Global Financial Systems
Chapter 13
Financial Regulations

Jon Danielsson London School of Economics

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Global Financial Systems: Stability and Risk
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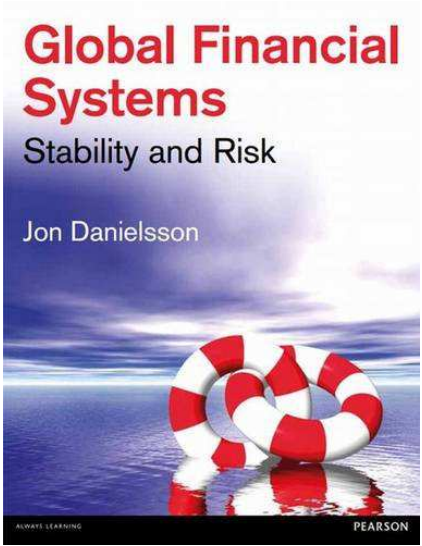
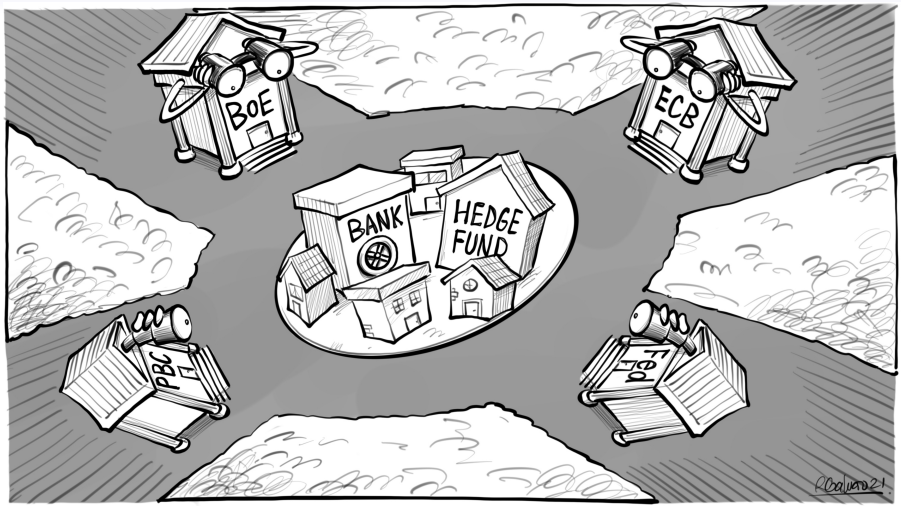
Book and slides



- Updated versions of the slides can be downloaded from the book web page `www.globalfinancialsystems.org`



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Content

- These slides combine content from
- Chapter 13, "Financial Regulations" (general introduction to financial regulations and what was relevant until the 2008 crisis)
- Chapter 18, "Ongoing Developments in Financial Regulations" (how regulations were changing after the 2008 crisis from the point of view of 2012 when the book was written)
- New content on new developments

What to include

- The domain of financial regulations is wast, and only a small portion can be included here
- With the main emphasis on regulations relating to financial stability
  a. The Basel Accords
  b. SIFI policies
  c. MacroPru
- And ignoring most MicroPru, securities markets, insurance and other regulations

Financial Regulations

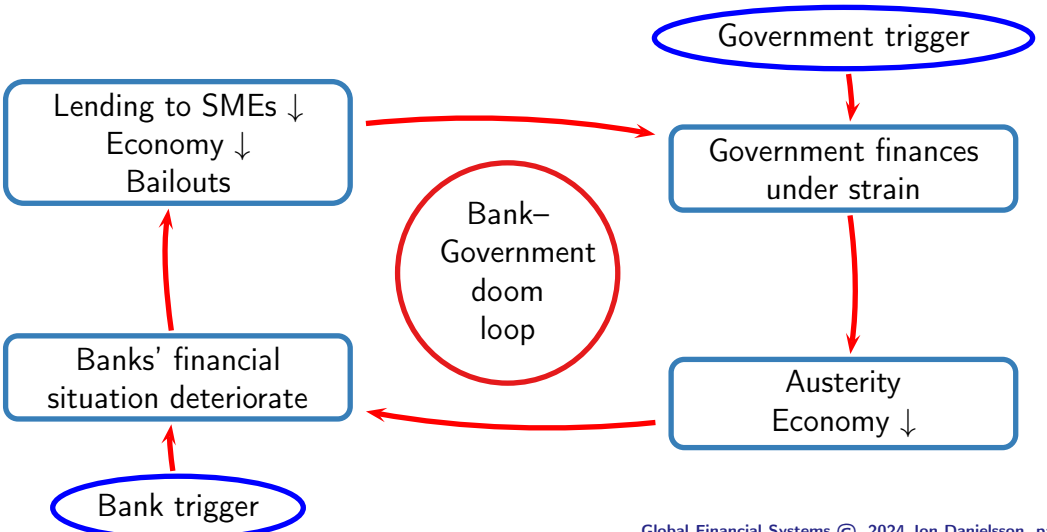
Why regulate the financial system?

- Market power
- Externalities
- Information asymmetry
- Be ready for the eventual crisis (yes, one will come)

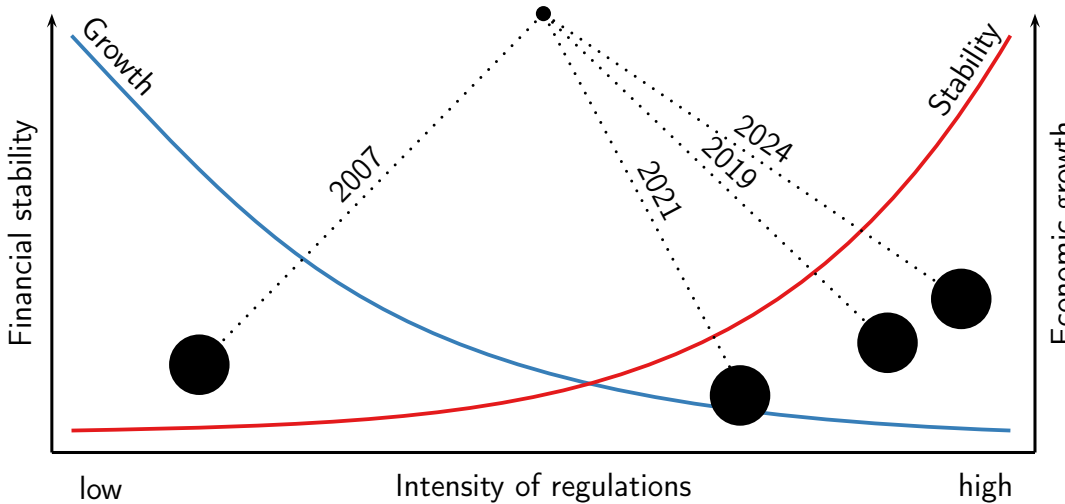
The conflict

- We want the banks to take risk
  - That is the only way to grow an economy
  - Countries with heavily regulated finance generally stagnate
- However, with risk comes the chance of failure
- We cannot have a vibrant banking system without the occasional failure

Bank–government doom loop



The regulation pendulum



Regulations and supervision

Regulations: the legal environment

Supervision: the enforcement

The focus of regulations

- *Macro-prudential regulation* – The failure of a single financial institution can bring down the financial system (systemic crisis)
- *Micro-prudential regulation* (investor/consumer protection)
  - Includes markets, insurance, pension, etc.

Note that these often conflict

Is a laissez-faire position credible?

- Banks should prosper and fail like any other enterprise
- Often prevailing policy but is not credible
- Externalities
  - When large losses, authorities have no choice but to act
  - Political pressure unbearable
  - 1866, 1907, Argentina
- Deciding not to regulate the financial sector is not a credible option for the authorities
- Being forced to intervene in times of crises without adequate preparation is a worst-case outcome
- Better to be prepared

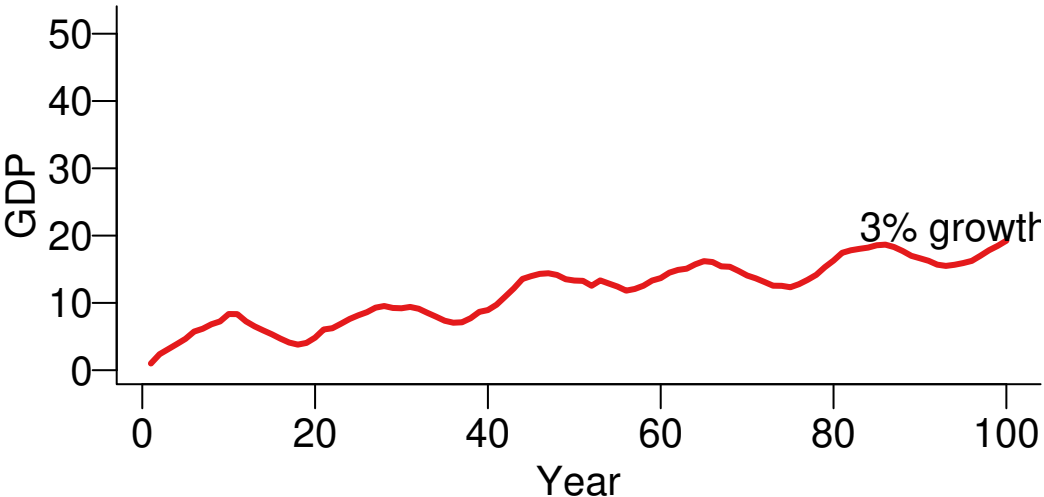
Financial policy

- Government policies targeting the financial system have three main objectives
  1. Price stability
  2. Stability of financial institutions
  3. Financial stability and prevention of systemic risk
- Each objective corresponds to one policy area
  1. Monetary policy
  2. Microprudential policy (MicroPru, or micro)
  3. Macroprudential policy (*MacroPru*, or *macro*)

Policy objectives and tools

- Financial stability is not an objective by itself
- It is only a means to an end
- What we care about is stable and sustainable economic growth
- Therefore, monetary policy, macro and micro, should be seen as ways to achieve that
- Even if many practitioners prefer not to emphasize that
- Or even reject it

The promise: GDP over a century



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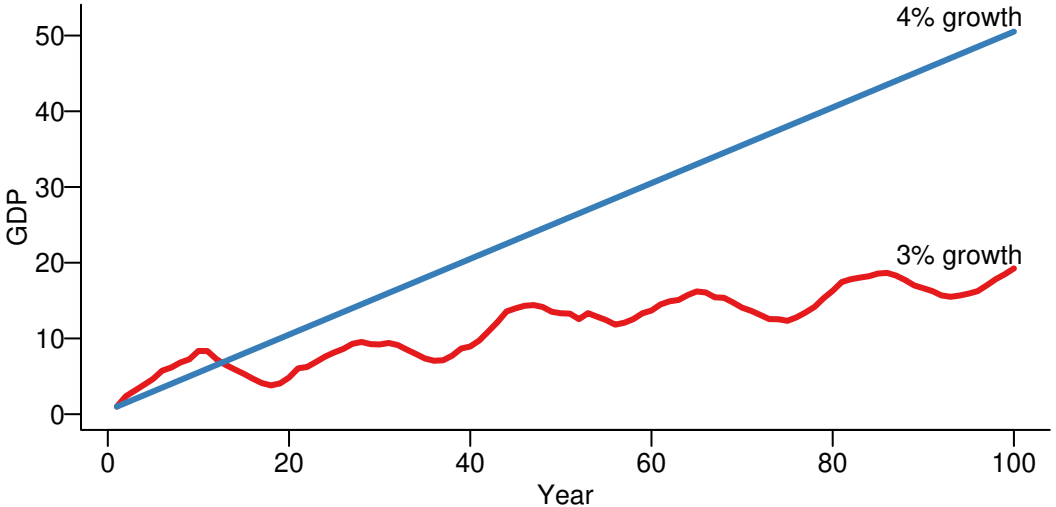

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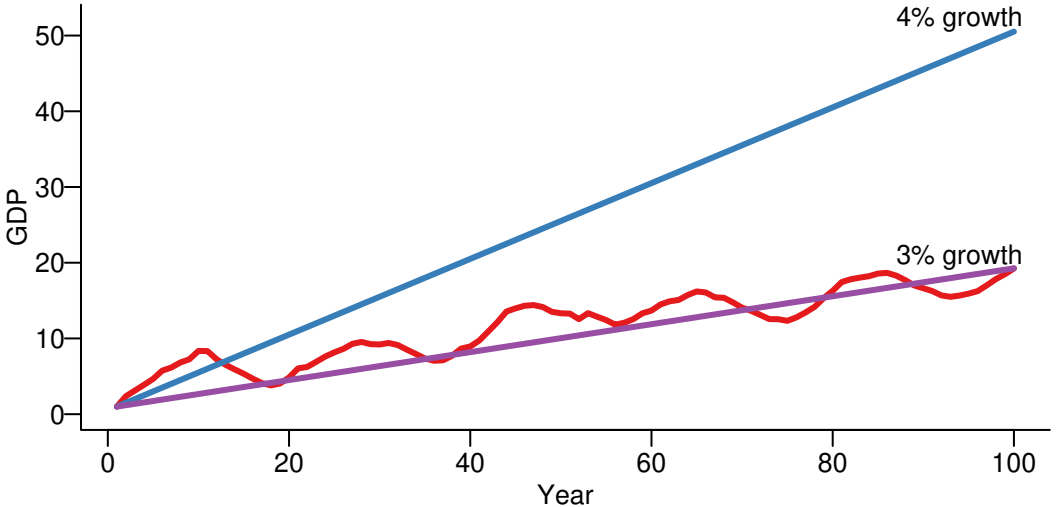

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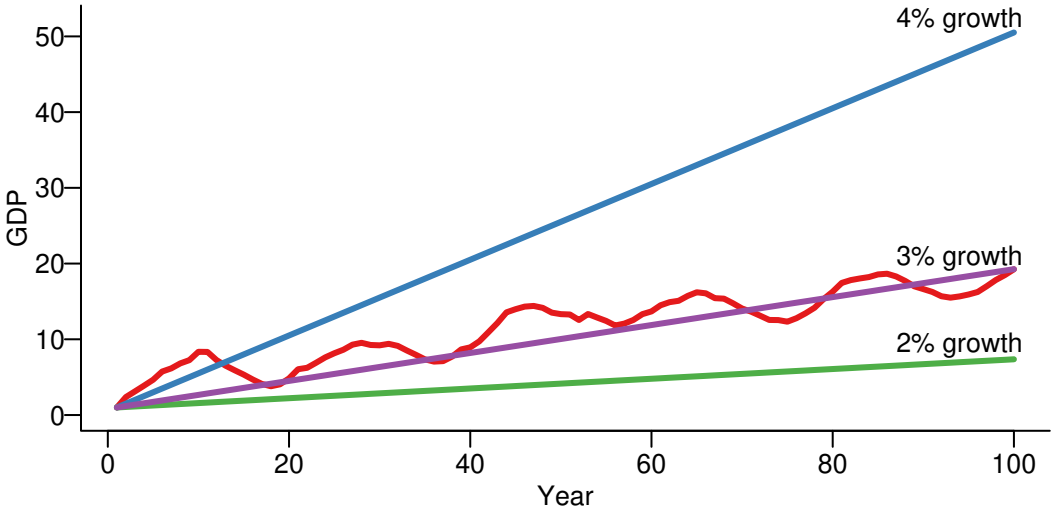


Supervision

Supervision and regulation

- Regulations refers to the law and the interpretation of the law by regulators
- Supervision refers to the enforcement of regulations
- The boundary can be blurred — supervisors need to interpret regulations
- Becomes especially problematic if supervisors and regulators belong to different agencies
- Like in Europe — Common rulebook the goal to aspire to

Should supervision be a part of the central bank? Arguments for separation

- *Conflict of interest*
  1. Higher rates to fight inflation vs. adverse impact on the profitability of the financial sector
- *Reputation risks*
  1. In case of bank failure: supervisor takes the blame, undermining a central bank's credibility
  2. e.g. BCCI in 1991
- *Too many different tasks*
  1. Not effective
  2. Politicisation of process

Should supervision be a part of the central bank? Arguments against separation

- *Engagement*
  1. CBs have no choice but to engage with financial stability
  2. Need to have information and power
- *Information*
  1. Supervisory information is valuable for forecasting key macroeconomic variables and thus implementing monetary policy
  2. CBs also have the responsibility to ensure the smooth working of various payment systems
  3. CBs need to be informed to act as LOLR

Supervisory structure in the US

- The Fed shares the responsibility for regulating and supervising the US financial system with other agencies
- Including the SEC, OCC and FDIC
- The Fed also serves as the umbrella supervisor of all bank holding companies

Supervisory structures in Europe

- European System of Central Banks includes the ECB and national CBs
- Single Supervisory Mechanism (SSM) established as part of Banking Union (BU)
- ECB as a central supervisor for the largest financial institutions
- National CBs support ECB in day-to-day supervision of national banks

Financial stability

- Policies to contain systemic risk and keep financial markets functioning
- CB has a monopoly on printing money thus, it is the only institution that can provide liquidity support in a crisis
- So generally, the central bank has the ultimate responsibility for the stability of the financial system

Foreign operations — Subsidiaries and branches

- A bank operating in a foreign country can have a branch or a subsidiary
  - A branch is a direct part of the home bank. Crucially, its liquidity and capital are a part of the home bank
  - A subsidiary is a separate legal entity, regulated as a domestic bank in the host country, with its own liquidity and capital
- The 2008 crisis, e.g. Lehman's, showed the problems with branches; see SVB
- Usually today, a branch operating in London is servicing companies from the home country — like Japanese companies with operations in London — and not domestic, British clients
- If they service British clients, like SVB, they need to be a subsidiary

Capital

Capital

- Capital is the most important regulatory tool
- Fundamentally to both MicroPru and MacroPru
- So what is capital?

Capital In Common Usage

- Adam Smith: "That part of a man's stock which he expects to afford him revenue"
- To Karl Marx, capital is more nefarious, as wealth that is used to create more wealth, something that only exists because of economic exchange or the circulation of money
- Modern usage follows both Smith and Marx and is often quite contradictory
- Capitalisation, which is the market value of a corporation
- Economists talk about capital as one of the two main inputs in production, the other being labour

Why Capital?

- *Reserves* against unexpected losses (buffer)
- *Limit to leverage* – or credit expansion

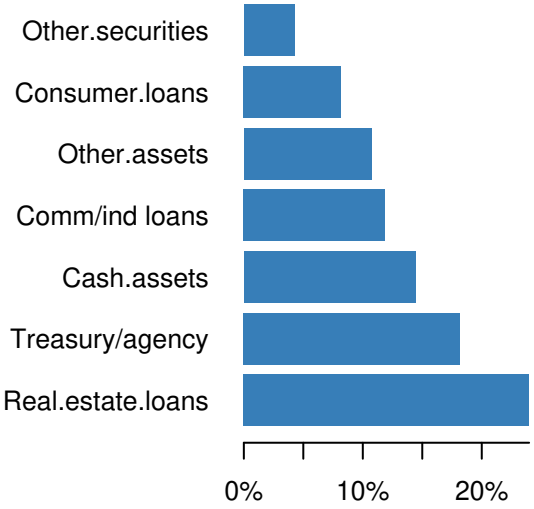
- It is not a buffer against expected losses since these are provisioned for elsewhere

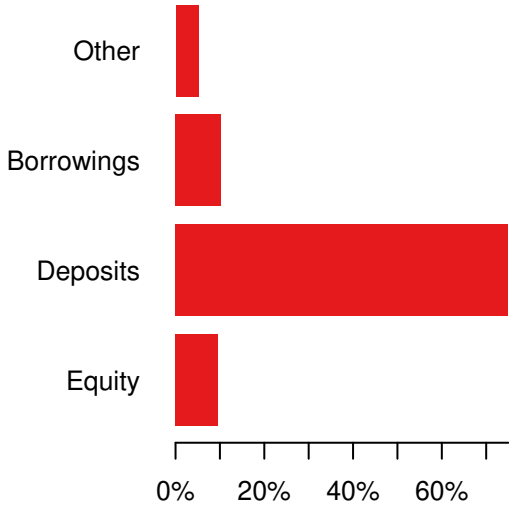
The Balance Sheet Of A Firm

Left-hand side	Right-hand side
Assets	Equity
	Liabilities

Assets - Liabilities = Equity

US banks balance sheet July 2024 — Fed h8





Equity

- A bank started five years ago
- Assuming the original stock price was 1,000, and there are no dividends or taxes
- Profits in years 1, 2, 3, and 5 were 100, respectively, while the loss in year 4 was 250
- In this case, the shareholders' *equity* is

$$1000 + 100 + 100 + 100 + 100 - 250$$

Capital and what it is made of

- The fundamental component of capital is equity
- Equity (or net worth) is known as core equity tier 1 (*CET1*)
- Bank capital is *more than equity*
- Since it includes certain types of debt instruments
  - Like AI1 bonds (discussed below)
  - Certain long-term subordinated bonds
- And other balance-sheet items
- The rules for what is allowed as capital can differ between countries
- We use the term "capital instruments"

Bank capital is what the regulators choose to call bank capital

Criteria for capital Instruments

- Loss absorption
- Permanency
- Flexibility and the ability to defer payment
- Default performance and freedom of action

The most common form of capital is equity.
The more equity-like an instrument is, the better protection it provides.

Basel Accords (BA)

Basel Committee for Banking Supervision (BCBS)

Basel Committee on Banking Supervision (BCBS)

- The BCBS is hosted at, but is distinct from, the Bank for International Settlements (BIS), whose head office is in Basel, Switzerland
- It does not possess any formal powers
- Rather, it is a vehicle for agreeing on common standards and financial regulations
- And it is left up to the member countries to implement the regulations
- BCBS reports to the G20
- But almost all countries with private sector banking system follow the rules set by the BCBS

Three Main Risk Areas Attracting Capital Charges

- Operational risk
- Banking book
- Trading book

Basel Accords

- Basel I (1992)
- Basel II (2008) Not fully implemented, for example, in the US
- Basel III (Implemented in stages from 2019)
  - *Basel III endgame*
- Basel IV (in the future)

Menu of Approaches

- Sophisticated (internal rating based, IRB) or basic methods for calculating risk
- Depends on the development of the institution and the underlying country
- Now moving away from IRB

Basel III

www.bis.org/basel_framework

Capital in Basel III

- Capital requirements are made up of a sequence of buffers
- Two is always requiered and has fixed rules

  Tier 1 (T1)
  Tier 2 (T2)
- Then we have three buffers that can be varied

  Capital conservation buffer (CCB)
  Countercyclical capital buffer (CCyB)
  Globally systemically important banks (G-SIB)

Total regulatory capital ratio = T1+T2+CCB+CCyB+G-SIB

Capital ratios

- The amount of capital is determined by capital ratios (CR)

$$\frac{\text{Capital}}{\text{Assets}} \geq \text{Threshold}$$

- Where a bank is subject to several ratios
- Such as whether assets are risk-weighed or not
- And for different types of capital
- A bank is declared bankrupt if the ratio falls below the minimum
- Even if the bank may be solvent, that is, assets exceed liabilities

Tier 1

- 4.5% of *CET1*
- 1.5% of additional capital instruments
  - *AT1* (next slide), retained earnings, can include preference shares

$$\frac{\text{CET1}}{\text{Risk weighed assets}} \geq 4.5\%$$

$$\frac{\text{CET1} + \text{AT1+other items}}{\text{Risk weighed assets}} \geq 6\%$$

Covid

- Mostly relaxation of capital buffers
- Both the countercyclical and capital conservation buffers
- The idea is that banks will find it easy to lend to companies with difficulty
- Early indications are that these are not very effective

AT1

- Additional Tier 1 capital (AT1) is (typically) a perpetual loan sold by a bank
- It is callable — apparently the expectation is that the bank will call it 3 to 5 years after issue — surely not the intention
- It is designed so the resolving authority has flexibility — the covenant usually stipulates that at the authority's discretion, AT1 holders can take losses before shareholders
- In other words, the owners of AT1 bonds can be made to absorb losses before equity holders
- AT1 become relevant for Credit Suisse, discussed later

Other ratios

- Tier 2 is 2% of
  - Revaluation reserves, hybrid capital instruments, *subordinated debt*, general loan-loss reserves, and undisclosed reserves

$$\frac{\text{Tier 2 capital}}{\text{Risk weighed assets}} \geq 2\%$$

- Capital conservation buffer — 0%-2.5% of CET1
- Countercyclical capital buffer — 0% – 2.5% of CET1
- Globally Systemically important bank (G-SIB) buffer 0%-2.5% of CET1

Two Types Of Capital Ratios

- Leverage ratio
  - It treats all assets the same
  - A loan to a safe entity – German government or Apple computers
  - Has the same risk weight as a loan to a risky entity – Japanese government or a hot dog stand
  - Because capital is costly, it can incentivize banks to seek the riskiest assets
- Risk-weighted ratio
  - If something is riskless, it gets a zero weight
  - The riskier it is, the higher the weight
  - So what are the weights? We showed one example relevant to market risk in the endogenous risk chapter. The next slide shows one relevant to credit risk

The Leverage Ratio

- Keep in mind that the term "leverage ratio" and even "leverage" can mean different things elsewhere
- In banking regulations

$$\text{Leverage ratio} = \text{LR} = \frac{T1}{\text{Total assets}} = \frac{T1}{\text{TA}} \geq 3\%$$

Risk Weights

- The idea of risk weights is that the riskier an asset is, the bigger weight it has in the capital calculation
- Low-risk asset, A_1 and high-risk A_2

LHS	RHS
Low risk assets (A_1)	Capital (C)
High risk assets (A_2)	Non–capital

$$\mathrm{CR} = \frac{C}{w_1 A_1 + w_2 A_2} \geq \alpha, \quad w_1 < w_2$$

- Where w_1 and w_2 are risk weights

How To Get The Weights?

- If a loan/bond is riskless in reality or by law, like government bonds, $w = 0$
- As the loan risk increases or the credit rating on a bond gets worse, so does the risk weight
- A AAA-rated corporation might attract $w = 0.1$ while a CCC-rated gets $w = 0.6$
- A loan to a wealthy borrower and a steady job with plenty of collateral might have $w = 0.15$ while a loan to someone with no assets and irregular employment might have $w = 0.7$
- The high-risk loans are often called *sub-prime*

G-SIBs 2024

Bucket	CET1	Bank
4	2.5%	JP Morgan Chase
3	2.0%	Bank of America, Citigroup, HSBC
2	1.5%	Agricultural Bank of China, Bank of China, Barclays, BNP Paribas, China Construction Bank, Deutsche Bank, Goldman Sachs, Industrial and Commercial Bank of China, Mitsubishi UFJ FG, UBS
1	1.0%	Bank of Communications, Bank of New York Mellon,Groupe BPCE, Groupe Crédit Agricole, ING, Mizuho FG, Morgan Stanley, Royal Bank of Canada, Santander, Société Générale, Standard Chartered, State Street, Sumitomo Mitsui FG, Toronto Dominion, Wells Fargo

HSBC At The End Of 2016

- Tier 1, £172 billion
- Total assets £2,375 billion
- Is the LR then $^{172}/_{2,375}$? No
- Minute accounting rules for classifying assets and liabilities (and GAAP vs. IFRS)
- The leverage ratio of HSBC is 5.4%
- Risk-weighted assets, RWA £857 billion
  - Lending to corporations, £583 billion
  - Retail loans, £367
- Under the most generous definition of capital, CR=17%

Distance to default

- Recal the leverage ratio

$$\text{Leverage ratio} = \text{LR} = \frac{T1}{\text{Total assets}} = \frac{T1}{\text{TA}} \geq 3\%$$

- Suppose a bank suffers a loss

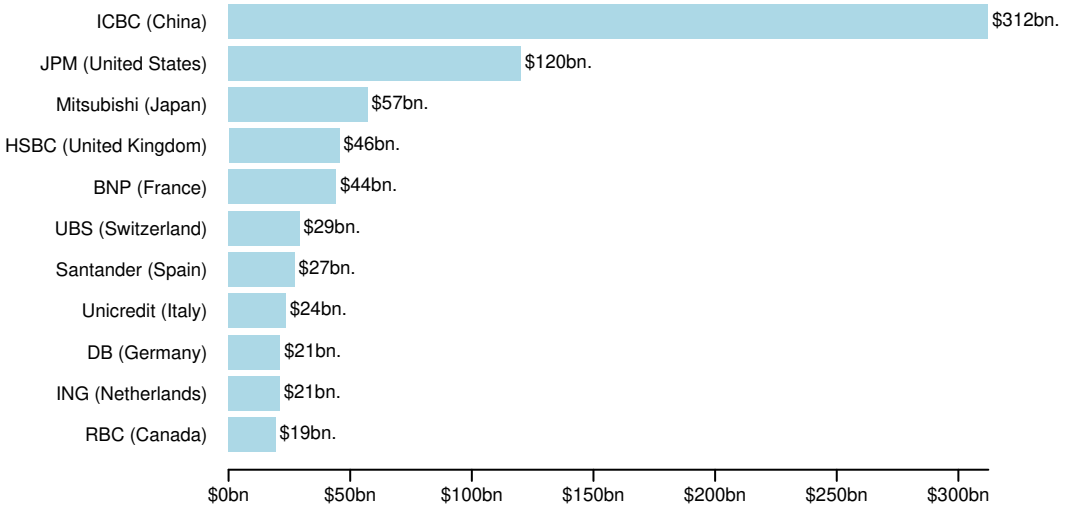
$$\text{Leverage ratio - loss} = \text{LR} = \frac{T1}{\text{Total assets - loss}} = \frac{T1}{\text{TA}} \geq 3\%$$

- The distance the default is the amount of a loss that would make the leverage ratio exactly 3%

Largest SIFI Per Country End Of 2023 (USD bn.)

Bank	Country	LR	TA	TA/GDP	Distance to default
JPM	United States	6.1	$3,875	14%	$120.1
DB	Germany	4.5	$1,419	32%	$21.3
ICBC	China	8.0	$6,310	35%	$312.3
Unicredit	Italy	5.8	$849	38%	$23.6
Mitsubishi	Japan	5.0	$2,874	68%	$57.2
RBC	Canada	4.3	$1,486	69%	$19.3
HSBC	United Kingdom	4.5	$3,039	91%	$45.6
BNP	France	4.6	$2,802	92%	$44.3
ING	Netherlands	5.0	$1,055	94%	$21.1
Santander	Spain	4.4	$1,943	123%	$27.2
UBS	Switzerland	4.7	$1,717	194%	$29.2

Loss To Default/Systemic Crisis (end of 2023)



Capital Ratio

- So

$$\text{Capital} \geq \text{Assets} - \text{Liabilities}$$

- Or

$$\text{Capital} = \text{Equity} + \text{other things}$$

- Then the key concept is:
- The capital (adequacy) ratio – *CAR*

$$\text{CAR} = \frac{\text{Capital}}{\text{Assets}} = \frac{C}{A} \geq \alpha$$

- Which has to exceed some threshold, α (for example, 8%)

Example with T1 and T2

- Bank has risky (A_2) and riskless (A_1) assets
- Risk-weighted capital ratio $\geq 8\%$

$$\text{Capital ratio} = \frac{C}{\text{RWA}} = \frac{T_1 + T_2}{0 \times A_1 + w_2 \times A_2} \geq 8\%$$

Example

- $C = \$12$, $A = \$100$, $\alpha = 8\%$

$$CR = \frac{\$12}{\$100} = 12\% > \alpha$$

- Leverage of

$$\frac{\$100}{\$12} = 8.3$$

Loss

- Suppose the bank loses 3% of its assets ($3)

$$\frac{\$12-\$3}{\$100-\$3} = 9.3\% > \alpha$$

- Note how the $3 affects both the numerator and denominator by the same amount
- But because the former is smaller, the ratio goes up
- Therefore, it can take a relatively small amount of losses for a bank to hit α

Continuing With Example

- Before the shock, the risk weight is 1, so $w = 1$

$$\frac{\$12}{w \times \$100} = \frac{\$12}{\$100} = 12\% > \alpha$$

Because of the shock, the risk weight increases to $w = 1.5$, and

$$\frac{\$12 - \$3}{w(\$100 - \$3)} = \frac{\$12 - \$3}{1.5(\$100 - \$3)} = 6.1\% < \alpha$$

The CR fell further

- The bank is no longer meeting its regulatory constraint, either causing it to be shut down by the authorities to receive a bailout or be taken over

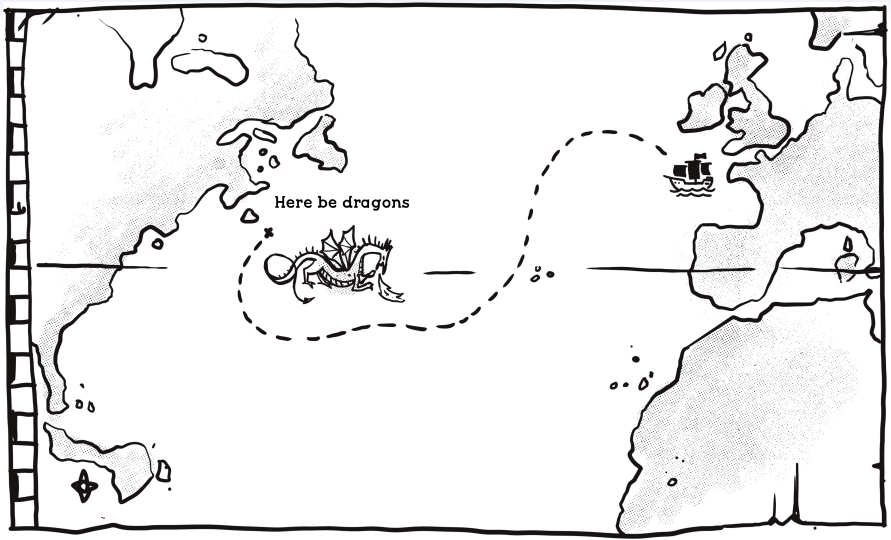
Impact of the Business Cycle

- Suppose a company is in the business of selling luxury goods, having $w = 0.2$ as the economy is doing well
- Suppose the economy enters into a recession
- Then the company may be expected to sell less, but it still has the same amount of debt, so weights increase to $w = 0.4$

The Problem With The Risk-Weighted Capital

- Suppose a shock hits some asset
- Then its price will fall, and the risk weight will increase
- Why? It happens mechanically the way we usually calculate risk weights
- The problem is that the impact on the CA will be larger

Challenges in financial regulations



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Challenges in financial regulations

a. Holistic
b. Resources
c. Responsibility transfer
d. The incentives of supervisors
e. Tick–the–box
f. Regulatory capture
g. Perverse consequences
h. The SIFI problem
i. What is the purpose of capital?
j. Capital arbitrage
k. Measuring risk weights
l. Procyclicality
m. Cliff effects

a. Holistic

- It is not enough to identify a particular problem
- and remedy that with regulations
- Secondary consequences
- Such as how the proposed regulations change bank behaviour and the impact on the relationship between the government and the banking system
- Need to be considered

b. Resource problems

- The Government pays much less than the banks
- With fewer staff members
- Seriously outgunned when dealing with the banks

c. Transfer of responsibility to government

- Supervisors get confidential information
- If banks fail, the authorities are partly to blame
- Banks, of course, fully know this
- Are incentivized to behave in a way that internalizes the possibility of burden-sharing with the government

d. Incentives of supervisors

- Air traffic in China
- Supervisors don't get credit when things go well, and everybody complains about excessive regulation
- After a failure, the head of the agency called to parliament — pilloried in the press
- The supervisors had all the information about the bank but did not act
- Incentives of supervisors are to prevent failure at all costs — become *too risk–averse*
- Incentive problem of the supervisor is *inverse* to bankers
- Need mechanisms in place to prevent excessive supervisory risk aversion
- Cost-benefit analysis on regulations?
- Very hard

e.Tick the box and legal approaches

- After its 2008 failure, the Icelandic supervisor said the purpose of the supervisor is "to ensure the banks don't break the law"
- That is legally correct, but not conceptually. The purpose of the supervisor is to prevent harm to society and help economic development
- Danger of excessively legalistic or formulaic approach to banking regulations, often referred to as *tick–the–box regulations*
- Principle–based regulations vs. tick–the–box based regulations
- Latter is much easier to implement and often ends up being the default approach
- SEC

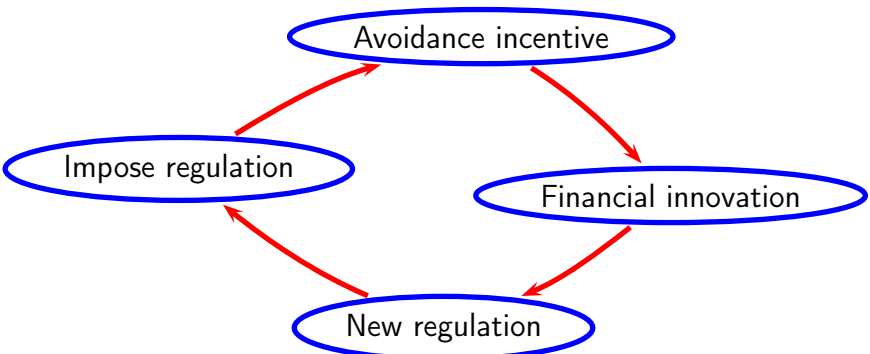
f. Regulatory capture

- Many reasons for why the government chooses to regulate the banking system
  - unprofitable banking services to disadvantaged sectors of society
  - national champions
  - bank lobbying is also quite strong and aims at creating banking regulations that favour the incumbents, discouraging entry into the banking system, providing protection for banks' profits and even the odd bailout
- Supervisory agency no longer works for society. Instead it, in effect, works in the interest of the banks
  - banks recruit staff out of supervisory agencies
  - banks go directly to the politicians
- Can be hard to verify. SEC? S&L?

g. Perverse consequences of regulation

The circle of financial innovation and regulation

- E.g. Reg Q → money market account
- Restricted dollar lending to foreigners → Eurodollar markets



h. SIFI problem

- The failure of SIFI banks will be very traumatic
- This is well understood
- But the problem becomes worse
  a. fixed and variable costs (see slide below)
  b. mergers and takeovers to resolve failing institutions

Fixed cost and variable cost

- Complying with regulations is very costly
- With both very high fixed and variable cost
- The high variable cost benefits the largest financial institutions
- And hence reduces competition and makes the SIFI problem worse

Too big to jail

"I am concerned that the size of some of these (financial) institutions becomes so large that it does become difficult for us to prosecute them
— Eric Holder, Attorney General of the US"

- HSBC failed to monitor transactions of US dollar purchases with drug trafficking proceeds in Mexico
- Illegal in the US
- US officials refused to prosecute the bank for money laundering in 2012
- Trade–of between rigorously enforcing regulations and risking systemic failure
- In 2016, reports and emails from UK and US officials showed that they were concerned about "financial calamity"

i. Goodhart's metaphor

What is the purpose of capital that cannot be used?

A weary traveller arrives by train to an unknown town late at night. Seeing one taxi outside the train station, the traveller asks the driver to take her to her hotel. The driver responds that he cannot do so and points to a sign on the wall saying "local regulations require that at least one taxi be outside the station at all times"

j. Capital structure arbitrage

- Before 2008, the capital structure was aggressively manipulated — maximizing the numerator and minimizing the denominator of the CR
- For example, by risk weights and hybrid instruments
- Much harder to do in Basel III
- Especially the leverage ratio (recall the table above)
- But there are still many ways to manipulate capital, both the numerator and denominator

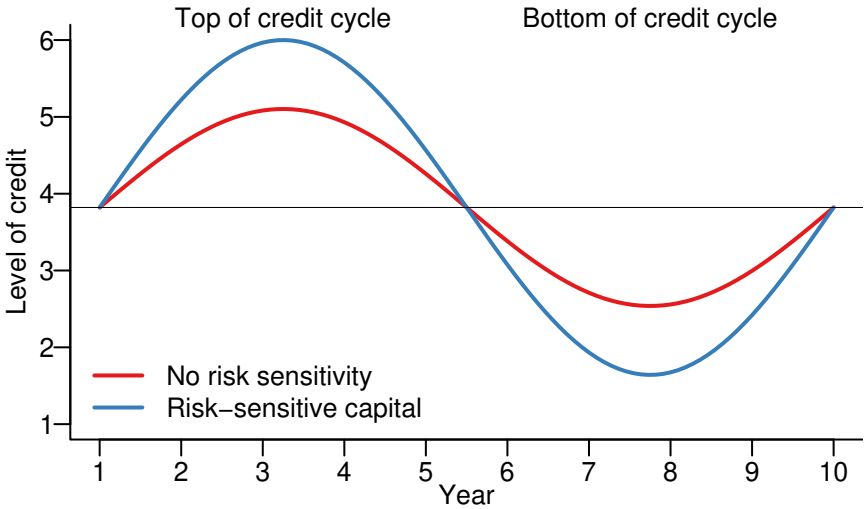
k. Calculating the risk weights

- Can either use a standardized approach — supervisor decides on one-size-fits-all
- Basically a risk bucket approach
- Or internal models (for the largest banks only)
- Risk models can strongly disagree, and there is no way to decide which is correct
- If we harmonize risk models, we create procyclicality
- And if we allow banks to make their own models, we create scope for manipulation

I. Procyclicality

- Bank lending is inherently pro-cyclical
- Chasing increasingly marginal credits in upturns — asset price bubble
- Bubble bursts, and everything goes into reverse but at a much faster pace
- Risk–sensitive capital exacerbates the problem
- Criticism:
  1. no limit to credit expansion during a boom
  2. too little attention on incentives and sanctions
- Banks behavior more homogeneous → Danger of endogenous risk

Procyclicality and risk sensitivity



Procyclicality in regulations

- During upswings, regulations become increasingly lax, amplifying the boom
- After a crisis, they become excessively strict, magnifying the downturn
- There are clear signs of this in the current cycle

m. Cliff effects

- If CAR falls below α, bank shut down
- Before that, increasing unwanted scrutiny from the authorities
- Banks prefer to keep a significant buffer above the minimum, generally around 12% – 13% before 2007

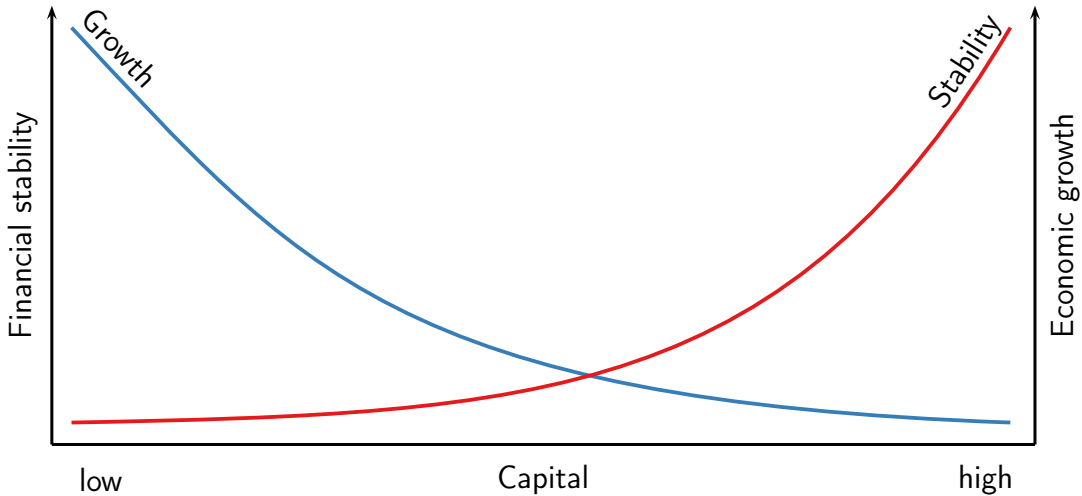
- Ratio falling: increase capital by selling equity
- Happens only in times of difficulty, costly, even impossible
- Can also reduce the amount/riskiness of assets— *deleveraging*
- In a crisis, firesale
- Bank may also refuse to provide new loans and roll over existing loans — credit crunch
- SMEs
- Exacerbate the crisis —endogenous risk

How much capital?

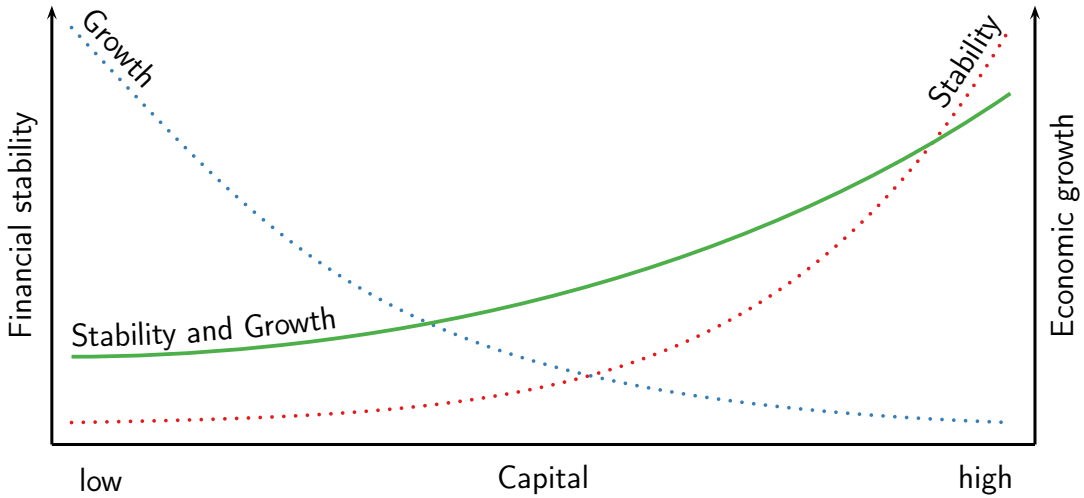
How much capital?

- The amount of capital is hotly debated
- Banks have always wanted it to be as low as possible
- Low levels of capital gave Japanese banks a considerable competitive advantage in the 1980s
- Many banks that failed during the crisis in 2008 apparently had a lot of capital that turned out to be illusionary
- Since then, the rules around capital, and the level of it, especially CET1, have increased considerably — Basel III
- Now the authorities want to increase it further — the Basel end-game

The capital tradeoff —



The capital tradeoff — or perhaps



The Balance Sheet Of A Bank

Suppose capital is only CET1

Left-hand side	Right-hand side
Consumer loans	Deposits
Commercial loans	Bonds
Government loans	Loans
Cash	Equity

Assets - Liabilities = Equity

CET1=Consumer loans + Commercial loans + Government loans + Cash - Deposits - Bonds - Loans

So, is this true?

If we assume government loans and cash have zero risk weight, the rest have one, then

$$\frac{\text{CET1}}{\text{Consumer loans} + \text{Commercial loans} + 0 \times \text{Cash} + 0 \times \text{Government loans}} \geq 6\%$$

What if we increase the threshold?

$$\frac{\text{CET1} \uparrow}{\text{Consumer loans} \downarrow + \text{Commercial loans} \downarrow} \geq 6\% + \text{increase}$$

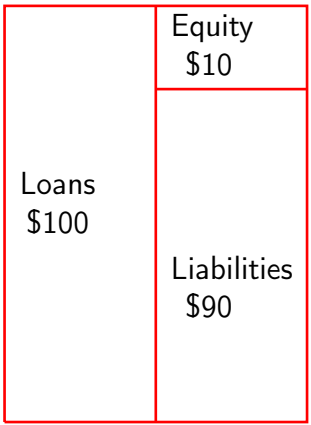
That is, lending contracts

Comments

- Admati et al. (2013) and Admati and Hellwig (2013) argue that this is wrong
- Instead, more capital can lead to more lending
- While reducing the cost of crises (arguments below)
- Many commentators continue to echo those views

Admati et al. (2013) example

Initial



Liquidation

Recapitalisation

Admati and Hellwig (2013)

Misconceptions about capital requirements Higher capital requirements do not mean banks have to hold more cash, reducing lending. Instead, equity is owners' investment in the bank, used to absorb potential losses — can use retained earnings to build up capital (ban dividends, buybacks)

Cost of capital While raising equity seems expensive, a well-capitalised bank is less risky, which can lower its overall cost of capital

Financial stability Higher capital buffers contribute to the stability of banks and the financial system, supporting consistent lending over time

Bank profitability and lending Concerns about reduced profitability from higher capital requirements are overstated. While RoE decreases, the overall safety and reduced risk of insolvency can make banks more reliable lenders, supporting stable lending practices

Critisism

Simplification of cost of capital Oversimplify the impact of increasing equity on the cost of capital, missing factors like market conditions and tax considerations

Neglect of transitional costs Downplays the short-term costs and potential economic impacts during the transition to higher capital levels

Assumptions about market imperfections The reliance on theoretical models like the Modigliani-Miller theorem overlooks real-world issues such as asymmetric information and signalling

Overemphasis on equity Focus on equity undervalues the importance of other regulatory measures like liquidity requirements and supervision

Empirical Generalization Conclusions not be universally applicable in diverse financial markets with different structures and levels of development

Basel III endgame (very brief summary)

- In the US, apply the strictest capital approach to banks with $100 bn. or more, now $700 bn.
- In the US, banks with $100 bn. or more use "available for sale" instead of hold until maturity (important when we discuss SVB later)
- Output floor (IRB $\geq$ 72.5% of standardised) — Limit ability to use own models, prefer standard measures
- More capital for trading and operations
- Limit the maximum exposure a bank can have to a single counterparty or group of connected counterparties
- Enhanced disclosure requirements

Reaction

- Banks have been fairly relaxed about regulations over the past 15 years compared to asset managers and insurance companies
- They are now increasingly vocal — running TV ads in the US against Basel III end game
- CEOs criticise authorities
- Bank regulations increasingly political

TV ads

- NFL game ad, Center Forward
- The Financial Services Forum (FSF) is a lobby group for the eight US global systemically important banks (G-Sibs)
- Bank Policy Institute (BPI) representing the nation's leading banks

Robustness with buffers or resilience with shock absorption?

Daníelsson (2022), Daníelsson (2024)

- Basel uses buffers calculated by risk estimates
- That is very costly
- No buffer can protect against large shocks
- And increases systemic risk since it drives towards harmonisation of beliefs and action, so banks tend to make similar estimates of risk and so attempt similar actions at the same time
- Instead, work with the inherent shock absorption capacity of the system

Diversification not uniformity

The more diversified our portfolio of financial institutions is:

a. The higher the shock absorption capacity of the system
b. The better financial services are tailored to the user
c. The lower the cost of regulating

Win-win-win. More growth, better deals for savers/investors and more stability

How the authorities can encourage this

- Tailor regulations to the types of financial institutions instead of one-size-fits-all
  - with a very high fixed cost and hence increasing returns to scale
- Eliminate barriers to new entrants, most importantly for those with new business models
- Embrace FinTech and DeFi (perhaps via CBDCs)
- Accept that shadow banking is usually a friend, not enemy
- Discourage large, highly integrated entities, especially the too-big-to-fail
- Separate highly systemic utility functions such as clearing from any other activities and house them in simple, low-profit, easy-to-resolve entities

And why does it not happen?

- Conservatism — prefer what we know instead of the new
- Risk aversion — regulators are not rewarded for success but blamed for failure
- Local maximisation — collective failure covers individual failure
- Lobbying — the incumbents prefer what we have

- Often stated like "Will somebody please think of the children" — because since anything new can harm, it should be banned

Resolution

- The term "resolution" refers here to the process of the authorities responding to (resolving) financial crises
- The most severe financial crises costs several trillions of dollars (Barnichon, C, and Ziegenbein 2022)
- Large number of people materially affected — considerable political consequences
- Society demands we do what it takes to resolve the crisis
- Bailouts have become what they call a middle-class good, making them inevitable (Chwieroth and Walter 2019)

The mechanics of how crises are resolved

- The political leadership takes charge
- That is inevitable and correct
- If it becomes necessary to change or bypass the law or significantly redistribute resources, the political leadership is the only entity with the necessary legitimacy
- A common scenario is that once the seriousness is realised
- The Minister of Finance sets up a meeting
- With the authorities, banks, parliamentarians, senior judges
- And it often runs very late into the night when a resolution is announced
- Representing the consensus decisions of all the relevant powers

The existing setup can be too confining

- Often, the rules and the laws in place stand in the way of the most effective crisis resolution
- Emergency sessions of Parliament, like in Switzerland 2023
- Emergency constitution clauses might be invoked
- Pistor (2013) finds that if the existing law prevents the most effective course of action, there is acceptance from the political and judicial system to suspend the law in the name of the higher objective of crisis resolution — that is, the law is violated

Politics

Central banks and monetary policy

- The powers given to central banks are *extraordinary* for a democratic society
- Who is more powerful, Governor of the Fed or the chairman of the Joint Chiefs of Staff?
- Justified by the importance of politicians not manipulating monetary policy for short-term gains
- But it is relatively straightforward
  a. One measurement (inflation)
  b. Two tools (price and quantity of money)
- *Clear objective, target and tools*

By contrast

- Macropru and regulations are complex and ill-defined
- Indicators are imprecise and conflicting
- Surgical tools are ineffective
- Powerful tools too blunt
- Identifies clear winners and losers (lobbying and politics)

Central bank independence

Chwieroth and Daníelsson (2013)

- We make central banks independent because we don't trust politicians to set interest rates
- Only works because of the clarity of the mission
- Macropru is much more political and cannot be, and will not be, left in the hands of the central banks no matter what fancy structure we create
- The hope is that the credibility of monetary policy rubs on to MacroPru
- The fuzziness of the MacroPrudential agenda and the interplay of political pressures may undermine monetary policy

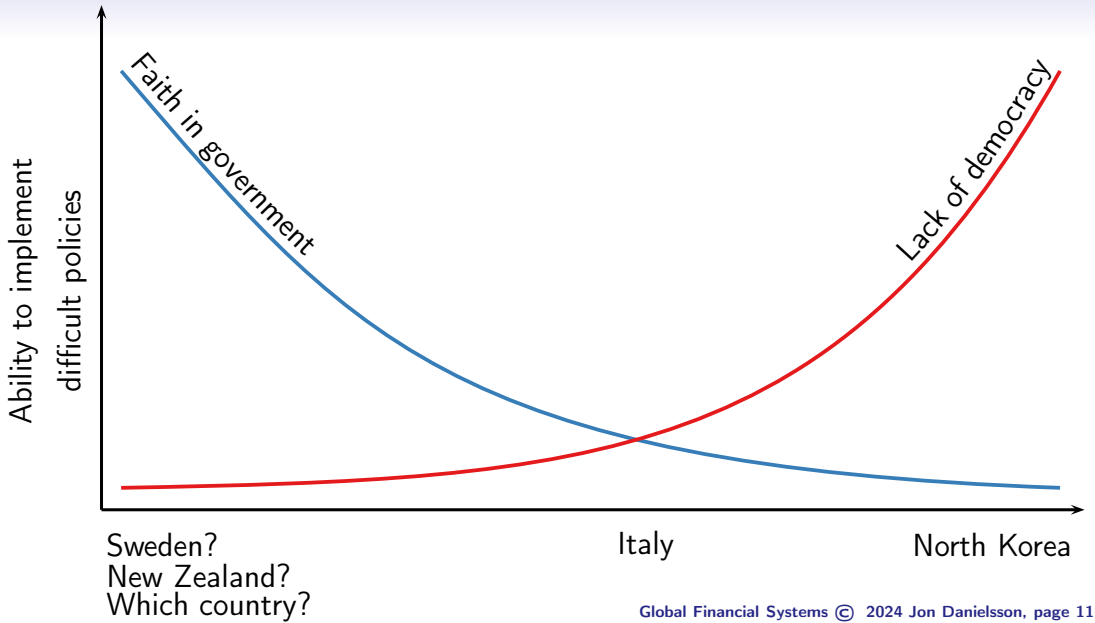
Major financial stress events

- Very few stress events arise purely from excessive risk (I can only think of one)
- Most are strongly influenced by politics
  a. Wars
  b. Venezuela
  c. Transition between political systems
  d. Populism and anti-globalism
  e. Government policies promoting home ownership
- The MacroPru event is only a consequence of something bigger

The dilemma of political risk

Daníelsson and Macrae (2016)

- Can a nonpolitical entity legitimately implement MacroPru policies that affect democratic outcomes?
- Recall Bank of England and Brexit
- Does the mandate given by the political leadership to the regulator extend to the behaviour of the political leadership?
- If the MacroPru authorities are not able to incorporate political risk in their analytic frameworks, how effective can they be?
- And how legitimate?


Ability to implement difficult policies
Faith in government
Lack of democracy
Sweden?
New Zealand?
Which country?
Italy
North Korea

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