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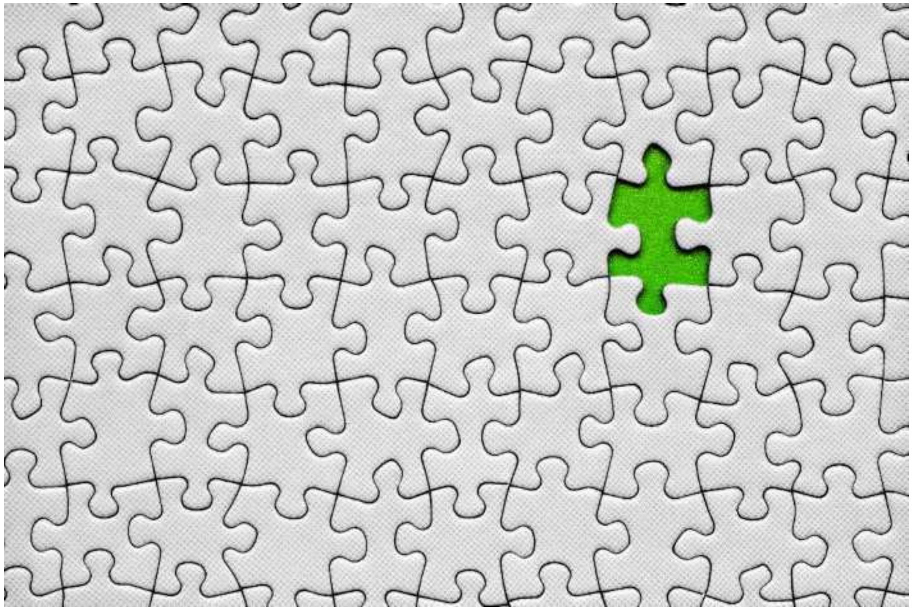
When business strategy and risk management meet
ー Use of Risk Appetite Framework and Risk Intelligence



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1. Overview of Risk Appetite Framework (RAF)

What is Risk Appetite (RA) and Risk Appetite Framework (RAF)?

- **Risk appetite (RA)**
  - The aggregate level and type of risk a management is willing to assume within its risk capacity to achieve its strategic objectives and business plan.
- **Risk appetite framework (RAF)**
  - Management to set the risk appetite while taking into consideration various stakeholders' expectations such as shareholders and regulators, and confirms that it is confined within the expected range; and permeates the risk appetite from the top management level throughout the organization down to the front business lines.
- **Risk capacity (RC)**
  - The maximum level of risk the financial institution can assume given its current level of resources before breaching constraints determined by regulatory capital and liquidity needs, the operational environment.

RAF is now becoming as a standard for governance code

- **Implementation of RAF is now a must for financial institutions**
  - FSB (Financial Stability Board, a leading international body formed by representatives of finance ministries, supervisory authorities, and central bankers from major countries to develop international financial regulations) published (November, 2013) ‘Principles for an Effective Risk Appetite Framework’ ⇒ minimum requirements for G-Sifis (Global systemically important financial institutions) ⇒ now gradually being applied to large domestic financial institutions.

- **In UK and Overseas, RAF now constitutes an element for the corporate governance code, and is gradually introduced by general corporate and public entities**
  - Already in UK, Turnnbull Guidance (best practice on internal control for listed companies) published in 1999 stated board should identify and evaluate the risks faced by the company while determine whether the quantity and category are acceptable.
  - In 2004, COSO has officially used the word Risk Appetite to achieve business objectives, acceptable by the company, quantity and type of risk as definition.
  - In 2010, UK revised corporate governance code sated as one of the important principles ‘The board is responsible for determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives.’

Many corporates are increasingly focusing their efforts on establishing a formal risk appetite for their company

"A global risk appetite is defined by the Executive Board and reviewed and validated on an annual basis by the Board of Directors" Nestlé,2013

"We reward our executives for taking responsible risks in line with the company's strategic objectives and overall risk appetite. In order to ensure that we are executing according to our strategic objectives and that we only accept
risks for which we are adequately compensated"
General Electric , 2013

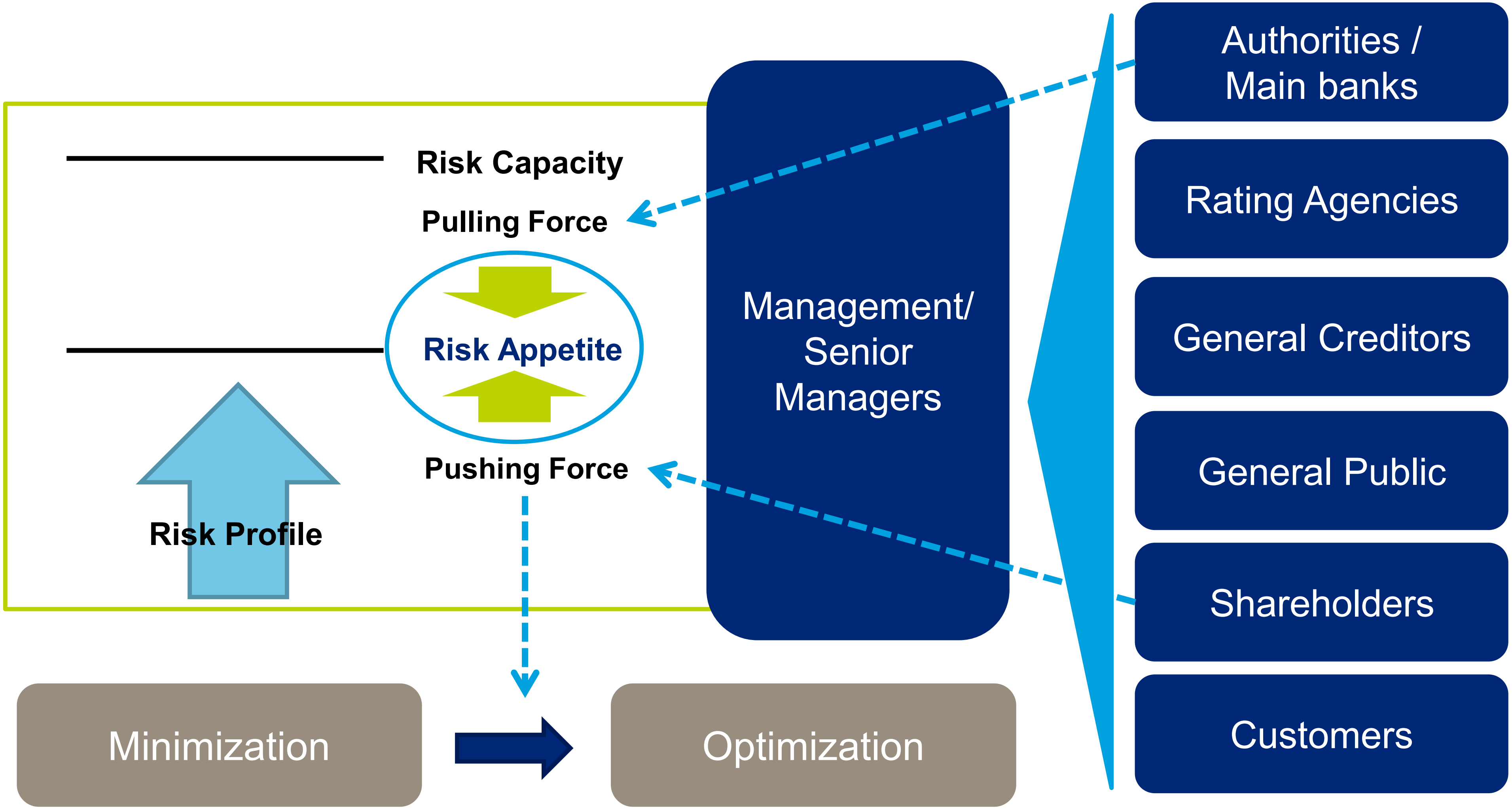
"The setting of the risk appetite thus ensures that risk is proactively managed to the level desired by the Management Board & shareholders"
Deutsche Bank, 2013

"[the risk appetite] expresses the acceptable levels of risk for the Group using 3 key dimensions…earnings & cash flow, ROI and potential impact on our reputation"
AstraZeneca, 2012

"Risk appetite defines the overall risk levels the company is willing to accept … [and] establishes principles for risk taking in the aggregate and for each risk type, …and controls designed to ensure that the risks remain within the defined risk appetite boundaries."
American Express, 2013

Our risk appetite is linked to our strategy and is based on the stance we have towards risks across strategic, operating, financing and compliance.
Randstad, 2012

Optimize risks within a trade-off relationship



‘Pulling’ forces for Risk Appetite

The expectation of stakeholders to “restrain” risk

- Regulators/ main banks : Business stability, containment of moral hazard
- Rating agencies : Prevent abuse of information asymmetry
- General creditors : Risk transfer (pass-down) from shareholders
- General public/Politician : Risk to compromise social fairness
- Shareholders : Risk transfer (pass-down) from shareholders

What the management ‘do not want to see’（＝the situation beyond their risk appetite） could be when their accountability is criticized and consequently forced to take its responsibility ⇒ The cap of risk appetite

For example:

- Fall below a certain level of financial stability ratio incl. capital adequacy ratio
- Fall below a certain level of earning indicator
- Economic capital reaches a certain level of accounting capital
- Rating fall below a certain level
- Risk premium reaches above a certain level
- Rising reputation risk

'Pushing' forces for Risk Appetite

The expectation of stakeholders to "take" risk

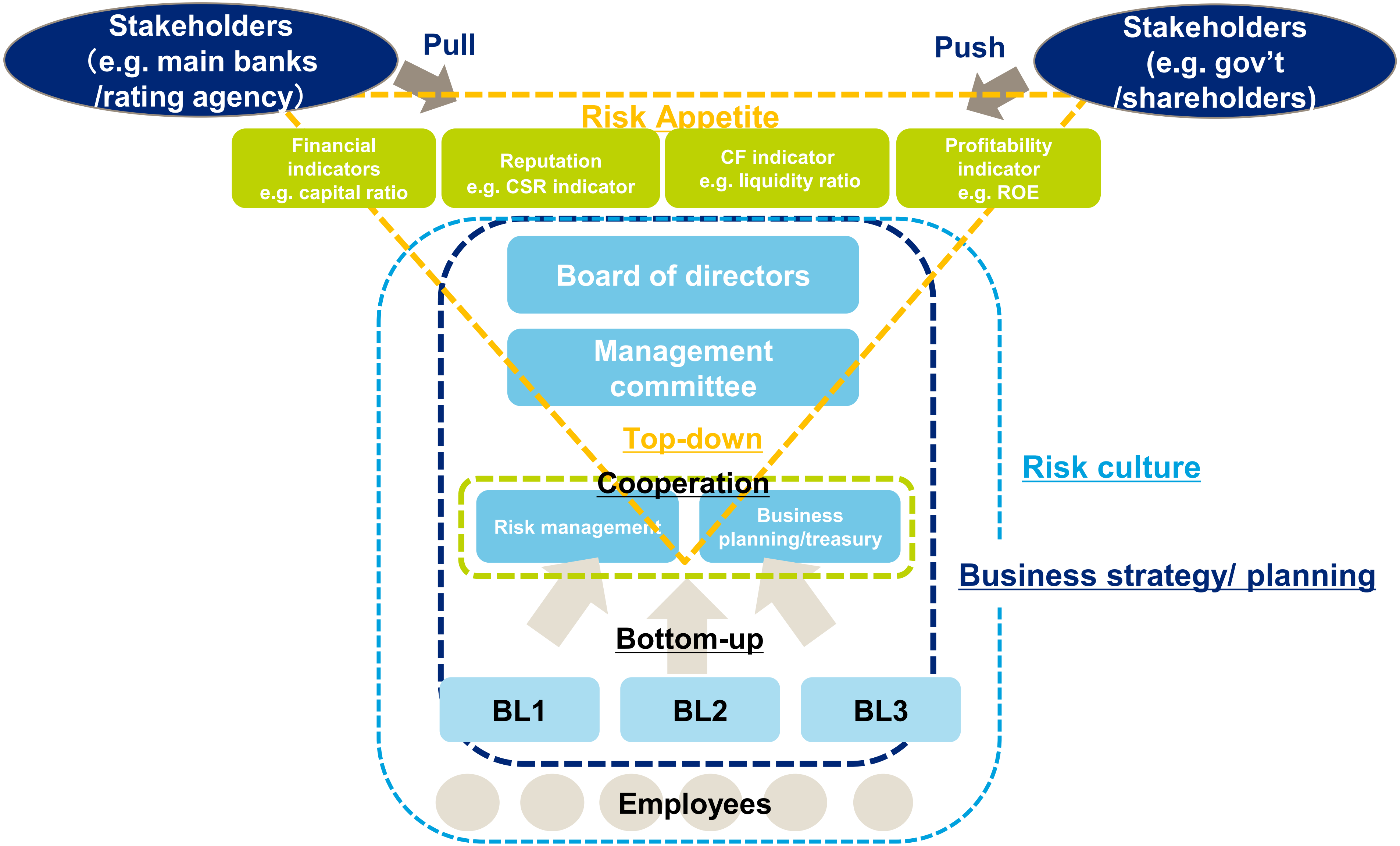
- Shareholders : Expectations for return
- General public/ Politician : Positive impacts to economy, contribution to social justice
- Regulators/ main banks : Contribution to sound economic growth, sound profitability to increase mid/long-term sustainability
- Rating agencies : Same as the above
- General creditors : Same as the above

For example:

- ROE reaches beyond a certain level
- Secure a certain level of return based on the risk
- Secure a certain level of dividend payment
- Secure employment
- Contribution to macro economic growth

*Risk Weighted Asset

Image of governance over RAF



Governance and risk measurement/control framework are two critical factors for establishing an effective RAF

Ensure the adequacy of risk appetite "source" → Governance	
Ensure the adequacy of risk appetite "source" ↓ Governance	■ **Establish "risk culture" to discourage having excessive risk appetite** ⇒ Need to establish the right "risk culture" and confirm risk capacity ■ **Review of governance/challenge framework and accountability system** ⇒ Align the governance/challenge framework and accountability system with the above risk culture and risk capacity ■ **Adequacy of remuneration system and incentive mechanism** ⇒ Control variable to fixed pay ratio, introduction of bonus claw backs, etc. ■ **Confirmation of varying interest of stakeholders and review the methods of balancing them into the target of businesses** ⇒ Seek the adequate balance which is acceptable to the overall society though transparent process
Ensure the adequacy of risk control methods in line with risk appetite ↓ Risk measurement and control framework	■ **Establish framework to identify risks associated with business strategy** ⇒ Develop cooperative framework between business planning/treasury and risk management divisions under the leadership of the top management (develop a framework to evaluate business risks from the perspective of risk management, and review/align the strategy with risk appetite) ■ **Establish method to identify risks associated with business strategy** ⇒ Stress testing and qualitative assessment (cover a wide range of risks including non-financial risks from the perspective of "follow-the-money") ■ **Establish framework to control risks associated with business strategy** ⇒ Establish ways to cascade risk appetite at strategic level down to tactical and operational levels, as well as methods to control them (development of the RAS, selection of risk appetite indicators, establishment of methods to control those indicators)

9 questions for the management to understand RAF

1. How do you capture expectations of various stakeholders (Which stakeholder to aware of the most? How do you balance various stakeholders' expectations?)
2. How does 1. realize in your RA
3. How do you express your RA
4. What is your RA level?
5. What are the biggest 5 risks facing your company
6. Are these top risks (5.) covered by the current risk management
7. How do you capture characteristics of your business model and business strategy? How do you recognize the associated risks?
8. Are the risks your company are facing right now, managed within your RA ranges?
9. If such risk is approaching your RA limit, how do you suppress it? If the risk passes beyond your RA limit, how do you respond?

Background on why RAF became increasingly important

Limitation of traditional risk management shown by the Global Financial Crisis

- Traditional concept of risk
  - ➢ Market risk, credit risk, operational risk, liquidity risk, etc.
  - ➢ Risks that are easy to measure (using backward-looking methods)
  - ➢ Risks that regulators request financial institutions to manage

  ⇒ Is this enough?

- Limitations indicated by the financial crisis
- Regulator-driven expansion of the scope of risks that needs to be managed by financial institutions, as well as insufficiency in the reliance on backward-looking measurement methods

- Need to consider what drives financial institutions to take risks in the first place and then capture the risks based on their driving factors

  ⇒ Attention on “risk appetite”

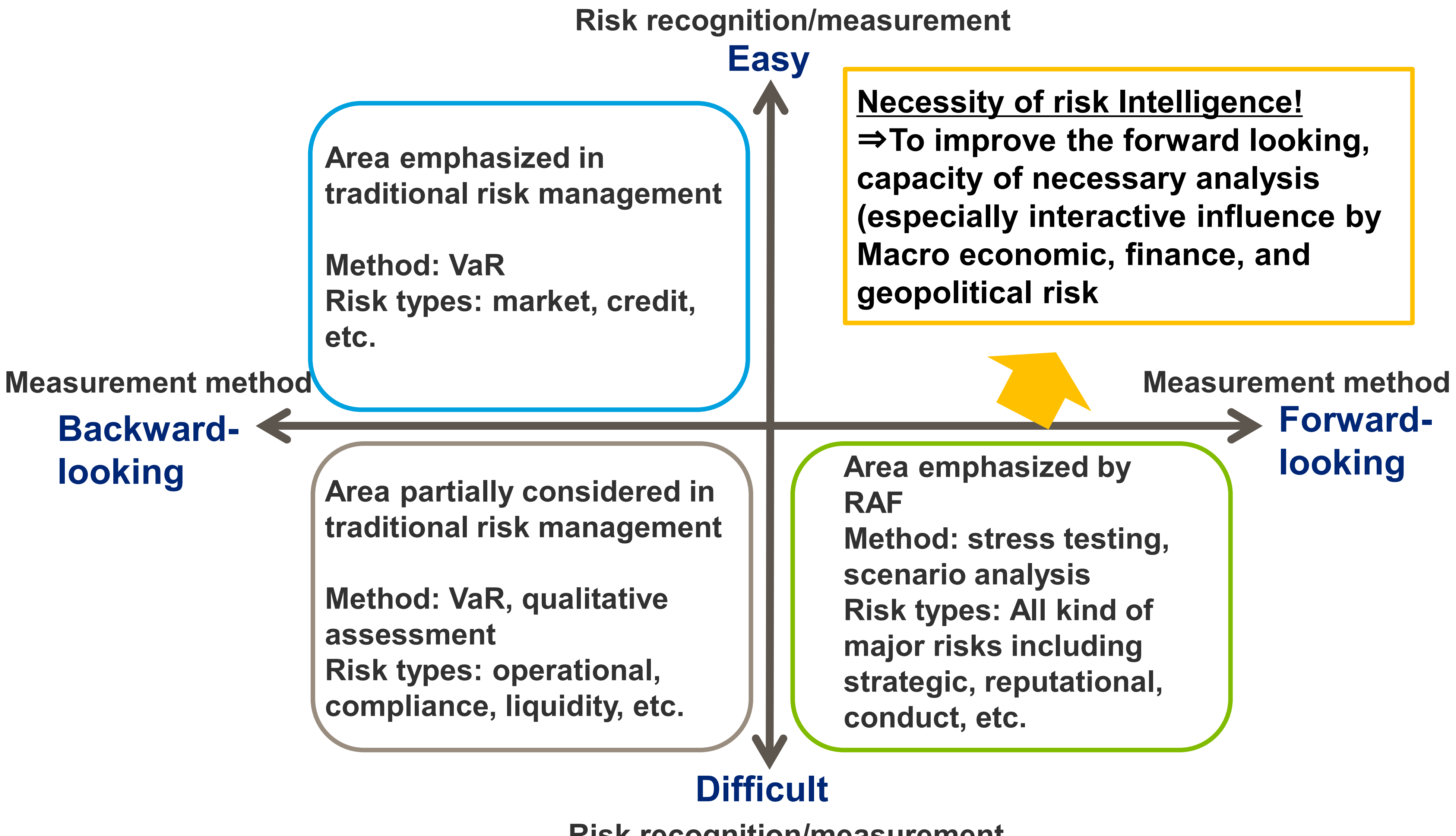
  - ➢ Emerging/strategic risk perspective
  - ➢ Forward-looking perspective

RAF revolutionizes corporate governance and risk management

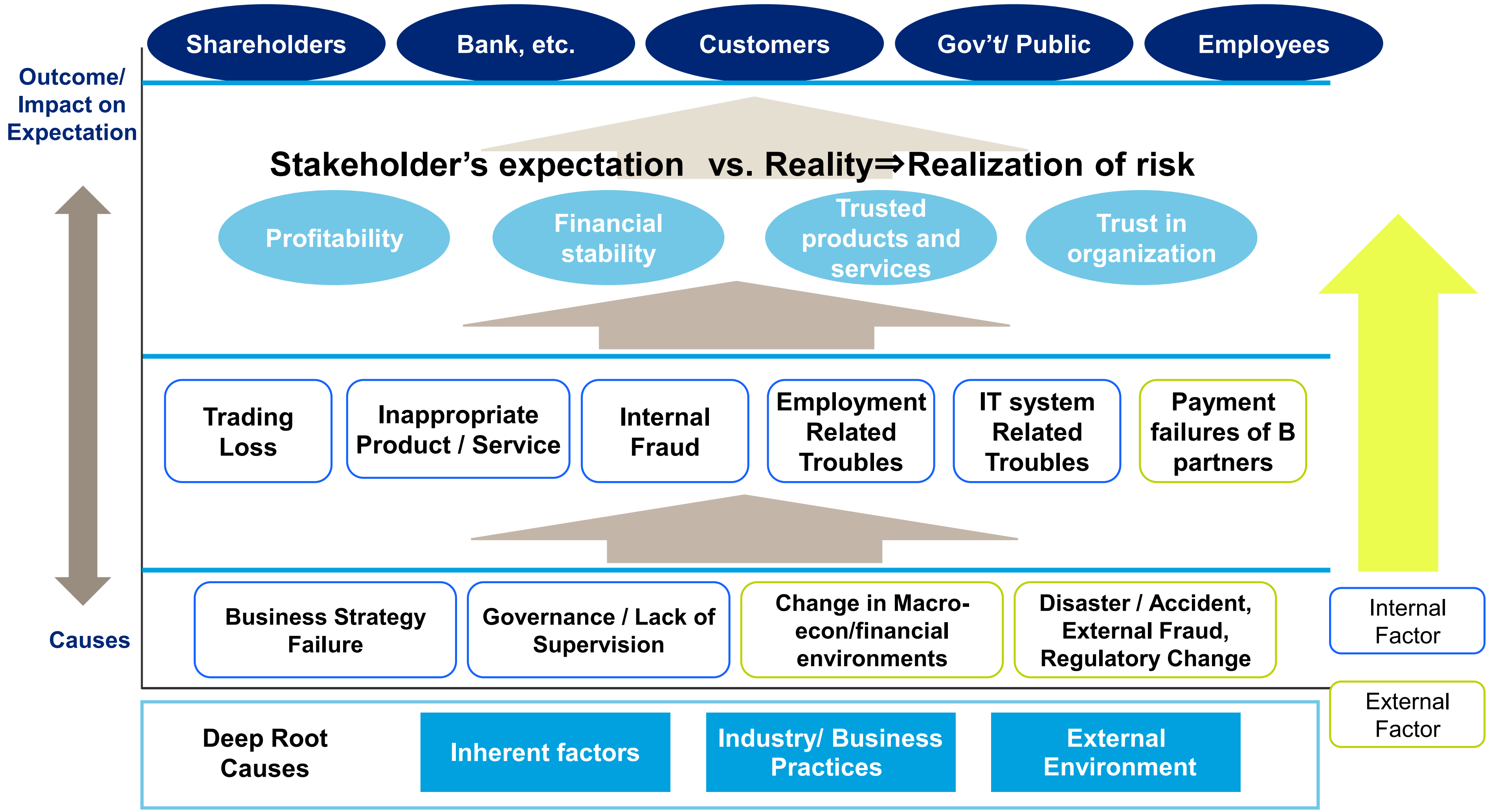
- **RAF visualizes the management's decision making process for internal and external third parties**
  - RAF is a "transparent" framework that clarifies how top management identifies the risks in its business strategy, assesses whether they can accept them or not, and control them so as to confine within their limits.
  - Visualization of the management's decision making process from the perspective of shareholders and other major stakeholders, as well as clarifying who is leading the particular risk taking activity and who has agreed/disagreed will enhance individual accountability of the top management. ⇒**appealing to foreign investors who are skeptical of Japanese companies' decision making process**
- **RAF assesses risks in the trade-off relationship and thereby prevents unaccountable judgement**
  - RAF enables the assessment of risk appetite in a "comparative" standard by not only awarding its minimization in <u>favor of regulators but also its optimization in favor of shareholders.</u>
  - RAF visualizes the essence of risks that is being taken by displaying this risk taking activity as a result of balancing different expectation of various stakeholders (Risk-off ⇒letdown of shareholders/government, Risk-on ⇒letdown of main banks/regulators).

2. Use of risk intelligence in RAF

Characteristic of the risks covered by RAF



Various risks & relationship with stakeholders' expectations



Risks in the strategy from Stakeholders' (SH) view point

The case of launching new mobile banking businesses

Main expectation of SH		Shareholders	Banks, Creditors	Customers	Government / general public	Employees
		Profitability	**Financial soundness and stability**	**Trust in products & services**	**Trust in products & services, organization**	**Trust in the organization**
Risk seen from SH 's view point	*Failure of business strategy*	Supporting significant improvement in profitability	Concerns for excessive strategic risk			
	Lack of governance and supervision	Some concerns on rapid changes in the business style	Big concerns on rapid changes in the business style		Some concerns on rapid changes in the business style	Serious concerns on rapid changes in the business style
	Trading failure					
	Provide inadequate products and services			Most welcome new services	Concerns for sacrificing parts of user as the result	
	Internal fraud					
	Labor related troubles	Some concerns on labor disputes	Big concerns for labor disputes			Serious concerns for labor disputes
	IT system related troubles	Some concerns on vulnerability of new IT infrastructure	Big concerns on vulnerability of new IT infrastructure		Big concerns on vulnerability of new IT infrastructure	
	Changes in macro-economic and financial environment	Very favorable condition for large capex	Favorable condition for large capex			Easy environment for job seeking
	Accidents / external fraud / regulatory changes				Loosening regulatory grip	
	Paymnet Failure of business partners					

Ex. of various perspectives to capture wide range of risks

	BU1	BU2	BU3	BU4	Others
					・・・

		Credit	Market	Operational	Liquidity	Others
Traditional risk classification	Regulatory capital/liquidity	SA	SA	BIA	LCR, NSFR	・・・
	Regulatory (internal model)/Backward looking	IRB	Internal model	AMA	NA	・・・
Business model, Policy	Management strategy (excess earnings) risk	Ex: Risk behind plan to increase lending	Ex: Risk behind high trading income goals	Ex: Risk associated with cost cuts and cuts in system investments	Ex: Increase in foreign exchange funding from expanding abroad	・・・
	Risks arising from incentives	Ex: Risk arising from reducing weighs on risk in performance evaluation	Ex: Raise bonus/base pay ratio (raise incentives)	Ex: Cost cuts in back office	Ex: Mispricing of LTP	・・・
	Risks arising from business model	Ex: Concentration risk from high dependence on real estate business	Ex: Market liquidity risk from expanding into new market	Ex: Legal and compliance risks from expanding into foreign retail market	Ex: Increase in foreign exchange funding from expanding abroad	・・・
Internal factors	Risks arising from operational factors	Ex: Fraudulent lending	Ex: Illicit trading	Ex: Embezzlement	Ex: Erroneous operation	・・・
	Risks arising from governance	Ex: Materialization of risk from the management's lack of risk control system				
External factors	Risks from change in authorities' stance	Ex: Degree of stress assumed in stress test	Ex: Treatment of benchmark interest rates	Ex: AML	Ex: Ring fencing	・・・
	External environment risk	Ex: End of Finance Facilitation Act	Ex: Rise in volatility from easing policies	Ex: Legislation of class action suit	Ex: Reduction in the scope of eligible collateral	・・・

How to measure risks associated with business strategy

How can the image of "risks associated with business strategy" or risks that need to be taken to achieve business strategy be recognized appropriately?
⇒ One way is to first confirm the business strategy's weak assumptions to be challenged

Rapid growth in revenue and profits projected in the coming three years

Any justification?

1. **New market/country development**
2. **New product introduction**
3. **Comparative advantage of business skill and knowledge**
4. **More risk taking in trading activities**
5. **Rapid growth in macro economy**

Risk of justification failure?

1. **Degree of uncertainty of new market**
2. **Degree of uncertainty of new product**
3. **Risks of skill obsolescence and of human resource outflow**
4. **Deterioration of risk-adjusted return**
5. **Risk associated with macro economy**

How to measure the size of the risk?

In most cases, the above risks can be measured by stress scenarios

How to execute business strategy?

Compare RA and 'irrelevant risk', eventually determine execution of business strategy

Case study: Framework to incorporate RA into business strategy in Company A

- Company A is considered at the top of the industry in XXX consumer goods sector domestically. Considering the uncertainty of the macroeconomic situation domestically and internationally, Company A had previously maintained a cautious investment stance while the firm's profitability had relatively been in a good shape.
- Meanwhile, the recent domestic economy is gradually breaking away from deflation, and marginalization of the Japanese economy is unavoidable in the long term. In addition, the ratio of foreign investors accounted for in shareholders surged and subsequently the pressures on improving the profitability has risen significantly. Against this background, the firm has now departed from the past passive business stance, and is pursuing proactive business development in the Asian market from this year forward. Furthermore, using surplus cash flow and focusing on the non-organic growth by proactive M&A activities are in their business plan.
- In its RAF, Company A sets up the following four areas for the strategic level risk appetite, which should be targeted to satisfy stakeholders' various expectations.
  - Earning indicator
  - Growth potential indicator
  - Financial stability indicator
  - Indicator for trust of customers/general public in their products and governance

Case study: Framework to incorporate RA into business strategy in Company A

RA of Company A

- <u>Earning indicator → to catch up with the level of EU/US firms</u>
  - The most important earning indicator is ROE ⇒ Current at around 8%, aiming to achieve EU/US major firms average standard of 15% in 5 years.
- <u>Growth potential index → proactive new market development</u>
  - Sales figures, operating earning and world market share. Considering company A's advanced technological capabilities and new business development in Southeast Asia, company A expects growth beyond the market average. Given that the average growth in the next five years of world economy at 4%, of major products market at 7%, the average growth of sales figures is targeted at 12%, business profit at 12%, and the world market share at 20% in five years compared to the current 10%..
- <u>Financial stability index → active risk taking to optimize its financial structure</u>
  - Set up goals for financial rating, financial leverage (DER), liquidity ratio. Specifically, to achieve financial rating: BBB⇒A, DER: 2.5times ⇒ 3times, liquidity ratio: 120% ⇒120%
- <u>Indicator for trust of customers/general public → establish a strong value added brand for customers and the public)</u>
  - Set up customer satisfaction surveys, product defect rate, brand reputation, compliance related indicators and indicators for prompt reaction to accidents. Specifically, to enhance efforts to reduce the defective product ratio and shorten responding time to customer complaints, while establishing as a 'trusted' brand and strengthening the risk management to cope with arising compliance risks in emerging countries, natural disasters and terrorism around the world.

Case study: Framework to incorporate RA into business strategy in Company A

The initial business plan submitted by the business units and planning division contains the following features:

- Basically, to maintain the current policy for domestic business
- Proactively expand business in overseas, focusing on the Asian market:
  - Partner with local firms to expand business in China
  - Partner or acquire local businesses in Thailand, Indonesia, the Philippines, Vietnam (proactive utilization of surplus cash flow)
  - Set up regional headquarters in Singapore to manage local businesses in Southeast Asia
  - Enhance the R&D department in Singapore to develop products that match local needs
- By achieving the above, it enables the firm to capture market share in China and Southeast Asia from an existing 5% and 10%, expanding to 10% and 20% respectively in five years
- Assume the performance of profitability and growth indexes to reach beyond the targets set up for risk appetite. Meanwhile, the indicator for financial stability also settles along the range of risk appetite. The initial business plan does not contain measures regarding strengthening the trust of customers and the public

Verification of strategic risk in light of the RA

From the RA perspective, the senior management, planning / finance, and risk management divisions raised the following questions regarding the business plan

- What is the feasibility to maintain current domestic market share and profitability considering; sales tax hike for the second time, impact of aging population and further intensified competitive environment?
- What is the impact of the recent economic downturn in China? Moreover, what is the risk of the relationship of the senior management in partner firms with the communist party?
- What is the likelihood that pace of growth in Southeast Asian countries will be revised down due to the expected interest rate hike in the US and economic downturn in China. In addition, what is the impact of the likelihood of capital outflow scenario due to the interest rate hike in US?
- A's Financial stability should somewhat worsen due to proactive investment. Have we considered the impact should the Bank of Japan's outlook; inflation scenario be realized?
- As the result of rapid business development in overseas, the domestic market may face a lack of human resources, which could lead to negative impacts on quality control, and accident handling. Moreover, local businesses are difficult to manage from Tokyo, and governance issues are expected to occur. Should we have emphasis to control such risks?

Verification result of strategic risk in light of the RA,

- According to macro-economic scenarios in Japan, worsening of profitability in the domestic market is unavoidable moving forward, should the assumption to maintain the current policy be kept
- On the other hand, considering the assumptions for the macro-economic scenarios in China and Southeast Asia, proactive business development in the Chinese and Southeast Asian markets have the potential to outweigh the declining profitability in the Japanese market. However, under a few specific plausible scenarios could result in the possibility of significant losses including exit costs.
- Facing the human resources shortage, rapid business development overseas could result in the lack of crisis response capability in overseas offices ⇒ increased loss in case crisis occurred, and growing compliance risk. The likelihood of occurrence is relatively small, yet the impacts to capital and reputation losses are significant in case the risks are materiallized

Business plan revision based on the verification result

- Revise the initial short-term rapid expansion of overseas business development strategy to a gradual development with a set priority order by each country
- From an acquisition approach, to increase the number of countries with a focus on the partnership approach strategy
- Determine clear rules for an ‘exit’ strategy
- Employ staff that greatly exceeds the initial plan in areas of overseas office support and risk management
- Enhance domestic production capabilities where quality control and compliance /risk are easier to manage → consider to increase exports
- As the result, the profitability and growth will not meet the initial risk appetite. Meanwhile, financial stability and trust of customers/public will increase, and eventually fall within the risk appetite range.