1. Basel I
   1. Proposed by BCBS (basel committee on banking supervision)
   2. 1988: adopted by regulators in EU and G10
   3. Capital = 8% of rwa
   4. Risk weights given by the accord (50% for mortgage, 100% for corporates)
   5. Included off-balance sheet exposures
   6. Capital =
      1. Tier 1: paid-up equity and disclosed reserved
      2. Tier 2: undisclosed reserves, assets revaluation reserves, provisions, subordinated debt…
   7. Weaknesses
      1. Focused only on credit risk
      2. Treated many types of loss as equally likely (private companies, PP&E, non-OCED central governments)
      3. Omitted consideration of any reduction in risk for portfolio effects
      4. Maturity of loans ignored or EAD
      5. Their risk weights didn't always comport with big bank experience, resulting in regulatory arbitrage
2. 1996 Amendment
   1. Added a market risk component (includes interest rate risk)
      1. Types of capital were amended to include Tier 3 (subordinated loans). This, only for market risk
   2. Allowed for market risk to come from standard regulatory charge or values from internal models (not credit risk)
3. Basel II
   1. Background
      1. Came into force in 2006
      2. Meant to address
         1. No internal models for credit risk (pd and ead)
         2. Operational risk
         3. Supervisory process and market competition can reduce risk
      3. Then came the crisis on 2007-2008. Guess what: banks needed quite a bit of emergency capital
      4. That highlighted
         1. Proportion of rwa banks held as capital was just too low
         2. Nature of the components of capital was insufficiently liquid
         3. No requirement for short-term liquidity
         4. Capital requirement goes up during bad times, and that's when it's hardest and most expensive to raise capital
         5. Regulatory arbitrage was still out there
   2. Requirements
      1. Pillar 1 – minimum capital requirements
         1. Definition of capital
            1. Tier 1 (core capital) = common & preferred + reserves – goodwill; must be gte 4% of rwa
            2. Tier 2 (supplimentary capital) = some stuff; must be lte Tier 1
            3. Tier 3 – only used to meet market risk, and lte 2.5\*Tier 1
         2. Minimum capital requirement
            1. Regulatory capital >= credit + market + operational
            2. Credit: 8% of rwa (standardized approach vs IRB) There's a ton on this.
      2. Pillar 2 – supervisory review process
         1. Addresses issues:
            1. Concentration risk (who's to say?)
            2. Relies on senior bank management
         2. Based on four principles
            1. Principle 1 – each bank must set up system of processes to determine capital adequacy (ICAAP)
            2. Principle 2 – Sas much regulary evaluate processes and compliance
            3. Principle 3 – Sas ecpect each bank to hold at least the minimum amount of capital
            4. Principle 4 – Sas should intervene if necessary
      3. Pillar 3 – market discipline
4. Basel III
   1. Increased the proportion of equity capital to be held and made tighter definitions of what counts as capital
   2. Capital definition
      1. Regulatory Capital = Tier 1 Common Equity + Add'l Tier 1 + Tier 2 (no Tier 3)
      2. CET1 >= 4.5% of rwa
      3. Tier 1 (CET1 + Add'l Tier 1) >= 6% of rwa
      4. Total Capital >= 8.0% of rwa
   3. Capital conservation buffer