ECOM6023

eFinancial Services

LECTURE 6:
RegTech – Risk, Regulations and Compliance

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L6 – Risk, Regulations, Compliance

Topics

- **Introduction**
- Why Regulation?
- Risk Management in Financial Institutions
- Stored Value Facilities – SVF
- Regulations and Financial Inclusion
- Compliance in Banks

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Introduction

- What is Risk? (in general)
- What are Risks for Banks and/or Insurances?
  - why do those risks exist? can they be avoided?
- What are risks for Customers?
  - from your personal perspective

- What is Regulation?
- What is Compliance?
- Why are Financial Institutions regulated?
  - Who is regulating them?

…. ….. .. …. ….

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Topics

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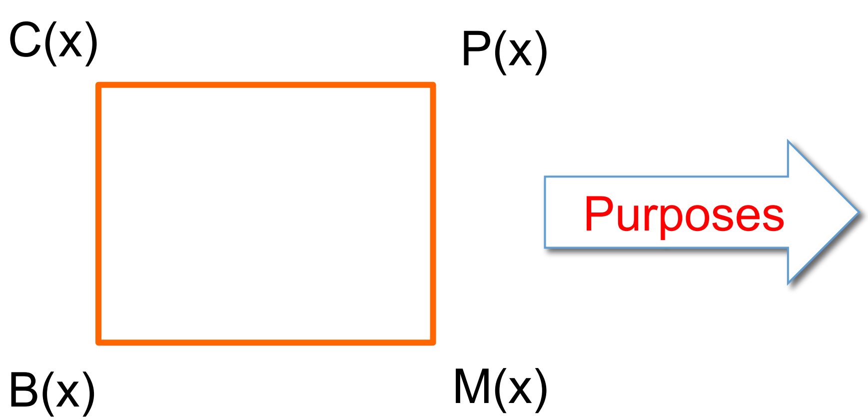
Why Regulation?

Why is national regulation an international topic?

Example:

A **C**ountry X defines laws and regulations for the **B**anks in this country, requiring to report trades of citizens (**P**eople) on financial **M**arkets



- Achieve stability and transparency of the national financial system
- Monitor financial activities of citizens (crime prevention etc…)
- Execute oversight on banks
- Ensure fairness and transparency of markets

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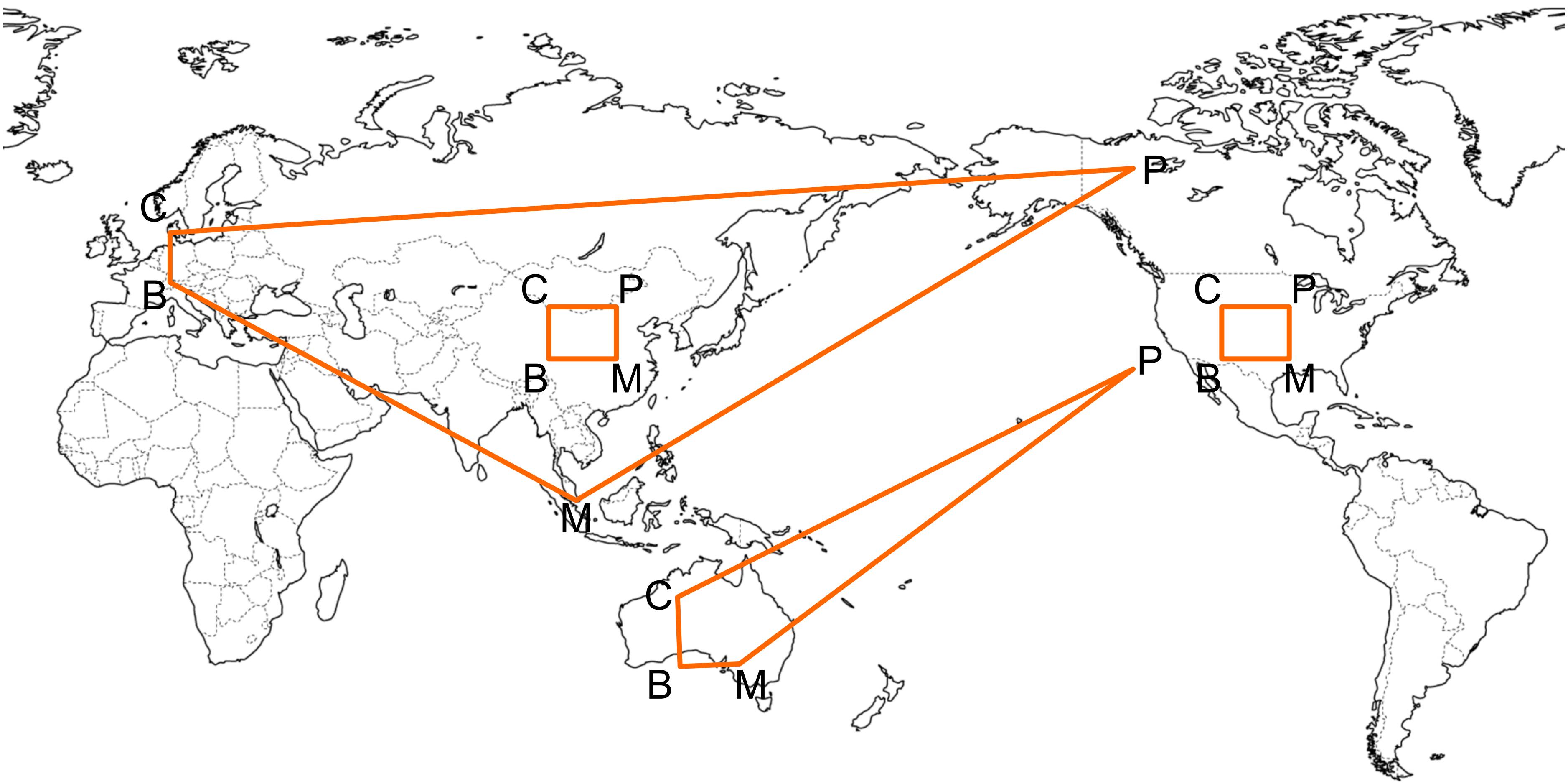
Why Regulation?

Why is national regulation an international topic?



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Why Regulation?

Why do nations and Communities promote global regulation?

Example 1: Remember 2007/2008 ?

- Global financial crisis, “Credit Crisis”
- local triggers with global consequences

Example 2: Tax Evasion

- Shifting profits and money outside country borders helps evade tax
- Tax evasion is a crime and damages the society and economy

Example 3: Terrorism Financing

- Terrorist organisations use the global financial system to provide funds for terrorist attacks and propaganda

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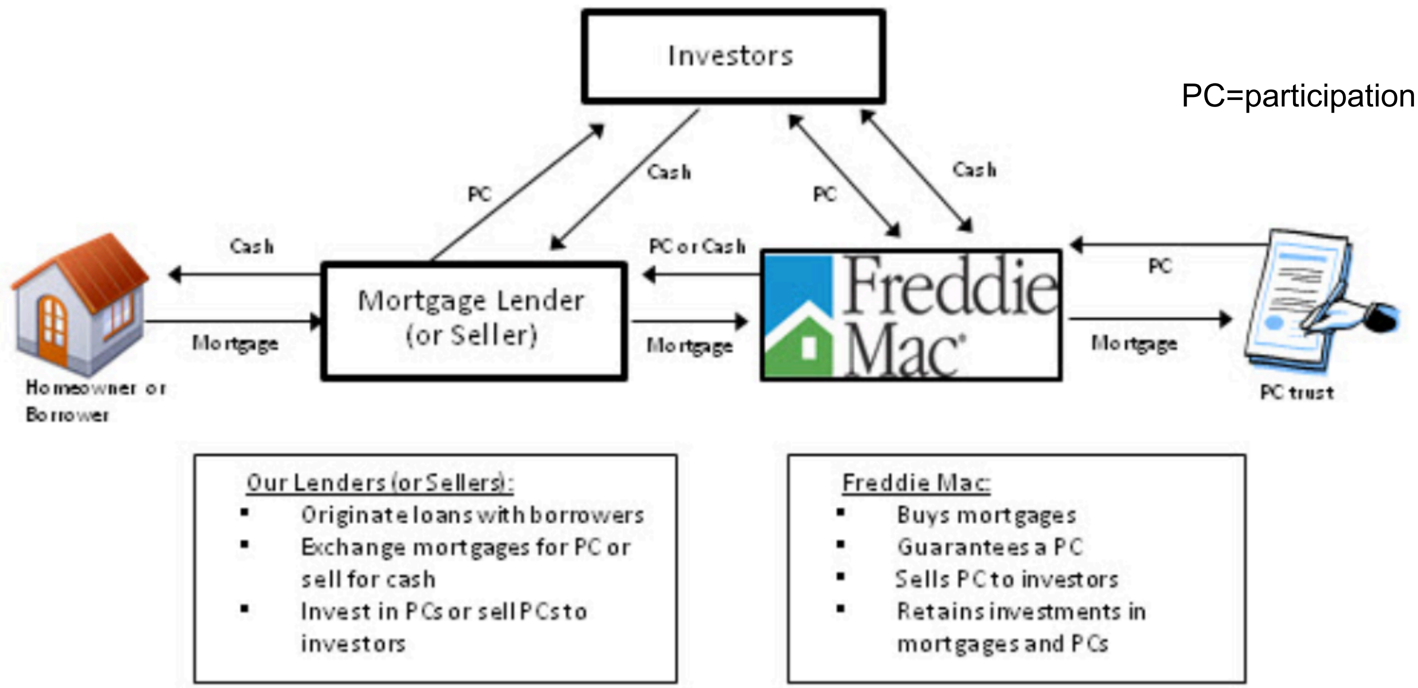
Why Regulation?

The business behind the Credit Crisis: Mortgage Securitisation

PC=participation certificate



Source: Annual Report of the Federal Home Loan Mortgage Corporation Freddie Mac
https://www.sec.gov/Archives/edgar/data/1026214/000102621414000024/fmcc-2013x10k.htm

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Why Regulation?

The business behind the Credit Crisis: Mortgage Securitisation

In general, for single-family loans, the securitization and Freddie Mac guarantee process works as follows:

(a) a lender originates a mortgage loan to a borrower purchasing a home or refinancing an existing mortgage loan;

(b) we purchase the loan from the lender and place it with other mortgages into a security that is sold to investors (this process is referred to as "pooling");

(c) the lender may then use the proceeds from the sale of the loan or security to originate another mortgage loan;

(d) we provide a credit guarantee (for a fee) to those who invest in the security;

(e) the borrower's monthly payment of mortgage principal and interest (net of a servicing fee and our management and guarantee fee) is passed through to the investors in the security; and

(f) if the borrower stops making monthly payments - because a family member loses a job, for example - we step in and, pursuant to our guarantee, make the applicable payments to investors in the security. In the event a borrower defaults on the mortgage, our servicer works with the borrower to find a solution to help them stay in the home, or sell the property and avoid foreclosure, through our many different workout options. If this is not possible, we ultimately foreclose and sell the home.

Source: Annual Report of the Federal Home Loan Mortgage Corporation Freddie Mac
https://www.sec.gov/Archives/edgar/data/1026214/000102621414000024/fmcc-2013x10k.htm

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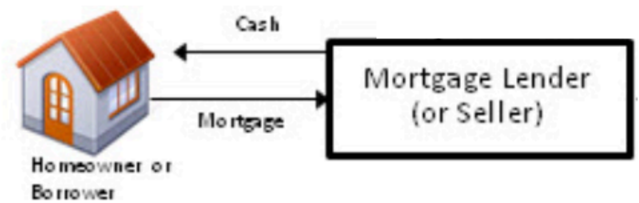
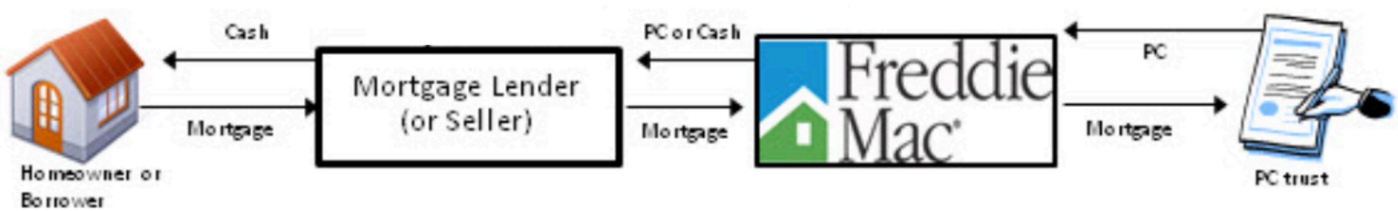
Why Regulation?

The business behind the Credit Crisis: Mortgage Securitisation



What are the risks of this business?

Where are the risks in this chain?



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Why Regulation?

For the US, the official Financial Crisis Inquiry Commission (FCIC) concluded,

- first, that the crisis was avoidable
- and second, that the crisis was caused by:
  - (1) widespread failures in financial regulation and supervision
  - (2) dramatic failures of corporate governance and risk management at many systemically important financial institutions
  - (3) a combination of excessive borrowing, risky investments, and lack of transparency, and
  - (4) a systemic breakdown in accountability and ethics.

For UK and EU, there are similar conclusions drawn by their respective commissions

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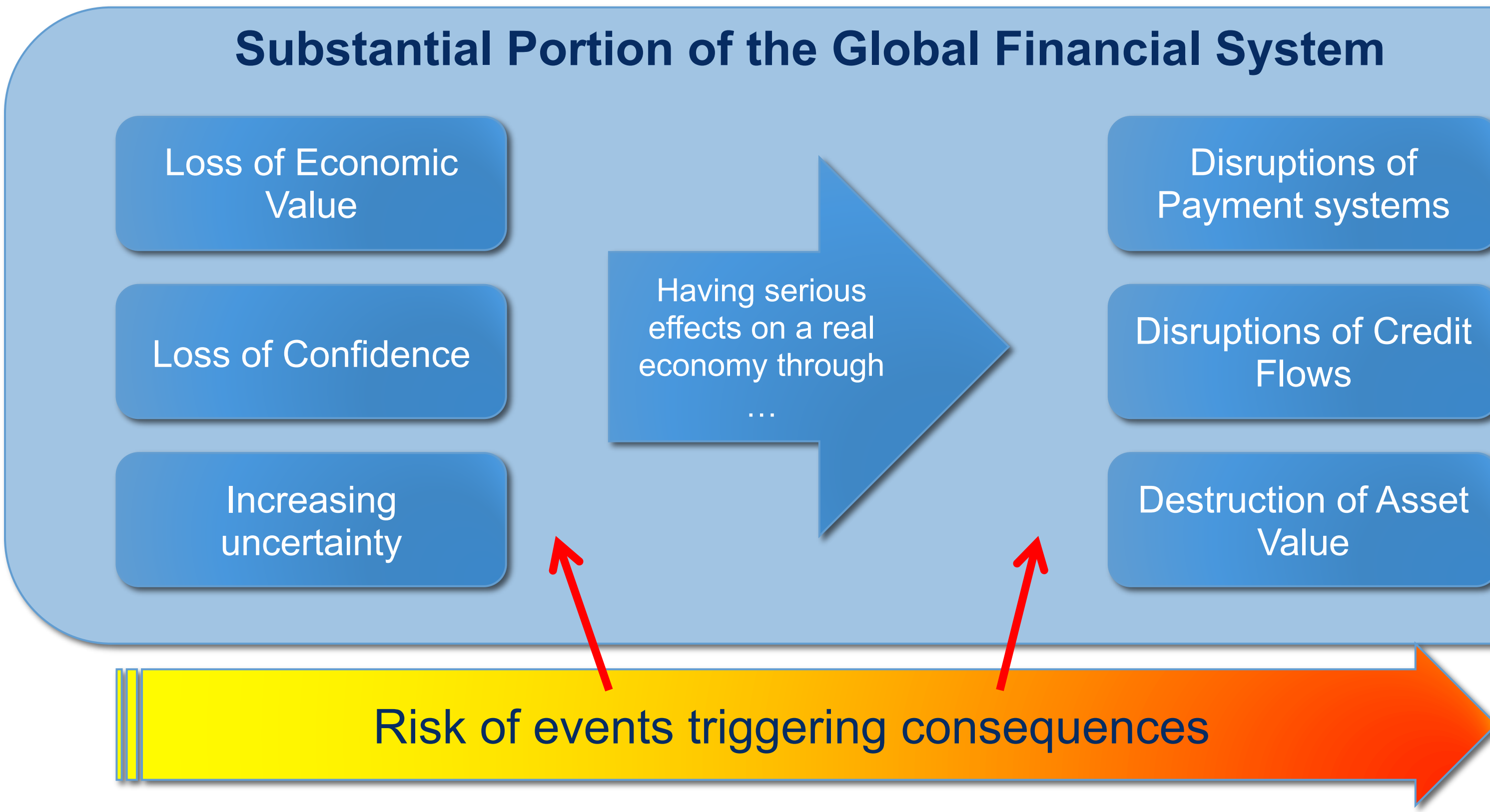
Why Regulation?

Some Terms: Systemic Risk of the Financial System



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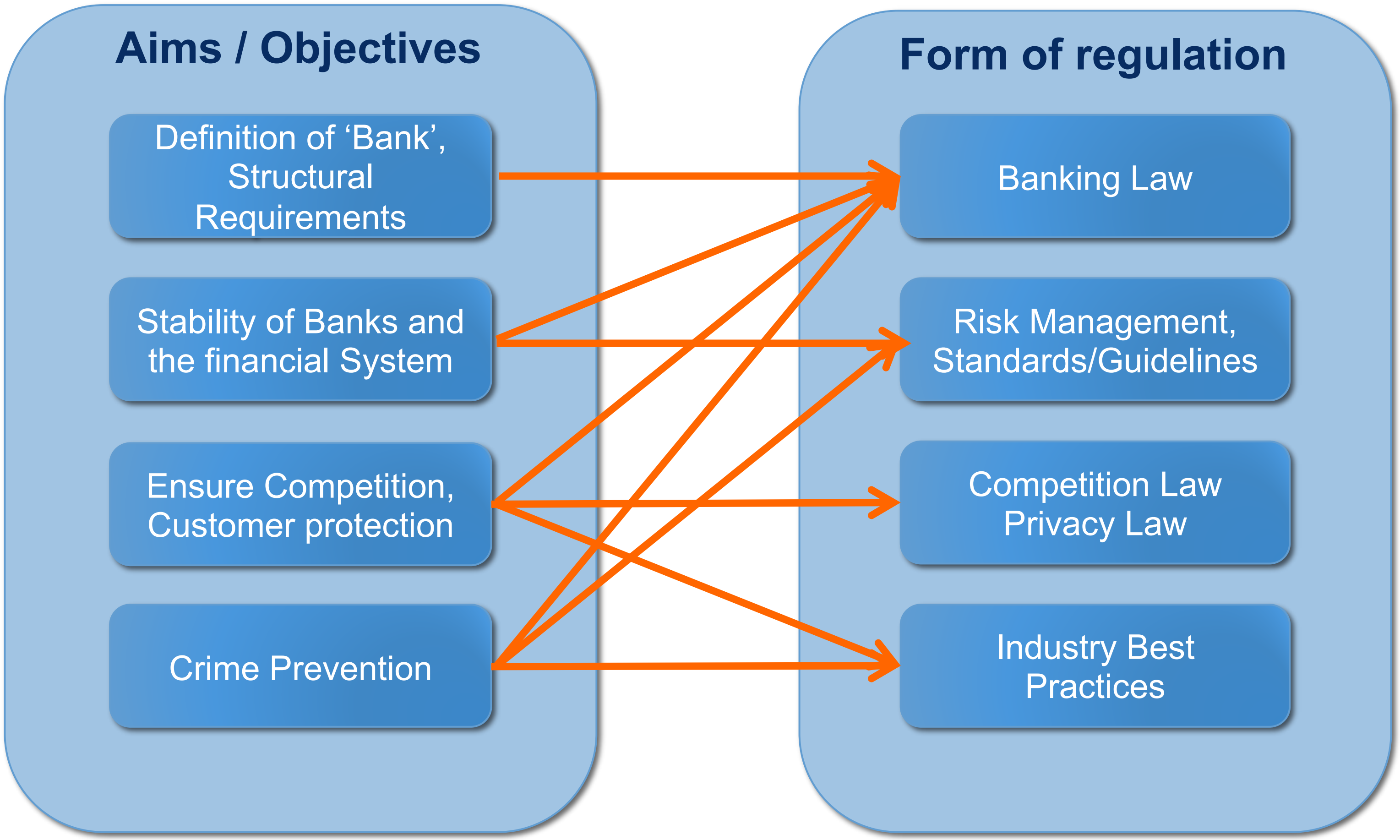
Why Regulation?

Aims and means of regulating Financial institutions



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Why Regulation?

Source: Banking in Asia-Pacific, Ernst&Young, 2015

Regulatory agenda for banks in Asia-Pacific

In this environment, what type of bank is likely to take advantage of the region's growth opportunities?

Financial crime

AML/KYC
Beneficial ownership dialogue starting globally

FATF standards adopted to varying degrees by governments & regulators – increasing scrutiny/strengthening (e.g., SG, HK)

Financial reporting

IFRS 9 – ECL models
BCBS 239
Basel III Pillar 3
FATCA
CRS

FATCA: IGAs for most jurisdictions

Capital markets reform

OTC Derivative Reform
G20 Roadmap on Shadow Banking

Shadow banking: changes to banks' wealth operations (CN)
Market integrity (e.g., SG – financial benchmarks regulation)
OTC derivatives reforms: potential standardization issues
Capital markets integration

Consumer protection

Conduct: misselling (e.g., AU, KR)
Data security/protection (e.g., CN, HK, SG, KR, ID)
Financial advice reforms (AU, SG)
Deposit insurance (e.g., AU – single customer view, CN)
Revised Code of Banking Practice (HK)

Resolution planning

New Large Exposures Framework
G-SIBS, D-SIBs
NBNI rules on GSIIs
FSB – Key Attributes of Effective Resolution Regimes

Large exposures (e.g., AU, HK, TH)
Recovery & Resolution (e.g., AU, HK)
D-SIB requirements (AU, HK, SG)
Disclosure of G-SIB indicators (CN)

Risk transformation

BCBS Corporate Governance Consultative Guidelines

Corporate governance/risk management strengthening (e.g., AU, IN, MY, PH, KR, SG)
Distressed assets guidelines/early identification (IN)
Strengthening controls on outsourcing (SG)
Lending scrutiny (e.g., AU, MY, TH)
Bank technology rules (CN – on hold; ID)

Prudential

Basel III - capital, liquidity

Stress testing (AU, HK)
Higher leverage ratio (e.g., CN, IN)
Stricter LCR rules or faster phase-in (e.g., CN, AU, HK)
Higher minimum capital requirements (super and accelerated adoption e.g., TW, SG, PH, IN)
Accelerated capital deduction phase-in and/or full deduction for many markets

Structural reform

Priority sector lending targets (ID, IN)
Standardization requirements (e.g., SG, HK, ID, IN – incentives)
Tier 1 capital determines permitted scope of business/expansion (ID)
Consolidation measures (e.g., PH, VN)

Global standards and international guidance | National regulations

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Topics

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- Stored Value Facilities – SVF
- Regulations and Financial Inclusion
- Compliance in Banks

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Risk in Financial Institutions

No Business is free of Risk.

It is important to understand

- what Risks exist,
- how likely they are
- what their potential impact is if they materialize and
- what can be done to mitigate or transfer them.

For a financial institution, it is a complex task to execute Risk Management. We'll approach it from two sides:

- Types of Risks
- Generic steps of Risk management

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Risk in Financial Institutions

Risk Management – a trade-off:

‘Risk vs. Return’ being a trade-off is at the heart of understanding about the psychology behind it.

Risk Management costs time, money, convenience, capabilities, liberty

Risk mitigation measures should be judged by their justification as a trade-off, not only by their effectiveness alone

- bulletproof vests are very effective against the risk of fatal injuries from bullets. But would you want to wear one in your everyday lives?
  - under which circumstances would your statement change?

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Risk in Financial Institutions

Misaligned incentives

Example 1:

- in the 90's, the consumer protection law in US was stronger than in UK, so US banks were more liable to credit card fraud than in UK.
- Thus, it could be expected that US banks spend more on card fraud than the UK banks.
- Research however showed that this was not the case.
- UK banks and their staff – in the light of perceived 'protection' against customer complaints – became more careless. This led to higher fraud in UK compared to US

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Risk in Financial Institutions

Misaligned incentives

Example 2:

- in the early years of the new millenium it was found that people did not spend even affordable amounts of money for virus protection on their computers
- It was found that the most likely payload of such viruses was a denial of service attack against some of the ‘big companies’ like Microsoft.
- Spending even only USD 20 to protect someone else was not seen as beneficial by the consumers
- spending USD 20 for protection of their own computers would have appeared fully reasonable to the consumers

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Risk in Financial Institutions

Misaligned incentives

So: who should manage the risk?

- the one who has best control and the benefit from avoiding the risk
- However: dangers arise when we separate the risk target from the damage target

an example:

https://www.finextra.com/newsarticle/28662/banks-are-rewarding-consumers-for-lax-internet-security---met-chief?utm_medium=newsflash&utm_source=2016-3-24

look at the discussion below that article … do you agree with the police commissioner or the commentators?

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Risk in Financial Institutions

Conclusion:

- Risk is a concept that is ‘difficult’ to grasp (=estimate)
- subjective biases, drastic events, recent memories etc distort the realistic view

- Thus: Objective Risk Management is necessary

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Risk Management in Financial Institutions

Terms and Definitions:

- **Risk**: opportunity for a threat to exploit a vulnerability and cause some damage
- **Incident**: Event where a threat attempted/succeeded to exploit a vulnerability
- **Damage**: consequence of an incident that needs to be rectified with monetary and human resources
- **Threat**: Property or activity in a (financial) systemic environment that can result in the loss of monetary or other values
- **Vulnerability**: Property of a (financial) system to be unable to fully protect the values (money, customer privacy, criem prevention, ...)
- **Probability** of a risk: likelihood for a certain risk to become an incident

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Risk Management in Financial Institutions

Risk Management has two major components:

- Risk Assessment
  - Risk Identification
  - Risk Calculation
  - Risk Evaluation
- Risk Treatment
  - Assessing mitigation measures, (incl. Transfer and acceptance)
  - Selection of mitigating measures

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Risk Management in Financial Institutions

Risk Identification

- Only when a threat and a vulnerability ‘match’, there is potential for a damage and thus a risk
- Example for non-existent risk:
  - Customer data is hosted on a Server with Operating system ABC
  - attack against the Server is using exploit of a vulnerability of Operating system DEF
  - Thus: no immediate privacy risk, no potential damage
- Example for existent risk:
  - Loan extended to a customer, long duration
  - there is a likelihood of death, illness, unemployment for this customer
  - Thus: there is a certain risk for defaulting on that loan

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Risk Management in Financial Institutions

Risk Calculation

- The company specific matching pairs of threats and vulnerabilities form the list of risks that are to be evaluated
- Threats and vulnerabilities are assessed by
  - probabilities of occurrence / estimation of frequency
  - qualitative or quantitative size of impact
- In conjunction with the Risk appetite, this will lead to risk indicators for individual items
- Risk items of same type have similar Risk properties
- Risk indicators are grouped into Risk Classes, based on ciritical categories of the risk size.

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Risk Management in Financial Institutions

Risk Evaluation

- The so calculated risk classifications are used to prioritize the risks
- pre-defined thresholds help to determine risks that need to be treated and risks that can be accepted
- The risk capacity of the company needs to consider all risks
  - including operational risk, credit risk, people risk …

- This step concludes the Risk Assessment.

- Choice of treatment of risks, execution and risk check are subject of the risk mitigation

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Risk Management in Financial Institutions

Risk Mitigation

- Risk treatment can be
  - taken from handbooks, guidelines, best practices
  - adapted to company specific requirements

- Risk mitigation measures can be of organizational / technical / financial / strategic nature

- Intended effect of the measures:
  - Risk minimization
  - Risk transfer
  - Risk avoidance
- Alternatively, a risk can be accepted as it is

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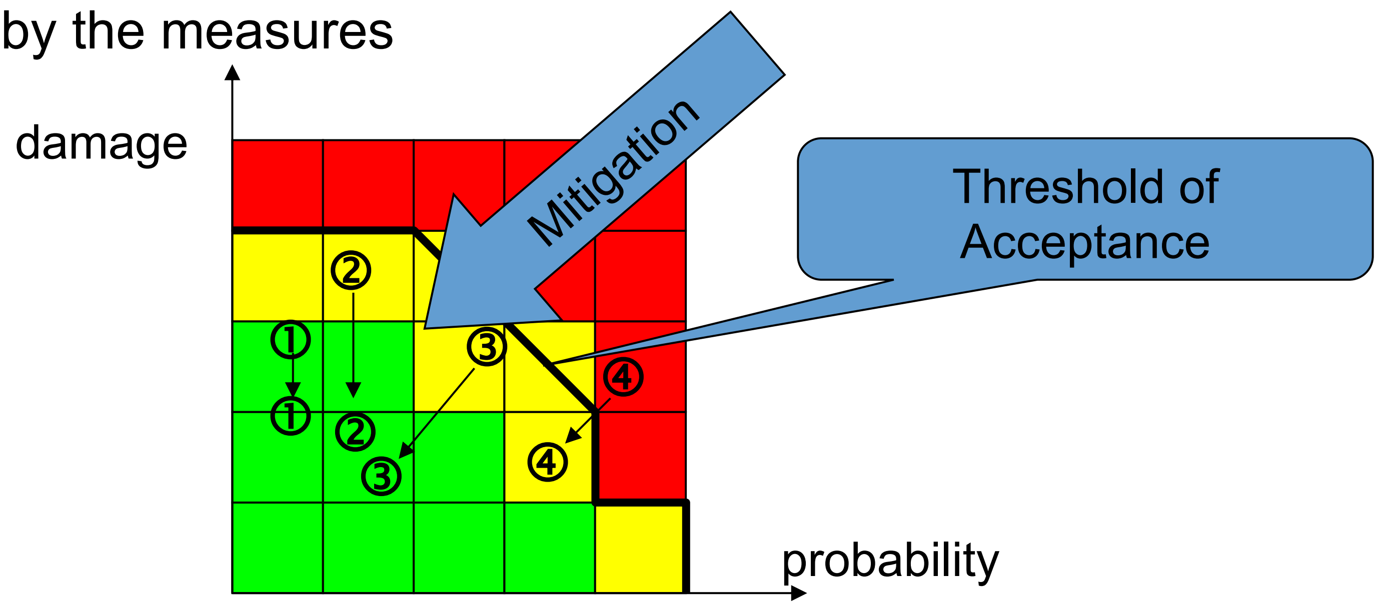
Risk Management in Financial Institutions

Risk Minimization

- risks can be evaluated in a matrix of their impact (size of damage) and probability
- risk minimization targets to change the location of the risk towards any axis
- the threshold of acceptance defines the risk level that needs to be undercut by the measures



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Risk Management in Financial Institutions

Risk Transfer

- risks can be transferred via insurance of the occurrence of the threat/vulnerability combination.
  - Size of insurance payment = impact/loss plus associated cost
- Risks can be transferred by outsourcing
  - outsourcing itself does not minimize the risk, but the insourcer can collect multiple risks and apply more efficient mitigation measures

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Risk Management in Financial Institutions

Risk Avoidance

- this means closing the risky business or process
- such a decision can be
  - a final decision to abandon a product / process
  - a temporary decision, until mitigation measures are available

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Risk Management in Financial Institutions

- Risk Mitigation Measures are then
  - defined, planned and assigned to responsible parties
  - Applied/executed
- Risk assessment and Risk calculation need to be repeated
  - changes in complex systems can introduce new risks!
- The Risk evaluation of the resulting risk after the application of measures
  - concludes the Risk Mitigation, or
  - shows the need for additional risk mitigation measures

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Risk Management in Financial Institutions

Risk Management – what is it for ?

Financial Institutions and even non-financial Institution have been facing problems (up to bankruptcy) through underestimated and undocumented risks

Risk Management aims to provide a framework to identify and measure risks in order to enable an organisation to counter act adverse developments

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Risk Management in Financial Institutions

Risk Management in Banks

- Basel I was in 1988 (effective 1992) a first approach to limit the risk of insolvency of banks
- Basel II (2004, effective 2006) demands more attention in banks to the risks involved, e.g.
  - Credit risk
  - Market risks
  - Liquidity risks
  - other risks (esp. operational risks… this includes e.g. IT and Security Risks)
- Basel II requires knowledge about the risks and buffering of bank's own capital to cover them

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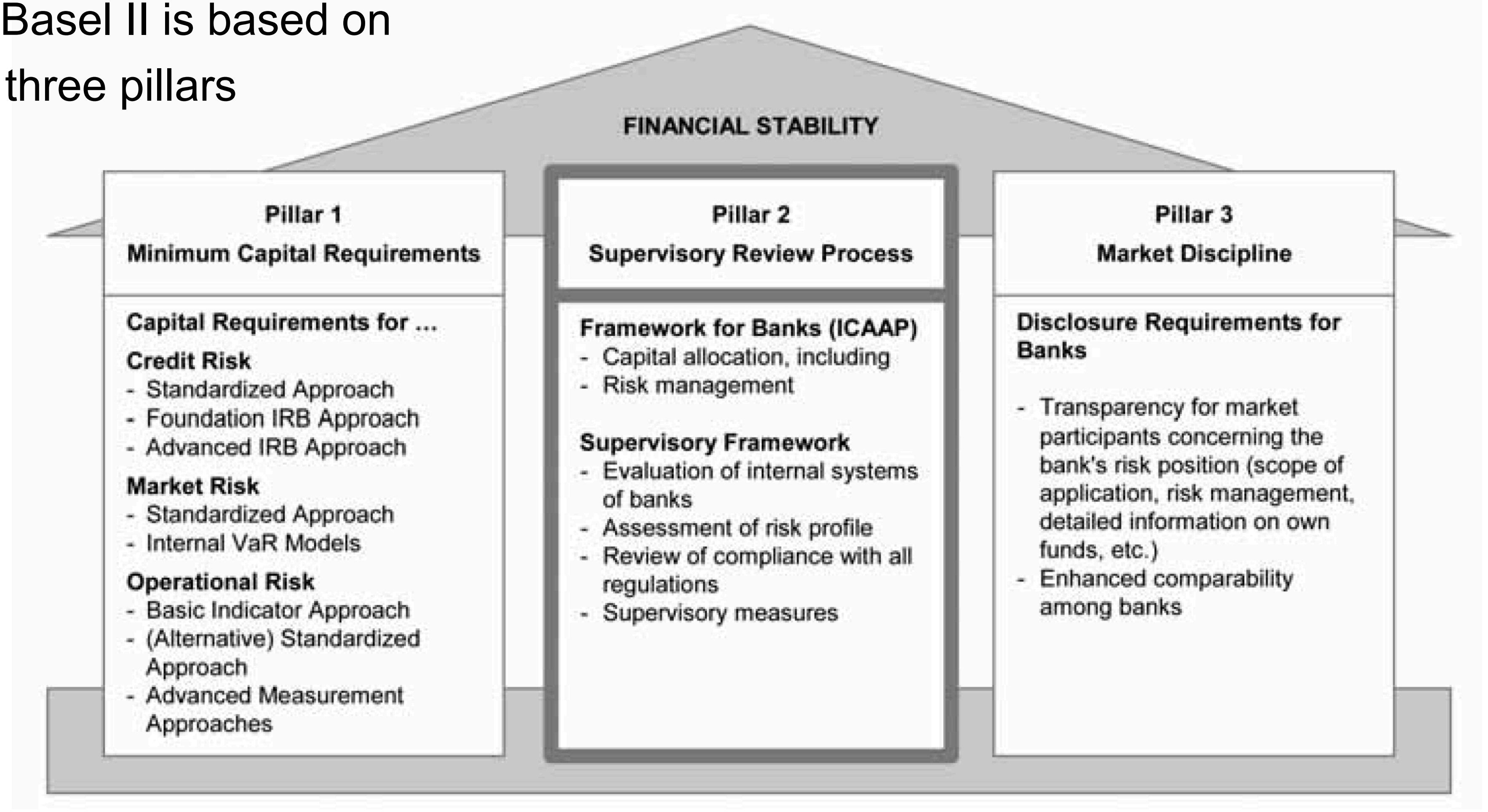
Risk Management in Financial Institutions

Risk Management in Banks

- Basel II is based on three pillars



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Risk Management in Financial Institutions

Risk Management in Banks

- Basel III adds requirements on top of Basel II:
  - Minimum Capital requirements are increased substantially
  - A Leverage cap is introduced, to limit the activities of a bank related to its size
  - A Liquidity requirement is introduced, to demand sufficient liquidity be held for stress tests (period of 30 days of adverse economical conditions)
- Basel III also introduces options to have relaxed requirements in case banks have better operational relationship with their corporate clients
  - i.e. know your client (KYC), know the client's risks

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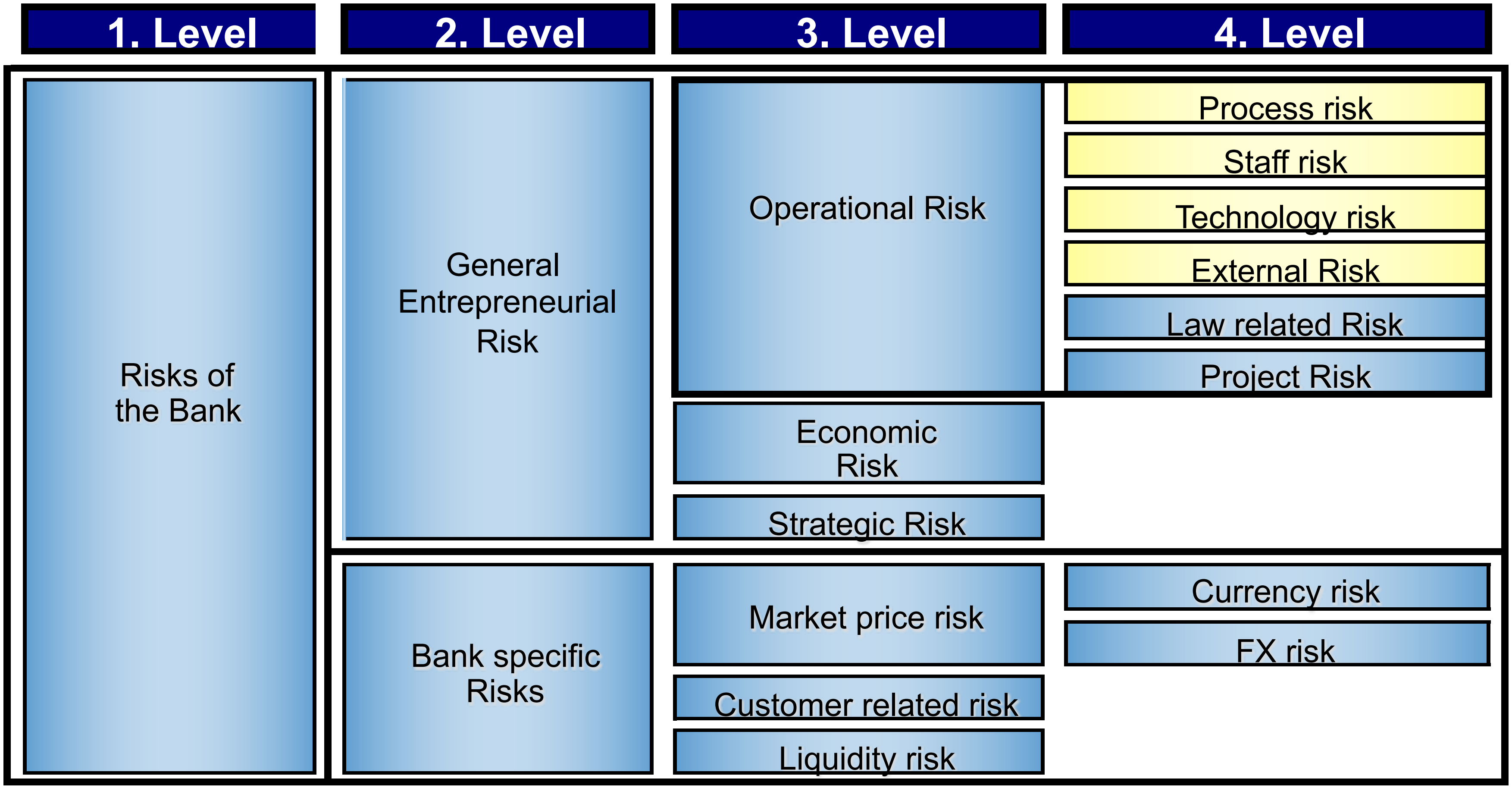
Risk Management in Financial Institutions

Risk Categories in Banks



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Topics

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- **Stored Value Facilities – SVF**
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Stored Value Facilities - SVF

What are these cards for?

what are the common properties / usages?

what are the differences?

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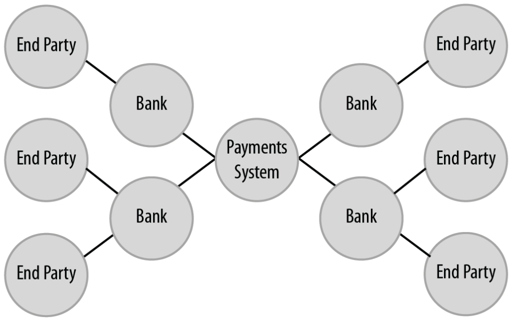
Stored Value Facilities - SVF



Recap:

- Payment Systems
  - open loop
  - closed loop
- Payments systems operate according to specific rules:
  - Technical standards
  - Processing standards
  - Membership requirements
  - Payment acceptance requirements
  - Exception processing and dispute resolution
  - Fees
  - Brands and marks
- Push / Pull Payments and their corresponding risks

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Stored Value Facilities - SVF

HKMA has sought to enhance consumer protection and minimise risk around SVF deposits and payments.

In November 2015, the regulator enacted the Payment Systems and Stored Value Facilities Ordinance, which requires all multi-purpose SVF issuers to obtain a license to operate in Hong Kong.

The Ordinance also requires SVF issuers

- to improve corporate governance,
- implement Anti-Money Laundering (AML) and
- know-your-customer (KYC) controls,
- strengthen SVF float and deposit protection, and
- enhance technology risk management,
- payment security and
- business continuity standards.

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Stored Value Facilities - SVF

(1) For the purposes of this Ordinance, a facility is a stored value facility if—

(a) the facility may be used for storing the value of an amount of money that—

(i) is paid into the facility from time to time; and

(ii) may be stored on the facility under the rules of the facility; and

(b) the facility may be used for either or both of the following purposes—

(i) as a means of making payments for goods or services under an undertaking (whether express or implied) given by the issuer as specified in subsection (2);

(ii) as a means of making payments to another person (other than payments mentioned in subparagraph (i)) under an undertaking (whether express or implied) given by the issuer as specified in subsection (3).

what is 'money'?

top up

a payment system

payments

transfer

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Stored Value Facilities - SVF

(2) The undertaking for subsection (1)(b)(i) is an undertaking that, if the facility is used as a means of making payments for goods or services, the issuer, or a person procured by the issuer to accept such payments, will accept the payments up to the amount of the stored value that is available for use under the rules of the facility.

sign up to participate

use 'prepaid' funds

payment system defines rules

(3) The undertaking for subsection (1)(b)(ii) is an undertaking that, if the facility is used as a means of making payments to another person (recipient) (other than payments mentioned in subsection(1)(b)(i)), the issuer, or a person procured by the issuer to make such payments, will make the payments to the recipient up to the amount of the stored value that is available for use under the rules of the facility.

sign up to participate

transfer 'prepaid' funds

(4) A facility is not a stored value facility for the purposes of this Ordinance if it is a single-purpose stored value facility.

what is 'single purpose'?

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Stored Value Facilities - SVF

Terms:

(5) .. Single-purpose stored value facility means a facility—

(a) that may be used for the purpose mentioned in subsection (1)(a); and

(b) in respect of which the issuer—

(i) gives an undertaking that, if the facility is used as a means of making payments for goods or services (not being money or money's worth) provided by the issuer, the issuer will provide the goods or services under the rules of the facility; and

(ii) does not give any other undertaking that falls within the description of subsection (2) or (3);

no sign up available

no 'money' taken out

no multi-purpose

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Stored Value Facilities - SVF

Terms:

(6) For the purposes of this section—

(a) a facility may be in physical or electronic form, but does not include cash;

(b) a reference to money is a reference to—

(i) money in any currency; or

(ii) any declared medium of exchange; and

(c) except in subsection (5), a reference to goods or services includes money or money's worth.

no 'redefinition' of cash

international

not restricted to 'money' as we know it

money and money services included

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Stored Value Facilities - SVF

Section 2C:

The Monetary Authority may, by notice published in the Gazette, declare a thing to be a medium of exchange for the purposes of this Ordinance.

clear accountability

full flexibility

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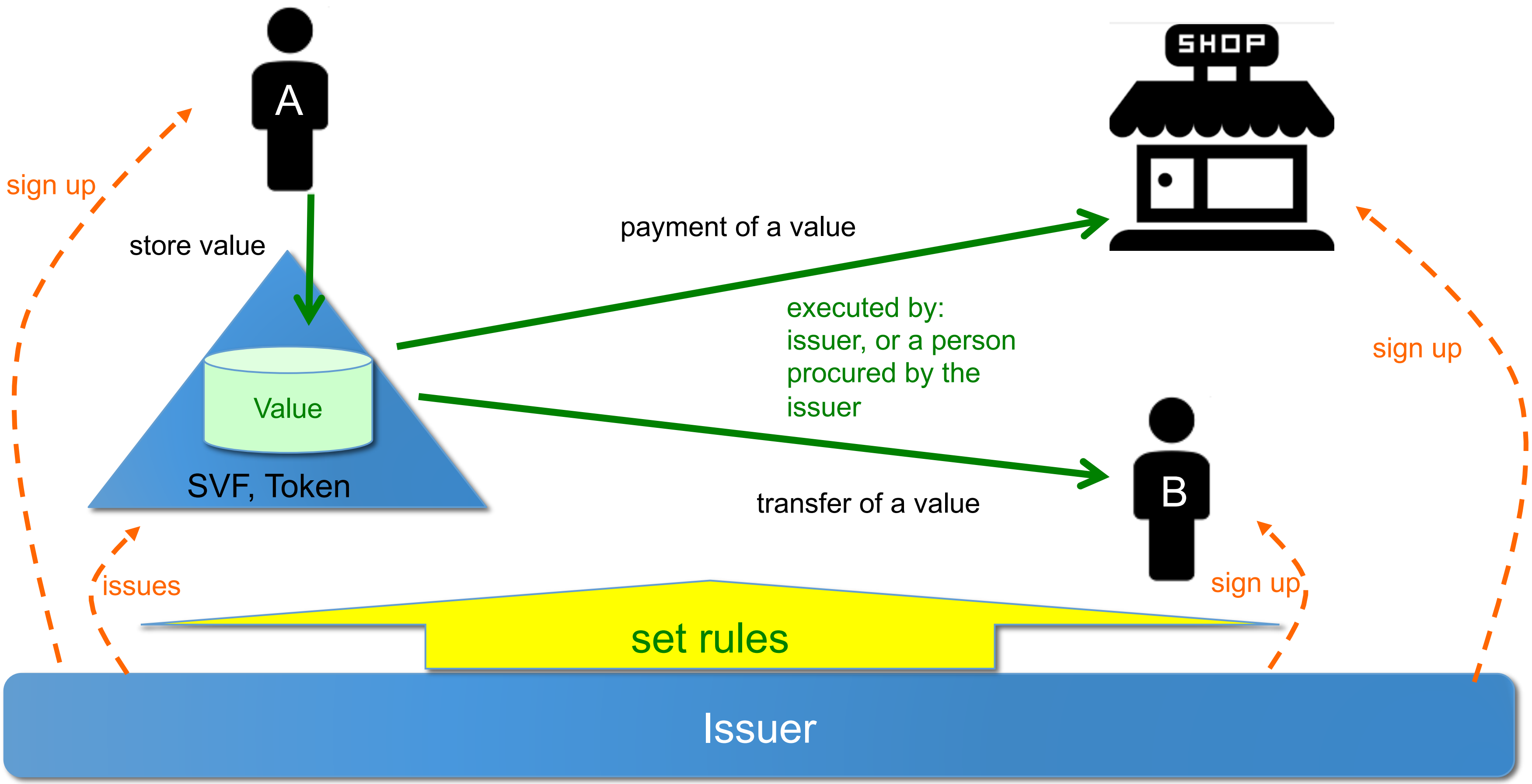
Stored Value Facilities - SVF

What do we have so far?



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Stored Value Facilities - SVF

Exercise:

Discuss the following questions:

- what (other than money) ‘medium of exchange’ can you imagine to be used as stored value?
  - who can top up?
  - how to use / exchange value?
  - other than ‘shops’: who can be interested in this?
- what shapes and forms can the ‘Stored Value Facility’ have?
  - What criteria to define?
  - What will be relevant in the future?
- what rules are required to define the actual transfer of value?

be creative…
anything goes

easy to use…
safe to use…

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Stored Value Facilities - SVF

specify a payment system as ‘special’

…The Monetary Authority may […] **designate** for the purposes of this Ordinance a clearing and settlement system or retail payment system […] if

(a) the Monetary Authority is of the opinion that the system is, or is likely to become, a clearing and settlement system or retail payment system (as the case may be) whose proper functioning is—

(i) material to the monetary or financial stability of Hong Kong; or

(ii) material to the functioning of Hong Kong as an international financial centre;

(b) having regard to matters of significant public interest, the Monetary Authority is of the opinion that the system should be so designated

‘special’ means ‘important for HK’

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Stored Value Facilities - SVF

… A clearing and settlement system or retail payment system is […a designated…] system referred to [before] if—

(a) it is in operation in Hong Kong; or

(b) it meets either of the following descriptions—

(i) for a clearing and settlement system, it accepts for clearing or settlement transfer orders denominated in Hong Kong dollars;

(ii) for a retail payment system, it accepts for transfer, clearing or settlement transfer orders denominated in any currency or declared medium of exchange,

makes it relevant for local citizens

… and internationally

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Stored Value Facilities - SVF

For the purposes of subsection (1)(b), the following matters are regarded as matters of significant public interest—

(a) whether the occurrence of any significant disruption to, or the presence of any significant inefficiency in, the functioning of the system is likely to adversely affect the public's confidence in payment systems;

payment systems

(b) whether the occurrence of any significant disruption to, or the presence of any significant inefficiency in, the functioning of the system is likely to adversely affect the public's confidence in the financial system of Hong Kong;

financial system

(c) whether the occurrence of any significant disruption to, or the presence of any significant inefficiency in, the functioning of the system is likely to adversely affect day-to-day commercial activities.

daily life and activities

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Stored Value Facilities - SVF

… factors [to apply or appear to be likely to apply] are—

(a) the estimated aggregate value of transfer orders transferred, cleared or settled through the system in a normal business day;

Volume of amounts

(b) the estimated average value of transfer orders transferred, cleared or settled through the system in a normal business day;

Volume of transactions

(c) the estimated number of transfer orders transferred, cleared or settled through the system in a normal business day;

number of transactions

(d) the estimated number of participants of the system;

number of users

(e) whether the system is linked to any designated system or any clearing and settlement system that is, or is operated by, a company recognized as a clearing house under section 37(1) of the Securities and Futures Ordinance (Cap 571).

importance to other markets

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Stored Value Facilities - SVF

Every […] designated system shall ensure that the following requirements are complied with […], namely—

requirements!

(a) that the operations of the system are conducted in a safe and efficient manner calculated to minimize the likelihood of any disruption to the functioning of the system;

reliability

(b) that there are in place operating rules that—

(i) comply with […] any prescribed requirements relating to the operating rules of a designated system; and

'compliant'

(ii) provide for the system to be operated in accordance with this Ordinance as it applies in relation to that system;

(c) that there are in place adequate arrangements to monitor and enforce compliance with the operating rules of the system, including arrangements regarding the resources available to the system operator;

Audit trail

(d) that there are available to the system financial resources appropriate for the proper performance of the system's particular functions.

good operations

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Stored Value Facilities - SVF

The operating rules of a designated system must—

(a) impose on participants requirements that are no less stringent than the requirements imposed on participants under the other provisions of this Ordinance;

transitive requirements

(b) provide that if a participant becomes insolvent he may be suspended from the system;

'clean-up'

(c) provide for default arrangements which are appropriate and adequate for the system in all circumstances; and

'foresee everything'

(d) provide for appropriate and adequate arrangements to deal with the situation where a system operator or settlement institution of the system is likely to become unable to meet its obligations under the system

handle exceptional cases

L6 – Risk, Regulations, Compliance

Stored Value Facilities - SVF

In this Ordinance, reference to the safety of a payment system includes in particular any matter relating to—

(a) the extent to which the operating rules of the system provide for certainty as to the circumstances under which transfer orders effected through the system are to be regarded as settled for the purposes of the system;

(b) the reliability and robustness of operation of the system;

(c) access control over the system;

(d) the integrity of, and access control over, the information held within the system;

(e) the risk management and control procedures relating to the operation of the system;

(f) the soundness of the system, including financial soundness;

(g) the services provided to the system by the infrastructure associated with the system; and

(h) the criteria regarding the safety of the system prescribed for the purposes of this section.

good practices of IT Systems

L6 – Risk, Regulations, Compliance

Stored Value Facilities - SVF

In this Ordinance, reference to the efficiency of a payment system includes in particular any matter relating to—

(a) the speed and efficiency with which operations relating to transfer orders within the system are carried out;

reasonable speed

(b) the overall cost to a participant of his participation in the system, having regard to the services provided by the system to its participants;

reasonable cost

(c) the reasonableness of criteria for admission as a participant in the system; and

fairness

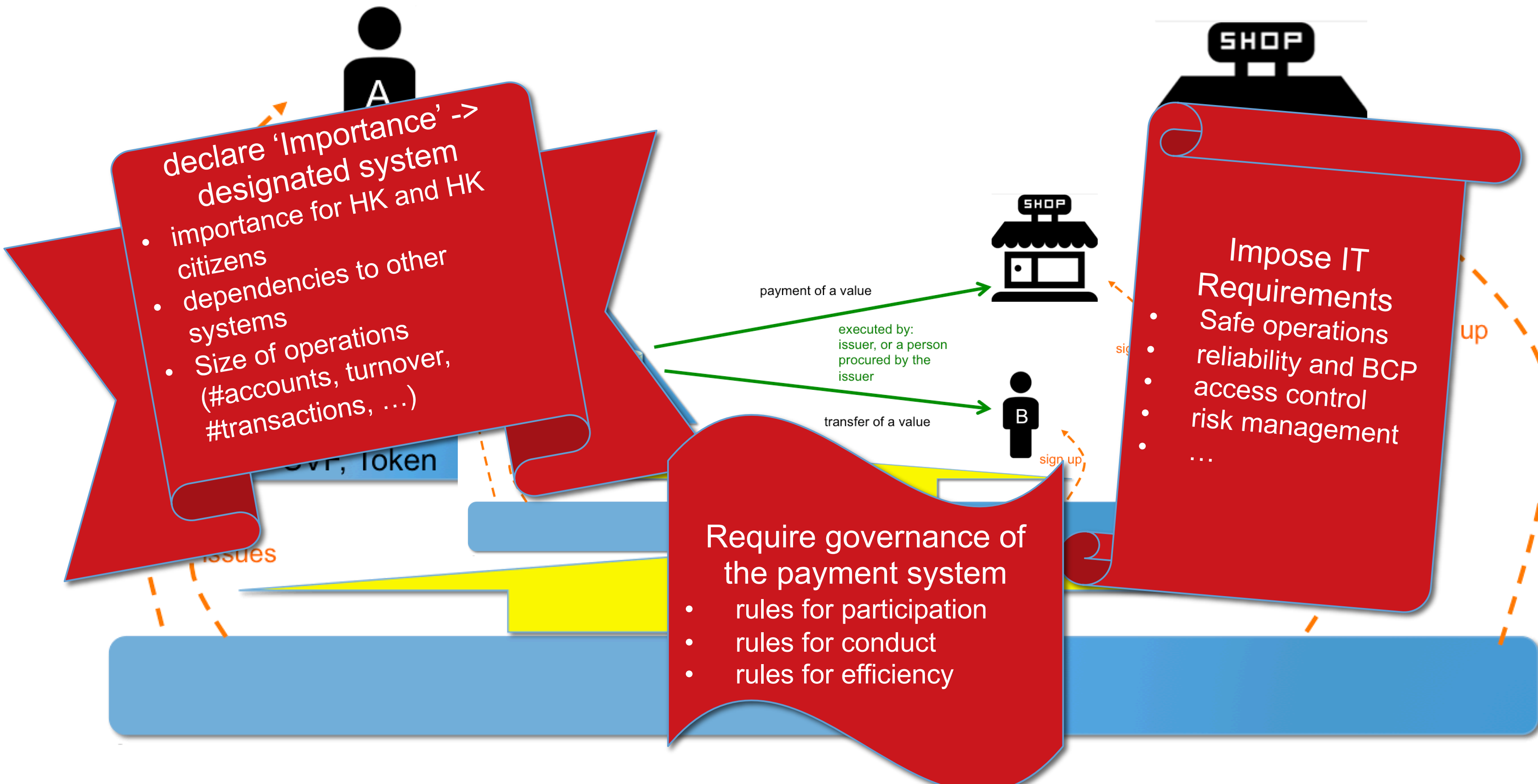
(d) for a clearing and settlement system, generally, the absence of measures having the effect of unfairly limiting, or exploiting the absence of, competition in relation to the functions performed by the system.

competitiveness

L6 – Risk, Regulations, Compliance

Stored Value Facilities - SVF

What do we have so far?



L6 – Risk, Regulations, Compliance

Stored Value Facilities - SVF

[…] a system operator or settlement institution of the system must not carry out through the system an activity that is not declared under that section.

restrictions apply …

A system operator or settlement institution who contravenes […] commits an offence and is liable—

in case of breach of arrangements

(a) on conviction on indictment—

(i) to a fine of $400000 and to imprisonment for 2 years; and

(ii) in the case of a continuing offence, to a further fine of $10000 for every day during which the offence continues; or

(b) on summary conviction—

(i) to a fine at level 6 and to imprisonment for 6 months; and

(ii) in the case of a continuing offence, to a further fine of $10000 for every day during which the offence continues.

fines and jail

L6 – Risk, Regulations, Compliance

Stored Value Facilities - SVF

Thus, …

- A regulation can be proactively guarding the future development of a payment system
  - by setting important cornerstones for the setup and processing
  - guided by general principles for technology, markets, participants
  - without knowing ‘exactly’ how the details will look like

L6 – Risk, Regulations, Compliance

Topics

- Introduction
- Why Regulation?
- Risk Management in Financial Institutions
- Stored Value Facilities – SVF
- **Regulations and Financial Inclusion**
- Compliance in Banks

L6 – Risk, Regulations, Compliance

Regulations and Financial Inclusion

Adults with monthly usage of bank account:

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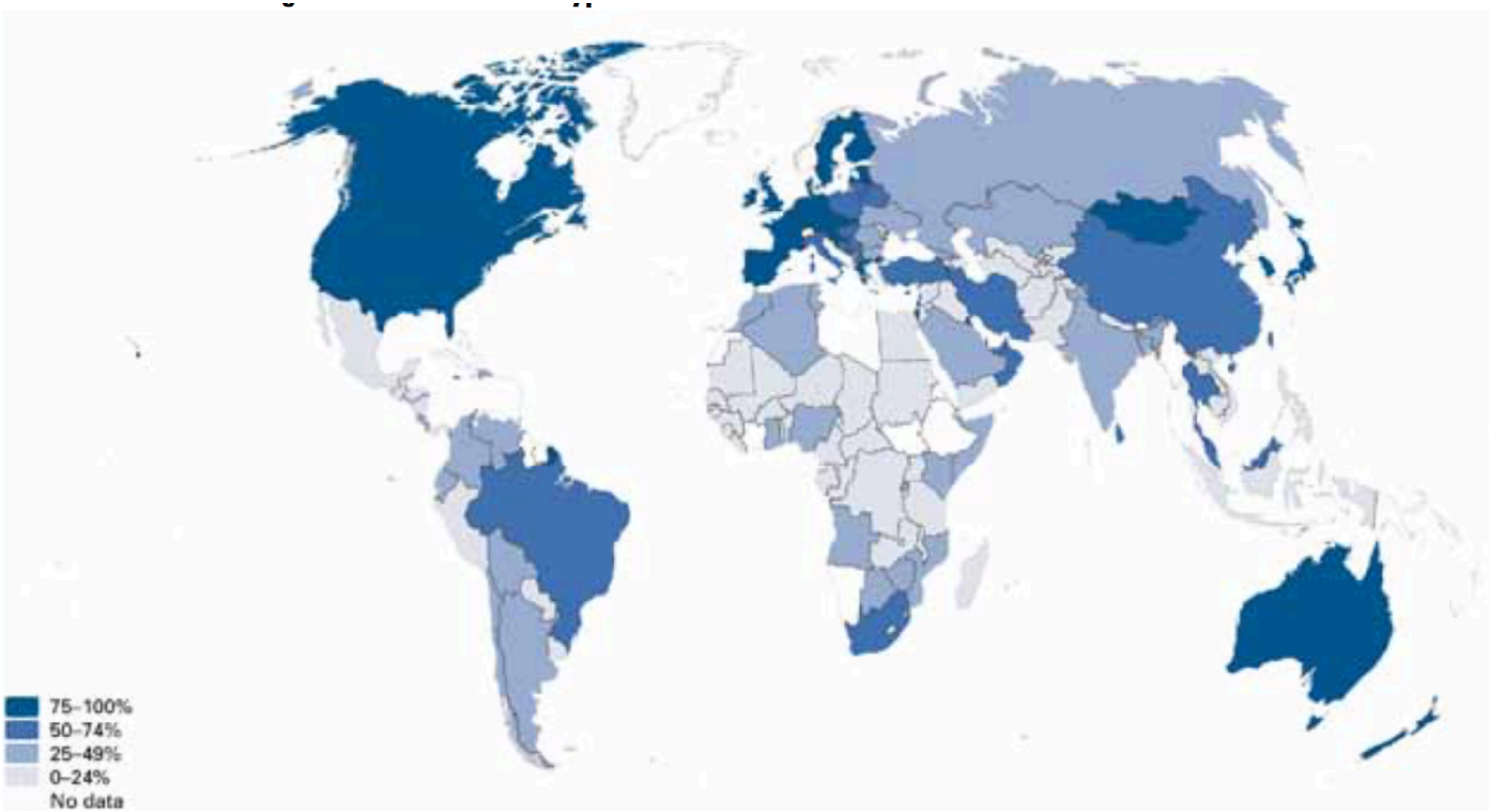

Source: Global Financial Inclusion (Global Findex) Database, World Bank, Washington, DC, http://www.worldbank.org/globalfindex.
Note: Percentage of adults (age 15 years or older) depositing to or withdrawing from an account with a formal financial institution at least once in a typical month.

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Regulations and Financial Inclusion

Some key messages:

- Financial inclusion—the proportion of individuals and firms that use financial services— varies widely across the world.
- More than 2.5 billion adults—about half of the world's adult population—do not have a bank account. While some of these people exhibit no demand for accounts, most are excluded because of barriers such as cost, travel distance, and amount of paperwork
- Research—both theoretical and empirical—suggests that Financial inclusion is important for development and poverty reduction.
- If inclusion is to have positive effects, it needs to be promoted responsibly. Financial inclusion does not mean credit for all at all costs.

Source: Financial Regulations for Improving Financial Inclusion, Center for Global Development. 2016

L6 – Risk, Regulations, Compliance

Regulations and Financial Inclusion

Origin of financial exclusion is that the costs of serving the financially excluded are high.

This is especially true for wide, remote areas, where the income which can be generated from the customers is relatively low.

However, regulators cannot force financial institutions to provide financial services.

Regulators can only try to create an economical environment where innovation and technology help lowering the cost of service.

L6 – Risk, Regulations, Compliance

Regulations and Financial Inclusion

Governments can confront market failures and enhance inclusion by

- developing an appropriate legal and regulatory framework
- supporting the information environment,
- promoting competition, and
- facilitating the adoption of business models by providers to enhance financial inclusion

Technological advances hold promise in the expansion of financial inclusion

Evidence points to the role of government in setting standards for

- disclosure and transparency,
- regulating aspects of business conduct, and
- overseeing effective recourse mechanisms to protect consumers

Source: Financial Regulations for Improving Financial Inclusion, Center for Global Development. 2016

L6 – Risk, Regulations, Compliance

Regulations and Financial Inclusion

Regulating by function:

- …can serve a dual purpose:
  - that of leveling the playing field across alternative providers and
  - that of reducing uncertainties regarding the nature of the regulatory framework that might apply to new players

Example:

as long as DSPs limit their provision of financial services to small transactions in payments, remittances, and transfers, with limited intraday exposure — that is, as long as they do not offer a substantial and long-lasting store of value — they should not be subject to bank-type regulation and supervision

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Regulations and Financial Inclusion

Regulating by degree of risk:

- The various capital and liquidity requirements, capital surcharges, and other regulations recommended for banks by the Basel Committee on Banking Supervision are based on this principle

Example:

the riskier the financial service provider is to the user or the whole financial system, or the more the user is potentially at risk of loss of funds or of fraud, abuse, misuse, or being sold an inappropriate product, the higher should be the regulatory bar.

Source: Financial Regulations for Improving Financial Inclusion, Center for Global Development. 2016

L6 – Risk, Regulations, Compliance

Regulations and Financial Inclusion

ex ante and ex post regulation:

- Banks and other traditional providers of financial services are subject to regulations that are well defined on an ex ante basis. Regulations governing the activities of most other industries (except health care) more typically follow an ex post approach

Example:

payments and transfer services provided by Mobile Network Operators and other nonbank DSPs generally pose limited risks to the financial system and therefore can be subject to lighter ex ante regulation.

This approach will best serve the efficient development of the market, as excessive ex ante regulation would inhibit innovation and the development of new products and markets.

Source: Financial Regulations for Improving Financial Inclusion, Center for Global Development. 2016

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Regulations and Financial Inclusion

Exercise:

Please read the following article:

http://www.bis.org/review/r150130b.pdf

Then work out:

- what are the goals for regulation in the context of financial services for the excluded people?
- what are the key points of the regulation in Uganda that have contributed to financial inclusion?

L6 – Risk, Regulations, Compliance

Topics

- Introduction
- Why Regulation?
- Risk Management in Financial Institutions
- Stored Value Facilities – SVF
- Regulations and Financial Inclusion
- **Compliance in Banks**

L6 – Risk, Regulations, Compliance

Compliance - Overview

The expression “compliance risk” is defined as

- the risk of legal or regulatory sanctions,
- material financial loss, or
- loss to reputation

a bank may suffer as a result of

- its failure to comply with laws, regulations, rules, related self-regulatory organisation standards, and
- codes of conduct applicable to its banking activities (together, “compliance laws, rules and standards”).

L6 – Risk, Regulations, Compliance

Compliance - Overview

The Compliance Function:

- Compliance should be part of the culture of the organisation;
- it is not just the responsibility of specialist compliance staff.
- Nevertheless, a bank will be able to manage its compliance risk more effectively if it has a compliance function in place that is consistent with
- the "compliance function principles" discussed here.

- The expression "compliance function" is used to describe staff carrying out compliance responsibilities;
- it is not intended to prescribe a particular organisational structure.

L6 – Risk, Regulations, Compliance

Compliance - Overview

Ways of organising the compliance function:

- A bank should organise its compliance function and set priorities for the management of its compliance risk in a way that is consistent with its own risk management strategy and structures.
- For instance, some banks may wish to organise their compliance function within their operational risk function, as there is a close relationship between compliance risk and certain aspects of operational risk.
- Others may prefer to have separate compliance and operational risk functions, but establish mechanisms requiring close cooperation between the two functions on compliance matters.

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 1

- The bank's board of directors is responsible for overseeing the management of the bank's compliance risk.
- The board should approve the bank's compliance policy, including a formal document establishing a permanent and effective compliance function.
- At least once a year, the board or a committee of the board should assess the extent to which the bank is managing its compliance risk effectively.

- As is the case with other categories of risk, the board is responsible for **ensuring that an appropriate policy is in place** to manage the bank's compliance risk.
- The board should **oversee the implementation of the policy**, including ensuring that compliance **issues are resolved effectively and expeditiously** by senior management with the assistance of the compliance function. The board may, of course, delegate these tasks to an appropriate board level committee (e.g. its audit committee)

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 2

- The bank's senior management is responsible for the effective management of the bank's compliance risk.

- This responsibility is typically answered by Senior management **creating the required policies** and providing resource, as well as **creating a functional compliance infrastructure** in which compliance is managed

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 3

- The bank's senior management is responsible for establishing and communicating a compliance policy, for ensuring that it is observed, and for reporting to the board of directors on the management of the bank's compliance risk.

- The bank's senior management is **responsible for establishing a written compliance policy** that contains the basic principles to be followed
- The duty of senior management to **ensure that the compliance policy is observed** entails responsibility for ensuring that **appropriate remedial or disciplinary action is taken if breaches are identified**.
- Senior management should, with the assistance of the compliance function:
  - at least once a year**, identify and assess the main compliance risk issues** facing the bank and the plans to manage them
  - at least once a year, **report to the board of directors or a committee of the board** on the bank's management of its compliance risk

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 4

- The bank’s senior management is responsible for establishing a permanent and effective compliance function within the bank as part of the bank’s compliance policy

- Senior management should take the necessary measures to **ensure that the bank can rely on a permanent and effective compliance function that is consistent with the following principles** below

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 5: Independence

- The bank's compliance function should be independent.

- The concept of independence involves four related elements, each of which is considered in more detail below.
- First, the compliance function should **have a formal status** within the bank.
- Second, **there should be a group compliance officer or head of compliance** with overall responsibility for co-ordinating the management of the bank's compliance risk.
- Third, compliance function staff, and in particular, the head of compliance, should **not be placed in a position where there is a possible conflict of interest** between their compliance responsibilities and any other responsibilities they may have.
- Fourth, **compliance function staff should have access to the information and personnel necessary** to carry out their responsibilities.

- The compliance function should have a formal status within the bank **to give it the appropriate standing, authority and independence**

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 5: Independence … cont'd

- Each bank **should have an executive or senior staff member** with overall **responsibility for co-ordinating the identification and management of the bank's compliance risk** and **for supervising the activities of other compliance function staff**. Here we use the title "head of compliance" to describe this position.
- The independence of the head of compliance and any other staff having compliance responsibilities may be undermined if they are placed in a position **where there is a real or potential conflict between their compliance responsibilities and their other responsibilities**.
- It is the preference that compliance function staff perform only compliance responsibilities. The Committee recognises, however, that this may not be practicable in smaller banks, smaller business units or in local subsidiaries. In these cases, therefore, compliance function staff may perform non-compliance tasks, provided potential conflicts of interest are avoided.
- The compliance function should have **the right on its own initiative to communicate with any staff member** and obtain access to any records or files necessary to enable it to carry out its responsibilities

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 6: Resources

- The bank's compliance function should have the resources to carry out its responsibilities effectively

- Compliance function staff should have a **sound understanding of compliance laws, rules and standards** and their practical impact on the bank's operations. The professional skills of compliance function staff, especially with respect to keeping up-to-date with developments in compliance laws, rules and standards, should be maintained through regular and systematic education and training.

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 7: Compliance function responsibilities

- The responsibilities of the bank's compliance function should be to assist senior management in managing effectively the compliance risks faced by the bank. Its specific responsibilities are set out below. If some of these responsibilities are carried out by staff in different departments, the allocation of responsibilities to each department should be clear.

- Not all compliance responsibilities are necessarily carried out by a "compliance department" or "compliance unit". Compliance responsibilities may be **exercised by staff in different departments**.
- If there is a division of responsibilities between departments, the **allocation of responsibilities to each department should be clear**. There should also be appropriate mechanisms for co-operation among each department and with the head of compliance (e.g. with respect to the provision and exchange of relevant advice and information).
- The compliance function should advise senior management on compliance laws, rules and standards, including keeping them informed on developments in the area

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 7: Cont’d

- The compliance function should, **on a pro-active basis, identify, document and assess the compliance risks** associated with the bank’s business activities, including
  - the development of new products and business practices,
  - the proposed establishment of new types of business or customer relationships, or
  - material changes in the nature of such relationships.

- The compliance function should **monitor and test compliance by performing sufficient and representative compliance testing**. The results of the compliance testing should be reported up through the compliance function reporting line in accordance with the bank’s internal risk management procedures.
- The compliance function may have specific statutory **responsibilities** (e.g. fulfilling the role of anti-money laundering officer). It may also liaise with relevant external bodies, including regulators, standard setters and external experts

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 8: Relationship with Internal Audit

- The scope and breadth of the activities of the compliance function should be subject to periodic review by the internal audit function.

- **Compliance risk should be included in the risk assessment methodology** of the internal audit function, and an audit programme that covers the adequacy and effectiveness of the bank's compliance function should be established, including testing of controls commensurate with the perceived level of risk.
- This principle implies that **the compliance function and the audit function should be separate**, to ensure that the activities of the compliance function are subject to independent review.
- It is important, therefore, that there is a clear understanding within the bank as to how **risk assessment and testing activities are divided between the two functions,** and that this is documented (e.g. in the bank's compliance policy or in a related document such as a protocol). The audit function should, of course, keep the head of compliance informed of any audit findings relating to compliance

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 9: Cross-border issues

- Banks should comply with applicable laws and regulations in all jurisdictions in which they conduct business, and the organisation and structure of the compliance function and its responsibilities should be consistent with local legal and regulatory requirements.

- Banks that choose to **conduct business in a particular jurisdiction should comply with local laws and regulations**.
- For example, banks operating in subsidiary form must satisfy the legal and regulatory requirements of the host jurisdiction. Certain jurisdictions may also have special requirements in the case of foreign bank branches. It is for local businesses to ensure that compliance responsibilities specific to each jurisdiction are carried out by individuals with the appropriate local knowledge and expertise, with oversight from the head of compliance in co-operation with the bank's other risk management functions

L6 – Risk, Regulations, Compliance

Compliance - Principles

Principle 10: Outsourcing

- Compliance should be regarded as a core risk management activity within the bank. Specific tasks of the compliance function may be outsourced, but they must remain subject to appropriate oversight by the head of compliance.

- The Joint Forum (i.e. the Basel Committee on Banking Supervision, the International Organization of Securities Commissions, and the International Association of Insurance Supervisors) has recently developed **high-level principles for outsourcing by regulated entities**, to which banks are encouraged to refer.
- A bank should **ensure that any outsourcing arrangements do not impede effective supervision** by its supervisors. Regardless of the extent to which specific tasks of the compliance function are outsourced, the **board of directors and senior management remain responsible for compliance by the bank** with all applicable laws, rules and standards.

L6 – Risk, Regulations, Compliance

Regulation…

... the positive side

How financial institutions can potentially benefit from different regulatory demands

Regulatory landscape

Regulatory oversight and scrutiny requiring high quality and integrated data

- BCBS 239 — data governance, risk data aggregation and risk reporting
- Basel III — counterparty, liquidity risk, enhanced capital ratios
- CCAR — capital adequacy, stress testing
- CFPB — protection of consumers from unfair, deceptive or abusive acts and practices in marketing, lending, disclosures, etc.

Regulatory expectations

Accurate and reliable data

- end-to-end understanding of data flow (data lineage)
- proactive and sustainable resolutions for data issues
- consistent and accurate reporting across all regulations
- active and complete monitoring across all customers and transactions.

Benefits of meeting regulatory requirements

- Improved cross-selling, and lower operational losses and capital requirements. Need to increase capital reserves to withstand economic downturn
- Ability to compare trading desks and evaluate profitability and exposure levels. Confidence in available data to make key business decisions
- Good data quality results in reduced costs and no implementation delays