being observed by investors and analysts and they are waiting for these to be bottomed that is a rise is being expected after massive falls, though not in the short term.

Considering the poor interest rates of US short term Treasury Bills; 0. 005%

for 3-months and 0.035% for 6-month bills as per the recent auction; this investment aspect has been kept on a farer side by many investors as the rate of return is minimal. Considering this point, other investment opportunities should be searched for. This shows that it is a nice time to buy some lower priced houses and benefit from the capital gains arising in the future, though not in the short term (Schoen, 2011).

Taking control of finances is very crucial and an investor should read about some financial trends using mathematical concepts such as percentages and shares in different investments and then take calculated actions. This leads to the understanding of the compounding concept. Just as an investor determines the amount of investment he or she can do, he must take into account the related rate of return and use it to compound his or her future inflows from the investment over the concerned time period. The simple formula for it to be calculated is: Amount of investment * (1 + rate of return)[^] number of years.

Savings Plans and Investments have to be prepared before doing any investment. For the example of the economy of US, the savings rate has declined so much (was zero in June 2005), that investors should not go for savings but for investments. An unprofitable investment such as the treasury bills should not be included in the investment plans. Comparative rates of return of investments should be analyzed.

If an investor does not possess sufficient financing to pay for the real estate investment discussed above or any other thing, he or she can opt for other means such as bank, credit card and mortgage loans. The rates concerned to these should be considered first; Mortgage loans interest rates have declined

in the US as per the article so this medium of financing can be taken to finance home investments. Mathematical concepts including such as compounding the interest expenses over the years concerned must be done to analyze the costs of investment.

Income Taxes are important to check for as different types of incomes arising from investments have different streams of income taxes. US treasury bills do not attract income taxes but others do such as income from long-term bonds. Capital Gains Tax arises from increase in property values. In any economy, the understanding of the federal budget is necessary. The amounts of expenditures, revenues, deficits or surpluses have to be known so as to see the performance of the country's economy. The proportion of expenditures on different sectors in the US by the government can help in planning investments. Monetary Policy should also be seen for especially the interest rate; US has a stagnant interest rate of 0.25% since January 2009.

References

John W. Schoen, 2011. 'After steadying, home prices begin falling again'. The Bottom Line, Msnbc. Retrieved November 07, 2011, from <
http://bottomline.msnbc.msn.com/_news/2011/11/07/8684796-after-steadying-home-prices-begin-falling-again?ocid=ansmsnbc11>