

Measuring Soundness and KPI of KODIT

Korea Credit Guarantee Fund (KODIT)

November 2015

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I | Overview of KODIT

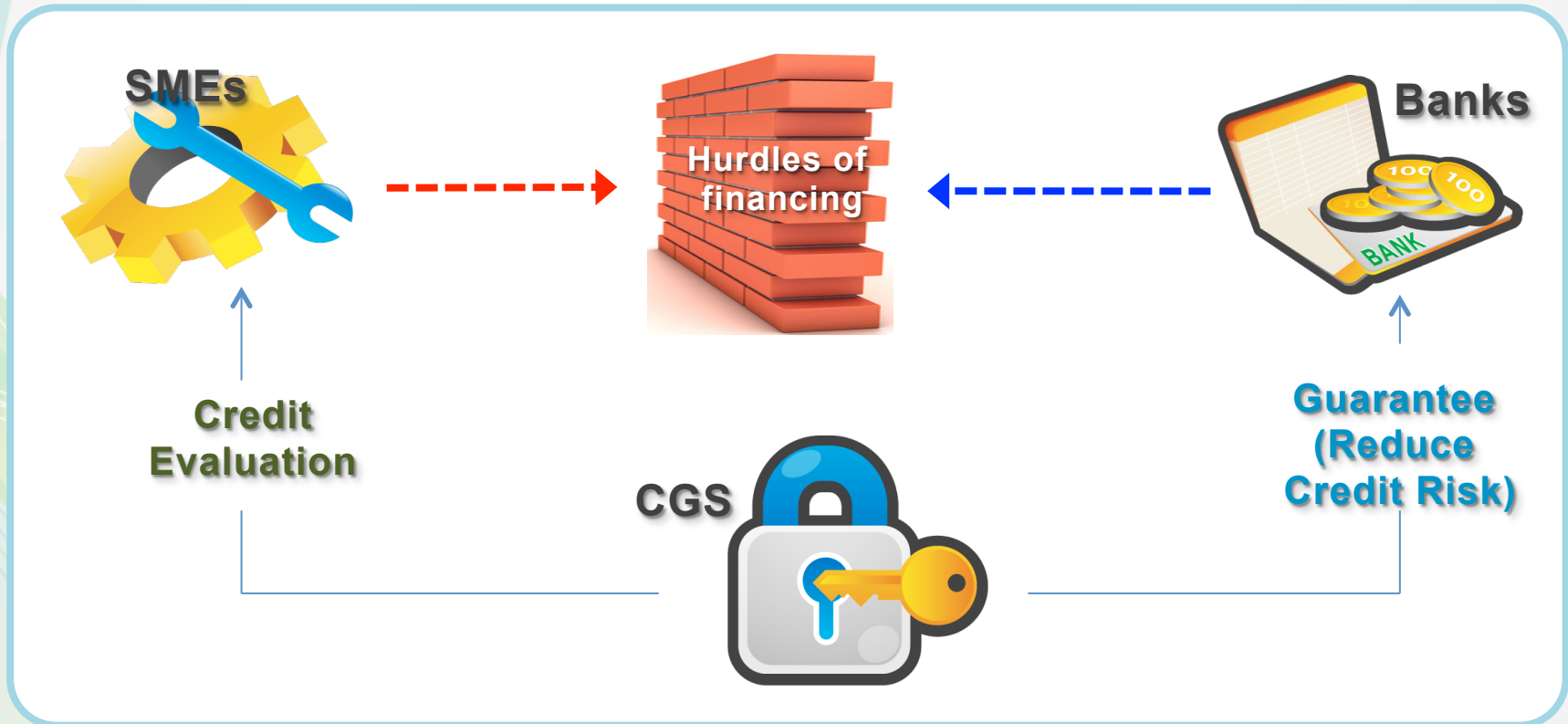
- Status: Not-for-profit special legal entity backed by the Gov't
- Establishment : 1976
- Capital Fund : USD 5.2 billion
- Outstanding Guarantee : USD 44.0 billion (* New supply : 12.6 USD billion ('14))
- Number of guaranteed companies : 215,728
- Number of Employees : 2,241
- Business network : 1 Head office, 9 Regional HQs, 106 Branches

Main Businesses



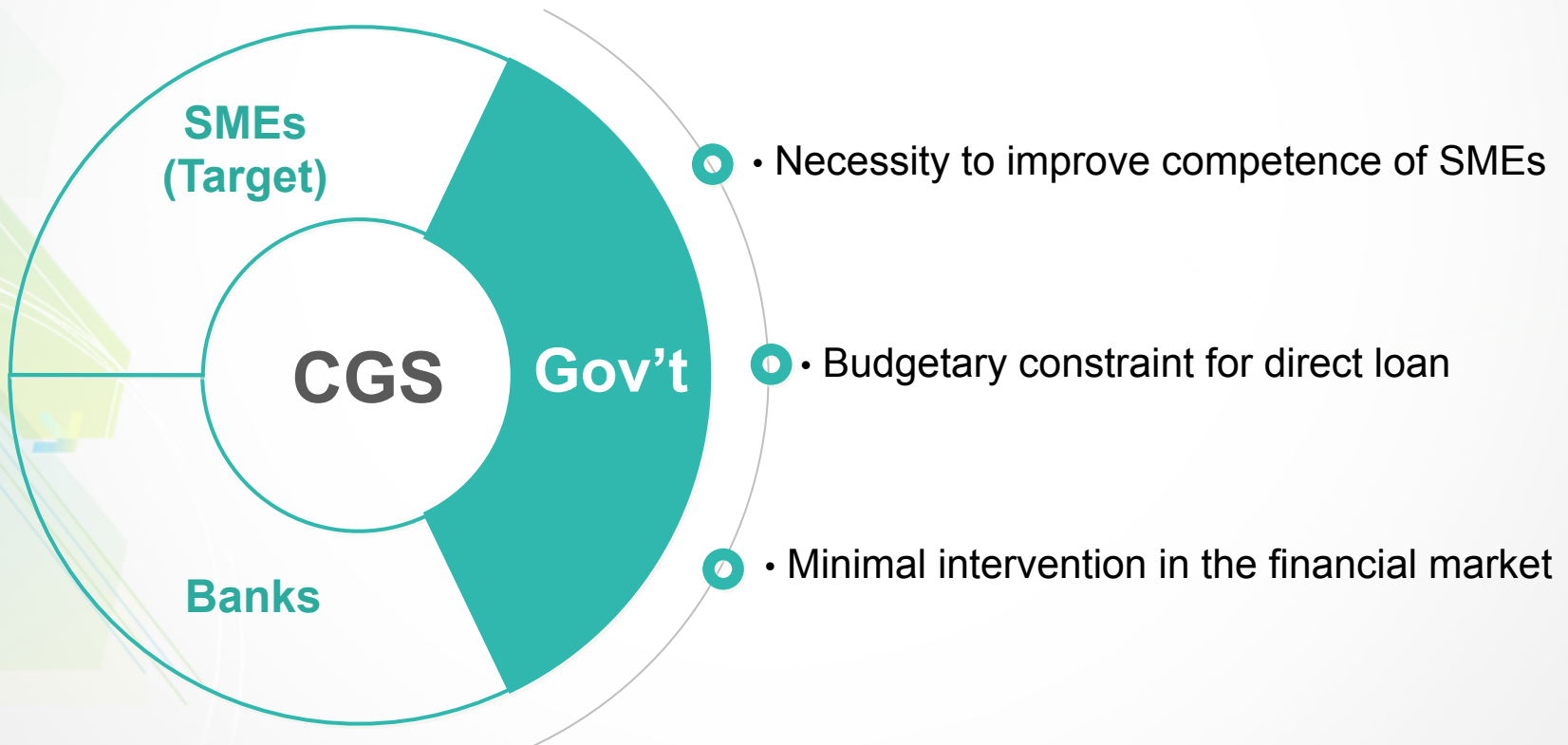
II | Roles and Objectives of CGS

Basic Structure of Credit Guarantee



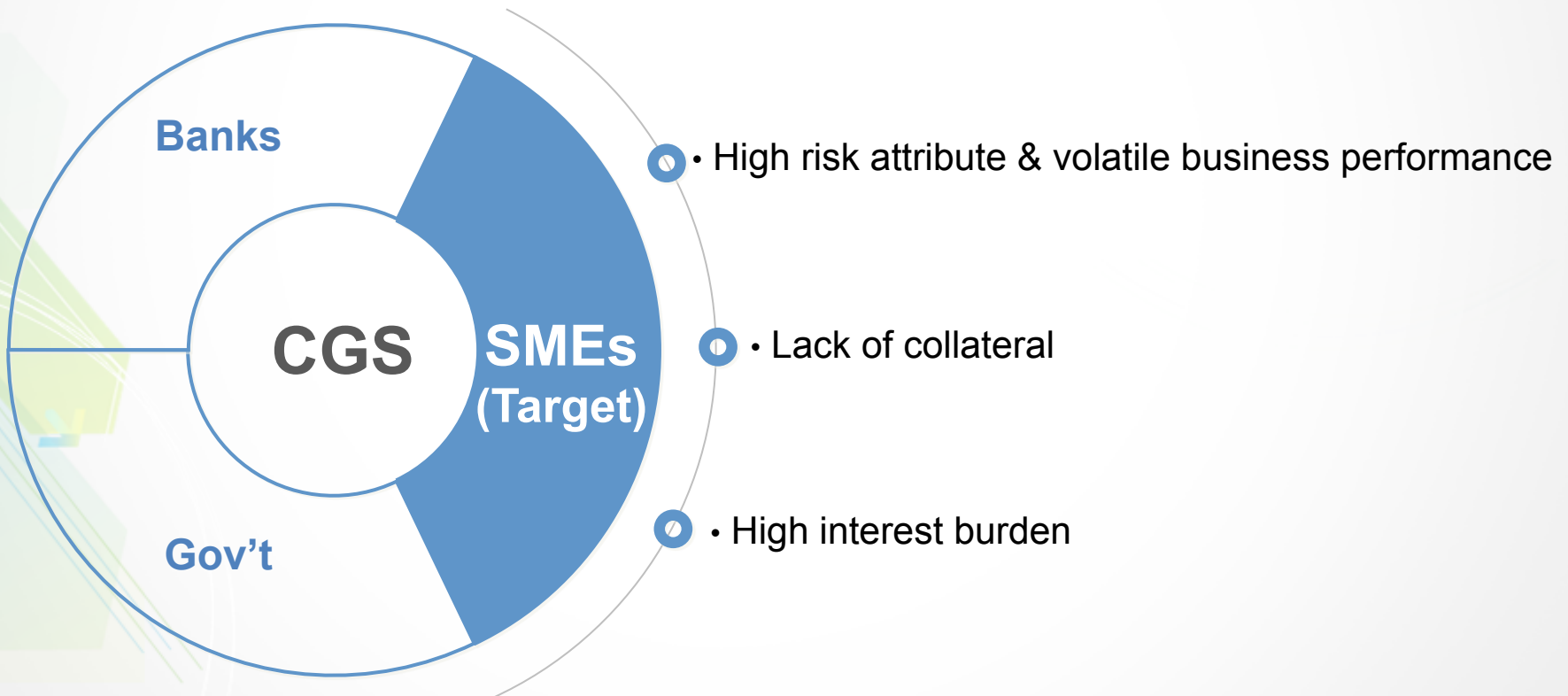
● Government – Designer & Supervisor

Governments focus on the development of SMEs & economic growth



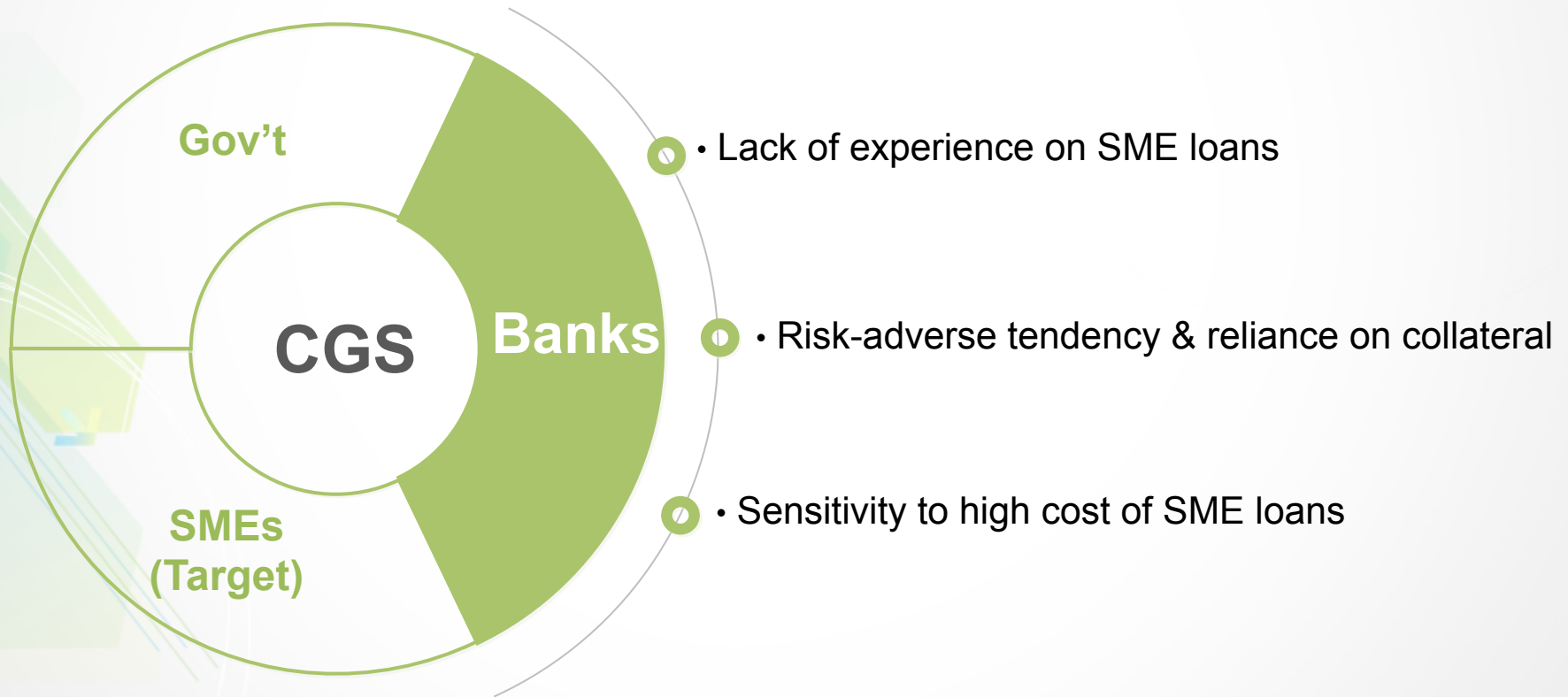
● SMEs - Borrowers

SMEs have limited access to formal finance due to ...



● Banks - Lenders

Banks have a tendency to avoid loans for SMEs



Objectives of CGS

For SMEs

- Ease access to formal finance
- Lower interest rate
- Provide fund for long-term investment

For Banks

- Provide assured collateral
- Introduce new loan markets
- Improve capital adequacy ratio

For Gov't

- Higher competitiveness of SMEs
- Job creation & supplement social safety-net
- Financial market progress
- Provide counter-cyclical macro economic tools



III | Evaluation of CGS

Criteria for Evaluation of Soundness

1. Legal support & Supervision

Legal Support

Supervision

2. Financial stability

Source of fund

Guarantee fee

Fund Investment

3. Operational mechanism

Guarantee procedure

Eligibility & ceiling & coverage

Other supporting systems

4. Risk Management

Credit risk management

Operational risk (audit)

Four
Major
Criteria

1. Legal Support & Supervision

Legal basis	<ul style="list-style-type: none">• Korea Credit Guarantee Fund Act
Clear objective & mandate	<ul style="list-style-type: none">• Improve financial accessibility for enterprises• Credit guarantee, investment, collection, etc.
Source of fund	<ul style="list-style-type: none">• Contribution from government, bank, enterprises, etc.
Capital Supplementation	<ul style="list-style-type: none">• Government can supplement capital deficiency
Other clauses	<ul style="list-style-type: none">• Relief of responsibility for non-serious mistake for employees• Access to credit information from public organizations

Supervision



THE NATIONAL ASSEMBLY OF
THE REPUBLIC OF KOREA



MINISTRY OF
STRATEGY AND
FINANCE, KOREA

Budget Planning



FSC
FINANCIAL SERVICES
COMMISSION

Operation Supervision



The Board of Policy

The Board of Directors

SMBA
Small & Medium Business
Administration



Capital Contribution

**Board of Audit
and Inspection
of Korea**



2. Financial Stability

• Contributions

Government
(irregular)

- Subject to yearly budget of the government

Banks
(regular)

- Mandatory donation in proportion to outstanding corporate loans (APR 0.225%)

Others
(irregular)

- Occasional contributions from banks or large enterprises

• Cumulative contributions (~ 2014)

45%, USD 10 billion

55%, USD 11 billion

5%

■ Government ■ Banks ■ Others

• Rationale for fee

- SMEs have to pay the fee for the financial benefit from CG
- Guarantee fee is a major source of fund in provision for claim payment

• Fee rate

- Fee rate is **risk proportionate** and follows **market principles**, but still has **subsidy element**
 - Basis rate is differentiated by credit rating of each firm : APR 0.6~3.0%
 - (Adjustment) added or subtracted by policy purposes

(Unit : billion USD)

	2012	2013	2014
Total Cash inflow (A)	17.4	17.0	17.5
Guarantee fee (B)	5.5	5.8	6.1
Proportion (B/A)	31.4%	34.2%	34.9%
<i>(Average fee rate)</i>	<i>1.21%</i>	<i>1.24%</i>	<i>1.27%</i>

• Reinvestment Policy

- Maximizing rate of return while properly managing liquidity risk
 - High rate of return < Safe investment & liquidity

• Characteristics of KODIT Reinvestment

- Strict liquidity requirement : Cash-outflow = capital fund x 42.6%
- Limited scope of investment asset (KCGF Act)
 - Bank deposit (CD, RP), treasury bond, municipal bond, corporate bond (AA- or higher)

	2012	2013	2014
Total Cash inflow (A)	17.4	17.0	17.5
Investment income(B)	3.1	1.9	1.4
Proportion (B/A)	17.6%	11.2%	7.8%
<i>Rate of return</i>	<i>4.60%</i>	<i>2.93%</i>	<i>4.49%</i>

3. Operational Mechanism

3. Operational Mechanism

- Individual approach (case by case)

Apply & Interview

- SME's application
- Eligibility check-up by interview with owner

Credit Analysis & On-site Visit

- Document submitted & reviewed
- Analyst's on-site visit

Evaluation & Approval

- Credit rating & Evaluation
- Guarantee approval

Issuance of Guarantee Letter

- Contract & Paying fee
- Issue of guarantee

Credit Guarantee Procedure

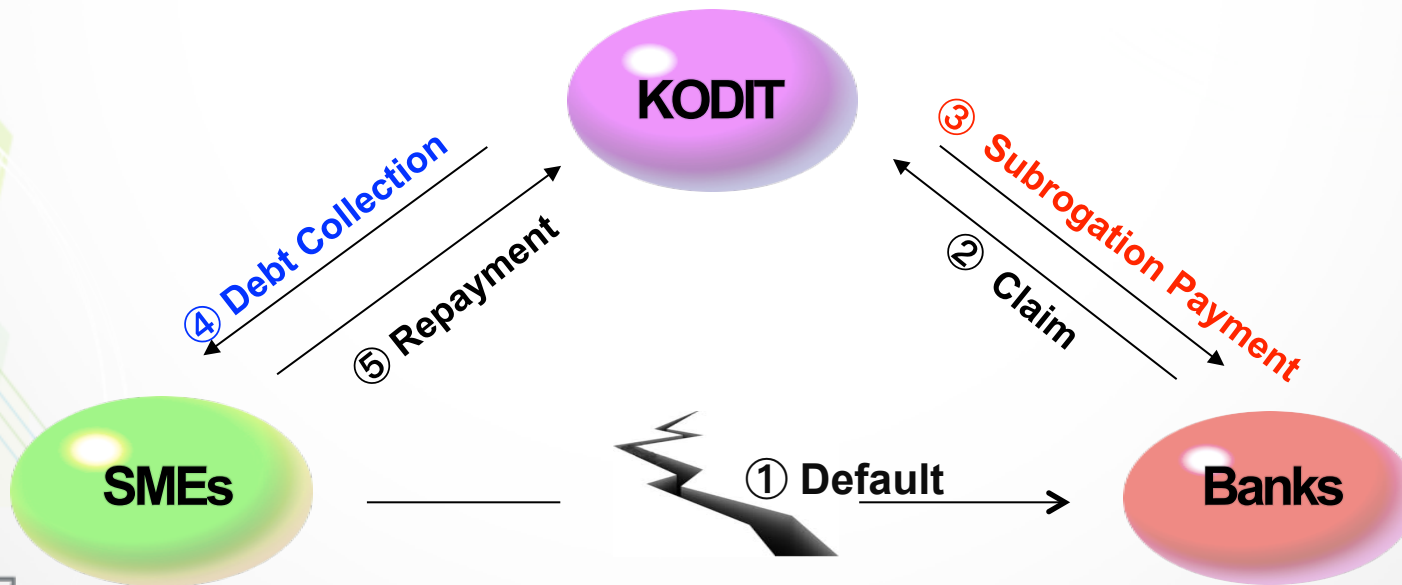
Claim Payment and Collection

• Subrogation Payment

- Apparent predictable criteria and speedy payment procedure
 - Boost the popularity of guarantee products from banks

• Collection

- Through in-house collection prevent moral hazard of SMEs and boost capital reserve



Eligibility & Ceiling & Coverage Ratio

Eligibility

- All for-profit entities are eligible with some exceptions
- Adopts the “negative list system”

Ceiling amount

AVG : USD 180,000

- General ceiling : USD 2.7 million * Special ceiling : USD 6.3 million
- Firm specific ceiling (working capital only)
 - (sales) within 1/2 ~ 1/6 of annual sales amount
 - (equity) within 3 times equity capital

Coverage ratio

AVG : 87%

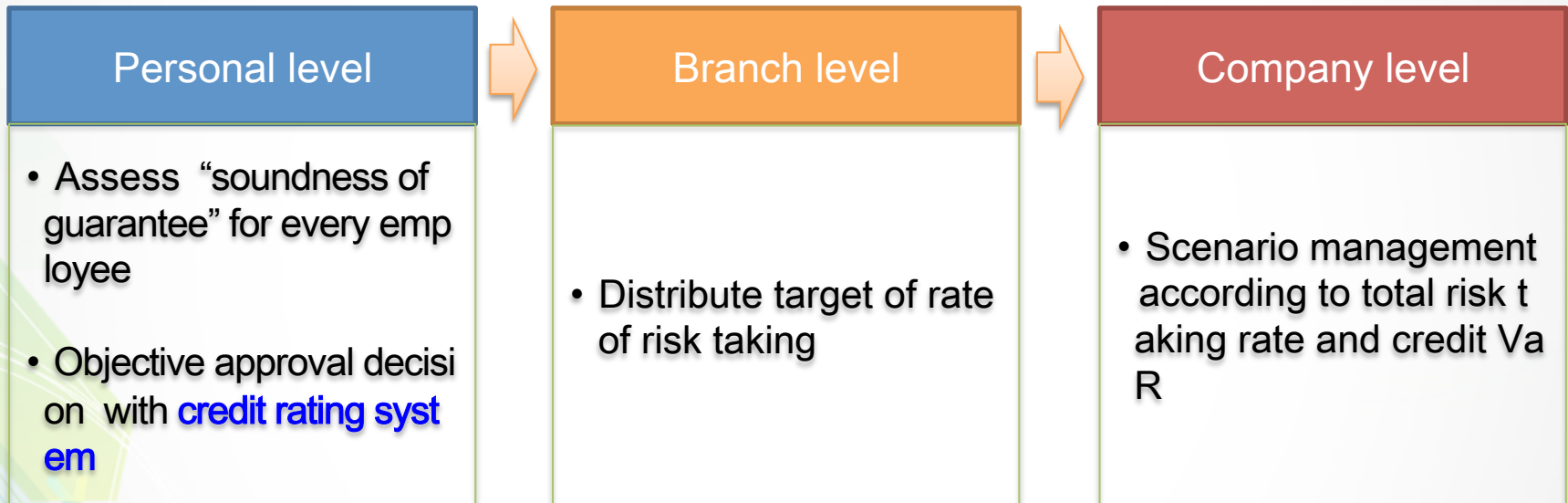
- Coverage ratios are differentiated by
 - ① Credit rating and ② Period of guarantee usage (policy purpose)
- Coverage ratio : 50% ~ 85%
- * *Enterprises with low credit ratings get higher coverage*

4. Risk Management

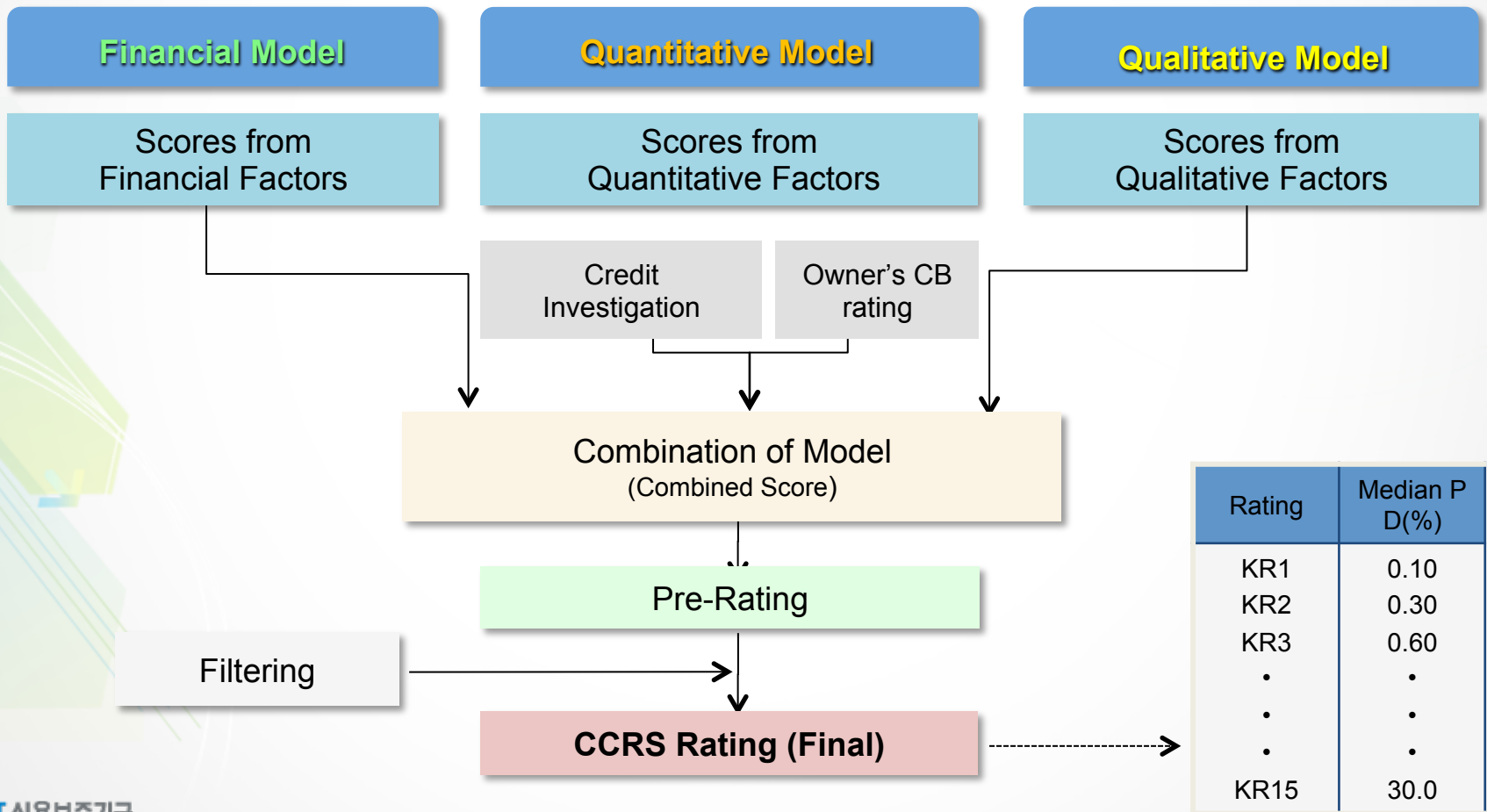
Risk Management Tools

Type	Definition	Tools
Credit Risk	Loss arising from borrower's default	Internal rating system
Market Risk	Financial loss from fluctuations in market prices	Investment policy
Operational Risk	Loss from unstable or failed process, people, systems or external events	Internal control and auditing

- Systematic credit risk management



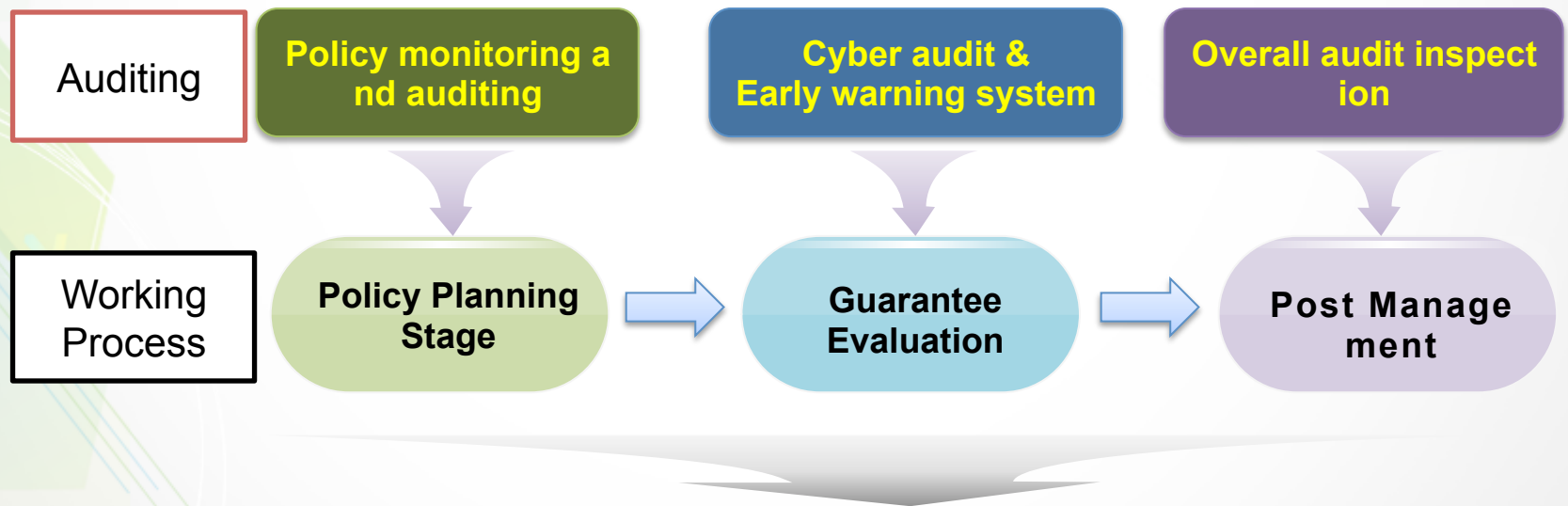
- Credit rating system (for individual approach)



• Strong Internal Audit Unit

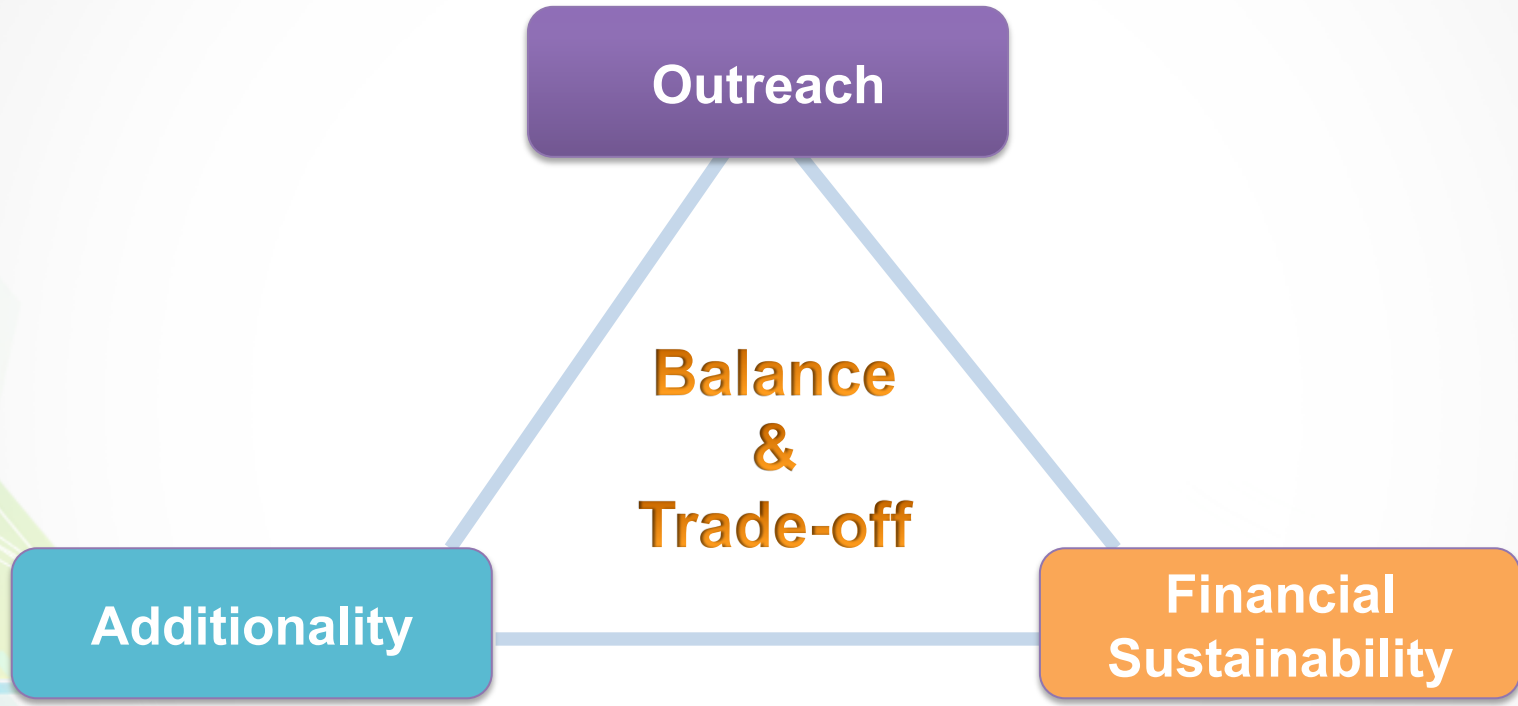
- Internal auditors (No. of staffs) : 24 (1.1% of total employees)
- Major roles : **Monitoring working procedure and operational risk management**

• Auditing by Working Process



Transparent working process & minimized operational risk

IV | Performance Evaluation



- Capital adequacy ratio, macro-economic roles, etc.

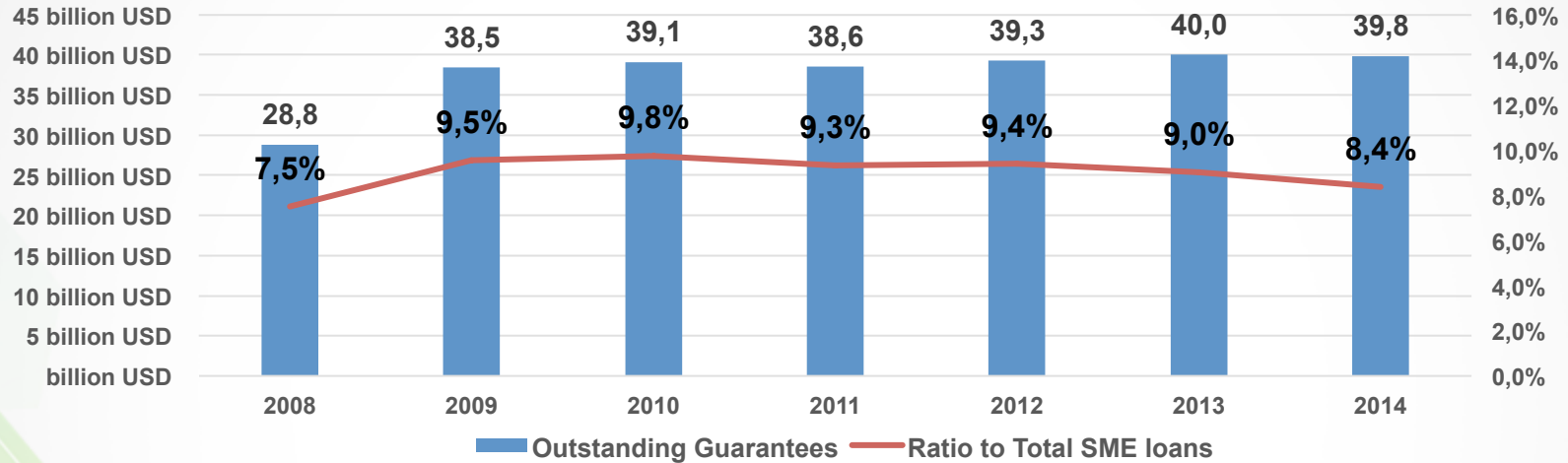
Definition

The degree of guarantee penetration measured by total amount or number of customers

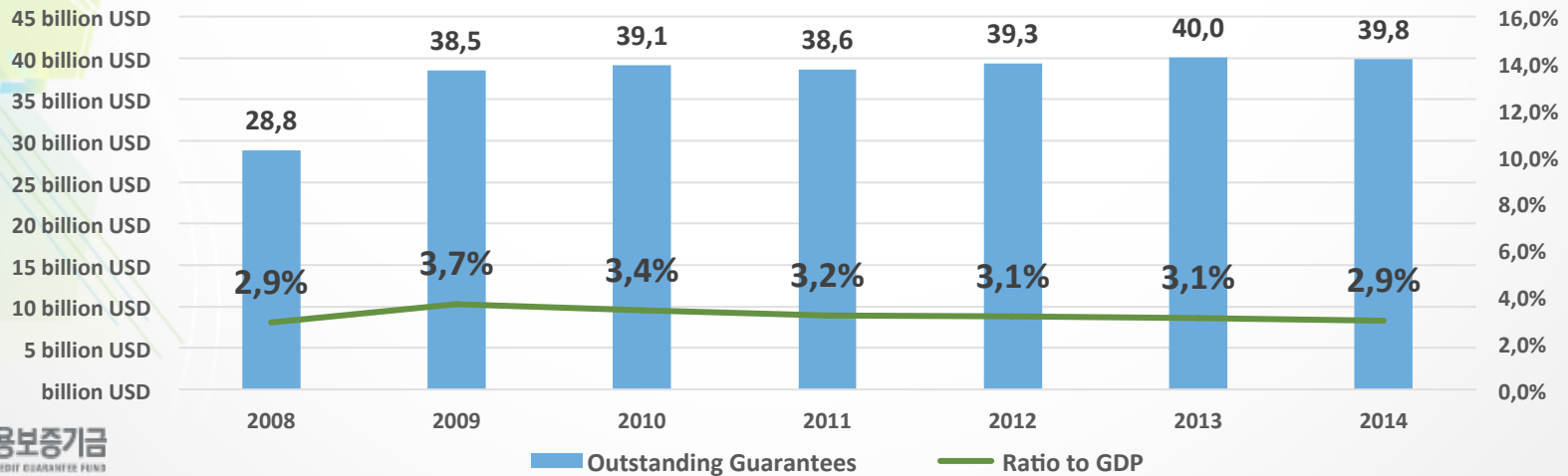
Measurement

- **(Outstanding guarantees / Outstanding SME loans *100%)**
: Outstanding guarantee: 40 billion, Outstanding loans to SMEs: 474 billion → 8.4%
- **(Guaranteed customers / Total SMEs *100%)**
: Guaranteed Companies: 216 thousand, Total SMEs: 3,419 thousand → 6.3 %
- **(Outstanding guarantees / GDP * 100%)**
: Outstanding guarantee: 40 billion, Nominal GDP: 1,410 billion → 2.9%

(Outstanding guarantees / Outstanding SME loans * 100%)



(Outstanding guarantees / GDP * 100%)

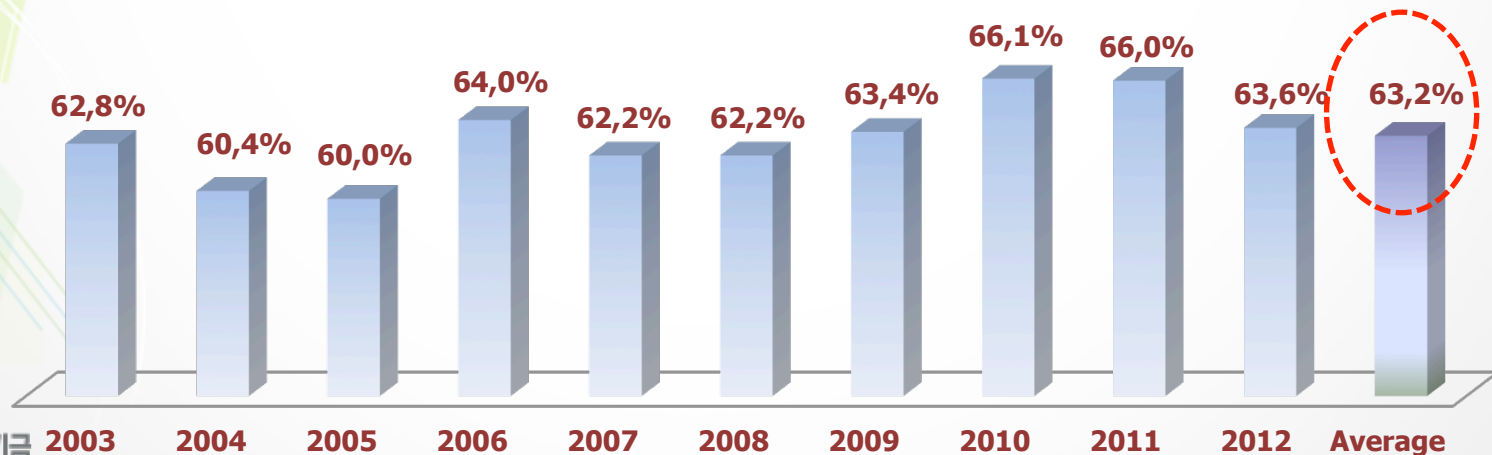


Definition

- **Additional credit or financial benefit created by using credit guarantee**
 - A key rationale for CGS but no uniform method for measurement

Additional Credit by CG of KODIT

- Calculation : $(\text{①Total loan payable} - \text{②Tangible assets that can be used as collateral}) \div \text{①Total loan payable}$
- Outcome : 63.2% of additional credit was created by CG (10 yr average)

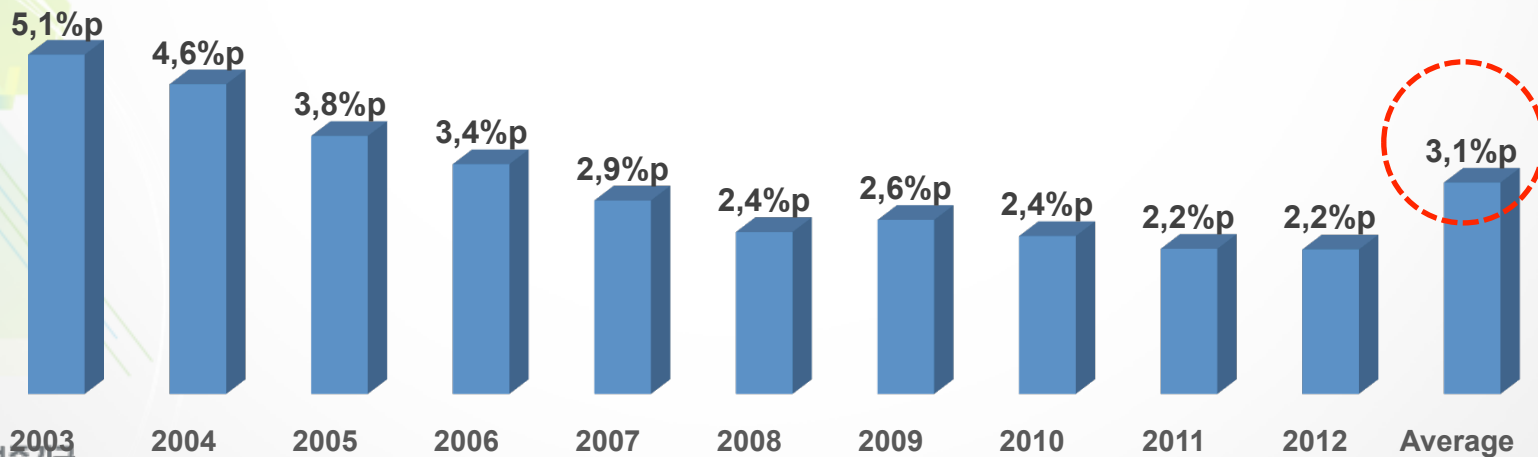


Financial Additionality (2)

Lower interest rate by CG of Korea

SMEs can enjoy lower interest rate compared with the rate charged by market principles

- Calculation : ①Interest rate of credit loan – (②Interest rate of guaranteed loan + ③Guarantee fee rate)
- Outcome : Average interest rate benefit was 3.1%p (10 yr average)



Definition

- **Economic impact or welfare generated by CG (indirect effect)**

① increase in sales or profit, ② job creation, ③ increase in tax payment, etc.

* Hard to measure because research should be based on counterfactual reasoning

Examples of economic additionality of CG in Korea

Performance improvement	<ul style="list-style-type: none"> • In general, guarantee user groups have shown better performance than non-user groups
Job creation	<ul style="list-style-type: none"> • USD 1 million of new CG create 5.4 of new job
Tax increase	<ul style="list-style-type: none"> • 1% increase of CG generate <ul style="list-style-type: none"> - corporate tax : 0.40% increase - value added tax : 0.32% increase - income tax : 0.13% increase
Value added	<ul style="list-style-type: none"> • New CG created extra value-added of USD 2.4 billion (2013)

Definition

The degree of long-term financial self-sustainability (**without government assistance**)

- Balance between cash inflow and outflow

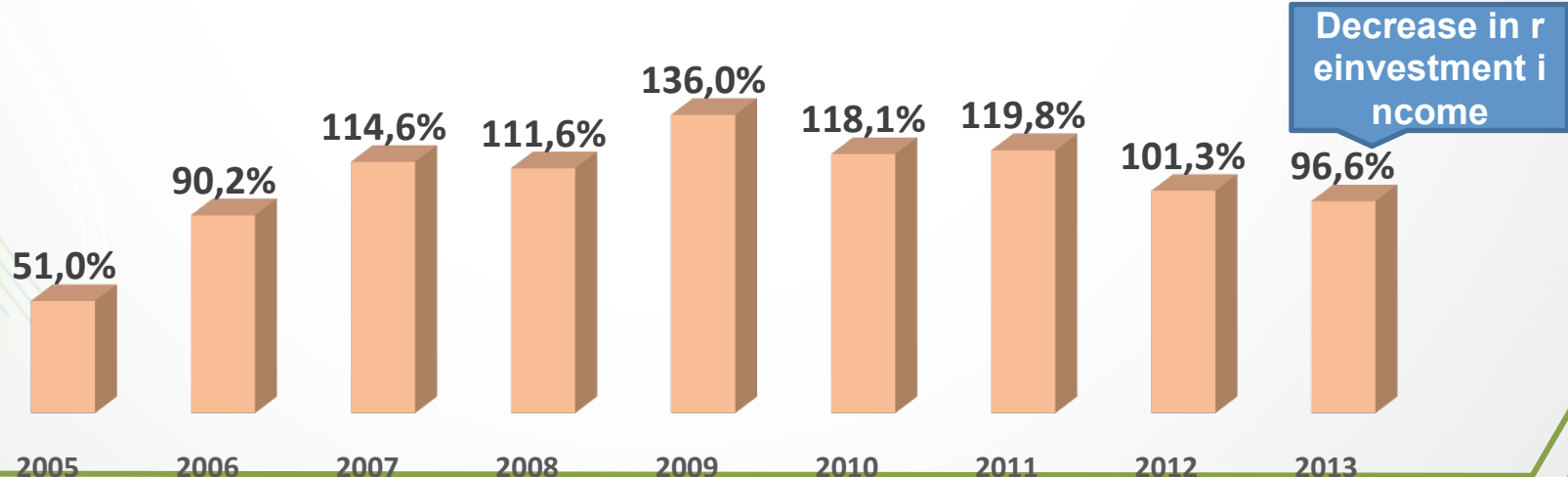
* Inflow : bank contribution, guarantee fee, reinvestment income

** Outflow : net-claim payment, administrative cost

Financial sustainability of KODIT

• Calculation : $\text{Cash inflow} \div \text{Cash outflow}$

* If the outcome is equal or bigger than 100%, KODIT is financially self-sustainable

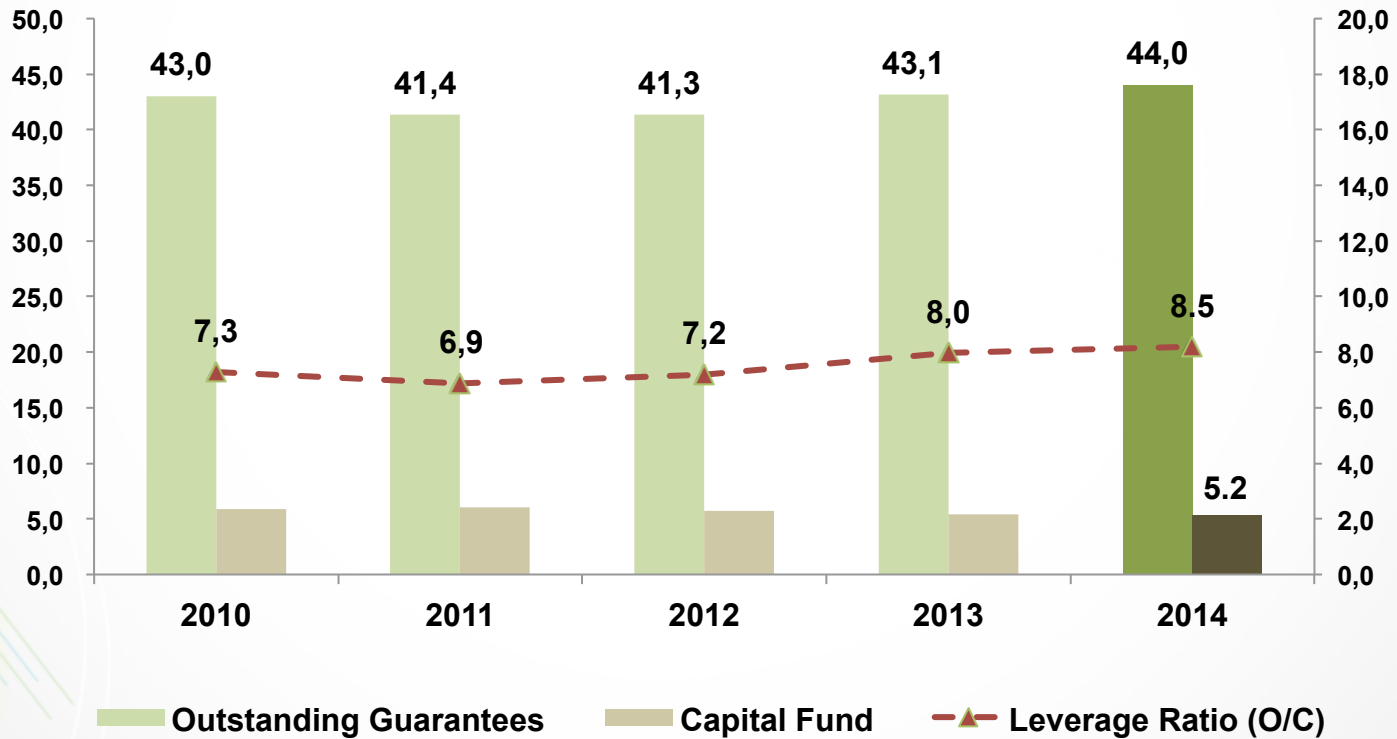


Financial Sustainability (2)

- Leverage ratio (Multiples)

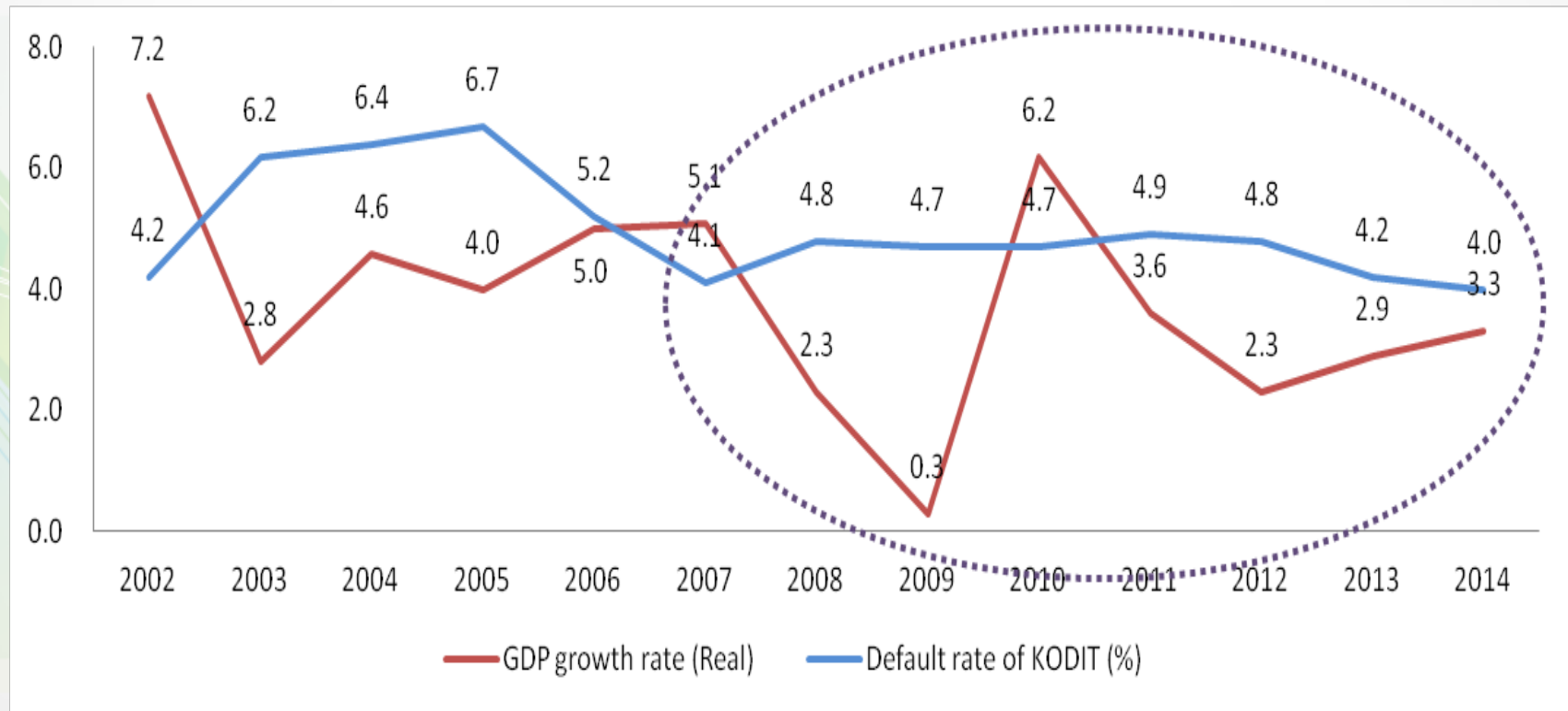
(Unit : billion USD)

(Unit : times)



Financial Sustainability (3)

- Outcome of credit risk management (consistent default rate)



BIS Capital Adequacy Ratio

Definition

- CG provide capital relief benefit for banks under new Basel Accords

* Conditions of guarantee to fulfill Basel requirement

① irrevocable payment, ② unconditional payment, ③ explicit & documented obligation

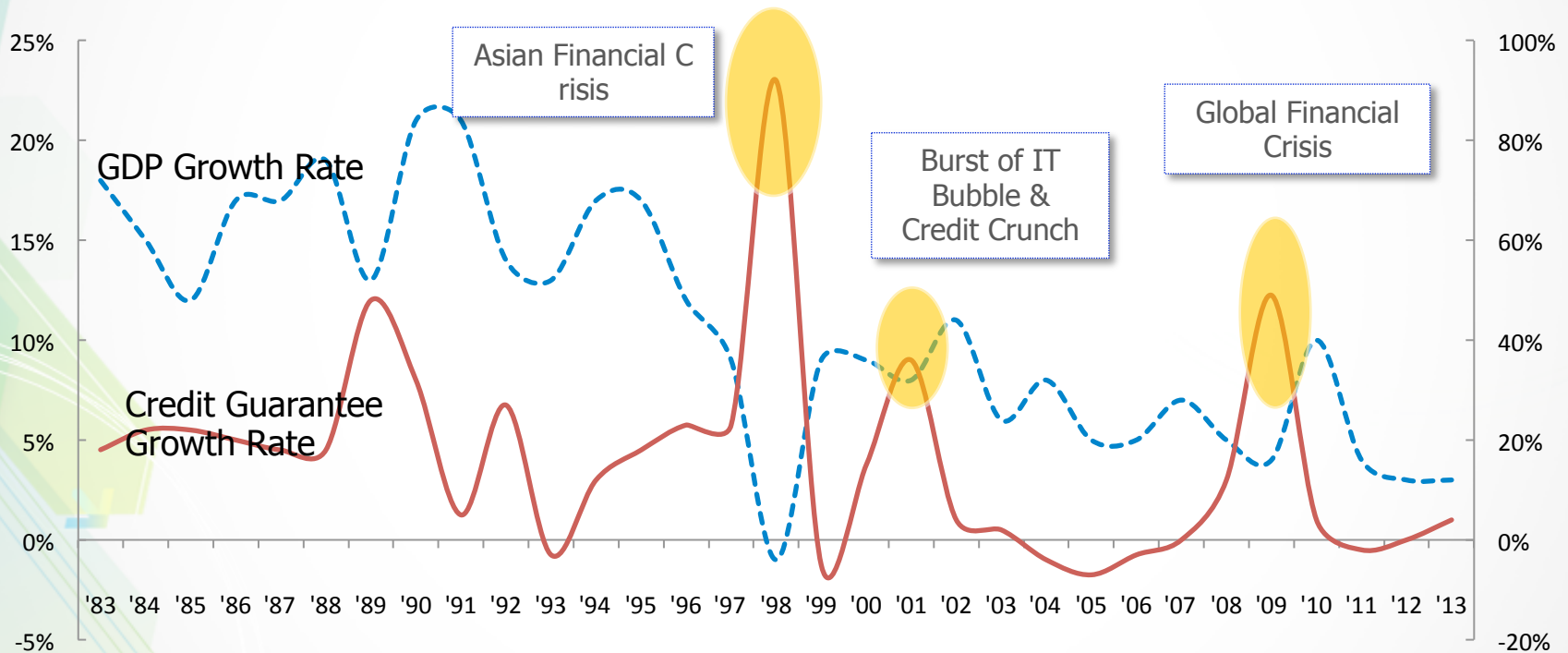
** BIS Capital Adequacy Ratio = Equity/ Risk weighted assets * 100%

Improvement of Capital Adequacy Ratio by CG of KODIT (2013)

CAR with CG (a)	CAR w/o CG (b)	Effect (a-b)
14.10%	13.81%	0.29%p

Banks can supply additional credit in the market w/o input of capital

- Counter-cyclical tool



Source: Bank of Korea, KODIT

- Each country has to develop CGS along with its economic development stage. In addition, it should also consider its own social, cultural and legal circumstances.
- There is no one-size-fits-all credit guarantee scheme. So do evaluation criteria.
- However, there are common and core criteria. Balance and trade-off among outreach, additionality and financial sustainability.
- Nowadays, CGS of Korea has gotten into a matured stage and faced its own specific challenges to overcome. There are still many misunderstandings.
- Effort for in-depth performance evaluation and close public relation is critical.

Thank you