

Time value of money for starbucks



Time Value of Money for Starbucks Introduction According to econedlink (n. d) the concept of the time value of money indicates that an individual is better off receiving money now than in the future. The value of money changes with time as a result of inflation and so \$1 today is worth more than a \$1 received in one year's time. It is therefore important that investments are done taking into consideration the opportunity cost of the other alternatives foregone.

Time Value of Starbucks Bonds The amount I would pay for Starbucks' bonds today depends on the expected rate of interest over the period in which the bond will be held. There is some uncertainty as it relates to the repayment date. The interest rate could be higher and lower than it is currently. I would also take into consideration the risk involved in buying the bond as well as the opportunity cost involved. Starbucks is currently in financial difficulty and so there is a possibility that I may not receive the payment in a year's time but at a later date. I would therefore require an interest rate which is higher than normal because of the additional risk involved with buying bonds in Starbucks instead of another bond or in an alternative investment. To account for the additional risk I would actually add a risk premium which would account for the uncertainty involved in investing in Starbucks.

Discount Rate for Starbuck Bonds According to Brigham and Ehrhardt (2005) finding present values is known as discounting. The discount rate that would be used to calculate the amount to be paid would be dependent on the going interest rate on similar bonds. For example, if the current going interest rate is 8% and I expect it to increase to 9% in a year time then I would require a return of 9% on my investment. In this case I would need an additional 3% in order to cover the additional risk involved. Therefore the interest rate expected would increase to 12% (9% + 3%). It

<https://assignbuster.com/time-value-of-money-for-starbucks/>

therefore means that the amount I pay now will be less than the amount I will receive in the future. This means that I would use a discount rate of 12% to compute the amount that I would pay now. This would also be dependent on the date in the future when I will be paid the \$2,000 which is the face value of the bond. According to FinanceProfessor.com (n.d.), the present value (PV) of \$2000 to be received at some future date is calculated based on the following formula: $PV = FV / (1+r)^n$ where, FV is the future value r the discount rate and n the number of years to maturity There is some uncertainty of the repayment date and so I will consider a three year time period. Interest of 12% of \$2,000 will be will be received As mentioned before $r = 12\%$ and FV is \$2000. The table below indicates the different scenarios from repayment after 1 year up to a period of 5 years assuming that there is no other cash flow.

Year	Future Value	PV Factor	PV Cash Flow
1	2000	0.8929	1785.8
2	2000	0.7972	1594.4
3	2000	0.7118	1423.6
4	2000	0.6355	1271.0
5	2000	0.5674	1134.8

The figures above indicate that the present value of \$2000 received at the end of various time periods. If the amount is to be received at the end of the first year then the amount that I would be willing to pay now for the bond is \$1,785.80. I would be willing to pay \$1,594.4, \$1,423.6, \$1,271, and \$1,134.8 if the amount is to be received at the end of year 2, 3, 4 and 5 respectively. If interest is factored in then the amount that I will be willing to pay may be a little bit more since I will be receiving interest on the bond at least annually. Starbuck Competitors Two of the companies operating in the same industry as Starbucks are McDonald's and Nestle SA. I would pay more for McDonalds' bonds because McDonalds has a lower risk coefficient as measured by beta which is equal to 0.55 (Daily Finance (n.d.)). I would also pay more for Nestle SA because the

<https://assignbuster.com/time-value-of-money-for-starbucks/>

company also has a lower risk coefficient than Starbucks. Starbucks beta is greater than 1 which suggests that it is a very risky investment. I would however pay less for a company that has a higher risk coefficient than Starbucks. Conclusion The time value of money is indeed an important concept that should be taken into account when investing money. The alternatives available should be considered as well as the relative risks of similar investments. The higher the risks involved the higher the interest rate that is expected on an investment. This higher interest compensates for the additional risk involved. This risk premium is seen as a compensation for default risk. According to Brigham and Ehrhardt (2005) investors need to assess a bond's risk of default before investing in it. This advice also applies to any investment in Starbucks's bonds. References FinanceProfessor. com (n. d.) Present Value. Retrieved from: <http://www.financeprofessor.com/financenotes/introductoryfin/presentvalue.htm> Brigham, E. F. and Ehrhardt, M. C. (2005) Financial Management: Theory and Practice. USA: Thomson South Western Econedlink (n. d.) Time Value of Money. Retrieved from: <http://www.econedlink.org/lessons/index.php?lid=37&type=student> Daily Finance. (n. d.). Top Competitors. Retrieved from: (<http://www.dailyfinance.com/company/starbucks-corporation/sbux/nas/top-competitors>