



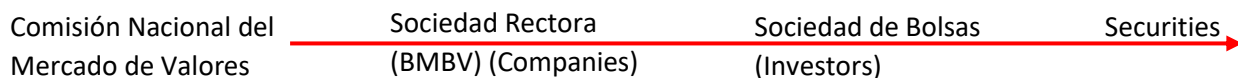


Formulas

Present Flows to Future Moments	Discount: Future Flows to Present Moments
$a_0 * (1 + r)^n$ 	$\frac{a_1}{(1 + r)^n}$ 
Gross Present Value (GPV)	Net Present Value (NPV)
Use the discount formula (MV)	Use the discount formula and add the first investment (Benefits)
Perpetual Present Value (Ex.2)	Present Value with a finite time (Ex.3)
$\frac{\text{Cash flow}}{\% \text{ return}}$	$\frac{\text{Cash Flow}}{\% * (1 - (\frac{1}{1 + \%})^n)}$
Perpetual when Growth is known (Ex.4)	Present Value with a finite time and growth
$\frac{\text{Cash flow}}{\% - g(\%)}$ 	$\frac{Cf - Cf * (\frac{1 + g}{1 + \%})^n}{\% - g}$
Certainty Equivalent (%) (Ex.6)	Certainty Equivalent (€) (Ex.6)
$\text{Expected Value}(\%) + \text{Risk Premium}(\%)$	$a_0 + \text{Present Value}$
Yield (%)	Free space for more
$\frac{a_f}{a_0} \% \text{ return}$ 	

Basic Financial Operations

1. **Investment:** Expected return rather risk
2. **Speculation:** High risk, high return
3. **Hedging:** Reduce risk through derivatives
4. **Arbitrage:** Profit without risk, temporary inefficiency

**Indexes****Time:** Fixed, Chain base**Stock** General, Sectorial**Construction:** Short, Long (standard, total)

Asset	<u>Any object, tangible or intangible, that is value to it's owner</u>
Financial Security	<u>Asset for it's owner or holder and liability for its issuer or writer</u>
Primitive asset	<u>Return depends on the financial status of the issuer</u> <u>Real assets (land) and financial assets (equity:stocks, fixed:bonds)</u>
Derivative asset	<u>Gives its owner the right on another asset and yields a return depending on additional factors also linked to evolution of other assets</u>
Stock	<u>Represents ownership or equity stake in a corporation</u>
Bonds	<u>Loaning the issuer (government or corporation) money; Specifies the amount of the loan, interest rate, how often the issuer will make interest payments to you and the date of the loan paid back full</u>
Bond fixed income	<u>Referred to that bc. They offer fixed interest payments; Bond prices are directly affected by interest rates. When interest falls, bond prices rise.</u>
Real options	Valuation methodology where option theory is applied to the analysis of real investment projects !!Not liquid assets nor tradable assets!!
OPTION	Contract, BUY (CALL) = buy asset at specified price at a future date Contract, Sell (PUT) = sell asset at specified price at a future date Parties involved: Owner (Holds Option) and Writer (issued option)
FUTURES	Agreement to buy or sell a set amount of commodity at a set price in the future; The price is agreed on by the buyer and seller; Investor only has to bring up a small deposit of around 10%
Perfect market	No operator has the ability to influence prices; Any participant has equal access to relevant information; every investor knows the best price you can buy or sell
Transparent market	New information available to the market is reflected in price changes of assets efficiently
Main Functions For the Investor	Channeling savings; Provide liquidity to securities trading; Share the management of the company by voting
For the Company	Financing; Valuation of the company (Share price)

Asset Classification

Derivatives

Financial Derivatives

Stock Exchange