



MASSIMILIANO SILLA
MULTI FAMILY OFFICE

Understanding **bonds**.

BOT, BTP, corporate bonds and fixed income properly explained: how price and yield are read, which risks really count and how the Italian tax system treats them. An independent guide for investors.

■ GOVERNMENT

■ CORPORATE

■ SPECIAL

EDITION · SEPTEMBER 2026
MASSIMILIANOSILLA.COM

The craft of lending, **properly explained.**

Bonds – the securities with which states, banks and companies borrow money from savers – form the largest financial market in the world: more than one hundred and sixty trillion dollars, still more than the entire equity market. With the return of interest rates, millions of Italians have gone back to buying them; but behind the homely appearance of a coupon lie mechanisms – the effective yield, accrued interest, duration, the ranks of repayment – that almost nobody has ever properly explained to them.

This guide was born to close that gap: to tell, in plain language and taking nothing for granted, what you really own when you own a bond, why its price moves if the promise is fixed, how much it can swing and how that is measured, which signatures and which clauses deserve trust, and what happens when the moment comes to settle up with the taxman.

It is an independent guide: it promotes no product, names no private issuers, and does not replace personalised advice. It provides the foundations – the ones every investor should have before deciding.

HOW TO USE THIS GUIDE

- **It is navigable.** From the contents you jump to a chapter with one click; the page number at the foot always leads back to the contents.
- **«Key takeaways»**, at the end of each chapter, sums up the essential points in a few lines.
- **The «In plain words» boxes** translate the most technical concepts into everyday analogies.
- **The final glossary** gathers all the technical terms: when a term does not add up, the answer is there.

CONTENTS

Thirteen chapters, **one path.**

PART ONE · THE FOUNDATIONS

01	The world of bonds	6
02	The anatomy of a bond	11
03	Price and yield	16
04	Duration	21

PART TWO · THE ISSUERS

05	Italian government bonds	26
06	Corporate bonds	31
07	Ratings and credit risk	36
08	Special bonds: subordinated, perpetual, structured	41

PART THREE · INFORMED USE

09	Buying bonds in practice	47
10	The risks to know	51
11	Strategies and portfolio	56
12	Bond taxation for the Italian investor	61
13	Essential glossary	66
	Disclaimers	71

The largest market, in six numbers.

over **\$160**
trillion

The value of debt securities outstanding worldwide: still more than the entire equity market, if only just.

12th century

In Venice, the first documented public loans: it is also one of the oldest markets in the world.

over **€3** trillion

Italy's public debt, largely in negotiable securities: BOT, BTP and their variants.

€18.3 billion

The takings of the BTP Valore of March 2024 (placement 26 February to 1 March): the record for a single placement aimed at savers.

12.5%

The tax rate on returns from government and supranational securities – against the ordinary 26 per cent.

€1,000

The minimum denomination of Italian government securities on the MOT: a market built for the saver too.

Sources: SIFMA, 2026; Banca d'Italia and MEF, 2025; Borsa Italiana. Rounded figures. Past performance is not indicative of future performance and any investment can lose value.



PART ONE · CHAPTERS 1–4

The **foundations.**

What owning a bond means: the loan and its parts, the law that ties prices to rates, and duration – the number that says in advance how much a security can swing.

01

A loan,
in black and white.

Before the instruments, the concept: a bond is a loan put down in writing. This chapter looks at who borrows money from savers, why they do it, how large this market is – the largest in the world – and how lending differs, profoundly, from owning.

1.1 What a bond is

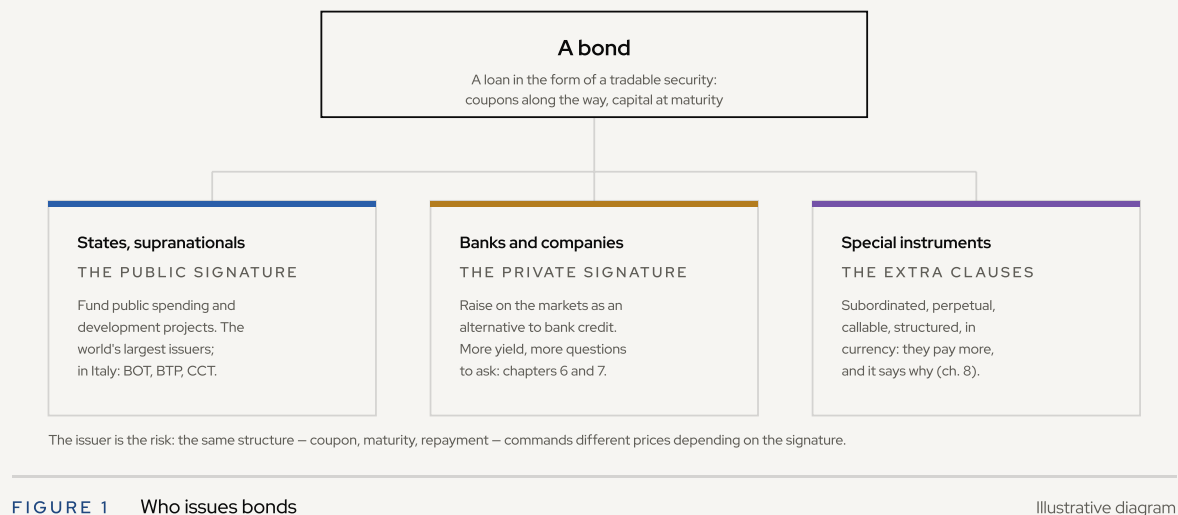
A bond is, in its essence, a **loan**. Whoever issues it – a state, a bank, a company – is borrowing money; whoever buys it is lending their own. In return, the issuer takes on two precise commitments in writing: to repay the capital on a set **maturity date** and to pay, along the way, a periodic compensation called the **coupon**.

The Italian word for the instrument says it plainly – *obbligazione*: whoever issues the security enters into an *obligation*. It is the deepest difference from a share, where nobody promises anything. The document that fixes these commitments – amount, maturity, coupon, clauses – is the **loan terms** (in Italian, the *regolamento del prestito*): everything the investor is entitled to expect is written there, before the purchase is even made.

A bond, however, is not a private contract between two people: it is a **negotiable** security, divided into standard denominations and – in most cases – listed on a market. Whoever has bought it need not wait for maturity to get their money back: they can sell it on to others, at the price the market expresses at that moment. It is this double nature – a rigid promise on one side, a moving price on the other – that makes bonds more interesting, and more treacherous, than the word «loan» might suggest.

IN PLAIN WORDS

Imagine lending €1,000 to a neighbour, with a signed note: you pay me back in five years, and every year you pay me €30 in interest. A bond is exactly this – with one difference: that note can be sold on to others, even tomorrow, at a price that will depend on how much the promise is worth on the market at that moment.



1.2 Who issues bonds, and why

Behind every bond is someone who needs capital. **Governments** are the largest issuers in the world: this is how they fund the part of public spending that tax revenue does not cover. In Italy these securities – the BOT, the Treasury's short-term bills, the BTP, its multi-year fixed-coupon bonds, and their variants – alone make up the greater part of the public debt, and we shall meet them up close in [chapter 5](#).

Alongside states come the **supranational bodies** – institutions such as the European Investment Bank or the World Bank, created by several governments together – which raise capital to fund development projects and infrastructure. Their credit standing is among the highest of all, and the Italian tax system treats them with the same favour as government bonds.

Then there are **banks**, for which issuing debt is part of the trade itself, and **companies**: a business that needs to build a plant or refinance a debt can ask the banking system for capital, or go straight to the markets by issuing *corporate bonds* ([chapter 6](#)). Finally the **local authorities** – regions, municipalities – which in Italy play a marginal role, but exist.

For the investor, the distinction is not academic: **the issuer is the risk**. The same structure – coupon, maturity, repayment – is worth a very different price depending on the signature beneath it.

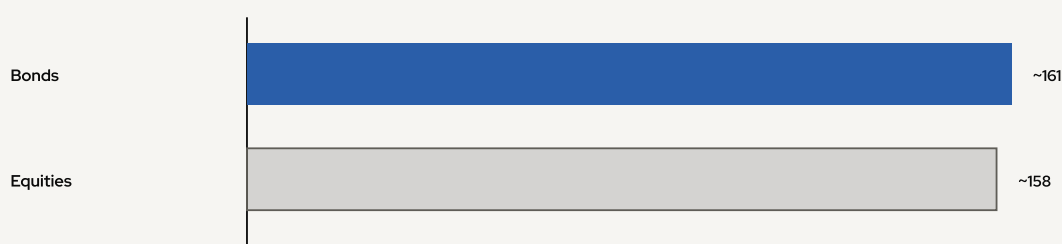
1.3 A market bigger than the stock exchange

The bond market is the largest financial market in the world. At the end of 2025 the value of debt securities outstanding exceeded **160 trillion dollars** – still more than the entire world equity market, although the gap has narrowed. It is also one of the oldest: the first documented public loans date back to the Venice of the twelfth century, when the Republic raised money from its citizens to fund its campaigns, paying an annual interest in return.

Despite its size, for decades this market stayed in the background: with the near-zero rates of the 2010s, coupons were so thin that many savers had drifted away. The rise in rates that began in 2022 turned the scene around: bonds went back to offering yields not seen for over a decade, and millions of Italians went back to buying them – often, though, with a rusty memory of their mechanics.

Italy, in this landscape, is a special case: its public debt has passed **three trillion euros**, its government securities are among the most heavily traded in Europe, and its retail bond market – the MOT, run by Borsa Italiana – is among the most developed in the world. Few other marketplaces let a private saver buy and sell bonds as easily as they buy a share.

VALUE OF WORLD MARKETS – TRILLIONS OF DOLLARS, END OF 2025



The debt securities market is the largest financial market in the world – and one of the oldest.

FIGURE 2 Bonds and equities: the sizes

Source: SIFMA, 2026 – end-2025 values, rounded figures

1.4 Creditors and shareholders: bonds and equities compared

Whoever buys a share becomes a **shareholder**: they share in the fortunes of the business, with no promise of repayment. Whoever buys a bond becomes a **creditor**: they do not share in the profits, but they hold a contractual right to coupons and repayment. These are two opposite legal positions, and every practical difference flows from here.

The first concerns the **order of repayment**. If things go wrong and the issuer fails, creditors come before shareholders: bondholders recover whatever there is to recover, shareholders collect what may be left – often nothing. The second concerns the **ceiling on gains**: the shareholder of a company that takes off can multiply their capital; the bondholder, at best, collects the promised coupons and the repayment – never more. Risk and return remain siblings here too.

The third difference is **predictability**. A bond held to maturity has a path known in advance, barring the issuer's failure: dates and amounts are written in the terms. This is what makes these instruments the backbone of all planning: a maturity can be made to coincide with a future expense – a child's university, the purchase of a house – with a precision no share can offer.

IN PLAIN WORDS

Shareholder and creditor sit at two different tables. The shareholder owns a slice of the cake: if the cake grows, the slice grows with it; if it burns in the oven, the slice disappears. The creditor holds a receipt: a precise sum is due, no more and no less – and if trouble comes, the creditor is served first.

1.5 Five good reasons (and one warning)

Why should a saver get to know bonds? Five reasons above all.

- **Predictable income.** Coupons arrive on known dates, in known (or calculable) amounts: for those who live partly on financial income, they are the raw material of planning.
- **A certain maturity.** Barring default, the capital comes back on a written date: no other listed instrument offers this property.
- **Gradable risk.** From the solidity of a supranational issuer to the aggressive yield of an indebted company, the range is continuous: everyone can choose the point they can bear.
- **Diversification.** In many market phases the prices of quality bonds move in a different direction from equities, cushioning the swings of the overall portfolio.
- **Favourable taxation,** in Italy, for public-sector securities: a reduced rate and exemption from inheritance tax ([chapter 12](#)).

And the warning: **bond does not mean safety**. The year 2022 reminded everyone – the rise in rates cost global bond indices more than ten per cent, the worst year in their recent history. A bond can lose value because rates rise, because the issuer wavers, because inflation erodes its purchasing power. The rest of this guide exists precisely to understand when, why, and by how much.

KEY TAKEAWAYS

- A bond is a loan in the form of a security: the issuer commits to paying coupons and repaying the capital at maturity.
- The issuer is the risk: the same structure commands different prices depending on the signature – state, supranational, bank or company.
- It is the largest financial market in the world: over 160 trillion dollars, more than the entire equity market.
- The bondholder is a creditor, not a shareholder: repaid before the shareholders, but with a ceiling on gains.
- Predictability does not mean safety: rates, inflation and credit standing can move the value, sometimes sharply.

Invested capital is at risk: its value can fall, as well as rise.

02

Four numbers,
one contract.

Face value, coupon, maturity, price: four numbers are enough to describe almost everything about a bond. This chapter takes them apart one by one – together with the calendar of cash flows, fixed and floating coupons, and that document, the loan terms, where every promise is written.

2.1 The face value: the figure everything is calculated on

Every bond is born with a **face value** (or par value): the amount the issuer undertakes to repay at maturity, and the base on which the coupons are calculated. It should not be confused with what the bond costs: the market price can sit above or below the face value, as we shall see in [chapter 3](#).

The face value also defines the **minimum denomination**, the smallest step in which the bond can be bought. Italian government securities come in thousand-euro denominations, designed for the saving public; many corporate bonds and bank issues aimed at institutions start instead at one hundred thousand euros – a threshold which, in practice, decides who can sit at the table. It is a detail to check first: an attractive bond with a hundred-thousand-euro denomination simply does not exist, for most portfolios.

By convention, bond prices are expressed **as a percentage of the face value**, with a base of 100. A price of 98 means: 98 per cent of face value – €980 for a thousand-euro denomination. Below 100 a security is said to trade *below par*, above 100 *above par*, at 100 *at par*. This convention makes bonds of every size comparable: from here on, every price in this guide is expressed this way.

IN PLAIN WORDS

The face value is like the figure printed on a banknote: it says what the piece of paper is worth at the end of the game, not what someone is willing to pay you for it today. If a 100 note could be resold, on good days it would fetch 102, on bad days 95 – but at the final till it will always be worth 100.

2.2 The coupon: the pay of the loan

The **coupon** is the periodic interest the issuer pays to whoever holds the security. It is expressed as an annual percentage of the face value: a bond with a 4 per cent coupon on a thousand-euro denomination pays €40 a year. The name comes from the slips which, in the days of paper certificates, were physically detached from the certificate to collect the interest at the counter.

The calendar varies: Italian BTP pay **every six months** (two €20 coupons, in our example), as do US Treasuries; many European corporate bonds once a year; floating-rate securities often every quarter. For the same annual rate, collecting more often is marginally better: the money arrives sooner and can be reinvested.

Beware of a frequent misunderstanding: **the coupon is not the yield**. A security with a 4 per cent coupon bought at 105 yields less than 4; bought at 95, more – because at maturity the repayment happens at 100 regardless. The coupon only says how much money arrives each year; the yield, which also accounts for the price paid, is the protagonist of the next chapter. Confusing the two numbers is the most classic mistake of those who choose a bond «because the coupon is high».

A 5-YEAR SECURITY – 3% COUPON, BOUGHT AT 98, REPAID AT 100

Below the line: what goes out. Above: what comes in, on dates known from day one. Coupon heights not to scale.

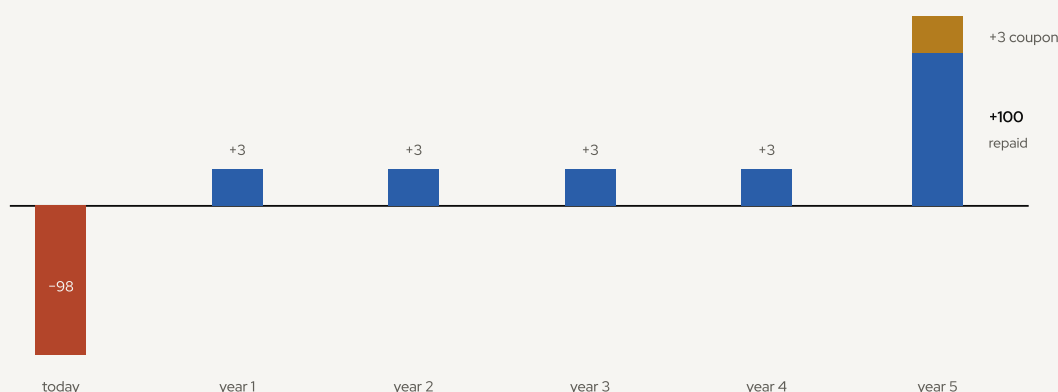


FIGURE 3 The cash flows of a bond

Hypothetical example for illustration

2.3 Fixed, floating, zero: three ways of paying

Not all coupons are alike, and the difference matters. The most common form is the **fixed rate**: the coupon is set at issue and never changes, whatever the markets do. It is the formula of the BTP: maximum predictability of the flows, but – as we shall see – maximum sensitivity of the price to rate movements.

Floating-rate bonds tie the coupon instead to a parameter that updates over time – typically a market rate such as Euribor, plus a fixed margin. When rates rise, future coupons rise with them; when they fall, they deflate. In exchange for this uncertainty in the flows, the price of the security stays far more

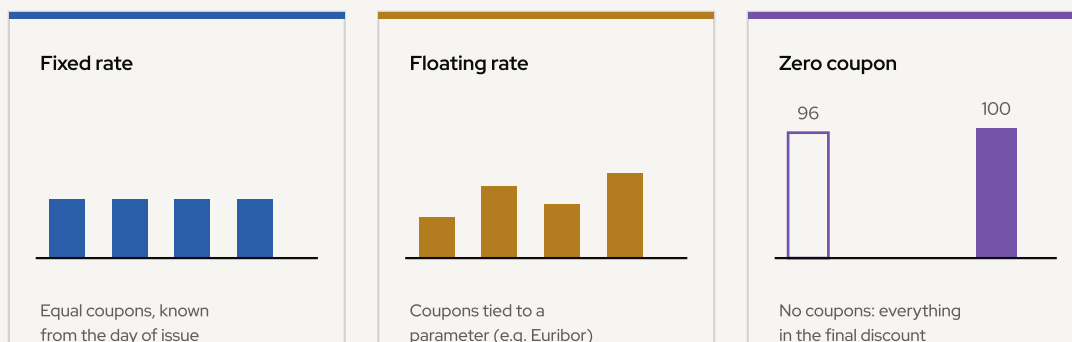
stable. In Italy the family is represented by the CCT, the Treasury's floating-rate certificates, linked to six-month Euribor.

At the opposite extreme stand bonds **with no coupon at all** – the *zero coupon* securities, like the BOT: they pay nothing along the way. They are bought below par and the face value is collected at maturity: all the return lies in the difference, called the **issue discount** (scarto di emissione). A security bought at 96 that repays 100 has returned that 4 of discount, without a single coupon ever passing through.

Finally there are more elaborate variants – rising coupons (*step-up*), inflation-linked coupons, conditional coupons – which we defer to chapters 5 and 8.

IN PLAIN WORDS

Three ways of being paid rent: a fixed rent, locked for the whole length of the lease; a rent linked to inflation, updated every year; or no rent at all, but a tenant who at the end of the lease hands back the house together with a cheque agreed from the very start. The flows differ; the trade is the same.



Three ways of paying for the same trade: the flows change, and with them the sensitivity to rates (chapter 4).

FIGURE 4 Three ways of paying: fixed, floating, zero coupon

Illustrative diagram

2.4 The maturity: when the loan ends

The **maturity** is the date on which the issuer repays the face value and the loan is extinguished. Durations cover every horizon: from the BOT at three, six and twelve months, to BTP reaching thirty and even fifty years, up to *perpetual* bonds – with no maturity at all – which we shall meet among the special instruments of chapter 8.

The market uses a classification of convenience: **short term** up to a couple of years, **medium** up to five-seven, **long** beyond. It is not an idle taxonomy: the residual life is the first engine of a bond's risk. The further away the maturity, the longer the promise stays exposed to everything that can change – rates, inflation, the issuer's health – and the more the price swings in the meantime. Chapter 4 will give this intuition a name and a number: duration.

One important clarification: the maturity is the day the loan ends, **not the only day one can exit**. A listed bond can be sold at any moment, at the market price. The maturity guarantees repayment at 100; an early exit happens at the price of the day, which may be higher or lower than what was paid. Whoever buys a thirty-year security is not locking money away for thirty years: they are accepting that, before maturity, the exit value is not guaranteed.

2.5 The loan terms: where every promise is written

All the numbers seen so far – face value, coupon, calendar, maturity – live in one document: the **loan terms** (regolamento del prestito), part of the issue prospectus. It is the security's legal identity card, and it also contains what the numbers do not say: the **currency** of denomination, the degree of **subordination** (who gets paid before whom, if trouble comes), any **early-redemption clauses** in the issuer's favour, the guarantees, the governing law.

Nobody expects a saver to read a hundred pages of prospectus. But the essential information is summarised in two accessible documents: the **key information document** (for securities placed with the public) and, for listed securities, the instrument's page on the Borsa Italiana website. Five minutes on these documents answer the questions that matter: who issues, how much it pays, when it matures, with what degree of protection, in what currency.

One code deserves to be known: the **ISIN**, the twelve-character string that uniquely identifies every security (for Italy it begins with IT). Two bonds from the same issuer can carry completely different terms: the only way to be certain of talking about the right one – with the bank, with an adviser, with a search engine – is to use its ISIN, not its name.

KEY TAKEAWAYS

- The face value is the base of every calculation: prices are expressed as a percentage, with 100 as par.
- The coupon is not the yield: it says how much arrives each year, not what the capital invested at the price paid actually earns.
- Fixed rate, floating rate and zero coupon spread the same trade over different flows – with different risks.
- The maturity guarantees repayment at 100; before that date one exits at the market price, not at a guaranteed value.
- The loan terms contain what the numbers do not say: subordination, call clauses, currency. The ISIN identifies the security without ambiguity.

Invested capital is at risk: its value can fall, as well as rise.

03

Rates up,
prices down.

It is the fundamental law of this market, and the least intuitive: when rates rise, bond prices fall. This chapter explains it up close, together with the yield to maturity – the only number that allows two securities to be compared – accrued interest and the yield curve.

3.1 Why the price moves, if the promise is fixed

The promise of a fixed-rate bond never changes: same coupons, same repayment, same dates. Yet its price moves every day. How is that possible?

The answer lies in the comparison with the alternatives. Suppose you hold a security paying 3 per cent a year, bought at par. If tomorrow market rates rise and the new, freshly issued securities offer 4 per cent, who would ever buy yours at full price? To sell it you will have to **discount it**: lower its price until its overall return – coupons plus the gain on the price – matches that 4 per cent the market now demands. If instead rates fall to 2, your 3 per cent becomes a rare commodity, and the price rises above par.

That is the whole of the **inverse relationship** between rates and prices: **rates up, prices down; rates down, prices up**. It is not a malfunction, nor an anomaly: it is arithmetic. The price is the dial that continuously brings the old promises back into balance with the new conditions. And it holds at every instant, even if you do not sell: the account statements of those who held long BTP in 2022, when rates rose with violence, showed it without mercy.

IN PLAIN WORDS

Think of a lease signed at a rent locked for ten years. If rents in the neighbourhood double, that lease – for the tenant – becomes a small tradable treasure; if rents collapse, it becomes a burden you pay to escape. The contract has not changed by a comma: the world around it has, and with it the value of the contract.

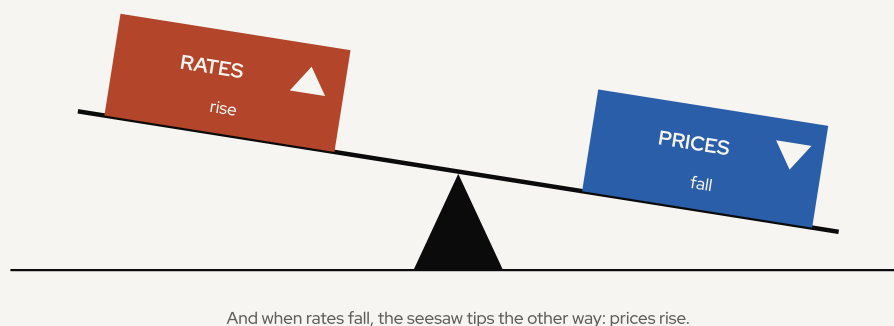


FIGURE 5 The inverse relationship between rates and prices

Illustrative diagram

3.2 The yield to maturity: the only yardstick that counts

If the coupon is not enough to say what a security earns, what does? The **yield to maturity**: the annual rate obtained by buying the security at today's price, collecting all the future coupons and receiving the repayment at 100, on the assumption of reinvesting the coupons at the same rate.

The yield to maturity brings together the three ingredients the coupon alone ignores: **the price paid** (buying at 95 or at 105 changes everything), **the time remaining** (that capital gain or loss is spread over the years left) and **the stream of coupons**. Two examples make the point: a security with a 2 per cent coupon bought at 92 five years from maturity yields about 3.8; a security with a 5 coupon bought at 108 over the same five years yields about 3.2. The higher coupon belonged to the less profitable security.

Hence a practical rule: **compare yields, never coupons**. Every instrument page on Borsa Italiana, every bank platform shows the yield to maturity calculated on the current price: that number – gross or net of tax, and it is always worth checking which of the two you are reading – is the only yardstick on which two different bonds can be placed on the same scales.

3.3 Clean price, dirty price and accrued interest

Whoever looks at a bond price for the first time meets an accounting surprise. The price displayed on the market – the **clean price** (corso secco, in the Italian convention) – is not what is actually paid. At purchase one adds the **accrued interest** (rateo): the fraction of coupon accrued since the last payment date, which belongs to the seller.

The logic is pure fairness. The coupon is paid, in full, to whoever holds the security on the payment date: if you buy a BTP four months after the last half-yearly coupon, in two months you will collect six months of interest having «earned» only two. The four months accrued by the seller are paid back to

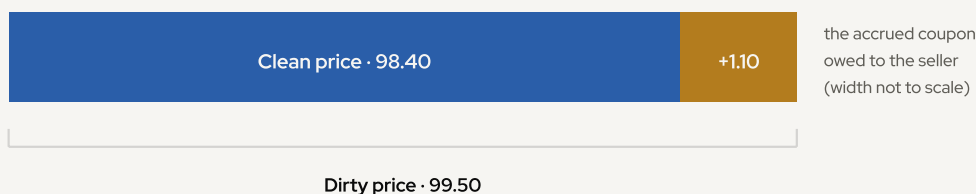
them at purchase, precisely as accrued interest. The all-in price – clean price plus accrued interest – is called the **dirty price** (corso tel quel), and it is the sum that actually leaves the account.

Quoting clean, keeping the accrual out of the price, is not a quirk: it keeps the price **readable**. Accrued interest grows every day and collapses to zero at every coupon date: if it were included, every bond would show a sawtooth profile even in still markets. The clean price, stripped of this mechanism, moves only when rates and credit standing move – and that is why it is the price one watches. Zero-coupon securities, BOT included, are the exception: having no coupons they have no accrual, and they quote directly at the dirty price.

IN PLAIN WORDS

It is like taking over an annual subscription halfway through the year: whoever leaves has already paid for months they will not use, and whoever joins refunds them at signing. Nobody gains and nobody loses: each pays exactly their own months.

WHAT YOU ACTUALLY PAY



ACCRUED INTEREST OVER TIME



FIGURE 6 Clean price, accrued interest and dirty price

Hypothetical example

3.4 The yield curve: time has a price

Now let us line up, for one and the same issuer, the yields at every maturity: three months, two years, ten, thirty. The drawing that emerges is called the **yield curve**, and it is one of the most watched images in finance.

In its **normal** shape the curve rises: long maturities yield more than short ones, because whoever ties up money for longer – exposing it for longer to inflation and the unexpected – demands a premium. But the curve can also **flatten**, or even **invert**: it happens when short rates, pushed up by central banks

to cool inflation, exceed long yields, which already embed the expectation of lower future rates. It happened, conspicuously, between 2022 and 2023.

For the investor, the curve is a practical dashboard. It says **how much waiting really pays**: if extending the maturity by five years adds a few decimals of yield, that extra risk is poorly rewarded; if the curve is steep, extension pays. And it recalls an uncomfortable truth: the easy yield of short-term parking, in inverted-curve phases, is a yield **on borrowed time** – when rates come down, it will have to be rolled over on worse terms, while whoever locked in a long rate will keep collecting it. The choice of maturity, as we shall see in chapter 11, is a portfolio decision, not a race to the last decimal.

YIELD BY MATURITY – TWO SHAPES OF THE CURVE

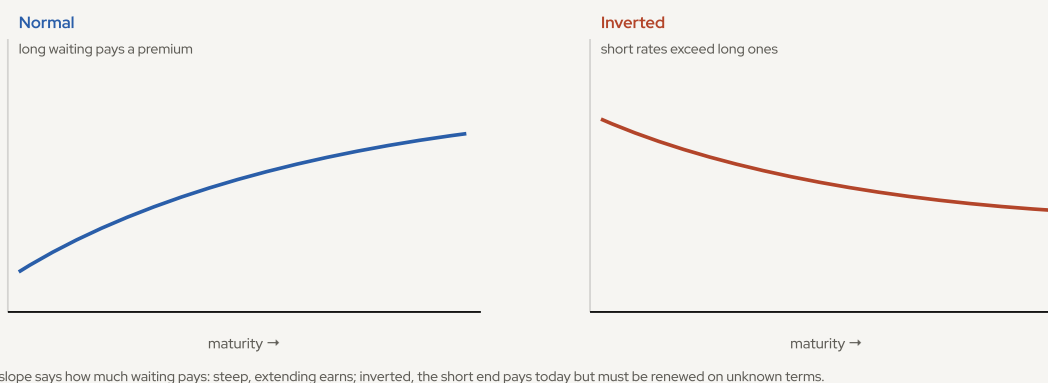


FIGURE 7 The shapes of the yield curve

Illustrative diagram

3.5 Above or below par: reading a price at a glance

We close the chapter with a reflex to train: faced with a price, understanding at a glance what it is saying.

A security **below par** – at 96, at 88 – is saying one of these things (often both): its coupon is lower than current rates for that maturity, or the market is demanding a premium for that issuer's risk. The yield to maturity will be higher than the coupon, because the price's journey towards 100 adds to the coupon flow. A security **above par** – at 104, at 110 – says the reverse: a generous coupon relative to today's rates, a yield to maturity below the coupon, and a part of the capital paid in that will not come back at maturity, returned year after year inside richer coupons.

Neither condition is in itself a bargain or a trap: **for equal yield and risk, 96 and 104 are equivalent**. What matter, if anything, are the practical nuances: the security below par concentrates more of its result in the final repayment (and in Italy, as we shall see in [chapter 12](#), capital gains and coupons follow different tax rules); the security above par brings more cash forward along the way. Be wary, rather, of prices very far from 100 without an obvious explanation in rates: there the market is almost always saying something about the credit – and it pays to listen.

KEY TAKEAWAYS

- Rates up, prices down (and vice versa): the price is the dial that realigns the old promises with the new conditions.
- Compare yields to maturity, never coupons: only the yield accounts for the price paid.
- The displayed price is the clean price; at purchase the accrued coupon is added. What you pay is the dirty price.
- The yield curve measures how much waiting pays: steep, flat or inverted, it guides the choice of maturities.
- Above or below par does not mean dear or cheap: for equal yield and risk they are equivalent. Very low prices speak of credit.

Invested capital is at risk: its value can fall, as well as rise.

04

Time,
weighed.

If chapter 3 showed that prices move with rates, this chapter measures by how much. Duration is the number that turns an intuition into a quantity: how sensitive a bond – or an entire portfolio – is to a movement in rates. Whoever knows it no longer suffers surprises: they budget for them.

4.1 A simple idea: the centre of gravity of time

Every bond is a sequence of future flows: coupons along the way, capital at the end. **Duration** is born as the average of the dates of these flows, each weighted by the money it carries: it is the security's **centre of gravity in time**, expressed in years – the point where the payments balance.

Two facts follow at once from this definition. First: for a **zero coupon** the duration coincides with the residual life – there is a single flow, at maturity, and the centre of gravity sits there. Second: for a security **with coupons** the duration is always shorter than the maturity, because part of the money arrives earlier; and the richer the coupons, the closer the centre of gravity moves, because more weight shifts onto the early years.

A ten-year BTP with a full coupon has today a duration of around eight years; a thirty-year one can exceed twenty; a six-month BOT sits at half a year. These numbers, on their own, look like accounting curiosities. They become decisive for what they *really* measure – and that is the next step.

IN PLAIN WORDS

Picture the future payments as weights resting on a beam graduated in years: little stacks of coins at the coupon dates, an ingot at maturity. Duration is the point where you place your finger so that the beam balances. If the final ingot is far away and the coins are small, the balance point falls almost under the ingot; if the coins are generous, the finger moves towards you.



FIGURE 8 Duration: the centre of gravity of the flows

Illustrative diagram

4.2 From average to thermometer: modified duration

The reason duration is famous is not the average of times, but one of its mathematical consequences: with a small adjustment (the **modified duration**, almost identical to the first at current rates) that number in years becomes a **sensitivity multiplier**: it indicates by how much the price changes, in percentage, if market yields move by one percentage point.

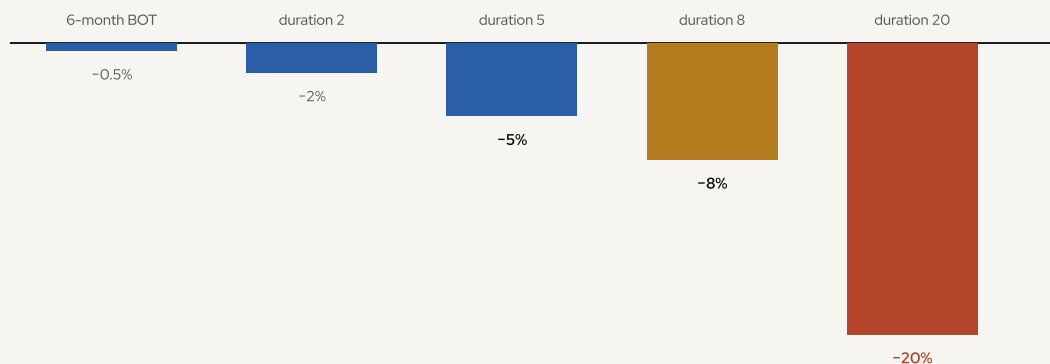
The rule fits in one line: **price change $\approx$ - duration $\times$ change in rates**. A security with duration 5: if rates rise by one point, the price falls by about 5 per cent; if they fall by one point, it rises by as much. With duration 20, the same point of rates becomes a move of about 20 per cent – on a bond, not on a technology stock.

This formula explains, in hindsight, every bond surprise of recent years. The very long securities bought during the zero-rate era had enormous durations and minimal coupons: when rates climbed back three-four points between 2022 and 2023, some fifty-year BTP lost more than half their value. No deception and no default: just duration, applied to an exceptional rate move. Whoever knew their multiplier knew what they were exposed to; whoever looked only at the coupon did not.

IN PLAIN WORDS

Duration is the gearbox of rate risk: in first gear you travel slowly and barely feel the potholes; in sixth, every bump becomes a jump. No gear is the right one in absolute terms – it depends on the road you expect and on how much jolting you are willing to take.

IF RATES RISE BY ONE PERCENTAGE POINT – CHANGE IN PRICE



When rates fall, the same numbers with a plus sign: the lever works both ways.

FIGURE 9 One extra point of rates, for five durations

Illustrative example: approximate changes

4.3 What lengthens (and what shortens) duration

Three factors govern the multiplier, all already encountered.

- **The maturity:** the further away it is, the longer the duration. It is the dominant factor – the difference between a two-year and a thirty-year dwarfs every other effect.
- **The coupon:** the higher it is, the shorter the duration, because more money comes back early. Between two ten-year securities, the one with a 5 coupon is less sensitive than the one with a 1. Securities issued in the zero-rate era, with token coupons, are by construction the most nervous of their category.
- **The type of rate: floating-rate** bonds have a very low duration almost by definition – the coupon realigns with the market at every reset, so the price does not need to move much to stay in balance. It is the reason CCT barely sway even when long BTP tremble.

It also holds for portfolios: the duration of a bond fund or ETF is the weighted average of those of the securities it holds, and every factsheet reports it. A «long-term euro government bond» fund with duration 15 is – on rate risk – an aggressive instrument, however reassuring the name may sound. Reading that number before buying is the single most useful check a saver can make on a fixed-income instrument.

4.4 Using duration, not suffering it

Duration is not a grade: it is a **positioning choice**, and its correct use starts from a personal question – what must this money do, and when?

Whoever has a goal with a known date can use duration to **immunise** themselves: a security held to maturity returns 100 whatever rates do in the meantime, and the interim swings become accounting noise. Aligning the maturity of one's securities with the horizon of the expense – children, house, retire-

ment – is the simplest and most effective form of rate-risk management: the risk does not disappear, but it stops concerning you.

Whoever instead holds bonds as a permanent component of the portfolio must choose the point of the curve to stand on. Short duration: little risk and little premium, suited to those who may need the capital soon. Long duration: more expected return (with a normal curve), more protection in recessions – when rates are cut, long securities appreciate precisely while equities suffer – but swings one must be able to bear without selling at the wrong moment.

A final warning of intellectual honesty: the duration formula is an approximation, valid for contained rate moves, and rates give no notice before moving. Predicting their direction is a trade in which even professionals regularly fail: duration serves to **size the exposure** to what may happen, not to guess what will.

KEY TAKEAWAYS

- Duration is the centre of gravity in time of a bond's flows: it is measured in years.
- Its real use is as a multiplier: $\text{price change} \approx - \text{duration} \times \text{change in rates}$.
- Long maturities and low coupons lengthen duration; a floating rate cancels it almost entirely.
- It holds for funds and ETFs too: the duration on the factsheet is the first number to read before buying.
- Held to maturity, a security repays 100 regardless: aligning maturities with goals neutralises rate risk better than any forecast.

Invested capital is at risk: its value can fall, as well as rise.



PART TWO · CHAPTERS 5-8

The **issuers.**

The signatures behind the securities: the Italian state and its family of instruments, the companies and the banks, the ratings that gauge their strength – and the special clauses to handle with care.

05

The debt
of the Republic.

BOT, BTP, CCT: household initials for generations of Italian savers. This chapter puts the Republic's family of securities in order – who they are, how they are born, how they differ – and explains what that ubiquitous number called the spread really tells.

5.1 The debt of the Republic

The Italian state is one of the largest bond issuers in the world. The public debt has passed **three trillion euros**, and for its largely prevailing part it lives in the form of negotiable securities, issued by the Ministry of the Economy through the Treasury. Every year the state places hundreds of billions of new securities – partly to fund the current deficit, in large part to roll over the securities that mature.

For the Italian saver these instruments play a special role, for concrete reasons. They are **accessible**: thousand-euro denominations, continuous listing on the MOT, purchase possible from any securities account. They are **liquid**: BTP are among the most heavily traded securities in Europe, and can be resold at any moment with contained trading spreads. They enjoy a **favourable taxation**: a 12.5 per cent rate on returns instead of 26, and exemption from inheritance tax ([chapter 12](#)). And Italian families have known them forever: after the return of rates, the share of public debt in savers' hands has risen strongly, helped by issues designed expressly for them.

None of this makes them free of risk: the rate risk of chapters 3 and 4 applies in full, and the credit standing of the Republic – however solid – has a price the market updates every day, as we shall see at the end of the chapter.

5.2 BOT and BTP: the two pillars

Two sets of initials form the backbone of the Italian debt. The **BOT** – Buoni Ordinari del Tesoro, the Treasury's ordinary bills – are the instruments of the short term: they last three, six or twelve months and pay no coupons. They are textbook *zero coupon* securities: bought below par, with 100 collected at maturity; all the return lies in the discount. They are the classic instrument for parking liquidity: short horizon, minimal duration, negligible price surprises.

The **BTP** – Buoni del Tesoro Poliennali, the Treasury's multi-year bonds – are the pillar of the medium and long term: a **fixed** coupon, paid every six months, on maturities running from a minimum of two years up to ten, fifteen, twenty, thirty and even fifty. It is on the BTP that the main part of the debt, of the trading and of the markets' attention concentrates; and it is on long BTP that rate risk gives its best and its worst – the high durations of chapter 4 live here.

Around the two pillars turns a practical rule worth fixing at once: **the initials tell the mechanism, the maturity tells the risk**. A BTP two years from maturity is a quiet instrument; the same BTP bought on the 2053 maturity is a powerful exposure to rates. Buying «a BTP» without looking at the maturity is like ordering «a coffee» in a country where the cups range from ten centilitres to a litre.

5.3 The variants: floating rate, inflation, retail

The Treasury flanks the two pillars with a family of variants, each with a precise trade:

SECURITY	MECHANISM	WHAT IT IS FOR
CCT	Floating coupon: six-month Euribor plus a margin	Income that follows rates; stable price even when rates rise
BTP€i	Capital and coupons indexed to European inflation	Protecting purchasing power over long horizons
BTP Italia	Indexed to Italian inflation, half-yearly coupons, loyalty bonus at maturity	Protection from domestic inflation, designed for the retail public
BTP Valore	Fixed coupons rising over time (step-up) and a loyalty bonus; reserved for retail at placement	Encouraging the saver to hold the security to maturity
BTP Green	An ordinary BTP whose proceeds fund the state's environmental spending	Fixed income with a declared destination of the funds

TABLE 1 The family of Italian government securities

Two observations. Securities **indexed to inflation** protect purchasing power but not the market price: if real yields rise, even a BTP€i falls – it happened, resoundingly, in 2022. And the securities **reserved for retail**, like the BTP Valore, have raised imposing sums – over eighteen billion euros in a single placement in 2024, a record – but they must be judged by the same yardstick as the others: the loyalty bonus is welcome only if yield, maturity and duration were right for your plan anyway.

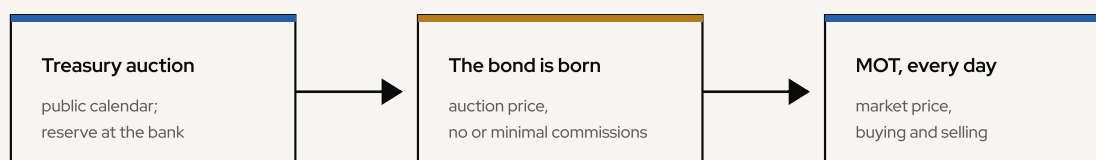
5.4 How they are born: auctions and placements

Government securities come into the world according to a public calendar, available on the Ministry's website, through two channels.

The ordinary channel is the **auction**: the Treasury announces amounts and maturities, and the specialist operators submit their bids. The saver does not take part directly but can **reserve** the securities on auction through their own bank (normally by the previous day), on favourable terms: on BTP and CCT at auction the subscriber pays no placement commission (on BOT the bank may charge a maximum commission set by decree, from 0.03 to 0.15 per cent depending on maturity) – a small but real advantage over buying on the secondary market, where the bank's commissions apply.

The second channel, used for the securities dedicated to the public such as BTP Italia and BTP Valore, is the **direct placement on the MOT platform**: for a few days the security can be subscribed at par, without commissions, from any securities account, and the Treasury reserves the right to close early. It is the mechanism that has brought Italian savers back to the public debt en masse.

After birth, every security lives on the **secondary market**: the MOT for retail, the MTS for wholesale operators. That is where the price starts moving with rates, according to the now familiar mechanics – and for the buyer, auction and secondary market are equivalent, net of commissions: one buys a security for its yield and maturity, not for the channel it came in through.



For retail securities (BTP Italia, BTP Valore) the placement happens directly on the MOT, at par.

For the buyer, auction and secondary market are equivalent: yield and maturity count, not the channel.

FIGURE 10 From the auction to the secondary market

Illustrative diagram

5.5 The spread: what it really says

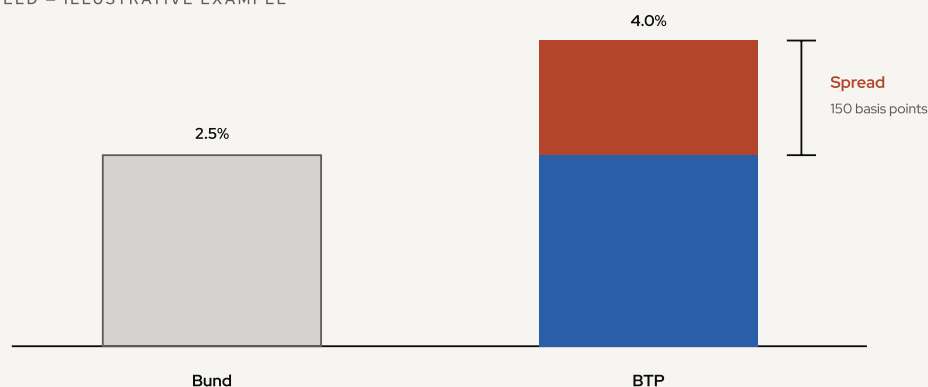
No number in Italian finance is more quoted – and less explained – than the **spread**. In its evening-news sense it is the difference between the yield of the ten-year BTP and that of the German Bund of equal maturity, measured in **basis points** (hundredths of a percentage point). A spread of 150 means: to lend to Italy for ten years, the market demands one and a half percentage points a year more than to lend to Germany.

That gap is the **price of perceived credit risk**: it measures, day by day, how much more or less confidence the markets grant the Italian signature compared with the signature considered the most solid in Europe. It rises in phases of political or fiscal tension, falls when the public accounts reassure; in the debt crisis of 2011 it passed 500 points, in calm phases it has dropped below 100.

For whoever holds BTP, the spread has a precise practical meaning: it is the component of the yield that **depends not on European rates but on Italy**. When it widens, BTP prices fall even if general rates stand still; when it narrows, they rise. Whoever holds the securities to maturity crosses these waves without consequence, barring the extreme event of a sovereign default – never occurred in the history of the Republic, but never excluded free of charge by the market: that extra margin of yield over the Bund is, quite literally, the pay for this residual possibility.

IN PLAIN WORDS

Two neighbours ask the same bank for a loan: one is charged 3 per cent, the other 4.5. The point and a half of difference is the spread: it does not describe the loan – identical – but the different confidence in the two men's ability to repay it.



The margin over the Bund is the price of confidence in the Italian signature: it widens in tension, narrows in calm.

FIGURE 11 The BTP-Bund spread

Illustrative example, hypothetical values

KEY TAKEAWAYS

- BOT for the short term without coupons, fixed-coupon BTP for the medium-long term: the initials tell the mechanism, the maturity tells the risk.
- CCT (floating rate), BTP€i and BTP Italia (inflation), BTP Valore (retail, step-up): each variant has a precise trade.
- At auction one subscribes without commissions on BTP and CCT (on BOT with a minimal commission set by decree), in the retail placements at par and without commissions; on the MOT one buys and sells every day.
- Indexed securities protect purchasing power, not the price: if real yields rise, they fall too.
- The BTP-Bund spread is the price of confidence in the Italian signature: when it widens, BTP prices fall even with European rates still.

Invested capital is at risk: its value can fall, as well as rise.

06

Lending
to companies.

When the borrower is not a state but a company, the loan changes nature: more yield, more questions to ask. This chapter crosses the corporate bond market – the two great halves it divides into, the hierarchy that decides who is repaid first, and the particular care that bank bonds deserve.

6.1 Lending to companies

A company that needs capital has three roads: asking its shareholders (equity), asking the banks (credit), or asking the markets directly by issuing **corporate bonds**. For large companies the third road is by now a main thoroughfare: the European corporate market is worth thousands of billions of euros, and for many groups bond debt far exceeds bank debt.

For the investor, the logic is identical to that of the previous chapters – coupon, maturity, price, yield – but with one extra ingredient that changes the flavour of everything: **the issuer's credit standing becomes the central variable**. A state issuing in its own currency has tools a company will never have; a company can lose its market, get an acquisition wrong, find itself on the wrong side of a technology. The extra yield that corporates offer over government securities – the *credit spread*, which we shall measure in chapter 7 – is exactly the pay for this.

One rule of hygiene applies from the start: **a corporate bond is judged against the government security of equal maturity**. If a company bond at five years yields 3.8 per cent when the five-year BTP yields 3, the right question is not «is 3.8 a lot?» but «does that extra 0.8 pay for the extra risk – counting also the taxation at 26 instead of 12.5 per cent?». Often yes; not rarely, no.

6.2 Investment grade and high yield: the market's two halves

The corporate market divides into two worlds, separated by a border drawn by the ratings that chapter 7 will examine up close. On one side the **investment grade** issuers: companies with solid balance sheets and stable access to credit, whose securities offer contained spreads over the governments. On the other the **high yield** world – historically also called *speculative grade*: more indebted, more cyclical or younger issuers, which to find buyers must offer noticeably higher yields.

The difference is not one of nuance but of **statistics**: in the investment grade world failures are rare events even in bad years; in the high yield world they are a physiological, recurring fraction of the market, which widens in recessions. The high yield investor does not ask *whether* some issuer in their basket will miss its payments, but *how many* – and that is why high yield makes sense almost only in diversified form, through funds or ETFs, where the single accident weighs little.

There is also a difference of **behaviour**: quality corporates move mainly with rates, like the governments; high yield moves mainly with the economy, like equities – in stock-market shocks the spreads widen and prices fall precisely while equities fall. Whoever buys high yield «to diversify equities» is often buying the same risk under another name.

IN PLAIN WORDS

Lending to an investment grade company is like renting your house to a tenant with a permanent contract and a robust payslip: the rent is normal, the surprises rare. High yield is the brilliant but erratic tenant, who offers a higher rent precisely because a few landlords before you said no. It can go very well – but the extra rent exists for a reason.

Investment grade FROM AAA TO BBB- Solid balance sheets, tight spreads. Defaults rare even in bad years. Moves mainly with rates, like the government bonds. The single bond can make sense	High yield FROM BB+ DOWN More yield; defaults are routine, and they widen in recessions. Moves mainly with the economy, like equities. Makes sense almost only diversified
--	--

The BBB-/BB+ border is no nuance: many institutional mandates may hold only investment grade.

FIGURE 12 Investment grade and high yield

Illustrative diagram

6.3 Who gets paid first: the repayment hierarchy

So far we have spoken of the issuer as a single signature. But the same company can issue bonds of **different rank** – and in a crisis, the rank decides everything. The law orders creditors on a precise ladder: whoever stands higher is repaid in full before whoever stands below sees a euro.

At the top stand the **secured** bonds – such as the banks' *covered bonds*, backed by a dedicated pool of mortgages or loans that stays separate even in bankruptcy. Then the **senior** debt, the ordinary rank of most issues. Below that, the **subordinated** debt: whoever holds it accepts by contract to be repaid only after all the ordinary creditors – and in exchange receives more generous coupons. At the bottom of the ladder, the shareholders.

The practical consequence is that **the issuer's name is not enough**: two bonds from the same bank, with similar coupons, can meet opposite fates in a crisis – one repaid in full, the other wiped out. The rank is written in the prospectus and shown on the instrument pages, usually under its English name: *covered*, *senior preferred*, *senior non-preferred*, *subordinated*. Before buying a security that yields conspicuously more than its siblings, the first thing to check is which rung of the ladder it belongs to: almost always, the answer is there.

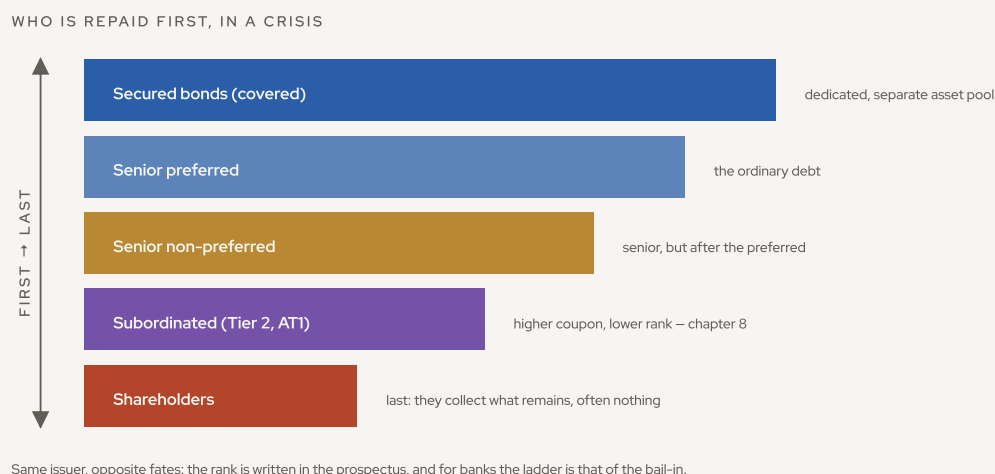


FIGURE 13 The repayment hierarchy

Illustrative diagram

6.4 Bank bonds: a chapter apart

Banks deserve a dedicated discussion, for two reasons. The first is that they are the most prolific corporate issuers and the most present in Italian portfolios: for decades the bonds of the bank around the corner, placed at the counter, were a default investment for millions of families. The second is that for banks a special crisis regime exists, which the investor must know: the **bail-in**.

Since 2016 the European rules have established that a failing bank is not rescued with public money before its investors have absorbed the losses: first the shareholders, then the subordinated holders, then – if that is not enough – the senior creditors, following the hierarchy just seen. This is not theory: the Italian and European cases of the past decade inflicted heavy losses precisely on retail holders of subordinated bank bonds, often unaware of the rank of what they owned.

Hence two specific cautions. First: with bank bonds **the rank matters even more**, because the procedure that activates it is codified and tested. Second: when your own bank proposes its own bonds, a structural conflict of interest exists – the seller is the issuer itself – and securities placed at the counter are often poorly liquid and hard to resell at full price. A bank bond can be a good investment; a bond bought *because* its issuer proposed it rarely is. The comparison with the market – yield, rank, liquidity – remains the only judge.

6.5 Before buying: the checklist

Let us sum the chapter up in a sequence of checks, in the order it pays to make them.

- **The minimum denomination.** Many corporates start at one hundred thousand euros: if that is the case, the story ends there – or passes through a fund.
- **The rank.** Senior, secured or subordinated? If subordinated, chapter 8 applies, and for most savers the short answer is: better not.
- **The yield against the government security of equal maturity**, net of taxes: 26 per cent here, 12.5 on the government security. A modest gross spread can vanish entirely after tax.
- **The liquidity.** How much does the security trade? How far apart are bid and ask? A security that does not trade is bought dear and resold badly (chapter 9).
- **The concentration.** How many euros are you lending to the same signature, counting also the accounts and deposits held with it? A portfolio of corporates makes sense if the signatures are many and the weights small: diversification, here, is not an ornament – it is the mechanism that turns credit risk from roulette into statistics.

For many savers, the honest conclusion is that exposure to corporate credit is better built **in collective form** – corporate bond funds and ETFs, where denominations, ranks and signatures are already diversified by construction. The single security remains sensible for prime issuers, senior ranks and amounts that do not unbalance the portfolio.

KEY TAKEAWAYS

- A corporate bond is always judged against the government security of equal maturity, net of the different taxation (26 versus 12.5 per cent).
- Investment grade and high yield are different worlds: in the second, defaults are physiological, and exposure makes sense almost only diversified.
- The rank decides who is repaid in a crisis: secured, senior, subordinated. Same issuer, opposite fates.
- For banks the bail-in applies: losses fall first on shareholders and bondholders, in order of hierarchy.
- Distrust conspicuous yield without an explanation, and securities proposed by whoever issues them: rank, liquidity and the market comparison are the judges.

Invested capital is at risk: its value can fall, as well as rise.

07

The signature,
under scrutiny.

Every bond rests on a single question: will this signature pay? This chapter enters credit risk – how it is measured, who measures it, what the measure is worth – and shows where to read it in real time: not in the agencies' report cards, but in prices.

7.1 Credit risk, called by its name

Credit risk is the possibility that the issuer does not honour its commitments: that it misses a coupon, repays late, repays only in part or does not repay at all. The event has a technical name – **default** – but it is not an all-or-nothing switch: it ranges from technical delay to negotiated restructuring (maturities extended, coupons cut) up to full insolvency.

To reason about it, two numbers are needed, not one. The first is the **probability** that the default occurs within a given horizon. The second is the **loss in case of default**: one almost never loses everything – creditors recover a percentage (the *recovery rate*) that depends on the assets left and, as seen in [chapter 6](#), on the rank of one's claim. Senior debt of a company with factories and warehouses can recover half of face value; a subordinated claim on a hollowed-out bank, almost nothing.

The product of the two numbers – how likely, how costly – is the **expected loss**, and it is the concept that orders the whole chapter: the market does not ask the investor to avoid credit risk, but to get it **paid for properly**. The whole bond trade, on the credit side, lies in this comparison between the compensation offered and the underlying expected loss.

7.2 The agencies and their scales

Assessing an issuer's solidity takes time, access to the accounts and craft. That is why the market has relied for a century on the **rating agencies** – the three global ones are S&P, Moody's and Fitch – which study balance sheets, flows and prospects and condense the judgement into an alphabetical grade: the **rating**.

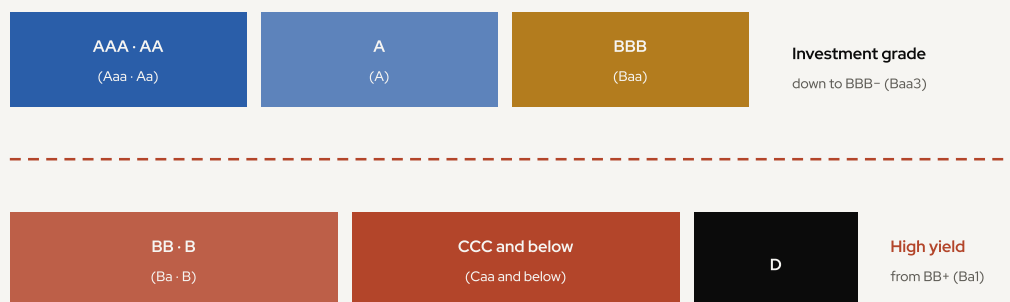
The scales differ in their details but tell the same story, from the triple A of maximum reliability down to the D of default:

JUDGEMENT	S&P / FITCH	MOODY'S	READS AS
Highest quality	AAA	Aaa	Extremely strong capacity to pay
High quality	AA · A	Aa · A	High solidity, limited sensitivity to the cycle
Medium quality	BBB	Baa	Adequate, but more exposed to adverse conditions
Speculative	BB · B	Ba · B	Vulnerable: payment depends on favourable conditions
High risk	CCC and below	Caa and below	Default possible or probable
Default	D	–	Non-payment under way

TABLE 2 The rating scales of the three agencies

Within each rung, the judgement is further shaded: S&P and Fitch add a + or a – to the letter (AA–, BBB+, BB–), Moody's the numbers **1, 2 and 3** (Aa3, Baa1, Ba2). They are fine gradations within the same category: a BBB+ is more solid than a BBB–, but both remain «medium quality». It is with these full codes that ratings appear on the instrument pages.

The border that counts is the one already met in chapter 6: up to and including **BBB– (Baa3)** one is **investment grade**; from BB+ (Ba1) down begins **high yield** territory. It is not a line like the others: many institutional investors may hold only investment grade securities, so the downgrade below the threshold – the issuer becoming a *fallen angel* – triggers forced selling and abrupt price moves. Every rating comes with an *outlook* (positive, stable, negative) signalling the probable direction of the next judgement.



The border drawn is the one that counts: the downgrade across the line – the «fallen angel» – triggers forced selling.

FIGURE 14 The rating scale and the border that counts

Illustrative diagram

7.3 How much to trust a report card

Ratings are useful and should be watched; but watched knowing what they are – and what they are not.

They are not infallible: the crisis of 2008 saw structured securities collapse from triple A within a few weeks, and it remains the harshest lesson ever taught to the rating industry. They are not prompt: the agencies update their judgements downstream of long analyses, and the downgrade often arrives when the market has already been pushing prices down for months – the report card photographs the recent past more than the future. And they are not investment advice: a rating says something about the probability that the signature pays, nothing about whether the security, *at today's price*, is a good purchase.

The correct use, for the saver, is as a **filter and a thermometer**. Filter: defining the minimum quality one is willing to hold in the portfolio, and not derogating from it to chase a coupon. Thermometer: watching the changes – an outlook turning negative, a downgrade – because they tell a direction. With one golden rule on divergences: **when a security's yield is far higher than its rating would justify, it is almost always the rating that is late, not the market that is generous.**

IN PLAIN WORDS

A rating is like the score of an inspector who visits a restaurant twice a year: serious, documented, but dated to the day of the visit. The market price is the queue outside the door: it updates every evening, absorbing rumours, moods and mistakes – but when the queue suddenly vanishes, it is rarely on a whim.

7.4 The credit spread: the judgement quoted in real time

The yield of any bond can be taken apart into two pieces: the yield of the security **free of credit risk** of equal maturity and currency – conventionally, the reference government bond – plus a margin compensating for everything else. That margin is the **credit spread**, and it is measured in basis points like the sovereign spread of [chapter 5](#), of which it is the universal sibling: there it measured confidence in the Republic, here it measures confidence in every single signature.

The spread is the rating written by the market, updated continuously: it widens when the issuer's accounts worry or when risk aversion rises in general, narrows when calm returns. It has a precious property: **it is comparable**. Different issuers, different coupons, different prices – but the spread brings everything back to the same question: how many basis points a year am I being paid for this signature risk?

And here the chapter closes on its opening concept: investing in credit means comparing the spread collected with the **expected loss**. If a high yield basket offers 350 basis points over the governments and history says that defaults, net of recoveries, cost on average 200 points a year, the trade has a margin; if the spread falls below the expected loss – it happens, in phases of euphoria – one is working for free, or at a loss, for the privilege of owning a high coupon. The big number in the shop window is never the answer: it is the question.

WHERE A CORPORATE BOND'S YIELD COMES FROM – EXAMPLE

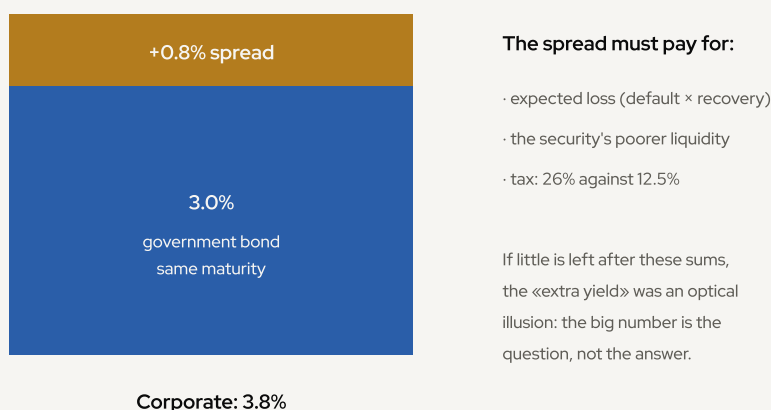


FIGURE 15 Where a corporate bond's yield comes from

Hypothetical example

7.5 If default really comes

It remains to look in the face the event that gives the whole chapter its meaning. What happens, concretely, to whoever holds a bond when the issuer stops?

Default is rarely a bolt from the blue: it is almost always preceded by months of widening spreads, downgrades, falling prices. When the event arrives, the main roads are two. The **restructuring**: issuer and creditors negotiate new terms – maturities extended, coupons reduced, capital cut (the so-called *haircut*) – often formalised in an exchange of old securities for new ones. Or the **insolvency procedure**: the assets are liquidated and distributed to the creditors in the order of hierarchy of chapter 6. In both cases the recovery takes years, and the security meanwhile trades at salvage prices.

For the saver, the real defences all lie **before** the event, and this guide has already lined them up: minimum issuer quality as a non-negotiable rule, senior rank, small weights on each single signature, true diversification – dozens of issuers, not three – and the humility to sell at a contained loss when the original thesis has failed, rather than accompanying the security all the way down, hoping. In credit, hope is the most expensive strategy of all.

KEY TAKEAWAYS

- Credit risk is measured in two numbers: probability of default and loss in case of default. Their product is the expected loss.
- The threshold that counts on the rating scales is BBB-/Baa3: below it begins high yield, and the downgrade across the border triggers forced selling.
- Ratings are filters and thermometers, not advice: they often arrive after prices have already moved.
- The credit spread is the market's judgement in real time: basis points a year paid for the risk of that signature.
- A yield far above one's peers almost always signals a risk the rating has not yet registered: the defences are built beforehand, with quality, rank and diversification.

Invested capital is at risk: its value can fall, as well as rise.

08

Special clauses,
special care.

On the margins of the ordinary market lives a population of bonds with special clauses: subordinated, without maturity, callable, convertible, built on formulas, denominated in distant currencies. Each pays more than its plain sisters – and each has, written in its terms, the reason why.

8.1 Subordinated bonds: high coupon, low rank

Chapter 6 showed the hierarchy of creditors; **subordinated bonds** deliberately occupy its lower rungs. Whoever buys them accepts by contract to be repaid after all the ordinary creditors, and in exchange collects noticeably richer coupons. They are issued above all by banks, for which they perform a precise function: for regulatory purposes they count as capital, a cushion ready to absorb losses.

The family has its own internal hierarchy. **Tier 2** securities are the «classic» subordinated bonds: they pay their coupons regularly and absorb losses only in an outright crisis. The **Additional Tier 1** – known as AT1 or CoCo *bonds* – are another matter: perpetual, with coupons the bank can **suspend at its own discretion** without this constituting default, and with a clause that, if the bank's capital falls below a threshold, **converts them into shares or writes them down to zero**. In 2023 the rescue of a large Swiss bank wiped out its AT1 overnight for around sixteen billion francs, while the shareholders – in theory last on the ladder – received something: a definitive reminder of how concrete these clauses are.

The point for the saver is one of transparency: **a subordinated bond is not «a bond that yields more» – it is an instrument halfway to equity**, remunerated for risks that in critical moments materialise all together. For most private portfolios, sensible exposure to this world – if at all – passes through specialised funds, not the single security.

8.2 Perpetuals and callables: when the maturity is an option

Two clauses, often combined, touch the variable that seemed most solid: the maturity. **Perpetual** bonds have none at all: they promise coupons forever, and the capital is recovered only by reselling the security. Their duration is extremely high by construction: they are among the most rate-sensitive instruments in existence.

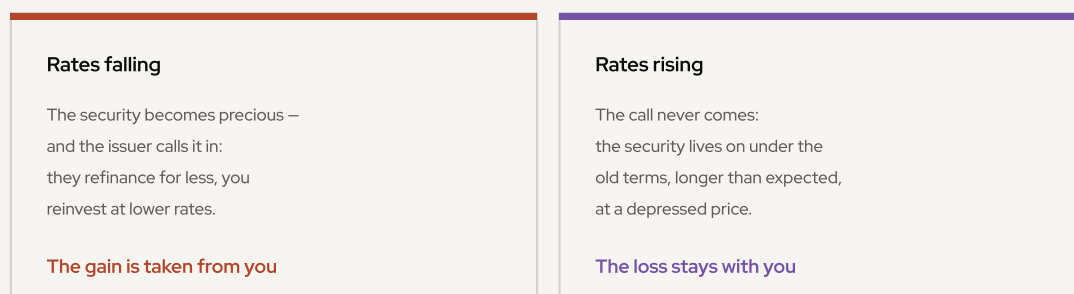
Callable bonds contain instead a right in the issuer's favour: to repay early, on pre-set dates. The asymmetry is plain – the issuer calls when it suits them, that is when rates have fallen and they can refinance for less; precisely when, for the investor, that security had become precious. If instead rates rise, the call does not come and the security stays alive on the old terms, longer than expected and at depressed prices. It is the so-called *extension risk*: what is worse for you happens, in both directions.

Whoever weighs a callable security must look at two yields: the one **to the first call date** and the one **to final maturity**, and reason on the worse of the two (the *yield to worst* of the technical sheets). And remember that the extra coupon of these instruments is not generosity: it is the price at which the investor is *selling an option* to the issuer. As always in fixed income, if it pays more, the reason is in writing.

IN PLAIN WORDS

A callable bond is a lease in which the landlord can give notice whenever he likes, and you never can. As long as the market is against him he keeps you; the moment he finds better he waves you goodbye. The slightly better rent he had granted you was, precisely, the price of that freedom – his.

THE CALL IS THE ISSUER'S RIGHT – EXERCISED WHEN IT SUITS THEM



Hence the worst scenario (yield to worst) is judged: the extra coupon is the price of the option you sold.

FIGURE 16 The asymmetry of the call

Illustrative diagram

8.3 Convertibles: a bond with a ticket to the equity market

Convertible bonds embed a right in favour, this time, of the investor: to turn the security into a pre-set number of the issuer's shares. As long as the share languishes, the convertible lives as a bond – coupons and repayment, normally with lower interest than the market, because the option is paid for. If the share takes off beyond the conversion price, the security appreciates in its wake, and conversion becomes a gain.

The resulting profile is hybrid and, on paper, attractive: **participating in part in equity rallies while keeping a bond floor**. Practice is more sober: the floor is worth as much as the signature holding it up – in crises convertibles fall both as bonds (credit) and as near-equities – and the valuation requires pricing an option, not a saver's trade. They are instruments for institutional markets, entering private portfolios almost only through dedicated funds; at the level of financial culture, though, they deserve the place they have here: they show with clarity how every additional clause is a piece of risk or of right, bought or sold, with a price inside the coupon.

8.4 Structured bonds: when the coupon becomes a formula

One step further stand the **structured** bonds: securities in which coupons or repayment depend on a formula – the path of an equity index, of a basket of shares, of a rate – with thresholds, conditions, memory effects and barriers. The border with investment certificates is thin; the substance is the same: **a plain bond plus one or more derivatives packaged together**, sold as a single product.

The problem is not that derivatives are evil: it is that the packaging makes **the price opaque**. Inside a structured product, the cost of the components and the issuer's margin cannot be seen; studies and case files of the supervisory authorities have documented for years that the real value of these products at placement is systematically below the price paid – the difference being, by definition, the pay of whoever wraps them. For the same desired exposure, there almost always exists a combination of plain instruments – a bond, an ETF – doing the same trade at a visible cost.

The practical rule is one alone, and it works as a universal test: **if you cannot explain to another person, in two sentences, in which scenarios you lose money with this security, it is not a security to own**. Plain bonds pass the test in ten seconds. Structured ones, rarely.

IN PLAIN WORDS

A structured bond is a wrapped gift basket: from outside you see the bow and some fruit on display, and the price is for the whole basket. Nobody forbids buying it – but the greengrocer next door sells the same fruit by the piece, price on display. The difference between the two bills is the cost of the wrapping: and when in doubt, it is more than you think.

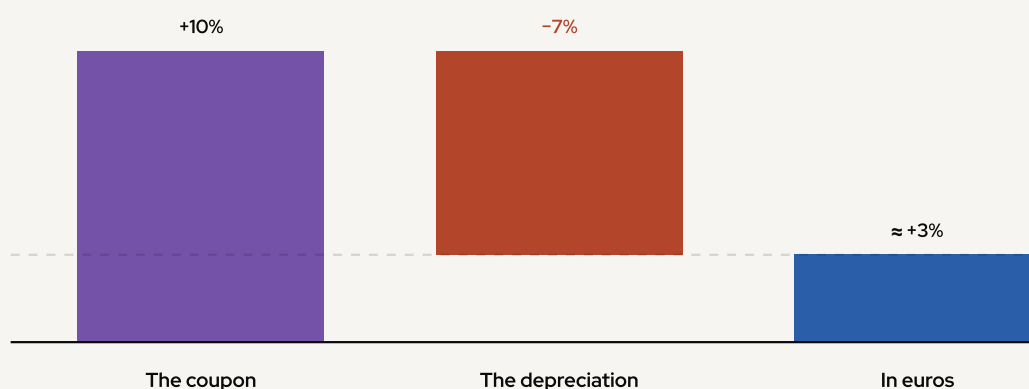
8.5 Foreign-currency bonds: the coupon is in another money

The last special family: securities denominated in a **currency other than the euro** – dollars, but also Turkish lira, Brazilian real, South African rand, often issued by rock-solid signatures such as the supranationals. The commercial lure is the coupon: seeing a World Bank security paying 10 per cent in an emerging currency makes a certain impression, next to European yields.

The effect is an optical illusion. Coupon and repayment arrive **in the currency of the security**: what counts is what they will be worth in euros, and the high rates of a currency are almost always the reflection of its high inflation – that is, of its tendency to depreciate precisely against the low-rate currencies. Theory and long experience say that, on average, depreciation eats most of the coupon advantage; meanwhile, currency risk dominates every other feature of the security: a «safe» bond in an emerging currency is an investment *in the currency*, with a bond attached.

This does not make foreign-currency securities unrepresentable: a deliberate exposure to the dollar, for example, can play a diversification role in a broad portfolio. But the decision must be taken for what it is – a currency position – and not for the size of the coupon. Here too, the terms do not lie: the currency of denomination is written on the first page. One only needs to read it, and ask whether that is a money one wants to own.

A 10% COUPON IN AN EMERGING CURRENCY – WHAT MAY BE LEFT IN EUROS



Illustrative example: high rates reflect high inflation, which tends to weaken the money. The exchange rate dominates everything.

FIGURE 17 The high coupon and the exchange rate

Hypothetical example for illustration

KEY TAKEAWAYS

- Every special clause is a risk or a right with a price inside the coupon: if a security pays more, the terms say why.
- Subordinated bonds – and AT1 in particular – are instruments halfway to equity: suspendable coupons, conversion or write-down in critical moments.
- In callable securities the option belongs to the issuer: judge the worst scenario (yield to worst), not the coupon.
- Structured bonds package derivatives at an invisible cost: if you cannot say in two sentences when you lose, it is not a security to own.
- In foreign-currency securities the exchange rate dominates everything: a high coupon in a depreciating money is a currency position, not fixed income.

Invested capital is at risk: its value can fall, as well as rise.



III

PART THREE · CHAPTERS 9-13

Informed **use.**

The practice of buying, the risks to know and the strategies for building a portfolio. With the Italian tax treatment and the closing glossary, for every word that slows you down.

09

From auction
to portfolio.

From theory to the counter – or rather, to the screen of one's own securities account. This chapter accompanies the real purchase: on which markets one buys, how the order book is read, why the limit order is not an option but a rule, and when the single security really beats a fund.

9.1 What is needed: an ordinary securities account

To buy bonds nothing exotic is needed: an ordinary **securities account** with a bank or an authorised intermediary is enough – the same one used for shares and ETFs. Orders can go through the counter, the telephone or, ever more often, the online platform, where trading costs are generally noticeably lower.

Commissions deserve a moment of attention because, on fixed income, they weigh differently than on equities: a bond is often bought to be held for years, so the commission is paid once – but on yields of 3–4 per cent a year, a 0.5 per cent entry commission is the equivalent of eating almost two months of interest. Traditional banks typically apply percentages with fixed minimums; online platforms get down to a few euros per executed order. On small amounts, the fixed minimum can make the transaction disproportionately expensive: this too is a reason why, below certain thresholds, collective instruments pay.

At purchase, as seen in [chapter 3](#), the accrued interest and the commissions are added to the clean price; settlement of the transaction normally takes place two business days after execution. None of these items is a surprise for whoever has read this far: they are the ordinary mechanics of the market.

9.2 Where one buys: MOT, EuroTLX and off-market

The Italian saver has at their disposal an infrastructure the rest of Europe envies: the **MOT** of Borsa Italiana, the electronic bond market dedicated to retail, where all Italian government securities are listed, many foreign and supranational ones and hundreds of bank and corporate bonds, with continuous trading during market hours. Alongside the MOT operates **EuroTLX**, a market born for bank retail, with a wide list above all on the currency and supranational fronts. On both, one trades from any securities account, exactly as with a share.

Not everything, however, is listed: many corporate bonds – especially those with hundred-thousand-euro denominations – trade only **off-market** (*over the counter*), through the intermediary who searches for the counterparty. For the saver, listing on a regulated market is a concrete protection: prices visible to all, price-formation rules, the possibility of reselling without depending on the goodwill of whoever sold. **For the same security, the listed channel is always preferable**; and a security that is not listed anywhere should be considered, for prudence, a security that cannot be resold except at a discount.

A note on times: the bulk of the trading concentrates in the late morning, when the wholesale markets are also fully operational. The first minutes after the open and the closing stretches of the session often show wider bid-ask gaps: whoever is not in a hurry avoids the frontier hours.

9.3 Bid, ask and true liquidity

Opening a security's screen, one meets two prices: the **bid** (*denaro*, in the Italian convention), the highest that buyers are offering at that moment, and the **ask** (*lettera*), the lowest that sellers accept. The distance between the two is the **bid-ask spread** – not to be confused with the credit spreads of the previous chapters: this is a transaction cost, pure and simple. Whoever buys pays the ask, whoever sells collects the bid: the spread is the market's toll, and it is paid twice in the life of every position – on entry and on exit.

On the most traded BTP the toll is minimal, a few cents; on minor corporate bonds it can widen to a point and beyond. The reading rule is simple: **the bid-ask spread is the thermometer of liquidity**. A security with a wide spread, few daily trades and meagre quantities on the book is a security that is easy to enter and costly to leave – and the apparent yield in the window should be mentally trimmed by this round-trip cost.

Before every purchase, three ten-second checks on the instrument page: how wide the spread is in percentage; how many trades the security has made in the latest sessions; how much quantity is displayed on the bid and on the ask. Three numbers that say, better than any reasoning, whether that position can be exited at the price on screen.

IN PLAIN WORDS

The market is a bureau de change: it buys from you at one price, sells back to you at a slightly higher one. On a much-requested banknote the scissors open a few pennies; on a rare currency they widen. No sign says «commission» – the commission is the gap.

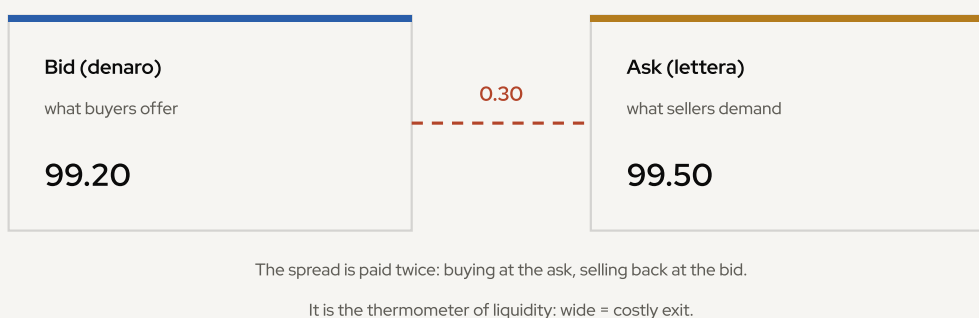


FIGURE 18 Bid, ask and spread

Hypothetical example

9.4 The right order: always with a price limit

When entering the order, the platform normally offers two roads. The **market order** («at best») executes at once, at the price it finds: on very liquid securities it is harmless, but on a thin bond it can cross quotes far from the fair price – and execute at figures nobody would have accepted in cold blood. The **limit order** fixes instead the maximum at which one is willing to buy (or the minimum at which to sell): it may not execute at once, but it can never execute worse than the limit.

On fixed income the choice is less negotiable than on equities, for a structural reason: **many bonds trade little**, and thin order books are the ideal terrain for clumsy executions. The practical rule is therefore one alone, with no exceptions worth listing: **orders always with a price limit**, set looking at the bid and the ask of the moment – for a purchase, near the ask if in a hurry, between bid and ask if not.

Two further points complete the craft. First: the **quantities** – the order is expressed in face value, respecting the security's minimum denomination and its multiples. Second: the **validity** – a limit order can stay on the book for days; whoever forgets it there risks seeing it executed weeks later, in changed market conditions. Short orders, checked, renewed deliberately: operational boredom is the modest price of clean results.

9.5 Single security or fund: when each one pays

The underlying question remains: buy bonds **one by one**, or through **bond funds and ETFs**? There is no single answer; there is a fairly clean division of labour.

The **single security** gives what no fund can give: a **maturity**, with repayment at 100 and flows known to the cent. It is the natural instrument for goals with a date – the expense five years out, the ladder of maturities of chapter 11 – and, on Italian government securities, it enjoys small denominations, great liquidity and simple taxation. Its limit is concentration: with normal amounts one manages to hold few signatures, which is fine for the governments and much less so for credit.

The **fund or ETF** gives instant diversification – hundreds of issuers in one unit, indispensable on corporates and high yield – at the price of a renunciation: having no maturity, it never promises repayment at 100; its value follows the markets, always, with the duration declared on the factsheet. A recent middle way exists, the **fixed-maturity** ETFs, which gather securities repaying in the same year and wind up like a bond: a young but coherent instrument, worth weighing for credit at a fixed date.

The honest synthesis: **governments held to maturity for the goals, collective instruments for the credit**, and distrust for the inverse hybridisations – the single corporate bought for the coupon, the long government fund bought «to park». Each instrument does its own trade well, and the other's badly.

KEY TAKEAWAYS

- Only a securities account is needed; but commissions, on bond yields, weigh: compare them first, and beware the fixed minimums on small amounts.
- MOT and EuroTLX are the saver's markets: for the same security, the listed channel is always preferable to off-market.
- The bid-ask spread is the thermometer of liquidity: it is paid on entry and on exit, and on thin securities it resizes the apparent yield.
- On fixed income, orders are always entered with a price limit: thin books do not forgive orders at best.
- Single securities for the maturities and the governments; funds and ETFs for the credit: each instrument does the other's trade badly.

Invested capital is at risk: its value can fall, as well as rise.

10

Knowing the risks,
to weigh them.

The previous chapters met the risks one at a time, each in its habitat. This chapter lines them up all together – rates, credit, liquidity, inflation, reinvestment, currency, call – because that is how they show up in reality: not in turn, but in clusters. Knowing them does not eliminate them; it lets you choose which ones to get paid for.

10.1 Rate risk: the most democratic

Rate risk is the protagonist of chapters 3 and 4, and the most democratic of all: it strikes even perfect securities, issued by the best signatures, without anyone having made a mistake. Market rates rise, the prices of fixed-rate promises fall – by as much as duration says.

Its practical traits are worth fixing. First: it is a **symmetric** risk – rates can also fall, and then long securities hand out capital gains; whoever avoids it on one side renounces the fruits on the other. Second: it is **certain in its mechanics, uncertain in its timing** – nobody knows when rates will move, but everybody can know in advance how much their portfolio would react. Third: for whoever holds the securities to maturity it is a risk **of the journey, not of the destination** – repayment at 100 arrives anyway; what swings is the early-exit value and the account statement read in the meantime.

The typical mistake is not suffering rate risk: it is **discovering one has it** – realising only in moving markets that the «quiet» bond fund had duration 12, or that the BTP bought for the coupon matured in 2051. The defence is disarmingly simple: read the duration beforehand, and size it on one's horizon. Everything else is commentary.

10.2 Credit and liquidity: the risks that hide together

Credit risk had its chapter, the seventh; here only its favourite travelling companion needs adding: **liquidity risk** – the possibility that, at the moment of selling, the market is not there. An illiquid security is not a security that can never be sold: it is one that can be sold only at a discount, with bid-ask spreads that widen precisely when exit would be needed.

The two risks hide together because **they activate together**. In moments of tension, the first securities to stop trading are those of the issuers over which the doubts gather: whoever would like to sell a minor corporate during a crisis discovers that the problem is not the price – it is finding the buyer. Liquidity is a fair-weather promise: it must be measured beforehand, with the three checks of chapter 9, knowing that in the storm it narrows for everyone and vanishes for the smallest.

There is finally a subtler entanglement, which the banking cases have made familiar: credit risk **concentrates where one is already exposed**. The saver who holds the account, the deposit and the bonds of the same bank has stacked three claims on the same signature; the employee who buys their employer's securities adds their salary to their capital. The first question of credit risk is not «is this signature solid?» but «how much of my life already depends on this signature?».

10.3 Inflation: the thief that never shows on the statement

There is a risk that makes no price fall, generates no visible loss, and in the long run can cost more than all the others: **inflation**. A bond promises future euros in a certain quantity; it promises nothing about what those euros will buy. With inflation at 2 per cent, a thousand euros ten years from now buy in groceries little more than 800 of today's; at 4 per cent, less than 700.

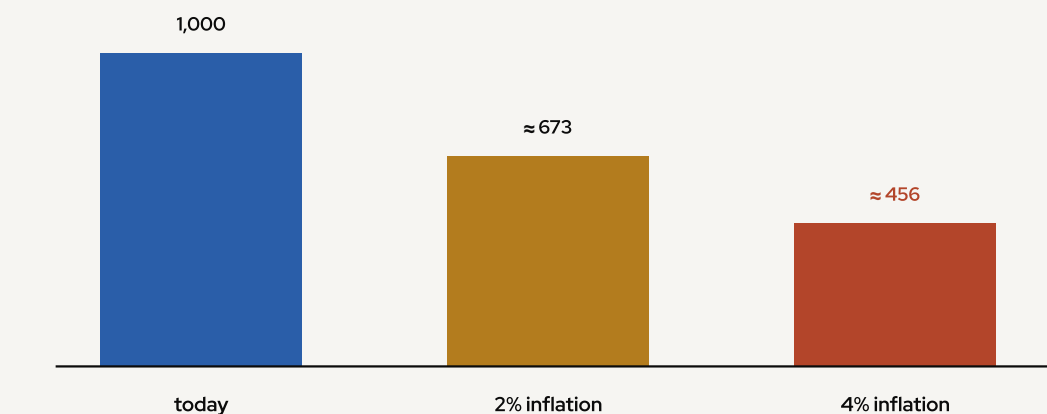
Fixed income is the designated victim of this risk precisely because of its virtue: **the flows are fixed**. The shareholder owns pieces of businesses that, for better or worse, adjust their prices and revenues; the bondholder owns numbers written in 2024 that will be paid, identical, in 2034. The 2021-2022 period recalled it harshly: to the price loss inflicted by rates was added, silently, the loss of purchasing power – and the second never came back.

The defences exist and have already been met: the securities **indexed to inflation** (chapter 5), which tie capital and coupons to the cost of living; **contained maturities**, which allow re-hooking to the new rates – which, as a rule, embed the new inflation; and, at the level of the overall portfolio, coexistence with real assets. What does not work is ignoring it: **the yield that counts is always the real one**, and a nominal 3 per cent with inflation at 3 is, in spending terms, an elegant zero.

IN PLAIN WORDS

Inflation is a polite thief: it does not break in, leaves no fingerprints, the statement stays pristine. Simply, every year, it replaces your banknotes with slightly smaller ones. You notice the theft only at the till – years later, when the same savings buy an emptier trolley.

WHAT 1,000 EUROS BUY, AFTER TWENTY YEARS OF INFLATION



No price falls, no loss appears on the statement: the yield that counts is the real one.

FIGURE 19 The erosion of purchasing power

Based on a hypothetical example

10.4 Reinvestment, currency, call: the second-row risks

Three minor risks complete the inventory – minor in fame, not always in the final bill.

Reinvestment risk is the mirror of rate risk: if rates fall, coupons and repayments come home precisely when reinvesting them earns less. Whoever lives on investment income knows it well: the portfolio of securities bought at the high rates matures, and the high rates are no longer there. It is the reason flows should be planned across several maturities – the ladder of [chapter 11](#) is born exactly for this – and why the zero coupon, having no coupons to reinvest, is the only instrument that truly locks a compound rate to maturity.

Currency risk was seen in [chapter 8](#): in foreign-currency securities it dominates every other consideration, and is accepted only as a deliberate currency choice. **Call risk**, likewise: in callable bonds the issuer repays when it suits them, and the extra coupon is the price of that asymmetry.

One thread ties these three risks together: **they cannot be seen in today's price**. The callable security, the foreign-currency one and the portfolio concentrated on a single maturity quote serenely, identical to their plain siblings; the difference emerges only when the scenario changes. It is the reason fixed income is judged on the terms and on the scenarios, not on the screen: what the price does not show, the contract says.

10.5 The map of risks, instrument by instrument

The table sums up where each risk hits hardest:

INSTRUMENT	RATES	CREDIT	INFLATION	OTHER RELEVANT RISKS
BOT and short zero coupons	Minimal	Low	Low	Reinvestment at every rollover
Long fixed-rate BTP	High	Sovereign (spread)	High	None
CCT and floating rate	Minimal	Sovereign (spread)	Medium	Uncertain coupons
Inflation-linked	High (on real yields)	Sovereign (spread)	Covered	Volatile price before maturity
Investment grade corporates	Medium	Medium	Medium	Liquidity, minimum denominations
High yield	Low	High	Medium	Liquidity; correlation with equities
Subordinated and AT1	Medium	Very high	Medium	Coupon suspension, call, write-down
Foreign-currency securities	Varies	Varies	Varies	Currency dominates everything

TABLE 3 The map of risks

Two readings of this map close the chapter. The first: **there is no risk-free box** – the BOT that zeroes out rates and credit pays its toll on reinvestment and, over the decades, on inflation. The second: risks **are chosen, not avoided**. A well-built bond portfolio is not the one that has ticked every box at «minimal»: it is the one in which every risk present has been chosen, sized on the horizon of whoever holds it, and – above all – paid by the yield. The unwitting risk is the only one that is never remunerated.

KEY TAKEAWAYS

- Rate risk is certain in its mechanics and uncertain in its timing: duration says in advance how much, nobody says when.
- Credit and liquidity activate together: in the storm, small and doubtful securities stop trading precisely when exit would be needed.
- Inflation does not appear on the statement but in the long run can cost more than everything: the yield that counts is the real one.
- Reinvestment, currency and call cannot be seen in today's price: they are read in the terms and in the scenarios.
- Risks are chosen, not avoided: the only risk never remunerated is the one you did not know about.

Invested capital is at risk: its value can fall, as well as rise.

11

Maturities in line,
with a design.

Knowing the instruments is not enough: one must decide what to make them do. This chapter moves from the single bonds to the portfolio – the role of fixed income alongside the rest, the ladder of maturities, the alternative architectures, and the underlying choice between holding to the end and managing along the way.

11.1 First the question: what are they for, here

Every sensible bond strategy begins with a question that is not about bonds: **what job must this money do?** The possible answers are four, and each one draws a different portfolio.

- **Funding an expense on a known date** – the house, studies, a project: securities with the maturity aligned to the date, held to repayment. Rate risk evaporates; only the signature counts.
- **Producing current income** – supplementing a pension or earnings: coupons spread through the year, staggered maturities to renew in rotation, high quality because the income must be certain, not brilliant.
- **Stabilising a portfolio** that contains equities: quality governments of medium duration, the classic counterweight that appreciates when the economy brakes and rates are cut.
- **Parking a reserve** awaiting a destination: short instruments – BOT, short zero coupons – where duration is minimal and the surprise impossible.

Almost every bond mistake savers make comes from confusing these jobs: the parking money invested in thirty-year BTP «because they yielded more», the income entrusted to subordinated bonds «for the coupon», the equity counterweight sought in high yield that collapses together with equities. First the job is assigned, then the tool is chosen – the reverse order never works.

11.2 The ladder of maturities: the strategy that forecasts nothing

The most useful architecture in fixed income is also the simplest, and it has a homely name: the **ladder of maturities** (*bond ladder*). The capital is divided into several equal rungs and one security is bought per rung, with staggered maturities – for example a fifth of the capital each year, from one to five years. When the first security matures, the repayment is reinvested on the furthest rung, and the ladder starts climbing again by itself.

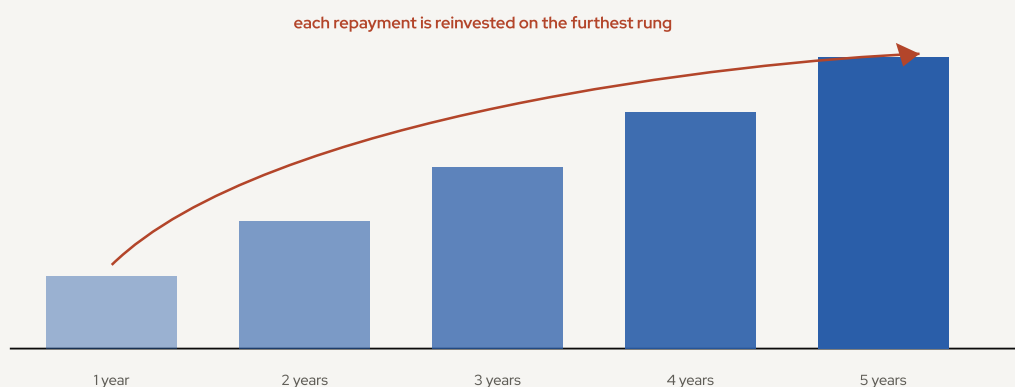
The beauty of the ladder lies in what it **does not require: no forecast about rates**. If rates rise, the repayments arriving one by one are reinvested on the new, better terms; if they fall, the long rungs already in the portfolio keep paying the old, higher rates. In every scenario a part of the portfolio is well positioned – and no wrong forecast can do great damage, because no forecast was made.

The side benefits complete the picture: there is always a maturity nearby (natural liquidity without having to sell anything), reinvestment risk is spread over years instead of concentrating on one date, and the overall duration stays stable and medium without maintenance. With Italian government securities – thousand-euro denominations, every maturity available, minimal commissions – a ladder can be built even with contained capital: it is, by a distance, the first structure to consider for whoever wants bonds in the portfolio without wanting to make a trade of them.

IN PLAIN WORDS

The ladder is the shopping trolley of those who refuse to bet on prices: a little today, a little next month, a little the month after. If prices fall, the next shops take advantage; if they rise, the pantry is already half full at the old prices. No stroke of genius – and no swing and a miss.

ONE CAPITAL, FIVE RUNGS – ONE SECURITY MATURING EACH YEAR



Rates rising: the repayments hook the new terms. Rates falling: the long rungs keep the old ones.

FIGURE 20 The ladder of maturities

Illustrative diagram

11.3 Barbell and bullet: the alternative architectures

Alongside the ladder, the craft knows two architectures with gym names. The **bullet** concentrates everything on a single maturity, chosen to coincide with a goal: it is the natural strategy of the expense on a known date, already met – simple, precise, maintenance-free.

The **barbell** divides the capital instead between the two extremes of the curve, skipping the centre: one part in very short instruments, one part in long securities. The short part gives liquidity and re-hooks the new rates quickly; the long part locks in yields and provides the counterweight in recessions. Compared with a ladder of equal average duration, the barbell is more reactive to extreme scenarios – and more demanding: it must be rebalanced, and its long part requires the stomach for the swings that [chapter 4](#) quantified.

Which to choose? The question matters less than it seems: **ladder, bullet and barbell are tools, not creeds**. The bullet serves the dated goals; the ladder serves income and simplicity; the barbell serves whoever wants to hold liquidity and recession protection together, accepting maintenance and swings. Many real portfolios end up being a ladder with one extra long rung, or a bullet with a liquid reserve beside it – nameless hybrids, and that is quite fine: the right architecture is the one that can be maintained over the years without midnight second thoughts.

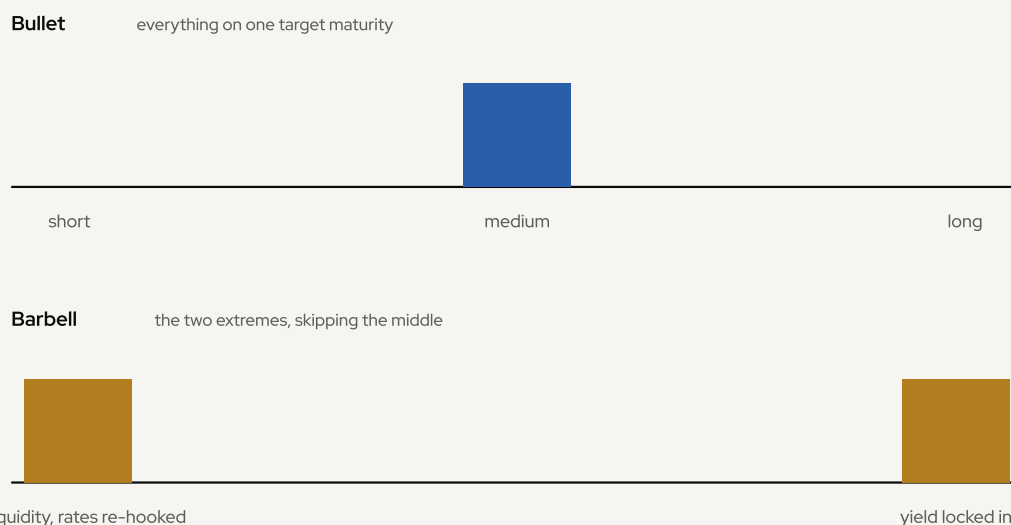


FIGURE 21 Bullet and barbell

Illustrative diagram

11.4 Holding to the end, or managing along the way

The choice of temperament remains: buy and **hold to maturity**, or **manage** – sell, lengthen, shorten – following the markets?

Holding has the force of facts on its side: repayment at 100 turns the swings into noise, trading costs are paid once, taxation is linear, and – above all – it does not require being right about rates. Managing has flexibility on its side: whoever shortened durations in 2021, with rates at zero and nothing to lose by staying short, avoided the worst year in the history of fixed income. But that example, so often cited, is treacherous: it was a limiting case in which the risk was all on one side. In normal conditions, forecasting rates is the trade in which even professionals fail most regularly – and every portfolio move pays spreads, commissions and, often, taxes.

For the saver, the reasonable synthesis is **structural, not tactical**: one chooses a structure – the ladder, the bullet, the barbell – sized on one's jobs and one's tolerance, and maintains it, limiting the interventions to the cases in which it is *life* that changes (a goal that slips, a reserve that is needed) or in which a security has stopped deserving its place (a deteriorated credit, [chapter 7](#)). The markets offer a good reason to redo everything every week; a well-designed bond portfolio is built to ignore fifty-one out of fifty-two.

11.5 The good habits of the bondholder

We close the strategic part as in the sister ETP guide of this series: with the habits worth more than any single choice.

- **The horizon commands the duration.** First establish when the money will be needed, then choose the maturity – never the other way round, never to chase a yield.
- **The minimum quality is not negotiated.** Set a threshold – of rating, of rank – and keep it even when a flashy coupon knocks. Especially when it knocks.
- **The signatures are counted.** Governments aside, no issuer should weigh more than a few percentage points of the portfolio – counting also the accounts and deposits with the same bank.
- **Reason net:** of commissions, of bid-ask spread, of taxes (12.5 or 26 per cent changes the ranking: [chapter 12](#)). The gross yield in the window does not buy the groceries.
- **Coupons are reinvested** – unless they are needed for living. Left on the account, they dilute; reinvested, they compound. Over the distance, the difference is the harvest.
- **The terms are read beforehand.** Rank, calls, currency, denomination: five minutes on the instrument page spare the wrong years. Every bad bond surprise in this guide was written down somewhere, in advance.

Nothing in this list requires talent or timing: only method. It is the good news of fixed income – the market where discipline, more than elsewhere, beats genius.

KEY TAKEAWAYS

- First the job, then the tool: dated goals, income, stabilisation and parking draw different portfolios.
- The ladder of maturities works in every scenario precisely because it forecasts nothing: the repayments re-hook the new rates, the long rungs keep the old ones.
- Bullet for the goals, barbell for whoever accepts maintenance and swings: they are tools, not creeds.
- Structure beats tactics: one intervenes when life changes or a credit deteriorates, not when the markets offer an opinion.
- Horizon, minimum quality, counted signatures, net accounting, reinvested coupons, terms read beforehand: discipline beats genius.

Invested capital is at risk: its value can fall, as well as rise.

12

Settling up
with the taxman.

The Italian tax system treats bonds on a double track: two different rates depending on the issuer, and two different drawers depending on the nature of the gain. This chapter puts things in order – rates, capital losses, stamp duty, regimes – and reaches the least known advantage of all: the one that emerges at inheritance.

12.1 Two separate drawers: redditi di capitale and redditi diversi

The starting point is the same one readers of the ETP guide already know: the Italian tax system divides financial income into two categories that do not communicate. The **redditi di capitale** (investment income) are the instrument's «promised» fruits: for a bond, the **coupons** and the **issue discount** (the difference between issue price and repayment, the typical return of BOT and zero coupons). The **redditi diversi** (other income) are instead the gains and losses **from trading**: the difference between the sale (or repayment) price and the purchase price on the market.

The distinction is not accounting pedantry: as we shall see shortly, **only the redditi diversi allow losses to be offset** – and it is here that the double drawer begins to produce concrete effects on investors' choices.

A typical bond generates both kinds of income over its life: the coupons fall into the first drawer, year after year; any price gain or loss falls into the second, at the moment of sale or repayment. Whoever buys a BTP at 96 and carries it to maturity collects coupons (redditi di capitale) and four points of appreciation (redditi diversi): two tax tracks for a single security, each with its own rules.

IN PLAIN WORDS

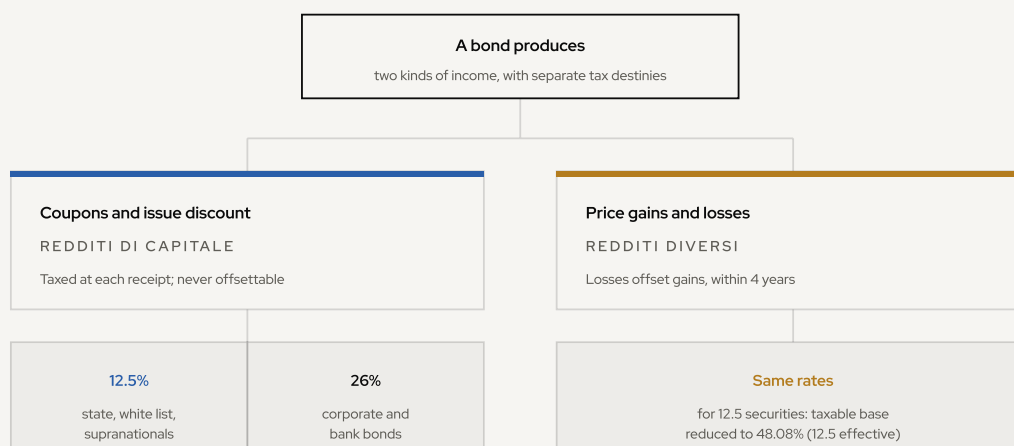
Picture two drawers in the same desk. Into the first go the promised fruits: coupons and discounts. Into the second, the results of the trading: price gains and losses. The house rule is strict: what lies in one drawer can never offset what lies in the other – and losses find a place only in the second.

12.2 The two rates: 12.5 and 26 per cent

On the size of the levy, Italy distinguishes by **issuer**. The ordinary rate on financial income is **26 per cent**, and it applies to corporate and bank bonds. But for one family of issuers the favourable rate of **12.5 per cent** applies: the securities of the Italian state (BOT, BTP, CCT and variants), those of the Italian local authorities, the securities issued by foreign states included in the *white list* – the roster of countries that exchange tax information with Italy, which includes all the main ones – and those of the **supranational bodies** such as the EIB and the World Bank.

The gap is no detail: more than half a rate less changes the ranking of yields. A BTP yielding 3.20 gross leaves about 2.80 in the pocket; a bank bond must yield about 3.78 gross to leave the same net. **The comparison between securities must always be made net**: the credit spread of a corporate, already called on to pay for the signature risk, must also pay for the thirteen and a half points of extra tax – and it does not always manage.

One technicality is worth knowing because it appears on account statements: for the securities at 12.5 the tax machine does not apply the reduced rate directly to the redditi diversi, but subjects to 26 per cent a **taxable base reduced to 48.08 per cent** of the gain – the result is identical ($26 \times 48.08\% = 12.5$), but on the statement one sees the reduced base, not the rate. The same logic, in the negative, for capital losses on these securities: they enter the drawer already resized to 48.08.



Rules as of September 2026. Plus: 0.2% annual stamp duty on market value; government and equivalent securities free of inheritance tax.

FIGURE 22 The tax journey of bond income

Rules as of September 2026

12.3 The asymmetry of capital losses

The drawer of the redditi diversi has a dowry: **capital losses** – the losses realised by selling a security below its carrying price – generate a credit that can be used to **offset future capital gains**, cutting the tax due. The credit lives in the so-called «zainetto fiscale» – the tax loss «backpack» – and expires on **31 December of the fourth year** after the one in which the loss was realised.

So much for the dowry; then the asymmetry, which for bondholders is particularly stinging. Capital losses offset only other **redditi diversi**: capital gains from selling bonds, shares, ETCs, ETNs and certificates. **They never offset the coupons**, which are redditi di capitale: whoever has lost selling one security and collects generous coupons from others pays the 12.5 or the 26 in full on the coupons, while the backpack stays full. And they do not offset the gains of ETFs either – which the tax system treats as redditi di capitale, as readers of the ETP guide will remember.

The practical consequences: whoever holds expiring capital losses has a legitimate tax reason to **realise latent capital gains** on bond securities (sell and buy back, absorbing the gain into the credit); and whoever chooses between a security below par and one above par at equal yield may consider that the former concentrates more of its result in the offsettable drawer. These are side optimisations – never the reason for an investment – but on sizeable bond portfolios they are worth real money.

12.4 Stamp duty, administered regime and declarative regime

Three administrative items complete the picture. The first is the **stamp duty**: 2 per thousand (0.2 per cent) a year on the market value of the financial instruments on deposit, debited by the bank. It concerns bonds like every other security: on one hundred thousand euros, two hundred euros a year – a miniature wealth tax that silently erodes the low yields.

The second is the choice of **regime**. In the **administered** regime (regime amministrato) – that of almost all savers – the bank acts as withholding agent: it calculates, withholds and pays every tax at every event, manages the backpack of the capital losses, and nothing passes through the tax return. In the **declarative** regime (regime dichiarativo) everything goes instead through the annual return: it is the road of whoever operates on foreign intermediaries without a withholding agent, with the burden of the dedicated forms and – for deposits held abroad – of the monitoring in the quadro RW, the tax return's foreign-assets schedule.

The third item is a peculiarity of the **BOT**: the tax on the issue discount is applied **in advance**, at the moment of subscription at auction – the 12.5 on the return to be collected at maturity is paid at once (for the other zero coupons, by contrast, the tax is paid on the accrued discount when the security is sold or repaid). That is why the price paid for a BOT at auction is slightly higher than the «mathematical» price: it embeds the withholding already paid. Nothing penalising – just a cash advance one must know about to read the execution correctly.

12.5 Inheritance: the advantage that cannot be seen in life

There is a tax chapter that yield comparisons always ignore, and which for family wealth can be worth more than every optimisation seen so far: **inheritance**. Italian government securities – and the securities treated as their equivalent, including those of supranational bodies such as the EIB – are **excluded from the taxable estate** for inheritance-tax purposes: they pass to the heirs without counting towards the taxable base.

Italian inheritance tax is, by European comparison, mild – a one-million-euro allowance for spouse and children, a 4 per cent rate beyond – but on estates above the allowances 4 per cent is money: a two-million portfolio held entirely in corporate bonds pays, beyond the allowance, taxes that the same portfolio in BTP does not see at all. For whoever plans the generational handover, the composition of the bond portfolio thus becomes an estate-planning lever in its own right – a subject that deserves a treatment of its own, and which we leave flagged here.

Since 2025, moreover, inheritance tax is **self-assessed**: it is the heirs (typically through the professional handling the declaration) who calculate and pay it, within ninety days of the filing deadline for the declaration. For this reason too, keeping the documentation of one's securities in order – ISINs, registrations, custody accounts – is a concrete courtesy towards those who come after.

12.6 A worked example (and the changes on the horizon)

Let us line everything up with a concrete case. A saver buys €20,000 face value of a BTP at 96, 3 per cent coupon, and holds it to maturity, four years later.

- **Coupons:** €600 a year (3 per cent on 20,000 face), taxed as redditi di capitale at 12.5: **€525 net** a year, €2,100 over four years.
- **Repayment:** at maturity 20,000 come back against an outlay of 19,200: the €800 of difference are redditi diversi. Taxable base reduced to 48.08 (€384.60), tax at 26: **€100** – that is, an effective 12.5 on the 800. If the backpack held capital losses still in validity, this tax drops to zero up to capacity.
- **Stamp duty:** 0.2 per cent a year on the market value: about €40 a year, 160 over the period.

Overall net result: about €2,640 on €19,200 invested over four years – a 4.1 per cent gross turned into roughly 3.4 net. The same flow from a corporate bond at 26 per cent would have left about 2.9: the tax difference, compounded over the years, is anything but decorative.

The rules described are those in force in September 2026. On the horizon remains the reform – announced many times, never yet accomplished – that should unify redditi di capitale and redditi diversi into a single offsettable category: it would change above all the destiny of capital losses. Until then, the double drawer holds – and so does the rule of always: **before any significant decision, check that the picture is still this one.**

KEY TAKEAWAYS

- Coupons and issue discounts are redditi di capitale; price gains and losses are redditi diversi: the two drawers do not communicate.
- 12.5 per cent on government, white list and supranational securities; 26 on the rest: yield comparisons must always be made net.
- Capital losses offset only redditi diversi, last four years and are never used against the coupons (nor against the gains of ETFs).
- Stamp duty of 0.2 per cent a year on the market value; in the administered regime the bank handles everything, with no tax return.
- Government securities and their supranational equivalents are excluded from inheritance tax: for estates above the allowances, a planning lever in its own right.

Invested capital is at risk: its value can fall, as well as rise.

13

The language
of bonds.

The words of fixed income, in alphabetical order and in plain English. Each entry ideally points back to the chapters where the concept lives: this glossary is made to be consulted every time a word slows the reading – here or elsewhere.

13.1 A–B

Accrued interest (rateo). The fraction of coupon accrued since the last payment date, refunded to the seller at the moment of purchase.

AT1 (Additional Tier 1). Perpetual, deeply subordinated bank bond: coupons suspendable at discretion, conversion into shares or write-down to zero if the bank's capital falls below a threshold. Also called CoCo bond.

At par. A price equal to 100, that is to the face value. Below 100: below par; above 100: above par.

Auction. The channel through which the Treasury places government securities with the operators. The saver accesses it by reserving at the bank, without commissions on BTP and CCT and with a maximum commission set by decree on BOT.

Bail-in. The European regime for managing bank crises: losses fall on shareholders and bondholders following the hierarchy of subordination, before any public intervention.

Barbell. A strategy dividing the capital between very short and very long maturities, skipping the centre of the curve.

Basis point. One hundredth of a percentage point (0.01%). One hundred basis points = 1%. The unit of measure of spreads and rate changes.

Bid / ask (denaro / lettera). The best purchase price (bid) and the best sale price (ask) displayed on the market. The difference is the bid-ask spread, the implicit transaction cost.

BOT (Buoni Ordinari del Tesoro). Zero-coupon Italian government bills at 3, 6 or 12 months: no coupon, the return lies in the discount between price and repayment at 100.

BTP (Buoni del Tesoro Poliennali). Italian government bonds with a fixed half-yearly coupon, on maturities from 2 to 50 years. Variants: BTP€i and BTP Italia (inflation-indexed), BTP Valore (reserved for retail, step-up coupons), BTP Green.

Bund. The German government bond, the euro area's benchmark: the spread of the BTP is measured against its yield.

13.2 C–D

Callable. A bond the issuer can repay early on pre-set dates. It is judged on the worst scenario (yield to worst).

CCT. Floating-rate Italian government securities: coupon linked to six-month Euribor plus a margin. Minimal duration, stable price.

Clean price (corso secco). The market price of the bond without the coupon in accrual: it is the price displayed on the lists.

Convertible. A bond transformable, at the investor's choice, into a pre-set number of the issuer's shares.

Coupon. The periodic interest paid by the bond, expressed as an annual percentage of the face value. It does not coincide with the yield.

Covered bond. A bank bond secured by a dedicated pool of assets (typically mortgages) that stays separate even in bankruptcy: the most protected rank of bank debt.

Credit spread. The margin of yield of a security over the government bond of equal maturity and currency: the compensation, in basis points, for the risk of the signature.

Default. The issuer's non-performance: from payment delay to restructuring up to full insolvency.

Dirty price (corso tel quel). The price actually paid: clean price plus accrued interest. It is the sum that leaves the account.

Duration. The centre of gravity in time of a bond's flows, in years. In its modified version, it measures the price's sensitivity to rates: $\text{change} \approx - \text{duration} \times \text{change in rates}$.

IN PLAIN WORDS

If a single entry of this glossary were to remain, it is duration: the number that turns «bonds swing» into «this bond, if rates move by one point, moves by roughly this much per cent». The difference between knowing and hoping, in one number.

13.3 E–L

Euribor. The euro area's interbank reference rate, the typical parameter of floating coupons (CCT included).

Face value (nominal value). The amount the issuer repays at maturity and on which the coupons are calculated. Prices are expressed as a percentage of this value, with a base of 100.

Fallen angel. An issuer downgraded from investment grade to high yield: the border crossing often triggers forced selling by constrained investors.

High yield. The segment of issuers below the investment grade threshold (from BB+/Ba1 down): higher yields, physiological defaults, correlation with equities.

Indexed (bond). A security whose capital or coupons follow a parameter – typically inflation (BTP€i, BTP Italia) or a market rate.

Investment grade. The segment of ratings from BBB–/Baa3 up: quality issuers, contained spreads, admitted in institutional mandates.

ISIN. The twelve-character code that uniquely identifies every security (IT... for Italy). The only name that admits no misunderstanding.

Issue discount (scarto di emissione). The difference between issue price and repayment value: the typical return of zero coupons, taxed as investment income (reddito di capitale).

Issuer. Whoever issues the security and binds itself to pay: state, supranational body, bank, company. The issuer is the risk.

Ladder (scala di scadenze). A portfolio of securities with maturities staggered at regular intervals: each repayment is reinvested on the furthest rung.

Loan terms (regolamento del prestito). The document fixing all the terms of the security: amounts, dates, rank, clauses, currency, governing law.

Loyalty bonus. The extra repayment granted by some retail securities (BTP Italia, BTP Valore) to whoever holds them from placement to maturity.

13.4 M-R

Minimum denomination (lotto minimo). The smallest tradable size of a security: €1,000 for Italian government securities, often €100,000 for corporates aimed at institutions.

MOT. Borsa Italiana's electronic bond market, dedicated to retail trading: Italian government securities, supranationals and hundreds of corporates are listed there.

Perpetual. A bond without maturity: it promises coupons forever; the capital is recovered only by reselling the security.

Rating. The agencies' synthetic judgement (S&P, Moody's, Fitch) on the issuer's capacity to pay: from AAA/Aaa to D.

Recovery rate. The percentage of the claim that bondholders recover in case of default: it depends on the residual assets and on the rank.

Redditi di capitale. The tax drawer of the promised fruits: coupons and issue discounts. Not offsettable with losses.

Redditi diversi. The tax drawer of the trading results: price gains and losses. Capital losses offset only income of this drawer, up to the fourth following year.

13.5 S

Sovereign spread. The difference in yield between the ten-year BTP and the German Bund, in basis points: the price of confidence in the Italian signature.

Step-up. A coupon structure rising over time, typical of retail securities such as the BTP Valore.

Structured (bond). A security whose coupons or repayment depend on formulas over indices or baskets: a bond plus packaged derivatives, at a cost that cannot be seen.

Subordinated. A bond repaid only after the ordinary creditors in case of crisis: a higher coupon in exchange for a lower rank (Tier 2, AT1).

Supranational. A body created by several states (EIB, World Bank, ESM): top credit standing and, in Italy, taxation equal to that of government securities.

13.6 T-Z

Tier 2. The «classic» rung of subordinated bank debt: it absorbs losses in an outright crisis, after AT1 and shareholders but before the senior creditors.

White list. The roster of states that exchange tax information with Italy: their public securities enjoy the 12.5 per cent rate.

Yield curve. The yields of one and the same issuer across all maturities, lined up: normal if it rises, inverted if short rates exceed the long ones.

Yield to maturity. The effective annual rate of whoever buys at today's price and holds to repayment, coupons reinvested. The only yardstick of comparison between securities.

Yield to worst. The worst among the possible yields of a security with call clauses: the prudent number on which callable bonds are judged.

Zainetto fiscale. The tax loss «backpack»: the credit accumulated with realised capital losses, usable against future capital gains (redditi diversi) up to the fourth following year.

Zero coupon. A bond without coupons: bought below par, the face value is collected at maturity. Duration equal to the residual life; no reinvestment risk.

KEY TAKEAWAYS

- The words of fixed income are few and stable: once learned, every instrument page becomes readable.
- When a term slows you down, the answer is here; when the answer is not enough, the reference chapter is one click from the contents.
- No glossary replaces reading the security's terms: that is where words become commitments.

The promises are **only the beginning.**

This guide ends here; the decisions do not. A bond is a simple promise – dates, amounts, a signature – but a portfolio is a set of promises placed at the service of a plan: a horizon, proportions, and a reason for every maturity.

If reading has raised questions about your own situation – how much duration it makes sense to bear, how to stagger the maturities, how much credit and at what price, what the tax rules say in your specific case – that is the signal that the most useful part of the work begins now.

A confidential conversation, with no obligation, is the simplest way to find out together. The contact details are on the last page.

Massimiliano Silla

To be read, before deciding.

This guide has an exclusively educational and informational purpose. It does not constitute investment advice, a personalised recommendation, a solicitation of public savings or an offer of financial instruments. Investment decisions should be taken only after an assessment of one's personal situation – objectives, time horizon, capacity to bear losses – if necessary with the assistance of a professional.

Invested capital is at risk. The value of any investment can fall as well as rise; past performance is not indicative of future performance. Subordinated, structured and foreign-currency instruments can entail rapid and significant losses and are not suitable for savers at large.

The data and rules cited are updated to September 2026, unless otherwise indicated. Legislation – tax law in particular – changes over time: before any decision it is worth checking that the picture described is still current. Market data come from public sources believed reliable (Banca d'Italia, MEF, SIFMA, ICMA, Borsa Italiana), which are not, however, guaranteed.

No private issuer or specific product is recommended in this guide; government securities are cited for descriptive purposes, not as a recommendation. The numerical examples are hypothetical and serve only to illustrate the mechanisms described. The photographs on the part pages come from Wikimedia Commons (CC0 and public-domain licences).

© 2026 Massimiliano Silla. All rights reserved. The texts, graphics and layout of this guide are the author's work. Sharing is welcome, provided it is in the complete, unaltered version, with attribution to Massimiliano Silla – massimilianosilla.com. Modification, extraction of parts, removal of the references to the author and commercial reuse without written permission are not allowed: info@massimilianosilla.com.

CONTACTS

Let's talk about your wealth.

Rome	Viale dell'Arte 25 00144 Italy	T +39 06 9670 1880
Milan	Via San Raffaele 1 20121 Italy	T +39 02 3035 6801
Turin	Corso Valdocco 2 10128 Italy	T +39 011 089 1164
Geneva	Place de la Fusterie 12 1204 Switzerland	Representative office By appointment

EMAIL

info@massimilianosilla.com

WEBSITE

massimilianosilla.com

LINKEDIN

in/massimiliano-silla

A first confidential conversation, with no obligation,
to understand where to start.

