

## Bank Regulation – Key Tools

### Licensing and supervision

- All banks need to be licensed and supervised by a national regulator

### Imposing minimum requirements

- Regulators require banks to have appropriate buffers against losses (the bigger the risks the bigger the buffers)

### Market discipline

- Regulators require banks to disclose financial and non-financial information for creditors to better assess risk

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## Summary of Recent Initiatives

Capital and Liquidity	Structural Reform	Infrastructure and Transparency
Basel III	Volcker Rule	MiFid II
	Ringfencing rules	Dodd-Frank
For example:	Short selling restrictions	EMIR
Capital ratios		
Liquidity ratios		
Funding ratio		

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## Key US Regulatory Bodies

Function	Main Regulator
Banking (lending and borrowing)	<ul style="list-style-type: none"> <li>The Federal Reserve System ("The Fed")</li> <li>The Office of the Comptroller of the Currency ("The OCC")</li> <li>The Federal Deposit Insurance Corporation ("The FDIC")</li> <li>State Banking Agencies*</li> <li>Other **</li> </ul>
Securities and Investments	<ul style="list-style-type: none"> <li>US Securities and Exchange Commission ("the SEC")</li> <li>Financial Industry Regulatory Authority ("FINRA")</li> </ul>
Derivatives	<ul style="list-style-type: none"> <li>US Commodity Futures Trading Commission ("CFTC")</li> </ul>

\* Every state has its own regulatory agency  
 \*\* Mainly related to consumer protection and financial crime

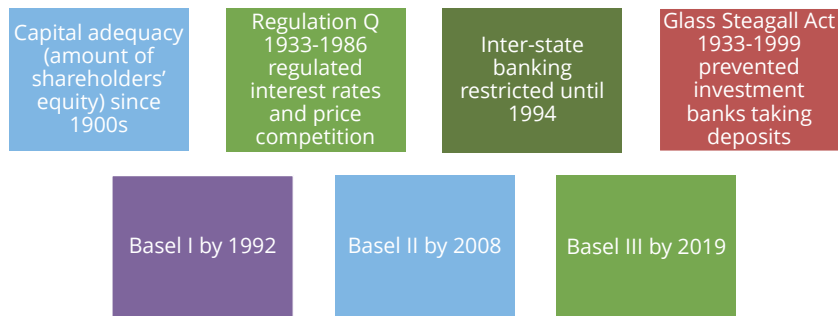
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## Key International Regulatory Bodies

Country	Main Regulator
United Kingdom	<ul style="list-style-type: none"> <li>Bank of England</li> <li>The Financial Conduct Authority ("FCA")</li> </ul>
Germany	<ul style="list-style-type: none"> <li>Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)</li> <li>German Federal Bank (Deutsche Bundesbank)</li> </ul>
European Union	<ul style="list-style-type: none"> <li>European Central Bank ("ECB")</li> <li>European Banking Authority ("EBA")</li> </ul>
Japan	<ul style="list-style-type: none"> <li>Financial Services Agency ("JFSA")</li> <li>Bank of Japan ("BOJ")</li> </ul>
People's Republic of China	<ul style="list-style-type: none"> <li>People's Bank of China ("PBOC")</li> <li>China Banking Regulatory Commission ("CBRC")</li> </ul>

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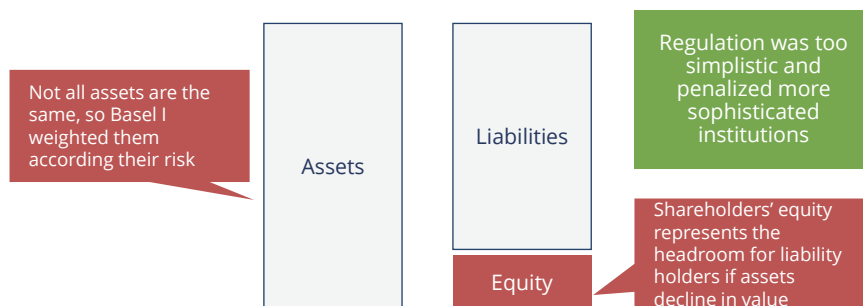
## Historical Regulation in the USA



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## Basel I – Introduction of Risk Weighted Assets

An increasingly global financial system needed a consistent approach to regulation so banks could compete on a level playing field



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## Risk Weighted Assets Example (Basel I)

Assets		Weighting	Weighted	
Cash	40.0	0.0%	0.0	= 40.0 x 0.0%
Government bonds	100.0	0.0%	0.0	= 100.0 x 0.0%
Mortgages	300.0	50.0%	150.0	= 300.0 x 50.0%
PP&E	50.0	100.0%	50.0	= 50.0 x 100.0%
Total	490.0		200.0	= 150.0 + 50.0
Shareholders' equity			40.0	
Goodwill			20.0	
Tier 1 capital			20.0	= 40.0 - 20.0
Tier 2 capital			20.0	
Total capital			40.0	40.0
Tier 1 capital / risk weighted assets		10.0%		= 20.0 / 200.0
Tier 2 capital / risk weighted assets		20.0%		= 40.0 / 200.0

Very stable assets such as cash have 0% weighting. As assets get more illiquid or risky the weighting increases

Tier 1 capital was the most important and was essentially shareholders' equity less goodwill

These capital ratios were a key way of establishing the safety of different institutions

Please note these calculations are simplified

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## Three Pillars in Basel II

Basel II allowed more complex risk weighting for assets and added some additional risk weighting measures to cover market and operational risk

### Pillar 1

- Allowed different methods for calculating risk weighted assets
- Added a RWA component for market risk
- Added a RWA component for operational risk

### Pillar 2

- Required internal reviews by business line of capital adequacy

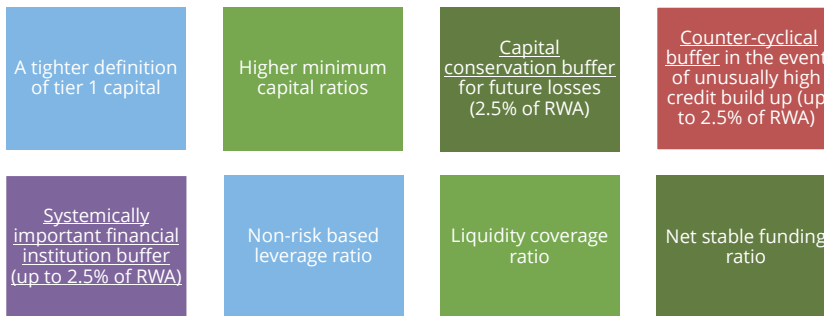
### Pillar 3

- Required market disclosure to improve stock market and credit rating assessment

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## Basel III – Increasing Capital Requirements

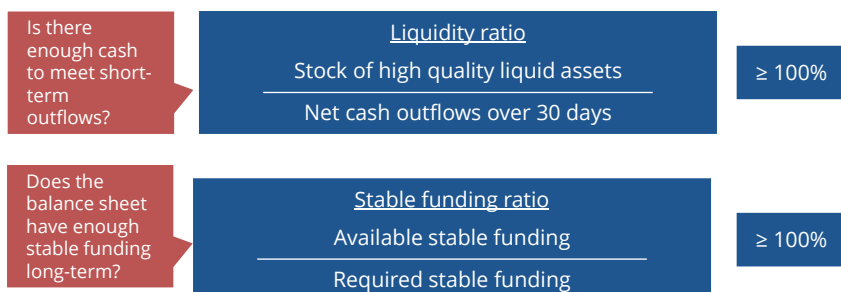
Following the financial crisis regulators looked at increasing the capital adequacy of banks and other regulated entities



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## Liquidity Ratios

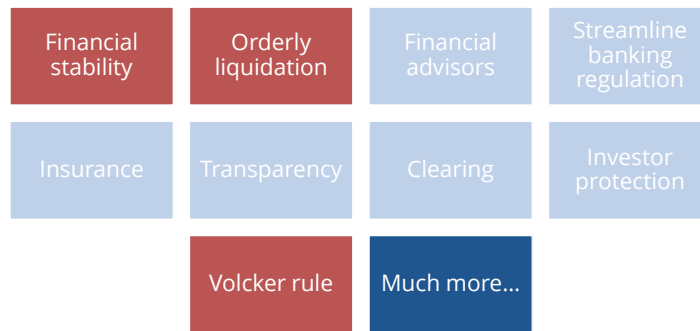
Following the failure of several banks related to funding (including Northern Rock and Lehman Brothers) regulators required improved liquidity and funding



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## Dodd-Frank Act (US)

Very significant piece of legislation affecting almost all parts of the US financial sector!

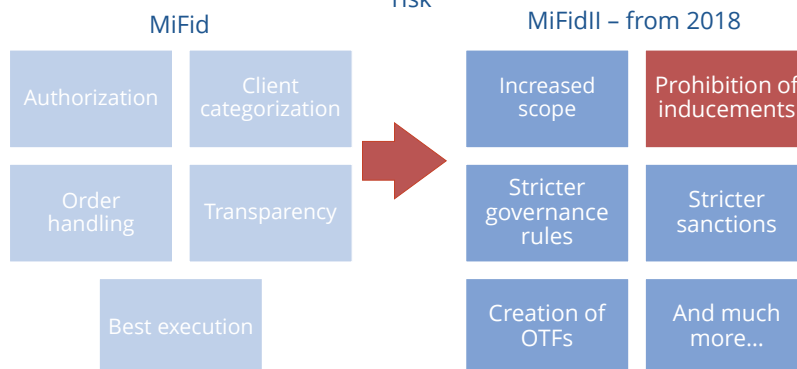


The Volcker rule puts limits on proprietary trading!

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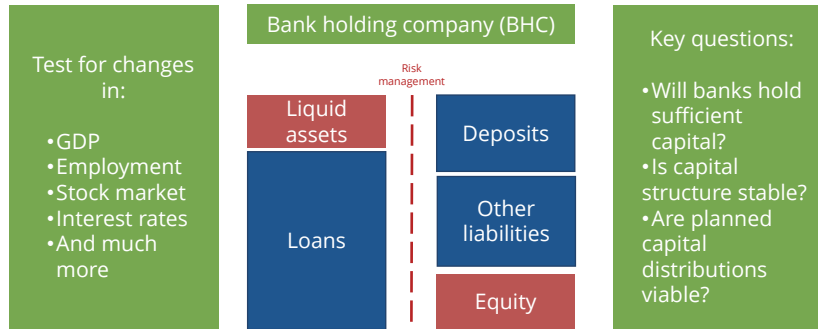
## MiFid (EU)

Harmonized legislation within the EU to increase competition, protect consumers and reduce systemic risk



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## Stress Testing – CCAR, DFAST, EU-testing



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