Yield curve explanation: liquidity theory, inflation/growth expectations, market segmentation, sentiment, demand-supply imbalances

**Steeping**: **Long 2y** bond yields, **short 10y bond** yields

Expectations of higher inflation, strong growth or rising yields. -> ***yield curve rise*** -> long-run rates rise faster/more than short term rates

**Carry costs = positive** because the 2y bond which we are long has a positive carry = yield (0.73%) - 3month libor (0.25%)

While the 10y bond which we are short has a negative carry (short) x%-3m libor

Net effect is positive (positive carry 2y > negative carry 10y)

**Roll Down** is also **positive** because the YC is much steeper in the 2y than in the 10y

the 2y bond which we are long has steeper roll down (YC is steep from 2y to 1y by 0.35%), while the 10y bond which we are short has no significant roll down (YC is steep from 10y to 7y)

**Flattener**: duration-neutral = **Sell 2y** yields and **buy 10y** yields

Expectations of slower growth, decreasing rates, less liquidity premia on yields -> **yield curve flattens** -> recession indicator -> short-term rates rise more than long-term rates

Calc.: **Duration ratio = D10y/D2y** -> 4,66x2y = 10y | Flat at 4.66y

Because: 10y has more Convexity than 2Y (=more price-sensitive), therefore lost more than 2Y

**Carry & Roll Down costs = negative** ; if Steppener: carry = positive

Carry Costs = expenses for “carrying” the item over time (incl. interest rates, storage, and opportunity costs)

Roll Down costs = costs for extending the maturity by closing the initial contract and opening a new longer-term contract for the same underlying asset at the then-current market price. calculated as the percentage change between futures price for the next month and the futures price for the current month contract -> adjustment strategy that allows a trader to improve the opportunities for profit by lowering the strike price to a more favourable position.

Mean-Reversion most affected from rising spreads

Fixed Income Arbitrage Strategies involve 2 or more points of the yield curve – positions are usually calibrated by Duration / BPVs

Basics: Duration = higher if longer maturity or lower coupon (if r ↑ then D ↓): price-sensitivity of bonds to ∆r

Convexity = Slope of price-sensitivity: more elastic = good, but expensive

**Convenience yield** is the **premium** associated with **holding** an underlying product or physical good, **rather than** the associated **derivative** security or contract.

“Markets can stay irrational longer than you can stay solvent.” John M Keynes

 Market movement is a random walk (EMH)

 You can right about the trade, but wrong about the timing

 Nearly impossible to predict markets