

# CONTINGENT CONVERTIBLES (COCO)

Solving the Bank capital problem?

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# What is a CoCo?

- ⦿ Contingent Convertible (CoCo)
- ⦿ Brought in under CRD IV / BIS III
- ⦿ Contains an automatic trigger to increase capital or decrease debt at the point of stress for the bank
- ⦿ Prior to trigger, a CoCo can be either additional tier 1 (AT1) or Tier 2 (T2) depending upon the trigger level
- ⦿ Trigger can be based upon capital or equity price falling below a certain predetermined level
- ⦿ Regulators normally have an override whereby they can activate the conversion before the mathematical trigger point

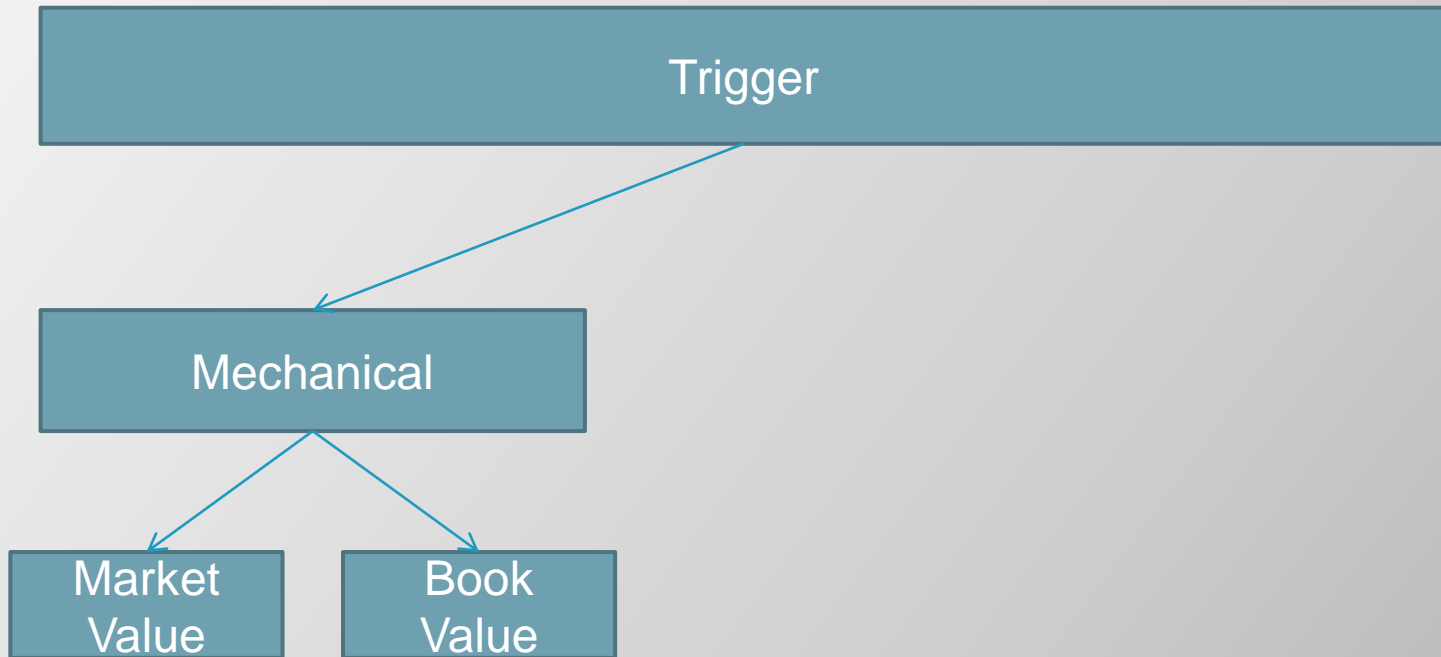
# Why do we need CoCos?

- ⦿ The hardest time to raise capital is the point at which a Bank needs it. CoCo is the regulators answer to that issue by creating a debt instrument which can become capital upon hitting certain trigger levels.
- ⦿ This trigger turns the debt instrument into either AT1 or T2 capital, helping to replace the capital lost through other activities (e.g. if defaults on underlying lending are spiking)
- ⦿ Puts rescue more in the hands of debt holders (bail in) rather than Government (bail out)
- ⦿ Bank management criticised in crisis for being too slow to seek additional capital. This instrument takes the decision out of their hands if they fail to take action to avoid the trigger.

# Systemic risk reduction

- ⦿ Main aim of CoCos is to reduce systemic risk
- ⦿ So how big do we want the market to get?
- ⦿ Larger market means more contingent capital for banks
- ⦿ Larger market means institutional investors must get involved to drive size. Does this in turn create potential contagion around CoCo market?
- ⦿ Bank defaults run in cycle with wider economy – so CoCo investment is not a hedge of any kind for institutional investors against broader portfolio losses
- ⦿ Best place for CoCo risk therefore HNW / Family office – but this limits market size and hence amount of contingent capital available
- ⦿ If market for contingent capital not large enough to cover majority of banks then won't significantly reduce systemic risk

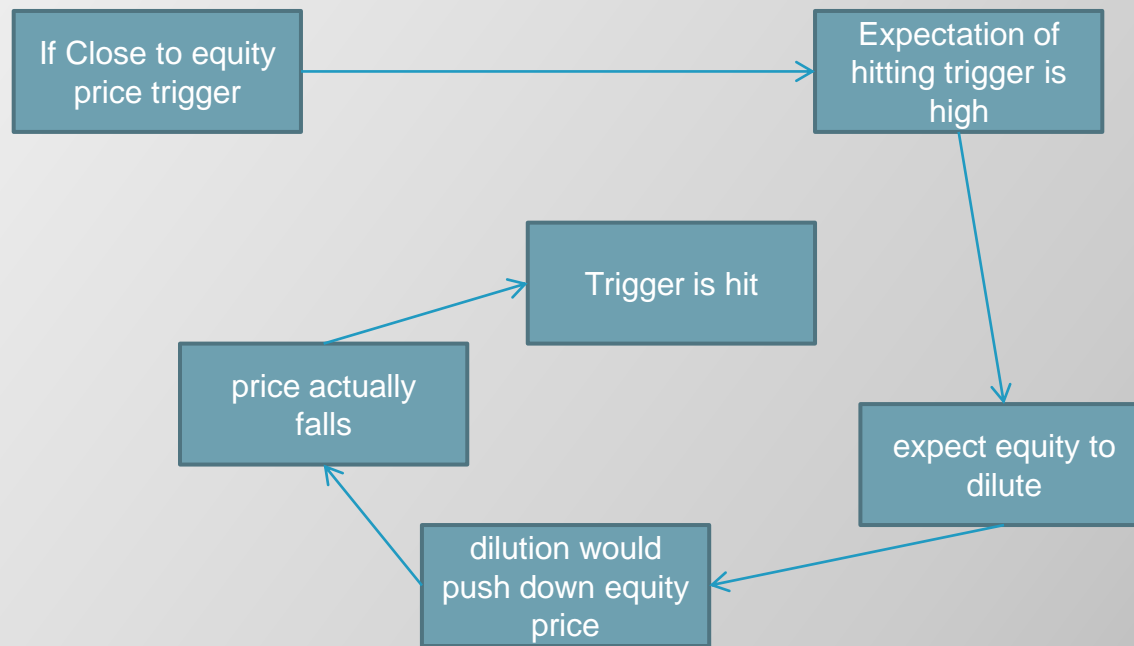
# Structure



# Trigger Levels

- ⦿ Book Value – normally relates to the level of CET1. If trigger is higher than CET1 at 5.125%, then CoCo will count as AT1. If below 5.125%, CoCo counts at T2
- ⦿ Market Value – Share price of issuing bank falls below a certain level
  - Question: how does the bank ensure this is at point where need capital rather than a pure market dislocation or short selling activity?

# Problem with MV Trigger – the death spiral

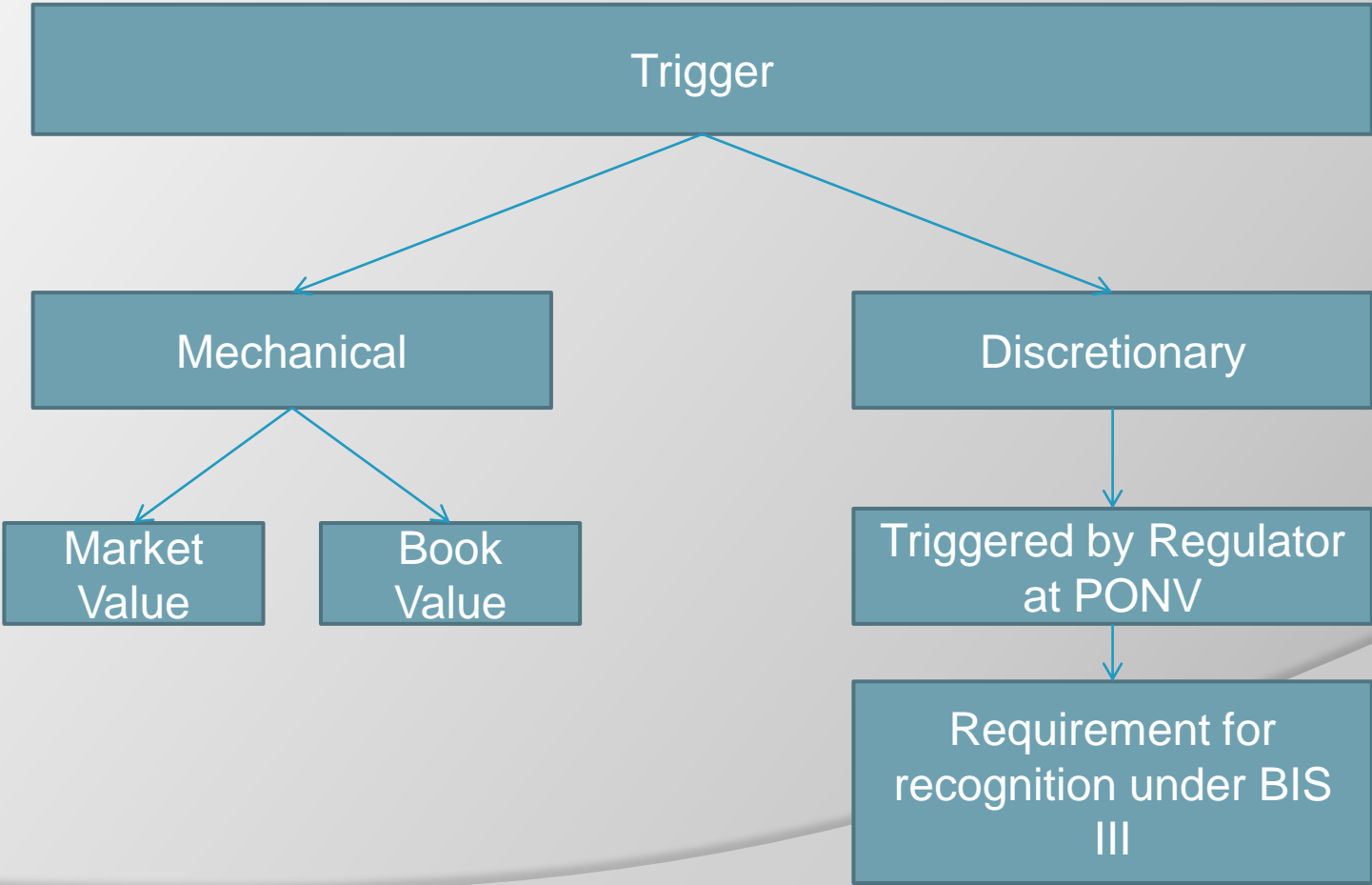


# Problem with Book Value trigger

- ⦿ Too slow
- ⦿ Historic information
- ⦿ Open to manipulation – bank has information before market (and Regulators) and can change models (e.g. VaR) to avoid trigger.



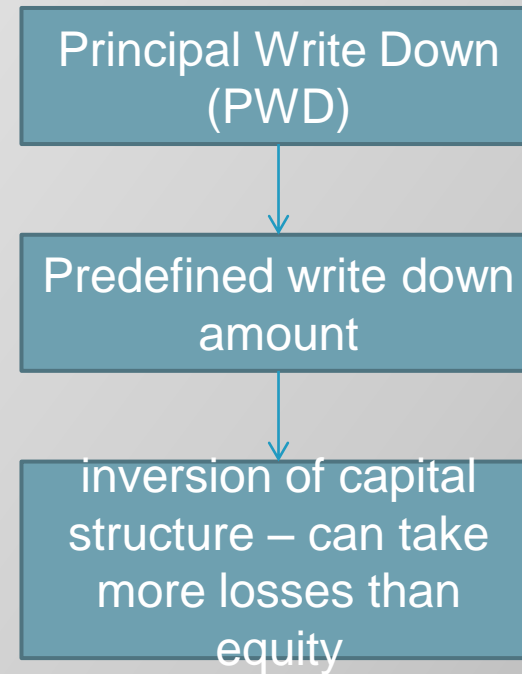
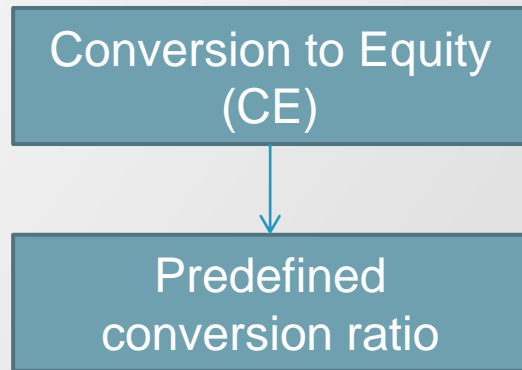
# Structure



# Impact of discretionary trigger

- ⦿ Trigger can be activated before the mechanical trigger point
- ⦿ Makes CoCo very hard to price – what is the option value?  
Fundamental part of valuing an option is to know where the strike price is
- ⦿ Activating the trigger too early could cause a liquidity run on a bank that would otherwise have been sound
- ⦿ How willing will the Regulator be to make that call in reality?

# Loss Absorption



# Conversion Ratio

- ⦿ based on market price of stock at time of trigger – likely to be low at this point – would dilute existing shareholders significantly
  - existing shareholders therefore have meaningful motivation to avoid the trigger
- ⦿ or; Pre-specified share price (often price at time of issue) – less dilution / less motivation of existing shareholders to avoid
- ⦿ or; combination – Set conversion rate equal to share price at time of conversion but subject to a pre-specified price floor. Preserves incentives for existing shareholders to avoid breach while preventing unlimited dilution.
- ⦿ Last option almost certainly means CoCo is getting converted at a rate above the then current market price – so effectively a partial write-down relating to the floor price.

# Risks

- ⦿ CoCos are very equity like – coupon can be cancelled by issuing bank or Regulator
- ⦿ Very digital in risk. High coupon and full repayment or significant loss
- ⦿ Regulator can trigger conversion
- ⦿ High liquidity risk – unlikely you will get a bid on a CoCo if other banks are starting to default
- ⦿ Extension risk – not allowed a step-up or other incentive to call bond at first call date and they are perpetual in order to qualify for AT1

# Systemic Risk revisited

- ⦿ So do CoCos reduce the level of systemic risk?
- ⦿ Would a regulator allow a too big to fail bank to hit the CoCo trigger levels or would they bail-out before that point to avoid contagion?
- ⦿ Would a regulator ever trigger PNV for a systemically important institution?
- ⦿ Should CoCos be obligatory across the industry in order to be effective?