Understanding bonds: A basic guide for investors

BANK ĊENTRALI TA' MALTA
EUROSISTEMA
CENTRAL BANK OF MALTA

Intro

- The aim of this presentation is to give existing or potential investors a basic understanding of bonds and bond markets.

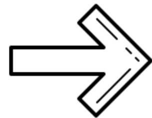
- This presentation will guide you in better understanding the concepts included in a paper published "*An Introductory Overview of the Bond Market*"

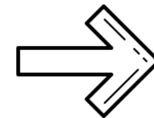
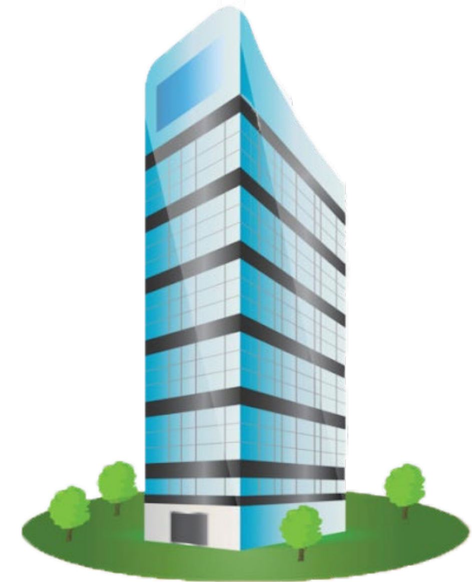
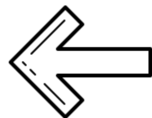
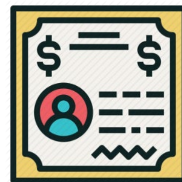
What are Bonds?

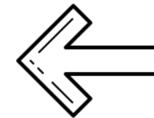
- Bonds are a tool for corporations or governments to raise money to finance projects or other investments which are expected to generate direct or indirect returns.
- These are specialised borrowing agreements that bind a **borrower** (**Issuer**) to give the **lender** (**Investor**) periodic streams of income.
- Such agreement is in the form of a contract (**Prospectus**), which lays out in detail the promises made by the issuer as well as the rights of the investors (**Bondholders**). These are known as **Indentures**.

What are Bonds? (cont'd)

- When the investor lends money to the borrower, s/he will receive a certificate showing the amount invested.





Investor **Corporation**

Investing in a bond!

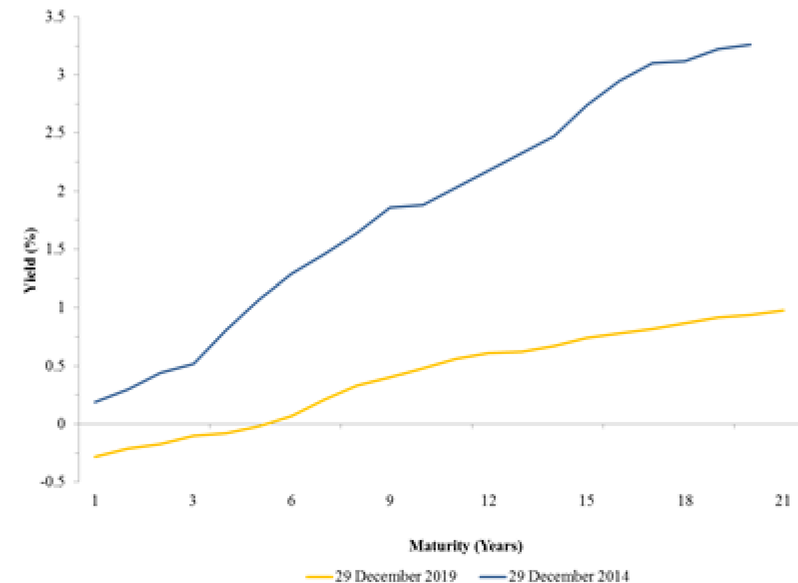
- Bonds are usually calculated in units of 100 or 1000 known as the **Face Value**. This does not necessarily mean that the investor will pay 100 for each bond invested.
- The investor may pay a higher (**Premium**) or lower (**Discount**) price.
- The life of the bond would be pre-specified in the indentures. The investor would know when the (**Principal**) face value amount placed with the borrower will be repaid.
- The specified date is known as the **Maturity Date**.

What is my return?

- Most bonds pay a stream of cash flows on pre-specified dates.
- When an investor invests at face value, the actual return on investment would be equal to the pre-determined **interest rate** (**Coupon**).
- On the other hand if an investor invests at a premium or at a discount, the actual return on investment will be lower or higher, respectively. This is known as the **Yield to Maturity** and is usually calculated on an annual basis.

What is my return? (cont'd)

- The Yield to Maturity depends mainly on the interest rate expectations of other investors as well as interest rate decisions by Central Banks.
- Although in most cases the Yield to Maturity is positive, at present we are also experiencing negative yields, whereby investors are paying borrowers to place their money with them.



How do I decide whether to invest or not?

- The amount invested depends on the investor's willingness to trust her/his money with the borrower.
- There are various risks which need to be taken into consideration when deciding on a potential investment.
  - What's the probability of getting my money back?
  - What if I want my money back earlier?
  - Are there any better opportunities?

Can I lose my Initial Investment?

- The original amount invested is not always guaranteed.
- One of the main risks when investing in a bond, is the risk that the issuer fails (**Defaults**) to meet their obligation of timely interest or principal payments. This is known as **Credit Risk**.
- In order to manage such risk, an investor can monitor the borrower personally, or else s/he can analyse this risk through **Credit Ratings**, issued by rating agencies.

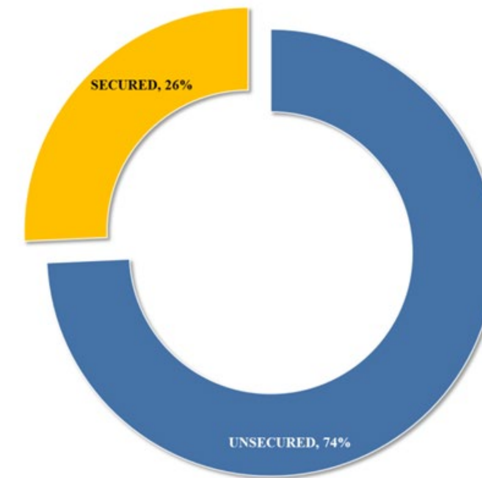
What are Credit Ratings?

- The ratings reflect the **creditworthiness** or the associated risk assigned to the issuer.
- A **credit rating** reflects the likelihood that the borrower will meet her/his obligations on time and in full, without defaulting, which would translate into a high credit rating.

	S&P	DBRS	Fitch	Moody's
Prime	AAA	AAA	AAA	Aaa
High Grade	AA+	AA+	AA+	Aa1
	AA	AA	AA	Aa2
	AA-	AA-	AA-	Aa3
Upper Medium Grade	A+	A+	A+	A1
	A	A	A	A2
	A-	A-	A-	A3
Lower Medium Grade	BBB+	BBB+	BBB+	Baa1
	BBB	BBB	BBB	Baa2
	BBB-	BBB-	BBB-	Baa3
Non-Investment Grade Speculative	BB+	BB+	BB+	Ba1
	BB	BB	BB	Ba2
	BB-	BB-	BB-	Ba3
Highly Speculative	B+	B+	B+	B1
	B	B	B	B2
	B-	B-	B-	B3
Substantial Risk	CCC+	CCC+	CCC+	Caa1
Extremely Speculative	CCC	CCC	CCC	Caa2

What would lower Credit Risk?

- Secured bonds are generally those backed by the company's assets (**Collateral**). In case of a default, the investor has a legal claim against these assets in order to recoup her/his or her investment.
- Debt not pledged by collateral is unsecured.
  - Sovereign bonds are generally unsecured and backed by the "creditworthiness" of the issuer (government).
  - Around a quarter of corporate debt in Malta is secured (26%).



Corporate Maltese Debt Market

What if I want my money back earlier?

An investor can decide to sell a bond to another investor, at an agreed price prior to it's maturity date. This transaction takes place on the **Secondary Market**.

The price at which the bond is bought and sold is determined by demand and supply on the market. Hence, these can be sold for more or less than initially purchased.

The local Secondary Market is maintained by the **Malta Stock Exchange.**

What if I want my money back earlier? (cont'd)

- If a secondary market for a bond is made up of a few buyers and sellers, we would refer to that market as being **illiquid** (**Liquidity Risk**).
- **Liquidity risk** is the risk that a market participant is unable to find an adequate counterparty in order to sell a position.
- Illiquidity can have an impact on the return from an investment and therefore, liquidity risk should be considered prior to purchasing the security, especially if the investor does not plan to hold it to maturity.

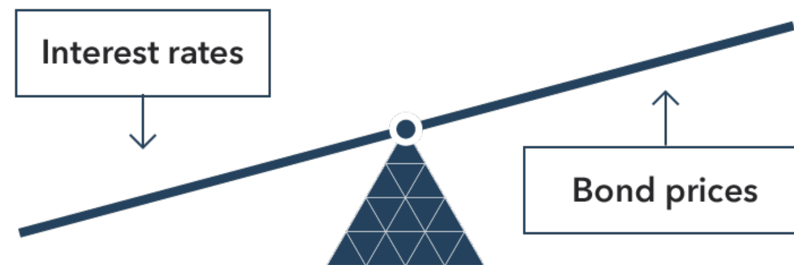
In the local market, Sovereign Bonds tend to be more liquid as the **Central Bank of Malta** acts as liquidity provider.

Are there any better opportunities?

- If an investor identifies a more lucrative investment option, s/he may sell the bond on the secondary market. Better investment opportunities may present themselves in the form of other bonds.
- Throughout the life of the bond interest rates fluctuate, so a newly issued bond with the **same** risk and characteristics like the bond that the bondholder is currently holding, might yield a higher return. A **rational** investor may opt to sell her/his current bond and purchase the newly issued bond.

Are there any better opportunities? (cont’d)

- However, in an efficient market, nobody would purchase the old bond, leading to a fall in price.
- This is known as **interest rate risk**. As market interest rates start to increase, the price of outstanding bonds start to decline. This negative relationship also holds when interest rates fall.



Type of Bonds (Plain Bonds)

- **Fixed Rate Bonds** - The issuer of this financial instrument is obligated to pay out a regular stream of income over the life of the bond, with the par value being repaid at maturity.
- **Floating Rate Bonds** – These financial instruments have a **variable** interest rate that fluctuates according to a chosen market interest rate benchmark, known as the **reference rate**.

Type of Bonds (Niche & Complex Bonds)

- **Inflation Linked Bonds** or **linkers** are debt securities in which the principal and coupons are linked to a specific **price index.**
- **Green Bonds** - People have developed a growing concern for the environment and for other social issues. The creation of green bonds was aimed at funneling this investment into eligible green projects.
- **Sukuk Bonds** – These bonds target Islamic investors but they are not necessarily issued by Islamic companies. They are structured in a different way and are best described as financial certificates that give the holders partial ownership of some debt or asset.

Type of Bonds (Niche & Complex Bonds)

- **Callable/Putable Bonds** – These bonds are fixed rate bonds which include an additional layer known as **Embedded Option**. Such option can be either a **Call Option** or a **Put Option**.
- A **call option** gives the **issuer** the **right** but not the obligation to repurchase the bond, from the bondholder, at a predetermined price and at a predetermined time.
- A **put option** grant the **bondholder** the **right**, but not the obligation, to receive earlier repayment of the principal within a specific time period and at a predetermined price.

Further Information

- Should you wish to read further, kindly refer to this link.

Thank You!