3 Instruments

3.1 Learning outcomes

After studying this text the learner should:

1. Understand the characteristics of the different types of bonds found in the international bond markets and be able to distinguish between them.

3.2 Introduction

There are five bond issuer groups and there are subcategories that apply to government as shown in Figure 1.

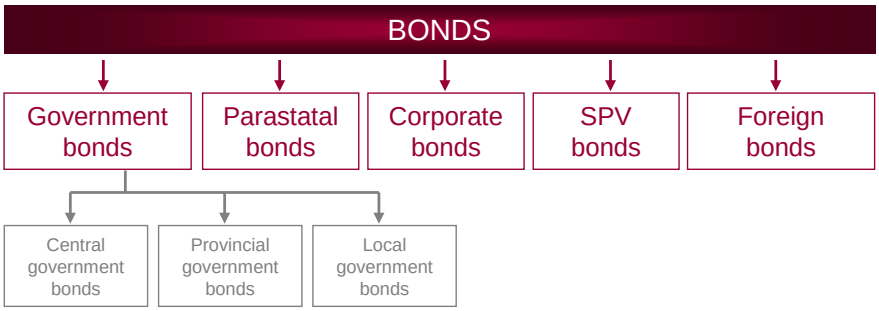


Figure 1: classification of bonds

These borrowers issue one or more of the many types of bonds that have been created to satisfy the needs of the issuers and the investors. The varieties of bonds found in international bond markets are[15]:

- Plain vanilla bonds.
- Bearer bonds versus registered bonds.
- Perpetual bonds versus fixed-term bonds.
- Floating rate bonds versus fixed-rate bonds.
- Inflation-linked bonds.
- Zero coupon bonds versus coupon bonds.
- Call bonds.
- STRIPS.
- Convertible bonds.
- Exchangeable bonds.
- Bonds with share warrants attached.
- General obligation bonds.
- Revenue bonds.
- Serial bonds.
- Catastrophe bonds.

- Asset-backed bonds.
- Senior, subordinated, junior and mezzanine bonds.
- Junk bonds.
- Guaranteed bonds.
- Pay-in-kind bonds.
- Split coupon bonds.
- Extendable bonds.
- Foreign bonds.
- Eurobonds.
- Global bonds.
- Retail bonds.

3.3 Bond instruments

3.3.1 Plain vanilla bonds

The plain vanilla bond was covered in an earlier section. A reminder: it is a fixed-term, fixed-rate and registered bond. An example is presented in Box 1 and its cash flows are presented in Figure 2.

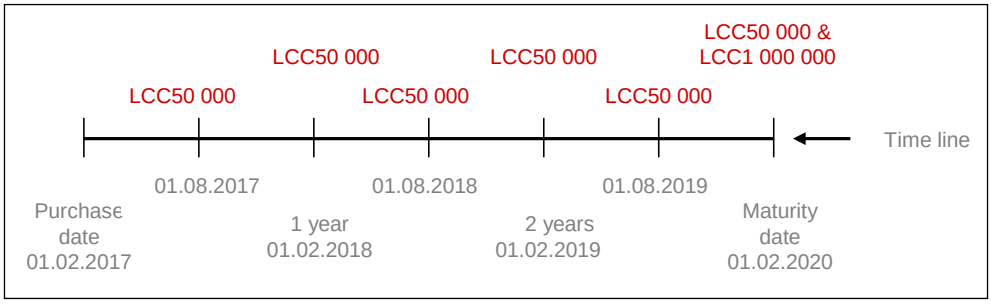


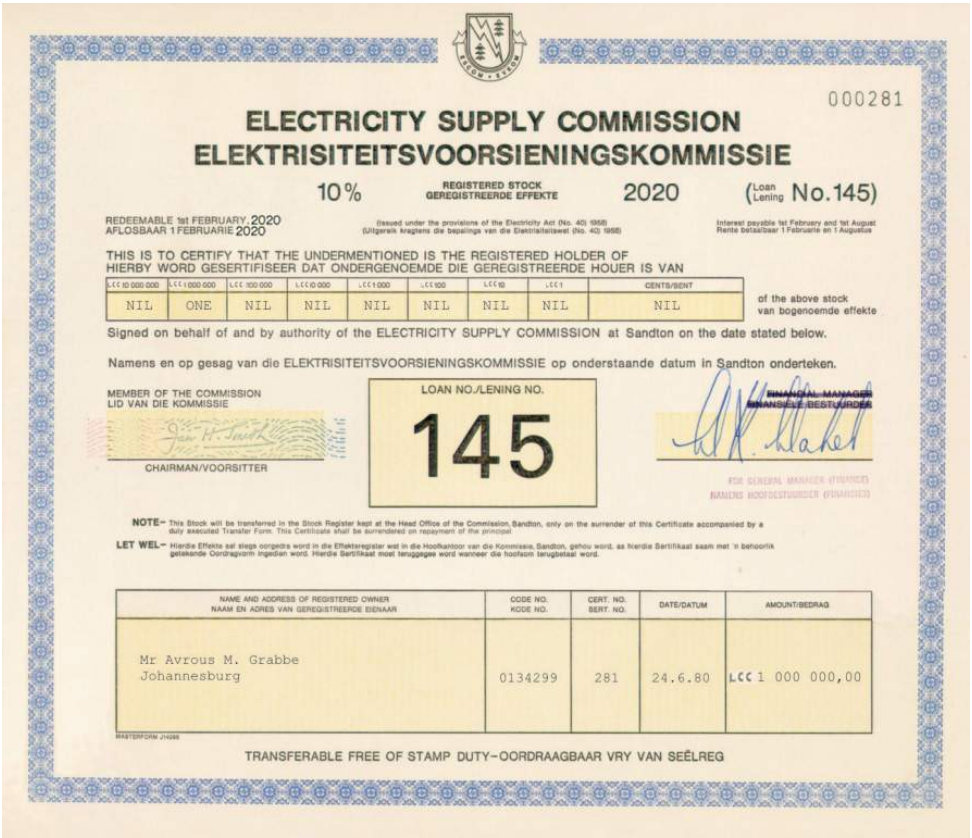
Figure 2: example of cash flows of plain vanilla bond: 10% coupon, interest payable six-monthly in arrears, due 1 February 2020

Assuming this bond is purchased on 1 February 2017 its cash flows are:

- LCC50 000 every 6 months until maturity including on the maturity date (0.10 × LCC1 000 000 / 2).
- LCC1 000 000 (the nominal / face value of the bond).

These characteristics of the bond do not change during the life of the bond. All that changes is the market rate on the bond, which brings about a change in the price of the bond.

BOX 1: EXAMPLE OF PLAIN VANILLA BOND



000281

ELECTRICITY SUPPLY COMMISSION
ELEKTRISITEITSVOORSIENINGSKOMMISSIE

10% REGISTERED STOCK GEREGISTREERDE EFFEKTE 2020 (Loan Lening No.145)

REDEEMABLE 1st FEBRUARY 2020
AFLOSBAAR 1 FEBRUARIE 2020

Issued under the provisions of the Electricity Act (No. 40) 1958)
(Uitgereik kragtens die bepalings van die Elektrisiteitswet (No. 40) 1958)

Interest payable 1st February and 1st August
Rente betaalbaar 1 Februarie en 1 Augustus

THIS IS TO CERTIFY THAT THE UNDERMENTIONED IS THE REGISTERED HOLDER OF
HIERBY WORD GESERTIFISEER DAT ONDERGENOEMDE DIE GEREGISTREERDE HOUER IS VAN

LCC 10 000 000	LCC 1 000 000	LCC 100 000	LCC 10 000	LCC 1 000	LCC 100	LCC 10	LCC 1	CENTS/SENT
NIL	ONE	NIL	NIL	NIL	NIL	NIL	NIL	NIL

of the above stock
van bogenoemde effekte

Signed on behalf of and by authority of the ELECTRICITY SUPPLY COMMISSION at Sandton on the date stated below.

Namens en op gesag van die ELEKTRISITEITSVOORSIENINGSKOMMISSIE op onderstaande datum in Sandton onderteken.

MEMBER OF THE COMMISSION
LID VAN DIE KOMMISSIE

CHAIRMAN/VOORSITTER

LOAN NO./LENING NO.
145

FINANCIAL MANAGER
FINANSIELE BESTUURDER

NOTE– This Stock will be transferred in the Stock Register kept at the Head Office of the Commission, Sandton, only on the surrender of this Certificate accompanied by a duly executed Transfer Form. This Certificate shall be surrendered on repayment of the principal

LET WEL– Hierdie Effekte sal slegs oorgedra word in die Effektereregister wat in die Hoofkantoor van die Kommissie, Sandton, gehou word, as hierdie Sertifikaat saam met 'n behoorlik getekende Oordragvorm ingedien word. Hierdie Sertifikaat moet teruggegee word wanneer die hoofsom terugbetaal word.

NAME AND ADDRESS OF REGISTERED OWNER NAAM EN ADRES VAN GEREGISTREERDE EIENAAR	CODE NO. KODE NO.	CERT. NO. SERT. NO.	DATE/DATUM	AMOUNT/BEDRAG
Mr Avrous M. Grabbe Johannesburg	0134299	281	24.6.80	LCC 1 000 000,00

TRANSFERABLE FREE OF STAMP DUTY–OORDRAAGBAAR VRY VAN SEËLREG

Source: Eskom

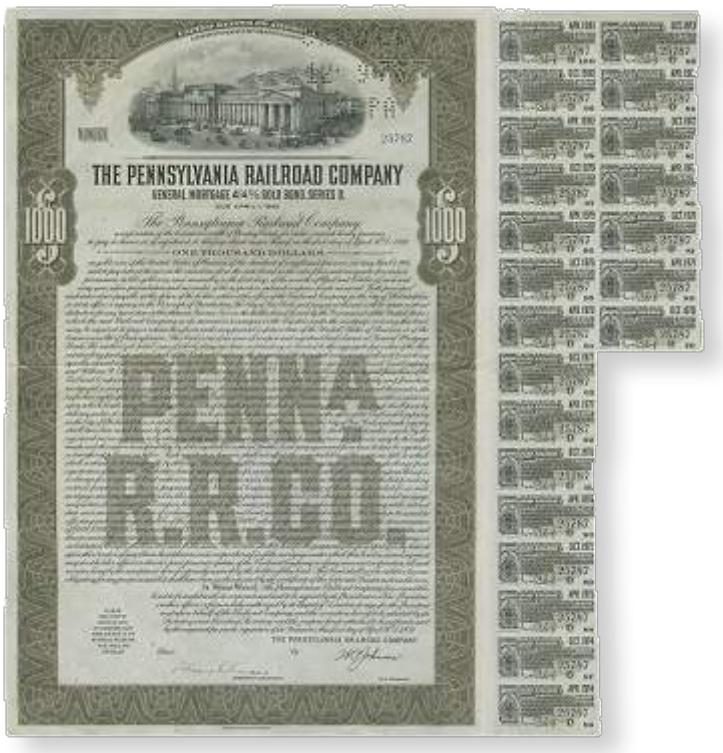
3.3.2 Bearer bonds versus registered bonds

Bearer bonds contrast to *registered bonds*. The plain vanilla bond in the example is a registered bond meaning that the name of the investor is printed on the certificate and that a register of owners is maintained. The register has two purposes: proof of ownership (together with the certificate) and the payment of interest to the registered owner.

Originally only the issuer maintained the register of owners. Later certain banks offered the service of maintenance of the register and change of registration of ownership; these services were utilised by most issuers. Later on these service providers became known as Transfer Secretaries.

With the advent of *immobilisation* and *dematerialisation* and the existence of a Central Scrip Depository (CSD), these Transfer Secretaries are now known as CSDPs (CSD Participants)[16]. With immobilisation, bonds are immobilised in the scrip depository and an electronic register is maintained by the CSDP and the CSD and these evidence ownership. The CSDP sends confirmation of ownership to investors on a regular basis. With total dematerialisation, the same situation prevails but no scrip is deposited in the CSD.[17]

BOX 2: EXAMPLE OF BEARER BOND WITH COUPONS



Source: http://riskencyclopedia.com/articles/book_entry_registered_bearer_bonds/

Transfer of ownership of registered bonds is accomplished by the completion of a *Securities Transfer Form* (CTF – also called *transfer deed*). This CTF is usually prescribed in terms of the statute that regulates companies / corporations.

In the case of *bearer bonds*, none of the above applies, i.e. the name of the issuer is not placed on the bond, and neither is a register kept. Proof of ownership is the physical bond itself.

The bond term *coupon* emanates from the bearer bonds issued in the distant past. Attached to the certificates were perforated coupons on which the amount of interest was printed. On interest dates these coupons were detached and presented to the issuer to honour. An example is provided in Box 2[18] (note the coupons on the right of the certificate).

Transfer of ownership of bearer bonds took / takes place by exchange of the certificate for funds. It will be apparent that a higher measure of risk attaches to bearer bonds, which is why they are no longer issued in the developed markets.

3.3.3 Perpetual bonds versus fixed-term bonds

Perpetual bonds are also knows as perpetuities, consols, treasury annuities and undated treasuries. They have an English genesis and they contrast to *fixed-term bonds*. A perpetual bond is a bond that has no maturity date. The rate (coupon) payable on the bond may be floating or fixed, and the rate is paid in perpetuity. An example of a fixed-rate perpetual bond is depicted in Figure 3.

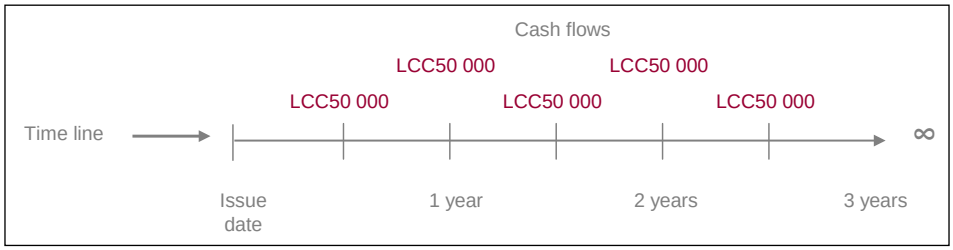


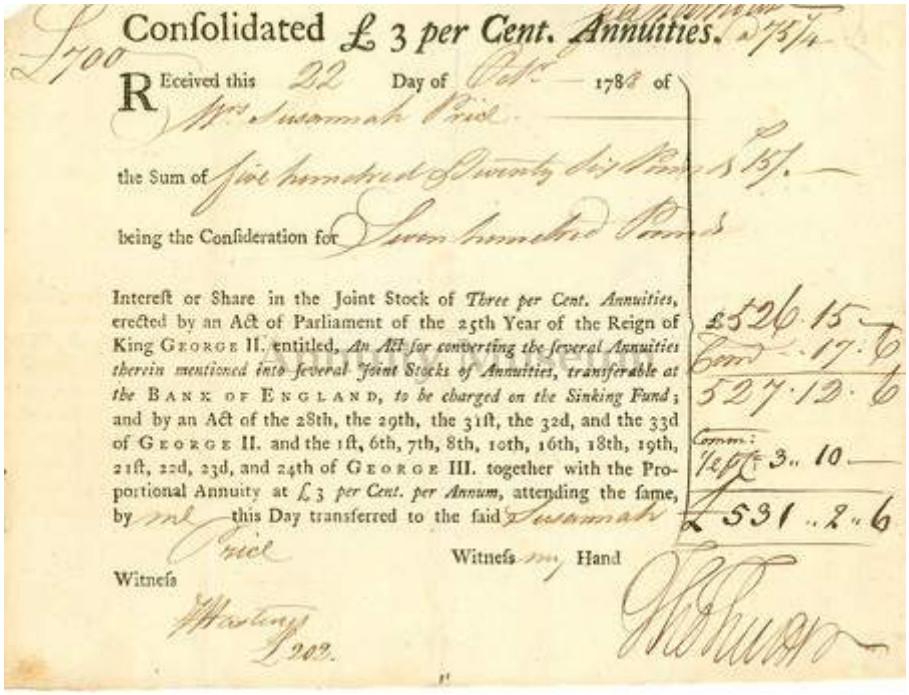
Figure 3: example of a perpetual bond (nominal value = LCC1 000 000; coupon = 10% pa)

In this example the perpetual bond has a nominal value of LCC1 million and an interest rate (coupon) of 10% per annum, payable 6-monthly in arrears. The nominal value is the amount payable for the bond *at issue* and this amount is not repayable. The LCC50 000 coupon (LCC1 000 000 × 0.10 / 2) is paid every 6 months from issue date *ad infinitum* (i.e. forever).

It will be evident that investors will only invest in these bonds if they are issued by an institution that has the ultimate creditworthiness. Only certain governments can claim this status. These bonds obviously still exist, but they are not issued any longer.

An example of a UK perpetual bond (annuity) is presented in Box 3.19

BOX 2: EXAMPLE OF PERPETUAL BOND (ANNUITY)



Consolidated £ 3 per Cent. Annuities.

Received this 22 Day of Feb. 1788 of

Mrs Susannah Price

the Sum of five hundred Twenty six Pounds 15/.

being the Consideration for Seven hundred Pounds

Interest or Share in the Joint Stock of *Three per Cent. Annuities*, erected by an Act of Parliament of the 25th Year of the Reign of King GEORGE II. entitled, *An Act for converting the several Annuities therein mentioned into several Joint Stocks of Annuities, transferable at the* BANK OF ENGLAND, *to be charged on the Sinking Fund*; and by an Act of the 28th, the 29th, the 31ſt, the 32d, and the 33d of GEORGE II. and the 1ſt, 6th, 7th, 8th, 10th, 16th, 18th, 19th, 21ſt, 22d, 23d, and 24th of GEORGE III. together with the Proportional Annuity at £ 3 *per Cent. per Annum*, attending the ſame, by Mrs Price this Day transferred to the ſaid Susannah

£526 15
Comm: 17 6
527 12 6
Comm: 3 10
£531 2 6

Witneſs my Hand

Witneſs

Source: http://financelongrun.blogspot.com/2013/02/perpetual-bonds.html

3.3.4 Floating rate bonds versus fixed-rate bonds

A *floating rate bond* (also called "floating rate note" – FRN) contrasts with a *fixed-rate bond*. This bond usually has the same features as a plain vanilla bond except that it does not have a fixed coupon, i.e. the rate payable on the bond is not fixed. Instead, the rate payable is linked to some benchmark rate. The benchmark rate can be any rate that "floats", i.e. changes frequently with market conditions, but it is a rate that is quoted regularly and is reliable in terms of reflecting market conditions accurately. Examples of benchmark rates are:

- *Prime rate*. This is the rate charged by banks on overdraft facilities to prime clients, and they are usually the same. They are usually quoted by the banks on a permanent basis.
- *Interbank lending rates*. In most countries a neutral organisation (such as an exchange) gathers in a variety of rates at which a number of the large banks will lend to one another for various periods, for example overnight, 30 days, 60 days, 91 days, 182 days and so on. Here we call them *IBAR* (interbank agreed rates). The neutral organisation usually calculates and publishes daily arithmetical averages for each rate after lopping of the highest and the lowest.
- *3-month BA rate* (i.e. the rate on 3-month bankers' acceptances). This rate occupied a high profile position in many countries in the past, but the instrument is no longer as widely traded.
- *91-day treasury bill tender rate*. Most central banks, on behalf of their governments, conduct weekly treasury bill tenders for various terms. In most countries these rates are published weekly and have high credibility in the market.

An example of a floating rate bond is (see Figure 4):

Nominal value:	LCC1 000 000
Term:	3 years
Interest frequency:	6-monthly
Floating rate:	100 basis points (bp) above most recent 91-day weekly treasury bill tender rate pa on interest dates (TB rate).

Because the floating rate is a per annum rate, the 6-monthly rate is:

(TB rate + 100bp) / 2.

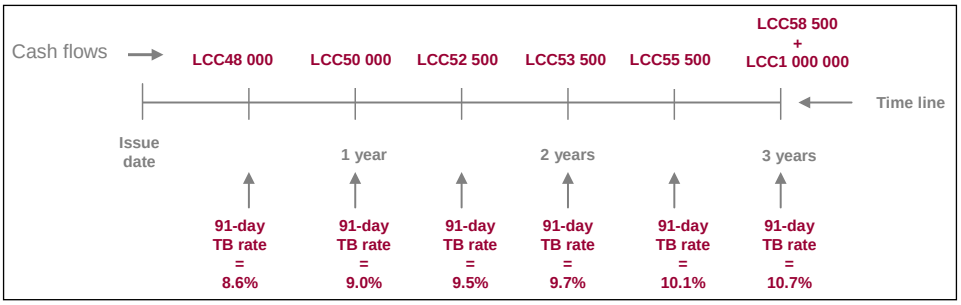


Figure 4: example of a floating rate bond

For example, the first interest amount payable is:

LCC1 000 000 × [(0.086 + 0.01) / 2]
= LCC1 000 000 × 0.048
= LCC48 000.

Floating rate bonds are also referred to as *reset bonds* in some countries.

3.3.5 Inflation-linked bonds

Inflation-linked bonds are also called *index bonds*. Their return is usually linked to the CPI (consumer price index) and as such is a variation of floating rate bonds. The differences are that the benchmark is not an interest rate but the inflation rate, and the principal value is adjusted for the differential between the CPI rate and the benchmark rate.

There is no generic CPI bond. The type is found in many countries (which are usually issued by government and parastatals – public enterprises) can be described as follows: the coupon rate is determined in an open market auction and remains fixed throughout the life of the bond. Adjustments are made to the bond's capital value to compensate for inflation.

An example is required. If the coupon on the bond is 6.0% pa and the investment is LCC1 million, the interest paid per annum is LCC60 000. If inflation in the next year is 4.0% pa, the capital value of the bond is adjusted to LCC1 040 000 (LCC1 000 000 × 1.04). The coupon rate of 6.0% pa remains unchanged but is payable on the higher capital value; it is therefore LCC62 400 (LCC1 040 000 × 0.06). This means that both capital and income are adjusted upwards by the CPI inflation rate.

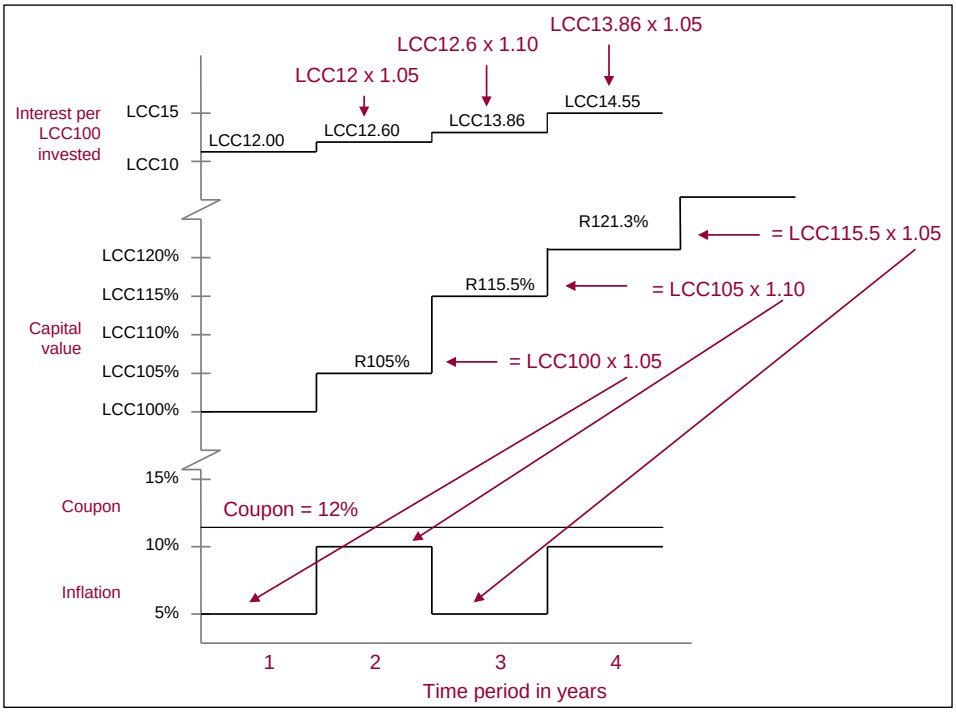


Figure 5: example of inflation-linked bond

Another example is presented in Figure 5 (inflation fluctuates between 5% and 10%; coupon = 12%).

Inflation-linked bonds are appropriate for investors who need to match inflation-linked liabilities.

3.3.6 Zero coupon bonds versus coupon bonds

A *zero coupon bond*, as the name indicates, is a bond that does not have any coupon payments. An example follows (see Figure 6):

Nominal value:	LCC1 000 000
Term:	3 years
Interest payable:	None (except that the "discount" is payable)
Interest dates:	None (except that the discount amount is payable on maturity date).

The *zero coupon bond* contrasts with the *coupon bond*, and is the most straightforward of all bonds. The face of the certificate[20] has the name of the investor, the nominal (face) value and the maturity date. It is *issued at a discount rate*, which reflects the interest rate that the investor is prepared to pay, i.e. the market rate for 3-year money. The return to the investor is the difference between that nominal value and the price paid, i.e. the discount amount.

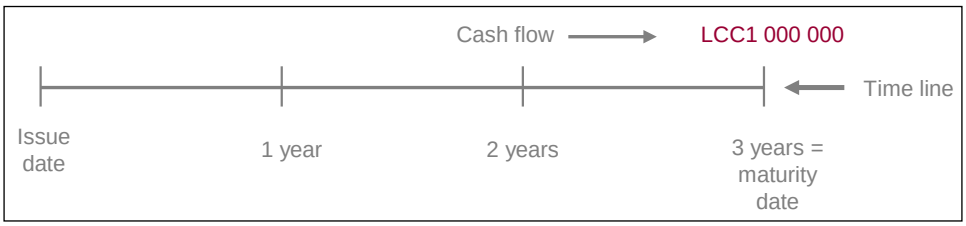


Figure 6: example of zero coupon bond

3.3.7 Call bonds

Call bonds are also termed *bonds with call provisions.* Call bonds are plain vanilla bonds that have a call provision attached, i.e. the *issuer has the option to repurchase the bond after a stipulated period* but before maturity, under certain conditions (usually price). Clearly, the issuer has the right but not the obligation to exercise this "option".

Usually in the case of call bonds a pre-determined cost to the issuer (advantage to the buyer) is included in the deal. For example, a 10% pa coupon callable bond issued at a price of 100% may be callable at a price of 110%, i.e. if the issuer calls the bond, the holder will be paid a price of 110%. Clearly, the issuer will only call the bond if the price rises to above 110%.

In the case of call bonds where the price is determined according to a tender, the bonds are called at par. This option for the issuer will ensure that the tender price will be lower than on equivalent term bonds that are not subject to calls.

There are three versions of call bonds:

1. Where the issuer has the option to call the entire issue.
2. Where the issuer has the option to call the issue in tranches.
3. Where the issuer has the option to call part of the issue.

A number of callable bonds are listed on the exchanges of the world. Although the callable feature allows the issuer to refinance at a lower rate, it places a limit on the capital gains to be made by the investor; hence callable bonds are not favoured by investors. Banks often issue callable bonds to qualify as Tier II capital in accordance with the regulations of the BASEL Accord.[21]

There are also a few bonds in issue that have put options attached, i.e. the holder has the right (but not the obligation) to sell the bond back to the issuer on or before a specified date under certain conditions.

3.3.8 Strips

STRIPS is the acronym for **S**eparate **T**rading of **R**egistered **I**nterest and **P**rincipal of **S**ecurities. These securities have existed in international bond markets for some years.

"Stripping" involves separating a plain vanilla bond into its constituent interest (coupon) payments (often called C-strips) and the principal payment (often called the P-strip), such that they exist separately.

The way bonds are stripped is straightforward: the plain vanilla bond is placed in a special purpose vehicle (SPV) and the SPV in turn issues the various "stripped" bonds (C-strips and the P-strip), with the bond providing collateral security. Bonds may also be stripped by the issuer itself: the bond (or part of the issue) is cancelled and a series of C-strips and P-strips are issued in place thereof.

It will be apparent that each cash flow (each coupon interest payment and the final principal amount) is a *zero coupon bond*. An example is presented (see also Figure 7 and Figure 8). The bond has the following features:

Nominal value:	LCC1 000 000
Issue date:	15 April 2008
Maturity date:	15 April 2011
Term:	3 years
Interest dates:	15 April and 15 October
Coupon rate:	8% pa.

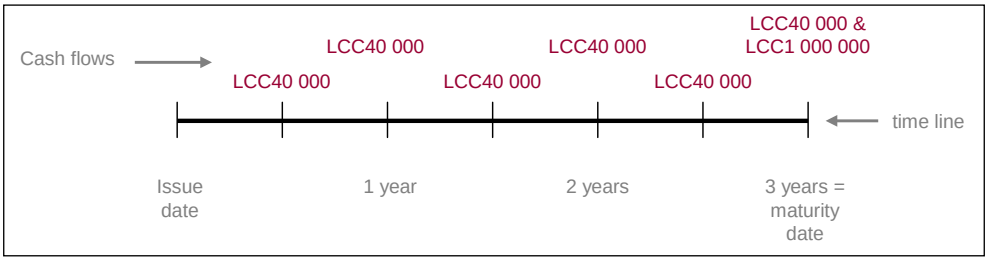


Figure 7: example of stripped bond

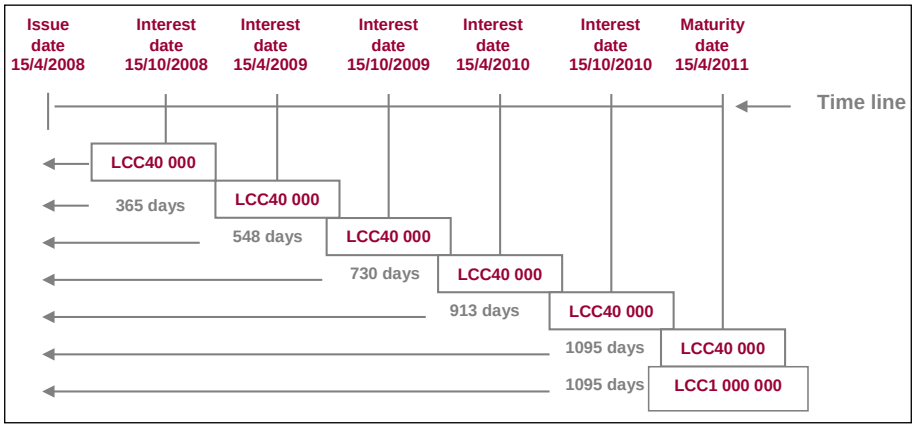


Figure 8: example of stripped bond

The *zero coupon bonds* derived from the "stripping" are as follows:

1 × LCC40 000 nominal value; term183 days
1 × LCC40 000 nominal value; term 365 days
1 × LCC40 000 nominal value; term 548 days
1 × LCC40 000 nominal value; term 730 days
1 × LCC40 000 nominal value; term 913 days
1 × LCC40 000 nominal value; term1095 days
1 × LCC1 000 000 nominal value; term1095 days.

3.3.9 Convertible bonds

Convertible bonds are bonds that are *convertible into ordinary (also known as common) shares* at a pre-specified price at the option of the investor; they may be handed over in return for equity in the issuer. Clearly the investor will only do so if it is profitable, i.e. if s/he is able to benefit from a rise in the share price [and more so than the rise in the bond price that he may be enjoying (which is the same as a decline in the bond rate)].

3.3.10 Exchangeable bonds

Exchangeable bonds are corporate bonds that are exchangeable for shares in a company other than the issuer of the bond. The *investor has an option to undertake the exchange*, but does not have an obligation to do so.

3.3.11 Bonds with share warrants attached

In some foreign markets issues are made of *bonds with share warrants attached*. The warrant is an option to purchase a pre-specified number of the shares of the company that issued the bonds at a pre-determined price.

These bonds thus differ from convertible and exchangeable bonds in that the bondholder retains the bonds upon exercise of the warrants. For example, in the case of convertible bonds the bonds are surrendered and cancelled upon conversion / exchange.

3.3.12 General obligation bonds[22]

The term *municipal bond* in the US refers to the bond issues of *any state* or any *entity created by a state* (cities, counties, school districts, water districts, etc.). There are three types of municipal bonds: general obligation bonds, revenue bonds and serial bonds. These are discussed separately (and not as categories of municipal bonds) in order to avoid confusion with domestic municipal bonds.

General obligation bonds are municipal bonds that are backed by "the full faith and credit" of the issuer. This means that the issuer will do all in its power to honour the debt. Because municipalities must continue to operate, a defaulting municipality may take many years to repay the interest and principal *after* due date.

3.3.13 Revenue bonds

A revenue bond is a US municipal bond that is issued to finance a *specific project* that is revenue generating, for example, a sewerage plant, a road, a tunnel. The revenues collected from the public for the use of the asset are used to pay the interest and principal. These bonds are more risky because the revenue may not be sufficient to cover the interest and principal and therefore they carry a relatively high rate. Investors (or the rating agencies on their behalf) would take a careful look at the ratio of expected revenue to interest commitment.

3.3.14 Serial bonds

A *serial bond* is a US municipal debt instrument. It is a series of bonds that are issued together, each with a different maturity. An example is the issue of US$100 million on a particular day for each of the periods 5 years, 10 years, 15 years and 20 years. They are all plain vanilla bonds and investors select which series are suitable for them, depending on their investment horizon. Pension funds usually prefer the longer bonds, short-term insurers the medium term bonds, while banks are more interested in the shorter bonds.

3.3.15 Catastrophe bonds

Catastrophe bonds are bond issues by risk takers such as insurance companies to offset some of their risk. For example[23], in 1997 Tokyo Marine & Fire Insurance issued a 10-year bond, the interest on which was tied to whether and to what extent Tokyo was damaged by an earthquake. The bondholders received interest (from the premiums collected by the insurer), which fluctuated at between 400-500 bp over LIBOR. The principal was lost if the earthquake occurred.

3.3.16 Asset-backed bonds

Asset-backed bonds are not a bond variety but are included here for the sake of comprehensiveness. Any of the bonds already mentioned or to be mentioned can be asset-backed, i.e. backed by certain assets. For example, central government securities in most countries are backed by the revenue and assets of the country.

Other examples of asset-backed bonds are the bonds issues of SPVs. As noted in a previous section, SPVs are the product of securitisations undertaken mainly by banks and companies themselves.

In the case of a mortgage securitsation the mortgages of individuals are pooled in a SPV and these are financed by the issue of two tiers of *mortgage-backed securities* (MBS): prime rated (AAA) bonds to the extent of about 90% and subordinated bonds for the balance of 10% (actually there are three tiers of MBS – see next section). All the bonds are *backed* by specific mortgages. This means that if the SPV fails, the holder of the bonds has a call on the underlying mortgage bonds.

A variation of the securitised mortgage-backed bond is the *non-securitised mortgage-backed bond*. An example is a power plant utility that issues bonds to finance the building of a plant. The plant is mortgaged (which means that it is pledged as collateral security for the bond).

3.3.17 Senior, subordinated, junior and mezzanine bonds

In securitisations, certain assets that have a cash flow are pooled and bonds (or short-term commercial paper) are issued to fund these assets. As seen above, *highly rated bonds*, called *senior bonds*, are issued up to a certain proportion of the assets pooled (usually 90%), and *subordinated bonds* for the rest (the balance of usually 10%). The split depends on the rating agencies' credit-enhancement demands.

The *subordinated bonds* are further split into so-called *mezzanine bonds* (to the extent of about 7%) and *junior bonds* for the balance (about 3%). The mezzanine bonds are usually rated BBB and the junior bonds are unrated (because they are usually taken up by the sponsor of the securitisation).

In the event of the failure of a portion of the underlying assets, the holders of the *junior bonds* are the first to take the loss. Next in line are the holders of the *mezzanine bonds* and last in line are the holders of the highly rated *senior bonds*. Thus the junior bonds are *subordinated* to the mezzanine bonds and the mezzanine bonds are *subordinated* to the highly rated *senior bonds*.

These bonds are usually of the plain vanilla variety, but some are floating rate bonds.

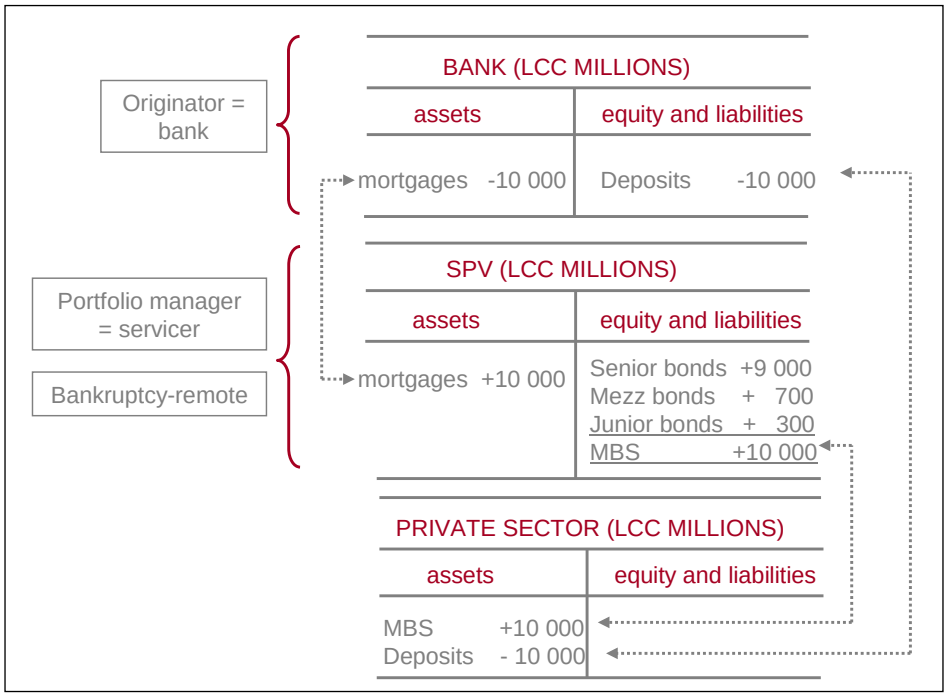


Figure 9: example of bank securitisation of mortgages

An example of a securitisation of mortgages by a bank is presented in Figure 9 for the sake of didactic elucidation. In this example it is assumed that all the mortgage backed securities (MBS) have been purchased by members of the financial private sector (pension funds, insurers and so on). In reality the junior (unrated) bonds are taken up by the originator / sponsor (usually a bank), while the mezzanine bonds are taken up by some risk-taker because the rate offered on them is high, reflecting the risk profile of these bonds.

3.3.18 Junk bonds

Junk bond is the term for bonds of companies that are not rated (because they cannot get a decent rating) or for bonds that are rated below investment grade, which is BBB – in the case of Standard & Poor's and Baa3 in the case of Moody's. Included thus in this category are the *junior bonds* of securitisations referred to above (the LCC300 million shown in Figure 9).

3.3.19 Guaranteed bonds

A *guaranteed bond* is a bond that is guaranteed by a party other than the issuer. One has to differentiate here between company bonds and parastatal (public enterprise) bonds. The companies with weak ratings or no credit ratings issue guaranteed bonds.

The company that issues the guarantee is usually an insurance company that has a high credit rating. It will be apparent that the investor in this case is not concerned about the financial standing of the issuer. Because the credit rating of the insurer is substituted for the rating of the issuer, the investor will look to the insurer for comfort. A weak company will only issue bonds with guarantees if the insurance premium is less than the interest premium the company would pay in the absence of the guarantee.

In many countries, the central government guarantees the bonds of the parastatals. These bonds trade at only small premiums to central government bonds, mainly because they are not as liquid as central government bonds.

3.3.20 Pay-in-kind bonds[24]

Pay-in-kind (PIK) bonds are bonds where the issuer has the option to pay the interest in the form of additional bonds. In some cases the issuer has the option to issue additional bonds in lieu of interest only during the first few years of the issue. Companies that may have cash flow difficulties in the first few years of a project usually issue this type of bond. These bonds usually carry a higher coupon (to compensate for the higher risk level).

3.3.21 Split coupon bonds

Split coupon bonds are similar to PIK bonds in that no interest is paid in the first few years (except that here the issuer has no option). The split coupon bond is a hybrid of the zero coupon bond and the fixed-rate bond. The bond is issued at a discount to face value (say 0.92) and the interest accrues until a specified time (say, when the value of the bond is 1.0). Thereafter, interest is paid at the coupon rate until maturity date.

Such bonds are issued in order that debt servicing is removed in a specified period. Such bonds have been issued to finance leveraged buyouts and recapitalisations and therefore carry a higher yield than equivalent term (uncomplicated) bonds.

3.3.22 Extendable bonds

Extendable bonds are bonds where the issuer has the option to extend the term of the bond beyond the (initial) maturity date for another fixed period or periods (the final maturity date). Because this bond has benefits for the issuer in the form of conserving cash at the initial maturity date, the rate is usually somewhat higher.

3.3.23 Foreign bonds

Foreign bonds are bonds issued by foreign entities (usually governments and parastatals) in local currency. They are foreign from the point of view of the local bond market. For example, a bond issued by a Swiss utility in Local Country (LC), denominated in LCC, is a foreign bond.

A number of countries at time issue bonds denominated in USD (US dollars) in the United States; these are foreign bonds (also called *Yankee* bonds) to US investors in them. Another example is a foreign country issue of bonds in Japan denominated in yen (JPY) (also called *Samurai* bonds). If a country issues bonds in the United Kingdom denominated in sterling / pounds (GBP), it is a foreign bond (in this case called *Bulldog* bonds). Foreign bonds are also called *traditional international bonds*.

Foreign bond issues are usually arranged by the investment banks of the country in which they are issued or investment banks that have an international presence with which the issuing government has a relationship. These bonds are issued in large denominations and are taken up mainly by the retirement funds, insurance companies and unit trusts.

3.3.24 Eurobonds

Eurobonds are bonds that are *issued in countries other than the country of the currency in which they are denominated*. For example, the Kenyan government could issue a USD-denominated bond in the UK.

Another example is a *Euro-LCC bond*, i.e. a bond that is denominated in LCC and is issued in another country. These bonds are normally created by institutions that have a better rating than the country's (i.e. Local Country's) sovereign rating; an example is a Euro-LCC bond issued by the World Bank and sold in the US.

It should be noted that the word *Euro* in Eurobond is a misnomer because a Eurobond does not have to be issued in Europe or the Euro-zone. This market first emerged in 1963, when USD-denominated bonds were issued in Europe in order to avoid onerous regulation and taxes; hence the term *Euro* in Eurobond. When the regulations were amended, the market had grown to such an extent that it continued to operate.

The Eurobond market generally is a retail market (i.e. the denominations are small – usually $5 000 and $10 000), with the bonds issued in bearer form, and it is driven by individuals, who wish to conceal their ownership of the bonds from their respective receivers of revenue, and other investors. Investment banks that have an international presence usually undertake the placing in the Eurobond market.

3.3.25 Global bonds

Global bonds are bonds that are issued and traded in two or more markets but are denominated in the currency of one of the markets. For example, if Local Country issues a global bond denominated in USD in both the US bond market (in which case it is a foreign bond and also called a *Yankee bond*), as well as the Eurobond market (in which case it is called a *Eurodollar bond*).

3.3.26 Retail bonds

A number of so-called *retail bonds* exist in a number of countries of the world. As the name suggests, they are *bonds*, i.e. have a long term to maturity, and the target market is the *retail* sector, as opposed to the wholesale sector. This means that the target market is the household sector, and that denominations are small. Retail bonds are issued by the government sector and the corporate sector.

3.3.27 Islamic bonds

Islamic finance is governed by Islamic rules and principles (Shariah) which, inter alia, prohibit the payment of interest (Riba). Shariah also forbids the investment in businesses that provide goods and services considered contrary to its principles (Haraam), and this includes gambling and alcoholic beverages. However, Islamic finance encourages trading and business, but through risk and profit sharing participation in permitted activities. The Shariah-compliant bonds are often referred to as Sukūk and they either:

- are backed by returns from real assets (ownership right to tangible assets, a pool of assets, or the assets of a specific project) and earn a variable rate of return that is tied to the performance of the asset, or
- offer returns that are unspecified before the investment is made but shared based on a pre-agreed ratio on actual earnings.[25]

3.4 Summary

There are many varieties of bonds in the bond markets of the world. The standard / most common bond is the plain vanilla bond (fixed-rate, fixed-term bond). The other popular bonds are zero coupon and inflation-linked bonds. There are many variations of these. The variety of bonds generally reflects the demands of the investors.

3.5 Bibliography

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