**Yield = YTM**

There is a current yield, but it is completely useless, so forget about it. YTM is what you need.

We also assume the reinvestment of the coupon at the same rate (i.e., YTM) = compounding.

The yield to maturity (YTM) is the rate for which the NPV (that includes the cost) of the bond is 0. The yield to maturity (YTM) is the total return anticipated on a bond if the bond is held until it matures.

It is seen as an annualized return on investment. So higher yield more profit.

The important aspect is that the yield is calculated once the bond's price is known. Obviously, the coupon rate is known from the beginning and doesn’t change. In short, the YTM is just a metric used to compare bonds of differing attributes. That is it. The important aspect is the bond’s price.

On the yield curve, you see the YTM of bonds across maturities. Again, this is the annualized return. So if a 3-month bond is 2% on the yield curve, that is the annualized value. In reality, you only get a quarter of it (2%/4).

The annualization allows for comparison across maturities.

The Fed controls the federal funds rate, which is displayed as an annualized value and applied to overnight lending/borrowing between financial institutions.

This funds rate has no direct relationship with any yield on the curve, but it does influence them. (I would think it is the floor of the yield curve at any given time, but you still have supply and demand for the bonds/treasuries themselves like any other project)

**Bond Price**

4⅛% Treasury Gilt 2029 means an annual coupon of 4.125% that will be paid in two equal semi-annual payments for a gilt maturing in 2029. Not the fucking YTM. £100 face value.

Saw a formula for calculating the price by knowing the yield (the PDF).

In my mind, all the things out there impact the price, and the yield changes as a result of the price change.

**Yield curve**

term structure of interest rates = yield curve

The yield curve plots the YTM for all maturities of zero-coupon bonds.

The duration of a zero-coupon bond is equivalent to its maturity

In an inverted yield curve, the short-term yield is above the long-term one. Say you are in this situation. At some point, investors will buy the long-term product in the belief that the central bank will cut interest rates, thus hurting the short-term yield. The comparison is between the long-term yield and rolling over the short-term yield for the same horizon (i.e., the long-term horizon). Investors believe that the long-term yield will provide superior yiel over the horizon because they anticipate the short term rate cuts which hurts the short-term roll. Now, this is from a yield locking/return perspective. Then with this belief in minf the investors buy the long-term yield product. So the price will go up due to demand which means that the yield on the product will go down so this lower the long-term yield to the point where it would be indifferent between rolling over the short term and buiyng the long term. Like they react on anticipated decisions from the Fed because as things are it could be equally enticing to buy any maturity (I am thinking product ok work with me) but once smth happens then one maturity will be less affected than another (i.e. the long term maturity vs the short therm one).Basically what happens is you exploit the difference in sensitivities between maturities with a change in the federal funds rate. If the federal funds rate declines then both the short and the long term yields will decrease. It is just that the short term yield will decrease by more since it is more sensitive to changes in the federal funds rate.

In a normal upward curve, the short-term yield is below the long-term one (probably due to the need to compensate me for my illiquidity over the longer horizon and maybe the opportunity cost since smth could pop up). But again, the explanation is not a written and applicable law; otherwise, we wouldn’t have flat or inverted curves. And again, the same rationale applies, only this time, the Fed will increase interest rates, so again, u want to exploit the sensitivity, so here, you would want to roll over the short-term maturity.

The flat yield curve is more of a transition stage.